

# PENNSYLVANIA

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CONSTRUCTION—PENNSYLVANIA

TABLE 1.—VALUE OF CONSTRUCTION BUSINESS DURING 1929 AND PRINCIPAL ITEMS OF EXPENDITURE

[Values expressed in thousands of dollars]

AREA, CLASSIFICATION OF ESTABLISHMENTS, AND SIZE OF BUSINESS GROUPS	Number of establishments	VALUE OF CONSTRUCTION BUSINESS			PRINCIPAL EXPENDITURES		
		Total	Under general contract or directly for owner	Under sub-contract	Sub-contract work let	Wages paid	Cost of materials
<b>PENNSYLVANIA</b> .....	2,691	603,928	477,851	128,078	168,116	134,906	185,075
<i>Counties and principal cities</i>							
<b>Counties:</b>							
Adams.....	3	147	135	12	28	30	68
Allegheny.....	474	142,437	119,476	22,961	39,817	32,435	41,003
Berks.....	34	3,140	2,459	690	775	667	1,142
Beaver.....	115	14,057	10,746	3,311	2,612	3,452	5,520
Blair.....	32	3,295	3,105	160	251	946	1,333
Bucks.....	17	1,338	1,104	234	287	318	484
Butler.....	6	2,493	2,493		1,209	412	607
Cambridge.....	38	4,872	4,310	562	657	1,247	1,910
Carbon.....	9	591	376	215	75	113	351
Centre.....	5	332	310	22	16	91	176
Chester.....	35	4,033	4,151	782	527	934	2,619
Clarion.....	3	251	251		54	55	85
Clearfield.....	9	735	727	8	44	198	320
Columbia.....	3	233	198	35	28	43	102
Crawford.....	4	1,644	71	93	5	31	82
Cumberland.....	7	1,073	995	78	43	310	437
Dauphin.....	10	1,430	997	433	205	349	612
Delaware.....	58	8,522	7,117	1,405	2,124	1,886	2,947
Erie.....	64	9,155	6,621	2,534	3,398	1,905	2,020
Fayette.....	58	8,741	7,475	1,266	1,438	2,140	3,100
Franklin.....	13	1,102	647	455	23	422	370
Huntingdon.....	13	1,706	1,504	202	272	359	833
Indiana.....	6	529	500	29	14	145	238
Jackson.....	8	1,163	1,155	8	70	249	442
Jefferson.....	5	886	838	48	61	199	200
Lackawanna.....	61	6,528	4,900	1,628	1,307	1,795	1,838
Lancaster.....	53	6,706	5,658	1,108	1,092	1,423	2,237
Lawrence.....	16	1,132	974	158	127	322	443
Lebanon.....	10	1,070	1,070	306	300	545	727
Lehigh.....	70	11,187	8,934	2,253	2,931	2,264	3,572
Luzerne.....	84	9,895	8,217	1,678	1,116	2,711	3,255
Lycoming.....	23	2,909	2,073	236	532	400	736
McKean.....	15	1,455	1,250	199	40	497	537
Mercer.....	24	2,719	2,421	298	413	855	695
Mifflin.....	5	814	300	14	99	178	328
Monroe.....	5	459	419	70	85	118	188
Montgomery.....	101	20,681	14,750	5,931	5,061	5,623	5,131
Northampton.....	81	12,634	8,850	3,784	936	3,521	5,877
Northumberland.....	15	2,201	2,061	140	206	535	920
Philadelphia.....	922	290,872	221,743	69,129	94,800	60,333	83,417
Schuylkill.....	18	2,722	2,540	179	517	606	1,179
Somerset.....	5	341	238	63	67	74	115
Venango.....	12	1,217	842	375	229	325	352
Warren.....	6	534	273	260	14	136	276
Washington.....	24	3,389	2,944	445	364	728	1,540
Westmoreland.....	37	3,253	2,440	813	539	759	1,424
York.....	42	5,520	4,229	1,300	1,004	1,250	2,305
Other counties <sup>1</sup> .....	16	2,094	2,022	72	405	479	690
<b>Principal cities:<sup>2</sup></b>							
Erie.....	87	8,494	7,473	1,021	1,438	2,105	2,896
Philadelphia.....	922	290,872	221,743	69,129	94,800	60,333	83,417
Pittsburgh.....	343	121,176	102,967	18,108	36,837	26,511	34,578
Reading.....	82	11,218	8,603	2,615	1,875	2,714	4,515
Scranton.....	52	5,998	4,406	1,592	1,229	1,637	1,661
<b>Classification of establishments</b>							
Operative builders.....	105	18,618	18,613	5	14,950	1,068	1,384
General contractors.....	1,197	405,799	399,522	6,277	142,364	80,819	108,664
Building.....	888	285,605	284,474	1,121	136,148	47,042	63,534
Building not specialized.....	681	223,020	220,928	1,032	103,592	40,061	54,241
Commercial building only.....	21	3,561	3,541	20	1,551	686	483
Manufacturing building only.....	0	31,949	31,949		20,182	2,800	3,700
Residential building only.....	230	22,065	22,050	9	10,523	3,499	5,020
<b>Classification of establishments—Continued</b>							
General contractors—Contd.							
Highway.....	105	31,028	31,177	451	2,454	8,286	12,205
Bridge and culvert.....	27	17,486	15,738	1,698	824	4,395	9,489
Grading.....	16	2,636	2,410	225	96	955	407
Street paving.....	72	18,300	18,074	316	947	4,332	6,959
Sewer, gas, water, conduit.....	36	7,107	6,731	416	140	2,430	2,256
Waterworks, dam and reservoir.....	9	2,458	2,340	118	61	514	1,096
Dredging, river, harbor, etc.....	16	12,237	11,952	285	514	3,463	3,413
Railroad and subway.....	18	22,033	20,460	1,623	933	7,282	7,438
Foundation.....	6	1,986	1,952	24	155	644	835
Other classes <sup>4</sup> .....	3	4,103	4,103		82	1,476	1,031
Subcontractors.....	1,389	170,511	69,716	119,795	10,802	53,019	75,028
Carpentering and wood flooring.....	40	4,432	1,262	3,170	323	1,286	1,712
Concrete.....	48	7,027	2,683	4,344	110	2,340	2,534
Electrical.....	140	14,053	5,295	8,758	125	3,940	6,765
Elevator construction.....	20	6,951	1,891	5,060	178	1,303	4,291
Heating and plumbing.....	483	52,889	20,368	32,522	1,949	12,912	27,007
Heating and piping.....	151	17,898	6,473	11,425	1,026	3,451	9,422
Pipe covering.....	6	1,987	25	1,962	26	810	671
Plumbing.....	205	16,742	5,359	11,383	452	4,558	8,186
Plumbing and heating combined.....	116	10,586	3,614	6,952	110	2,530	5,755
Automatic sprinkler system.....	6	5,697	4,807	800	335	1,557	2,972
Masonry.....	93	10,886	814	10,072	126	4,547	4,481
Painting and decorating.....	109	6,484	2,450	7,023	216	4,521	2,157
Glass and glazing.....	10	1,498	708	890	3	257	831
Plastering and lathing.....	51	6,661	343	6,318	418	3,173	1,694
Roofing and sheet-metal work.....	157	14,947	2,812	12,135	285	4,137	6,909
Roofing.....	73	7,123	1,917	5,206	184	1,846	3,595
Sheet-metal work.....	48	3,769	995	3,571	20	1,148	1,565
Roofing and sheet-metal combined.....	39	4,055	697	3,358	75	1,143	1,750
Steel erection.....	36	23,112	10,441	6,671	6,488	5,546	6,020
Stonework.....	23	4,003	7	3,996	41	1,637	1,606
Marble and tiling.....	76	8,730	627	8,103	68	2,037	3,803
Wrecking.....	3	188		188		143	10
Excavating.....	28	2,823	552	2,271	47	1,131	1,777
Ornamental iron.....	33	2,975	238	2,737	178	567	1,215
Grading.....	4	985	720	265	153	469	35
Soundproofing.....	5	2,025	126	1,899	40	312	1,130
Metal work, n. e. s.....	21	4,946	2,008	2,938	59	1,963	1,433
Flooring, n. e. s.....	7	4,411	260	175	7	98	211
Other classes <sup>7</sup> .....	5	368	103	255		91	106
<b>Size of business groups</b>							
General contractors <sup>8</sup> .....	1,302	424,417	418,135	6,282	157,314	81,887	110,048
\$25,000 to \$49,999.....	290	11,072	10,979	93	2,503	2,828	3,555
\$50,000 to \$99,999.....	336	24,276	23,981	295	7,240	5,395	7,442
\$100,000 to \$199,999.....	308	43,261	42,726	535	14,853	9,114	11,348
\$200,000 to \$499,999.....	223	70,915	70,036	879	24,362	15,344	17,646
\$500,000 to \$999,999.....	82	53,698	52,972	726	17,655	10,189	15,149
\$1,000,000 and over.....	63	221,194	217,440	3,754	90,701	39,018	54,807
Building contractors <sup>9</sup> .....	993	304,213	303,087	1,126	151,098	48,110	64,918
\$25,000 to \$49,999.....	254	9,285	9,217	68	2,476	2,245	3,192
\$50,000 to \$99,999.....	279	20,216	20,058	158	7,163	4,092	6,040
\$100,000 to \$199,999.....	226	31,101	30,929	172	14,167	5,608	7,098
\$200,000 to \$499,999.....	145	46,166	46,038	158	23,468	7,875	8,950
\$500,000 to \$999,999.....	52	34,551	34,288	263	16,516	5,689	7,708
\$1,000,000 and over.....	37	162,864	162,557	307	87,308	22,601	31,924
Subcontractors.....	1,389	170,511	69,716	119,795	10,802	53,019	75,028
\$25,000 to \$49,999.....	574	20,542	5,855	14,687	229	6,505	8,217
\$50,000 to \$99,999.....	407	28,177	7,899	20,272	309	8,895	11,611
\$100,000 to \$199,999.....	233	30,751	7,131	23,620	696	9,129	13,504
\$200,000 to \$499,999.....	138	42,251	10,934	31,317	1,732	12,756	17,755
\$500,000 to \$999,999.....	31	21,217	7,747	13,470	1,148	6,327	9,662
\$1,000,000 and over.....	16	36,603	20,154	16,449	6,028	9,409	14,279

See footnotes at end of table.

TABLE 1.—VALUE OF CONSTRUCTION BUSINESS DURING 1929 AND PRINCIPAL ITEMS OF EXPENDITURE—Continued

[Values expressed in thousands of dollars]

AREA, CLASSIFICATION OF ESTABLISHMENTS, AND SIZE OF BUSINESS GROUPS	Number of establishments	VALUE OF CONSTRUCTION BUSINESS			PRINCIPAL EXPENDITURES			AREA, CLASSIFICATION OF ESTABLISHMENTS, AND SIZE OF BUSINESS GROUPS	Number of establishments	VALUE OF CONSTRUCTION BUSINESS			PRINCIPAL EXPENDITURES		
		Total	Under general contract or directly for owner	Under sub-contract	Sub-contract work let	Wages paid	Cost of materials			Total	Under general contract or directly for owner	Under sub-contract	Sub-contract work let	Wages paid	Cost of materials
<b>ERIE</b> .....	57	8,494	7,473	1,021	1,438	2,105	2,898	<b>PHILADELPHIA—Continued</b>							
<i>Classification of establishments</i>								<i>Classification of establishments—Continued</i>							
General contractors <sup>1</sup> .....	34	7,100	7,044	56	1,427	1,689	2,200	<i>Subcontractors—Continued.</i>							
Building.....	25	4,786	4,734	52	1,315	1,438	1,597	14	3,197	1,363	1,834	248	687	1,641	
Building not specialized <sup>2</sup> .....	18	4,108	4,115	52	1,242	982	1,354	12	2,850	6	2,844	38	1,150	1,221	
Residential building only.....	7	619	619			206	242	27	4,118	230	3,888	47	1,106	1,867	
Highway <sup>3</sup> .....	0	2,064	2,060	4	102	506	575	3	188		188		10	143	
Sewer, gas, water, conduit.....	3	249	249			45	119	11	1,707	810	806	158	783	117	
Subcontractors.....	23	1,394	429	965	11	416	605	18	1,935	102	1,833	144	849	715	
Electrical.....	3	144		144		41	79	16	3,089	841	2,748	46	1,000	1,250	
Heating and plumbing.....	10	674	315	358	6	179	340	34	245	123	122	7	48	121	
Heating and piping <sup>4</sup> .....	8	384	122	262	4	104	207	3	1,784	102	1,082	40	241	908	
Plumbing.....	7	289	193	96	2	74	133	<i>Size of business groups</i>							
Roofing and sheet-metal work.....	4	220	77	143		62	79	General contractors <sup>5</sup> .....	344	201,640	199,866	1,775	91,567	34,180	43,915
Marble, tiling and plastering.....	3	262		262		94	70	\$25,000 to \$49,999.....	48	2,230	2,217	13	687	509	401
Other classes <sup>11</sup> .....	3	94	37	58	5	40	38	\$50,000 to \$99,999.....	50	4,000	3,998	02	6,111	1,922	1,791
<i>Size of business groups</i> <sup>*</sup>								\$100,000 to \$199,999.....	87	11,884	11,830	54	13,142	4,479	4,037
General contractors <sup>5</sup> .....	34	7,100	7,044	56	1,427	1,689	2,200	\$200,000 to \$499,999.....	81	25,895	25,639	256	9,983	8,239	6,100
\$25,000 to \$49,999.....	10	384	384		74	90	149	\$500,000 to \$999,999.....	34	21,842	21,842		23,300	31,881	
\$50,000 to \$99,999.....	9	688	653	35	77	140	311	Building contractors <sup>6</sup> .....	209	168,286	168,137	148	80,106	22,130	28,473
\$100,000 to \$199,999.....	4	577	577		115	173	212	\$25,000 to \$49,999.....	43	1,587	1,574	13	670	355	364
\$200,000 to \$499,999.....	6	2,090	2,086	4	15	684	713	\$50,000 to \$99,999.....	48	3,443	3,420	17	2,002	440	494
\$500,000 to \$999,999.....	5	3,360	3,343	17	1,146	603	905	\$100,000 to \$199,999.....	69	9,415	9,397	18	6,003	1,100	988
Building contractors <sup>7</sup> .....	25	4,786	4,734	52	1,315	1,138	1,597	\$200,000 to \$499,999.....	60	10,325	10,225	100	12,830	2,270	2,178
\$25,000 to \$49,999.....	10	384	384		74	90	149	\$500,000 to \$999,999.....	24	15,739	15,739		9,825	1,884	2,238
\$50,000 to \$99,999.....	5	363	328	35	67	73	152	Subcontractors.....	25	108,776	108,776		67,800	16,986	22,211
\$100,000 to \$199,999.....	4	577	577		115	173	212	\$25,000 to \$49,999.....	578	80,232	21,878	67,354	3,233	26,153	39,502
\$200,000 to \$499,999.....	2	710	710			274	360	\$50,000 to \$99,999.....	190	6,961	1,005	5,295	109	2,165	2,512
\$500,000 to \$999,999.....	4	2,752	2,735	17	1,059	529	723	\$100,000 to \$199,999.....	167	10,892	2,156	8,736	239	3,668	4,138
Subcontractors.....	23	1,394	429	965	11	416	605	\$200,000 to \$499,999.....	115	15,992	3,070	12,922	450	4,640	7,043
\$25,000 to \$49,999.....	13	503	109	334	6	145	212	\$500,000 to \$999,999.....	80	24,202	6,018	18,184	1,017	7,409	9,911
\$50,000 to \$99,999.....	6	360	138	222	1	114	146	\$1,000,000 and over.....	20	13,411	4,245	9,166	685	4,129	6,115
\$100,000 to \$199,999.....	4	581	122	409	4	156	247	<b>PITTSBURGH</b> .....	343	121,176	102,067	10,109	36,837	26,511	34,578
<b>PHILADELPHIA</b> .....	922	280,872	221,748	69,129	94,800	60,333	83,417	<i>Classification of establishments</i>							
<i>Classification of establishments</i>								Operative builders.....	10	1,195	1,190	5	922	99	110
Operative builders.....	48	11,900	11,900		10,807	233	443	General contractors.....	185	85,102	83,752	1,350	31,582	15,800	21,080
General contractors.....	296	189,740	187,965	1,775	80,760	33,947	43,472	Building.....	95	59,995	59,648	317	30,927	8,051	11,323
Building.....	221	140,386	146,239	148	78,389	21,898	28,030	Building not specialized.....	59	56,006	56,289	317	29,550	7,510	10,420
Building not specialized.....	163	134,902	134,754	148	70,756	20,500	27,076	Commercial building only.....	3	275	275		34	57	784
Commercial building only.....	13	2,983	2,983		1,751	543	262	Residential building only.....	33	3,084	3,084		1,843	48	1,600
Manufacturing building only.....	3	761	761		178	214	157	Highway.....	6	5,044	4,971	73	219	1,037	1,600
Residential building.....	42	7,741	7,741		5,705	551	536	Bridge and culvert.....	6	7,658	6,959	699	152	1,836	4,676
Highway.....	7	3,000	3,000		108	675	1,385	Street paving.....	11	3,163	3,100	3	74	864	1,300
Bridge and culvert.....	10	6,332	5,074	658	519	1,859	2,912	Sewer, gas, water, conduit.....	6	1,135	1,053	80	5	308	427
Grading.....	3	815	737	78	50	284	83	Dredging, river, harbor, etc.....	3	710	686	24	59	220	148
Street paving.....	14	6,907	6,907		409	1,343	2,760	Railroad.....	8	5,447	5,447		20	2,384	1,907
Sewer, gas, water, conduit.....	11	3,253	3,253			1,224	945	Other classes <sup>11</sup> .....	5	1,982	1,820	163	128	560	600
Waterworks.....	5	1,673	1,548	25	33	388	872	Subcontractors.....	198	34,879	17,125	17,754	4,333	10,582	12,487
Dredging, river, harbor, etc.....	12	7,128	6,892	236	374	2,045	2,000	Carpentering and wood flooring.....	3	613	234	379	176	99	237
Railroad and subway.....	10	11,257	10,639	618	815	3,205	3,303	Concreting.....	8	1,908	888	1,080	28	650	842
Other classes <sup>12</sup> .....	3	3,088	3,076	12	63	1,026	1,182	Electrical.....	21	3,018	992	2,026	100	1,067	1,238
Subcontractors.....	578	89,262	21,878	67,354	3,233	26,153	39,502	Elevator construction.....	3	1,149	834	315		293	669
Carpentering and wood flooring.....	33	3,644	935	2,709	125	1,147	1,408	Heating and plumbing.....	53	6,383	1,941	4,442	124	1,915	3,125
Concreting.....	23	3,548	1,029	2,519	48	1,229	1,237	Heating and piping <sup>3</sup> .....	16	1,562	459	1,103	118	60	1,867
Electrical.....	54	6,060	2,024	4,036	16	1,807	3,251	Plumbing.....	33	3,804	1,221	2,583	6	1,224	1,867
Elevator construction.....	15	5,608	1,057	4,551	173	988	3,543	Plumbing and heating combined.....	4	1,017	261	756		314	571
Heating and plumbing.....	162	26,348	10,794	15,553	1,646	6,036	13,429	Masonry.....	7	966	65	901	15	466	867
Heating and piping <sup>1</sup> .....	63	9,988	2,800	7,187	781	1,775	5,125	Painting, decorating, and glazing.....	22	2,029	708	1,320	19	911	462
Pipe covering.....	4	448	24	424	1	144	106	Plastering and lathing.....	5	909		909		497	156
Plumbing.....	61	6,730	1,974	4,756	430	1,760	3,194	Roofing and sheet-metal work.....	28	3,983	1,108	2,875	75	1,145	2,178
Plumbing and heating combined.....	28	3,485	1,090	2,396	99	811	1,941	Roofing.....	9	2,620	1,018	1,602	67	671	1,684
Automatic sprinkler system.....	6	5,697	4,897	800	335	1,557	2,972	Sheet-metal work.....	11	890	56	834	8	322	816
Masonry.....	44	7,522	321	7,201	60	2,983	3,311	Roofing and sheet metal combined.....	5	8	473	34	439		152
Painting and decorating.....	60	6,619	1,320	5,299	174	3,016	1,616	Steel erection.....	5	9,294	9,024	270	3,761	1,846	1,701
Glass and glazing.....	7	1,048	612	436	3	178	540	Stonework.....	3	218		218		67	74
Plastering and lathing.....	17	3,286	125	3,161	69	611	871	Marble and tiling.....	21	1,959	191	1,778		637	851
Roofing and sheet-metal work.....	55	5,837	582	5,254	191	1,648	2,456	Excavating and grading.....	4	401	120	282		229	11
Roofing.....	24	2,196	357	1,839	114	561	967	Ornamental iron.....	6	488	72	416	22	88	220
Sheet-metal work.....	19	1,741	25	1,716	18	542	711	Metal work, n. e. s.....	4	1,089	899	190	13	581	183
Roofing and sheet metal combined.....	12	1,899	200	1,699	59	545	777	Other classes <sup>13</sup> .....	5	400	50	350		120	165

See footnotes at end of table.



TABLE 1.—VALUE OF CONSTRUCTION BUSINESS DURING 1929 AND PRINCIPAL ITEMS OF EXPENDITURE—Continued

[Values expressed in thousands of dollars]

AREA, CLASSIFICATION OF ESTABLISHMENTS, AND SIZE OF BUSINESS GROUPS	Number of establishments	VALUE OF CONSTRUCTION BUSINESS			PRINCIPAL EXPENDITURES			AREA, CLASSIFICATION OF ESTABLISHMENTS, AND SIZE OF BUSINESS GROUPS	Number of establishments	VALUE OF CONSTRUCTION BUSINESS			PRINCIPAL EXPENDITURES				
		Total	Under general contract or directly for owner	Under sub-contract	Sub-contract work let	Wages paid	Cost of materials			Total	Under general contract or directly for owner	Under sub-contract	Sub-contract work let	Wages paid	Cost of materials		
<b>PITTSBURGH—Continued</b>						<b>READING—Continued</b>						<b>READING—Continued</b>					
<i>Size of business groups</i>						<i>Size of business groups—Continued</i>						<i>Size of business groups—Continued</i>					
General contractors <sup>1</sup> .....	145	86,297	84,042	1,355	32,504	15,920	22,090	General contractors—Con.	28	5,593	5,592	1	1,859	1,199	1,725		
\$25,000 to \$49,999.....	24	837	827	10	290	107	221	Building contractors <sup>2</sup> .....	5	198	198		57	40	70		
\$50,000 to \$99,999.....	37	3,110	3,110		1,414	545	703	\$25,000 to \$49,999.....	7	559	559		193	87	203		
\$100,000 to \$199,999.....	34	4,726	4,624	102	1,344	918	1,372	\$100,000 to \$199,999.....	7	1,046	1,045	1	355	243	367		
\$200,000 to \$499,999.....	27	9,144	8,913	231	2,355	2,106	2,738	\$200,000 to \$499,999.....	7	2,364	2,364		855	570	618		
\$500,000 to \$999,999.....	12	7,749	7,749		1,469	1,777	2,290	\$500,000 to \$999,999.....	2	1,420	1,420		399	259	407		
\$1,000,000 and over.....	11	60,731	60,720	1,011	25,662	10,299	14,766	\$1,000,000 and over.....	2								
Building contractors <sup>3</sup> .....	105	61,100	60,838	322	31,840	8,120	11,433	Subcontractors.....	50	4,414	1,813	2,601	10	1,080	2,352		
\$25,000 to \$49,999.....	20	719	709	10	260	148	184	\$25,000 to \$49,999.....	20	708	283	425	1	199	320		
\$50,000 to \$99,999.....	34	2,875	2,875		1,414	471	639	\$50,000 to \$99,999.....	20	1,424	661	763	8	445	654		
\$100,000 to \$199,999.....	23	3,090	3,090		1,276	512	715	\$100,000 to \$199,999.....	5	643	292	351		160	332		
\$200,000 to \$499,999.....	17	5,522	5,522		2,256	1,076	1,192	\$200,000 to \$499,999.....	4	1,013	578	435	1	230	476		
\$500,000 to \$999,999.....	5	3,198	3,198		1,283	634	760	\$500,000 to \$999,999.....	1	627		627		40	571		
\$1,000,000 and over.....	6	45,766	45,444	312	25,360	5,279	7,943	\$1,000,000 and over.....	1								
Subcontractors.....	198	34,879	17,125	17,754	4,333	10,582	12,487	<b>SCRANTON</b> .....	52	5,998	4,496	1,502	1,229	1,637	1,661		
\$25,000 to \$49,999.....	74	2,683	497	2,186	8	936	992	<i>Classification of establishments</i>									
\$50,000 to \$99,999.....	51	3,584	784	2,800	27	1,259	1,328	General contractors.....	23	3,640	3,584	66	1,179	903	877		
\$100,000 to \$199,999.....	39	5,633	1,814	3,819	150	1,939	2,138	Building.....	20	2,592	2,592	66	1,074	645	608		
\$200,000 to \$499,999.....	26	8,498	2,078	6,415	321	2,976	3,596	Highway and street paving.....	3	991	991		105	258	269		
\$500,000 to \$999,999.....	5	3,603	1,041	1,722		1,278	1,559	Subcontractors.....	29	2,340	912	1,437	60	734	784		
\$1,000,000 and over.....	3	10,821	10,012	809	3,827	2,192	2,876	Heating and plumbing.....	13	747	407	339	3	202	368		
<b>READING</b> .....	82	11,218	8,608	2,615	1,875	2,714	4,515	Plumbing.....	8	415	243	172		117	180		
<i>Classification of establishments</i>								Plumbing and heating combined.....	5	332	164	167	3	85	188		
Operative builders.....	8	803	863		355	120	296	Plastering and lathing.....	3	101	7	94		42	29		
General contractors.....	24	5,941	5,927	14	1,510	1,508	1,807	Roofing and sheet-metal work.....	5	325	170	149		80	110		
Building.....	20	4,730	4,729	1	1,504	1,073	1,428	Other classes <sup>20</sup> .....	8	1,175	321	854	47	404	277		
Building not specialized.....	10	4,182	4,181	1	1,850	976	1,309	<i>Size of business groups</i>									
Residential building only.....	4	548	548		148	97	120	General contractors.....	23	3,640	3,584	66	1,179	903	877		
Other classes <sup>16</sup> .....	4	1,211	1,197	13	6	435	438	\$25,000 to \$49,999.....	3	105	105		16	28	34		
Subcontractors.....	50	4,414	1,813	2,601	10	1,080	2,352	\$50,000 to \$99,999.....	7	503	489	14	62	139	173		
Concreting <sup>17</sup> .....	3	167	91	76		65	61	\$100,000 to \$199,999.....	8	1,152	1,100	52	510	262	243		
Electrical.....	9	833	748	85	1	185	463	\$200,000 to \$499,999.....	4	1,194	1,194		244	281	281		
Heating and plumbing.....	15	1,390	760	643	1	349	747	\$500,000 to \$999,999.....	1	694	694		347	193	146		
Heating and piping.....	3	395	280	115		82	247	\$1,000,000 and over.....	1								
Plumbing.....	8	538	330	247	1	169	302	Building contractors.....	20	2,659	2,592	66	1,074	645	608		
Plumbing and heating combined.....	4	421	140	281		98	212	\$25,000 to \$49,999.....	3	105	105		16	28	34		
Painting and decorating.....	3	141	4	137		70	36	\$50,000 to \$99,999.....	7	503	489	14	62	139	173		
Roofing and sheet-metal work.....	8	455	31	423		120	181	\$100,000 to \$199,999.....	8	1,152	1,100	52	510	262	243		
Roofing.....	5	314	20	294		83	123	\$200,000 to \$499,999.....	1	204	204		139	23	13		
Sheet-metal work.....	3	140	11	129		36	58	\$500,000 to \$999,999.....	1	694	694		347	193	146		
Steel erection <sup>18</sup> .....	3	728	54	674		57	641	\$1,000,000 and over.....	29	2,349	912	1,437	50	734	784		
Marble, tiling and plastering.....	6	327	50	277	8	108	123	\$25,000 to \$49,999.....	15	534	237	297	15	165	220		
Other classes <sup>19</sup> .....	3	367	80	287		127	80	\$50,000 to \$99,999.....	9	636	372	264	22	209	268		
<i>Size of business groups</i>								\$100,000 to \$199,999.....	3	430	152	284		118	175		
General contractors <sup>1</sup> .....	32	6,804	6,790	14	1,865	1,634	2,163	\$200,000 to \$499,999.....	2	741	150	591	13	243	121		
\$25,000 to \$49,999.....	5	198	198		57	40	70	\$500,000 to \$999,999.....	2								
\$50,000 to \$99,999.....	8	617	604	13	195	105	214	\$1,000,000 and over.....	1								
\$100,000 to \$199,999.....	9	1,348	1,847	1	859	310	494	Subcontractors.....	29	2,349	912	1,437	50	734	784		
\$200,000 to \$499,999.....	7	2,364	2,364		855	570	618	\$25,000 to \$49,999.....	15	534	237	297	15	165	220		
\$500,000 to \$999,999.....	3	2,276	2,276		399	609	767	\$50,000 to \$99,999.....	9	636	372	264	22	209	268		
\$1,000,000 and over.....	3	2,276	2,276		399	609	767	\$100,000 to \$199,999.....	3	430	152	284		118	175		
								\$200,000 to \$499,999.....	2	741	150	591	13	243	121		
								\$500,000 to \$999,999.....	2								
								\$1,000,000 and over.....	1								

<sup>1</sup> Includes Armstrong, Bradford, Cameron, Elk, Greene, Montour, Potter, Sullivan, Union, Wayne, and Wyoming, for which data can not be shown without revealing individual operations. From areas other than those listed, no reports were received from establishments which handled as much as \$25,000 business during 1929.

<sup>2</sup> Figures are included in respective county totals.

<sup>3</sup> Includes air transport work.

<sup>4</sup> Includes oil and natural gas pipe line; and telephone line and system.

<sup>5</sup> Includes automatic temperature control.

<sup>6</sup> Includes highway and street paving.

<sup>7</sup> Includes sewer, gas, water, conduit; rental of equipment, trucking, etc.; and miscellaneous, n. e. s.

<sup>8</sup> Includes operative builders.

<sup>9</sup> Includes grading and street paving.

<sup>10</sup> Includes plumbing and heating combined.

<sup>11</sup> Includes masonry; and painting and decorating.

<sup>12</sup> Includes foundation; and telephone line and system.

<sup>13</sup> Includes soundproofing; and rental of equipment, trucking, etc.

<sup>14</sup> Includes grading; waterworks; foundation; and air transport work.

<sup>15</sup> Includes highway; soundproofing; and flooring, n. e. s.

<sup>16</sup> Includes highway; grading; sewer, gas, water, conduit; and dam and reservoir.

<sup>17</sup> Includes masonry; and stonework.

<sup>18</sup> Includes ornamental iron.

<sup>19</sup> Includes elevator construction; excavating; and sewer, gas, water and conduit.

<sup>20</sup> Includes carpentering and wood flooring; concreting; electrical; painting and decorating; stone work; excavating; and ornamental iron.

\* For complete classification see tabulation for the State above.

TABLE 2.—CONSTRUCTION BUSINESS OF REPORTING ESTABLISHMENTS DURING 1929, BY CLASS OF OWNERSHIP AND BY TYPE OF WORK

CLASS OF OWNERSHIP AND TYPE OF CONSTRUCTION WORK	CONSTRUCTION BUSINESS REPORTED BY—						CLASS OF OWNERSHIP AND TYPE OF CONSTRUCTION WORK	CONSTRUCTION BUSINESS REPORTED BY—					
	All classes of establishments		General contractors <sup>1</sup>		Subcontractors			All classes of establishments		General contractors <sup>1</sup>		Subcontractors	
	Number reporting	Value	Number reporting	Value	Number reporting	Value		Number reporting	Value	Number reporting	Value	Number reporting	Value
<b>PENNSYLVANIA</b>													
All construction business.....	2,691	\$603,928,385	1,802	\$424,417,158	1,889	\$179,511,227	<b>PENNSYLVANIA—Con.</b>						
Distribution not reported.....	262	25,487,109	65	9,637,180	197	15,849,929	All business under subcontract—Continued.						
Distributed by class of ownership.....	2,429	578,441,276	1,737	414,779,978	1,192	103,661,298	Distributed by class—Con.						
Private.....	2,231	433,336,378	1,072	297,150,388	1,159	136,185,990	Masonry.....	109	\$9,437,349	10	\$165,240	93	\$9,272,109
Quasi public or community.....	567	30,098,950	222	26,711,048	345	12,387,902	Painting and decorating.....	95	6,579,671	5	41,919	90	7,549,869
Public.....	754	106,005,948	426	90,918,542	329	15,087,406	Glass and glazing.....	17	1,012,107	3	5,323	46	6,064,100
Distribution not reported.....	81	7,376,616	42	5,968,984	39	1,407,632	Plastering and lathing.....	49	6,099,483	1			
Distributed by class of public ownership.....	673	98,629,332	353	84,949,558	290	13,679,774	Roofing and sheet-metal work.....		11,732,544				11,732,544
Federal.....	70	8,382,833	29	5,659,888	41	722,945	Roofing.....	112	5,336,297			112	5,336,297
State.....	262	35,216,745	157	31,695,060	105	3,521,685	Sheet-metal work.....	124	4,264,371			124	4,264,371
County or township.....	250	17,799,589	134	15,629,485	116	2,170,104	Roofing and sheet metal combined.....	31	2,081,876			31	2,081,876
Municipal.....	397	39,230,165	211	31,965,126	186	7,265,040	Steel erection.....	44	9,745,769	8	2,833,933	36	6,862,823
All business under general contract or directly for owners.....	1,836	477,850,522	1,302	418,134,734	534	59,715,788	Stonework.....	40	3,588,038	6	103,100	34	3,484,932
Distribution not reported.....	22	5,294,084	14	4,031,611	8	602,423	Marble and tiling.....	70	7,899,890			70	7,899,890
Distributed by class.....	1,814	472,556,488	1,288	413,503,123	520	59,053,365	Wrecking.....	14	257,727	4	50,986	10	200,741
Building.....	1,560	335,040,868	1,038	295,370,386	512	39,670,482	Excavating.....	84	3,038,492	32	1,148,143	52	2,430,349
Distribution not reported.....	151	14,588,563	94	11,300,336	57	3,282,227	Ornamental iron.....	39	2,812,460			39	2,812,460
Distributed by class.....	1,399	320,452,305	944	284,064,050	455	36,388,255	Highway.....	5	141,668	2	488,054	3	130,321
Commercial.....	532	63,272,010	348	57,963,785	184	5,318,225	Grading.....	6	485,707	3		3	
Educational.....	325	27,879,751	195	24,931,050	130	2,943,701	Street paving.....	4	71,843	3	127,175	1	34,618
Hotel.....	81	3,065,126	28	3,479,043	53	476,083	Bridge and culvert.....	4	89,960	3		2	
Hospital and institutional.....	184	11,117,888	96	9,052,726	88	1,165,163	Sewer, gas, water, conduit.....	4	93,922	2	170,617	1	26,744
Manufacturing.....	325	76,373,966	189	67,008,517	136	9,365,449	Waterworks.....	4	103,379	3		2	
Military and naval.....	16	1,590,768	8	1,358,434	8	232,324	Dredging, river, harbor, etc.....	5	68,081	5	68,681	4	1,764,801
Public: Courts, jails, etc.....	95	10,710,361	52	10,352,788	43	357,573	Soundproofing.....	4	1,764,801			18	2,732,069
Religious and memorial.....	201	11,323,634	146	10,561,937	115	761,697	Metal work, n. e. s.....	18	2,792,069			18	2,732,069
Residential.....	1,046	78,527,128	786	68,829,966	310	9,697,162	Flooring, n. e. s.....	9	214,729			9	214,729
Social and recreational.....	159	6,552,054	99	5,960,043	60	586,411	Pipe line.....	1		1		1	
Air transport.....	29	830,942	19	801,700	10	29,152	Rental of equipment, trucking, etc.....	7	207,032	2	10,803	5	278,020
Rail and water transportation.....	38	19,199,425	21	18,808,980	17	390,445	Miscellaneous, n. e. s.....	5		2		3	
Miscellaneous.....	271	9,119,262	154	4,058,392	117	5,060,870	<b>ERIE</b>						
Highway and street.....	233	47,174,429	218	46,151,379	15	1,023,050	All construction business.....	57	8,493,945	34	7,000,708	23	1,394,237
Water power development.....	8	288,390	4	104,662	4	183,738	Distribution not reported.....	4	666,023	2	539,835	2	120,788
Railroad and car line.....	40	17,997,186	36	17,604,034	2	977,814	Distributed by class of ownership.....	53	7,827,322	32	6,559,873	21	1,267,449
Air transport work.....	9	584,662	7	47,519,062	30	9,572,129	Private.....	43	3,742,824	22	2,811,538	21	631,286
Public works and utilities.....	209	57,091,191	179	47,519,062	30	9,572,129	Quasi public or community.....	14	344,913	6	230,230	8	114,683
Distribution not reported.....	3	88,610	3	88,610			Public.....	20	3,739,585	14	3,518,105	6	221,480
Distributed by class.....	206	57,002,581	176	47,430,452	30	9,572,129	Distribution not reported.....	3	130,100			3	130,100
Bridge, tunnel, etc.....	78	24,628,749	68	17,380,396	10	7,248,353	Distributed by class of public ownership.....	17	3,603,485	14	3,518,105	3	85,380
Central station, light and power plant.....	25	11,763,003	16	11,254,721	9	498,282	State.....	4	1,071,262	4	1,071,262		
Refuse disposal plant.....	5		1		4	324,077	County or township.....	6	650,298	4	2,446,843	2	85,380
Oil and natural gas pipe line.....	1	1,204,028	1	879,951			Municipal.....	11	1,881,925	9		2	
Telephone line and system.....	1		1				All business under general contract or directly for owners.....	45	7,473,102	34	7,044,108	11	428,994
Park, grounds, etc.....	19	389,721	13	279,265	6	110,456	Building.....	36	5,181,395	25	4,705,371	11	425,094
River and harbor improvement.....	8	2,873,924	8	2,873,924			Commercial.....	12	705,681	8	633,667	4	72,014
Sewage disposal and drainage.....	75	6,645,235	66	6,548,215	9	97,020	Educational.....	8	1,470,143	5	1,459,361	3	10,782
Water supply.....	34	2,971,965	28	1,606,856	6	1,275,099	Hotel.....	1				1	
Dock, pier, retaining wall, etc.....	21	4,220,944	20		1		Hospital and institutional.....	1	60,300		(?)		(?)
Flood control, irrigation and land drainage.....	5	1,797,840	4	6,517,124	1	18,842	Social and recreational.....	13	437,086		357,452	5	80,234
Miscellaneous.....	17	508,182	10		1		Public: Courts, jails, etc.....	3	337,250	2	(?)	1	(?)
Miscellaneous.....	14	379,762		6,753,610		7,626,152	Religious and memorial.....	10	645,871	6	594,301	4	51,480
Automatic sprinkler system.....	3	4,685,292			3	4,685,292	Residential.....	21	1,211,604	16	1,125,127	6	86,477
Miscellaneous, n. e. s.....	78	9,694,470	59	6,763,610	19	2,940,860	Rail and water transportation.....	2				2	
All business under subcontract.....	1,281	126,077,863	106	6,282,424	1,175	119,795,439	Miscellaneous.....	7	256,770	1	142,473	3	114,297
Distribution not reported.....	27	3,950,447	2	180,821	25	3,769,626	Highway and street.....	9	2,109,801	7	2,109,801		(?)
Distributed by class.....	1,254	122,127,416	104	6,101,603	1,150	116,025,813	Public works and utilities.....	8	231,936		(?)	1	(?)
Carpentering and wood flooring.....	61	3,301,928	20	165,647	41	3,226,281	Bridge, tunnel, etc.....	2			(?)	1	(?)
Concreting.....	97	4,713,467	33	639,108	64	4,074,359	Park grounds, etc.....	2	59,343		(?)	1	(?)
Foundation.....	2		1		1		Water supply.....	1			(?)		
Electrical.....	119	8,908,021			119	8,908,021	Sewage disposal and drainage.....	3	172,598	3	172,598		
Elevator construction.....	16	5,085,189			16	5,085,189	All business under subcontract.....	23	1,020,843	3	55,600	20	965,243
Heating and plumbing.....	31	131,607		17,768	31	113,839	Electrical.....	3	143,819			3	143,819
Heating and piping.....	268	11,798,902			267		Heating and plumbing.....	9	398,560			9	398,560
Automatic temperature control.....	2			17,768	2	25,357,477	Heating and pipe covering.....	9	185,729			9	185,729
Pipe covering.....	43	2,140,348			41		Plumbing.....	6	212,851			6	212,851
Plumbing.....	252	11,435,995			251		Masonry and concreting.....	3	64,091		(?)	2	(?)
Plumbing and heating combined.....	64	4,956,215			64	4,956,215	Painting and decorating.....	3	251,028		(?)	2	(?)
Automatic sprinkler systems.....	4	800,147			4	800,147	Marble and tiling.....	2			(?)		
							Roofing and sheet-metal work.....	4	155,345			4	155,345
							Roofing.....	4	88,250			4	88,250
							Sheet-metal work.....	5	97,095			5	97,095
							Excavating.....	2			(?)	1	(?)
							Miscellaneous.....	1	18,000			1	(?)

See footnotes at end of table.

CONSTRUCTION—PENNSYLVANIA

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TABLE 2.—CONSTRUCTION BUSINESS OF REPORTING ESTABLISHMENTS DURING 1929, BY CLASS OF OWNER-SHIP AND BY TYPE OF WORK—Continued

CLASS OF OWNERSHIP AND TYPE OF CONSTRUCTION WORK	CONSTRUCTION BUSINESS REPORTED BY—						CLASS OF OWNERSHIP AND TYPE OF CONSTRUCTION WORK	CONSTRUCTION BUSINESS REPORTED BY—					
	All classes of establishments		General contractors <sup>1</sup>		Subcontractors			All classes of establishments		General contractors <sup>1</sup>		Subcontractors	
	Number reporting	Value	Number reporting	Value	Number reporting	Value		Number reporting	Value	Number reporting	Value	Number reporting	Value
<b>PHILADELPHIA</b>													
All construction business.....	922	\$390,872,008	344	\$201,639,651	578	\$89,232,447							
Distribution not reported.....	49	5,020,373	5	521,231	44	4,505,142							
Distributed by class of ownership.....	873	285,845,725	339	201,118,420	534	84,727,305							
Private.....	821	223,634,228	305	151,361,220	510	72,273,003							
Quasi public or community.....	184	20,939,741	55	14,475,709	129	6,463,972							
Public.....	106	41,271,750	94	35,281,431	102	5,990,325							
Distribution not reported.....	11	1,401,854	5	1,005,472	6	306,382							
Distributed by class of public ownership.....	185	39,809,902	80	34,275,959	90	5,593,943							
Federal.....	30	3,540,717	13	3,233,656	17	307,061							
State.....	61	9,606,652	28	8,336,176	33	1,300,476							
County or township.....	60	7,091,702	27	6,818,350	33	873,442							
Municipal.....	120	18,940,741	56	15,887,777	64	3,052,964							
All business under general contract or directly for owners.....	525	221,743,325	345	199,864,918	180	21,878,407							
Distribution not reported.....	7	1,957,702	4	1,699,682	3	358,020							
Distributed by class.....	518	219,785,623	341	198,265,236	177	21,520,387							
Building.....	448	163,887,990	278	148,793,267	170	15,094,723							
Distribution not reported.....	38	3,494,927	15	2,015,463	23	1,479,464							
Distributed by class.....	410	160,393,063	263	146,777,804	147	13,615,259							
Commercial.....	167	40,288,052	110	37,656,189	57	2,631,863							
Educational.....	68	13,155,555	40	12,258,674	28	898,881							
Hotel.....	24	1,570,213	9	1,334,590	15	235,623							
Hospital and institutional.....	68	7,027,598	39	6,633,230	29	394,368							
Manufacturing.....	100	24,393,144	60	21,666,899	40	2,720,245							
Military and naval.....	7	1,287,511	4	1,085,937	3	201,574							
Public: Courts, jails, etc.....	23	8,813,071	16	8,621,222	7	191,849							
Religious and memorial.....	76	5,054,161	46	4,814,386	30	239,765							
Residential.....	274	34,938,584	190	31,692,340	84	3,246,238							
Social and recreational.....	45	2,554,545	29	2,304,877	16	249,668							
Air transport.....	4	381,040	4	381,040									
Rail and water transportation.....	14	17,159,576	8	17,072,774	6	86,802							
Miscellaneous.....	73	3,770,223	35	1,257,640	38	2,512,583							
Highway and street.....	37	10,583,243	32	10,133,510	5	449,733							
Water power development.....	1		1		2	(?)							
Railroad and car line.....	15	10,484,621	13	(?)	2	(?)							
Subway (other than buildings).....	1		1										
Public works and utilities.....	59	27,525,085	54	27,117,774	5	407,311							
Distribution not reported.....	1	74,000	1	74,000									
Distributed by class.....	58	27,451,085	53	27,043,774	5	407,311							
Bridge, tunnel, etc.....	21	6,256,906	20	(?)	1	(?)							
Central station, light, and power plant.....	11	11,133,150	8	10,781,260	3	351,890							
Dock, pier, retaining wall, etc.....	12		12	2,628,143									
Flood control, irrigation and land drainage.....	2	2,628,143	2	(?)	1	(?)							
Park, grounds, etc.....	3	49,900	2	(?)									
River and harbor improvement.....	6	2,722,462	6	2,722,462									
Refuse-disposal plant.....	1		1	(?)									
Sewage disposal and drainage.....	19	2,981,348	18	(?)	1	(?)							
Water supply.....	6	1,356,193	6	1,356,193									
Miscellaneous.....	7	322,983	7	322,983									
Miscellaneous.....		7,304,684		2,530,888		4,773,796							
Automatic sprinkler system.....	3	4,685,292			3	4,685,292							
Miscellaneous, n. e. s.....	14	2,619,392	11	2,530,888	3	86,504							
All business under subcontract.....	521	69,128,773	25	1,774,733	496	67,354,040							
Distribution not reported.....	7	2,113,324			7	2,113,324							
Distributed by class.....	514	67,015,449	25	1,774,733	489	65,240,716							
Carpentering and wood flooring.....	39	2,970,586	5	45,100	34	2,925,486							
Concreting.....	30	2,170,699	5	99,800	25	2,070,899							
Electrical.....	45	4,671,126			45	4,671,126							
Elevator construction.....	11	4,546,618			11	4,546,618							
Heating and plumbing.....	15	15,150,481			15	15,150,481							
Heating and piping.....	90	6,928,096			90	6,928,096							
Pipe covering.....	10	489,128			10	489,128							
Plumbing.....	76	5,145,052			76	5,145,052							
Plumbing and heating combined.....	16	1,788,058			16	1,788,058							
Automatic sprinkler systems.....	4	800,147			4	800,147							
Masonry.....	44	6,588,110	1	(?)	43	(?)							
Glass and glazing.....	13	556,892			13	556,892							
<b>PHILADELPHIA—Continued</b>													
All business under subcontract—Continued.....	54	\$4,961,800	1	\$11,800	53	\$8,113,357							
Distributed by class—Con.....	18	3,163,357	2		16								
Painting and decorating.....		4,740,685				4,740,685							
Plastering and lathing.....		1,966,720				1,966,720							
Roofing and sheet-metal work.....		1,862,533				1,862,533							
Roofing.....	36				36								
Sheet-metal work.....	40				40								
Roofing and sheet metal combined.....	9	911,423			9	911,423							
Steel erection.....	19	2,708,309	2	(?)	17	(?)							
Stonework.....	10	2,653,086			10	2,653,086							
Marble and tiling.....	27	3,705,255			27	3,705,255							
Wrecking.....	5	188,336			5	188,336							
Excavating.....	23	1,333,217	1	411,532	4	1,110,021							
Ornamental iron.....	17	1,653,437			17	1,653,437							
Dredging, river, harbor, etc.....	4	57,481	4	57,481									
Metal work, n. e. s.....	14	2,023,813			14	2,023,813							
Rental of equipment, trucking, etc.....	3	86,949	1	(?)	2	(?)							
Flooring, n. e. s.....	6	127,281			6	127,281							
Other classes.....	8	2,358,391	5	499,431	3	1,858,960							
<b>PITTSBURGH</b>													
All construction business.....	343	121,176,065	145	86,297,102	198	34,878,963							
Distribution not reported.....	39	3,760,919	6	965,998	33	2,794,921							
Distributed by class of ownership.....	304	117,415,140	139	85,331,104	165	32,084,042							
Private.....	280	93,780,031	118	67,277,971	162	26,502,060							
Quasi public or community.....	78	5,511,654	24	3,501,601	54	2,010,053							
Public.....	98	18,123,461	44	14,551,532	54	3,571,929							
Distribution not reported.....	11	1,683,902	5	1,401,373	6	222,529							
Distributed by class of public ownership.....	87	16,439,559	39	13,090,159	48	3,349,400							
Federal.....	11	1,248,024	4	944,419	7	303,605							
State.....	26	3,761,967	13	3,012,300	13	749,661							
County or township.....	34	3,778,691	15	3,268,375	19	505,316							
Municipal.....	68	7,655,877	33	5,865,059	35	1,790,818							
All business under general contract or directly for owners.....	221	102,066,631	145	84,941,884	76	17,124,747							
Distribution not reported.....	1	621,000	1	621,000									
Distributed by class.....	220	101,445,631	144	84,320,684	76	17,124,747							
Building.....	183	70,757,454	111	62,064,684	72	8,692,770							
Distribution not reported.....	19	2,269,591	9	1,820,917	10	448,674							
Distributed by class.....	164	68,487,893	102	60,243,767	62	8,244,096							
Commercial.....	63	9,540,660	38	7,949,464	25	1,591,196							
Educational.....	36	1,827,616	16	2,465,378	20	514,365							
Hotel.....	6	1,152,127	2		4								
Hospital and institutional.....	19	628,347	6	507,282	13	121,065							
Manufacturing.....	33	41,433,877	14	38,429,345	19	3,004,532							
Public: Courts, jails, etc.....	13	923,240	4	826,405	9	96,841							
Religious and memorial.....	35	1,084,130	17	1,335,054	18	149,076							
Residential.....	116	7,705,053	72	6,325,853	44	1,380,100							
Social and recreational.....	10	604,797	6	563,392	10	51,405							
Air transport.....	5	17,012	3		2								
Rail and water transportation.....	7	1,562,733	8	1,317,754	4	261,991							
Miscellaneous.....	24	1,107,305	5	33,840	19	1,073,525							
Highway and street.....	24	7,794,112	20	7,485,609	4	308,503							
Railroad and car line.....	5	3,886,588	4	(?)	1	(?)							
Public works and utilities.....	31	14,921,288	27	8,737,061	4	6,183,327							
Bridge, tunnel, etc.....	15		12		3								
Central station, light and power plant.....	1	11,380,022	1	6,843,588									
Dock, pier, retaining wall, etc.....	6		5	(?)	1	(?)							
River and harbor improvement.....	2	753,878	2										
Park, grounds, etc.....	6	230,760	3	135,147	3	95,603							
Refuse disposal plant.....	1				1								
Sewage disposal and drainage.....	10	1,228,478	9	980,241	1	1,532,998							
Water supply.....	4	1,289,761	3		1								
Oil and natural gas pipe line.....	3	43,399	1	(?)	1	(?)							
Miscellaneous.....	3		2		1								
Water-power development.....	2		1	(?)	1	(?)							
Air transport work.....	1	418,404	1		1								
Miscellaneous, n. e. s.....	15	3,667,727	9	2,053,545	6	1,614,182							

See footnotes at end of table.

CONSTRUCTION—PENNSYLVANIA

TABLE 2.—CONSTRUCTION BUSINESS OF REPORTING ESTABLISHMENTS DURING 1929, BY CLASS OF OWNER-SHIP AND BY TYPE OF WORK—Continued

CLASS OF OWNERSHIP AND TYPE OF CONSTRUCTION WORK	CONSTRUCTION BUSINESS REPORTED BY—						CLASS OF OWNERSHIP AND TYPE OF CONSTRUCTION WORK	CONSTRUCTION BUSINESS REPORTED BY—					
	All classes of establishments		General contractors <sup>1</sup>		Subcontractors			All classes of establishments		General contractors <sup>1</sup>		Subcontractors	
	Number reporting	Value	Number reporting	Value	Number reporting	Value		Number reporting	Value	Number reporting	Value	Number reporting	Value
<b>PITTSBURGH—Continued</b>						<b>READING—Continued</b>							
All business under subcontract. Distribution not reported.....	182	\$10,109,434	12	\$1,355,218	170	\$17,754,216	All business under subcontract. Distribution not reported.....	37	\$2,614,693	2	(?)	35	(?)
	2	106,704			2	106,704		2	402,575			2	\$402,575
Distributed by class.....	180	18,042,730	12	1,355,218	168	17,587,512	Distributed by class.....	35	2,212,118	2	(?)	33	(?)
Carpentering and wood flooring.....	4	220,700	1	(?)	3	(?)	Electrical.....	3	218,468			1	218,468
Concreting.....	12	1,084,824	4	189,775	8	895,049	Elevator construction.....	1	409,184			1	409,184
Electrical.....	17	2,027,402			17	2,027,402	Heating and plumbing.....	7	170,257			7	170,257
Elevator construction.....	3	344,977			3	344,977	Heating and pipe covering.....	6	238,927			6	238,927
Heating and plumbing.....	4	637,105			4	637,105	Plumbing.....	3	222,260			3	222,260
Heating and piping.....	26	1,754,410	1	(?)	25	(?)	Painting and decorating.....	2				2	
Plumbing.....	20	2,466,033			20	2,466,033	Plastering and lathing.....						
Plumbing and heating combined.....	3	316,662			3	316,662	Roofing and sheet-metal work.....	5	370,488			5	370,488
Masonry.....	8	897,966	1	(?)	7	(?)	Roofing.....	6	261,391			6	261,391
Painting and decorating.....	19	806,090	1	(?)	18	(?)	Sheet-metal work.....	4	115,097			4	115,097
Glass and glazing.....	3	455,085			3	455,085	Steel erection <sup>11</sup> .....	4	678,675			4	678,675
Plastering and lathing.....	4	835,305			4	835,305	Stonework and concreting.....	3	99,321			3	99,321
Roofing and sheet-metal work.....		2,715,326				2,715,326	Marble and tiling.....	4	182,603			4	182,603
Roofing.....	12	1,303,789			12	1,303,789	Other classes <sup>12</sup> .....	3	30,219	2	(?)	1	(?)
Sheet-metal work.....	18	1,065,858			18	1,065,858	<b>SCRANTON</b>						
Roofing and sheet metal combined.....	6	345,679			6	345,679	All construction business.....	52	5,997,776	23	\$3,040,243	29	2,348,533
Steel erection.....	5	1,174,270	2	(?)	3	(?)	Distribution not reported.....	3	148,003	1	49,000	2	99,603
Stonework.....	3	217,726			3	217,726	Distributed by class of ownership.....	49	5,849,173	22	3,600,243	27	2,248,930
Marble and tiling.....	22	1,842,953			22	1,842,953	Private.....	46	3,203,630	20	1,902,495	26	1,301,144
Excavating and wrecking.....	11	643,693	5	205,687	6	438,006	Quasi public or community.....	21	830,751	7	536,878	14	302,873
Ornamental iron.....	9	603,220			9	603,220	Public.....	16	1,805,783	6	1,160,870	10	644,913
Soundproofing.....	3	113,563			3	113,563	Distribution not reported.....	1	20,457			1	20,457
Metal work, n. e. s.....	3	106,996			3	106,996	Distributed by class of public ownership.....	15	1,785,326	6	1,160,870	9	624,456
Flooring, n. e. s.....	3	87,448			3	87,448	Federal.....	1	541,379			1	541,379
Other classes <sup>13</sup> .....	5	108,096	2	(?)	3	(?)	State.....	7	482,696	5	504,659	6	459,410
							County or township.....	8	761,251	3	596,211	4	165,040
							Municipal.....	7					
<b>READING</b>						<b>SCRANTON</b>							
All construction business.....	82	11,218,144	32	6,803,813	50	4,414,331	All business under general contract or directly for owners.....	41	4,495,537	23	3,683,598	18	911,939
Distribution not reported.....	10	1,705,840	1	215,440	9	1,490,400	Building.....	38	3,410,739	21	2,648,800	17	761,939
Distributed by class of ownership.....	72	9,512,304	31	6,688,373	41	2,923,931	Distribution not reported.....	3	130,525	1	49,000	2	81,525
Private.....	72	8,214,998	31	5,599,490	41	2,615,608	Distributed by class.....	35	3,280,214	20	2,599,300	15	680,414
Quasi public or community.....	12	162,037	5	95,371	7	66,666	Commercial.....	17	694,632	10	474,042	7	119,990
Public.....	10	1,135,269	6	893,512	13	241,757	Educational.....	12	1,048,354	6	969,154	6	70,200
Distribution not reported.....	3	174,206	1	150,231	2	23,975	Hotel.....	4	7,060	1	173,366	3	89,563
Distributed by class of public ownership.....	16	961,063	5	743,281	11	217,782	Hospital and institutional.....	10	255,869	5	173,366	5	89,563
State.....	3	35,397	1	31,792	2	23,164	Manufacturing.....	6	80,556	3	74,192	3	12,364
County or township.....	5	19,559	2	711,489	3	194,618	Religious and memorial.....	8	47,424	3	37,092	5	10,332
Municipal.....	12	906,107	4		8		Residential.....	21	700,203	11	504,409	10	195,794
							Social and recreational.....	8	187,700	4	170,415	4	17,285
All business under general contract or directly for owners.....	61	8,003,451	32	6,790,052	29	1,813,399	Public: Courts, jails, etc.....	2	352,416	1	190,530	2	155,886
Building.....	58	7,454,103	29	5,724,230	29	1,729,873	Miscellaneous.....	7	53,430	3	53,430	3	
Distribution not reported.....	4	1,237,308	3	1,071,308	1	166,000	Public works and utilities <sup>14</sup> .....	3	53,430	3		1	(?)
Distributed by class.....	54	6,216,795	26	4,652,922	28	1,563,873	Highway and street.....	2	1,031,398	2		2	
Commercial.....	17	803,857	5	698,018	12	105,839	Miscellaneous, n. e. s.....	2		2		2	
Educational.....	11	708,516	6	599,159	5	109,357							
Hotel.....	3	9,503	1	30,482	2	9,375	All business under subcontract. Concreting and stonework.....	24	1,502,239	2	(?)	22	(?)
Hospital and institutional.....	3	30,354	2		1		Heating and plumbing.....	3	418,179	1	(?)	2	(?)
Manufacturing.....	16	1,168,768	9	716,969	7	451,794	Heating and piping.....	8	337,127			8	(?)
Religious and memorial.....	7	244,479	3	232,853	4	11,628	Pipe covering.....	1	166,478			1	(?)
Residential.....	47	2,971,702	24	2,190,907	23	780,795	Plumbing and heating combined.....	1				1	
Social and recreational.....	4	117,222	2	184,534	2	95,087	Plumbing.....	8	170,649			8	170,649
Miscellaneous.....	8	162,399	6		2		Painting and decorating.....	1	185,754			1	185,754
Public works and utilities <sup>10</sup> .....	5	752,014	4	(?)	1	(?)	Plastering and lathing.....	3				3	
Highway and street.....	3		2		1	(?)	Roofing and sheet-metal work.....		154,079			4	154,079
Water-power development.....	1	397,334	1	(?)	1	(?)	Roofing.....	4	89,395			4	89,395
Miscellaneous, n. e. s.....	1		1		1		Sheet-metal work.....	4	64,684			5	64,684
							Other classes <sup>14</sup> .....	6	407,100	3	59,645	3	347,455

<sup>1</sup> Includes operative builders.  
<sup>2</sup> Value omitted in order to avoid disclosing individual operations. The amounts omitted are, however, included in the respective totals.  
<sup>3</sup> Includes subway, (other than buildings).  
<sup>4</sup> Includes 1 establishment reporting miscellaneous work.  
<sup>5</sup> Includes 1 establishment reporting work on automatic temperature control.  
<sup>6</sup> Includes establishments reporting the following types of work: General contractors—bridge and culvert, 1; grading, 1; waterworks, 2; foundation, 1. Subcontractors—Highway, 1; soundproofing, 1; foundation, 1.  
<sup>7</sup> Includes 1 establishment reporting rental of equipment.  
<sup>8</sup> Includes 1 establishment reporting pipe covering and 1 reporting work on automatic temperature control.  
<sup>9</sup> Includes establishments reporting the following types of work: General contractors—Dredging, river, and harbor, 1; pipe line, 1. Subcontractors—Highways, 1; grading, 1; miscellaneous, n. e. s., 1.  
<sup>10</sup> Includes establishments reporting the following types of work: General contractors—Type of work not reported, 1; bridge, tunnel, etc., railroad and car line, 1; sewage disposal and drainage, 1; miscellaneous, 1. Subcontractors—Sewage disposal and drainage, 1.  
<sup>11</sup> Includes 2 establishments reporting ornamental iron.  
<sup>12</sup> Includes establishments reporting the following types of work: General contractors—Carpentering and wood flooring, 1; excavating, 1. Subcontractors—Sewer gas, water, conduit, 1.  
<sup>13</sup> Includes establishments reporting the following types of work: Type of work not reported, 1; central station, light and power plant, 2.  
<sup>14</sup> Includes establishments reporting the following types of work: General contractors—Carpentering, 1; masonry, 1; excavating, 1. Subcontractors—electrical, 1; excavating, 1; ornamental iron, 1.

# CONSTRUCTION—PENNSYLVANIA

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TABLE 3.—CONSTRUCTION BUSINESS DURING 1929, BY LOCATION

CLASSIFICATION OF ESTABLISHMENTS	Estab- lish- ments report- ing	Total	In home city	In home state	Outside home state	CLASSIFICATION OF ESTABLISHMENTS	Estab- lish- ments report- ing	Total	In home city	In home state	Outside home state
<b>PENNSYLVANIA</b>						<b>PHILADELPHIA</b>					
	2,806	\$580,287,543	\$298,320,200	\$441,773,051	\$138,514,492		894	\$284,317,984	\$156,740,984	\$208,299,981	\$76,018,003
Operative builders	102	18,007,808	17,709,938	18,007,808		Operative builders	46	11,484,366	11,276,486	11,484,366	
General contractors	1,158	393,813,004	175,335,702	289,530,804	104,273,200	General contractors	200	188,540,767	92,834,243	127,927,008	60,622,159
Building	860	279,006,699	135,537,897	201,418,883	77,587,816	Building	217	145,615,912	69,019,079	95,741,291	49,874,621
Building not special- ized	612	222,906,380	116,110,107	165,811,560	57,094,820	Building not special- ized	161	134,474,780	61,111,942	85,063,241	49,411,539
Commercial building only	21	3,561,031	2,139,876	3,510,031	42,000	Commercial building only	13	2,983,070	1,695,220	2,941,070	42,000
Manufacturing build- ing	6	31,949,374	227,457	11,924,542	20,024,832	Manufacturing build- ing only	3	760,515	141,819	684,008	75,607
Residential building only	221	20,589,914	17,060,457	20,163,750	426,164	Residential building only	40	7,397,547	6,070,098	7,052,072	345,475
Highway	102	29,781,082	4,133,848	26,271,402	3,490,280	Highway	7	3,000,192	1,054,373	1,816,131	1,184,061
Bridge and culvert	25	15,373,535	2,903,767	9,094,397	9,270,138	Bridge and culvert	9	6,022,130	1,506,523	2,410,711	3,611,419
Grading	10	2,635,338	1,498,675	2,369,630	265,708	Grading	3	814,771	652,971	804,371	10,400
Street paving	69	17,141,059	11,185,149	16,784,401	356,658	Street paving	13	6,796,962	5,568,481	6,501,754	205,208
Sewer, gas, water, con- duit	35	7,093,327	5,101,357	6,038,088	1,055,239	Sewer, gas, water, con- duit	11	3,253,104	2,087,727	2,843,727	409,377
Water works, dam, and reservoir	9	2,458,320	1,106,673	1,585,149	873,171	Water works Dredging, river, harbor, etc.	5	1,573,398	1,103,489	1,230,239	337,159
Dredging, river, harbor, etc.	16	12,237,164	1,747,967	7,412,879	4,824,285	Dredging, river, harbor, etc.	12	7,128,200	1,701,714	3,335,199	3,793,091
Railroad and subway	17	22,016,823	10,121,792	16,200,931	5,809,892	Railroad and subway	10	11,257,355	8,433,010	10,292,852	904,560
Foundation	6	1,986,077	185,963	1,477,884	608,093	Other classes <sup>10</sup>	3	3,037,653	1,056,926	2,855,333	222,320
Other classes <sup>11</sup>	3	4,102,930	1,812,014	3,880,000	222,320	Subcontractors	558	84,283,861	55,039,255	68,888,017	15,395,844
Subcontractors	1,340	108,466,731	100,184,500	134,225,439	34,241,292	Carpentering and wood flooring	32	3,149,947	2,277,898	2,767,711	382,236
Carpentering and wood flooring	38	3,588,080	2,637,909	3,205,850	382,236	Concreting	23	3,547,872	2,131,541	2,921,022	626,850
Concreting	48	7,026,531	4,358,757	5,997,503	1,028,968	Electrical	54	6,669,976	5,506,935	5,941,672	718,304
Electrical	138	13,200,100	10,400,294	12,490,457	850,652	Elevator construction	14	5,557,091	3,108,993	4,008,288	1,549,703
Elevator construction	19	6,900,502	4,031,988	5,259,797	1,643,795	Heating and plumbing	157	25,485,658	14,984,759	18,864,054	6,621,604
Heating and plumbing	471	50,287,630	33,543,662	42,181,439	8,106,290	Heating and piping <sup>12</sup>	61	6,112,148	6,571,713	7,848,527	1,703,621
Heating and piping <sup>12</sup>	147	16,929,630	11,475,538	14,888,010	2,052,877	Pipe covering	4	448,091	269,979	397,491	50,990
Pipe covering	5	1,936,670	1,324,609	789,755	1,205,815	Plumbing	61	6,730,294	4,946,275	6,228,033	502,261
Plumbing	204	16,520,826	13,480,148	15,988,715	532,111	Plumbing and heating combined	25	2,997,937	2,820,525	2,935,202	62,735
Plumbing and heating combined	109	9,162,108	7,893,100	9,080,158	73,010	Automatic sprinkler system	6	5,697,188	370,267	1,454,801	4,242,387
Automatic sprinkler system	6	5,697,188	370,267	1,454,801	4,242,387	Masonry	44	7,521,645	6,232,752	6,008,604	613,041
Masonry	63	10,886,356	8,781,772	10,230,315	656,041	Painting and decorating	58	6,349,023	4,818,130	6,015,041	333,982
Painting and decorating	103	9,040,459	7,094,372	8,527,489	112,969	Glass and glazing	7	1,047,557	863,672	969,627	137,930
Glass and glazing	10	1,598,102	1,283,132	1,400,172	137,930	Plastering and lathing	17	3,285,730	2,974,396	3,141,408	144,322
Plastering and lathing	50	6,549,955	5,000,484	6,307,233	152,722	Roofing and sheet-metal work	51	4,370,753	3,331,011	4,069,082	301,712
Roofing and sheet-metal work	148	12,899,991	7,702,400	10,701,535	2,108,456	Roofing	23	2,058,632	1,437,920	1,937,920	120,711
Roofing	68	6,471,833	3,124,719	4,726,636	1,745,247	Sheet-metal work	19	1,740,979	1,435,328	1,608,664	142,315
Sheet-metal work	45	3,769,327	2,508,444	3,445,512	323,815	Roofing and sheet metal combined	0	571,142	458,129	582,498	38,644
Roofing and sheet metal combined	35	2,568,781	2,069,237	2,520,387	39,394	Steel erection	14	3,197,295	1,137,777	1,725,321	1,471,474
Steel erection	23	21,411,706	1,582,020	9,890,361	14,521,405	Stonework	11	2,658,290	1,355,933	2,249,576	408,720
Stonework	22	3,810,612	1,960,720	3,351,402	469,210	Marble and tiling	27	4,117,916	3,001,222	3,668,344	449,572
Marble and tiling	74	8,372,379	5,715,338	7,759,903	612,476	Excavating and grading	11	1,706,628	506,222	1,195,893	516,825
Excavating	3	187,761	187,761	187,761		Ornamental iron	16	1,448,403	1,166,111	1,308,090	139,704
Excavating and grading	27	2,622,074	1,254,661	2,467,314	154,760	Metal work, n. e. s.	14	2,094,843	1,282,213	1,788,878	306,065
Ornamental iron	31	2,488,157	1,038,349	2,308,229	179,931	Flooring, n. e. s.	3	143,283	69,388	123,927	10,356
Metal work, n. e. s.	4	984,577	175,592	628,512	356,065	Other classes <sup>11</sup>	5	1,941,045	890,312	1,280,560	660,485
Soundproofing	5	2,024,742	832,694	1,304,257	660,485						
Flooring, n. e. s.	19	3,950,863	1,362,269	2,416,900	1,583,963						
Other classes <sup>12</sup>	6	338,947	229,232	303,276	35,671						
	4	327,064	61,117	179,677	147,387						
	58	7,918,945	5,545,414	6,618,957	1,301,988						
<b>ERIE</b>						<b>PITTSBURGH</b>	398	117,584,853	43,913,762	75,262,410	42,302,443
General contractors	33	6,524,708	4,225,377	5,243,720	1,280,988	Operative builders	10	1,194,951	1,194,951	1,194,951	
Building	24	4,211,314	3,898,811	3,925,095	286,219	General contractors	130	84,005,753	25,405,919	51,150,937	32,854,816
Building not special- ized	17	3,592,556	3,283,552	3,306,330	286,219	Building	91	58,934,598	18,754,436	35,031,267	23,903,331
Commercial building only	7	618,759	614,759	618,759		Building not special- ized	57	55,839,646	15,858,868	31,990,325	23,849,321
Residential building only	6	2,064,415	144,718	1,131,067	932,458	Commercial building 					

TABLE 3.—CONSTRUCTION BUSINESS DURING 1929, BY LOCATION—Continued

CLASSIFICATION OF ESTABLISHMENTS	Establishments reporting	Total	In home city	In home state	Outside home state	CLASSIFICATION OF ESTABLISHMENTS	Establishments reporting	Total	In home city	In home state	Outside home state
<b>PITTSBURGH—Con.</b>						<b>READING—Con.</b>					
Subcontractors—Con.						Subcontractors	46	\$3,190,887	\$2,538,504	\$3,115,169	\$75,718
Heating and plumbing	51	\$5,837,408	\$5,262,019	\$5,779,108	\$53,300	Concreting <sup>16</sup>	3	166,749	166,749	166,749	
Heating and piping <sup>2</sup>	16	1,562,060	1,120,832	1,503,760	58,300	Electrical	9	832,588	499,047	782,370	50,218
Plumbing	32	3,533,562	3,440,401	3,583,562		Heating and plumbing	14	1,117,078	1,066,783	1,117,078	
Plumbing and heating combined	3	691,786	691,786	691,786		Heating and piping	3	394,518	394,518	394,518	
Masonry	7	966,332	888,095	966,332		Plumbing	8	583,284	539,959	583,284	
Painting, decorating, and glazing	21	1,855,626	1,401,108	1,676,639	178,987	Plumbing and heating combined	3	139,276	132,276	139,276	
Plastering and lathing	5	909,009	909,009	909,009		Painting and decorating	3	140,523	140,523	140,523	
Roofing and sheet-metal work	26	3,707,313	1,505,005	2,172,630	1,534,683	Roofing and sheet-metal work	7	341,981	252,240	341,681	
Roofing	7	2,344,258	490,375	816,825	1,527,433	Roofing	4	201,589	111,848	201,589	
Sheet-metal work	11	890,290	542,615	883,790	6,500	Sheet-metal work	3	140,392	140,392	140,392	
Roofing and sheet metal combined	8	472,765	472,015	472,015	750	Marble, tiling, and plastering	6	328,504	272,429	328,504	
Steel erection	5	9,293,926	109,643	2,371,325	6,922,601	Other classes <sup>16</sup>	4	265,464	140,733	239,964	25,500
Stonework	3	217,726	217,726	217,726		<b>SCRANTON</b>					
Marble and tiling	19	1,612,161	1,307,394	1,607,614	4,547	General contractors	22	3,466,869	1,877,352	3,406,569	
Excavating and grading	4	401,416	367,733	401,416		Building	19	2,476,961	1,701,679	2,476,961	
Ornamental iron	6	488,373	436,056	485,306	3,067	Highway and street paving	3	990,008	176,673	990,008	
Soundproofing	3	271,458	130,143	271,458		Subcontractors	29	2,348,533	1,167,700	2,208,533	140,000
Metal work, n. e. s.	4	1,089,484	89,056	874,795	514,689	Heating and plumbing	13	747,211	673,661	637,211	110,000
Other classes <sup>13</sup>	4	392,269	265,099	375,964	16,315	Plumbing	8	416,373	351,128	405,378	10,000
<b>READING</b>						Plumbing and heating combined	5	331,833	222,433	231,833	160,000
Operative builders	8	862,996	862,996	862,996		Plastering and lathing	3	101,015	101,015	101,015	
General contractors	24	5,940,817	5,132,153	5,812,721	128,066	Roofing and sheet-metal work	5	325,359	98,692	295,359	30,000
Building	20	4,730,207	4,147,075	4,602,111	128,066	Other classes <sup>17</sup>	8	1,174,948	394,432	1,174,948	
Building not specialized	16	4,182,207	3,599,075	4,054,111	128,066						
Residential building only	4	548,000	548,000	548,000							
Other classes <sup>14</sup>	4	1,210,610	985,083	1,210,610							

<sup>1</sup> Includes air transport work.  
<sup>2</sup> Includes oil and natural gas pipe line; and telephone line and system.  
<sup>3</sup> Includes automatic temperature control.  
<sup>4</sup> Includes highway; and street paving.  
<sup>5</sup> Includes sewer, gas, water, conduit; rental of equipment, trucking, etc.; and miscellaneous, n. e. s.  
<sup>6</sup> Includes operative builders.  
<sup>7</sup> Includes grading and street paving.  
<sup>8</sup> Includes plumbing and heating combined.  
<sup>9</sup> Includes masonry; painting and decorating.  
<sup>10</sup> Includes foundation; and telephone line and system.  
<sup>11</sup> Includes wrecking; and soundproofing.  
<sup>12</sup> Includes grading; railroad; foundation; waterworks; and air transport work.  
<sup>13</sup> Includes carpentering; highway; and flooring, n. e. s.  
<sup>14</sup> Includes highway; grading; sewer, gas, water, conduit; and dam and reservoir.  
<sup>15</sup> Includes masonry; and stone work.  
<sup>16</sup> Includes elevator construction; steel erection; ornamental iron; and sewer, gas, water, conduit.  
<sup>17</sup> Includes carpentering and wood flooring; concreting; electrical; painting and decorating; stonework; excavating; and ornamental iron.



CONSTRUCTION—PENNSYLVANIA

TABLE 4.—CONSTRUCTION BUSINESS OUTSIDE HOME STATE, BY LOCATION

STATE OR COUNTRY	LOCATION REPORTED BY—			STATE OR COUNTRY	LOCATION REPORTED BY—		
	All classes of establishments	General contractors	Subcontractors		All classes of establishments	General contractors	Subcontractors
<b>PENNSYLVANIA</b>				<b>PHILADELPHIA—Continued</b>			
Total distributed by State or country <sup>1</sup> .....	\$138, 514, 402	\$104, 273, 200	\$34, 241, 202	Total distributed by State or country—Continued.			
Alabama.....	2, 430, 249	2, 403, 362	26, 887	New Hampshire.....	\$2, 786, 640	\$2, 786, 640	
Arizona.....	90, 055	96, 105	3, 860	New Jersey.....	19, 845, 073	13, 396, 237	\$6, 440, 436
Arkansas.....	29, 267	12, 950	16, 307	New York.....	15, 382, 450	13, 878, 203	1, 504, 247
California.....	17, 512		17, 512	North Carolina.....	198, 306		198, 306
Colorado.....	2, 345	2, 250	95	Ohio.....	1, 900, 472	1, 892, 748	7, 724
Connecticut.....	10, 046, 120	9, 796, 533	240, 687	Oklahoma.....	173, 000	173, 000	
Delaware.....	5, 170, 972	4, 335, 833	835, 139	Oregon.....	140, 386	140, 386	
District of Columbia.....	1, 900, 811	1, 689, 478	271, 333	Rhode Island.....	76, 273	68, 679	7, 594
Florida.....	167, 722	141, 541	16, 181	South Carolina.....	484		484
Georgia.....	638, 720	535, 908	147, 812	Tennessee.....	689, 431	656, 678	32, 753
Illinois.....	5, 340, 563	5, 077, 848	262, 715	Texas.....	2, 076, 100	2, 076, 100	
Indiana.....	4, 026, 300	4, 007, 859	18, 501	Vermont.....	719, 110	719, 110	
Iowa.....	39, 300	39, 300		Virginia.....	1, 190, 602	831, 493	359, 109
Kansas.....	3, 183		3, 183	Washington.....			
Kentucky.....	2, 480, 105	2, 026, 520	453, 585	West Virginia.....	2, 224, 139	2, 095, 683	128, 456
Louisiana.....	78, 855	4, 780	60, 075	Wisconsin.....	6, 040	6, 040	
Maine.....	303, 403	297, 468	35, 935	Wyoming.....	365, 000	363, 100	2, 500
Maryland.....	4, 990, 506	3, 650, 009	1, 340, 497	Other States, n. s.	4, 814, 093	266, 683	4, 247, 416
Massachusetts.....	1, 230, 111	859, 105	380, 000	Hawaii.....	6, 000		6, 000
Michigan.....	8, 111, 903	4, 031, 902	3, 480, 001	Canada.....	30, 000		30, 000
Minnesota.....	1, 623, 834	1, 559, 073	64, 761				
Mississippi.....	587, 056			<b>PITTSBURGH</b>			
Missouri.....	2, 283, 756	2, 230, 480	47, 276	Total distributed by State or country <sup>1</sup> .....	42, 302, 443	32, 854, 810	9, 447, 627
New Hampshire.....	2, 812, 577	2, 806, 154	6, 423	Alabama.....	279, 213	279, 213	
New Jersey.....	25, 424, 000	17, 569, 781	7, 855, 128	Arizona.....	53, 294	53, 294	
New Mexico.....	12, 406		12, 406	Arkansas.....	12, 950	12, 950	
New York.....	23, 807, 795	17, 898, 512	5, 909, 283	Colorado.....	2, 250	2, 250	
North Carolina.....	430, 187	115, 777	314, 410	Connecticut.....	8, 577, 058	8, 577, 058	
North Dakota.....	8, 129		8, 129	Delaware.....	5, 156	5, 156	3, 000
Ohio.....	9, 503, 411	8, 081, 400	881, 021	District of Columbia.....	1, 022, 036	1, 022, 036	
Oklahoma.....	261, 140	252, 811	8, 329	Florida.....	4, 757	4, 757	
Oregon.....	140, 386	140, 386		Georgia.....	5, 381	5, 381	
Rhode Island.....	766, 865	390, 182	376, 683	Illinois.....	4, 716, 953	4, 716, 953	14, 013
South Carolina.....	614, 460		614, 460	Indiana.....	3, 003, 345	3, 049, 332	430, 795
South Dakota.....	14, 045	14, 045		Kentucky.....	543, 570	112, 805	61, 014
Tennessee.....	721, 692	686, 289	35, 403	Louisiana.....	60, 394	4, 780	3, 880
Texas.....	2, 802, 619	2, 253, 650	548, 969	Maryland.....	668, 079	654, 819	40, 550
Utah.....	25, 649	25, 649		Massachusetts.....	148, 429	102, 879	40, 550
Vermont.....	734, 076	730, 794	3, 282	Michigan.....	3, 918, 878	512, 859	3, 406, 028
Virginia.....	1, 899, 389	1, 389, 566	509, 823	Minnesota.....	1, 559, 073	1, 559, 073	
Washington.....	10, 282	10, 282		Mississippi.....	5, 300	5, 300	10, 400
West Virginia.....	4, 985, 112	4, 628, 028	357, 084	Missouri.....	132, 900	172, 500	
Wisconsin.....	1, 079, 107	1, 022, 127	56, 980	New Jersey.....	1, 359, 147	1, 359, 147	
Wyoming.....	7, 044	7, 044		New York.....	1, 804, 370	1, 516, 694	287, 676
Other States, n. s.	10, 276, 998	1, 528, 826	8, 748, 172	North Carolina.....	7, 852	7, 852	707
Hawaii.....	6, 000		6, 000	Ohio.....	6, 745, 833	6, 121, 581	624, 242
Canada.....	233, 331	142, 551	90, 780	Oklahoma.....	79, 811	79, 811	
Cuba, Bermuda, and West Indies.....	89, 685		89, 685	Rhode Island.....	21, 503	21, 503	
Mexico.....	20, 271	20, 271		South Dakota.....	14, 045	14, 045	
Japan.....	4, 669	4, 669		Tennessee.....	32, 211	29, 616	2, 650
				Texas.....	230, 896	98, 003	132, 893
				Utah.....	25, 649	25, 649	
				Vermont.....	1, 432		1, 432
				Virginia.....	118, 923	118, 923	
				Washington.....	10, 282	10, 282	
				West Virginia.....	1, 462, 659	1, 321, 358	141, 301
				Wisconsin.....	669, 027	659, 027	
				Other States, n. s.	4, 767, 526	471, 000	4, 286, 526
				Canada.....	142, 551	142, 551	
				Mexico.....	20, 271	20, 271	
				Japan.....	4, 669	4, 669	
				<b>READING</b>			
				Total distributed by State <sup>5</sup> .....	203, 814	128, 006	75, 718
				Delaware.....	5, 500		5, 500
				Maryland.....	5, 255		5, 255
				New Jersey.....	22, 116		22, 116
				New York.....	28, 043	28, 006	847
				West Virginia.....	42, 000		42, 000
				Other States, n. s.	100, 000	100, 000	
				<b>SCRANTON</b>			
				Total distributed by State <sup>6</sup> .....	140, 000		140, 000
				New York.....	140, 000		140, 000

Number of establishments reporting:

- <sup>1</sup> All classes, 457; general contractors, 188; subcontractors, 269.
- <sup>2</sup> All classes, 8; general contractors, 6; subcontractors, 2.
- <sup>3</sup> All classes, 239; general contractors, 100; subcontractors, 189.
- <sup>4</sup> All classes, 45; general contractors, 20; subcontractors, 25.
- <sup>5</sup> All classes, 4; general contractors, 2; subcontractors, 2.
- <sup>6</sup> All classes, 3; subcontractor, 3.

TABLE 5.—NUMBER AND SALARIES OF PROPRIETORS, FIRM MEMBERS, AND SALARIED EMPLOYEES: 1929

CLASSIFICATION OF ESTABLISHMENTS	Establishments reporting	PROPRIETORS AND FIRM MEMBERS				SALARIED EMPLOYEES										Sex not reported
		Receiving no salary	Receiving salaries		All salaried employees		Officers and clerical staff		Superintendents, foremen, etc.		Number reported by sex					
			Number	Total annual salaries	Total number	Total annual salaries	Number	Total annual salaries	Number	Total annual salaries	Total	Male	Female			
<b>PENNSYLVANIA</b>	2,624	1,461	1,209	\$4,313,344	10,627	\$32,774,943	6,186	\$21,238,005	4,341	\$11,536,938	9,523	7,995	1,528	1,004		
Operative builders	100	106	25	96,728	124	207,512	73	160,363	51	131,149	109	80	29	15		
General contractors	1,172	719	423	1,614,422	6,575	22,370,176	3,536	14,506,554	3,039	7,863,622	6,028	5,320	708	547		
Building	872	560	332	1,277,233	4,271	16,030,564	2,596	11,134,372	1,675	4,496,192	3,949	3,389	560	322		
Building not specialized	619	370	241	974,031	3,156	12,003,295	1,743	8,904,048	1,413	3,698,347	2,856	2,601	365	300		
Commercial building only	20	16	6	17,485	77	233,619	49	149,245	28	84,374	78	59	17	1		
Manufacturing building only	6	1	3	6,593	781	2,181,355	656	1,760,987	125	420,368	781	647	134	---		
Residential building only	227	173	82	276,124	257	612,295	148	319,192	109	203,103	236	182	54	21		
Highway	105	68	27	96,440	678	1,570,989	230	653,764	448	617,226	670	538	32	108		
Bridge and culvert	24	12	6	51,432	252	813,005	78	295,383	174	618,222	227	219	8	25		
Grading	16	6	9	19,070	78	195,853	41	116,944	37	78,909	60	57	9	12		
Street paving	68	33	27	96,857	334	1,063,301	148	645,854	186	417,447	307	277	30	27		
Sewer, gas, water, conduit	35	24	14	47,500	206	637,609	109	272,517	97	265,092	200	186	14	6		
Waterworks, dam and reservoir	9	4	2	4,590	45	151,355	22	51,872	23	90,483	45	36	9	---		
Dredging, river, harbor, etc.	16	4	4	13,000	259	910,890	129	578,509	130	332,381	239	218	21	20		
Railroad and subway	18	4	---	---	278	1,052,804	110	582,956	169	460,848	258	247	11	20		
Foundation	6	2	2	7,700	42	173,405	15	88,704	27	84,701	35	34	1	7		
Other classes <sup>2</sup>	3	2	---	---	132	269,801	49	85,679	83	184,122	132	119	13	---		
Subcontractors	1,352	636	761	2,602,194	3,828	10,107,255	2,577	6,565,088	1,251	3,542,107	3,386	2,595	791	412		
Carpentering and wood flooring	40	17	21	83,797	108	272,320	80	190,931	28	81,389	108	83	25	---		
Concreting	47	22	21	57,815	223	694,167	106	386,966	117	307,201	217	187	30	6		
Electrical	135	49	61	224,866	445	1,033,516	335	791,651	110	291,865	403	295	108	42		
Elevator construction	19	4	1	3,120	138	383,266	103	275,692	35	107,574	138	97	41	---		
Heating and plumbing	474	240	299	918,675	1,058	2,551,410	759	1,703,509	299	847,841	952	694	258	100		
Heating and piping <sup>3</sup>	147	70	102	303,461	370	969,683	276	685,703	94	283,975	364	265	89	16		
Pipe covering	5	---	2	6,500	50	113,508	17	29,974	33	83,534	50	41	9	---		
Plumbing	202	110	120	300,793	369	860,190	204	557,726	105	302,464	329	228	98	43		
Plumbing and heating combined	114	69	75	217,916	191	449,880	144	326,760	47	123,130	144	98	46	47		
Automatic sprinkler systems	6	1	---	---	78	168,149	58	103,411	20	54,738	78	62	16	---		
Masonry	90	59	53	207,242	177	484,929	93	249,233	84	235,696	148	124	24	29		
Painting and decorating	105	62	47	185,877	246	644,422	168	428,046	78	216,776	235	168	67	11		
Glass and glazing	10	2	4	22,500	22	100,932	15	82,532	7	18,400	22	16	6	---		
Plastering and lathing	51	41	18	70,987	116	335,374	73	188,830	43	146,544	101	85	16	15		
Roofing and sheet-metal work	154	66	115	378,777	396	1,012,995	267	604,453	129	408,542	325	247	78	71		
Roofing	71	27	49	186,602	185	497,237	110	274,163	75	223,074	132	90	36	53		
Sheet-metal work	45	20	29	101,815	124	344,847	87	209,504	37	135,343	113	94	19	11		
Roofing and sheet metal combined	38	9	37	140,360	87	170,911	70	120,786	17	50,125	80	57	23	7		
Steel erection	32	6	9	51,345	236	777,814	115	401,502	121	376,252	200	173	27	36		
Stonework	23	11	12	42,927	79	265,685	50	172,319	29	93,366	66	56	10	13		
Marble and tiling	72	23	48	175,737	188	520,491	164	442,672	24	77,819	142	98	44	46		
Wrecking	3	---	---	---	10	19,892	8	16,212	2	3,680	6	5	1	4		
Excavating	27	19	17	53,220	88	199,231	29	73,417	59	125,814	97	58	0	21		
Ornamental iron	29	9	20	75,859	100	267,916	77	205,679	23	62,237	93	53	10	7		
Grading <sup>4</sup>	4	4	---	---	28	67,840	16	37,760	12	20,080	22	20	2	1		
Soundproofing	5	1	1	10,000	40	104,756	36	93,666	4	11,090	39	20	10	25		
Metal work, n. e. s.	21	9	6	21,100	104	276,377	66	188,264	38	88,113	79	58	21	3		
Flooring, n. e. s.	7	2	2	7,950	17	40,912	11	22,644	6	18,268	14	11	3	25		
Other classes <sup>5</sup>	4	---	6	10,900	9	13,010	6	8,390	3	4,620	9	8	1	---		
<b>ERIE</b>	55	29	23	74,379	150	423,984	87	250,720	63	173,244	126	99	27	24		
General contractors <sup>6</sup>	33	21	7	21,320	111	354,101	60	207,075	51	147,086	98	82	16	13		
Building	24	17	6	17,720	77	235,339	42	140,257	35	95,032	69	54	12	11		
Building not specialized <sup>6</sup>	18	11	6	17,720	71	223,219	37	131,137	34	92,032	60	48	12	11		
Residential building only	6	6	---	---	6	12,120	5	9,120	1	3,000	6	6	---	---		
Highway <sup>7</sup>	6	2	1	3,600	30	101,922	17	59,018	13	42,994	30	26	4	2		
Sewer, gas, water, conduit	3	2	---	---	4	16,900	1	7,800	3	9,100	2	2	---	---		
Subcontractors	22	8	16	53,059	39	69,803	27	43,645	12	26,158	28	17	11	11		
Electrical	3	3	---	---	4	5,133	2	2,525	2	2,608	2	1	1	2		
Heating and plumbing	10	2	8	28,079	24	47,400	15	25,600	9	21,960	21	13	8	3		
Heating and piping <sup>8</sup>	3	---	2	8,787	12	28,576	7	15,300	5	13,276	12	8	4	3		
Plumbing	7	2	6	19,292	12	18,884	8	10,200	4	8,684	9	5	4	4		
Roofing and sheet-metal work	4	---	5	15,620	7	12,540	7	12,640	4	8,684	3	2	1	4		
Other classes <sup>9</sup>	5	3	3	9,360	4	4,670	3	3,080	1	1,590	2	1	1	2		
<b>PHILADELPHIA</b>	907	430	399	1,652,001	4,803	17,640,648	2,879	12,495,553	1,924	5,145,005	4,532	3,840	692	271		
Operative builders	47	54	10	46,039	65	182,267	37	108,122	28	74,145	61	43	18	4		
General contractors	293	129	100	482,732	2,730	11,861,808	1,429	8,527,638	1,301	3,334,170	2,602	2,356	246	123		
Building	221	102	80	398,696	1,953	9,291,106	1,074	7,085,490	879	2,207,016	1,853	1,658	200	100		
Building not specialized	163	66	64	362,090	1,795	8,709,412	960	6,715,106	806	1,994,300	1,667	1,406	161	99		
Commercial building only	13	9	4	7,085	33	205,023	38	126,599	25	78,424	63	40	14	---		
Manufacturing building only	3	---	---	---	33	79,428	26	61,305	7	18,123	60	29	4	---		
Residential building only	42	27	12	29,521	91	297,243	50	180,480	41	116,763	116	69	21	1		
Highway	7	1	4	16,240	34	104,239	12	40,630	22	65,609	38	24	1	1		
Bridge and culvert	8	4	2	14,600	76	290,930	21	108,277	65	182,653	76	29	3	---		
Grading	3	1	2	7,800	26	58,505	14	35,852	12	19,653	20	23	3	---		
Street paving	13	2	2	9,046	137	505,026	71	352,096	66	152,030	137	124	4	---		
Sewer, gas, water, conduit	11	8	4	16,400	121	318,697	73	184,457	48	134,240	121	117	5	---		
Waterworks	5	3	1	1,800	21	86,484	11	22,944	10	65,540	21	16	7	---		
Dredging, river, harbor	12	4	4	13,000	150	537,435	78	389,651	72	147,484	130	122	8	20		
Railroad and subway	10	4	---	---	128	437,654	55	229,968	75	207,686	122	116	7	6		
Other classes <sup>10</sup>	3	---	1	5,200	84	281,732	23	76,973	62	154,759	84	83	1	---		
Subcontractors	567	247														



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TABLE 5.—NUMBER AND SALARIES OF PROPRIETORS, FIRM MEMBERS, AND SALARIED EMPLOYEES: 1929—Continued

CLASSIFICATION OF ESTABLISHMENTS	Estab-lish-ments report-ing	PROPRIETORS AND FIRM MEMBERS				SALARIED EMPLOYEES								
		Re-ceiving no salary	Receiving salaries		All salaried employes		Officers and clerical staff		Superintendents, foremen, etc.		Number reported by sex			Sex not re-ported
			Number	Total annual salaries	Total number	Total annual salaries	Number	Total annual salaries	Number	Total annual salaries	Total	Male	Female	
<b>PHILADELPHIA—Continued.</b>														
<b>Subcontractors—Continued.</b>														
Heating and plumbing	160	83	94	\$314,887	511	\$1,287,125	354	\$844,984	157	\$442,141	478	366	112	33
Heating and piping <sup>3</sup>	61	27	37	123,554	212	593,437	158	433,787	54	150,660	204	162	42	8
Pipe covering	4		2	6,500	19	42,762	9	20,360	10	22,412	19	17	2	
Plumbing	61	40	34	124,573	148	367,418	94	214,364	54	153,054	138	96	42	10
Plumbing and heating combined	28	15	21	60,260	54	125,359	35	73,072	19	52,287	39	29	10	15
Automatic sprinkler systems	6	1			78	158,140	58	103,411	20	54,738	78	62	16	
Masonry	42	20	24	129,829	130	398,481	73	230,038	57	168,443	122	105	17	8
Painting and decorating	69	30	27	113,643	106	455,773	115	310,605	51	145,168	165	114	51	1
Glass and glazing	7	2	3	16,500	12	77,652	11	75,452	1	2,200	12	8	4	
Plastering and lathing	17	7	8	44,067	52	170,160	34	101,753	18	68,407	51	39	12	1
Roofing and sheet-metal work	54	19	29	97,777	158	392,057	114	268,461	44	123,596	162	119	33	6
Roofing	24	13	8	22,320	65	161,116	44	112,687	21	48,429	62	48	14	3
Sheet-metal work	19	4	13	53,357	56	156,345	39	101,618	17	54,727	50	48	8	
Roofing and sheet metal combined	11	2	8	22,100	37	74,596	31	54,150	6	20,440	34	23	11	3
Steel erection	13	4	5	22,508	70	248,617	53	186,627	17	61,990	52	44	8	18
Stonework	12	9	3	7,500	51	187,431	30	111,713	21	75,718	40	39	7	5
Marble and tiling	26	12	19	85,794	80	234,450	66	183,491	14	50,959	71	53	18	9
Wrecking	3				10	19,892	8	16,212	2	3,680	6	5	1	4
Excavating and grading	11	8	9	24,500	43	107,409	21	53,051	22	54,358	30	27	3	13
Ornamental iron	16	5	14	61,330	66	104,356	54	134,730	12	29,620	62	56	6	4
Metal work, n. e. s.	16	9	3	11,700	77	187,642	53	139,386	24	48,266	52	34	18	25
Flooring, n. e. s.	4	1			15	37,062	10	21,654	5	15,408	13	10	3	2
Other classes <sup>11</sup>	3	1	2	12,080	31	87,711	27	76,601	4	11,110	31	24	7	
<b>PITTSBURGH</b>	<b>329</b>	<b>125</b>	<b>154</b>	<b>610,607</b>	<b>2,329</b>	<b>6,966,490</b>	<b>1,523</b>	<b>4,567,575</b>	<b>806</b>	<b>2,398,915</b>	<b>2,101</b>	<b>1,779</b>	<b>322</b>	<b>228</b>
Operative builders	10	7	3	12,000	5	5,600	5	5,600			5	3	2	
General contractors	130	55	44	189,539	1,687	5,132,942	1,140	3,502,471	547	1,630,471	1,688	1,372	216	99
Building	92	40	35	166,444	1,103	3,579,666	980	2,686,950	263	892,716	1,180	938	192	63
Building not specialized	87	26	19	65,661	1,148	3,486,475	901	2,637,433	247	840,042	1,086	901	185	62
Commercial building only	3	4			9	21,482	8	20,910	1	572	9	8	1	
Residential building only	32	19	16	100,783	36	71,709	21	28,607	15	43,102	35	29	6	1
Highway	6	1			140	367,600	57	178,345	83	180,265	122	119	3	18
Bridge and culvert	6	1	2	5,800	110	353,730	37	139,743	73	213,987	110	105	5	
Street paving	10	3	5	13,695	63	160,166	21	82,440	42	77,726	49	48	1	14
Sewer, gas, water, conduit	5	1	2	3,600	10	39,480	12	26,880	4	9,600	12	10	2	4
Dredging, river, harbor, etc.	3				25	88,762	15	56,842	10	31,920	25	22	3	
Railroad	3				103	422,118	40	251,038	57	171,080	103	100	3	
Other classes <sup>12</sup>	5				37	121,420	22	77,233	15	44,187	37	30	7	
Subcontractors	189	63	107	400,068	637	1,827,948	378	1,059,504	259	768,444	508	404	104	129
Carpentering and wood flooring	3	2	3	17,350	7	17,470	4	9,470	3	8,000	7	5	2	
Concreting	8	1	2	3,600	50	134,324	24	78,070	26	56,254	48	42	6	2
Electrical	20	6	9	36,462	75	217,052	51	146,631	24	70,371	66	46	21	9
Heating and plumbing	52	14	27	79,263	127	398,851	106	317,113	21	81,738	116	92	24	11
Heating and piping <sup>3</sup>	16	2	8	20,348	53	161,070	47	137,802	6	24,108	53	42	11	
Plumbing	32	11	17	52,195	64	179,413	51	129,333	13	50,080	60	47	13	4
Plumbing and heating combined	4	1	2	6,720	10	57,468	8	49,918	2	7,550	3	3		7
Masonry	7	4	8	21,400	9	25,798	2	2,618	7	23,180	1		1	3
Painting, decorating, and glazing	22	15	7	41,695	54	140,626	34	87,009	20	53,017	49	40	9	5
Plastering and lathing	5	3	2	5,000	34	94,630	16	34,853	18	59,777	34	32	2	
Roofing and sheet-metal work	27	6	26	98,010	91	264,578	46	95,651	46	168,927	55	39	10	30
Roofing	8	2	5	15,704	40	141,229	13	23,424	33	117,805	12	7	5	34
Sheet-metal work	11	2	10	31,071	29	96,663	18	49,507	11	47,156	29	23	6	
Roofing and sheet metal combined	8	2	11	51,235	16	26,680	14	22,720	2	3,966	14	9	5	2
Steel erection	4	1	3	24,937	64	183,133	12	48,833	52	134,750	46	40	6	18
Stonework	3	1	3	21,227	2	5,095	2				2	2		
Marble and tiling	19	3	10	34,224	43	140,149	39	127,289	4	12,860	18	11	7	26
Excavating and grading	4	5	3	8,060	18	20,608	7	12,490	11	17,118	4	4		14
Ornamental iron	4		2	3,640	17	65,018	12	40,682	5	18,336	17	15	2	
Soundproofing	3				11	20,665	10	18,865	1	1,800	10	7	3	1
Metal work, n. e. s.	4		3	9,400	20	54,731	6	14,875	14	39,856	20	18	2	
Other classes <sup>13</sup>	4	2			15	36,220	8	13,760	7	22,460	15	12	3	
<b>READING</b>	<b>80</b>	<b>42</b>	<b>47</b>	<b>165,291</b>	<b>198</b>	<b>520,228</b>	<b>124</b>	<b>321,748</b>	<b>74</b>	<b>198,480</b>	<b>183</b>	<b>144</b>	<b>39</b>	<b>16</b>
Operative builders	7	4	4	18,444	7	12,303	4	5,103	3	7,200	8	2	1	4
General contractors	24	16	7	50,771	106	296,218	55	155,184	51	141,034	105	91	14	1
Building	20	13	6	47,981	88	233,537	45	108,424	43	125,113	87	75	12	1
Building not specialized	16	10	5	45,981	80	215,783	39	95,390	41	119,393	79	68	11	1
Residential building only	4	3	1	2,000	8	17,764	6	12,034	2	5,720	8	7	1	
Other classes <sup>14</sup>	4	3	1	2,790	18	62,681	10	40,760	8	15,921	18	16	2	
Subcontractors	49	22	36	96,076	85	211,707	65	161,451	20	50,246	75	51	24	10
Concreting <sup>15</sup>	3	2			5	15,302	5	15,392			4	3	1	8
Electrical	8	3	2	4,000	31	70,049	23	47,146	8	22,903	26	18	8	5
Heating and plumbing	15	8	12	38,317	18	38,509	13	27,064	5	11,445	18	13	5	
Heating and piping	3	1	3	9,618	5	6,330	3	1,886	2	4,450	5	3	2	
Plumbing	8	6	6	19,345	4	5,681	4	5,681			4	3	1	
Plumbing and heating combined	4	1	3	9,351	9	26,492	6	19,497	3	6,995	9	7	2	
Painting and decorating	3	2		3,380	2	3,120	1	1,040	2	2,080	2	1	1	
Roofing and sheet-metal work	8	1	12	32,849	7	18,642	5	14,663	2	3,979	7	6	1	
Roofing	5		10	27,846	5	8,193	2	4,214	2	3,979	5	4	1	
Sheet-metal work	3	1	2	5,003	2	10,449	3	10,449			2	2		
Steel erection <sup>16</sup>	6	2			5	15,047	3	10,200	2	4,847	5	4	1	4
Plastering, marble, and tiling	3	4	3	7,690	10	15,031	10	15,031			6	2	4	
Other classes <sup>17</sup>	3		6	9,940	7	35,917	5	30,925	2	4,992	7	4	3	

See footnotes at end of table.

TABLE 5.—NUMBER AND SALARIES OF PROPRIETORS, FIRM MEMBERS, AND SALARIED EMPLOYEES: 1929—Continued

CLASSIFICATION OF ESTABLISHMENTS	Establishments reporting	PROPRIETORS AND FIRM MEMBERS			SALARIED EMPLOYEES									
		Receiving no salary	Receiving salaries		All salaried employees		Officers and clerical staff		Superintendents, foremen, etc.		Number reported by sex			Sex not reported
			Number	Total annual salaries	Total number	Total annual salaries	Number	Total annual salaries	Number	Total annual salaries	Total	Male	Female	
<b>SCRANTON</b> .....	49	24	29	\$112,912	150	\$430,544	71	\$226,984	79	\$203,680	121	104	17	29
General contractors.....	23	9	14	72,659	72	204,262	35	102,650	37	101,612	57	47	10	15
Building.....	20	9	13	67,859	47	125,908	27	66,985	20	58,923	32	25	7	15
Highway and street paving.....	3	—	1	4,800	25	78,354	8	35,665	17	42,689	25	22	3	—
Subcontractors.....	26	15	15	40,253	78	226,282	36	124,214	42	102,068	64	57	7	14
Plastering and lathing.....	3	3	2	8,840	1	2,800	1	2,800	—	—	1	1	—	—
Heating and plumbing.....	11	5	10	24,544	20	55,492	13	35,520	7	22,972	18	14	4	2
Plumbing.....	7	3	9	21,684	10	34,426	9	31,254	1	3,172	8	7	1	2
Plumbing and heating combined.....	4	2	1	2,860	10	24,066	4	4,266	6	19,800	10	7	3	—
Roofing and sheet-metal work.....	5	6	—	—	13	50,621	9	41,981	4	8,640	8	7	1	5
Other classes <sup>15</sup> .....	7	1	3	6,869	44	114,369	13	43,913	31	70,456	37	35	2	7

- <sup>1</sup> Includes air transport.
- <sup>2</sup> Includes oil and natural gas pipe line; and telephone line and system.
- <sup>3</sup> Includes automatic temperature control.
- <sup>4</sup> Includes highway and street paving.
- <sup>5</sup> Includes sewer, gas, water, conduit; and rental of equipment, trucking, etc.
- <sup>6</sup> Includes operative builders.
- <sup>7</sup> Includes grading; and street paving.
- <sup>8</sup> Includes heating and plumbing combined.
- <sup>9</sup> Includes masonry; painting and decorating; plastering and lathing; and marble and tiling.
- <sup>10</sup> Includes foundation; and telephone line and system.
- <sup>11</sup> Includes soundproofing; and rental of equipment, trucking, etc.
- <sup>12</sup> Includes grading; foundation; waterworks; and air transport.
- <sup>13</sup> Includes elevator construction; highway; and flooring, n. e. s.
- <sup>14</sup> Includes highway; grading; sewer, gas, water, conduit; and dam and reservoir.
- <sup>15</sup> Includes masonry; and stonework.
- <sup>16</sup> Includes ornamental iron.
- <sup>17</sup> Includes elevator construction; excavating; and sewer, gas, water, conduit.
- <sup>18</sup> Includes carpentering and wood flooring; concreting; electrical; painting and decorating; stonework; excavating; and ornamental iron.

TABLE 6.—VALUE OF CONSTRUCTION EQUIPMENT, IN COMPARISON WITH CONSTRUCTION BUSINESS AND WAGES PAID DURING 1929

CLASSIFICATION OF ESTABLISHMENTS AND PERCENTAGE OF EQUIPMENT OWNED	Establishments reporting	EQUIPMENT		Value of construction business reported	Wages paid	CLASSIFICATION OF ESTABLISHMENTS AND PERCENTAGE OF EQUIPMENT OWNED	Establishments reporting	EQUIPMENT		Value of construction business reported	Wages paid
		Purchased during the year	Inventory value at end of year					Purchased during the year	Inventory value at end of year		
<b>PENNSYLVANIA</b> .....	2,308	\$8,864,576	\$41,139,780	\$506,166,757	\$112,627,276	<b>PENNSYLVANIA—Con.</b>					
<i>Classification of establishments</i>						<i>Classification of establishments—Continued</i>					
Operative builders.....	86	8,376	56,306	15,358,866	812,792	Subcontractors—Continued.					
General contractors.....	1,072	6,804,488	32,353,180	334,049,882	65,676,506	Roofing and sheet-metal work—Continued.					
Building.....	775	840,333	10,021,920	219,546,185	33,733,798	Roofing and sheet-metal combined.....	31	\$43,238	\$239,986	\$2,687,522	\$796,495
Building not specialized.....	553	712,853	9,212,024	164,597,372	27,275,848	Steel erection.....	29	500,197	1,304,409	21,827,979	5,311,594
Commercial building only.....	19	30,513	275,472	3,426,509	680,585	Stonework.....	20	64,790	297,236	3,711,667	1,534,728
Manufacturing building only.....	6	26,263	125,900	31,949,374	2,805,664	Marble and tiling.....	57	56,166	337,426	6,220,524	1,952,132
Residential building only.....	107	70,705	408,524	19,672,930	2,971,721	Excavating.....	26	312,832	932,381	2,690,796	1,080,006
Highway.....	101	1,074,884	7,228,422	30,433,151	4,176,437	Ornamental iron.....	25	19,102	247,708	2,484,875	475,036
Bridge and culvert.....	25	745,455	2,521,700	16,728,053	7,851,571	Grading.....	4	31,485	177,421	984,577	468,801
Grading.....	15	146,660	950,563	2,535,338	916,655	Soundproofing.....	4	2,100	9,423	1,814,080	250,194
Street paving.....	72	676,072	3,441,011	18,300,266	4,331,928	Metal work, n. e. s.....	26	145,854	401,946	4,845,512	1,652,470
Sewer, gas, water, conduit.....	35	433,209	1,173,185	7,169,061	2,425,260	Rental of equipment, trucking, etc.....	3	23,000	75,000	149,958	51,558
Waterworks, dam and reservoir.....	8	96,246	230,095	2,403,320	497,817	Flooring, n. e. s.....	7	9,338	27,807	440,947	97,501
Dredging, river, harbor, etc.....	15	934,348	4,410,527	9,289,968	2,612,813	Other classes <sup>16</sup> .....	3	7,780	16,353	160,878	115,781
Railroad and subway.....	12	622,256	1,718,732	22,083,041	7,282,137	<i>Percentage of equipment owned</i>					
Foundation.....	5	21,410	131,861	1,320,519	372,340	General contractors <sup>17</sup> .....	1,158	6,812,864	32,409,582	340,408,748	66,489,298
Other classes <sup>2</sup> .....	3	313,615	525,170	4,102,980	1,475,730	None.....	118	—	—	20,080,246	1,068,425
Subcontractors.....	1,148	2,051,711	8,730,178	156,757,009	46,137,978	1% to 25% inclusive.....	17	33,457	260,949	3,714,433	616,130
Carpentering and wood flooring.....	38	17,153	458,830	4,343,780	1,255,833	26% to 50% inclusive.....	23	57,365	159,475	3,693,989	690,478
Concreting.....	41	199,810	746,683	6,480,997	2,110,401	51% to 75% inclusive.....	38	363,145	801,890	12,977,281	2,480,067
Electrical.....	115	90,441	378,603	12,418,896	3,449,175	76% to 99% inclusive.....	197	2,545,782	8,141,870	72,135,958	18,399,472
Elevator construction.....	16	31,375	128,261	5,795,024	1,066,350	100%.....	723	678,505	22,175,312	226,780,056	41,610,514
Heating and plumbing.....	394	231,335	1,375,926	45,057,346	10,713,651	Not reported.....	42	134,610	370,080	7,016,785	1,624,212
Heating and piping.....	134	87,105	537,324	16,806,817	3,133,045	Subcontractors.....	1,148	2,051,711	8,730,178	156,757,009	46,137,978
Pipe covering.....	4	5,300	6,110	1,855,370	780,540	None.....	49	—	—	8,339,520	1,851,421
Plumbing.....	165	92,540	510,909	14,245,096	3,892,485	1% to 25% inclusive.....	6	3,478	15,607	548,813	229,215
Plumbing and heating combined.....	80	44,258	311,009	8,055,936	1,016,098	26% to 50% inclusive.....	10	37,194	242,214	2,343,015	891,997
Automatic sprinkler systems.....	5	2,132	10,574	4,064,127	970,583	51% to 75% inclusive.....	16	142,595	331,490	2,389,188	764,427
Masonry.....	80	98,932	483,678	10,417,258	4,361,846	76% to 99% inclusive.....	76	492,244	1,202,110	17,087,803	5,502,683
Painting and decorating.....	88	57,210	277,869	7,737,995	3,032,168	100%.....	952	1,340,164	6,584,381	121,713,882	35,538,597
Glass and glazing.....	9	5,766	55,233	1,501,642	249,970	Not reported.....	40	36,030	354,376	4,334,928	1,359,638
Plastering and lathing.....	35	46,087	209,442	5,549,958	2,619,038						
Roofing and sheet-metal work.....	128	100,893	728,543	12,080,644	3,361,826						
Roofing.....	61	46,702	202,047	6,229,246	1,601,573						
Sheet-metal work.....	30	10,953	286,510	3,163,877	963,758						

See footnotes at end of table.

CONSTRUCTION—PENNSYLVANIA

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TABLE 6.—VALUE OF CONSTRUCTION EQUIPMENT, IN COMPARISON WITH CONSTRUCTION BUSINESS AND WAGES PAID DURING 1929—Continued

CLASSIFICATION OF ESTABLISHMENTS AND PERCENTAGE OF EQUIPMENT OWNED	Establishments reporting	EQUIPMENT		Value of construction business reported	Wages paid	CLASSIFICATION OF ESTABLISHMENTS AND PERCENTAGE OF EQUIPMENT OWNED	Establishments reporting	EQUIPMENT		Value of construction business reported	Wages paid
		Purchased during the year	Inventory value at end of year					Purchased during the year	Inventory value at end of year		
<b>ERIE</b> .....	49	\$149,588	\$967,684	\$3,028,426	\$1,961,699	<b>PHILADELPHIA—Continued</b>					
<i>Classification of establishments</i>						<i>Percentage of equipment owned</i>					
General contractors <sup>a</sup> .....	30	130,484	905,066	6,875,716	1,623,094	General contractors <sup>a</sup> .....	317	\$1,815,705	\$13,842,697	\$141,036,001	\$21,065,153
Building.....	21	18,343	110,677	4,562,322	1,072,014	None.....	01			14,405,380	323,621
Building not specialized <sup>b</sup> .....	17	18,218	104,577	4,054,517	885,214	1% to 25% inclusive.....	6	10,572	187,804	2,638,084	463,775
Residential building only.....	4	125	6,100	507,805	186,800	26% to 50% inclusive.....	4	1,515	13,307	749,300	170,797
Highway <sup>c</sup> .....	6	92,161	731,726	2,064,415	505,844	51% to 75% inclusive.....	10	135,625	330,808	7,451,093	1,555,173
Sewer, gas, water, conduit.....	3	10,080	62,663	248,079	45,236	76% to 99% inclusive.....	49	540,488	1,804,849	21,190,534	4,340,242
Subcontractors.....	19	19,104	62,618	1,152,710	338,605	100%.....	175	1,046,486	11,437,618	92,920,529	14,800,942
Electrical.....	3	6,017	6,892	143,819	40,005	Not reported.....	12	22,019	68,251	1,075,191	310,603
Heating and plumbing.....	8	3,918	10,410	526,597	145,398	Subcontractors.....	515	595,518	3,567,030	79,900,750	23,261,375
Roofing and sheet-metal work.....	4	2,673	25,426	220,171	62,045	None.....	32			6,699,015	1,473,132
Other classes <sup>d</sup> .....	4	6,496	10,800	262,123	90,557	1% to 25% inclusive.....	4	2,565	7,707	228,005	78,805
<i>Percentage of equipment owned</i> <sup>e</sup>						26% to 50% inclusive.....	6	31,414	227,440	2,153,055	822,104
General contractors <sup>a</sup> .....	30	130,484	905,066	6,875,716	1,623,094	51% to 75% inclusive.....	6	106,545	208,042	1,097,564	528,780
26% to 50% inclusive.....	1	400	5,000	158,000	70,000	76% to 99% inclusive.....	30	79,715	416,762	6,305,719	2,475,587
76% to 99% inclusive.....	7	60,003	247,274	2,800,204	665,572	100%.....	426	359,095	2,508,385	60,758,875	17,278,176
100%.....	20	55,734	431,562	3,548,991	761,084	Not reported.....	11	16,184	188,713	2,058,517	644,791
Not reported.....	2	5,347	221,230	368,431	125,838	<b>PITTSBURGH</b> .....					
Subcontractors.....	19	19,104	62,618	1,152,710	338,605	<i>Classification of establishments</i>	275	\$2,047,728	5,970,450	113,371,425	24,191,711
100%.....	17	17,331	49,880	1,036,350	297,240	Operative builders.....	4	40	1,000	630,400	20,030
Not reported.....	2	1,773	12,738	116,360	41,365	General contractors.....	118	1,441,249	4,154,881	82,867,810	15,254,016
<b>PHILADELPHIA</b> .....	832	\$411,223	\$17,989,730	\$220,936,761	\$45,226,528	Building.....	81	120,108	632,106	58,056,192	7,783,346
<i>Classification of establishments</i>						Building not specialized.....	50	113,054	501,522	55,602,219	7,309,815
Operative builders.....	45	3,800	22,418	10,984,356	222,314	Commercial building only.....	3	125	46,903	274,812	63,647
General contractors.....	272	1,811,905	13,820,279	130,051,645	21,742,839	Residential building only.....	28	6,929	28,681	2,779,161	419,884
Building.....	202	177,206	6,632,908	89,906,923	10,645,511	Highway.....	6	300,372	1,132,071	5,044,446	1,637,164
Building not specialized.....	148	152,006	6,396,565	78,675,200	9,350,432	Bridge and culvert.....	5	459,402	1,116,577	7,497,894	1,809,503
Commercial building only.....	12	11,543	141,240	2,923,070	643,256	Street paving.....	11	123,847	332,604	3,162,886	864,490
Manufacturing building only.....	3	3,000	66,200	760,515	214,125	Sewer, gas, water, conduit.....	6	56,730	134,867	1,132,800	307,874
Residential building only.....	30	10,057	28,894	7,008,048	637,698	Railroad.....	3	239,609	397,309	5,447,226	2,383,687
Highway.....	5	69,283	338,784	2,761,255	594,084	Other classes <sup>12</sup> .....	6	72,281	409,347	1,926,300	467,943
Bridge and culvert.....	10	178,289	791,251	6,332,130	1,850,142	Subcontractors.....	153	606,434	1,814,569	29,873,215	8,917,665
Grading.....	3	17,679	136,530	814,771	284,337	Carpentering and wood flooring.....	3	350	40,719	613,413	93,429
Street paving.....	14	164,074	1,203,901	6,906,962	1,342,582	Concreting.....	6	106,805	275,080	1,771,280	553,034
Sewer, gas, water, conduit.....	10	170,244	464,394	3,225,104	1,219,610	Electrical.....	17	5,403	24,255	2,771,818	996,445
Waterworks.....	4	80,916	154,507	1,518,398	371,957	Heating and plumbing.....	41	25,014	123,687	6,639,580	1,665,019
Dredging, river, harbor, etc.....	11	558,026	3,021,112	4,181,094	1,104,680	Heating and piping <sup>13</sup> .....	15	4,248	65,187	2,272,066	600,863
Railroad and subway.....	10	238,660	812,737	11,257,355	3,204,772	Plumbing.....	26	21,866	65,500	3,367,514	1,065,056
Other classes <sup>10</sup> .....	3	157,522	264,146	3,087,653	1,020,255	Masonry.....	7	4,470	25,992	966,332	409,496
Subcontractors.....	515	595,518	3,557,039	70,900,750	23,261,375	Painting, decorating, and glazing.....	17	15,282	42,713	1,685,914	671,707
Carpentering and wood flooring.....	31	16,374	414,461	3,555,041	1,117,232	Plastering and lathing.....	4	4,847	35,678	523,746	304,254
Concreting.....	22	52,611	211,578	3,411,317	1,176,022	Roofing and sheet-metal work.....	18	16,795	75,488	2,982,044	857,453
Electrical.....	51	20,195	109,771	6,321,827	1,701,701	Roofing.....	5	12,825	28,825	2,116,071	530,268
Elevator construction.....	13	20,349	73,824	5,347,075	930,463	Sheet-metal work.....	6	2,117	25,780	427,691	136,189
Heating and plumbing.....	141	76,302	434,212	22,363,819	4,855,340	Roofing and sheet metal combined.....	7	1,853	20,893	438,282	140,996
Heating and piping <sup>3</sup> .....	00	33,625	197,316	9,559,010	1,680,550	Steel erection.....	5	301,487	535,934	9,293,926	1,846,102
Pipe covering.....	3	3,800	5,110	316,801	114,446	Stonework.....	3	278	32,212	217,726	67,254
Plumbing.....	54	25,893	133,588	5,836,034	1,493,496	Marble and tiling.....	12	11,111	142,856	900,528	326,749
Plumbing and heating combined.....	19	10,942	87,624	2,586,857	596,266	Excavating and grading.....	4	13,825	73,589	401,416	228,942
Automatic sprinkler systems.....	5	2,132	10,574	4,064,127	970,583	Ornamental iron.....	0	2,966	73,381	488,373	88,278
Masonry.....	42	63,147	317,762	7,327,514	2,905,989	Metal work, n. e. s.....	4	94,902	250,210	1,089,484	580,822
Painting and decorating.....	50	32,238	177,028	5,441,217	2,457,457	Other classes <sup>14</sup> .....	6	2,301	53,375	534,635	170,131
Glass and glazing.....	7	5,769	48,733	1,047,557	178,487	<i>Percentage of equipment owned</i>					
Plastering and lathing.....	14	23,158	120,556	3,164,021	1,555,932	General contractors <sup>a</sup> .....	122	1,441,289	4,155,881	83,498,210	15,274,046
Roofing and sheet metal work.....	50	25,610	256,243	4,690,943	1,372,031	None.....	15			1,921,803	263,120
Roofing.....	21	5,984	62,317	2,061,489	521,102	1% to 25% inclusive.....	1	350	2,150	127,000	23,460
Sheet-metal work.....	19	3,505	113,709	1,740,979	541,796	26% to 50% inclusive.....	5	2,292	3,484	725,300	87,236
Roofing and sheet-metal combined.....	10	16,121	80,217	894,475	309,133	51% to 75% inclusive.....	4	20,458	57,163	2,835,400	275,134
Steel erection.....	12	28,438	249,744	3,060,258	630,003	76% to 99% inclusive.....	25	391,445	1,177,981	18,315,908	5,368,242
Stonework.....	11	53,333	195,530	2,744,810	1,114,513	100%.....	65	1,022,448	2,642,371	68,337,367	8,892,928
Marble and tiling.....	20	17,336	47,478	2,744,810	770,085	Not reported.....	7	4,296	272,742	1,284,842	369,926
Excavating and grading.....	11	121,220	627,694	1,706,628	783,219	Subcontractors.....	153	606,434	1,814,569	29,873,215	8,917,665
Ornamental iron.....	10	18,668	123,447	1,805,393	330,772	None.....	2			383,659	120,310
Metal work, n. e. s.....	15	5,255	39,289	2,980,492	989,145	1% to 25% inclusive.....	8	913	7,900	315,550	150,410
Flooring, n. e. s.....	4	8,200	9,000	2,453,283	47,651	26% to 50% inclusive.....	1			63,238	27,731
Other classes <sup>11</sup> .....	5	3,130	40,683	1,912,600	344,833	51% to 75% inclusive.....	4	4,380	59,678	447,184	149,379
						76% to 99% inclusive.....	16	45,134	155,287	2,027,355	927,099
						100%.....	115	546,927	1,614,615	25,028,726	7,225,361
						Not reported.....	8	7,080	67,888	1,007,494	314,375

See footnotes at end of table.

TABLE 6.—VALUE OF CONSTRUCTION EQUIPMENT, IN COMPARISON WITH CONSTRUCTION BUSINESS AND WAGES PAID DURING 1929—Continued

CLASSIFICATION OF ESTABLISHMENTS AND PERCENTAGE OF EQUIPMENT OWNED	Establishments reporting	EQUIPMENT		Value of construction business reported	Wages paid	CLASSIFICATION OF ESTABLISHMENTS AND PERCENTAGE OF EQUIPMENT OWNED	Establishments reporting	EQUIPMENT		Value of construction business reported	Wages paid
		Purchased during the year	Inventor-y value at end of year					Purchased during the year	Inventor-y value at end of year		
<b>READING</b> .....	65	\$204,314	\$419,846	\$9,837,290	\$2,428,198	<b>SCRANTON</b> .....	43	\$112,078	\$431,377	\$5,312,123	\$1,448,937
<i>Classification of establishments</i>						<i>Classification of establishments</i>					
Operative builders.....	6	1,830	6,110	672,890	112,807	General contractors.....	20	53,736	279,675	3,305,469	820,093
General contractors.....	20	150,292	233,840	5,434,363	1,371,757	Building.....	17	13,900	81,298	2,314,861	562,044
Building.....	16	28,034	80,280	4,223,753	937,051	Highway and street paving.....	3	30,776	108,377	990,608	268,049
Building not specialized.....	12	21,311	76,781	3,675,753	839,849	Subcontractors.....	23	58,342	151,702	2,006,654	626,894
Residential building only.....	4	6,723	3,505	548,000	97,202	Heating and plumbing.....	10	2,111	26,980	614,698	175,741
Other classes <sup>1</sup> .....	4	122,258	153,554	1,210,610	434,706	Plumbing.....	6	337	16,938	322,737	91,886
Subcontractors.....	39	52,192	179,896	3,830,037	943,634	Plumbing and heating combined.....	4	1,774	10,042	291,961	83,855
Electrical.....	7	3,016	22,119	739,492	165,048	Roofing and sheet-metal work.....	5	2,156	20,215	325,359	85,779
Heating and plumbing.....	13	6,147	42,218	1,308,662	325,250	Other classes <sup>17</sup> .....	8	54,075	98,507	1,066,697	305,344
Plumbing.....	8	4,455	21,638	683,284	169,380	<i>Percentage of equipment owned<sup>2</sup></i>					
Plumbing and heating combined.....	5	1,092	20,580	725,278	155,870	General contractors.....	20	53,736	279,675	3,305,469	820,093
Painting and decorating.....	3	1,450	5,800	140,523	70,417	None.....	2			238,947	59,861
Roofing and sheet-metal work.....	5	4,617	16,165	267,348	76,294	76% to 99%, inclusive.....	2	17,602	24,777	402,386	119,653
Marble, tiling, plastering.....	5	13,097	10,249	287,523	96,884	100%.....	15	30,134	252,051	2,615,136	627,524
Other classes <sup>16</sup> .....	6	23,965	83,345	1,080,689	210,741	Not reported.....	1			49,000	13,065
<i>Percentage of equipment owned<sup>3</sup></i>						Subcontractors.....	23	58,342	151,702	2,006,654	626,894
General contractors <sup>4</sup> .....	26	152,122	230,950	6,107,263	1,484,564	None.....	1			62,890	11,068
None.....	2			82,920	14,100	76% to 99%, inclusive.....	1	43,435	63,295	450,000	141,280
51% to 75%, inclusive.....	2	4,713	9,668	292,130	63,066	100%.....	21	14,907	88,407	1,493,704	474,516
76% to 99%, inclusive.....	5	121,869	151,043	2,069,642	549,545	Subcontractors.....	1			62,890	11,068
100%.....	16	25,540	77,239	3,581,151	846,844	None.....	1			450,000	141,280
Not reported.....	1		2,000	51,410	11,009	76% to 99%, inclusive.....	1			450,000	141,280
Subcontractors.....	39	52,192	179,896	3,830,037	943,634	100%.....	21			1,493,704	474,516
None.....	1			49,340	11,592						
1% to 25%, inclusive.....	2	6,070	5,020	62,042	25,657						
76% to 99%, inclusive.....	3	7,390	14,039	723,949	75,839						
100%.....	33	38,132	160,837	2,994,706	830,546						

- <sup>1</sup> Includes air transport work.
- <sup>2</sup> Includes oil and natural gas pipe line; and telephone line and system.
- <sup>3</sup> Includes automatic temperature control.
- <sup>4</sup> Includes highway and street paving.
- <sup>5</sup> Includes sewer, gas, water, conduit; and wrecking.
- <sup>6</sup> Includes operative builders.
- <sup>7</sup> Includes grading and street paving.
- <sup>8</sup> Includes masonry; painting and decorating; and marble and tiling.
- <sup>9</sup> See complete classification in the tabulation for the State above.
- <sup>10</sup> Includes foundation; and telephone line and system.
- <sup>11</sup> Includes soundproofing; and rental of equipment, trucking, etc.
- <sup>12</sup> Includes dredging, river, harbor, waterworks, etc.; and air transport work.
- <sup>13</sup> Includes automatic temperature control; and plumbing and heating combined.
- <sup>14</sup> Includes flooring; n. e. s.; soundproofing; highway; and elevator construction.
- <sup>15</sup> Includes highway; grading; sewer, gas, water, conduit; and dam and reservoir.
- <sup>16</sup> Includes concreting; elevator construction; masonry; steel erection; excavating; and sewer, gas, water, conduit.
- <sup>17</sup> Includes carpentering and woodflooring; concreting; electrical; painting and decorating; plastering and lathing; and excavating.

TABLE 7.—WAGE EARNERS, BY MONTHS, AND WAGES PAID DURING 1929

CLASSIFICATION OF ESTABLISHMENTS AND LENGTH OF WORKING WEEK	Establishments reporting	NUMBER EMPLOYED ON 15TH DAY OF THE MONTH OR NEAREST REPRESENTATIVE DAY												Wages paid during year
		January	February	March	April	May	June	July	August	September	October	November	December	
<b>PENNSYLVANIA</b> .....	2,367	40,046	48,085	53,110	62,847	73,302	81,661	86,355	90,152	87,472	85,380	76,360	63,458	\$125,298,316
<i>Classification of establishments</i>														
Operative builders.....	72	543	550	633	782	770	759	700	626	615	632	626	540	987,514
General contractors.....	1,056	27,389	26,279	30,206	37,772	46,602	54,371	57,960	61,347	58,442	57,129	50,265	40,112	75,538,341
Building.....	780	16,551	15,872	18,430	22,315	25,680	29,346	30,902	31,276	29,861	29,210	26,806	22,569	43,768,068
Building not specialized.....	571	13,475	13,294	15,920	19,431	22,305	25,740	27,064	27,289	25,939	25,362	23,192	19,467	37,620,280
Commercial building only.....	15	177	207	210	200	232	248	253	236	240	185	213	211	355,839
Manufacturing building only.....	5	1,618	1,080	895	961	1,212	1,253	1,459	1,658	1,773	1,808	1,835	1,612	2,759,839
Residential building only.....	189	1,281	1,291	1,411	1,717	1,931	2,105	2,126	2,093	1,909	1,855	1,566	1,270	3,032,060
Highway.....	92	2,143	1,869	2,192	3,546	5,906	7,874	8,822	9,786	9,308	9,172	6,587	4,112	7,484,723
Bridge and culvert.....	25	1,574	1,531	1,743	1,930	1,979	2,305	2,130	2,420	2,564	2,327	2,494	2,181	4,341,497
Grading <sup>1</sup> .....	16	294	316	392	557	639	716	709	828	828	796	626	621	955,984
Street paving.....	96	1,219	1,018	1,579	2,981	4,042	4,630	5,012	5,698	5,698	5,250	3,784	2,467	3,960,895
Sewer, gas, water, conduit.....	29	755	774	850	1,043	1,317	1,468	1,702	1,705	1,544	1,412	1,364	940	1,882,560
Waterworks, dam, and reservoir.....	8	224	227	241	267	317	205	277	300	315	288	281	297	486,933
Dredging, river, harbor, etc.....	15	1,185	1,078	1,253	1,294	1,674	1,977	2,046	2,363	2,299	2,399	2,699	2,457	3,414,250
Railroad and subway.....	16	2,268	2,312	2,331	3,023	3,575	4,273	4,899	5,295	4,581	4,755	4,209	3,242	7,093,467
Foundation.....	6	492	591	430	243	276	286	287	318	365	457	423	339	644,184
Other classes <sup>2</sup> .....	3	684	691	759	863	1,197	1,201	1,174	1,211	1,079	1,033	992	981	1,475,780

See footnotes at end of table.

CONSTRUCTION—PENNSYLVANIA

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TABLE 7.—WAGE EARNERS, BY MONTHS, AND WAGES PAID DURING 1929—Continued

CLASSIFICATION OF ESTABLISHMENTS AND LENGTH OF WORKING WEEK	Estab-lish-ments reporting	NUMBER EMPLOYED ON 15TH DAY OF THE MONTH OR NEAREST REPRESENTATIVE DAY												Wages paid during year
		January	February	March	April	May	June	July	August	September	October	November	December	
<b>PENNSYLVANIA—Continued.</b>														
<i>Classification of establishments—Contd.</i>														
Subcontractors.....	1,220	21,114	21,256	22,271	23,793	25,930	26,531	27,689	28,179	28,415	27,628	25,469	22,800	\$48,772,461
Carpentering and wood flooring.....	37	398	406	437	550	617	699	606	638	600	603	533	433	1,195,438
Concrete.....	45	877	816	963	1,182	1,444	1,601	1,784	1,787	1,645	1,549	1,607	1,600	1,969,705
Electrical.....	126	1,771	1,788	1,729	1,705	1,744	1,776	1,793	1,860	1,926	1,978	1,913	1,914	3,747,273
Elevator construction.....	19	501	504	508	457	485	465	477	495	507	514	454	450	1,294,145
Heating and plumbing.....	435	5,987	5,651	5,594	5,831	6,005	6,136	6,303	6,685	7,039	7,271	6,709	6,152	12,167,033
Heating and piping <sup>1</sup> .....	130	1,587	1,523	1,502	1,558	1,600	1,661	1,858	1,987	2,186	2,281	2,017	1,720	3,165,992
Pipe covering.....	4	814	308	250	243	264	284	325	303	307	300	388	415	781,723
Plumbing.....	188	2,096	1,974	1,998	2,041	2,123	2,127	2,105	2,275	2,324	2,330	2,163	2,055	4,299,681
Plumbing and heating combined.....	107	1,348	1,232	1,208	1,339	1,371	1,441	1,392	1,413	1,463	1,515	1,425	1,271	2,362,666
Automatic sprinkler systems.....	6	642	614	636	650	647	623	683	707	759	805	716	601	1,556,971
Masonry.....	82	1,933	1,919	2,058	2,296	2,850	2,797	2,736	2,581	2,357	2,195	2,045	1,778	3,846,004
Painting and decorating.....	95	1,510	1,581	1,868	2,271	2,070	2,533	2,810	3,019	2,902	2,568	2,108	1,698	4,225,238
Glass and glazing.....	7	88	91	91	91	95	94	91	92	92	94	92	98	176,130
Plastering and lathing.....	43	1,024	1,212	1,226	1,258	1,239	1,268	1,454	1,517	1,512	1,607	1,382	1,057	3,019,141
Roofing and sheet-metal work.....	134	1,754	1,647	1,720	1,871	2,077	2,114	2,319	2,387	2,426	2,509	2,372	2,214	3,707,316
Roofing.....	63	776	700	745	834	908	957	1,116	1,128	1,253	1,322	1,251	1,144	1,633,523
Sheet-metal work.....	34	405	419	422	459	526	513	525	532	528	511	488	440	673,392
Roofing and sheet metal combined.....	37	573	528	553	578	643	644	678	727	645	674	633	624	1,100,401
Steel erection.....	30	1,851	2,135	2,405	2,561	2,642	2,640	2,487	2,297	2,389	2,353	2,130	1,878	5,417,564
Stonework.....	20	401	463	587	602	717	769	873	917	898	676	675	583	1,237,658
Marble and tiling.....	68	966	952	914	941	997	1,082	1,099	1,141	1,138	1,030	994	972	2,860,760
Excavating.....	23	443	516	520	640	710	745	942	909	827	730	627	558	1,023,872
Ornamental iron.....	24	259	246	241	250	252	242	253	281	277	276	269	263	438,029
Grading <sup>1</sup> .....	4	57	58	72	94	224	274	333	451	626	319	368	301	468,801
Soundproofing.....	5	144	158	148	129	151	180	123	118	113	125	197	189	311,519
Metal work, n. e. s.....	19	921	997	1,014	856	893	849	846	743	790	1,018	834	708	1,020,977
Floors, n. e. s.....	7	32	46	50	49	44	46	42	105	98	102	50	49	97,601
Other classes <sup>6</sup> .....	0	137	72	60	63	65	165	198	156	103	102	52	50	148,357
<i>Length of working week</i>														
General contractors <sup>1</sup> .....	1,128	27,932	26,820	30,839	38,554	47,372	55,130	53,666	61,973	59,957	57,761	50,891	40,658	76,525,855
40-hour, 5-day week.....	111	1,485	1,330	1,486	1,766	2,074	2,202	2,349	2,553	2,026	3,057	2,490	2,148	4,081,140
45-hour, 5-day week.....	5	44	43	75	115	129	148	135	132	187	205	204	224	160,181
50-hour, 5-day week.....	2	17	15	10	20	29	75	49	48	84	68	12	8	37,915
All other 5-day week.....	460	8,724	8,788	9,081	11,041	12,485	14,530	15,803	15,431	14,500	13,760	12,802	11,420	21,777,376
44-hour, 5½-day week.....	24	267	233	279	454	547	583	632	566	562	538	448	309	581,986
49½-hour, 5½-day week.....	75	1,488	1,444	1,472	2,301	2,052	3,096	3,208	3,538	3,301	3,179	2,404	2,303	3,893,422
All other 5½-day week.....	114	1,440	1,490	1,583	1,840	2,075	2,220	2,318	2,225	2,074	2,041	1,899	1,692	2,593,536
48-hour, 6-day week.....	34	1,099	1,130	1,306	1,073	1,874	2,208	2,267	1,020	1,576	1,469	1,481	1,217	2,531,009
54-hour, 6-day week.....	54	2,851	2,103	1,941	2,520	3,265	3,712	4,254	4,069	4,902	4,687	4,435	3,726	6,302,201
60-hour, 6-day week.....	171	6,376	6,102	6,997	6,754	13,432	15,864	17,241	19,187	17,880	17,613	13,743	10,033	18,246,462
All other 6-day week.....	40	989	884	1,038	1,335	1,568	1,917	2,160	2,429	2,398	2,284	1,816	1,331	2,110,802
All other not designated.....	14	701	700	841	972	1,166	1,370	1,257	1,390	1,353	1,355	1,201	1,237	2,430,371
Not reported.....	19	2,456	2,471	3,830	4,754	6,076	7,205	6,953	7,880	7,308	7,524	7,797	5,278	12,273,156
Subcontractors.....	1,220	21,114	21,256	22,271	23,793	25,930	26,531	27,689	28,179	28,415	27,628	25,469	22,800	48,772,461
40-hour, 5-day week.....	208	5,955	6,132	6,086	6,235	6,889	6,594	6,906	7,312	7,343	7,330	6,752	5,756	14,730,540
45-hour, 5-day week.....	4	15	22	20	18	13	13	14	9	7	22	16	15	24,104
50-hour, 5-day week.....	7	77	74	76	77	99	91	80	78	73	64	58	51	184,584
All other 5-day week.....	652	10,908	11,008	11,790	12,573	13,100	13,833	14,414	14,295	14,083	12,865	11,599	11,891	25,061,734
44-hour, 5½-day week.....	18	238	228	238	275	285	320	316	309	297	271	284	267	438,082
49½-hour, 5½-day week.....	24	323	247	200	352	423	558	600	540	542	501	423	328	587,089
All other 5½-day week.....	96	1,645	1,426	1,516	1,793	2,168	2,130	2,126	2,008	1,993	1,849	1,598	1,692	2,948,771
48-hour, 6-day week.....	46	392	403	432	460	477	514	544	562	685	639	658	613	879,129
54-hour, 6-day week.....	27	268	242	311	354	537	586	601	741	907	570	580	481	1,027,733
60-hour, 6-day week.....	23	409	488	537	565	643	747	961	1,076	947	927	801	746	927,733
All other 6-day week.....	41	524	531	510	607	666	644	619	623	638	675	687	634	1,017,089
All other not designated.....	11	114	97	106	148	168	168	160	170	156	177	181	175	243,224
Not reported.....	12	346	363	380	336	372	333	355	338	376	312	312	319	778,915
<b>ERIE</b>														
<i>Classification of establishments</i>														
General contractors <sup>1</sup> .....	32	472	533	604	717	1,112	1,258	1,246	1,275	1,245	1,283	1,083	829	1,666,700
Building.....	24	440	487	550	577	751	825	793	842	762	806	754	682	1,125,168
Building not specialized <sup>2</sup> .....	17	314	333	404	478	632	687	761	811	739	636	635	582	918,711
Residential building only.....	7	126	104	95	99	119	138	32	31	23	120	119	100	208,457
Highway and grading.....	5	30	31	31	113	314	379	398	383	423	418	283	111	451,976
Other classes <sup>3</sup> .....	3	2	15	14	27	47	54	55	60	61	59	46	36	89,556
Subcontractors.....	23	153	171	187	181	191	204	194	194	221	242	251	224	415,930
Electrical.....	3	11	20	17	15	18	31	24	21	26	19	18	23	40,605
Heating and plumbing.....	10	69	80	86	73	74	71	73	80	88	94	90	87	178,723
Heating and piping <sup>1</sup> .....	3	35	33	30	40	44	43	46	53	67	59	52	50	104,353
Plumbing.....	7	34	47	47	33	30	28	27	27	31	35	32	37	74,370
Roofing and sheet-metal work.....	4	20	23	33	26	34	42	42	39	39	44	40	37	62,045
Marble, tiling, and plastering.....	3	41	33	20	34	33	35	29	30	45	60	63	68	94,134
Other classes <sup>4</sup> .....	3	12	15	22	33	32	25	26	24	23	25	20	9	40,423
<i>Length of working week <sup>11</sup></i>														
General contractors <sup>1</sup> .....	32	472	533	604	717	1,112	1,258	1,246	1,275	1,245	1,283	1,083	829	1,666,700
44-hour, 5½-day week.....	15	231	268	327	371	497	540	626	655	604	549	498	444	719,453
49½-hour, 5½-day week.....	1	14	14	14	19	23	23	35	32	30	38	31	19	21,588
55-hour, 5½-day week.....	1	15	19	22										

TABLE 7.—WAGE EARNERS, BY MONTHS, AND WAGES PAID DURING 1929—Continued

CLASSIFICATION OF ESTABLISHMENTS AND LENGTH OF WORKING WEEK	Establishments reporting	NUMBER EMPLOYED ON 15TH DAY OF THE MONTH OR NEAREST REPRESENTATIVE DAY												Wages paid during year
		January	February	March	April	May	June	July	August	September	October	November	December	
<b>ERIE—Continued.</b>														
<i>Length of working week—Continued</i>														
Subcontractors.....	23	153	171	187	181	191	204	194	194	221	242	251	224	\$416,930
40-hour, 5-day week.....	2	21	25	26	22	27	24	21	24	34	45	58	84	64,930
44-hour, 5½-day week.....	17	115	124	127	131	133	140	134	134	162	163	158	150	286,158
49½-hour, 5½-day week.....	1	7	7	7	10	11	15	16	13	14	14	13	12	28,050
54-hour, 6-day week.....	1	2	6	13	2	6	8	9	9	10	10	11	10	8,024
60-hour, 6-day week.....	1	4	5	9	11	8	5	7	7	7	6	7	4	8,252
All other 6-day week.....	1	4	4	5	5	6	0	7	7	6	4	4	5	9,507
<b>PHILADELPHIA.....</b>	<b>781</b>	<b>21,320</b>	<b>21,198</b>	<b>24,004</b>	<b>27,911</b>	<b>31,692</b>	<b>34,688</b>	<b>36,873</b>	<b>38,148</b>	<b>36,986</b>	<b>35,938</b>	<b>33,933</b>	<b>28,785</b>	<b>56,008,188</b>
<i>Classification of establishments</i>														
Operative builders.....	29	103	118	130	181	188	179	167	139	125	121	105	100	194,100
General contractors.....	245	10,551	10,280	12,753	15,820	18,164	20,746	22,256	23,393	22,048	21,769	20,770	17,343	31,630,093
Building.....	183	6,354	6,218	8,044	9,899	11,293	13,213	14,188	14,500	13,626	13,371	12,705	10,519	20,879,880
Building not specialized.....	146	6,074	5,894	7,717	9,538	10,901	12,790	13,726	14,066	13,198	13,000	12,351	10,209	20,167,153
Commercial building only.....	7	103	135	124	164	110	111	128	112	128	87	127	129	212,700
Residential building only.....	30	174	189	203	262	322	312	336	322	300	275	227	181	500,027
Highway.....	4	105	66	68	124	149	242	330	373	380	395	321	215	337,701
Bridge and culvert.....	10	673	680	777	795	923	975	926	846	1,094	1,000	956	968	1,869,142
Grading.....	3	90	72	139	257	202	205	150	238	189	176	171	131	284,337
Street paving.....	11	259	237	509	1,200	1,592	1,472	1,366	1,912	1,923	1,972	1,430	914	1,121,311
Sewer, gas, water, conduit.....	8	363	375	383	415	407	623	587	516	476	440	443	406	748,206
Waterworks.....	4	183	181	185	177	192	196	196	213	223	182	176	198	361,073
Dredging, river, harbor, etc.....	11	683	561	635	719	971	1,255	1,271	1,479	1,446	1,563	1,793	1,511	1,006,026
Railroad and subway.....	8	1,324	1,341	1,337	1,621	1,686	1,042	2,492	2,518	1,985	1,923	2,189	1,875	3,016,102
Other classes <sup>10</sup> .....	3	517	558	583	614	659	723	750	788	701	661	586	606	1,026,255
Subcontractors.....	507	10,666	10,791	11,121	11,910	13,340	13,763	14,450	14,626	14,813	14,054	13,058	11,292	24,183,989
Carpentering and wood flooring.....	30	351	360	381	473	541	620	601	574	605	533	479	390	1,056,837
Concreting.....	23	583	609	622	707	818	920	1,012	992	914	890	1,042	878	1,228,771
Electrical.....	49	822	797	761	738	709	837	917	851	855	898	961	949	1,737,836
Elevator construction.....	14	360	376	380	347	379	352	371	393	395	402	348	348	979,180
Heating and plumbing.....	143	2,713	2,606	2,681	2,782	2,917	2,956	3,045	3,243	3,441	3,507	3,080	2,793	6,095,009
Heating and piping <sup>11</sup> .....	53	801	779	774	841	861	857	960	1,009	1,142	1,165	995	852	1,612,294
Pipe covering.....	3	17	42	46	40	42	40	63	60	54	63	54	68	115,029
Plumbing.....	55	835	771	828	814	873	903	877	992	1,024	986	867	800	1,043,332
Plumbing and heating combined.....	25	418	400	397	437	494	524	472	460	462	488	448	382	767,033
Automatic sprinkler systems.....	6	642	614	636	650	647	623	683	707	750	805	716	691	1,556,971
Masonry.....	38	1,350	1,403	1,479	1,900	2,094	2,003	1,850	1,709	1,633	1,380	1,278	973	2,597,361
Painting and decorating.....	53	1,163	1,162	1,324	1,467	1,556	1,559	1,913	2,044	2,021	1,662	1,407	1,239	2,816,203
Glass and glazing.....	6	84	85	87	86	80	88	85	86	86	88	87	89	160,437
Plastering and lathing.....	15	430	575	594	678	744	754	832	728	798	990	798	522	1,585,219
Roofing and sheet-metal work.....	49	741	673	707	759	939	891	912	1,035	1,039	1,116	1,043	867	1,505,744
Roofing.....	22	266	236	242	262	340	321	312	381	447	521	485	342	503,466
Sheet-metal work.....	15	195	190	197	210	282	269	275	286	273	263	253	211	467,716
Roofing and sheet metal combined.....	12	280	247	268	287	317	301	325	368	319	332	305	304	544,572
Steel erection.....	10	328	333	372	408	493	501	450	502	468	469	415	346	656,979
Stonework.....	10	290	319	377	444	494	542	617	639	602	431	420	320	780,887
Marble and tiling.....	24	494	446	390	397	430	516	528	547	490	445	426	415	1,061,568
Excavating and grading.....	8	188	307	273	236	323	381	508	562	750	428	494	468	705,407
Ornamental iron.....	12	157	155	149	155	155	144	160	172	173	169	171	164	263,732
Metal work, n. e. s.....	15	375	418	388	431	447	419	380	344	384	400	400	351	980,166
Flooring, n. e. s.....	4	13	22	22	21	20	21	31	78	82	84	34	33	47,551
Other classes <sup>11</sup> .....	4	215	145	134	112	132	259	239	157	111	112	182	157	298,063
<i>Length of working week<sup>12</sup></i>														
General contractors <sup>6</sup> .....	274	10,654	10,407	12,883	16,001	18,352	20,025	22,423	23,522	22,173	21,884	20,875	17,443	31,824,109
40-hour, 5-day week.....	6	116	83	97	102	71	74	97	82	150	158	148	164	197,361
44-hour, 5½-day week.....	172	4,045	4,054	4,577	5,084	5,746	6,889	7,979	7,453	6,966	6,772	6,337	5,063	10,034,763
49½-hour, 5½-day week.....	4	73	66	76	166	169	106	209	184	186	174	105	72	186,062
55-hour, 5½-day week.....	5	522	475	347	808	570	525	680	680	630	614	495	619	761,063
All other 5½-day week.....	10	78	96	124	162	138	161	150	146	127	118	118	138	205,566
48-hour, 6-day week.....	15	436	411	477	605	553	593	610	553	493	480	497	456	818,784
54-hour, 6-day week.....	7	411	354	403	439	489	540	549	590	949	944	930	879	1,294,629
60-hour, 6-day week.....	43	2,046	2,046	3,369	4,396	4,902	5,237	5,727	6,438	5,808	5,620	5,127	4,222	6,784,089
All other 6-day week.....	4	24	21	20	30	24	32	31	38	38	40	31	33	55,442
All other not designated.....	2	4	4	4	4	4	1	1	1	1	4	4	4	3,400
Not reported.....	6	1,999	1,897	3,389	4,506	5,626	6,674	6,390	7,342	6,799	6,954	7,134	4,893	11,482,170
Subcontractors.....	507	10,666	10,791	11,121	11,910	13,340	13,763	14,450	14,626	14,813	14,054	13,058	11,292	24,183,989
40-hour, 5-day week.....	102	3,125	3,330	3,267	3,450	4,074	3,960	4,023	3,937	4,060	4,046	3,761	3,009	7,364,181
45-hour, 5-day week.....	2	1	6	7	7	3	2	3	1	16	13	9	9	8,702
All other 5-day week.....	2	15	12	15	14	28	25	26	18	23	19	25	24	75,000
44-hour, 5½-day week.....	294	5,327	5,227	5,612	6,119	6,534	6,901	7,345	7,602	7,540	7,063	6,387	5,698	12,006,164
49½-hour, 5½-day week.....	7	102	103	117	149	162	183	174	162	150	114	113	103	226,596
55-hour, 5½-day week.....	3	111	47	20	84	103	210	229	145	106	101	83	69	163,395
All other 5½-day week.....	32	842	813	844	875	981	985	1,008	995	966	932	880	856	1,511,512
48-hour, 6-day week.....	17	215	224	211	213	216	240	259	251	222	230	330	236	416,255
54-hour, 6-day week.....	10	137	131	149	161	293	320	360	466	634	334	385	325	593,588
60-hour, 6-day week.....	9	240	344	312	293	280	319	411	448	537	553	473	355	508,692
All other 6-day week.....	20	293	283	294	312	374	344	347	350	307	335	349	329	552,833
All other not designated.....	5	39	26	25	27	42	62	37	44	43	54	53	61	100,465
Not reported.....	4	219	245	248	208	250	216	220	207	224	224	206	219	558,576

See footnotes at end of table.



CONSTRUCTION—PENNSYLVANIA

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TABLE 7.—WAGE EARNERS, BY MONTHS, AND WAGES PAID DURING 1929—Continued

CLASSIFICATION OF ESTABLISHMENTS AND LENGTH OF WORKING WEEK	Estab-lish-ments reporting	NUMBER EMPLOYED ON 15TH DAY OF THE MONTH OR NEAREST REPRESENTATIVE DAY												Wages paid during year
		Janu-ary	Febru-ary	March	April	May	June	July	August	Sep-tember	Octo-ber	Novem-ber	Decem-ber	
<b>PITTSBURGH</b>	<b>311</b>	<b>9,265</b>	<b>8,580</b>	<b>9,009</b>	<b>9,884</b>	<b>12,454</b>	<b>14,001</b>	<b>15,011</b>	<b>16,025</b>	<b>16,271</b>	<b>16,519</b>	<b>14,127</b>	<b>11,514</b>	<b>224,551,987</b>
<i>Classification of establishments</i>														
Operative builders	8	18	20	29	27	37	45	46	54	57	65	54	42	58,117
General contractors	126	5,735	5,022	5,239	5,818	7,040	9,607	10,306	11,204	11,240	11,280	9,437	7,455	14,970,957
Building	87	3,211	2,588	2,603	2,943	3,608	4,057	4,471	4,682	4,919	4,339	3,745	3,745	7,212,299
Building not specialized	54	3,039	2,401	2,384	2,668	3,382	3,760	4,151	4,333	4,622	4,622	4,093	3,648	6,091,619
Commercial building only	3	20	22	21	32	43	47	46	47	39	38	30	27	53,647
Residential building only	30	152	165	198	253	243	260	274	282	280	259	216	170	467,033
Highway	6	729	613	720	677	1,102	1,622	1,760	1,794	1,713	1,941	1,302	1,100	1,637,164
Bridge and culvert	6	494	448	589	457	650	841	720	1,055	930	746	957	718	1,836,318
Street paving	10	233	187	201	516	821	1,057	1,221	1,045	1,161	989	825	663	814,499
Sewer, gas, water, conduit	6	163	161	155	181	200	218	279	282	310	259	251	181	307,874
Dredging, river, harbor, etc.	3	97	94	156	54	71	74	118	140	146	107	134	154	219,642
Railroad	3	476	492	453	880	1,103	1,538	1,569	1,843	1,069	1,917	1,289	730	2,383,687
Other classes <sup>12</sup>	5	332	439	302	110	106	200	102	377	360	402	340	264	359,474
Subcontractors	177	3,512	3,518	3,741	4,039	4,477	4,349	4,659	4,767	4,974	5,174	4,636	4,017	9,522,863
Carpentering and wood flooring	3	22	24	32	43	45	47	36	29	23	39	33	27	93,429
Concreting	6	158	107	100	168	315	316	387	396	344	304	291	249	380,486
Electrical	20	405	420	413	364	369	332	279	398	435	490	384	376	1,042,624
Elevator construction	3	120	100	106	87	84	82	84	111	89	88	88	80	205,589
Heating and plumbing	50	744	660	643	675	650	609	645	710	733	760	745	677	1,872,503
Heating and piping <sup>14</sup>	15	129	127	117	123	124	122	156	200	214	232	223	167	374,749
Plumbing	31	472	417	363	434	436	380	378	388	402	408	407	417	1,183,701
Plumbing and heating combined	4	143	122	133	118	90	107	111	122	117	120	115	93	314,053
Masonry	5	73	78	100	78	86	87	143	129	107	85	64	57	209,709
Painting, decorating, and glazing	20	144	210	270	401	720	650	618	618	588	422	241	21	832,612
Plastering and lathing	4	258	222	208	158	113	151	205	270	198	141	169	124	473,614
Roofing and sheet-metal work	24	417	369	400	438	430	442	610	524	577	563	557	595	1,023,077
Roofing	6	219	192	193	230	218	266	426	310	365	346	340	391	502,890
Sheet-metal work	10	139	152	145	144	140	107	131	131	140	145	141	129	508,282
Roofing and sheet metal combined	8	59	55	62	55	72	67	83	83	79	76	76	75	151,905
Steel erection	5	720	793	833	866	940	940	961	846	1,034	1,259	1,181	988	1,846,102
Stonework	3	17	20	20	12	22	22	23	24	42	52	47	67	87,254
Marble and tiling	17	150	173	175	185	150	170	174	192	107	184	158	136	429,262
Excavating and grading	4	98	76	65	135	148	141	175	168	202	116	109	85	228,042
Ornamental iron	5	32	26	28	33	33	43	41	38	38	40	32	32	78,065
Metal work, n. e. s.	3	109	148	201	256	293	241	177	221	200	404	291	215	558,309
Other classes <sup>15</sup>	5	45	50	40	43	44	57	66	68	51	66	60	68	119,596
<i>Length of working week<sup>13</sup></i>														
General contractors <sup>6</sup>	134	5,753	5,042	5,268	5,845	7,677	9,652	10,352	11,258	11,297	11,345	9,491	7,497	15,029,074
40-hour, 6-day week	67	1,067	913	908	1,221	1,523	1,543	1,674	1,837	2,165	2,246	1,801	1,523	2,888,047
50-hour, 6-day week	3	3	3	3	3	3	3	3	3	3	3	3	3	24,877
44-hour, 5½-day week	18	630	552	749	538	642	774	1,061	955	826	950	784	1,021,904	
55-hour, 5½-day week	7	514	545	620	789	1,026	1,257	1,243	1,058	701	688	688	548	85,140
48-hour, 6-day week	4	1,407	942	735	788	1,061	1,223	1,499	1,747	1,854	1,779	1,773	1,544	1,361,635
54-hour, 6-day week	4	1,407	942	735	788	1,061	1,223	1,499	1,747	1,854	1,779	1,773	1,544	2,650,930
60-hour, 6-day week	30	1,815	1,065	1,621	2,400	3,540	4,415	4,840	5,159	5,083	5,262	3,920	2,860	5,708,005
All other 6-day week	3	45	43	62	69	81	79	83	92	90	90	94	77	78,439
All other not designated	2	16	20	34	6	26	23	19	21	24	36	25	20	34,163
Not reported	1	266	350	187					23	80	168	189	97	271,844
Subcontractors	177	3,512	3,518	3,741	4,039	4,477	4,349	4,659	4,767	4,974	5,174	4,636	4,017	9,522,863
40-hour, 6-day week	100	1,981	1,884	1,924	1,895	1,918	1,789	2,015	2,220	2,184	2,152	2,009	1,717	5,028,387
All other 6-day week	3	21	22	21	19	27	20	18	18	7	7	5	4	57,264
44-hour, 5½-day week	43	1,253	1,354	1,408	1,066	1,810	1,792	1,923	1,771	2,086	2,318	2,071	1,824	3,635,310
40½-hour, 5½-day week	1	9	7	7	6	6	6	8	6	8	10	11	14	10,686
55-hour, 5½-day week	1	10	10	20	20	40	70	50	70	50	20	20	20	32,054
All other 5½-day week	0	54	43	47	156	378	388	312	306	272	274	225	63	251,198
48-hour, 6-day week	4	44	47	62	75	86	84	87	128	158	163	122	119	153,856
54-hour, 6-day week	5	44	32	68	85	116	120	100	132	130	102	65	70	145,784
All other 6-day week	3	59	69	66	59	53	66	61	62	75	61	66	71	141,242
All other not designated	1	1					5	28	26	24	27	21	18	13,694
Not reported	1	38	50	58	58	43	38	37	28	30	30	21	16	52,988
<b>READING</b>	<b>70</b>	<b>1,044</b>	<b>1,116</b>	<b>1,253</b>	<b>1,628</b>	<b>1,989</b>	<b>1,995</b>	<b>1,996</b>	<b>2,112</b>	<b>1,874</b>	<b>1,761</b>	<b>1,557</b>	<b>1,230</b>	<b>2,439,131</b>
<i>Classification of establishments</i>														
Operative builders	6	13	16	43	65	79	81	78	73	71	77	77	69	103,399
General contractors	22	551	505	607	879	966	1,236	1,277	1,299	1,090	1,005	891	627	1,357,258
Building	18	403	448	488	623	656	876	856	833	673	584	484	421	922,552
Building not specialized	14	362	409	450	577	582	800	769	765	616	528	431	373	825,350
Residential building only	4	41	39	38	46	74	76	87	78	57	56	53	48	97,202
Other classes <sup>10</sup>	4	148	147	209	256	310	360	421	466	417	421	407	200	434,706
Subcontractors	42	480	505	513	584	644	678	641	740	713	679	580	534	978,474
Concreting <sup>17</sup>	3	10	0	36	43	58	57	54	50	44	43	40	24	64,936
Electrical	8	82	96	94	111	111	109	105	106	109	98	110	100	154,505
Heating and plumbing	13	168	157	158	165	197	218	205	232	235	232	186	169	333,228
Heating and piping	3	34	37	39	38	41	53	51	56	51	58	44	39	81,563
Plumbing	7	78	65	70	74	85	93	89	112	118	113	89	85	157,788
Plumbing and heating combined	3	58	55	49	53	71	72	65	64	66	61	53	45	93,877
Painting and decorating	3	50	40	40	51	53	50	42	80	72	56	62	48	70,417
Roofing	4	34	34	35	36	34	38	42	48	49	52	49	48	171,498
Marble, tiling, and plastering	4	35	35	38	38	41	44	61	85	67	52	40	38	108,001
Other classes <sup>18</sup>	5	101	114	112	140	150	162	132	139	137	146	112	101	175,889

See footnotes at end of table.

TABLE 7.—WAGE EARNERS, BY MONTHS, AND WAGES PAID DURING 1929—Continued

CLASSIFICATION OF ESTABLISHMENTS AND LENGTH OF WORKING WEEK	Estab- lish- ments report- ing	NUMBER EMPLOYED ON 15TH DAY OF THE MONTH OR NEAREST REPRESENTATIVE DAY												Wages paid during year
		Janu- ary	Febru- ary	March	April	May	June	July	August	Sep- tem- ber	Octo- ber	Novem- ber	Decem- ber	
<b>READING—Continued.</b>														
<i>Length of working week <sup>12</sup></i>														
General contractors <sup>6</sup> .....	28	504	611	740	944	1,045	1,817	1,355	1,372	1,161	1,082	968	696	\$1,460,657
44-hour, 5½-day week.....	10	155	180	154	198	229	350	352	333	284	233	191	147	367,132
55-hour, 5½-day week.....	13	289	307	412	546	594	705	817	804	730	697	630	407	800,400
All other 5½-day week.....	3	81	75	77	88	127	117	118	116	98	118	123	110	177,068
60-hour, 6-day week.....	1	34	27	39	32	35	30	38	29	29	20	19	28	48,882
All other not designated.....	1	5	22	58	80	60	49	30	30	20	10	5		67,224
Subcontractors.....	42	480	505	513	584	644	678	641	740	713	679	589	534	978,474
40-hour, 6-day week.....	3	40	26	25	35	33	38	44	30	67	49	40	37	63,793
45-hour, 6-day week.....	1	8	10	9	8	6	7	7	4	2	1		3	8,494
44-hour, 5½-day week.....	20	281	247	256	270	305	331	324	377	356	333	289	261	541,081
49½-hour, 5½-day week.....	1	16	13	15	18	18	10	22	21	21	22	22	22	94,108
55-hour, 5½-day week.....	5	51	61	65	82	101	92	83	110	123	120	78	71	129,240
All other 5½-day week.....	4	55	55	66	64	62	69	65	65	58	66	64	60	107,521
All other 6-day week.....	1	61	72	59	89	90	101	76	65	67	67	78	66	85,057
Not reported.....	1	18	18	18	18	20	21	20	18	19	21	18	15	22,180
<b>SCRANTON.....</b>	<b>45</b>	<b>645</b>	<b>646</b>	<b>689</b>	<b>921</b>	<b>1,093</b>	<b>1,060</b>	<b>1,042</b>	<b>1,092</b>	<b>960</b>	<b>915</b>	<b>751</b>	<b>631</b>	<b>1,438,768</b>
<i>Classification of establishments</i>														
General contractors.....	22	425	431	447	605	707	693	665	711	608	554	443	348	865,127
Building.....	19	308	323	334	385	376	371	370	433	373	340	262	234	607,078
Highway and street paving.....	3	117	108	113	220	331	322	295	278	235	214	181	114	258,049
Subcontractors.....	23	220	215	242	316	386	397	377	381	352	361	308	283	573,041
Heating and plumbing.....	11	84	90	83	88	99	92	87	81	83	89	88	88	188,407
Plumbing.....	7	63	62	54	57	68	65	61	55	55	57	59	59	104,552
Plumbing and heating combined.....	4	31	28	29	31	31	27	26	26	28	32	29	29	83,855
Roofing.....	4	15	17	26	32	33	34	38	37	46	54	51	46	64,979
Other classes <sup>13</sup> .....	8	121	108	133	196	254	271	252	263	223	218	199	149	320,255
<i>Length of working week <sup>12</sup></i>														
General contractors.....	22	425	431	447	605	707	693	665	711	608	554	443	348	865,127
44-hour, 5½-day week.....	16	317	340	359	375	387	390	406	481	443	334	276	225	587,178
All other 5½-day week.....	3	8	17	18	44	33	37	81	38	31	58	44	39	63,873
60-hour, 6-day week.....	2	71	51	49	150	258	226	196	165	114	121	77	43	162,989
Not reported.....	1	29	23	21	27	29	40	32	27	20	41	46	41	51,087
Subcontractors.....	23	220	215	242	316	386	397	377	381	352	361	308	283	573,041
40-hour, 6-day week.....	2	15	18	27	38	42	48	29	40	36	27	29	29	78,887
44-hour, 5½-day week.....	15	115	111	103	136	143	144	139	150	154	134	132	132	271,447
49½-hour, 5½-day week.....	1	20	18	16	17	13	13	10	14	15	13	13	13	21,848
48-hour, 6-day week.....	3	14	17	24	29	26	25	21	20	23	22	22	22	48,841
60-hour, 6-day week.....	1	51	42	64	82	146	151	140	165	123	124	108	84	141,280
All other 6-day week.....	1	5	9	8	14	10	17	8	8	6	0	4	3	11,338

<sup>1</sup> Includes air transport work.<sup>2</sup> Includes telephone line and system; and pipe line.<sup>3</sup> Includes automatic temperature control.<sup>4</sup> Includes highway and street paving.<sup>5</sup> Includes wrecking; sewer, gas, water, conduit; rental of equipment, trucking, etc.; and miscellaneous, n. e. s.<sup>6</sup> Includes operative builders.<sup>7</sup> Includes street paving; and sewer, gas, water, conduit.<sup>8</sup> Includes plumbing and heating combined.<sup>9</sup> Includes masonry; painting and decorating.<sup>10</sup> Includes foundation; and telephone line and system.<sup>11</sup> Includes wrecking; and soundproofing.<sup>12</sup> See complete classification in the tabulation for the State, above.<sup>13</sup> Includes grading; foundation; waterworks and air transport work.<sup>14</sup> Includes automatic temperature control.<sup>15</sup> Includes highway; soundproofing; and flooring, n. e. s.<sup>16</sup> Includes highway; grading; sewer, gas, water, conduit; and dam and reservoir.<sup>17</sup> Includes masonry; and stonework.<sup>18</sup> Includes elevator construction; steel erection; excavating; and sewer, gas, water, conduit.<sup>19</sup> Includes carpentering and wood flooring; electrical; painting and decorating; plastering and lathing; stone work; excavating; and ornamental iron.



CONSTRUCTION—PENNSYLVANIA

TABLE 8.—EXPENDITURES OF REPORTING ESTABLISHMENTS: 1929

CLASSIFICATION OF ESTABLISHMENTS	Establishments reporting	Value of construction business reported	PRINCIPAL ITEMS OF EXPENDITURE			OTHER ITEMS OF EXPENDITURE							
			Subcontract work let	Wages paid	Cost of materials	Salaries		Rent for		Interest	Contract bond premiums	Compensation and liability insurance premiums	All other overhead expenses
						Proprietors and firm members	Employees	Equipment	Offices, etc.				
<b>PENNSYLVANIA</b>	2,282	\$518,938,937	\$141,552,000	\$116,868,608	\$102,361,348	\$3,819,009	\$26,298,630	\$3,291,871	\$2,289,414	\$2,334,506	\$1,389,044	\$3,343,116	\$27,849,482
Operative builders	70	15,403,866	12,446,000	875,825	1,003,035	72,383	253,129	1,300	40,079	338,401	20,528	113,032	390,778
General contractors	987	338,023,849	118,628,000	67,378,267	91,092,737	1,320,324	18,762,230	2,914,084	1,253,128	1,200,094	1,206,828	1,927,388	16,143,716
Building	743	239,082,407	118,127,000	39,624,410	53,682,784	1,071,335	12,985,353	873,000	804,030	822,147	579,035	1,018,710	6,175,595
Building not specialized	547	185,949,023	82,055,000	33,451,918	45,707,814	876,153	10,107,492	893,919	607,621	460,707	552,289	826,290	4,506,147
Commercial building only	18	3,367,726	1,831,000	610,754	401,922	7,059	227,708	3,163	13,730	21,759	14,349	20,895	113,280
Manufacturing building only	4	31,863,736	20,178,000	2,777,081	3,766,954	2,181,355	460	5,430	100,972	1,545	117,836	1,076,450	
Residential building only	174	17,901,982	9,093,000	2,075,657	3,716,594	188,007	408,798	5,408	30,849	178,049	10,863	53,089	420,718
Highway	33	23,608,206	2,289,000	5,999,413	9,304,161	1,139,552	533,566	53,324	102,229	277,888	178,425	2,471,909	
Bridge and culvert	21	15,986,674	924,000	3,902,193	8,893,049	45,632	732,524	33,591	29,470	30,556	68,558	784,111	
Grading	12	1,610,741	82,000	698,264	190,900	9,470	160,112	51,268	10,200	8,100	1,512	20,100	
Street paving	58	10,561,400	939,000	3,886,470	6,253,245	89,357	999,874	356,284	47,116	76,807	120,199	137,557	
Sewer, gas, water, conduit	26	5,413,082	125,000	1,857,377	1,778,751	29,600	446,067	56,788	13,543	40,952	61,962	84,671	
Waterworks, dam, and reservoir	7	1,782,462	61,000	418,725	939,422	4,690	116,260	1,850	4,153	10,705	15,563	12,161	
Dredging, river, harbor, etc.	14	12,093,223	613,000	3,309,578	3,376,053	7,800	801,560	376,918	85,224	24,641	62,819	128,061	
Railroad	15	15,902,304	442,000	5,042,127	6,804,953	860,502	486,323	20,050	42,440	38,822	108,574	1,199,491	
Foundation	5	1,881,580	154,000	613,021	708,834	2,500	151,010	3,055	8,573	1,001	11,357	24,050	
Other classes	3	4,102,980	82,000	1,475,780	1,030,976	260,801	141,445	14,490	10,859	1,125	54,916	120,938	
Subcontractors	1,219	165,509,222	10,478,000	48,614,416	69,395,571	2,417,302	9,283,277	370,487	906,207	735,921	161,698	1,302,690	11,314,988
Carpentering and wood flooring	30	8,792,206	290,000	1,177,409	1,450,950	78,977	220,783	438	21,852	290	293	21,733	
Concrete	44	6,531,625	110,000	2,227,402	2,340,234	57,315	676,300	47,641	41,600	34,083	13,910	73,747	
Electrical	126	12,978,262	125,000	3,697,810	6,218,428	210,581	1,038,191	1,150	115,857	52,221	19,305	43,344	
Elevator construction	18	6,707,881	178,000	1,234,828	4,188,636	3,120	340,617	17,515	3,210	3,202	32,062	128,309	
Heating and plumbing	429	49,279,484	1,894,000	12,077,148	24,904,435	873,004	2,402,418	17,740	359,603	326,623	75,059	177,641	
Heating and piping	132	16,308,698	977,000	3,146,810	8,566,432	271,468	886,428	4,554	112,681	109,624	38,560	42,300	
Pipe covering	5	1,986,570	26,000	810,169	671,050	6,500	113,608	2,000	5,790	78,400	21,030	255,504	
Plumbing	179	15,298,935	446,000	4,103,098	7,307,873	378,774	763,636	4,382	110,712	80,925	24,006	49,444	
Plumbing and heating combined	107	9,093,093	110,000	2,400,100	5,306,627	210,352	480,702	144	66,768	55,648	11,884	20,435	
Automatic sprinkler systems	6	5,607,188	335,000	1,559,971	2,972,453	158,149	6,609	17,762	4,017	540	540	35,242	
Masonry	80	10,080,172	119,000	4,241,201	4,153,178	207,242	459,021	60,120	27,977	31,630	6,018	84,580	
Painting and decorating	94	8,086,149	173,000	4,128,191	1,979,004	169,890	598,493	5,835	87,107	33,630	2,046	61,470	
Glass and glazing	10	1,598,102	3,000	256,970	830,514	22,500	100,932	11,475	15,113	66	3,707	162,815	
Plastering and lathing	42	6,250,179	417,000	3,009,677	1,560,566	62,280	324,260	1,481	29,671	38,712	3,950	37,692	
Roofing and sheet-metal work	137	13,438,084	284,000	8,624,676	6,285,940	326,822	941,954	13,668	93,923	68,257	8,857	108,531	
Roofing	69	6,750,492	184,000	1,728,953	3,389,631	131,843	406,183	11,747	49,495	15,460	1,917	98,976	
Sheet-metal work	38	3,434,722	25,000	1,028,253	1,420,401	88,704	330,029	19,815	21,818	3,603	17,134	218,806	
Roofing and sheet metal combined	30	3,252,870	76,000	867,370	1,466,854	106,715	115,787	2,121	24,613	20,979	3,964	22,421	
Steel erection	32	22,645,645	6,485,000	5,462,155	6,004,905	47,145	745,679	25,760	80,687	33,761	19,884	447,086	
Stonework	18	3,574,430	36,000	1,454,292	1,430,709	30,927	228,005	58,228	14,489	20,743	1,589	28,420	
Marble and tiling	68	7,977,655	68,000	2,410,486	3,502,620	157,504	447,901	1,313	63,489	24,574	1,850	28,505	
Excavating and iron	21	1,772,955	47,000	731,421	108,115	41,836	109,513	108,785	7,755	15,465	5,302	17,504	
Ornamental iron	27	2,458,054	153,000	497,692	945,248	72,250	224,280	888	34,604	10,814	226	14,153	
Soundproofing	4	1,844,086	40,000	260,194	1,054,454	10,000	87,778	4,302	1,626	66	3,945	178,612	
Metal work, n. e. s.	20	4,845,512	59,000	1,052,479	1,383,456	21,100	258,704	4,062	25,657	2,787	565	112,228	
Rental of equipment, trucking, etc.	6	149,988	7,000	51,568	10,481	6,180	12,950	4,062	1,033	1,708	565	4,479	
Flooring, n. e. s.	6	414,197	7,000	86,347	197,842	7,050	40,912	1,115	814	1,001	320	1,916	
Other classes	5	487,613	156,120	116,800	116,800	4,740	23,988	23,500	6,500	401	514	3,260	
<b>ERIE</b>	44	6,533,744	1,316,000	1,562,187	2,196,307	70,779	558,941	10,513	16,318	38,652	29,138	34,792	340,869
General contractors	23	5,257,484	1,305,000	1,189,347	1,639,943	17,720	290,386	10,513	6,805	28,834	20,009	28,186	
Building	19	3,998,987	1,107,000	921,176	1,237,511	17,720	209,988	5,165	4,205	15,387	9,970	20,361	
Building not specialized	14	3,452,582	1,140,000	727,376	1,019,326	17,720	197,868	5,165	3,905	13,322	9,070	19,271	
Residential building only	5	546,405	51,000	193,800	218,185	12,120	12,120	300	300	2,065	1,000	2,354	
Other classes	4	1,258,497	108,000	208,171	402,432	80,398	5,348	2,600	13,447	10,039	7,825	174,914	
Subcontractors	21	1,276,260	11,000	372,840	558,364	53,050	68,555	0,511	9,818	129	6,606	77,586	
Heating and plumbing	10	678,935	6,000	178,723	340,192	28,079	47,400	4,491	6,818	60	2,269	27,892	
Heating and piping	3	384,452	4,000	104,353	207,140	8,787	28,570	1,380	4,526	60	1,064	12,907	
Plumbing	7	289,483	2,000	74,370	133,052	10,292	18,884	3,111	2,292	60	1,195	14,985	
Roofing and sheet-metal work	4	220,171	5,000	62,045	78,656	15,620	12,540	140	1,708	60	1,240	10,036	
Other classes	7	382,154	5,000	132,072	130,516	0,360	8,555	4,874	1,292	69	3,107	30,658	
<b>PHILADELPHIA</b>	631	241,044,802	78,192,000	51,538,417	73,683,527	1,560,785	14,669,668	2,144,002	1,398,134	952,473	632,655	1,320,958	11,711,142
Operative builders	40	10,379,394	9,336,000	219,254	430,023	30,639	171,017	1,000	26,741	255,441	12,337	69,602	135,069
General contractors	257	147,407,613	60,840,000	26,767,410	35,474,063	419,989	9,211,758	1,930,219	887,007	362,244	547,792	742,421	
Building	195	111,951,685	58,972,000	17,020,509	22,042,632	370,103	6,950,096	770,206	730,543	295,970	358,070	473,459	
Building not specialized	147	101,239,960	51,835,000	15,808,417	21,148,300	338,430	6,387,375	774,190	630,377	155,795	330,927	434,558	
Commercial building only	12	2,933,070	1,731,000	534,250	244,823	7,085	204,273	2,740	11,180	18,880	13,290	18,850	
Manufacturing building only	3	760,515	178,000	214,125	166,954	79,428	59,428	450	5,430	28,207	1,549	8,473	
Residential building only	33	7,028,140	5,228,000	463,771	492,599	24,588	270,020	1,826	19,556	63,097	6,299	11,578	
Highway	4	2,609,040	108,000	535,289	1,252,655	6,240	72,294	88,529	2,861	13,284	23,434	16,410	
Bridge and culvert	9	6,124,130	519,000	1,809,142	2,836,644	14,600	305,145	11,480	11,085	4,789	9,800	18,424	
Street paving	13	6,714,001	409,000	1,306,371	2,690,715	9,046	473,200	130,804	18,524	21,564	54,271		

TABLE 8.—EXPENDITURES OF REPORTING ESTABLISHMENTS: 1929—Continued

CLASSIFICATION OF ESTABLISHMENTS	Establishments reporting	Value of construction business reported	PRINCIPAL ITEMS OF EXPENDITURE			OTHER ITEMS OF EXPENDITURE							
			Subcontract work let	Wages paid	Cost of materials	Salaries		Rent for		Interest	Contract bond premiums	Compensation and liability insurance premiums	All other overhead expenses
						Proprietors and firm members	Employees	Equipment	Offices, etc.				
<b>PHILADELPHIA—Continued</b>													
Subcontractors—Continued.													
Heating and plumbing	152	\$25,485,991	\$1,646,000	\$5,867,178	\$12,972,047	\$296,991	\$1,269,306	\$11,051	\$130,880	\$123,029	\$41,446	\$91,076	\$1,506,593
Heating and piping	56	9,328,498	781,000	1,659,330	4,707,703	105,658	555,645	1,050	62,546	69,820	23,341	21,975	502,416
Pipe covering	4	448,091	1,000	144,075	196,208	6,500	42,762		3,300	1,296		1,049	12,360
Plumbing	60	6,697,294	430,000	1,740,956	3,173,175	124,578	367,418	3,332	35,387	33,269	16,143	21,665	300,390
Plumbing and heating combined.	26	3,314,920	99,000	765,846	1,832,508	60,260	145,332		11,886	14,627	1,413	10,517	140,042
Automatic sprinkler system	6	5,697,188	335,000	1,556,971	2,972,453		153,149	0,669	17,762	4,017		549	551,439
Masonry	41	7,106,648	60,000	2,882,215	3,081,865	129,820	374,571	49,503	20,738	17,718	5,929	59,045	198,559
Painting and decorating	54	6,143,935	142,000	2,785,040	1,497,772	113,643	419,934	3,425	52,067	20,268	1,108	38,680	530,508
Glazing and painting	7	1,047,557	3,000	178,487	538,514	16,500	77,662		5,775	11,103		3,284	100,364
Glass and glazing	13	3,129,021	68,000	1,545,932	829,920	35,360	162,846	1,105	13,650	18,727		450	17,626
Roofing and sheet-metal work	52	5,531,730	191,000	1,535,085	2,340,838	97,777	378,084	10,300	49,238	18,530	2,540	39,782	480,579
Roofing	23	2,170,418	114,000	553,543	956,020	22,320	101,116	10,265	22,033	3,936	1,627	14,307	141,801
Sheet-metal work	19	1,740,970	18,000	541,796	711,436	53,387	156,345		17,355	4,814		9,018	127,876
Roofing and sheet metal combined.	10	1,020,339	50,000	430,740	682,382	22,100	60,623	35	9,850	9,780		860	15,497
Steel erection	14	3,197,265	248,000	886,979	1,540,818	22,508	248,617	250	7,100	25,211	2,600	33,547	235,337
Stonework	10	2,567,400	33,000	1,002,028	1,116,114	7,500	169,271	58,228	8,383	16,090	1,088	22,320	111,367
Marble and tiling	25	3,882,995	47,000	1,077,485	1,779,418	85,794	198,050	1,313	33,654	7,322		824	14,740
Excavating	9	916,489	5,000	391,623	110,491	24,560	69,059	53,940	5,624	6,642		2,052	11,723
Ornamental iron	16	1,657,920	119,000	322,008	675,705	61,330	141,544		20,804	8,145		176	190,411
Metal work, n. e. s.	15	2,989,492	40,000	989,145	1,200,233	11,700	169,969	1,752	14,714	1,648		565	24,187
Flooring, n. e. s.	4	245,283	7,000	47,551	121,438		37,662		4,200	393		320	8,107
Other classes	4	1,840,143	40,000	269,489	1,008,068	12,080	91,861		3,600	1,776		7,632	177,274
<b>PITTSBURGH</b>													
Operative builders	6	784,400	640,000	29,850	43,456	6,000	5,600		3,532	5,620	7,104	1,382	0,874
General contractors	107	76,743,662	30,787,000	13,709,111	10,434,370	103,234	4,690,081	217,080	167,330	261,614	140,055	376,207	3,210,097
Building	78	57,854,402	30,132,000	7,716,988	10,883,678	85,939	3,510,256	20,748	117,151	196,904	48,308	242,827	1,654,666
Building not specialized	49	55,083,052	28,980,000	7,270,724	10,160,411	29,201	3,438,566	26,995	107,449	175,350	47,212	234,104	1,636,364
Commercial building only	3	274,812	34,000	53,647	109,536		21,482		423	1,721		1,060	8,349
Residential building only	26	2,496,638	1,118,000	392,617	673,631	60,738	50,208	2,360	7,152	19,827	46	7,281	59,053
Highway	4	1,746,764	219,000	528,800	615,203		119,238	5,493	6,996	33,447		20,862	353,100
Bridge and culvert	4	6,823,817	152,000	1,599,820	4,307,302		293,243	13,978	9,782	3,795		30,455	299,024
Street paving	0	2,770,200	74,000	774,308	1,124,657		167,655	89,469	11,210	8,401		30,455	33,464
Sewer, gas, water, conduit	4	531,881	3,000	103,608	217,564	3,600	33,480	2,284	2,200	5,648		2,313	38,466
Dredging, river, harbor, etc.	3	710,360	59,000	219,042	148,164		88,782	19,337	9,508	6,847		2,719	103,559
Other classes	5	6,297,248	148,000	2,075,885	2,187,902		477,447	69,771	10,423	7,672		10,188	451,739
Subcontractors	167	31,892,158	4,281,000	9,449,518	11,230,695	327,934	1,658,577	69,978	169,836	94,692	32,953	309,604	2,257,865
Carpentering and wood flooring	3	613,413	176,000	93,429	236,641	17,350	17,470		2,036	72		1,305	15,393
Concreting	8	1,908,006	28,000	650,260	841,966	8,500	134,324	4,291	13,029	19,482	0,951	21,604	173,873
Electrical	20	2,664,665	100,000	899,089	1,085,582	36,402	203,713	1,160	20,775	10,295	1,837	9,056	189,197
Heating and plumbing	45	5,666,098	85,000	1,696,865	2,744,519	73,376	361,922	1,040	53,648	25,858	4,955	18,281	277,652
Heating and piping	13	1,245,591	79,000	323,322	534,037	14,461	129,751	1,040	22,370	8,458	1,014	5,676	91,600
Plumbing	28	3,403,951	0,000	1,059,490	1,639,796	52,195	174,703		25,404	11,707	2,983	10,752	122,051
Plumbing and heating combined.	4	1,016,550		314,053	570,686	6,720	57,468		5,875	5,693	958	1,854	64,031
Masonry	0	928,158	15,000	446,224	365,117	21,400	25,000	5,217	870	8,249		8,734	16,543
Painting, decorating, and glazing	18	1,774,070	8,000	794,558	420,371	25,627	119,032	730	17,109	0,165	255	12,931	126,917
Plastering and lathing	5	909,009		497,408	156,257	5,000	94,630		4,652	3,722	3,500	3,171	57,894
Roofing and sheet-metal work	20	3,244,152	74,000	894,240	1,836,454	56,064	235,295	1,626	6,136	4,104	500	41,631	116,076
Roofing	8	2,345,128	67,000	582,920	1,519,032	15,704	141,229	882	4,606	2,589		37,091	45,755
Sheet-metal work	8	688,536	7,000	250,684	240,375	18,020	88,462		480	1,095	500	3,620	44,428
Roofing and sheet metal combined.	4	200,488		60,642	77,047	22,340	5,604	744	1,049	420		820	25,863
Steel erection	3	9,201,452	3,700,000	1,825,874	1,635,700	20,737	181,265	5,500	5,380	4,357	15,000	116,614	1,003,607
Stonework	3	217,726		67,254	73,500	21,227	5,095		1,230	133		1,895	18,947
Marble and tiling	17	1,586,604		500,249	688,555	21,101	114,849		8,368	8,249		4,040	89,335
Excavating and grading	3	281,416		123,262	10,634	8,060	20,608	46,509	5,750	1,251	100	3,250	69,624
Ornamental iron	6	483,373	22,000	88,278	228,964	3,640	65,018	480	10,894	999	50	2,657	49,451
Metal work, n. e. s.	4	1,089,494	13,000	580,822	183,223	0,400	54,731	3,210	7,877	1,139		58,212	42,821
Other classes	6	1,259,526		291,700	723,313		25,625		2,087	677	95	0,817	61,805
<b>READING</b>													
Operative builders	7	737,900	300,000	112,807	255,500	18,444	6,903		960	6,420		818	7,535
General contractors	21	5,661,857	1,373,000	1,404,188	1,791,359	50,771	293,046	31,665	15,890	75,483	22,638	20,416	244,751
Building	17	4,451,247	1,367,000	1,020,482	1,363,031	47,981	230,365	3,192	10,405	67,981	12,535	17,940	174,178
Building not specialized	14	3,983,247	1,239,000	930,560	1,206,495	45,981	212,611	3,192	10,405	21,899	12,535	10,467	131,810
Residential building only	3	408,000	128,000	92,922	86,536	2,000	17,754		36,372			1,482	42,359
Other classes	4	1,210,610	6,000	434,706	438,328	2,790	62,681	28,473	5,491	17,602	10,103	11,467	70,573
Subcontractors	42	3,781,845	10,000	895,740	2,128,697	90,876	140,681	2,644	20,830	15,671	5,399	14,690	224,095
Electrical	7	709,872	1,000	176,667	423,002	4,000	66,149		900	3,166	2,627	2,419	77,573
Heating and plumbing	14	1,349,491	1,000	337,438	732,315	38,317	38,509		12,891	0,805	2,295	3,683	74,846
Heating and piping	3	394,518		81,563	247,387	9,618	6,336		1,320	1,100	1,817	768	99,679
Plumbing	7	533,944	1,000	167,788	273,042	10,348	5,681		4,616	3,451	210	1,553	35,100
Plumbing and heating combined.	4	421,029		98,087	211,886	9,351	26,492		6,949	2,254	268	1,302	20,067
Painting and decorating	3	140,523		70,417	36,275	3,380	3,120		216	462	126	823	5,900
Roofing and sheet-metal work	6	344,039		91,016	135,832	32,849	8,193		3,670	805		2,250	26,117
Steel erection	3	727,550		56,892	641,446		15,047		2,150	500	8	3,227	13,247
Marble, tiling, plastering, and lathing	6	326,504	8,000	108,001	123,146	7,590	15,031		1,040	1,403		687	2

TABLE 8.—EXPENDITURES OF REPORTING ESTABLISHMENTS: 1929—Continued

CLASSIFICATION OF ESTABLISHMENTS	Establishments reporting	Value of construction business reported	PRINCIPAL ITEMS OF EXPENDITURE			OTHER ITEMS OF EXPENDITURE							
			Subcontract work let	Wages paid	Cost of materials	Salaries		Rent for		Interest	Contract bond premiums	Compensation and liability insurance premiums	All other overhead expenses
						Proprietors and firm members	Employees	Equipment	Offices, etc.				
<b>SCRANTON</b> .....	44	\$4,761,193	\$1,087,000	\$1,296,624	\$1,316,813	\$99,871	\$318,746	\$14,339	\$36,686	\$19,299	\$22,800	\$29,301	\$350,797
General contractors.....	20	3,224,567	1,059,000	794,771	727,776	59,618	181,014	4,441	10,384	13,009	18,047	18,946	269,963
Building.....	17	2,233,959	954,000	536,722	458,991	54,818	103,260	500	7,105	12,533	12,633	12,109	47,171
Highway and street paving.....	3	990,608	105,000	258,049	268,784	4,800	78,354	3,941	3,279	1,076	6,014	6,837	222,792
Subcontractors.....	24	1,536,626	28,000	501,853	589,038	40,253	137,132	0,898	26,282	5,080	4,153	10,355	60,834
Heating and plumbing.....	10	443,194	3,000	122,323	197,820	24,544	22,054	0,346	9,346	1,128	1,049	1,442	18,996
Plumbing.....	6	275,819	-----	77,100	110,023	21,684	8,374	5,257	5,257	928	49	989	13,308
Plumbing and heating combined.....	4	172,345	3,000	45,133	81,797	2,860	13,680	-----	4,089	200	1,000	453	5,688
Plastering and lathing.....	3	101,015	-----	41,038	28,894	8,840	2,800	-----	992	680	-----	1,048	7,246
Roofing and sheet-metal work.....	5	325,359	-----	85,779	110,055	-----	60,621	-----	5,002	1,197	390	2,732	16,172
Other classes <sup>14</sup> .....	6	692,058	25,000	251,813	252,299	6,869	9,898	-----	10,072	2,075	2,744	5,133	18,420

- <sup>1</sup> Includes oil and natural gas pipe line; and telephone line and system.
- <sup>2</sup> Includes automatic temperature control.
- <sup>3</sup> Includes wrecking; highway; grading; sewer, gas, water, conduit; and miscellaneous, n. e. s.
- <sup>4</sup> Includes sewer, gas, water, conduit; and highway.
- <sup>5</sup> Includes plumbing and heating combined.
- <sup>6</sup> Includes electrical; masonry; painting and decorating; and marble and tiling.
- <sup>7</sup> Includes grading; foundation; and telephone line and system.
- <sup>8</sup> Includes wrecking; soundproofing; rental of equipment, trucking, etc.
- <sup>9</sup> Includes grading; waterworks; railroad; and foundation.
- <sup>10</sup> Includes flooring, n. e. s.; soundproofing; highway; and elevator construction.
- <sup>11</sup> Includes highway; grading; sewer, gas, water, conduit; and dam and reservoir.
- <sup>12</sup> Includes ornamental iron.
- <sup>13</sup> Includes concreting; masonry; and sewer, gas, water, conduit.
- <sup>14</sup> Includes concreting; electrical; painting and decorating; stonework; and ornamental iron.

TABLE 9.—COST OF MATERIALS FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929, BY KIND

KIND OF MATERIAL	COST OF MATERIALS REPORTED BY—				KIND OF MATERIAL	COST OF MATERIALS REPORTED BY—					
	All classes of establishments			General contractors <sup>2</sup>		Subcontractors	All classes of establishments			General contractors <sup>2</sup>	Subcontractors
	Amount	Per cent distribution	Per \$1,000 construction work done <sup>1</sup>				Amount	Per cent distribution	Per \$1,000 construction work done <sup>1</sup>		
<b>PENNSYLVANIA</b>					<b>PENNSYLVANIA—Continued</b>						
All kinds of material.....	\$185,074,787	-----	\$424.67	\$110,047,160	\$75,027,027	Distributed by kind—Continued.					
Distribution not reported.....	43,316,196	23.4	-----	27,802,712	15,513,484	Elevators, dumb-waiters, and equipment.....	\$4,185,806	3.0	\$12.59	\$200,158	\$3,985,648
Distributed by kind.....	141,758,591	100.0	-----	82,244,448	59,514,143	Pipe: Drain tile, vitrified, concrete, segment tile, corrugated.....	1,343,501	.9	4.03	1,198,501	146,000
Sand, gravel, stone, slag, cinders, etc.....	12,732,215	9.0	38.14	11,115,290	1,616,925	Pipe: Cast-iron, sheet and tube steel, etc.....	3,213,940	2.3	9.63	2,635,040	528,306
Brick (face, common, fire, paving, etc.).....	5,032,504	4.2	17.77	3,988,162	1,944,342	Wire cable, guards, and fencing.....	566,703	.4	1.70	495,987	70,716
Tile (fireproofing).....	1,018,658	.7	3.05	573,978	444,680	Bituminous paving materials, tar, asphalt, and oil.....	1,902,319	1.3	5.70	1,770,662	131,657
Tile, facing, terra cotta, floor and wall.....	1,842,742	1.3	5.52	410,573	1,423,169	Wood piling and timber.....	325,666	.2	.98	325,666	-----
Concrete and cinder block.....	1,437,230	1.0	4.31	1,191,490	245,731	Ready mixed concrete.....	689,883	.5	2.07	676,169	13,714
Cut stone, granite and marble.....	5,251,226	3.7	15.73	3,016,097	2,234,529	Machinery.....	4,559,461	3.2	13.00	4,526,883	32,878
Riprap, rubble, etc.....	341,742	.2	1.02	259,634	82,108	Freight, hauling or trucking to job.....	201,263	.2	.87	265,291	26,032
Cement.....	9,042,009	7.0	29.79	8,806,019	1,136,890	Cast forms, beads, etc.....	1,000	(3)	(1)	-----	1,000
Lime.....	589,093	.4	1.77	224,300	365,333	Chemicals and chemical products.....	20,678	(3)	.06	20,678	-----
Plaster, etc.....	1,179,634	.8	3.53	809,368	870,316	Metal products, n. e. s. (including metal furniture).....	103,431	.1	.31	37,056	66,375
Structural steel.....	20,091,024	14.8	62.89	14,766,461	6,224,563	Mineral products (nonmetallic) n. e. s.....	554,139	.4	1.66	539,038	15,101
Reinforcing steel.....	3,517,464	2.5	10.54	3,229,365	287,599	Sealing materials.....	25,096	(3)	.08	23,942	1,154
Cast iron, miscellaneous, excluding pipe.....	648,410	.5	1.94	532,990	115,420	Textiles and corking materials.....	17,950	(3)	.06	15,888	2,062
Metal doors, windows, and trim.....	1,560,761	1.1	4.68	617,305	943,456	Miscellaneous.....	1,039,227	.7	3.11	868,880	170,347
Metal and wire lath and furring.....	357,429	.3	1.07	109,935	250,494						
Ornamental metal work.....	980,148	.7	2.93	278,761	701,387						
Lumber, rough and finished.....	8,854,992	6.2	26.53	7,873,910	931,082						
Lath, shingles, and shakes (wood).....	300,296	.2	.90	212,804	87,492						
Millwork.....	3,901,400	2.8	11.69	3,690,162	311,238						
Composition board.....	1,503,609	1.1	4.52	319,068	1,188,841						
Waterproofing materials.....	647,866	.2	1.04	197,404	149,962						
Hardware, rough and finished.....	1,024,772	.7	3.47	1,507,984	116,798						
Paints, varnishes, glass.....	3,367,858	2.4	10.09	637,224	2,730,034						
Roofing and sheet metal.....	5,680,010	4.0	17.03	697,241	4,988,769						
Finished flooring other than cement, wood, or tile.....	421,309	.3	1.20	228,212	193,097						
Screens, shades, awnings, etc.....	265,605	.2	.79	50,671	214,934						
Heating and ventilating equipment.....	9,558,308	6.7	28.04	1,087,936	8,470,372						
Plumbing and gas-fitting equipment.....	10,614,187	7.5	31.80	1,244,798	9,369,389						
Electrical appliances and supplies.....	8,144,071	5.7	24.40	1,509,453	6,634,613						

See footnotes at end of table.

TABLE 9.—COST OF MATERIALS FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929 BY KIND—Continued

KIND OF MATERIAL	COST OF MATERIALS REPORTED BY—				KIND OF MATERIAL	COST OF MATERIALS REPORTED BY—					
	All classes of establishments			General contractors <sup>2</sup>		Subcontractors	All classes of establishments			General contractors <sup>2</sup>	Subcontractors
	Amount	Per cent distribution	Per \$1,000 construction work done <sup>1</sup>				Amount	Per cent distribution	Per \$1,000 construction work done <sup>1</sup>		
<b>ERIE—Continued</b>					<b>PHILADELPHIA—Continued</b>						
Distributed by kind—Continued.					Distributed by kind—Continued.						
Plaster, etc.	\$29,514	1.3	\$5.15	\$22,464	\$7,050	\$286,535	0.4	\$1.05	\$286,535	-----	
Structural steel	56,943	2.4	9.94	50,085	858	371,330	.5	2.15	371,330	-----	
Reinforcing steel	84,608	3.6	14.74	84,508	-----	4,524,822	6.2	26.16	4,522,034	\$2,788	
Cast iron, miscellaneous, excluding pipe	10,872	.5	1.90	10,872	-----	74,507	.1	.43	62,024	12,483	
Metal doors, windows, and trim	12,053	.5	2.21	12,514	139	54,473	.1	.31	8,098	40,376	
Metal and wire lath and furring	6,100	.3	1.00	1,100	5,000	547,003	.7	3.17	535,459	12,144	
Ornamental metal work	6,202	.3	1.08	3,102	3,100	23,856	(*)	.14	22,702	1,154	
Lumber, rough and finished	141,416	6.0	24.67	139,856	1,560	16,740	(*)	.10	14,078	2,007	
Lath, shingles, and shakes (wood)	10,853	.5	1.89	10,853	-----	435,435	.6	2.52	351,943	83,487	
Millwork	104,490	4.4	18.23	104,490	-----	-----	-----	-----	-----	-----	
Composition board	13,759	.6	2.40	13,759	-----	-----	-----	-----	-----	-----	
Waterproofing materials	6,075	.3	1.06	6,075	-----	-----	-----	-----	-----	-----	
Hardware, rough and finished	32,428	1.4	5.66	31,878	550	-----	-----	-----	-----	-----	
Paints, varnishes, glass	63,447	2.7	11.07	44,045	19,402	-----	-----	-----	-----	-----	
Roofing and sheet metal	80,085	3.4	14.08	9,584	71,101	-----	-----	-----	-----	-----	
Finished flooring other than cement, wood, or tile	10,944	.5	1.91	9,744	1,200	-----	-----	-----	-----	-----	
Screens, shades, awnings, etc.	987	(*)	.17	987	-----	-----	-----	-----	-----	-----	
Heating and ventilating equipment	128,818	5.5	22.47	12,183	116,635	-----	-----	-----	-----	-----	
Plumbing and gas fitting equipment	101,085	8.1	33.34	51,145	139,940	-----	-----	-----	-----	-----	
Electrical appliances and supplies	104,188	4.4	18.18	25,156	79,032	-----	-----	-----	-----	-----	
Elevators, dumb-waiters, and equipment	280	(*)	.05	280	-----	-----	-----	-----	-----	-----	
Pipe: Drain tile, vitrified, concrete, segment tile, corrugated	72,185	3.1	12.69	71,485	700	-----	-----	-----	-----	-----	
Pipe: Cast-iron, sheet, and tube steel, etc.	24,265	1.0	4.23	9,265	15,000	-----	-----	-----	-----	-----	
Bituminous paving materials, tar, asphalt, and oil	177,743	7.6	31.01	177,743	-----	-----	-----	-----	-----	-----	
Ready mixed concrete	4,843	.2	.85	4,843	-----	-----	-----	-----	-----	-----	
Metal products, n. e. s. (including metal furniture)	520	(*)	.00	520	-----	-----	-----	-----	-----	-----	
Mineral products (nonmetallic) n. e. s.	3,589	.2	.63	3,589	-----	-----	-----	-----	-----	-----	
Miscellaneous	8,973	.4	1.56	8,973	-----	-----	-----	-----	-----	-----	
<b>PHILADELPHIA</b>					<b>PHILADELPHIA</b>						
All kinds of material	83,416,801	-----	425.44	43,914,607	39,502,134	-----	-----	-----	-----	-----	
Distribution not reported	9,844,863	11.8	-----	3,860,980	5,983,853	-----	-----	-----	-----	-----	
Distributed by kind	73,571,938	100.0	-----	40,053,687	33,518,251	-----	-----	-----	-----	-----	
Sand, gravel, stone, slag, cinders, etc.	5,873,802	8.0	33.97	4,738,216	1,135,586	-----	-----	-----	-----	-----	
Brick (face, common, fire, paving, etc.)	3,251,136	4.4	18.80	1,834,336	1,416,800	-----	-----	-----	-----	-----	
Tile (fireproofing)	721,644	1.0	4.17	325,039	390,605	-----	-----	-----	-----	-----	
Tile, facing, terra cotta, floor and wall	867,133	1.2	5.02	171,765	695,368	-----	-----	-----	-----	-----	
Concrete and cinder block	565,295	.8	3.27	425,429	139,866	-----	-----	-----	-----	-----	
Cut stone, granite, and marble	3,180,270	4.3	18.43	1,426,440	1,759,824	-----	-----	-----	-----	-----	
Riprap, rubble, etc.	131,081	.2	.76	110,481	21,200	-----	-----	-----	-----	-----	
Cement	3,949,822	5.4	22.84	3,196,492	753,130	-----	-----	-----	-----	-----	
Lime	349,289	.5	2.02	276,634	72,655	-----	-----	-----	-----	-----	
Plaster, etc.	609,748	.8	3.53	34,953	574,795	-----	-----	-----	-----	-----	
Structural steel	6,797,361	9.2	39.31	5,125,518	1,671,843	-----	-----	-----	-----	-----	
Reinforcing steel	1,821,882	2.5	10.53	1,578,609	243,273	-----	-----	-----	-----	-----	
Cast iron, miscellaneous, excluding pipe	508,659	.7	2.94	438,680	69,979	-----	-----	-----	-----	-----	
Metal doors, windows, and trim	1,014,803	1.4	5.87	247,003	767,800	-----	-----	-----	-----	-----	
Metal and wire lath and furring	175,095	.2	1.01	5,199	169,896	-----	-----	-----	-----	-----	
Ornamental metal work	480,488	.7	2.78	144,283	336,205	-----	-----	-----	-----	-----	
Lumber, rough and finished	4,667,413	6.3	20.99	3,763,618	903,800	-----	-----	-----	-----	-----	
Lath, shingles and shakes (wood)	127,203	.2	.74	98,263	28,940	-----	-----	-----	-----	-----	
Millwork	1,500,894	2.0	8.03	1,212,260	288,434	-----	-----	-----	-----	-----	
Composition board	1,185,012	1.6	0.86	168,037	1,027,577	-----	-----	-----	-----	-----	
Waterproofing materials	206,417	.3	1.20	76,640	109,777	-----	-----	-----	-----	-----	
Hardware, rough and finished	895,432	1.2	5.18	696,659	98,773	-----	-----	-----	-----	-----	
Paints, varnishes, glass	2,305,074	3.1	13.33	177,175	2,128,499	-----	-----	-----	-----	-----	
Roofing and sheet metal	1,925,588	2.6	11.13	307,922	1,617,666	-----	-----	-----	-----	-----	
Finished flooring other than cement, wood, or tile	183,564	.2	1.00	90,136	84,428	-----	-----	-----	-----	-----	
Screens, shades, awnings, etc.	214,108	.3	1.24	11,744	202,364	-----	-----	-----	-----	-----	
Heating and ventilating equipment	4,707,177	6.4	27.22	706,194	4,000,983	-----	-----	-----	-----	-----	
Plumbing and gas fitting equipment	6,058,425	8.2	35.03	740,217	5,318,208	-----	-----	-----	-----	-----	
Electrical appliances and supplies	4,484,043	6.1	25.93	1,306,557	3,177,486	-----	-----	-----	-----	-----	
Elevators, dumb-waiters, and equipment	3,461,212	4.7	20.02	43,774	3,417,438	-----	-----	-----	-----	-----	
Pipe: Drain tile, vitrified, concrete, segment tile, corrugated	795,382	1.1	4.60	685,044	110,338	-----	-----	-----	-----	-----	
Pipe: Cast-iron, sheet and tube steel, etc.	2,023,063	3.0	15.17	2,380,340	243,323	-----	-----	-----	-----	-----	
Wire cable, guards, and fencing	473,275	.6	2.74	427,648	45,627	-----	-----	-----	-----	-----	
Bituminous paving materials, tar, asphalt, and oil	1,117,847	1.5	6.46	980,458	128,389	-----	-----	-----	-----	-----	
<b>PHILADELPHIA</b>					<b>PHILADELPHIA</b>						
All kinds of material	84,577,777	-----	409.99	22,090,349	12,487,428	-----	-----	-----	-----	-----	
Distribution not reported	12,125,827	35.1	-----	9,480,839	2,644,088	-----	-----	-----	-----	-----	
Distributed by kind	22,451,950	100.0	-----	12,609,510	9,842,440	-----	-----	-----	-----	-----	
Sand, gravel, stone, slag, cinders, etc.	1,537,157	6.8	28.07	1,436,063	101,094	-----	-----	-----	-----	-----	
Brick (face, common, fire, paving, etc.)	655,620	2.9	11.97	411,899	243,721	-----	-----	-----	-----	-----	
Tile (fireproofing)	73,072	.3	1.33	69,547	6,525	-----	-----	-----	-----	-----	
Tile, facing, terra cotta, floor and wall	305,770	1.4	5.58	72,119	233,651	-----	-----	-----	-----	-----	
Concrete and cinder block	209,451	.9	3.83	170,005	39,356	-----	-----	-----	-----	-----	
Cut stone, granite and marble	535,835	2.4	9.79	381,597	154,238	-----	-----	-----	-----	-----	
Riprap, rubble, etc.	61,523	.3	1.12	61,523	-----	-----	-----	-----	-----	-----	
Cement	1,897,050	6.2	25.61	1,821,212	75,838	-----	-----	-----	-----	-----	
Lime	40,600	.2	.85	20,890	19,710	-----	-----	-----	-----	-----	
Plaster, etc.	59,014	.2	1.02	16,920	42,094	-----	-----	-----	-----	-----	
Structural steel	6,802,175	30.3	124.21	5,393,508	1,469,667	-----	-----	-----	-----	-----	
Reinforcing steel	452,937	2.0	8.27	443,063	9,874	-----	-----	-----	-----	-----	
Cast iron, miscellaneous, excluding pipe	48,667	.2	.89	23,747	24,920	-----	-----	-----	-----	-----	
Metal doors, windows, and trim	187,986	.8	3.43	90,512	97,474	-----	-----	-----	-----	-----	
Metal and wire lath and furring	43,648	.2	.80	5,320	38,328	-----	-----	-----	-----	-----	
Ornamental metal work	221,051	1.0	4.04	10,218	210,833	-----	-----	-----	-----	-----	
Lumber, rough and finished	664,495	3.0	12.14	641,605	22,890	-----	-----	-----	-----	-----	
Lath, shingles and shakes (wood)	5,308	(*)	.15	4,890	7,400	-----	-----	-----	-----	-----	
Millwork	242,777	1.1	4.43	242,234	543	-----	-----	-----	-----	-----	
Composition board	58,626	.3	1.07	20,120	38,506	-----	-----	-----	-----	-----	
Waterproofing materials	25,398	.1	.62	26,154	2,244	-----	-----	-----	-----	-----	
Hardware, rough and finished	143,422	.6	2.62	134,427	8,995	-----	-----	-----	-----	-----	
Paints, varnishes, glass	431,708	1.9	7.58	118,656	313,052	-----	-----	-----	-----	-----	
Roofing and sheet metal	2,044,845	9.1	37.93	169,152	1,875,193	-----	-----	-----	-----	-----	
Finished flooring other than cement, wood, or tile	44,529	.2	.81	15,975	28,554	-----	-----	-----	-----	-----	
Screens, shades, awnings, etc.	16,360	.1	.30	5,874	10,486	-----	-----	-----	-----	-----	
Heating and ventilating equipment	1,386,189	6.2	25.31	207,984	1,178,205	-----	-----	-----	-----	-----	
Plumbing and gas fitting equipment	1,794,130	8.0	32.76	252,727	1,541,403	-----	-----	-----	-----	-----	
Electrical appliances and supplies	1,317,972	5.9	24.07	87,015	1,230,957	-----	-----	-----	-----	-----	
Elevators, dumb-waiters, and equipment	705,170	3.1	12.88	137,860	567,310	-----	-----	-----	-----	-----	
Pipe: Drain tile, vitrified, concrete, segment tile, corrugated	112,011	.5	2.06	103,051	9,560	-----	-----	-----	-----	-----	
Pipe: Cast-iron, sheet and tube steel, etc.	200,651	1.3	5.31	133,177	157,474	-----	-----	-----	-----	-----	
Wire cable, guards, and fencing	50,405	.2	.92	20,482	20,923	-----	-----	-----	-----	-----	
Bituminous paving materials, tar asphalt and oil	52,212	.2	.96	52,212	-----	-----	-----	-----	-----	-----	
Wood piling and timber	38,705	.2	.71	38,705	-----	-----	-----	-----	-----	-----	
Ready mixed concrete	81,478	.4	1.40	75,104	6,372	-----	-----	-----	-----	-----	
Freight, hauling or trucking to job	52,748	.2	.96	52,748	-----	-----	-----	-----	-----	-----	
Chemicals and chemical products	5,633										

TABLE 9.—COST OF MATERIALS FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929, BY KIND—Continued

KIND OF MATERIAL	COST OF MATERIALS REPORTED BY—					KIND OF MATERIAL	COST OF MATERIALS REPORTED BY—				
	All classes of establishments			General contractors <sup>1</sup>	Subcontractors		All classes of establishments			General contractors <sup>2</sup>	Subcontractors
	Amount	Per cent distribution	Per \$1,000 construction work done <sup>1</sup>				Amount	Per cent distribution	Per \$1,000 construction work done <sup>1</sup>		
<b>READING—Continued</b>					<b>SCRANTON—Continued</b>						
Distributed by kind—Continued.					Distributed by kind—Continued.						
Cement.....	\$70,365	3.1	\$14.75	\$54,238	\$16,127	Brick (face, common, fire, paving, etc.).....	\$32,005	2.6	\$9.18	\$32,005	
Lime.....	14,868	.6	3.12	8,747	6,121	Tile (fireproofing).....	8,952	.7	2.57	8,952	
Plaster, etc.....	19,784	.9	4.15	12,083	7,701	Tile, facing, terra cotta, floor and wall.....	3,013	.3	1.03	3,013	
Structural steel.....	94,183	4.1	19.74	94,183	—	Concrete and cinder block.....	2,849	.2	.32	2,849	
Reinforcing steel.....	8,504	.4	1.78	8,089	415	Cut stone, granite and marble.....	31,986	2.6	9.17	6,827	
Cast iron, miscellaneous, excluding pipe.....	4,304	.2	.90	1,024	2,380	Riprap, rubble, etc.....	500	(*)	.14	500	
Metal doors, windows, and trim.....	11,171	.5	2.34	11,171	—	Concrete.....	96,403	7.9	27.05	67,778	
Metal and wire lath and furring.....	8,215	.4	1.72	4,717	3,498	Lime.....	3,066	.3	.88	3,013	
Ornamental metal work.....	47,145	2.0	9.88	7,145	40,000	Plaster, etc.....	26,269	2.2	7.54	9,867	
Lumber, rough and finished.....	190,329	8.3	39.90	180,741	588	Structural steel.....	12,292	1.0	3.53	12,292	
Lath, shingles, and shakes (wood).....	10,207	.5	4.03	13,360	5,847	Reinforcing steel.....	31,420	2.6	9.02	17,690	
Millwork.....	86,914	3.8	18.22	86,914	—	Cast iron, miscellaneous, excluding pipe.....	425	(*)	.12	425	
Composition board.....	11,896	.5	2.49	8,000	3,896	Metal doors, windows, and trim.....	5,252	.4	1.51	5,252	
Waterproofing materials.....	1,592	.1	.33	1,427	165	Metal and wire lath and furring.....	2,000	.2	.57	2,000	
Hardware, rough and finished.....	28,298	1.2	5.93	28,109	189	Ornamental metal work.....	333	(*)	.09	333	
Paints, varnishes, glass.....	48,682	2.1	10.21	12,227	36,455	Lumber, rough and finished.....	102,053	15.9	55.34	174,775	
Roofing and sheet metal.....	114,342	5.0	23.97	12,878	101,464	Lath, shingles and shakes (wood).....	3,980	.3	1.14	2,576	
Finished flooring other than cement, wood or tile.....	10,674	.5	2.24	10,153	521	Millwork.....	35,909	3.0	10.30	35,909	
Screens, shades, awnings, etc.....	3,371	.1	.71	3,371	—	Composition board.....	1,466	.1	.42	1,466	
Heating and ventilating equipment.....	280,360	12.2	58.77	84,100	246,260	Waterproofing materials.....	405	(*)	.11	405	
Plumbing and gas fitting equipment.....	297,126	12.9	62.29	26,573	270,553	Hardware, rough and finished.....	7,630	.6	2.19	7,630	
Electrical appliances and supplies.....	476,794	20.7	99.95	12,308	464,486	Paints, varnishes, glass.....	4,746	.4	1.36	4,746	
Elevators, dumb-waiters, and equipment.....	255	(*)	.05	255	—	Roofing and sheet metal.....	106,768	8.8	30.62	1,277	
Pipe: Drain tile, vitrified, concrete, segment tile, corrugated.....	6,225	.3	1.30	4,405	1,820	Finished flooring, other than cement, wood or tile.....	3,723	.3	1.07	3,723	
Pipe: Cast-iron, sheet and tube steel, etc.....	5,772	.3	1.21	5,772	—	Screens, shades, awnings, etc.....	350	(*)	.10	350	
Wire cable, guards, and fencing.....	746	(*)	.15	746	—	Heating and ventilating equipment.....	104,988	13.6	47.32	578	
Bituminous paving materials, tar, asphalt, and oil.....	64,504	2.8	13.52	64,504	—	Plumbing and gas fitting equipment.....	120,128	10.6	37.04	418	
Metal products, n. e. s. (including metal furniture).....	154	(*)	.03	154	—	Electrical appliances and supplies.....	62,395	5.1	17.90	423	
Miscellaneous.....	5,922	.2	1.24	5,153	769	Pipe: Drain tile, vitrified, concrete, segment tile, corrugated.....	6,926	.6	1.99	5,995	
						Pipe: Cast-iron, sheet and tube steel, etc.....	13,154	1.1	3.77	1,065	
<b>SCRANTON</b>					<b>SCRANTON</b>						
All kinds of material.....	1,661,418	—	348.38	877,193	784,225	Wire cable, guards, and fencing.....	671	.1	.19	671	
Distribution not reported.....	446,788	26.9	—	299,033	147,755	Bituminous paving materials, tar, asphalt, and oil.....	23,098	1.9	6.63	23,098	
Distributed by kind.....	1,214,630	100.0	—	578,160	636,470	Freight, hauling or trucking to job.....	38,484	3.2	11.04	27,194	
Sand, gravel, stone, slag, cinders, etc.....	156,256	12.9	44.82	109,836	46,420	Metal products, n. e. s. (including metal furniture).....	53	(*)	.01	53	
						Miscellaneous.....	4,179	.3	1.20	2,570	

<sup>1</sup> The value of construction work done is obtained from figures presented in Table 1, by subtracting the value of subcontract work let from the total value of construction business.

<sup>2</sup> Includes operative builders.

<sup>3</sup> Less than one-tenth of 1 per cent.

<sup>4</sup> Less than 1 cent.

<sup>5</sup> The percentage of total cost shown for this item is high because establishments located within this area reported that a large part of their construction work (on which this material was used) was done on contracts outside this area.

<sup>6</sup> The percentage of total cost shown for this item is high because the business of establishments reporting this material constituted a considerable part of the total business reported for this area.

CONSTRUCTION—PENNSYLVANIA

TABLE 10.—COMPARISON OF COST OF DESIGNATED MATERIALS FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929, WITH COST OF MATERIALS AND VALUE OF CONSTRUCTION BUSINESS

[Based exclusively upon reports of establishments which gave the distributed cost of materials]

KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	COST OF DESIGNATED MATERIAL				Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>	KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	COST OF DESIGNATED MATERIAL				Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>
	Cost of all materials distributed by kind	Amount	Per cent of—					Cost of all materials distributed by kind	Amount	Per cent of—			
			Total cost	Cost of all distributed materials						Total cost	Cost of all distributed materials		
<b>PENNSYLVANIA</b>						<b>PENNSYLVANIA—Continued</b>							
<i>Sand, gravel, stone, slag, cinders, etc.</i>						<i>Brick—Continued</i>							
All classes.....	Dollars 141,768,501	Dollars 12,732,215	100.0	9.0	Dollars 419,090,391	72.2	Subcontractors—Continued.	Dollars 3,656,140	Dollars 1,829,718	30.8	50.0	Dollars 8,618,336	98.8
General contractors <sup>2</sup> .....	82,244,448	11,115,290	87.3	13.6	287,073,296	62.9	Masonry.....	6,051,276	20,000	3	3	11,646,972	71.9
Building.....	45,638,656	3,993,673	31.4	8.8	194,074,580	50.3	Steel erection.....	1,472,973	22,569	4	1.6	3,130,273	99.0
Building not specialized <sup>2</sup> .....	42,476,600	3,818,991	30.0	9.0	179,972,950	51.9	Stonework.....	2,734,115	1,186	(3)	(3)	6,230,419	99.3
Commercial building only.....	330,841	55,016	4	16.6	2,880,554	48.0	Marble and tiling.....	121,941	22,692	(4)	18.6	821,880	98.3
Manufacturing building only.....	152,842	440	(3)	3			Excavating.....	10,585	400	(3)	3.8	32,117	100.0
Residential building only.....	2,678,283	119,229	9	4.5	578,638	36.8	Sewer, gas, water, conduit.....						
Highway.....	9,065,958	3,069,032	24.1	33.8	10,042,438	52.3	Dredging, river, harbor, etc.....						
Bridge and culvert.....	9,427,101	483,009	3.8	5.1	24,404,036	92.2	Railroad.....						
Grading.....	174,457	88,701	7	50.8	17,287,401	95.3	Foundation.....						
Street paving.....	5,405,310	1,713,490	13.5	31.7	14,356,981	94.9	Air transport work.....						
Sewer, gas, water, conduit.....	1,608,505	424,404	3.3	26.4	5,256,888	98.2	Subway (other than buildings).....						
Dam and reservoir.....	16,374	4,038	(3)	24.7	113,240	98.2	Telephone line and system.....						
Waterworks.....	1,015,412	101,633	3	10.0	2,192,330	97.5							
Dredging, river, harbor, etc.....	3,249,692	475,392	3.7	14.6	10,318,307	95.8							
Railroad.....	3,650,170	420,744	3.3	11.5	9,362,114	97.3							
Foundation.....	561,108	68,546	5	12.2	1,147,558	91.7							
Air transport work.....	167,000	15,000	1	9.0	444,265	100.0							
Subway (other than buildings).....	1,628,316	182,921	1.4	11.2	5,594,985	91.3							
Telephone line and system.....	636,389	77,137	6	12.1	1,982,595	97.9							
Subcontractors.....	459,514,143	1,016,925	12.7	2.7	131,117,095	94.0							
Carpentering and wood flooring.....	1,102,697	2,078	(3)	2	2,926,696	92.7							
Concrete.....	1,822,974	651,049	5.1	35.7	5,471,014	98.4							
Electrical.....	6,630,269	250	(3)	(3)	13,710,129	99.1							
Elevator construction.....	4,176,250	200	(3)	(3)	6,597,859	97.4							
Heating and plumbing.....	18,366,284	4,702	(3)	(3)	36,671,323	96.3							
Heating and piping.....	6,248,824	1,093	(3)	(3)	12,046,932	94.1							
Plumbing.....	6,419,582	3,107	(3)	(3)	12,909,487	97.3							
Plumbing and heating combined.....	1,770,878	497	(3)	(3)	3,389,603	99.0							
Masonry.....	3,656,140	409,289	3.9	13.7	8,618,336	98.8							
Plastering and lathing.....	1,511,958	98,830	8	6.6	6,041,188	93.7							
Roofing and sheet-metal work.....	4,570,472	88,775	7	1.6	11,793,241	98.1							
Roofing and sheet metal combined.....	3,293,449	88,375	7	2.7	6,371,404	97.4							
Steel erection.....	1,171,646	400	(3)	(3)	2,457,231	98.2							
Stonework.....	6,051,276	19,800	2	3	11,546,972	71.9							
Marble and tiling.....	1,472,973	89,084	7	6.0	3,130,273	99.0							
Excavating.....	2,734,115	91,217	7	3.3	6,236,418	90.3							
Ornamental iron.....	121,941	43,031	3	35.3	821,850	98.3							
Sewer, gas, water, conduit.....	805,578	2,423	(3)	3	1,082,328	94.0							
Soundproofing.....	10,585	3,880	(3)	36.6	32,117	100.0							
Metal work, n. o. s.....	1,073,126	1,409	(3)	1.5	1,933,940	98.0							
Rental of equipment, trucking, etc.....	1,317,629	1,409	(3)	1.1	2,291,929	98.8							
Brick (face, common, fire, paving, etc.)	141,768,501	5,932,504	100.0	4.2	419,090,391	72.2							
General contractors <sup>2</sup> .....	482,244,448	3,988,162	67.2	4.8	287,073,296	62.9							
Building.....	45,638,656	3,019,409	59.9	6.6	194,074,580	50.3							
Building not specialized <sup>2</sup> .....	42,476,600	2,831,112	47.7	6.9	179,972,950	51.9							
Commercial building only.....	330,841	15,514	3	4.7	2,880,554	48.0							
Manufacturing building only.....	152,842	38,825	7	25.4	578,638	36.8							
Residential building only.....	2,678,283	133,958	2.3	5.0	10,042,438	52.3							
Highway.....	9,065,958	103,487	1.7	1.1	24,404,036	92.2							
Bridge and culvert.....	9,427,101	43,713	1	5	17,287,401	95.3							
Grading.....	174,457	1,050	(3)	6	1,438,016	95.6							
Street paving.....	5,405,310	610,449	10.3	11.3	14,356,981	94.9							
Sewer, gas, water, conduit.....	1,608,505	66,978	1.1	4.2	5,256,888	98.1							
Dam and reservoir.....	1,015,412	63,625	1.1	6.3	2,192,330	97.5							
Waterworks.....	3,249,692	37,244	6	1.1	10,318,307	95.8							
Dredging, river, harbor, etc.....	3,650,170	26,720	4	7	9,362,114	97.3							
Railroad.....	561,108	3,939	1	7	1,147,558	91.7							
Foundation.....	1,628,316	2,563	(3)	2	5,594,985	91.3							
Subway (other than buildings).....	636,389	9,985	2	1.6	1,982,595	97.9							
Subcontractors.....	459,514,143	1,944,342	32.8	3.3	131,117,095	94.0							
Carpentering and wood flooring.....	1,102,697	1,856	(3)	1	2,926,696	92.7							
Concrete.....	1,822,974	20,802	4	1.1	5,471,014	98.4							
Electrical.....	6,630,269	2,226	(3)	(3)	13,710,129	99.1							
Elevator construction.....	4,176,250	23,893	4	1	6,597,859	97.4							
Heating and plumbing.....	18,366,284	23,893	4	1	36,671,323	96.3							
Heating and piping.....	6,248,824	23,276	4	4	12,046,932	94.1							
Plumbing.....	6,419,582	117	(3)	(3)	12,909,487	97.3							
Plumbing and heating combined.....	1,770,878	881	(3)	(3)	3,389,603	99.0							
Masonry.....	3,656,140	349,050	3.5	9.5	8,618,336	98.8							
Plastering and lathing.....	1,511,958	35,467	4	2.3	6,041,188	93.7							
Roofing and sheet-metal work.....	4,570,472	22,475	2	2	11,793,241	98.1							
Roofing and sheet metal combined.....	3,293,449	22,439	2	7	6,371,404	97.4							
Steel erection.....	1,171,646	30	(3)	(3)	2,457,231	98.2							
Stonework.....	6,051,276	21,857	2	4	11,546,972	71.9							
Marble and tiling.....	1,472,973	103,041	1.0	7.0	3,130,273	99.0							
Excavating.....	2,734,115	57,066	6	2.1	6,236,418	90.3							
Ornamental iron.....	121,941	16,476	2	13.5	821,850	98.3							
Sewer, gas, water, conduit.....	805,578	18,180	(3)	(3)	1,082,328	94.0							
Soundproofing.....	10,585	2,125	(3)	20.1	32,117	100.0							
Metal work, n. o. s.....	1,073,126	52,986	5	4.9	1,933,940	98.0							
Rental of equipment, trucking, etc.....	1,317,629	1,409	(3)	1.1	2,291,929	98.8							
Brick (face, common, fire, paving, etc.)	141,768,501	1,200	(3)	11.4	75,373	100.0							

See footnotes at end of table.



TABLE 10.—COMPARISON OF COST OF DESIGNATED MATERIALS FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929, WITH COST OF MATERIALS AND VALUE OF CONSTRUCTION BUSINESS—Continued

[Based exclusively upon reports of establishments which gave the distributed cost of materials]

KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	COST OF DESIGNATED MATERIAL				Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>	KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	COST OF DESIGNATED MATERIAL				Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>		
	Cost of all materials distributed by kind	Amount		Per cent of—				Cost of all distributed materials	Cost of all materials distributed by kind	Amount				Per cent of—	Cost of all distributed materials
		Dollars	Per cent							Dollars	Per cent				
PENNSYLVANIA—Continued						PENNSYLVANIA—Continued									
<i>Structural steel</i> <sup>0</sup>						<i>Lumber, rough and finished</i>									
All classes.....	141,768,591	20,991,024	100.0	14.8	419,000,391	72.2	All classes.....	141,768,591	8,854,902	100.0	6.2	419,000,391	72.2		
General contractors <sup>1</sup> .....	82,244,448	14,766,401	70.3	18.0	287,973,206	62.0	General contractors <sup>1</sup> .....	82,244,448	7,873,910	88.9	9.0	287,973,206	62.9		
Building.....	45,638,656	3,704,922	17.9	8.2	194,074,580	50.3	Building.....	45,638,656	6,580,802	74.8	14.4	194,074,580	50.3		
Building not specialized <sup>2</sup> .....	42,476,690	3,602,550	17.4	8.0	179,972,950	51.9	Building not specialized <sup>2</sup> .....	42,476,690	5,548,887	62.7	13.1	179,972,950	51.9		
Commercial building only.....	330,841	17,146	.1	5.2	2,880,554	48.0	Commercial building only.....	330,841	134,152	1.5	40.5	2,800,554	48.0		
Manufacturing building only.....	152,842	37,465	.2	24.5	578,638	36.8	Manufacturing building only.....	152,842	22,648	.3	14.8	578,638	36.8		
Residential building only.....	2,678,283	47,700	.2	1.8	10,642,438	52.3	Residential building only.....	2,678,283	875,115	9.9	32.7	10,642,438	52.3		
Highway.....	9,065,958	73,888	.4	8.0	24,404,036	62.2	Highway.....	9,065,958	191,374	2.2	2.1	24,404,036	62.2		
Bridge and culvert.....	9,427,101	7,705,075	87.0	82.4	17,287,401	95.3	Bridge and culvert.....	9,427,101	159,562	1.8	1.7	17,287,401	95.3		
Grading.....	174,457	2,900	0.0	1.7	1,438,016	65.0	Grading.....	174,457	2,943	0.0	1.7	1,438,016	65.0		
Street paving.....	5,405,310	30,901	.1	2.1	14,350,981	94.9	Street paving.....	5,405,310	61,203	.7	1.1	14,350,981	94.9		
Sewer, gas, water, conduit.....	1,608,505	18,102	.1	1.1	5,250,888	98.1	Sewer, gas, water, conduit.....	1,608,505	137,202	1.6	8.5	5,250,888	98.1		
Dam and reservoir.....	16,374	409	0.0	2.0	113,240	98.2	Dam and reservoir.....	16,374	2,934	0.0	17.9	113,240	98.2		
Waterworks.....	1,015,412	21,065	.1	2.1	2,192,330	97.5	Waterworks.....	1,015,412	55,553	.6	6.5	2,192,330	97.5		
Dredging, river, harbor, etc.....	3,249,692	414,794	2.0	12.8	10,318,307	97.3	Dredging, river, harbor, etc.....	3,249,692	304,307	3.4	9.4	10,318,307	95.8		
Railroad.....	3,650,170	1,739,534	8.3	47.7	9,302,114	97.3	Railroad.....	3,650,170	139,677	1.6	3.8	9,302,114	97.3		
Foundation.....	561,108	11,000	.1	2.1	1,147,558	91.7	Foundation.....	561,108	18,940	.2	3.4	1,147,558	91.7		
Subway (other than buildings).....	1,028,310	921,941	4.4	50.0	5,504,985	91.3	Subway (other than buildings).....	1,028,310	177,568	2.0	10.9	5,504,985	91.3		
Telephone line and system.....	636,389	18,382	.1	2.9	1,982,506	97.9	Telephone line and system.....	636,389	34,745	4.0	5.5	1,982,506	97.9		
Subcontractors.....	459,514,143	6,224,563	20.7	10.6	131,117,095	94.0	Subcontractors.....	459,514,143	981,082	11.1	1.6	131,117,095	94.0		
Carpentering and wood flooring.....	1,102,697	214	0.0	0.0	2,920,696	92.7	Carpentering and wood flooring.....	1,102,697	657,564	7.4	59.6	2,920,696	92.7		
Concreting.....	1,822,974	2,640	0.0	0.1	5,471,014	98.4	Concreting.....	1,822,974	143,853	1.6	7.9	5,471,014	98.4		
Electrical.....	6,030,269	9,395	0.0	0.1	13,719,120	99.1	Electrical.....	6,030,269	7,849	0.1	2.2	6,597,859	97.4		
Elevator construction.....	4,176,250	60,676	.3	1.5	6,597,859	97.4	Elevator construction.....	4,176,250	7,849	0.0	2.2	6,597,859	97.4		
Heating and plumbing.....	418,366,284	40,059	.2	2.2	36,671,323	96.3	Heating and plumbing.....	418,366,284	3,562	0.0	0.0	36,671,323	96.3		
Heating and piping.....	6,248,824	40,059	.2	0.2	12,046,932	94.1	Heating and piping.....	6,248,824	2,097	0.0	0.0	12,046,932	94.1		
Masonry.....	3,656,140	2,089	0.0	0.1	8,618,336	98.8	Masonry.....	3,656,140	1,195	0.0	0.0	12,000,487	97.3		
Roofing and sheet-metal work.....	4,704,072	59,080	.3	1.0	11,793,241	98.1	Roofing and sheet-metal work.....	4,704,072	300	0.0	0.0	3,389,603	99.0		
Roofing and sheet metal combined.....	1,171,646	59,080	.3	5.0	2,457,231	98.2	Roofing and sheet metal combined.....	3,656,140	24,035	.3	7.7	8,618,336	98.8		
Steel erection.....	6,051,276	5,082,608	27.1	93.9	11,546,972	71.9	Painting and decorating.....	2,046,326	55,000	.6	2.7	8,797,762	97.7		
Stonework.....	1,472,973	105	0.0	0.0	3,130,278	99.0	Plastering and lathing.....	1,511,958	8,748	.1	0.6	6,041,188	93.7		
Excavating.....	121,941	341	0.0	0.3	821,850	98.3	Roofing and sheet-metal work.....	4,704,072	5,707	.1	1.1	11,793,241	98.1		
Ornamental iron.....	865,578	142,104	.7	16.4	1,982,328	94.0	Roofing.....	3,293,449	5,707	.1	2.2	6,371,404	97.4		
Metal work, n. e. s.....	1,317,629	225,192	1.1	17.1	2,201,929	98.8	Steel erection.....	6,051,276	3,293	0.0	1.1	11,546,972	71.9		
<i>Reinforcing steel</i>						<i>Millwork</i>									
All classes.....	141,768,591	3,517,464	100.0	2.5	419,000,391	72.2	All classes.....	141,768,591	3,901,400	100.0	2.8	419,000,391	72.2		
General contractors <sup>1</sup> .....	82,244,448	3,229,865	91.8	3.9	287,973,206	62.0	General contractors <sup>1</sup> .....	82,244,448	3,590,162	92.0	4.4	287,973,206	62.9		
Building.....	45,638,656	1,646,501	44.0	3.4	194,074,580	50.3	Building.....	45,638,656	3,567,355	91.4	7.8	194,074,580	50.3		
Building not specialized <sup>2</sup> .....	42,476,690	1,535,711	43.7	3.0	179,972,950	51.9	Building not specialized <sup>2</sup> .....	42,476,690	3,069,049	78.7	7.2	179,972,950	51.9		
Commercial building only.....	330,841	1,738	0.0	5.5	2,880,554	48.0	Commercial building only.....	330,841	36,593	.9	11.1	2,880,554	48.0		
Manufacturing building only.....	152,842	729	0.0	0.5	578,638	36.8	Manufacturing building only.....	152,842	675	0.0	4.4	578,638	36.8		
Residential building only.....	2,678,283	8,323	.2	0.3	10,642,438	52.3	Residential building only.....	2,678,283	461,038	11.8	17.2	10,642,438	52.3		
Highway.....	9,065,958	775,545	22.0	8.0	24,404,036	62.2	Highway.....	9,065,958	3,053	.1	3.1	24,404,036	62.2		
Bridge and culvert.....	9,427,101	128,242	3.0	1.4	17,287,401	95.3	Bridge and culvert.....	9,427,101	7,300	.2	1.1	17,287,401	95.3		
Grading.....	174,457	1,580	0.0	2.0	1,438,016	94.9	Grading.....	174,457	690	0.0	4.4	1,438,016	95.6		
Street paving.....	5,405,310	136,451	3.9	2.5	14,350,981	94.9	Street paving.....	5,405,310	200	0.0	0.0	14,350,981	94.9		
Sewer, gas, water, conduit.....	1,608,505	104,528	3.0	6.5	5,250,888	98.1	Sewer, gas, water, conduit.....	1,608,505	200	0.0	0.0	5,250,888	98.1		
Dam and reservoir.....	16,374	686	0.0	4.2	113,240	98.2	Dredging, river, harbor, etc.....	3,249,692	11,364	.3	3.0	10,318,307	95.8		
Waterworks.....	1,015,412	20,900	.6	2.0	2,192,330	97.5	Railroad.....	3,650,170	102,439	2.9	2.8	9,302,114	97.3		
Dredging, river, harbor, etc.....	3,249,692	161,027	4.6	5.0	10,318,307	97.5	Foundation.....	561,108	10,849	.5	3.0	1,147,558	91.7		
Railroad.....	3,650,170	102,439	2.9	2.8	9,302,114	97.3	Subway (other than buildings).....	1,028,310	91,000	2.6	54.5	5,504,985	91.3		
Foundation.....	561,108	10,849	.5	3.0	1,147,558	91.7	Telephone line and system.....	636,389	18,382	.5	2.9	1,982,506	97.9		
Subway (other than buildings).....	1,028,310	126,640	3.6	7.8	5,504,985	91.3	Subcontractors.....	459,514,143	311,238	8.0	5.6	131,117,095	94.0		
Telephone line and system.....	636,389	18,382	.5	2.9	1,982,506	97.9	Carpentering and wood flooring.....	1,102,697	232,181	6.0	21.1	2,920,696	92.7		
Subcontractors.....	459,514,143	287,599	8.2	8.0	131,117,095	94.0	Concreting.....	1,822,974	25,704	.7	1.4	5,471,014	98.4		
Carpentering and wood flooring.....	1,102,697	156,903	4.5	8.6	5,471,014	98.4	Masonry.....	3,656,140	5,705	.1	2.2	8,618,336	98.8		
Concreting.....	1,822,974	2,640	0.0	0.1	13,719,120	99.1	Painting and decorating.....	2,046,326	482	0.0	0.0	8,797,762	97.7		
Electrical.....	6,030,269	100	0.0	0.0	3,130,278	99.0	Stonework.....	1,472,973	450	0.0	0.0	3,130,278	99.0		
Elevator construction.....	4,176,250	100	0.0	0.0	821,850	98.3	Marble and tiling.....	2,734,115	1,216	0.0	0.0	6,236,418	99.3		
Heating and plumbing.....	418,366,284	100	0.0	0.0	1,982,328	94.0	Soundproofing.....	1,073,126	45,500	1.2	4.2	1,933,940	98.0		
Heating and piping.....	6,248,824	100	0.0	0.0	2,201,929	98.8	Roofing and sheet-metal work.....	4,704,072	13,530	.4	2.2	11,793,241	98.1		
Masonry.....	3,656,140	8,043	.2	2.3	8,618,336	98.8	Roofing.....	3,293,449	13,539	.4	4.4	6,371,404	97.4		
Roofing and sheet-metal work.....	4,704,072	2,100	.1	0.3	1,207,017	99.8	Steel erection.....	6,051,276	39,300	1.1	6.1	11,546,972	71.9		
Roofing and sheet metal combined.....	1,171,646	59,080	.3	5.0	2,457,231	98.2	Stonework.....	1,472,973	61,121	1.7	4.1	3,130,278	99.0		
Steel erection.....	6,051,276	5,082,608	27.1	93.9	11,546,972	71.9	Marble and tiling.....	2,734,115	1,750	0.0	2.1	6,236,418	99.3		
Stonework.....	1,472,973	105	0.0	0.0	3,130,278	99.0	Excavating.....	121,941	2,543	.1	2.1	821,850	98.3		
Excavating.....	121,941	341	0.0	0.3	821,850	98.3	Ornamental iron.....	865,578	100	0.0	0.0	1,982,328	94.0		
Ornamental iron.....	865,578	142,104	.7	16.4	1,982,328	94.0	Rental of equipment, trucking, etc.....	10,481	1,800	.1	17.2	75,373	100.0		
Metal work, n. e. s.....	1,317,629	225,192	1.1	17.1	2,201,929	98.8									

TABLE 10.—COMPARISON OF COST OF DESIGNATED MATERIALS FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929, WITH COST OF MATERIALS AND VALUE OF CONSTRUCTION BUSINESS—Continued

[Based exclusively upon reports of establishments which gave the distributed cost of materials]

KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	COST OF DESIGNATED MATERIAL				Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>	KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	COST OF DESIGNATED MATERIAL				Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>
	Cost of all materials distributed by kind	Amount	Per cent of—					Cost of all materials distributed by kind	Amount	Per cent of—			
			Total cost	Cost of all distributed materials						Total cost	Cost of all distributed materials		
<b>PENNSYLVANIA—Continued</b>						<b>PENNSYLVANIA—Continued</b>							
<i>Paints, varnishes, glass—Continued</i>						<i>Heating and ventilating equipment</i>							
						<i>Dollars</i> <i>Dollars</i> 100.0      6.7 <i>Dollars</i> 72.2							
General contractors—Con.	<i>Dollars</i>	<i>Dollars</i>			<i>Dollars</i>		All classes.....	141,758,591	9,568,808	100.0	6.7	419,090,391	72.2
Highway	9,065,958	3,130	0.1	(3)	24,404,036	92.2	General contractors <sup>2</sup> .....	82,244,448	1,087,936	11.4	1.3	287,973,296	62.9
Bridge and culvert	9,427,101	107,665	3.2	1.1	17,287,401	95.3	Building.....	45,638,656	1,029,539	10.8	2.3	194,074,580	50.3
Grading	174,457	405	(3)	(3)	1,438,016	96.0	Building not specialized <sup>2</sup> .....	42,476,690	949,180	9.9	2.2	179,072,960	51.9
Street paving	5,405,310	1,062	(3)	(3)	14,356,981	94.9	Commercial building only.....	330,841	4,400	(3)	1.3	2,880,554	48.0
Sewer, gas, water, conduit	1,008,605	1,680	(3)	(3)	5,256,888	98.1	Residential building only.....	2,678,283	75,969	8	2.8	10,042,438	52.3
Waterworks	1,015,412	3,761	.1	.4	2,102,330	97.6	Street paving.....	5,405,310	1,400	(3)	(3)	14,356,981	94.9
Dredging, river, harbor, etc.	3,249,692	15,639	.5	.5	10,318,307	95.8	Sewer, gas, water, conduit.....	1,608,605	550	(3)	1.2	5,256,888	98.1
Railroad	3,650,170	28,471	.8	.8	9,362,114	97.3	Dredging, river, harbor, etc.....	3,249,692	38,508	.4	1.2	10,318,307	95.8
Subway (other than buildings)	1,628,316	4,325	.1	.3	5,594,985	91.3	Air-transport work.....	167,000	10,000	.1	6.0	444,205	100.0
Subcontractors.....	59,514,143	2,730,634	81.1	4.6	131,117,095	94.0	Subway (other than buildings)	1,628,316	7,939	.1	.5	5,594,985	91.3
Carpentering and wood flooring.....	1,102,697	23,558	.7	2.1	2,926,696	92.7	Subcontractors.....	59,514,143	8,470,372	88.0	14.2	131,117,095	94.0
Concreting.....	1,822,974	47,540	1.4	2.6	5,471,014	98.4	Electrical.....	6,630,269	750	(3)	(3)	15,719,129	60.1
Electrical.....	6,630,269	53	(3)	(3)	13,719,129	99.1	Elevator construction.....	4,176,250	2,400	(3)	.1	6,597,859	97.4
Elevator construction.....	4,176,250	13,509	.4	.3	6,597,859	97.4	Heating and plumbing.....	18,366,284	8,163,637	86.4	44.4	36,671,323	96.3
Heating and plumbing.....	18,366,284	7,066	.2	(3)	36,671,323	96.3	Heating and piping.....	6,248,824	4,923,283	51.5	78.8	12,046,932	94.1
Heating and piping.....	6,248,824	667	(3)	(3)	12,046,932	94.1	Pipe covering.....	671,050	565,492	5.9	84.3	1,989,570	88.7
Pipe covering.....	671,050	5,000	.1	.7	1,989,570	98.7	Plumbing.....	6,419,582	1,696,027	17.7	26.4	12,009,487	97.3
Plumbing.....	6,419,582	1,480	(3)	(3)	12,909,487	97.3	Plumbing and heating combined.....	1,770,878	695,833	7.3	39.3	3,389,603	99.0
Plumbing and heating combined.....	1,770,878	519	(3)	(3)	3,389,603	99.0	Automatic temperature control.....	283,407	283,407	3.0	100.0	641,543	100.0
Masonry.....	3,656,140	3,206	.1	.1	8,618,336	98.8	Painting and decorating.....	2,046,326	311	(3)	(3)	8,707,792	97.7
Painting and decorating.....	2,046,326	1,962,780	58.3	95.9	8,797,792	97.7	Roofing and sheet-metal work.....	5,704,072	279,717	2.9	4.9	11,793,241	98.1
Glass and glazing.....	620,514	557,572	16.6	89.9	1,207,017	90.8	Roofing.....	3,293,449	108,489	1.1	3.3	6,371,404	97.4
Plastering and lathing.....	1,511,958	258	(3)	(3)	6,041,188	93.7	Sheet-metal work.....	1,238,977	75,285	.8	6.1	2,994,606	99.3
Roofing and sheet-metal work.....	5,704,072	44,302	1.3	.8	11,793,241	98.1	Roofing and sheet metal combined.....	1,171,646	95,906	1.0	8.2	2,457,231	98.2
Roofing.....	3,293,449	21,125	.6	.6	6,371,404	97.4	Marble and tiling.....	2,734,115	2,505	(3)	.1	6,239,418	99.3
Sheet-metal work.....	1,238,977	22,130	.7	1.8	2,994,606	99.3	Soundproofing.....	1,073,126	21,082	.2	2.0	1,933,940	98.0
Roofing and sheet metal combined.....	1,171,646	1,047	(3)	.1	2,457,231	98.2	<i>Plumbing and gas fitting equipment</i>						
Steel erection.....	6,051,276	57,045	1.7	.9	11,546,972	71.9	All classes.....	141,758,591	10,614,187	100.0	7.5	419,090,391	72.2
Stonework.....	1,472,973	875	(3)	.1	3,130,273	99.0	General contractors <sup>2</sup> .....	82,244,448	1,244,798	11.7	1.5	287,973,296	62.9
Ornamental iron.....	865,578	3,889	.1	.4	1,982,328	94.0	Building.....	45,638,656	1,084,459	10.2	2.4	194,074,580	50.3
Soundproofing.....	1,073,126	5,291	.2	.5	1,933,940	98.0	Building not specialized <sup>2</sup> .....	42,476,690	997,471	9.4	2.9	179,072,960	51.9
Metal work, n. e. s.....	1,317,629	3,000	.1	.2	2,291,929	98.8	Commercial building only.....	330,841	1,500	(3)	.5	2,880,554	48.0
							Residential building only.....	2,678,283	85,488	8	3.2	10,042,438	52.3
<i>Roofing and sheet metal</i>							Highway.....	9,065,958	2,116	(3)	(3)	24,404,036	92.2
All classes.....	141,758,591	5,686,010	100.0	4.0	419,090,391	72.2	Bridge and culvert.....	9,427,101	3,875	(3)	(3)	17,287,401	95.3
General contractors <sup>2</sup> .....	82,244,448	697,241	12.3	.8	287,973,296	62.9	Grading.....	174,457	405	(3)	(3)	1,438,016	96.0
Building.....	45,638,656	642,808	11.3	1.4	194,074,580	50.3	Street paving.....	5,405,310	8,224	.1	(3)	14,356,981	94.9
Building not specialized <sup>2</sup> .....	42,476,690	577,015	10.1	1.4	179,072,960	51.9	Sewer, gas, water, conduit.....	1,008,605	300	(3)	(3)	5,256,888	98.1
Commercial building only.....	330,841	3,248	.1	1.0	2,880,554	48.0	Dam and reservoir.....	1,015,412	74,769	.7	7.4	2,102,330	97.5
Residential building only.....	2,678,283	62,545	1.1	2.3	10,042,438	52.3	Waterworks.....	3,249,692	54,598	.5	1.7	10,318,307	95.8
Highway.....	9,065,958	1,208	(3)	(3)	24,404,036	92.2	Railroad.....	3,650,170	485	(3)	(3)	9,362,114	97.3
Bridge and culvert.....	9,427,101	3,000	.1	(3)	17,287,401	95.3	Subway (other than buildings)	1,628,316	14,951	.1	.9	5,594,985	91.3
Grading.....	174,457	43	(3)	(3)	1,438,016	96.0	Subcontractors.....	59,514,143	9,369,839	88.3	15.7	131,117,095	94.0
Street paving.....	5,405,310	640	(3)	(3)	14,356,981	94.9	Electrical.....	6,630,269	275	(3)	(3)	15,719,129	60.1
Sewer, gas, water, conduit.....	1,008,605	150	(3)	(3)	5,256,888	98.1	Heating and plumbing.....	18,366,284	9,207,840	86.8	50.1	36,671,323	96.3
Dredging, river, harbor, etc.....	3,249,692	21,621	.4	.7	10,318,307	95.8	Heating and piping.....	6,248,824	882,669	8.3	14.1	12,046,932	94.1
Foundation.....	561,108	1,400	(3)	.2	1,147,558	91.7	Plumbing.....	6,419,582	4,474,982	42.2	69.7	12,909,487	97.3
Subway (other than buildings)	1,628,316	26,371	.5	1.6	5,594,985	91.3	Plumbing and heating combined.....	1,770,878	882,772	8.3	49.8	3,389,603	99.0
Subcontractors.....	59,514,143	4,988,769	87.7	8.4	131,117,095	94.0	Automatic sprinkler systems.....	2,972,458	2,907,458	28.0	90.8	5,697,188	94.1
Carpentering and wood flooring.....	1,102,697	42	(3)	(3)	2,926,696	92.7	Roofing and sheet-metal work.....	5,704,072	150,780	1.4	2.6	11,793,241	98.1
Concreting.....	1,822,974	4,151	.1	.2	5,471,014	98.4	Roofing and sheet metal combined.....	1,171,646	150,789	1.4	12.9	2,457,231	98.2
Electrical.....	6,630,269	240	(3)	(3)	6,597,859	97.4	Stonework.....	1,472,973	3,372	(3)	.2	3,130,273	99.0
Elevator construction.....	4,176,250	187,865	3.3	1.0	36,671,323	96.3	Marble and tiling.....	2,734,115	7,107	.1	.3	6,239,418	99.3
Heating and plumbing.....	18,366,284	1,552	1.6	1.5	12,046,932	94.1	<i>Electrical appliances and supplies</i>						
Heating and piping.....	6,248,824	91,552	1.6	1.5	12,046,932	94.1	All classes.....	141,758,591	8,144,071	100.0	5.7	419,090,391	72.2
Pipe covering.....	671,050	5,000	.2	1.4	1,989,570	98.7	General contractors <sup>2</sup> .....	82,244,448	1,509,458	18.5	1.8	287,973,296	62.9
Plumbing.....	6,419,582	56,593	1.0	.9	12,909,487	97.3	Building.....	45,638,656	1,413,105	17.4	3.1	194,074,580	50.3
Plumbing and heating combined.....	1,770,878	30,220	.5	1.7	3,389,603	99.0	Building not specialized <sup>2</sup> .....	42,476,690	1,965,697	10.8	3.2	179,072,960	51.9
Masonry.....	3,656,140	401	(3)	(3)	8,618,336	98.8	Commercial building only.....	330,841	1,400	(3)	.4	2,880,554	48.0
Painting and decorating.....	2,046,326	6,500	.1	.3	8,797,792	97.7	Residential building only.....	2,678,283	46,018	.6	1.7	10,042,438	52.3
Plastering and lathing.....	1,511,958	80,647	1.4	5.3	6,041,188	93.7	Highway.....	9,065,958	1,892	(3)	(3)	24,404,036	92.2
Roofing and sheet-metal work.....	5,704,072	4,652,369	81.8	81.6	11,793,241	98.1	Bridge and culvert.....	9,427,101	626	(3)	(3)	17,287,401	95.3
Roofing.....	3,293,449	2,806,461	49.3	85.2	6,371,404	97.4							
Sheet-metal work.....	1,238,977	1,000,295	17.6	80.7	2,994,606	99.3							
Roofing and sheet metal combined.....	1,171,646	846,618	14.9	72.3	2,457,231	98.2							
Steel erection.....	6,051,276	18,279	.3	.3	11,546,972	71.9							
Stonework.....	1,472,973	2,816	(3)	.2	3,130,273	99.0							
Marble and tiling.....	2,734,115	5,062	.1	.2	6,239,418	99.3							
Ornamental iron.....	865,578	3,500	.1	.4	1,982,328	94.0							
Soundproofing.....	1,073,126	18,897	.3	1.8	1,933,940	98.0							
Flooring, n. e. s.....	191,180	8,000	.1	4.2	395,947	98.4							

See footnotes at end of table.



TABLE 10.—COMPARISON OF COST OF DESIGNATED MATERIALS FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929, WITH COST OF MATERIALS AND VALUE OF CONSTRUCTION BUSINESS—Continued

[Based exclusively upon reports of establishments which gave the distributed cost of materials]

KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	COST OF DESIGNATED MATERIAL				Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>	KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	COST OF DESIGNATED MATERIAL				Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>	
	Cost of all materials distributed by kind	Amount	Per cent of—					Amount	Per cent of—	Cost of all materials distributed by kind	Per cent of—			
			Total cost	Cost of all distributed materials							Total cost			Cost of all distributed materials
<b>PENNSYLVANIA—Continued</b>						<b>PENNSYLVANIA—Continued</b>								
<i>Electrical appliances and supplies—Continued</i>						<i>Bituminous paving materials, tar, asphalt, and oil</i>								
General contractors—Con.	Dollars	Dollars	(%)	(%)	Dollars		Dollars	Dollars	100.0	1.3	Dollars		72.2	
Grading	174,487	209	(*)	0.2	1,438,016		All classes	141,758,591	1,902,319		419,090,391			
Street paving	5,405,310	1,036	(*)	(*)	14,356,981		General contractors <sup>2</sup>	482,244,448	1,770,662	93.1	2,877,673,290		62.9	
Sewer, gas, water, conduit	1,608,505	200	(*)	(*)	5,256,888		Building	445,638,656	42,826	2.3	194,074,580		50.3	
Dredging, river, harbor	3,249,692	87,019	(*)	7.1	10,318,307		Building not specialized <sup>2</sup>	42,476,690	40,326	2.1	179,972,960		51.9	
Railroad	3,050,170	1,285	(*)	(*)	9,362,114		Residential building only	2,678,283	2,500	1.1	10,642,438		52.3	
Foundation	591,108	4,000	(*)	7.1	1,147,558		Highway	9,065,958	944,080	49.6	24,404,030		92.2	
Subway (other than buildings)	1,628,316	30,056	(*)	1.8	5,594,985		Bridge and culvert	9,427,101	12,468	0.7	17,287,401		95.2	
Subcontractors	459,514,143	6,634,613	81.5	11.1	131,117,095		Grading	174,457	15,356	8.8	1,438,016		95.6	
Carpentering and wood flooring	1,102,697	3,645	(*)	3.3	2,926,696		Street paving	5,405,310	681,619	35.8	14,356,981		94.9	
Concreting	1,822,974	925	(*)	1.1	5,471,014		Sewer, gas, water, conduit	1,608,505	10,908	1.0	5,256,888		98.1	
Electrical	6,630,269	6,481,998	79.6	97.6	13,719,129		Waterworks	1,015,412	5,995	0.3	2,192,330		97.5	
Elevator construction	4,176,250	31,453	(*)	8.1	6,597,859		Dredging, river, harbor, etc.	3,249,692	14,691	0.9	10,318,307		95.3	
Heating and plumbing	18,306,284	111,660	1.4	6.1	36,671,323		Railroad	3,050,170	26,050	1.4	9,362,114		97.3	
Heating and piping	6,248,824	76,013	(*)	1.2	12,046,932		Foundation	591,108	5,169	0.3	1,147,558		91.7	
Plumbing	6,419,582	35,347	(*)	6.1	12,909,487		Telephone line and system	636,389	2,504	1.1	1,982,595		97.9	
Plumbing and heating combined	1,770,878	300	(*)	(*)	3,389,603		Subcontractors	459,514,143	131,657	0.9	131,117,095		94.0	
Stonework	1,472,973	1,348	(*)	1.1	3,130,273		Carpentering and wood flooring	1,102,697	6,209	3.3	2,926,696		92.7	
Marble and tiling	2,734,115	559	(*)	(*)	6,236,418		Concreting	1,822,974	67,181	3.5	5,471,014		98.4	
Metal work, n. e. s.	1,317,629	3,025	(*)	2.2	2,291,929		Heating and plumbing	18,306,284	200	(*)	36,671,323		96.3	
Elevators, dumb-waiters, and equipment							Plumbing	6,419,582	200	(*)	12,909,487		97.3	
All classes	141,758,591	4,185,806	100.0	3.0	419,090,391		Masonry	3,650,140	892	(*)	6,618,336		98.8	
General contractors <sup>2</sup>	482,244,448	200,158	4.8	2.2	287,673,290		Roofing and sheet-metal work	5,704,072	39,582	2.1	11,793,241		98.1	
Building	445,638,656	199,158	4.8	4.4	194,074,580		Roofing and sheet metal combined	1,171,646	2,142	1.1	2,457,231		98.2	
Building not specialized <sup>2</sup>	42,476,690	192,752	4.6	5.1	179,972,960		Stonework	1,472,973	1,393	1.1	3,130,273		99.0	
Commercial building only	330,841	360	(*)	1.1	2,880,554		Soundproofing	1,073,120	1,200	1.1	1,933,940		98.0	
Residential building only	2,678,283	6,046	(*)	1.2	10,642,438		Flooring, n. e. s.	191,180	15,000	8.8	305,947		98.4	
Dredging, river, harbor, etc.	3,249,692	1,000	(*)	(*)	10,318,307		Machinery							
Subcontractors	459,514,143	3,985,648	95.2	6.7	131,117,095		All classes	141,758,591	4,559,461	100.0	419,090,391		72.2	
Elevator construction	4,176,250	3,984,748	95.2	95.4	6,597,859		General contractors	481,283,674	4,520,583	99.3	283,688,274		64.9	
Masonry	3,650,140	900	(*)	(*)	8,618,336		Building	444,677,892	4,351,829	95.4	189,789,558		52.3	
Pipe—Cast-iron, sheet and tube steel, etc.							Building not specialized	41,515,916	4,351,829	95.4	175,687,928		54.6	
All classes	141,758,591	3,213,940	100.0	2.3	419,090,391		Dredging, river, harbor, etc.	3,249,692	174,754	3.8	10,318,307		95.8	
General contractors <sup>2</sup>	482,244,448	2,685,640	83.0	3.3	287,673,290		Subcontractors	459,514,143	32,878	7.7	131,117,095		94.0	
Building	445,638,656	1,719,452	53.5	3.8	194,074,580		Electrical	6,630,269	32,500	7.7	13,719,129		99.1	
Building not specialized <sup>2</sup>	42,476,690	1,713,362	53.3	4.0	179,972,960		Elevator construction	4,176,250	378	(*)	6,597,859		97.4	
Residential building only	2,678,283	6,090	(*)	2.2	10,642,438		ERIE							
Highway	9,065,958	99,253	3.1	1.1	24,404,030		Sand, gravel, stone, slag, cinders, etc.							
Bridge and culvert	9,427,101	30,260	(*)	3.3	17,287,401		All classes	2,352,486	178,017	100.0	7,038,124		83.1	
Grading	174,457	5,735	(*)	3.3	1,438,016		General contractors	1,835,798	171,502	96.3	5,848,374		79.8	
Street paving	5,405,310	26,579	(*)	8.5	14,356,981		Building	1,304,342	63,890	35.9	4,019,111		72.3	
Sewer, gas, water, conduit	1,608,505	155,075	(*)	4.8	5,256,888		Building not specialized	1,061,903	56,010	31.5	3,417,264		69.5	
Dam and reservoir	16,374	527	(*)	3.2	113,240		Manufacturing building only	24,254	440	2.2	55,442		100.0	
Waterworks	1,015,412	543,101	16.9	53.5	2,192,330		Residential building only	218,185	7,440	4.2	546,405		88.2	
Dredging, river, harbor, etc.	3,249,692	66,291	(*)	2.0	10,318,307		Highway	292,802	67,551	37.0	921,295		93.0	
Railroad	3,050,170	16,545	(*)	5.5	9,362,114		Grading	40,588	19,832	11.1	312,980		98.7	
Subway (other than buildings)	1,628,316	22,782	(*)	1.4	5,594,985		Street paving	78,377	13,084	7.3	348,000		100.0	
Subcontractors	459,514,143	528,306	16.4	9.9	131,117,095		Sewer, gas, water, conduit	118,689	7,145	4.0	285,979		96.0	
Concreting	1,822,974	4,327	(*)	2.8	5,471,014		Subcontractors	451,687	6,515	3.7	1,189,750		99.2	
Electrical	6,630,269	52,670	(*)	1.6	13,719,129		Masonry	18,788	2,015	1.1	37,095		86.8	
Elevator construction	4,176,250	1,031	(*)	(*)	6,597,859		Plastering and lathing	17,000	1,500	8.8	66,189		100.0	
Heating and plumbing	18,306,284	313,392	(*)	1.7	36,671,323		Marble and tiling	39,645	3,000	1.7	146,537		100.0	
Heating and piping	6,248,824	165,345	(*)	2.6	12,046,932		Brick (face, common, fire, paving, etc.)							
Plumbing	6,419,582	22,624	(*)	7.4	12,909,487		All classes	2,352,486	97,192	100.0	7,038,124		83.1	
Plumbing and heating combined	1,770,878	120,423	(*)	6.8	3,389,603		General contractors	1,835,798	95,760	98.5	5,848,374		79.8	
Automatic sprinkler systems	2,972,453	5,000	(*)	2.2	5,697,188		Building	1,304,342	91,382	94.0	4,019,111		72.3	
Roofing and sheet-metal work	5,704,072	11,778	(*)	2.2	11,793,241		Building not specialized	1,061,903	78,382	80.0	3,417,264		69.5	
Roofing and sheet metal combined	1,171,646	8,878	(*)	8.8	2,457,231		Manufacturing building only	24,254	3,825	3.9	55,442		100.0	
Steel erection	6,051,276	125,000	(*)	2.1	11,546,972		Residential building only	218,185	9,175	9.4	546,405		88.2	
Stonework	1,472,973	36	(*)	(*)	3,130,273		Grading	40,588	546	6.6	312,980		98.7	
Ornamental iron	865,578	4,861	(*)	2.0	1,982,328									
Metal work, n. e. s.	1,317,629	16,311	(*)	1.2	2,291,929									

See footnotes at end of table.

TABLE 10.—COMPARISON OF COST OF DESIGNATED MATERIALS FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929, WITH COST OF MATERIALS AND VALUE OF CONSTRUCTION BUSINESS—Continued

[Based exclusively upon reports of establishments which gave the distributed cost of materials]

KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	Cost of all materials distributed by kind	COST OF DESIGNATED MATERIAL				Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>	KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	Cost of all materials distributed by kind	COST OF DESIGNATED MATERIAL				Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>
		Amount		Per cent of—						Amount		Per cent of—			
		Dollars	Dollars	Total cost	Cost of all distributed materials					Dollars	Dollars	Total cost	Cost of all distributed materials		
<b>ERIE—Continued</b>							<b>ERIE—Continued</b>								
<b>Brick—Continued</b>							<b>Structural steel</b>								
General contractors—Con.	Dollars 70,377	Dollars 2,401	2.5	3.0	Dollars 346,000	100.0	All classes.....	Dollars 2,352,485	Dollars 50,943	100.0	2.4	Dollars 7,038,124	83.1		
Street paving	118,689	1,431	1.5	1.2	248,979	96.0	General contractors.....	1,835,798	50,085	98.5	3.1	5,848,374	79.8		
Sewer, gas, water, conduit.....							Building.....	1,304,342	50,085	98.5	4.3	4,019,111	72.3		
Subcontractors.....	610,087	1,432	1.5	3	1,189,750	99.2	Building not specialized.....	1,061,903	48,620	86.4	4.0	3,417,204	69.5		
Masonry.....	18,788	1,132	1.2	6.0	37,695	86.8	Manufacturing building only.....	24,254	2,465	4.8	10.2	55,442	100.0		
Marble and tiling.....	39,645	300	3	8	146,537	100.0	Residential building only.....	218,185	5,000	8.8	2.3	540,405	88.2		
<b>Tile, facing, terra cotta, floor, and wall</b>							Subcontractors.....	516,087	858	1.5	2	1,189,750	99.2		
All classes.....	2,352,485	35,389	100.0	1.5	7,038,124	83.1	Masonry.....	18,788	858	1.5	4.0	37,695	86.8		
General contractors.....	1,835,798	15,389	43.5	8	5,848,374	79.8	<b>Reinforcing steel</b>								
Building.....	1,304,342	15,389	43.5	1.2	4,019,111	72.3	All classes.....	2,352,485	84,508	100.0	3.0	7,038,124	83.1		
Building not specialized.....	1,061,903	14,639	41.4	1.4	3,417,264	69.5	General contractors.....	1,835,798	84,508	100.0	4.0	5,848,374	79.8		
Residential building only.....	218,185	750	2.1	3	546,406	88.2	Building.....	1,304,342	57,572	68.1	4.4	4,019,111	72.3		
Subcontractors.....	516,087	20,000	56.5	3.9	1,189,750	99.2	Building not specialized.....	1,061,903	50,848	67.3	5.4	3,417,264	69.5		
Marble and tiling.....	39,645	20,000	56.5	50.4	146,537	100.0	Manufacturing building only.....	24,254	720	9	3.0	55,442	100.0		
<b>Concrete and cinder block</b>							<b>Lumber rough and finished</b>								
All classes.....	2,352,485	51,415	100.0	2.2	7,038,124	83.1	All classes.....	2,352,485	141,416	100.0	6.0	7,038,124	83.1		
General contractors.....	1,835,798	43,417	84.4	2.4	5,848,374	79.8	General contractors.....	1,835,798	139,866	98.9	7.0	5,848,374	79.8		
Building.....	1,304,342	43,417	84.4	3.3	4,019,111	72.3	Building.....	1,304,342	134,324	95.0	10.3	4,019,111	72.3		
Building not specialized.....	1,061,903	25,455	40.5	2.4	3,417,264	69.5	Building not specialized.....	1,061,903	69,515	40.2	6.5	3,417,264	69.5		
Manufacturing building only.....	24,254	570	1.1	2.4	55,442	100.0	Manufacturing building only.....	24,254	6,109	4.3	25.2	55,442	100.0		
Residential building only.....	218,185	17,380	33.8	8.0	546,406	88.2	Residential building only.....	218,185	58,700	41.5	20.9	540,405	88.2		
Subcontractors.....	516,087	7,998	15.6	1.5	1,189,750	99.2	Highway.....	292,802	3,357	2.4	1.1	921,295	93.0		
Masonry.....	18,788	7,998	15.6	42.0	37,695	86.8	Sewer, gas, water, conduit.....	118,689	2,175	1.5	1.8	248,979	90.0		
<b>Cut stone, granite and marble<sup>11</sup></b>							<b>Millwork</b>								
All classes.....	2,352,485	336,599	100.0	14.3	7,038,124	83.1	All classes.....	2,352,485	104,400	100.0	4.4	7,038,124	83.1		
General contractors.....	1,835,798	324,182	96.3	17.7	5,848,374	79.8	General contractors.....	1,835,798	104,490	100.0	5.7	5,848,374	79.8		
Building.....	1,304,342	322,476	95.8	24.7	4,019,111	72.3	Building.....	1,304,342	104,490	100.0	8.0	4,019,111	72.3		
Building not specialized.....	1,061,903	322,476	95.8	30.4	3,417,264	69.5	Building not specialized.....	1,061,903	99,065	95.4	9.4	3,417,264	69.5		
Street paving.....	79,377	1,706	5	2.1	346,000	100.0	Manufacturing building only.....	24,254	675	6	2.8	55,442	100.0		
Subcontractors.....	516,087	12,417	3.7	2.4	1,189,750	99.2	Residential building only.....	218,185	4,150	4.0	1.9	540,405	88.2		
Masonry.....	18,788	417	1	2.2	37,695	86.8	<b>Hardware, rough and finished</b>								
Marble and tiling.....	39,645	12,000	3.6	30.3	146,537	100.0	All classes.....	2,352,485	32,428	100.0	1.4	7,038,124	83.1		
<b>Cement<sup>10</sup></b>							<b>Roofing and sheet metal</b>								
All classes.....	2,352,485	230,121	100.0	9.8	7,038,124	83.1	All classes.....	2,352,485	80,685	100.0	3.4	7,038,124	83.1		
General contractors.....	1,835,798	224,240	97.4	12.2	5,848,374	79.8	General contractors.....	1,835,798	31,878	98.3	1.7	5,848,374	79.8		
Building.....	1,304,342	101,524	44.1	7.8	4,019,111	72.3	Building.....	1,304,342	31,878	98.3	2.4	4,019,111	72.3		
Building not specialized.....	1,061,903	99,192	43.1	9.3	3,417,264	69.5	Building not specialized.....	1,061,903	28,412	87.6	2.7	3,417,264	69.5		
Manufacturing building only.....	24,254	910	4	3.8	55,442	100.0	Manufacturing building only.....	24,254	876	2.7	3.6	55,442	100.0		
Residential building only.....	218,185	1,422	6	17.4	546,405	88.2	Residential building only.....	218,185	2,590	8.0	1.2	540,405	88.2		
Highway.....	292,802	50,853	22.1	7	921,295	93.0	Subcontractors.....	516,087	550	1.7	1	1,189,750	99.2		
Grading.....	40,588	5,534	2.4	13.6	312,989	98.7	Masonry.....	18,788	150	5	8	37,695	86.8		
Street paving.....	79,377	23,768	10.3	29.9	346,000	100.0	Plastering and lathing.....	17,000	400	1.2	2.4	66,189	100.0		
Sewer, gas, water, conduit.....	118,689	42,561	18.5	35.9	248,979	96.0	<b>Roofing and sheet metal</b>								
Subcontractors.....	516,087	5,881	2.0	1.1	1,189,750	99.2	All classes.....	2,352,485	80,685	100.0	3.4	7,038,124	83.1		
Masonry.....	18,788	3,506	1.5	18.7	37,695	86.8	General contractors.....	1,835,798	9,584	11.9	5	5,848,374	79.8		
Marble and tiling.....	39,645	2,375	1.0	6.0	146,537	100.0	Building.....	1,304,342	9,584	11.9	7	4,019,111	72.3		
<b>Plaster, etc.</b>							<b>General contractors.....</b>								
All classes.....	2,352,485	29,514	100.0	1.3	7,038,124	83.1	Building not specialized.....	1,061,903	6,134	7.6	6	3,417,264	69.5		
General contractors.....	1,835,798	22,464	76.1	1.2	5,848,374	79.8	Residential building only.....	218,185	3,460	4.3	1.0	540,405	88.2		
Building.....	1,304,342	22,339	75.7	1.7	4,019,111	72.3	Subcontractors.....	516,087	71,101	88.1	13.8	1,189,750	99.2		
Building not specialized.....	1,061,903	21,018	71.2	2.0	3,417,264	69.5	Masonry.....	18,788	195	2	1.0	37,695	86.8		
Manufacturing building only.....	24,254	231	8	1.0	55,442	100.0	Roofing and sheet-metal work.....	78,556	70,906	87.9	90.1	220,173	100.0		
Residential building only.....	218,185	1,090	3.7	5	546,405	88.2	Roofing.....	57,323	49,573	87.4	86.5	189,311	100.0		
Sewer, gas, water, conduit.....	118,689	125	4	1	248,979	96.0	Sheet metal.....	21,338	21,333	26.4	100.0	80,860	100.0		
Subcontractors.....	516,087	7,050	23.9	1.4	1,189,750	99.2	<b>General contractors.....</b>								
Plastering and lathing.....	17,000	7,000	23.7	41.2	66,189	100.0	Building.....	1,304,342	9,584	11.9	7	4,019,111	72.3		
Marble and tiling.....	39,645	50	2	1	146,537	100.0	Building not specialized.....	1,061,903	6,134	7.6	6	3,417,264	69.5		

See footnotes at end of table.

CONSTRUCTION—PENNSYLVANIA

TABLE 10.—COMPARISON OF COST OF DESIGNATED MATERIALS FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929, WITH COST OF MATERIALS AND VALUE OF CONSTRUCTION BUSINESS—Continued

[Based exclusively upon reports of establishments which gave the distributed cost of materials]

KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	COST OF DESIGNATED MATERIAL				Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>	KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	COST OF DESIGNATED MATERIAL				Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>	
	Cost of all materials distributed by kind	Amount	Per cent of—					Amount	Per cent of—	Cost of all materials distributed by kind	Per cent of—			
			Total cost	Cost of all distributed materials							Total cost			Cost of all distributed materials
<b>ERIE—Continued</b>						<b>PHILADELPHIA</b>								
<i>Heating and ventilating equipment</i>						<i>Sand, gravel, stone, slag, cinders, etc.</i>								
All classes.....	Dollars 2,352,485	Dollars 128,818	100.0	5.5	Dollars 7,038,124	83.1	All classes.....	Dollars 73,571,938	Dollars 5,873,802	100.0	8.0	Dollars 230,836,045	67.4	
General contractors.....	\$ 1,835,798	12,183	0.5	.7	\$ 5,848,374	70.8	General contractors <sup>2</sup> .....	40,053,687	4,738,216	80.7	11.8	165,425,004	54.6	
Building.....	\$ 1,304,342	12,183	0.5	.9	\$ 4,019,111	72.3	Building.....	25,031,653	2,444,332	41.6	9.4	127,639,117	43.6	
Building not specialized.....	\$ 1,061,903	4,483	3.5	.4	\$ 3,417,264	69.5	Building not specialized <sup>2</sup> .....	25,127,015	2,385,119	40.6	9.5	121,083,407	44.4	
Residential building only.....	218,185	7,700	6.0	3.5	546,405	88.2	Commercial building only.....	261,823	40,820	8.8	19.0	2,610,220	41.3	
Subcontractors.....	\$ 516,687	116,635	90.5	22.6	\$ 1,189,750	99.2	Residential building only.....	422,815	9,393	2.2	2.2	3,452,490	26.3	
Heating and plumbing.....	264,525	108,856	84.5	41.2	518,626	99.1	Highway.....	1,254,885	101,286	3.3	15.2	2,634,040	96.4	
Heating and piping.....	90,068	50,991	46.6	62.4	161,997	100.0	Bridge and culvert.....	2,911,844	317,813	5.4	10.9	6,332,130	91.8	
Plumbing.....	111,257	25,394	19.7	22.8	234,189	99.3	Grading.....	21,086	2,362	(*)	11.2	321,324	93.9	
Plumbing and heating combined.....	57,200	23,500	18.2	41.1	122,440	96.7	Street paving.....	1,939,710	579,201	9.9	29.9	4,338,200	94.1	
Roofing and sheet-metal work.....	\$ 78,050	7,750	6.0	0.9	\$ 220,171	100.0	Sewer, gas, water, conduit.....	929,967	285,115	4.9	30.7	2,818,504	100.0	
Roofing.....	57,823	7,750	6.0	18.5	189,311	100.0	Waterworks.....	800,890	51,633	9.9	6.4	1,420,648	97.9	
<i>Plumbing and gas-fitting equipment</i>						<i>Dredging, river, harbor, etc.</i>								
All classes.....	2,352,485	101,085	100.0	8.1	7,038,124	83.1	Railroad.....	1,837,069	165,122	2.8	0.0	5,209,433	94.8	
General contractors.....	\$ 1,835,798	51,145	26.8	2.8	\$ 5,848,374	70.8	Foundation.....	1,609,923	376,028	6.4	23.4	5,528,570	94.2	
Building.....	\$ 1,304,342	51,145	26.8	3.9	\$ 4,019,111	72.3	Subway (other than build-ings).....	545,955	65,266	1.1	12.0	1,105,058	94.3	
Building not specialized.....	\$ 1,061,903	26,345	13.8	2.5	\$ 3,417,264	69.5	Telephone line and system.....	1,628,316	182,921	3.1	11.2	5,594,985	91.3	
Residential building only.....	218,185	24,800	13.0	11.4	546,405	88.2	Subcontractors.....	636,389	77,137	1.2	12.1	1,982,595	100.0	
Subcontractors.....	\$ 516,687	130,940	73.2	27.1	\$ 1,189,750	99.2	Carpentering and wood flooring.....	\$ 33,518,251	1,135,580	19.3	3.4	\$ 74,411,041	96.4	
Heating and plumbing.....	264,525	139,940	73.2	52.9	518,626	99.1	Concreting.....	1,064,864	1,100	(*)	.1	2,811,374	96.6	
Heating and piping.....	90,068	36,077	18.9	37.6	161,997	100.0	Concreting.....	1,237,269	460,159	7.8	37.2	3,647,872	98.6	
Plumbing.....	111,257	85,863	44.9	77.2	234,189	99.3	Electrical.....	3,216,406	150	(*)	.0	6,569,976	99.8	
Plumbing and heating combined.....	57,200	18,000	9.4	31.5	122,440	96.7	Elevator construction.....	3,543,028	200	(*)	.0	5,557,991	96.9	
<i>Electrical appliances and supplies</i>						<i>Heating and plumbing</i>								
All classes.....	2,352,485	104,188	100.0	4.4	7,038,124	83.1	Heating and piping.....	\$ 9,787,901	3,601	1.0	(*)	\$ 19,661,329	93.8	
General contractors.....	\$ 1,835,798	25,150	24.1	1.4	\$ 5,848,374	79.8	Heating and plumbing.....	3,156,609	605	(*)	.0	6,501,954	91.8	
Building.....	\$ 1,304,342	24,887	23.9	1.9	\$ 4,019,111	72.3	Plumbing.....	2,000,523	2,990	1.1	.1	5,315,546	93.6	
Building not specialized.....	\$ 1,061,903	7,787	7.5	.7	\$ 3,417,264	69.5	Masonry.....	2,790,769	411,002	7.0	14.7	6,274,670	99.2	
Residential building only.....	218,185	17,100	10.4	7.8	546,405	88.2	Plastering and lathing.....	824,563	30,887	7.0	4.8	3,070,867	97.9	
Grading.....	40,588	209	.3	.7	312,989	98.7	Roofing and sheet-metal work.....	\$ 1,893,402	85,733	1.5	4.5	\$ 4,847,798	96.7	
Subcontractors.....	\$ 516,687	70,032	75.9	15.3	\$ 1,189,750	99.2	Roofing and sheet metal combined.....	960,020	85,433	1.5	8.9	2,170,418	94.8	
Electrical.....	79,032	70,032	75.9	100.0	143,819	100.0	Stonework.....	377,482	300	(*)	.1	816,142	96.9	
<i>Pipe: Drain tile, vitrified, concrete, segment tile, corrugated</i>						<i>Roofing and sheet metal combined</i>								
All classes.....	2,352,485	72,185	100.0	3.1	7,038,124	83.1	Marble and tiling.....	1,213,378	41,663	7.7	3.4	2,237,751	98.7	
General contractors.....	\$ 1,835,798	71,485	99.0	3.9	\$ 5,848,374	79.8	Excavating.....	1,610,404	35,295	6.2	2.3	3,267,610	98.9	
Building.....	\$ 1,304,342	300	.4	(*)	\$ 4,019,111	72.3	Ornamental iron.....	93,291	30,772	6.0	39.4	592,213	99.5	
Building not specialized.....	\$ 1,061,903	200	.3	(*)	\$ 3,417,264	69.5	Soundproofing.....	491,895	2,103	(*)	.4	1,215,848	92.0	
Residential building only.....	218,185	100	.1	(*)	546,405	88.2	Metal work, n. e. s.....	997,793	16,612	3.0	1.7	1,753,284	97.7	
Highway.....	292,802	404	.6	.1	921,295	93.0	All classes.....	73,571,938	3,251,136	100.0	4.4	239,836,045	67.4	
Street paving.....	79,377	10,272	14.2	12.9	346,000	100.0	General contractors <sup>2</sup> .....	40,053,687	1,834,336	56.4	4.6	165,425,004	54.6	
Sewer, gas, water, conduit.....	118,689	60,509	83.8	51.0	248,979	96.0	Building.....	25,031,653	1,642,810	47.5	6.0	127,639,117	43.6	
Subcontractors.....	\$ 516,687	700	1.0	.1	\$ 1,189,750	99.2	Building not specialized <sup>2</sup> .....	25,127,015	1,497,274	46.1	6.0	121,083,407	44.4	
Heating and plumbing.....	\$ 264,525	700	1.0	.3	\$ 518,626	99.1	Commercial building only.....	261,823	3,462	1.1	1.3	2,610,220	41.3	
Heating and piping.....	90,068	36,077	18.9	37.6	161,997	100.0	Manufacturing building only.....	120,000	35,000	1.1	20.2	493,000	76.6	
Plumbing.....	111,257	85,863	44.9	77.2	234,189	99.3	Residential building only.....	422,815	7,074	2.1	1.7	3,452,490	26.3	
Plumbing and heating combined.....	57,200	18,000	9.4	31.5	122,440	96.7	Highway.....	1,254,885	17,899	5.5	1.4	2,634,040	96.4	
<i>Bituminous paving materials, tar, asphalt, and oil</i>						<i>Bridge and culvert</i>								
All classes.....	2,352,485	177,743	100.0	7.6	7,038,124	83.1	Street paving.....	2,911,844	14,764	5.4	3.5	4,338,200	94.1	
General contractors.....	\$ 1,835,798	177,743	100.0	9.7	\$ 5,848,374	79.8	Sewer, gas, water, conduit.....	1,939,710	70,569	2.4	3.0	2,818,504	100.0	
Highway.....	292,802	137,601	77.4	47.0	921,295	93.0	Waterworks.....	929,967	42,823	1.3	4.6	1,420,648	97.0	
Grading.....	40,588	13,740	7.7	33.9	312,989	98.7	Dredging, river, harbor, etc.....	596,890	68,625	2.0	7.0	5,209,433	94.8	
Street paving.....	79,377	26,496	14.9	33.4	346,000	100.0	Railroad.....	1,837,069	34,004	1.0	1.6	5,528,570	94.2	
						<i>Foundation</i>								
						<i>Subway (other than build-ings)</i>								
						<i>Telephone line and system</i>								
						<i>Subcontractors</i>								
						<i>Carpentering and wood flooring</i>								
						<i>Concreting</i>								
						<i>Electrical</i>								
						<i>Heating and plumbing</i>								
						<i>Heating and piping</i>								
						<i>Plumbing</i>								
						<i>Masonry</i>								
						<i>Plastering and lathing</i>								
						<i>Roofing and sheet-metal work</i>								
						<i>Roofing and sheet metal combined</i>								
						<i>Stonework</i>								
						<i>Marble and tiling</i>								
						<i>Excavating</i>								

See footnotes at end of table.

TABLE 10.—COMPARISON OF COST OF DESIGNATED MATERIALS FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929, WITH COST OF MATERIALS AND VALUE OF CONSTRUCTION BUSINESS—Continued

[Based exclusively upon reports of establishments which gave the distributed cost of materials]

KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	COST OF DESIGNATED MATERIAL					Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>	KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	COST OF DESIGNATED MATERIAL					Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>		
	Cost of all materials distributed by kind	Amount		Per cent of—					Dollars	Cost of all materials distributed by kind	Amount		Per cent of—			Dollars	
		Total cost	Cost of all distributed materials	Total cost	Cost of all distributed materials						Total cost	Cost of all distributed materials	Total cost				Cost of all distributed materials
<b>PHILADELPHIA—Continued</b>							<b>PHILADELPHIA—Continued</b>										
<i>Tile, facing, terra cotta, floor, and wall</i>							<i>Structural steel<sup>10</sup></i>										
All classes.....	Dollars 73,671,938	Dollars 867,133	100.0	1.2	Dollars 230,836,045	67.4	All classes.....	Dollars 73,571,938	Dollars 6,797,361	100.0	0.2	Dollars 230,836,045	67.4				
General contractors.....	30,625,583	171,765	19.8	4.4	162,016,647	57.4	General contractors <sup>2</sup> .....	40,053,687	5,125,518	75.4	12.8	165,425,004	54.6				
Building.....	25,503,549	164,460	19.0	6.0	125,130,760	46.5	Building.....	25,931,653	1,752,874	25.8	6.8	127,639,117	43.6				
Building not specialized.....	24,608,911	158,110	18.2	6.0	118,575,050	47.6	Building not specialized <sup>2</sup> .....	25,127,015	1,690,397	25.0	6.8	121,083,407	44.4				
Commercial building only.....	281,823	6,350	2.4	2.4	2,610,220	41.3	Commercial building only.....	261,823	4,000	1.0	1.9	2,610,220	41.3				
Manufacturing building only.....	2,911,844	5,583	0.6	1.1	6,332,130	91.8	Manufacturing building only.....	120,000	35,000	5.0	20.2	493,000	76.6				
Bridge and culvert.....	1,837,069	1,722	0.2	0.1	5,209,438	94.8	Residential building only.....	422,815	13,577	2.0	3.2	3,452,400	26.3				
Dredging, river, harbor, etc.....	1,837,069	1,722	0.2	0.1	5,209,438	94.8	Highway.....	1,254,885	24,412	4.0	1.9	2,634,040	96.4				
Subcontractors.....	33,518,251	695,368	80.2	2.1	74,411,041	96.4	Bridge and culvert.....	2,911,844	2,234,867	32.9	76.8	6,332,130	91.8				
Carpentering and wood flooring.....	1,064,864	71,061	8.2	6.7	2,811,374	96.6	Sewer, gas, water, conduit.....	929,967	5,212	1.0	0.0	2,818,904	100.0				
Concreting.....	1,237,269	400	(3)	(3)	3,547,872	98.0	Waterworks.....	806,890	21,664	3.0	2.7	1,420,048	97.9				
Heating and plumbing.....	9,787,901	500	1.0	(3)	19,661,329	93.8	Dredging, river, harbor, etc.....	1,837,069	137,245	2.0	7.5	5,209,438	94.8				
Plumbing.....	2,600,523	500	1.0	(3)	5,315,546	93.6	Railroad.....	1,609,923	15,703	2.0	1.0	5,238,570	94.2				
Masonry.....	2,790,769	49,256	5.7	1.8	6,274,670	99.2	Foundation.....	545,955	11,600	2.2	2.1	1,105,058	94.3				
Marble and tiling.....	1,510,404	574,151	66.2	38.0	3,267,610	98.9	Subway (other than buildings).....	1,628,316	921,941	13.6	56.0	5,594,985	91.3				
<i>Cut stone, granite, and marble</i>							Subcontractors.....	33,518,251	1,071,843	24.6	5.0	74,411,041	96.4				
All classes.....	73,571,938	3,186,270	100.0	4.3	230,836,045	67.4	Carpentering and wood flooring.....	1,064,864	20	(3)	(3)	2,811,374	96.6				
General contractors <sup>2</sup> .....	40,053,687	1,426,446	44.8	3.6	165,425,004	54.6	Concreting.....	1,237,269	2,610	(3)	0.2	3,547,872	98.6				
Building.....	25,931,653	1,052,838	33.0	4.1	127,639,117	43.6	Electrical.....	3,216,466	9,395	1.0	0.3	6,599,976	99.8				
Building not specialized <sup>2</sup> .....	25,127,015	1,052,838	33.0	4.2	121,083,407	44.4	Elevator construction.....	3,543,028	50,000	1.0	1.4	5,587,901	96.9				
Commercial building only.....	261,823	475	(3)	2.2	2,610,220	41.3	Heating and plumbing.....	9,787,901	5,200	1.1	1.0	19,661,329	93.8				
Highway.....	1,254,885	43,054	1.4	3.4	2,634,040	96.4	Heating and piping.....	3,156,600	5,200	1.0	2.2	6,501,954	91.8				
Bridge and culvert.....	2,911,844	1,210	(3)	(3)	6,332,130	91.8	Masonry.....	2,790,769	150	(3)	(3)	6,274,670	99.2				
Street paving.....	1,939,710	22,249	0.7	1.1	4,838,200	94.1	Steel erection.....	1,415,367	1,303,072	19.2	92.1	2,900,514	92.2				
Sewer, gas, water, conduit.....	929,967	9,000	3.1	1.1	2,818,904	100.0	Excavating.....	93,291	341	(3)	0.4	592,213	90.5				
Dredging, river, harbor, etc.....	1,837,069	3,000	1.1	0.2	5,209,438	94.8	Ornamental iron.....	491,395	110,613	1.8	24.3	1,215,348	92.6				
Railroad.....	1,609,923	9,768	3.0	0.6	5,528,570	94.2	Metal work, n. e. s.....	1,186,233	181,412	2.7	15.3	2,079,218	98.5				
Foundation.....	545,955	284,427	8.9	52.1	1,105,058	94.3	<i>Reinforcing steel</i>										
Subcontractors.....	33,518,251	1,750,824	55.2	5.3	74,411,041	96.4	All classes.....	73,571,938	1,821,882	100.0	2.6	230,836,045	67.4				
Concreting.....	1,237,269	11,835	4.1	1.0	3,547,872	98.6	General contractors <sup>2</sup> .....	40,053,687	1,578,669	80.7	3.9	165,425,004	54.6				
Heating and plumbing.....	9,787,901	100	(3)	(3)	19,661,329	93.8	Building.....	25,931,653	1,105,978	60.7	4.3	127,639,117	43.6				
Plumbing.....	2,600,523	100	(3)	(3)	5,315,546	93.6	Building not specialized <sup>2</sup> .....	25,127,015	1,103,431	60.6	4.4	121,083,407	44.4				
Masonry.....	2,790,769	70,851	2.2	2.5	6,274,670	99.2	Commercial building only.....	261,823	630	0.0	0.2	2,610,220	41.3				
Stonework.....	1,213,378	1,003,299	31.5	82.7	2,237,751	98.7	Residential building only.....	422,815	1,017	1.1	5.0	3,452,400	26.3				
Marble and tiling.....	1,510,404	673,679	21.1	44.6	3,267,610	98.9	Highway.....	1,254,885	73,867	4.1	5.9	2,634,040	96.4				
<i>Cement</i>							Bridge and culvert.....	2,911,844	32,287	1.8	1.1	6,332,130	91.8				
All classes.....	73,571,938	3,049,622	100.0	5.4	239,836,045	67.4	Street paving.....	1,939,710	7,713	0.4	4.4	4,838,200	94.1				
General contractors <sup>2</sup> .....	40,053,687	3,196,492	80.9	8.0	165,425,004	54.6	Sewer, gas, water, conduit.....	929,967	81,733	4.5	8.8	2,818,904	100.0				
Building.....	25,931,653	1,807,707	45.8	7.0	127,639,117	43.6	Dredging, river, harbor, etc.....	1,837,069	35,778	2.0	1.9	5,209,438	94.8				
Building not specialized <sup>2</sup> .....	25,127,015	1,774,197	44.9	7.1	121,083,407	44.4	Railroad.....	1,609,923	79,442	4.0	4.0	5,528,570	94.2				
Commercial building only.....	261,823	3,400	1.1	1.3	2,610,220	41.3	Foundation.....	545,955	16,840	0.9	3.1	1,105,058	94.3				
Manufacturing building only.....	120,000	30,000	5.0	25.0	493,000	76.6	Subway (other than buildings).....	1,628,316	126,640	7.0	7.8	5,594,985	91.3				
Residential building only.....	422,815	110	(3)	(3)	3,452,400	26.3	Telephone line and system.....	636,389	18,352	1.0	2.9	1,982,595	100.0				
Highway.....	1,254,885	116,345	2.9	9.3	2,634,040	96.4	Subcontractors.....	33,518,251	243,213	13.3	3.0	74,411,041	96.4				
Bridge and culvert.....	2,911,844	102,063	2.0	3.5	6,332,130	91.8	Concreting.....	1,237,269	127,424	7.0	10.3	3,547,872	98.6				
Street paving.....	1,939,710	2,897	1.1	13.7	321,324	93.9	Heating and plumbing.....	9,787,901	100	(3)	(3)	19,661,329	93.8				
Sewer, gas, water, conduit.....	929,967	368,188	9.3	10.0	4,838,200	94.0	Heating and piping.....	3,156,600	100	(3)	(3)	6,501,954	91.8				
Dredging, river, harbor, etc.....	1,837,069	134,840	3.4	14.5	5,218,904	100.0	Masonry.....	2,790,769	149	(3)	(3)	6,274,670	99.2				
Waterworks.....	806,890	26,739	0.7	3.9	1,420,048	97.9	Glass and glazing.....	539,514	2,100	1.1	0.4	1,047,567	99.7				
Railroad.....	1,609,923	187,993	4.8	10.2	5,209,438	94.8	Roofing and sheet-metal work.....	1,893,462	13,539	0.7	7.7	4,347,798	96.7				
Foundation.....	545,955	338,626	8.6	21.0	5,528,570	94.8	Roofing.....	956,020	13,539	0.7	1.4	2,170,418	94.8				
Subway (other than buildings).....	1,628,316	67,569	1.7	12.4	1,105,058	94.3	Steel erection.....	1,415,367	37,500	2.1	2.0	2,900,514	92.2				
Telephone line and system.....	636,389	42,833	1.1	6.7	1,982,595	100.0	Stonework.....	1,213,378	60,301	3.3	5.0	2,237,751	98.7				
Subcontractors.....	33,518,251	753,130	10.1	2.2	74,411,041	96.4	Excavating.....	93,291	2,000	1.1	2.1	592,213	90.5				
Carpentering and wood flooring.....	1,064,864	1,110	(3)	(3)	2,811,374	96.6	Ornamental iron.....	491,395	100	(3)	(3)	1,215,348	92.6				
Concreting.....	1,237,269	291,713	7.4	23.6	3,547,872	98.6	<i>Metal doors, windows, and trim</i>										
Electrical.....	3,216,466	744	(3)	(3)	6,599,976	99.8	All classes.....	73,571,938	1,014,893	100.0	1.4	239,836,045	67.4				
Elevator construction.....	3,543,028	150	(3)	(3)	5,587,901	96.9	General contractors <sup>2</sup> .....	40,053,687	247,003	24.3	6.0	165,425,004	54.6				
Heating and plumbing.....	9,787,901	2,760	1.0	1.0	19,661,329	93.8	Building.....	25,931,653	233,202	23.0	9.9	127,639,117	43.6				
Heating and piping.....	3,156,600	600	(3)	(3)	6,501,954	91.8	Building not specialized <sup>2</sup> .....	25,127,015	233,184	22.0	9.9	121,083,407	44.4				
Masonry.....	2,790,769	2,160	1.1	1.1	6,274,670	99.2	Commercial building only.....	261,823	1,418	1.0	0.5	2,610,220	41.3				
Plastering and lathing.....	824,563	6,934	2.2	8.0	3,070,857	99.0	Manufacturing building only.....	120,000	5,000	5.0	4.2	493,000	76.6				
Roofing and sheet-metal work.....	1,893,462	20,698	0.5	1.1	4,347,798	96.7	Residential building only.....	422,815	3,600	0.4	0.9	3,452,400	26.3				
Roofing and sheet metal combined.....	956,020	20,976	0.5	2.2	2,170,418	94.8	Bridge and culvert.....	2,911,844	348	(3)	(3)	6,332,130	91.8				
Steel erection.....	1,415,367	22	(3)	(3)	2,900,514	92.2	Dredging, river, harbor, etc.....	1,837,069	13,183	1.3	7.0	5,209,438	94.8				
Stonework.....	1,213,378	56,240	1.4	4.6	2,237,751	98.7	Railroad.....	1,609,923	270	(3)	(3)	5,528,570	94.2				
Marble and tiling.....	1,510,404	26,826	0.7	1.8	3,267,610	98.9	Subcontractors.....	33,518,251	707,800	75.7	2.3	74,411,041	96.4				
Excavating.....	93,291	13,767	3.0	14.8	592,213	90.5	Carpentering and wood flooring.....	1,064,864	26,600	2.6	2.5	2,811,374	96.6				
Ornamental iron.....	491,395	70	(3)	(3)	1,215,348												



TABLE 10.—COMPARISON OF COST OF DESIGNATED MATERIALS FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929, WITH COST OF MATERIALS AND VALUE OF CONSTRUCTION BUSINESS—Continued

[Based exclusively upon reports of establishments which gave the distributed cost of materials]

KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	Cost of all materials distributed by kind	COST OF DESIGNATED MATERIAL		Value of construction business	Indicated per cent of all business done by own force	KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	Cost of all materials distributed by kind	COST OF DESIGNATED MATERIAL		Value of construction business	Indicated per cent of all business done by own force		
		Amount	Per cent of—					Amount	Per cent of—				
			Total cost						Cost of all distributed materials			Total cost	Cost of all distributed materials
<b>PHILADELPHIA—Continued</b>						<b>PHILADELPHIA—Continued</b>							
<i>Paints, varnishes, glass—Continued</i>						<i>Plumbing and gas fitting equipment<sup>10</sup></i>							
<b>Subcontractors—Continued.</b>						<b>All classes.....</b>							
Masonry.....	Dollars 2,790,769	Dollars 1,508	.1	.1	Dollars 6,274,670	99.2	Dollars 73,571,938	Dollars 6,058,425	100.0	8.2	Dollars 239,836,045	67.4	
Painting and decorating.....	1,594,071	1,526,721	66.2	95.8	6,499,013	97.4	40,053,687	740,217	12.2	1.8	165,425,004	54.6	
Glass and glazing.....	539,614	496,572	21.5	92.0	1,047,557	99.7	25,931,053	663,437	11.0	2.6	127,639,117	43.6	
Plastering and lathing.....	824,593	58	(*)	(*)	3,070,857	97.9	25,127,015	655,183	10.8	2.6	121,083,407	44.4	
Roofing and sheet-metal work.....	1,893,462	42,126	1.8	2.2	4,347,798	90.7	422,815	5,304	1	2.0	3,452,490	28.3	
Roofing.....	956,020	19,976	0	2.1	2,170,418	94.8	1,254,855	1,841	(*)	1	2,634,040	56.4	
Sheet-metal work.....	559,960	21,850	9	3.9	1,361,238	99.0	2,911,844	3,875	(*)	1	6,332,130	91.8	
Roofing and sheet metal combined.....	377,482	300	(*)	(*)	816,142	98.0	1,939,710	2,389	(*)	1	4,338,200	94.1	
Steel erection.....	1,415,367	7,045	3	.5	2,900,514	92.2	803,890	18,247	.3	2.3	1,420,648	97.9	
Stonework.....	1,213,378	875	(*)	(*)	2,237,761	98.7	1,837,069	34,942	(*)	1.9	6,200,433	94.8	
Ornamental iron.....	491,395	2,079	1	.6	1,215,348	92.6	1,609,923	485	(*)	(*)	5,528,570	94.2	
Metal work, n. e. s.....	1,186,233	3,000	1	.3	2,079,218	98.5	1,628,316	14,951	.2	9	5,504,985	91.3	
<b>Roofing and sheet metal</b>						<b>Subcontractors.....</b>							
All classes.....	73,571,938	1,925,588	100.0	2.0	239,836,045	67.4	33,518,251	5,318,208	87.8	15.9	74,411,041	96.4	
General contractors <sup>1</sup> .....	40,053,687	307,922	16.0	.8	165,425,004	54.6	3,210,400	275	(*)	3	6,569,076	99.8	
Building.....	25,931,053	258,013	13.4	1.0	127,639,117	43.6	4,787,901	5,313,865	87.7	54.3	19,661,320	93.8	
Building not specialized.....	25,127,015	254,247	13.2	1.0	121,083,407	44.4	3,150,009	234,950	4.7	9.0	6,501,954	91.8	
Residential building only.....	422,815	3,766	.2	.0	3,452,490	28.3	2,600,523	1,759,911	29.0	67.7	5,165,546	93.6	
Highway.....	1,254,855	595	(*)	(*)	2,034,400	60.4	Plumbing and heating combined.....	627,798	301,461	5.0	48.0	1,213,234	97.2
Dredging, river, harbor, etc.....	1,837,069	21,543	1.1	1.2	5,209,433	94.8	Automatic sprinkler systems.....	2,072,453	2,907,453	49.0	90.8	5,097,188	94.1
Foundation.....	546,955	1,400	.1	.3	1,105,058	94.3	Marble and tiling.....	1,510,404	4,128	.1	.3	3,267,010	98.9
Subway (other than buildings).....	1,628,316	26,371	1.4	1.0	5,594,985	91.3	<b>Electrical appliances and supplies</b>						
Subcontractors.....	33,518,251	1,617,066	84.0	4.8	74,411,041	96.4	All classes.....	73,571,938	4,484,043	100.0	6.1	239,836,045	67.4
Carpentering and wood flooring.....	1,064,804	42	(*)	(*)	2,811,374	96.6	General contractors <sup>2</sup> .....	40,053,687	1,309,587	29.1	3.3	165,425,004	54.6
Concrete.....	1,237,260	4,151	(*)	.3	3,647,872	98.6	Building.....	25,931,053	1,219,023	27.2	4.7	127,639,117	43.6
Elevator construction.....	3,543,028	240	(*)	(*)	5,557,991	96.9	Building not specialized.....	25,127,015	1,213,598	27.1	4.8	121,083,407	44.4
Heating and plumbing.....	4,787,901	68,376	3.6	.7	19,661,320	93.8	Residential building only.....	422,815	5,425	.1	1.3	3,452,490	28.3
Heating and piping.....	3,156,609	40,030	2.1	1.3	6,501,954	91.8	Dredging, river, harbor, etc.....	1,837,069	52,193	1.2	2.8	5,209,433	94.8
Pipe covering.....	106,208	9,500	.5	.4	448,091	99.8	Railroad.....	1,609,923	1,285	(*)	1	5,528,570	94.2
Plumbing.....	2,600,523	14,117	.7	.5	5,315,546	93.6	Foundation.....	545,955	4,000	.1	.7	1,105,058	94.3
Plumbing and heating combined.....	627,798	4,723	.2	.8	1,213,234	97.2	Subway (other than buildings).....	1,628,316	30,066	.7	1.8	5,504,985	91.3
Masonry.....	2,790,769	45	(*)	(*)	6,274,670	99.2	Subcontractors.....	33,518,251	3,177,480	70.0	9.5	74,411,041	96.4
Roofing and sheet-metal work.....	1,893,462	1,517,033	78.8	80.1	4,347,798	94.7	Carpentering and wood flooring.....	1,064,804	3,645	1	.3	2,811,374	96.6
Roofing.....	956,020	648,265	33.7	67.8	2,170,418	94.8	Concrete.....	1,237,260	925	(*)	1	3,647,872	98.6
Sheet-metal work.....	559,960	497,778	25.9	83.9	1,361,238	99.0	Electrical.....	3,210,400	3,134,655	69.9	97.5	6,569,076	99.8
Roofing and sheet metal combined.....	377,482	370,990	19.3	98.3	816,142	66.9	Elevator construction.....	3,543,028	3,900	.0	1	5,557,991	96.9
Steel erection.....	1,415,367	18,279	.9	1.3	2,900,514	92.2	Heating and plumbing.....	4,787,901	31,078	.7	.3	19,661,320	93.8
Ornamental iron.....	491,395	1,500	.1	.3	1,215,348	92.6	Heating and piping.....	3,156,609	20,578	.7	.9	6,501,954	91.8
Flooring, n. e. s.....	101,708	8,000	.4	7.9	200,283	97.1	Plumbing.....	2,600,523	1,600	(*)	1	5,315,546	93.6
<b>Heating and ventilating equipment</b>						<b>Elevators, dumb-waiters, and equipment</b>							
All classes.....	73,571,938	4,707,177	100.0	6.4	239,836,045	67.4	All classes.....	73,571,938	3,401,212	100.0	4.7	239,836,045	67.4
General contractors.....	39,625,588	706,194	15.0	1.8	162,910,847	57.4	General contractors <sup>2</sup> .....	40,053,687	43,774	1.3	1	165,425,004	54.6
Building.....	25,503,540	660,925	14.0	2.6	125,130,760	46.5	Building.....	25,931,053	42,774	1.2	2	127,639,117	43.6
Building not specialized.....	24,698,911	654,086	13.9	2.6	118,575,030	47.6	Building not specialized.....	25,127,015	30,414	1.1	1	121,083,407	44.4
Residential building only.....	422,815	6,839	.1	1.6	3,452,490	28.3	Commercial building only.....	261,823	360	(*)	1	2,610,220	41.3
Dredging, river, harbor, etc.....	1,837,069	37,330	.8	2.0	5,209,433	94.8	Residential building only.....	422,815	6,000	(*)	2	3,452,490	28.3
Subway (other than buildings).....	1,628,316	7,939	.2	.5	5,594,985	91.3	Dredging, river, harbor, etc.....	1,837,069	1,000	(*)	1	5,209,433	94.8
Subcontractors.....	33,518,251	4,000,983	85.0	11.9	74,411,041	96.4	Subcontractors.....	33,518,251	3,417,438	98.7	10.2	74,411,041	96.4
Electrical.....	3,210,400	750	(*)	(*)	6,569,076	99.8	Elevator construction.....	3,543,028	3,417,438	98.7	96.5	5,557,991	96.9
Elevator construction.....	3,543,028	2,400	1	1	5,557,991	96.9	<b>Pipe: Cast-iron, sheet and tube steel, etc.</b>						
Heating and plumbing.....	4,787,901	3,933,909	83.6	40.2	19,661,320	93.8	All classes.....	73,571,938	2,623,663	100.0	3.6	239,836,045	67.4
Heating and piping.....	3,156,609	2,657,339	56.8	84.2	6,501,954	91.8	General contractors.....	39,625,588	2,380,340	90.7	6.0	162,910,847	57.4
Pipe covering.....	106,208	90,650	1.6	45.2	448,091	99.8	Building.....	25,503,540	1,676,287	63.0	6.8	125,130,760	46.5
Plumbing.....	2,600,523	732,985	15.6	28.2	5,315,546	93.6	Building not specialized.....	24,698,911	1,676,287	63.0	6.8	118,575,030	47.6
Plumbing and heating combined.....	627,798	219,224	4.7	34.9	1,213,234	97.2	Highway.....	1,254,855	30,785	1.2	2.5	2,634,040	96.4
Automatic temperature control.....	284,310	234,310	5.0	100.0	485,316	100.0	Bridges and culvert.....	2,911,844	8,522	.3	.1	6,332,130	91.8
Painting and decorating.....	1,594,071	311	(*)	(*)	6,499,013	97.4	Street paving.....	1,939,710	1,734	.1	.3	4,338,200	94.1
Roofing and sheet-metal work.....	1,893,462	63,613	1.4	3.4	4,347,798	96.7	Sewer, gas, water, conduit.....	929,067	55,770	2.1	6.0	2,818,904	100.0
Roofing.....	956,020	50,805	1.1	5.3	2,170,418	94.8	Waterworks.....	803,890	540,162	20.6	66.0	1,420,648	97.9
Sheet-metal work.....	559,960	13,248	.3	2.4	1,361,238	99.0	Dredging, river, harbor, etc.....	1,837,069	44,268	1.7	2.4	5,209,433	94.8
						Subway (other than buildings).....							
						1,628,316							

See footnotes at end of table.



TABLE 10.—COMPARISON OF COST OF DESIGNATED MATERIALS FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929, WITH COST OF MATERIALS AND VALUE OF CONSTRUCTION BUSINESS—Continued

[Based exclusively upon reports of establishments which gave the distributed cost of materials]

KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	COST OF DESIGNATED MATERIAL				Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>	KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	COST OF DESIGNATED MATERIAL				Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>		
	Cost of all materials distributed by kind	Per cent of—		Total cost				Cost of all distributed materials	Cost of all materials distributed by kind	Per cent of—				Total cost	Cost of all distributed materials
		Amount	Total cost							Amount	Total cost				
<b>PHILADELPHIA—Continued</b>						<b>PITTSBURGH—Continued</b>									
<i>Pipe: Cast-iron, sheet and tube steel, etc.—Con.</i>						<i>Sand, gravel, stone, slag, cinders, etc.—Con.</i>									
	Dollars	Dollars			Dollars		Dollars	Dollars			Dollars				
Subcontractors.....	\$33,518,251	243,323	0.3	.7	\$74,411,041	96.4	\$9,842,440	101,094	6.6	1.0	\$21,639,738	87.6			
Concreting.....	1,237,269	4,327	.2	.3	3,547,872	98.6	213,051	34,111	2.2	16.0	616,850	98.6			
Electrical.....	3,216,466	27,099	1.0	.8	6,569,976	90.8	250,366	3,040	1.2	1.2	671,064	98.4			
Elevator construction.....	3,543,028	1,031	(*)	(*)	5,557,991	90.9	133,876	26,893	1.7	10.3	835,305	100.0			
Heating and plumbing.....	9,787,901	187,797	7.2	1.9	19,061,329	93.8									
Heating and piping.....	3,156,009	111,340	4.2	3.5	6,501,954	91.8									
Plumbing.....	2,600,523	3,320	.1	.1	5,315,540	93.0									
Plumbing and heating combined.....	627,798	68,137	2.6	10.9	1,213,234	97.2	\$2,013,590	2,123	.1	.1	\$3,595,302	98.1			
Automatic sprinkler systems.....	2,972,453	5,000	.2	.2	5,097,188	94.1	1,593,919	2,123	.1	.1	2,451,735	97.4			
Roofing and sheet metal work.....	1,893,462	2,900	.1	.2	4,347,798	96.7	1,659,388	16,800	1.3	1.2	3,309,221	99.5			
Roofing.....	2,900,020	2,900	.1	.3	2,170,418	94.8	18,500	2,000	.1	10.8	103,218	100.0			
Ornamental iron.....	401,395	4,861	.2	1.0	1,215,848	92.6	420,081	14,157	.9	3.4	942,890	100.0			
Metal work, n. e. s.....	1,180,233	15,311	.6	1.3	2,079,218	98.5									
<i>Bituminous paving materials, tar, asphalt and oil</i>						<i>Brick (face, common, fire, paving, etc.)</i>									
All classes.....	\$73,571,938	1,117,847	100.0	1.5	\$230,830,045	97.4	22,451,950	655,620	100.0	2.9	\$55,898,229	69.6			
General contractors.....	\$30,625,583	989,458	88.5	2.5	\$102,910,647	57.4									
Building.....	25,503,549	16,897	1.5	1.1	125,130,760	46.5									
Building not specialized <sup>2</sup> .....	24,698,911	14,097	1.3	1.1	118,575,050	47.6									
Residential building only.....	422,815	2,200	.2	.5	3,452,490	96.4									
Highway.....	1,254,885	479,039	42.9	38.2	2,634,040	91.8									
Bridge and culvert.....	2,911,844	7,200	.6	.2	0,332,130	91.3									
Street paving.....	1,939,710	434,024	38.8	22.4	4,838,200	94.1									
Sewer, gas, water, conduit.....	929,967	3,350	.3	.4	2,518,004	100.0									
Waterworks.....	800,800	995	.1	.1	1,420,648	97.9									
Dredging, river, harbor, etc.....	1,837,069	14,691	1.3	.8	5,209,433	94.8									
Railroad.....	1,609,923	25,553	2.3	1.6	6,528,570	94.2									
Foundation.....	545,955	5,169	.5	.9	1,105,058	94.3									
Telephone line and system.....	636,389	2,504	.2	.4	1,982,595	100.0									
Subcontractors.....	\$33,518,251	128,389	11.5	.4	\$74,411,041	96.4									
Carpentering and wood flooring.....	1,004,804	0,209	.6	.6	2,811,374	96.6									
Concreting.....	1,237,269	67,155	6.0	5.4	3,547,872	98.0									
Roofing and sheet-metal work.....	1,893,462	37,440	3.3	2.0	4,347,798	96.7									
Roofing.....	950,020	37,440	3.3	3.9	2,170,418	94.8									
Stonework.....	1,213,378	1,385	.1	.1	2,237,761	98.7									
Soundproofing.....	907,793	1,200	.1	.1	1,763,284	97.7									
Flooring, n. e. s.....	101,708	15,000	1.3	14.7	200,283	97.1									
<i>Machinery</i>						<i>Cut stone, granite and marble</i>									
All classes.....	\$73,571,938	4,524,822	100.0	6.2	\$230,830,045	67.4	22,451,950	535,835	100.0	2.4	\$55,898,229	69.6			
General contractors.....	\$30,625,583	4,522,034	99.9	11.4	\$102,910,647	57.4									
Building.....	25,503,549	4,351,829	96.2	17.1	125,130,760	46.5									
Building not specialized <sup>2</sup> .....	24,698,911	4,351,829	96.2	17.6	118,575,050	47.6									
Dredging, river, harbor, etc.....	1,837,069	170,205	3.8	9.3	5,209,433	94.8									
Subcontractors.....	\$33,518,251	2,788	.1	(*)	\$74,411,041	96.4									
Electrical.....	3,216,466	2,410	.1	.1	6,569,976	99.8									
Elevator construction.....	3,543,028	378	(*)	(*)	5,557,991	98.0									
<b>PITTSBURGH</b>						<b>Cement</b>									
<i>Sand, gravel, stone, slag, cinders, etc.</i>						<i>All classes.....</i>									
All classes.....	22,451,950	1,537,157	100.0	6.8	55,898,229	69.6	22,451,950	1,307,050	100.0	6.2	55,898,229	69.6			
General contractors <sup>2</sup> .....	12,609,510	1,430,063	93.4	11.4	34,258,491	62.3									
Building.....	4,943,583	493,525	32.1	10.0	17,053,402	47.9									
Building not specialized <sup>2</sup> .....	4,769,601	482,327	31.4	10.1	16,014,041	60.8									
Commercial building only.....	19,536	2,210	.1	11.8	115,812	87.6									
Residential building only.....	154,446	8,988	.6	5.9	923,549	56.5									
Highway.....	1,204,808	398,798	25.9	33.1	4,145,427	95.7									
Bridge and culvert.....	4,675,538	46,835	3.0	1.9	7,658,091	98.0									
Grading.....	17,681	10,794	.7	69.9	100,000	100.0									
Street paving.....	977,150	330,851	21.5	33.9	2,522,405	97.7									
Sewer, gas, water, conduit.....	267,064	55,298	3.6	20.7	6,528,570	94.2									
Waterworks.....	208,522	80,000	3.3	24.0	771,822	96.6									
Dredging, river, harbor, etc.....	148,164	36,052	2.3	23.7	710,360	91.7									
Air transport work.....	167,000	15,000	1.0	9.0	444,264	100.0									
Subcontractors.....	\$9,842,440	75,838	5.4	.8	\$21,639,738	87.6									
Concreting.....	213,051	31,600	2.3	14.8	616,850	98.6									
Masonry.....	250,366	6,217	.4	2.5	671,064	98.4									
Plastering and lathing.....	133,876	3,256	.2	2.4	835,305	100.0									
Roofing and sheet-metal work.....	\$2,013,590	1,463	.1	.1	\$3,595,302	98.1									
Roofing.....	1,593,919	1,463	.1	1.3	2,451,735	97.4									
Steel erection.....	1,659,388	20,800	1.5	1.3	3,309,221	99.5									
Stonework.....	420,081	8,949	.6	2.1	942,890	100.0									
Marble and tiling.....	420,081	8,453	.2	4.6	180,556	100.0									
Soundproofing.....	75,333														

See footnotes at end of table.

TABLE 10.—COMPARISON OF COST OF DESIGNATED MATERIALS FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929, WITH COST OF MATERIALS AND VALUE OF CONSTRUCTION BUSINESS—Continued

[Based exclusively upon reports of establishments which gave the distributed cost of materials]

KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	COST OF DESIGNATED MATERIAL				Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>	KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	COST OF DESIGNATED MATERIAL				Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>
	Cost of all materials distributed by kind	Amount	Per cent of—					Cost of all materials distributed by kind	Amount	Per cent of—			
			Total cost	Cost of all distributed materials						Total cost	Cost of all distributed materials		
<b>PITTSBURGH—Continued</b>						<b>PITTSBURGH—Continued</b>							
<i>Structural steel<sup>10</sup></i>						<i>Paints, varnishes, glass—Continued</i>							
All classes.....	Dollars	Dollars	100.0	30.3	Dollars	69.6	All classes.....	Dollars	Dollars	72.6	3.2	Dollars	87.6
	22,451,950	6,802,175			55,898,220			9,842,440	813,052			21,630,738	87.6
General contractors.....	12,500,183	5,332,508	78.4	42.4	34,179,491	62.9	Subcontractors.....	213,051	43,400	10.1	20.4	616,850	98.0
Building.....	4,924,250	1,165,211	17.1	23.7	16,974,402	48.4	Concreting.....	683,222	312	1	(3)	1,039,808	100.0
Building not specialized.....	4,750,274	1,162,375	17.1	24.5	15,935,041	62.0	Elevator construction.....	250,565	400	1	2	671,004	98.4
Commercial building only.....	19,536	1,245	(3)	6.4	116,812	87.0	Masonry.....	189,228	177,072	41.2	93.9	1,217,809	98.8
Residential building only.....	154,446	1,591	(3)	1.0	923,549	56.5	Painting and decorating.....	34,000	34,000	7.0	100.0	63,000	100.0
Highway.....	1,204,808	33,757	5	2.8	4,145,427	95.7	Plastering and lathing.....	133,875	200	(3)	1	835,305	100.0
Bridge and culvert.....	4,675,538	4,125,523	60.7	88.2	7,658,091	98.0	Roofing and sheet-metal work.....	2,013,596	1,777	4	1	3,595,302	98.1
Street paving.....	977,150	3,456	1	4	2,522,405	97.7	Roofing.....	1,593,919	1,000	2	1	2,451,735	97.4
Sewer, gas, water, conduit.....	207,064	250	(3)	1	852,890	99.7	Sheet-metal work.....	298,704	280	1	1	854,753	99.1
Dredging, river, harbor, etc.....	148,164	4,311	1	2.9	710,360	91.7	Roofing and sheet metal combined.....	120,973	497	1	4	288,814	100.0
Subcontractors.....	9,842,440	1,469,667	21.6	14.9	21,639,738	87.0	Steel erection.....	1,659,388	50,000	11.0	3.0	3,300,221	59.5
Elevator construction.....	633,222	10,676	2	1.7	1,039,808	100.0	Soundproofing.....	75,333	5,291	1.2	7.0	180,650	100.0
Masonry.....	250,565	268	(3)	1	671,004	98.4	<i>Roofing and sheet metal<sup>10</sup></i>						
Steel erection.....	1,059,388	1,414,943	20.8	85.3	3,309,221	59.5	All classes.....	22,451,950	2,044,345	100.0	0.1	55,898,220	69.6
Metal work, n. e. s.....	131,396	43,780	6	33.3	212,711	98.8	General contractors <sup>2</sup> .....	12,609,510	169,152	8.3	1.3	34,258,491	62.3
<i>Reinforcing steel</i>						<i>Heating and ventilating equipment</i>							
All classes.....	22,451,950	452,937	100.0	2.0	55,898,220	69.6	All classes.....	22,451,950	1,380,189	100.0	6.2	55,898,220	60.6
General contractors.....	12,500,183	443,083	97.8	3.5	34,179,491	62.9	General contractors <sup>2</sup> .....	12,609,510	207,984	15.0	1.0	34,258,491	62.3
Building.....	4,924,250	165,247	36.5	3.4	16,974,402	48.4	Building.....	4,943,583	197,984	14.3	4.0	17,053,402	47.9
Building not specialized.....	4,750,274	164,202	36.3	3.5	15,935,041	62.6	Building not specialized <sup>2</sup> .....	4,769,601	195,141	14.1	4.1	16,014,041	60.8
Commercial building only.....	19,536	500	1	2.6	116,812	87.6	Residential building only.....	154,446	2,843	2	1.8	923,549	56.5
Residential building only.....	154,446	545	1	4	923,549	56.5	Air transport work.....	167,000	10,000	7	6.0	942,264	100.0
Highway.....	1,204,808	129,957	28.7	10.8	4,145,427	95.7	Subcontractors.....	9,842,440	1,875,193	91.7	19.1	21,630,738	87.6
Bridge and culvert.....	4,675,538	20,599	4.5	4	7,658,091	98.0	Heating and plumbing.....	2,609,762	1,800	1	1	5,285,558	98.1
Street paving.....	977,150	15,930	3.5	1.6	2,522,405	97.7	Heating and piping.....	536,773	1,800	1	3	1,170,833	91.6
Sewer, gas, water, conduit.....	207,064	350	1	1	852,890	99.7	Masonry.....	250,565	161	(3)	1	671,004	98.4
Waterworks.....	208,522	20,000	4.4	9.6	771,682	98.0	Painting and decorating.....	180,228	0,500	(3)	3.4	1,217,809	98.8
Air transport work.....	167,000	91,000	20.1	54.5	444,264	100.0	Roofing and sheet-metal work.....	2,013,596	1,847,829	90.4	91.8	3,595,302	98.1
Subcontractors.....	9,842,440	9,854	2.2	1	21,639,738	87.6	Roofing.....	1,593,919	1,522,000	74.4	95.5	2,451,735	97.4
Concreting.....	213,051	7,804	1.7	3.7	610,975	98.6	Sheet-metal work.....	298,704	205,347	10.0	68.7	854,753	99.1
Plastering and lathing.....	133,875	300	1	2	835,305	100.0	Roofing and sheet metal combined.....	120,973	120,476	5.9	99.0	288,814	100.0
Marble and tiling.....	420,081	1,750	4	4	942,890	100.0	Soundproofing.....	75,333	18,897	9	25.1	180,650	100.0
<i>Lumber, rough and finished</i>						<i>Plumbing and gas-fitting equipment</i>							
All classes.....	22,451,950	604,495	100.0	3.0	55,898,220	69.0	All classes.....	22,451,950	1,794,130	100.0	8.0	55,898,220	69.6
General contractors <sup>2</sup> .....	12,609,510	641,905	96.6	5.1	34,258,491	62.3	General contractors <sup>2</sup> .....	12,609,510	207,984	15.0	1.0	34,258,491	62.3
Building.....	4,943,583	485,810	73.1	9.8	17,053,402	47.9	Building.....	4,943,583	197,984	14.3	4.0	17,053,402	47.9
Building not specialized <sup>2</sup> .....	4,769,601	429,961	64.3	9.0	16,014,041	60.8	Building not specialized <sup>2</sup> .....	4,769,601	195,141	14.1	4.1	16,014,041	60.8
Commercial building only.....	19,536	1,990	8	10.2	116,812	87.6	Residential building only.....	154,446	2,843	2	1.8	923,549	56.5
Residential building only.....	154,446	56,859	8.0	36.8	923,549	56.5	Air transport work.....	167,000	10,000	7	6.0	942,264	100.0
Highway.....	1,204,808	67,407	10.1	5.6	4,145,427	95.7	Subcontractors.....	9,842,440	1,178,205	85.0	12.0	21,630,738	87.6
Bridge and culvert.....	4,675,538	9,106	1.4	2	7,658,091	98.0	Heating and plumbing.....	2,609,762	1,047,000	75.5	40.1	5,285,558	98.1
Street paving.....	977,150	20,832	3.1	2.1	2,522,405	97.7	Heating and piping.....	536,473	530,437	33.3	98.9	1,170,833	91.6
Sewer, gas, water, conduit.....	207,064	11,029	1.7	4.1	852,890	99.7	Plumbing.....	1,749,762	330,200	23.8	18.9	3,464,420	90.8
Waterworks.....	208,522	5,000	8	2.4	771,682	98.0	Plumbing and heating combined.....	274,340	137,170	9.9	50.0	488,078	100.0
Dredging, river, harbor, etc.....	148,164	32,671	4.9	22.1	710,360	91.7	Automatic temperature-control.....	40,187	40,187	3.5	100.0	156,227	100.0
Air transport work.....	167,000	10,000	1.6	6.0	444,264	100.0	Roofing and sheet-metal work.....	2,013,596	107,648	7.8	5.3	3,595,302	98.1
Subcontractors.....	9,842,440	22,590	3.4	2	21,639,738	87.6	Roofing.....	1,593,919	45,671	3.3	2.9	2,451,735	97.4
Carpentering and wood flooring.....	5,954	5,272	8	88.5	41,350	71.3	Sheet-metal work.....	298,704	62,077	4.5	20.8	854,753	99.1
Concreting.....	213,051	10,338	1.6	4.9	616,850	98.6	Marble and tiling.....	420,081	2,505	2	0	942,264	100.0
Elevator construction.....	633,222	3,469	5	5	1,039,808	100.0	Soundproofing.....	75,333	21,052	1.5	27.9	180,650	100.0
Plastering and lathing.....	133,875	461	1	3	835,305	100.0	<i>Plumbing and gas-fitting equipment</i>						
Roofing and sheet-metal work.....	2,013,596	200	(3)	(3)	3,595,302	98.1	All classes.....	22,451,950	1,794,130	100.0	8.0	55,898,220	69.6
Roofing.....	1,593,919	200	(3)	1	2,451,735	97.4	General contractors.....	12,609,510	252,727	14.1	2.0	34,179,491	62.9
Marble and tiling.....	420,081	350	1	2.7	942,890	100.0	Building.....	4,924,250	195,930	10.9	4.0	16,974,402	48.4
Highway.....	11,000	2,500	4	22.7	50,000	100.0	Building not specialized.....	4,750,274	187,484	10.4	3.9	15,935,041	62.6
<i>Paints, varnishes, glass</i>						<i>Plumbing and gas-fitting equipment</i>							
All classes.....	22,451,950	431,708	100.0	1.9	55,898,220	69.6	Residential building only.....	154,446	8,440	5	5.5	923,549	56.5
General contractors <sup>2</sup> .....	12,609,510	118,656	27.5	9	34,258,491	62.3	Highway.....	1,204,808	275	(3)	(3)	4,145,427	95.7
Building.....	4,943,583	47,938	11.1	1.0	17,053,402	47.9	Waterworks.....	208,522	56,522	3.2	27.1	771,682	96.6
Building not specialized <sup>2</sup> .....	4,769,601	45,339	10.5	1.0	16,014,041	60.8	Subcontractors.....	9,842,440	1,541,403	85.9	15.7	21,639,738	87.6
Commercial building only.....	19,536	650	2	3.8	116,812	87.6	Heating and plumbing.....	2,609,762	1,540,156	85.8	59.0	5,285,558	98.1
Residential building only.....	154,446	1,959	5	1.3	923,549	56.5	Plumbing.....	1,749,762	1,402,980	78.2	80.2	3,464,420	99.8
Highway.....	1,204,808	1,270	3	1	4,145,427	95.7	Plumbing and heating combined.....	274,340	137,170	7.6	50.0	488,078	100.0
Bridge and culvert.....	4,675,538	67,725	15.7	1.4	7,658,091	98.0	Marble and tiling.....	420,081	1,247	1	3	942,890	100.0
Waterworks.....	208,522	1,000	2	5	771,682	96.6	See footnotes at end of table.						
Dredging, river, harbor, etc.....	148,164	657	2	4	710,360	91.7							



TABLE 10.—COMPARISON OF COST OF DESIGNATED MATERIALS FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929, WITH COST OF MATERIALS AND VALUE OF CONSTRUCTION BUSINESS—Continued

[Based exclusively upon reports of establishments which gave the distributed cost of materials]

KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	COST OF DESIGNATED MATERIAL				Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>	KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	COST OF DESIGNATED MATERIAL				Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>
	Cost of all materials distributed by kind	Amount	Per cent of—					Cost of all materials distributed by kind	Amount	Per cent of—			
			Total cost	Cost of all distributed materials						Total cost	Cost of all distributed materials		
<b>PITTSBURGH—Continued</b>						<b>READING—Continued</b>							
<i>Electrical appliances and supplies</i>						<i>Cement—Continued</i>							
All classes.....	Dollars 22,451,950	Dollars 1,317,972	100.0	5.9	Dollars 755,898,229	60.6	Subcontractors.....	Dollars 1,313,599	Dollars 16,127	22.9	1.2	Dollars 2,634,768	99.8
General contractors.....	12,500,183	87,915	6.7	.7	34,179,401	62.9	Concrete.....	22,096	11,630	16.5	52.6	60,264	100.0
Building.....	4,024,250	85,922	6.5	1.7	10,974,402	48.4	Heating and plumbing.....	518,119	30	(3)	(3)	914,424	99.9
Building not specialized.....	4,750,274	84,337	6.4	1.8	15,935,041	62.6	Plumbing.....	301,683	30	(3)	(3)	583,284	99.8
Residential building only.....	154,446	1,585	.1	1.0	923,549	56.5	Plastering and lathing.....	25,612	293	.4	1.1	84,737	91.8
Highway.....	1,204,808	1,442	.1	.1	4,146,427	95.7	Marble and tiling.....	97,534	2,048	2.9	2.1	241,707	99.6
Bridge and culvert.....	4,075,538	551	(3)	(3)	7,058,091	98.0	Sewer, gas, water, conduit.....	10,585	2,125	3.0	20.1	32,117	100.0
Subcontractors.....	0,842,440	1,230,057	93.3	12.5	21,639,738	87.0	<i>Structural steel</i>						
Electrical.....	1,238,044	1,202,005	91.2	97.1	3,017,825	96.7	All classes.....	2,305,315	94,183	100.0	4.1	5,636,565	83.3
Elevator construction.....	633,222	27,493	2.1	4.3	1,039,868	100.0	General contractors <sup>2</sup> .....	991,716	64,183	100.0	0.5	3,001,797	72.6
Marble and tiling.....	420,881	559	(3)	.1	942,300	100.0	Building.....	853,388	93,714	99.5	11.0	2,641,187	66.8
<i>Elevators, dumb-waiters, and equipment</i>						<i>Ornamental metal work</i>							
All classes.....	22,451,950	705,170	100.0	3.1	755,898,229	60.0	All classes.....	2,305,315	47,145	100.0	2.0	7,536,565	83.3
General contractors.....	12,500,183	137,860	19.5	1.1	34,179,491	62.9	General contractors.....	838,992	7,145	15.2	0.9	2,590,907	74.6
Building.....	4,024,250	137,860	19.5	2.8	16,974,402	48.4	Building.....	700,694	7,145	15.2	1.0	2,230,297	68.2
Building not specialized.....	4,750,274	137,860	19.5	2.9	15,935,041	62.6	Building not specialized.....	640,847	7,145	15.2	1.1	2,112,297	67.6
Subcontractors.....	0,842,440	507,310	80.5	5.8	21,639,738	87.0	Subcontractors.....	1,313,599	40,000	84.8	3.0	2,634,768	99.8
Elevator construction.....	633,222	567,310	80.5	89.6	1,039,868	100.0	Ornamental iron.....	40,000	40,000	84.8	100.0	55,000	100.0
<b>READING</b>						<i>Lumber, rough and finished</i>							
<i>Sand, gravel, stone, slag, cinders, etc.</i>						All classes.....							
All classes.....	2,305,315	145,530	100.0	0.3	5,636,565	83.3	All classes.....	2,305,315	190,329	100.0	8.3	5,636,565	83.3
General contractors <sup>2</sup> .....	991,716	122,888	84.4	12.4	3,001,797	72.0	General contractors <sup>2</sup> .....	991,716	189,741	99.7	10.1	3,001,797	72.6
Building.....	853,388	64,854	44.5	7.6	2,641,187	66.8	Building.....	853,388	187,212	98.4	21.0	2,641,187	66.8
Building not specialized.....	802,571	63,754	43.8	7.9	2,523,187	66.1	Building not specialized.....	802,571	177,132	63.1	22.1	2,523,187	66.1
Residential building only.....	50,817	1,100	.8	2.2	118,000	73.0	Residential building only.....	50,817	10,080	5.3	19.8	118,000	73.0
Highway.....	114,239	51,260	35.2	44.9	194,490	100.0	Grading.....	12,747	618	.3	4.8	107,762	96.3
Grading.....	12,747	3,621	2.5	28.4	107,762	96.3	Dam and reservoir.....	11,342	1,911	1.0	16.8	58,382	96.6
Dam and reservoir.....	11,342	3,163	2.2	27.9	58,382	96.6	Subcontractors.....	1,313,599	588	.3	(3)	2,634,768	99.8
Subcontractors.....	1,313,599	22,692	15.0	1.7	2,634,768	99.8	Concrete.....	22,096	951	2	1.6	60,264	100.0
Concreting.....	22,096	9,700	6.7	43.9	96,294	100.0	Heating and plumbing.....	518,119	35	(3)	(3)	914,424	99.9
Plastering and lathing.....	25,612	2,874	2.0	11.2	84,737	91.8	Plumbing.....	301,683	95	(3)	(3)	583,284	99.8
Roofing and sheet-metal work.....	100,832	100	.1	.1	267,348	100.0	Roofing and sheet-metal work.....	100,832	142	.1	.1	267,348	100.0
Roofing.....	87,918	100	.1	.1	237,438	100.0	Roofing.....	87,918	142	.1	.2	237,438	100.0
Marble and tiling.....	97,534	6,158	4.2	6.8	241,797	99.6	<i>Millwork</i>						
Sewer, gas, water, conduit.....	10,585	3,860	2.7	36.5	32,117	100.0	All classes.....	2,305,315	80,014	100.0	3.8	5,636,565	83.3
<i>Brick, (face, common, fire, paving, etc.)</i>						General contractors <sup>2</sup> .....							
All classes.....	2,305,315	88,624	100.0	3.8	5,636,565	83.3	Building.....	991,716	86,914	100.0	8.8	3,001,797	72.6
General contractors <sup>2</sup> .....	991,716	88,224	99.5	10.8	2,641,187	66.8	Building not specialized.....	853,388	86,914	100.0	10.2	2,641,187	66.8
Building.....	853,388	88,224	99.5	10.8	2,523,187	66.1	Residential building only.....	802,571	77,614	89.3	9.7	2,523,187	66.1
Building not specialized.....	802,571	84,264	95.1	10.5	2,523,187	66.1	Residential building only.....	50,817	9,300	10.7	18.3	118,000	73.0
Residential building only.....	50,817	3,960	4.5	7.8	118,000	73.0	<i>Paints, varnishes, glass</i>						
Subcontractors.....	1,313,599	400	.5	(3)	2,634,768	99.8	All classes.....	2,305,315	48,682	100.0	2.1	5,636,565	83.3
Sewer, gas, water, conduit.....	10,585	400	.5	3.8	32,117	100.0	General contractors <sup>2</sup> .....	991,716	12,227	25.1	1.2	3,001,797	72.6
<i>Tile, facing, terra cotta, floor and wall</i>						Building.....							
All classes.....	2,305,315	67,817	100.0	2.9	5,636,565	83.3	Building not specialized.....	853,388	12,227	25.1	1.4	2,641,187	66.8
General contractors <sup>2</sup> .....	991,716	7,490	11.0	.8	3,001,797	72.6	Residential building only.....	802,571	11,462	23.5	1.5	2,523,187	66.1
Building.....	853,388	7,490	11.0	.9	2,641,187	66.8	Residential building only.....	50,817	765	1.6	1.4	118,000	73.0
Building not specialized.....	802,571	7,490	11.0	.9	2,523,187	66.1	Subcontractors.....	1,313,599	36,455	74.9	2.8	2,634,768	99.8
Subcontractors.....	1,313,599	60,327	89.0	4.6	2,634,768	99.8	Heating and plumbing.....	518,119	180	.4	(3)	914,424	99.9
Marble and tiling.....	97,534	60,327	89.0	61.9	241,797	99.6	Plumbing.....	301,683	180	.4	.1	583,284	99.8
<i>Cement</i>						Painting and decorating.....							
All classes.....	2,305,315	70,365	100.0	3.1	5,636,565	83.3	All classes.....	2,305,315	36,275	74.5	100.0	140,523	100.0
General contractors <sup>2</sup> .....	991,716	54,238	77.1	5.5	3,001,797	72.6	<i>Roofing and sheet metal</i>						
Building.....	853,388	48,747	69.3	5.7	2,641,187	66.8	All classes.....	2,305,315	114,342	100.0	5.0	5,636,565	83.3
Building not specialized.....	802,571	48,379	68.8	6.0	2,523,187	66.1	General contractors <sup>2</sup> .....	991,716	12,878	11.8	1.3	3,001,797	72.6
Residential building only.....	50,817	368	.5	.7	118,000	73.0	Building.....	853,388	12,878	11.8	1.5	2,641,187	66.8
Grading.....	12,747	2,008	2.9	15.8	107,762	96.3	Building not specialized.....	802,571	11,763	10.3	1.5	2,523,187	66.1
Dam and reservoir.....	11,342	3,483	4.9	30.7	58,382	96.6	Residential building only.....	50,817	1,125	1.0	2.2	118,000	73.0
<i>See footnotes at end of table.</i>						Subcontractors.....							
						Roofing and sheet-metal work.....							
						Roofing.....							
						Sheet-metal work.....							
						Marble and tiling.....							

TABLE 10.—COMPARISON OF COST OF DESIGNATED MATERIALS FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929, WITH COST OF MATERIALS AND VALUE OF CONSTRUCTION BUSINESS—Continued

[Based exclusively upon reports of establishments which gave the distributed cost of materials]

KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	COST OF DESIGNATED MATERIAL					Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>	KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	COST OF DESIGNATED MATERIAL					Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>		
	Cost of all materials distributed by kind	Amount		Per cent of—					Dollars	Cost of all materials distributed by kind	Amount		Per cent of—			Dollars	
		Dollars	Per cent	Total cost	Cost of all distributed materials						Dollars	Per cent	Total cost				Cost of all distributed materials
<b>READING—Continued</b>							<b>SCRANTON—Continued</b>										
<i>Heating and ventilating equipment</i> <sup>11</sup>							<i>Cut stone, granite and marble</i>										
All classes.....	2,305,816	280,360	100.0	12.2	5,636,565	83.3	All classes.....	1,214,630	31,986	100.0	2.6	3,882,102	79.5				
General contractors <sup>2</sup> .....	4,991,716	34,100	12.2	3.4	3,001,797	72.6	General contractors.....	4,578,160	6,827	21.3	1.2	2,386,655	67.7				
Building.....	853,388	84,100	12.2	4.0	2,641,187	66.8	Building.....	4,361,707	6,827	21.3	1.9	1,640,545	59.6				
Building not specialized <sup>2</sup> .....	802,571	29,100	10.4	3.6	2,523,187	66.1	Building not specialized.....	337,799	6,827	21.3	2.0	1,565,954	57.1				
Residential building only.....	50,817	5,000	1.8	9.8	118,000	73.0	Subcontractors.....	4,636,470	25,159	78.7	4.0	1,495,447	97.9				
Subcontractors.....	1,313,599	246,260	87.8	18.7	2,634,768	99.8	Stonework.....	25,159	25,159	78.7	100.0	124,939	100.0				
Heating and plumbing.....	518,119	246,260	87.8	47.5	914,424	99.9	<i>Cement</i>										
Heating and piping.....	216,436	161,014	53.0	69.8	331,140	100.0	All classes.....	1,214,630	96,403	100.0	7.9	3,882,102	70.5				
Plumbing.....	301,683	95,246	34.0	31.6	583,284	99.8	General contractors.....	578,160	67,778	70.3	11.7	2,386,655	67.7				
<i>Plumbing and gas fitting equipment</i> <sup>11</sup>							<i>Plaster, etc.</i>										
All classes.....	2,305,815	297,126	100.0	12.9	5,636,565	83.3	All classes.....	1,214,630	26,269	100.0	2.2	3,882,102	70.5				
General contractors <sup>2</sup> .....	4,991,716	26,578	8.9	2.7	3,001,797	72.6	General contractors.....	4,578,160	9,867	37.6	1.7	2,386,655	67.7				
Building.....	853,388	26,200	8.8	3.1	2,641,187	66.8	Building.....	361,707	9,867	37.6	2.7	1,640,545	59.6				
Building not specialized <sup>2</sup> .....	802,571	21,500	7.2	2.7	2,523,187	66.1	Building not specialized.....	337,799	7,217	27.5	2.1	1,565,954	57.1				
Residential building only.....	50,817	4,700	1.6	9.2	118,000	73.0	Residential building only.....	23,908	2,650	10.1	11.1	74,591	72.4				
Dam and reservoir.....	11,342	373	1.1	3.3	58,382	66.6	Highway.....	216,453	49,692	61.5	23.0	740,110	85.9				
Subcontractors.....	1,313,599	270,553	91.1	20.6	2,634,768	99.8	Subcontractors.....	4,636,470	28,625	20.7	4.5	1,495,447	97.9				
Heating and plumbing.....	518,119	269,604	90.7	52.0	914,424	99.9	Concreting.....	120,191	28,625	20.7	23.8	290,240	95.5				
Heating and piping.....	216,436	65,422	22.0	30.2	331,140	100.0	<i>Reinforcing steel</i>										
Plumbing.....	301,683	204,182	68.7	67.7	583,284	99.8	All classes.....	1,214,630	31,429	100.0	2.6	3,882,102	79.5				
Marble and tiling.....	97,534	949	0.3	1.0	241,767	99.6	General contractors.....	578,160	17,690	56.3	3.1	2,386,655	67.7				
<i>Electrical appliances and supplies</i> <sup>10</sup>							<i>Lumber, rough and finished</i>										
All classes.....	2,305,815	476,794	100.0	20.7	5,636,565	83.3	All classes.....	1,214,630	192,053	100.0	15.9	3,882,102	70.5				
General contractors <sup>2</sup> .....	4,991,716	12,308	2.6	1.2	3,001,797	72.6	General contractors.....	578,160	174,776	90.6	30.2	2,386,655	67.7				
Building.....	853,388	12,308	2.6	1.4	2,641,187	66.8	Building.....	361,707	172,425	89.4	47.7	1,640,545	59.6				
Building not specialized <sup>2</sup> .....	802,571	11,018	2.3	1.4	2,523,187	66.1	Building not specialized.....	337,799	162,678	84.3	48.2	1,565,954	57.1				
Residential building only.....	50,817	1,290	0.3	2.5	118,000	73.0	Residential building only.....	23,908	9,747	5.1	40.8	74,591	72.4				
Subcontractors.....	1,313,599	404,480	97.4	35.4	2,634,768	99.8	Highway.....	216,453	2,350	1.2	1.1	740,110	85.9				
Electrical.....	462,540	402,540	97.0	100.0	832,588	90.9	Subcontractors.....	4,636,470	13,739	43.7	2.2	1,495,447	97.9				
Heating and plumbing.....	518,119	1,940	0.4	0.4	914,424	99.9	Concreting.....	120,191	13,739	43.7	11.4	290,240	95.5				
Plumbing.....	301,683	1,040	0.4	0.0	583,284	99.8	<i>Millwork</i>										
<i>Bituminous paving materials, tar, asphalt, and oil</i>							<i>Roofing and sheet metal</i> <sup>10</sup>										
All classes.....	2,305,815	64,504	100.0	2.8	5,636,565	83.3	All classes.....	1,214,630	106,768	100.0	8.8	3,882,102	79.5				
General contractors.....	4,991,716	64,504	100.0	7.7	2,590,907	74.6	General contractors.....	4,578,160	1,277	1.2	0.2	2,386,655	67.7				
Building.....	470,664	1,515	2.3	2.2	2,230,297	68.2	Building.....	361,707	1,277	1.2	0.4	1,640,545	59.6				
Building not specialized.....	649,847	1,515	2.3	2.2	2,112,297	67.6	Building not specialized.....	337,799	1,277	1.2	0.4	1,565,954	57.1				
Highway.....	114,239	62,989	97.7	55.1	194,466	100.0	Subcontractors.....	4,636,470	18,178	9.4	2.9	1,495,447	97.9				
<b>SCRANTON</b>							<i>Brick (face, common, fire, paving, etc.)</i>										
<i>Sand, gravel, stone, slag, cinders, etc.</i>							<i>Millwork</i>										
All classes.....	1,214,630	156,256	100.0	12.9	3,882,102	79.5	All classes.....	1,214,630	35,909	100.0	3.0	3,882,102	79.5				
General contractors.....	578,160	109,836	70.3	10.0	2,386,655	67.7	General contractors.....	4,578,160	35,909	100.0	6.2	2,386,655	67.7				
Building.....	361,707	23,539	15.1	6.5	1,640,545	59.6	Building.....	361,707	35,909	100.0	9.9	1,640,545	59.6				
Building not specialized.....	337,799	21,359	13.7	6.3	1,565,954	57.1	Building not specialized.....	337,799	35,909	100.0	10.0	1,565,954	57.1				
Residential building only.....	23,908	2,230	1.4	9.3	74,591	72.4	Roofing and sheet metal <sup>10</sup> .....	4,636,470	105,491	98.8	16.6	1,495,447	97.9				
Highway.....	216,453	86,247	55.2	39.8	746,110	85.9	Heating and plumbing.....	4,323,750	10,436	9.8	3.2	653,808	99.6				
Subcontractors.....	4,636,470	46,420	29.7	7.3	1,495,447	97.9	Plumbing.....	135,661	8,750	8.2	6.4	321,975	100.0				
Concreting.....	120,191	46,420	29.7	38.6	290,240	95.5	Plumbing and heating combined.....	54,549	1,686	1.6	3.1	132,473	100.0				

See footnotes at end of table.

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TABLE 10.—COMPARISON OF COST OF DESIGNATED MATERIALS FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929, WITH COST OF MATERIALS AND VALUE OF CONSTRUCTION BUSINESS—Continued

[Based exclusively upon reports of establishments which gave the distributed cost of materials]

KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	COST OF DESIGNATED MATERIAL					Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>	KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	COST OF DESIGNATED MATERIAL										
	Cost of all materials distributed by kind	Amount	Per cent of—		Value of construction business				Cost of all materials distributed by kind	Amount	Per cent of—		Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>					
			Total cost	Cost of all distributed materials							Total cost	Cost of all distributed materials							
<b>SCRANTON—Continued</b>																			
<i>Roofing and sheet metal—Continued</i>																			
Subcontractors—Continued.																			
Roofing and sheet-metal work.....	Dollars	Dollars				Dollars													
work.....	95,055	95,055	89.0	100.0	293,431	100.0													
Roofing.....	75,055	75,055	70.3	100.0	233,431	100.0													
Sheet-metal work.....	20,000	20,000	18.7	100.0	60,000	100.0													
<i>Heating and ventilating equipment<sup>10</sup></i>																			
All classes.....	1,214,630	164,988	100.0	13.0	3,882,102	70.5													
General contractors.....	4 578,160	578	.4	.1	2,386,655	67.7													
Building.....	4 361,707	578	.4	.2	1,640,545	59.6													
Building not specialized.....	337,799	578	.4	.2	1,565,954	57.1													
Subcontractors.....	4 636,470	164,410	99.6	25.8	1,495,447	97.9													
Heating and plumbing.....	323,759	164,410	99.6	50.8	653,808	99.6													
Heating and piping.....	133,549	103,448	62.7	77.5	199,360	98.5													
Plumbing.....	135,661	36,066	21.9	26.6	321,975	100.0													
Plumbing and heating combined.....	54,549	24,806	15.1	45.6	132,473	100.0													
<i>Plumbing and gas fitting equipment<sup>10</sup></i>																			
All classes.....	1,214,630	120,128	100.0	10.6	3,882,102	79.5													
General contractors.....	4 578,160	418	.3	.1	2,386,655	67.7													
Building.....	4 361,707	418	.3	.1	1,640,545	59.6													
Building not specialized.....	337,799	418	.3	.1	1,565,954	57.1													
<b>SCRANTON—Continued</b>																			
<i>Plumbing and gas fitting equipment—Continued</i>																			
Subcontractors.....	Dollars	Dollars																	
Heating and plumbing.....	4 636,470	128,710	69.7	20.2	1,495,447	97.9													
Heating and piping.....	323,759	128,710	69.7	39.8	653,808	99.6													
Plumbing.....	133,549	20,101	15.6	15.1	199,360	98.5													
Plumbing and heating combined.....	135,661	83,373	64.0	61.5	321,975	100.0													
Plumbing and heating combined.....	54,549	25,236	19.5	46.3	132,473	100.0													
<i>Electrical appliances and supplies</i>																			
All classes.....	1,214,630	62,395	100.0	5.1	3,882,102	79.5													
General contractors.....	4 578,160	423	.7	.1	2,386,655	67.7													
Building.....	4 361,707	423	.7	.1	1,640,545	59.6													
Building not specialized.....	337,799	423	.7	.1	1,565,954	57.1													
Subcontractors.....	4 636,470	61,972	99.3	9.7	1,495,447	97.9													
Electrical.....	54,500	54,500	87.3	100.0	70,500	100.0													
Heating and plumbing.....	4 323,759	7,472	12.0	2.3	653,808	99.6													
Plumbing.....	135,661	7,472	12.0	5.5	321,975	100.0													
<i>Bituminous paving materials</i>																			
All classes.....	1,214,630	23,098	100.0	1.9	3,882,102	79.5													
General contractors.....	4 578,160	23,098	100.0	4.0	2,386,655	67.7													
Highway.....	216,453	23,098	100.0	10.7	746,110	85.9													

<sup>1</sup> Based upon the difference between the total value of all construction work reported and the value of subcontract work let.  
<sup>2</sup> Includes operative builders.  
<sup>3</sup> Less than one-tenth of 1 per cent.  
<sup>4</sup> Includes cost of materials reported by establishments which did not include designated material in their distributed lists.  
<sup>5</sup> Includes construction work reported by establishments which did not include the designated material in their distributed lists.  
<sup>6</sup> Includes cost of materials reported by operative builders who did not include the designated material in their distributed lists.  
<sup>7</sup> Includes construction work reported by operative builders who did not include the designated material in their distributed lists.  
<sup>8</sup> Includes cost of materials reported by subcontracting establishments which did not include the designated material in their distributed lists.  
<sup>9</sup> Includes construction work reported by subcontracting establishments which did not include the designated material in their distributed lists.  
<sup>10</sup> See footnote 5 of Table 9, on p. 1065.  
<sup>11</sup> See footnote 6 of Table 9, on p. 1065.

TABLE 11.—COST OF MATERIAL FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929

[This table is made up in three sections, the second section begins on p. 1083, the third section on p. 1086]

CLASSIFICATION OF ESTABLISHMENTS	Total cost of all materials		COST OF ALL MATERIALS DISTRIBUTED BY KIND		Sand, gravel, crushed stone, slag, cinders, etc.	Brick (face, common, fire, paving, etc.)	Tile (fire-proofing)	Tile, facing, terra cotta, floor, and wall	Concrete and cinder block	Cut stone, granite and marble	Rip-rap, rubble, etc.	Cement	Lime	Plaster, etc.	Structural steel
	Amount	Per cent of total	Amount	Per cent of total											
<b>PENNSYLVANIA.</b>															
	Dollars	Dollars	76.8	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
	185,074,787	141,768,691		12,732,216	6,932,504	1,018,658	1,842,742	1,437,230	5,251,228	341,742	9,942,908	589,693	1,179,684	20,981,024	
Operative builders	1,383,521	960,774	69.4	52,815	121,914	2,124	4,803	31,527	11,408		1,039	11,758	4,043	7,652	13,915
General contractors	108,663,639	81,283,674	74.5	11,062,476	3,860,248	571,854	414,770	1,159,072	3,005,289	258,505	8,794,261	219,717	301,710	14,752,546	
Building	63,534,004	44,677,882	70.3	3,040,858	2,897,485	553,238	407,044	706,569	2,159,777	96,137	3,070,782	180,860	293,229	3,751,047	
Building not specialized	54,240,507	41,515,916	76.5	3,766,176	2,709,108	543,010	380,685	595,631	2,085,303	87,835	2,970,654	167,200	217,662	3,648,671	
Manufacturing building only	483,476	330,841	68.4	55,016	15,814	4,000	7,250	3,154	733		9,105	1,141	104	17,145	
Residential building only	3,789,796	152,842	4.0	440	33,825			676			30,010	468	231	37,465	
Highway	5,020,225	2,678,283	53.3	119,228	133,958		10,628	19,109	107,208	73,741	8,302	69,113	11,091	75,232	47,766
Bridge and culvert	12,204,537	9,065,958	74.3	3,066,032	103,487			159,209	73,750		2,833,587	4,065	0,221	73,888	
Grading	9,488,925	9,427,101	99.3	483,600	43,713			19,140	147,206	1,000	290,378	2,057		7,765,675	
Street paving	240,407	174,457	72.5	88,701	1,050			1,885	50		25,389	16,537		2,900	
Sewer, gas, water, conduit	6,956,061	5,405,310	77.7	1,713,490	610,449	5,913		194,733	136,327	65,285	1,205,524	22		30,001	
Dam and reservoir	2,256,111	1,608,505	71.3	424,464	66,978	4,700		8,661	0,900		290,833	1,224	225	18,102	
Waterworks	16,374	16,374	100.0	4,038							4,588			409	
Drading, river, harbor, etc.	1,030,080	1,015,412	94.0	101,633	63,625					5,000	86,780	1,271		21,665	
Railroad	3,413,104	3,249,692	95.2	475,302	37,244	3,003	1,853	685	184,075	67,103	475,805	9,750	2,041	414,764	
Foundation	5,809,953	3,650,170	62.8	420,744	25,720			25,488	0,768		367,376			1,739,534	
Air transport work	834,701	561,108	67.2	68,546	3,939			3,602	284,427	23,475	73,380	2,722		11,600	
Subway (other than buildings)	167,000	167,000	100.0	15,000				40,000							
Telephone line and system	1,628,316	1,628,316	100.0	182,921	2,563									921,941	
Telephone line and system	1,030,976	636,389	61.7	77,137	9,985						42,883				
Subcontractors	175,027,627	59,514,143	79.3	1,616,925	1,944,342	444,680	1,423,109	245,731	2,234,520	82,108	1,136,890	305,333	870,316	6,224,563	
Carpentering and wood flooring	1,712,017	1,102,697	64.4	2,078	1,356			71,194	1,270		1,743	1,135	744	214	
Concrete	2,533,995	1,822,974	71.9	651,049	20,802	520		400	36,183	12,635	466,207	40,961	15	2,640	
Electrical	6,765,299	6,630,269	98.0	250	2,226						774			6,395	
Elevator construction	4,290,943	4,176,250	97.3	200							150			60,676	
Heating and plumbing	27,006,913	18,306,284	68.0	4,702	23,393			700	500	160	5,163	96	20	40,059	
Heating and piping	9,138,725	6,248,824	68.4	1,098	23,270						2,346	87	10	40,059	
Pipe covering	671,050	671,050	100.0												
Plumbing	8,186,314	6,419,582	78.4	3,107	117			600	500	160	2,436	4	10		
Plumbing and heating combined	5,754,874	1,770,878	30.8	497				100				351	5		
Automatic temperature control	283,497	283,497	100.0												
Automatic sprinkler system	2,972,453	2,972,453	100.0												
Masonry	4,481,191	3,656,140	81.6	499,289	1,829,718	322,901	71,251	191,459	85,790	43,786	340,050	150,251	1,706	2,089	
Painting and decorating	2,187,153	2,046,326	94.9											850	
Glass and glazing	850,514	620,514	74.7												
Plastering and lathing	1,093,880	1,511,953	89.3	98,830				133			35,467	134,061	824,638		
Roofing and sheet-metal work	6,909,388	5,704,072	82.6	88,775		1,231	8,587				22,475			26,020	59,090
Roofing	3,594,718	3,293,449	91.6	88,375		1,231	8,202				22,439			23,020	
Sheet-metal work	1,564,790	1,238,977	79.2												
Roofing and sheet metal combined	1,749,880	1,171,046	67.0	400			385				36				59,080
Steel erection	6,920,294	6,051,276	87.4	19,800	20,000						21,857			5,082,668	
Stonework	1,605,701	1,472,973	91.7	89,064	22,569	2,132	1,133	8,576	1,105,249	37,122	103,041	8,824	14,467	105	
Marble and tiling	3,802,846	2,734,115	71.9	91,217	1,186	117,896	1,269,364	1,570	1,030,695		57,996	22,203	1,801		
Wrecking	10,275	10,275	100.0												
Excavating	176,837	121,941	69.0	43,031	22,692			6,173			1,200	16,476	5,934	341	
Ornamental iron	1,215,185	865,578	71.2	2,428							180	10	5	142,104	
Highway	11,000	11,000	100.0												
Grading	6,500	6,500	100.0												
Sewer, gas, water, conduit	10,585	10,585	100.0	3,860	400						2,125				
Soundproofing	1,129,787	1,078,126	95.0	10,512							52,986	968			
Metal work, n. e. s.	1,433,456	1,317,029	91.9	1,409										225,192	
Rental of equipment, trucking, etc.	10,481	10,481	100.0	4,431							1,200				
Flooring, n. e. s.	210,910	191,189	90.6				407								
<b>ERIE.</b>															
	2,895,668	2,352,485	81.2	178,017	97,192	17,087	35,389	51,415	336,599		230,121	18,300	29,514	56,843	
General contractors	2,264,823	1,835,798	81.1	171,502	95,760	17,087	15,389	43,417	324,182		224,240	17,123	22,464	56,085	
Building	1,571,039	1,304,342	83.0	63,890	91,382	17,087	15,389	43,417	322,476		101,524	16,462	22,359	56,085	
Building not specialized	1,304,650	1,061,903	81.4	56,010	78,382	16,807	14,639	25,455	322,476		99,192	13,802	21,018	48,620	
Manufacturing building only	24,254	24,254	100.0	440	3,825			576			910	468	231	2,465	
Residential building only	242,185	218,185	90.1	7,440	9,175	280	750	17,386			1,422	2,192	1,000	5,000	
Highway	455,080	292,802	64.3	67,551							50,853				
Grading	40,588	40,588	100.0	19,332	546						5,534	661			
Street paving	79,377	79,377	100.0	13,084	2,401				1,706		23,788				
Sewer, gas, water, conduit	118,689	118,689	100.0	7,145	1,431						42,661			125	
Subcontractors	605,354	516,687	85.4	6,515	1,432		20,000	7,998	12,417		5,881	1,177	7,050	858	
Electrical	79,032	79,032	100.0												
Heating and plumbing	340,192	264,525	77.8												
Heating and piping	149,940	96,068	64.1												
Plumbing	133,052	111,257	83.6												
Plumbing and heating combined	57,200	57,200	100.0												
Masonry	18,788	18,788	100.0	2,015	1,132			7,998	417		3,506	457		858	
Painting and decorating	19,041	19,041	100.0												
Plastering and lathing	17,000	17,000	100.0	1,500										7,000	
Roofing and sheet metal work	78,656	78,656	100.0												
Roofing	57,323	57,323	100.0												
Sheet-metal work	21,333	21,333	100.0												
Marble and tiling	52,645	39,645	75.3	3,000	300		20,000		12,000		2,375	720		50	

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TABLE 11.—COST OF MATERIAL FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929—Con.

CLASSIFICATION OF ESTABLISHMENTS	Total cost of all materials	COST OF ALL MATERIALS DISTRIBUTED BY KIND		Sand, gravel, crushed stone, slag, cinders, etc.	Brick (face, common, fire, paving, etc.)	Tile (fire-proofing)	Tile, facing, terra cotta, floor, and wall	Concrete and cinder block	Cut stone, granite and marble	Rip-rap, rubble, etc.	Cement	Lime	Plaster, etc.	Structural steel
		Amount	Per cent of total											
<b>PHILADELPHIA</b>	<b>Dollars 83,416,801</b>	<b>Dollars 73,671,939</b>	<b>88.2</b>	<b>Dollars 5,873,802</b>	<b>Dollars 3,261,136</b>	<b>Dollars 721,644</b>	<b>Dollars 867,138</b>	<b>Dollars 585,295</b>	<b>Dollars 3,186,270</b>	<b>Dollars 131,681</b>	<b>Dollars 3,949,622</b>	<b>Dollars 349,289</b>	<b>Dollars 609,748</b>	<b>Dollars 18,797,361</b>
Operative builders	443,104	428,104	96.6	31,983	61,441			7,266	9,703		2,078	636		8,368
General contractors	43,471,563	39,625,583	91.2	4,706,233	1,772,895	325,039	171,765	418,163	1,416,749	110,481	3,194,414	71,998	34,958	5,117,150
Building	28,030,241	25,503,549	91.0	2,412,340	1,481,369	317,539	164,460	92,534	1,043,135	20,936	1,805,629	47,443	32,958	1,744,506
Building not specialized	27,075,641	24,698,911	91.2	2,353,136	1,435,833	316,355	158,110	89,534	1,042,660	20,936	1,772,119	46,775	9,280	1,691,029
Commercial building only	261,823	261,823	100.0	49,820	3,402	1,184	6,350	3,000	475		3,400	678	104	4,900
Manufacturing building only	156,954	120,000	76.5		35,000						30,000			35,000
Residential building only	535,823	422,815	78.9	0,393	7,074						110	90	23,568	13,577
Highway	1,385,069	1,254,885	90.6	191,286	17,869			108,962	43,054		116,345	1,555		24,412
Bridge and culvert	2,911,844	2,911,844	100.0	317,813	14,764		5,583		1,210	1,000	102,668			2,234,867
Grading	82,586	21,086	25.5		2,362						2,887	15,837		
Street paving	2,759,703	1,939,710	70.3	579,201	76,569			190,366	22,249	83	368,188	13		
Sewer, gas, water, conduit	944,967	929,967	98.4	285,115	42,823	4,500			9,900	500	134,840			5,212
Waterworks	871,558	800,800	92.6	51,633	63,625						26,786	1,271		21,664
Dredging, river, harbor, etc.	2,000,481	1,837,069	91.8	105,122	34,004	3,000	1,722	313	3,000	64,487	187,993	3,667	2,000	137,245
Railroad	1,674,454	1,609,923	96.1	370,028	25,720			25,488	9,768		338,626			15,703
Foundation	545,955	545,955	100.0	65,266	3,604				284,427	23,475	67,599	2,222		11,600
Subway (other than buildings)	1,628,316	1,628,316	100.0	182,921	2,563									921,941
Telephone line and system	636,389	636,389	100.0	77,137	9,985						42,883			
Subcontractors	30,562,134	33,518,261	84.9	1,135,586	1,410,800	306,605	695,368	139,806	1,759,824	21,200	753,130	276,655	574,790	1,671,843
Carpentering and wood flooring	1,408,461	1,064,804	75.6	1,100	1,280		71,061	1,270			1,110	1,090	509	20
Concreting	1,237,269	1,237,269	100.0	460,150	17,014	20	400	30	11,835		291,713	40,419		2,640
Electrical	3,251,466	3,216,466	98.9	150	2,226						744			9,395
Elevator construction	3,543,028	3,543,028	100.0	200							150			50,000
Heating and plumbing	13,428,719	9,787,001	72.9	3,601	9,962		500	500	160		2,760	91		5,200
Heating and piping	4,890,654	3,156,609	64.5	605	9,800						600	80		5,200
Pipe covering	196,208	196,208	100.0											
Plumbing	3,194,175	2,600,623	81.4	2,066	102		500	500	160		2,100	5		
Plumbing and heating combined	1,041,019	627,798	60.3											
Automatic temperature control	234,310	234,310	100.0											
Automatic sprinkler system	2,972,453	2,972,453	100.0											
Masonry	3,310,830	2,790,769	84.3	411,002	1,370,945	288,610	49,256	128,368	70,851		281,328	125,700	250	150
Painting and decorating	1,615,813	1,604,071	99.3											
Glass and glazing	639,514	639,514	100.0								0,934	88,099	531,077	
Plastering and lathing	871,053	824,563	94.7	39,887										
Roofing and sheet-metal work	2,456,139	1,893,462	77.1	85,733		1,000					20,998		26,020	
Roofing	967,220	956,020	98.8	85,433		1,000					20,976		26,020	
Sheet-metal work	711,436	550,900	77.4											
Roofing and sheet metal combined	777,482	377,482	48.6	300										
Steel erection	1,540,818	1,415,367	91.9								22			1,303,072
Stonework	1,221,106	1,213,378	99.4	41,663	2,920	1,230		3,403	1,003,299	20,000	56,240	4,700	14,271	
Marble and tiling	1,866,602	1,510,404	80.9	35,295	394	105,733	674,151	1,305	673,679		26,826	9,534	1,748	
Wrecking	10,275	10,275	100.0											
Excavating	110,491	93,291	84.4	36,772	11,219			5,000		1,200	13,767	5,934		341
Ornamental iron	714,837	491,395	68.8	2,103							76	10		119,613
Grading	6,500	6,500	100.0								49,533	958		
Soundproofing	997,793	997,793	100.0	16,612										181,412
Metal work, n. o. s.	1,250,233	1,186,233	94.9	1,409										
Flooring, n. o. s.	121,438	101,708	83.8											
<b>PITTSBURGH</b>	<b>34,577,777</b>	<b>22,451,950</b>	<b>64.9</b>	<b>Dollars 1,537,157</b>	<b>Dollars 655,620</b>	<b>Dollars 73,072</b>	<b>Dollars 305,770</b>	<b>Dollars 209,451</b>	<b>Dollars 585,835</b>	<b>Dollars 61,523</b>	<b>Dollars 1,397,050</b>	<b>Dollars 46,500</b>	<b>Dollars 56,014</b>	<b>Dollars 6,802,175</b>
Operative builders	110,137	19,327	17.5	500	1,448	440		2,520		38	423	219	260	
General contractors	21,980,212	12,590,183	57.3	1,435,563	410,451	66,107	72,119	167,575	381,597	61,485	1,320,789	20,680	16,066	5,332,508
Building	11,322,653	4,924,256	43.5	493,025	245,853	66,107	72,119	112,306	119,444	15,735	445,375	18,040	16,066	1,165,211
Building not specialized	6,828,674	4,750,274	69.6	481,827	227,867	63,152	72,119	103,492	113,970	15,735	440,577	16,675	16,491	1,162,375
Commercial building only	109,530	19,530	17.8	2,210	4,555			154			1,194	413		1,245
Residential building only	784,143	154,446	19.7	8,988	13,901	2,955		8,750	5,446		3,604	952	176	1,591
Highway	1,600,234	1,204,808	75.3	398,768	13,202				30,705		459,610			33,757
Bridge and culvert	4,675,538	4,675,538	100.0	46,835	3,818			14,140	145,966		75,845	2,640		4,125,523
Grading	17,681	17,681	100.0	10,764										
Street paving	1,299,657	977,150	75.2	339,551	137,903				85,452	40,750	100,210			3,456
Sewer, gas, water, conduit	427,064	267,064	62.5	55,288	9,675			1,039			65,170			250
Waterworks	208,522	208,522	100.0	50,000							60,000			
Dredging, river, harbor, etc.	148,164	148,164	100.0	35,052							24,279			4,311
Air transport work	167,000	167,000	100.0	15,000				40,000						
Subcontractors	12,487,428	9,842,440	78.8	101,094	243,721	6,525	233,651	39,356	154,238		75,838	25,601	39,088	1,469,667
Carpentering and wood flooring	236,541	5,954	2.5											
Concreting	1,541,965	219,051	14.2	34,111	2,550	500		30,608	800		31,600			
Electrical	1,233,044	1,233,044	100.0											10,676
Elevator construction	669,222	633,222	94.6											
Heating and plumbing	3,124,728	2,609,752	83.5											
Heating and piping	638,206	536,473	84.1											
Plumbing	1,866,649	1,749,752	93.7											
Plumbing and heating combined	570,686	274,340	48.1											
Automatic temperature control	49,187	49,187	100.0											

See footnotes on p. 1082.

TABLE 11.—COST OF MATERIAL FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929—Con.

CLASSIFICATION OF ESTABLISHMENTS	Total cost of all materials	COST OF ALL MATERIALS DISTRIBUTED BY KIND		Sand, gravel, crushed stone, slag, cinders, etc.	Brick (face, common, fire, paving, etc.)	Tile (fire-proofing)	Tile, facing, terra cotta, floor, and wall	Concrete and cinder block	Cut stone, granite and marble	Rip-rap, rubble, etc.	Cement	Lime	Plaster, etc.	Structural steel
		Amount	Per cent of total											
<b>PITTSBURGH—Continued</b>														
<b>Subcontractors—Continued.</b>														
Masonry	Dollars 367,815	Dollars 250,365	68.2	Dollars 3,040	Dollars 221,086	Dollars 5,794		Dollars 8,758	Dollars 423		Dollars 0,217	Dollars 2,533		Dollars 268
Painting and decorating	217,967	189,228	86.8											
Glass and glazing	244,000	34,000	13.9											
Plastering and lathing	156,257	133,875	85.7	25,893										
Roofing and sheet-metal work	2,177,596	2,013,596	92.5	2,123		231	133				3,256	10,440	39,085	
Roofing	1,683,919	1,593,919	94.7	2,123		231	8,202				1,403			
Sheet-metal work	816,704	298,704	36.6				8,202				1,463			
Roofing and sheet metal combined	177,973	120,973	68.0											
Steel erection	1,701,467	1,659,388	97.5	19,800	20,000						20,900			1,414,943
Stonework	73,500	18,500	25.2	2,000					15,000			1,500		
Marble and tiling	850,581	420,081	49.4	14,157	85		225,316		188,015		8,949	2,128	3	
Ornamental iron	228,964	183,225	80.0											
Highway	11,000	11,000	100.0											
Soundproofing	181,994	75,333	41.4								3,453			
Metal work, n. e. s.	183,223	131,396	71.7											43,789
Flooring, n. e. s.	22,430	22,430	100.0											
<b>READING</b>	<b>4,515,129</b>	<b>2,305,315</b>	<b>51.1</b>	<b>145,580</b>	<b>88,624</b>	<b>14,801</b>	<b>67,817</b>	<b>29,185</b>	<b>26,605</b>	<b>1,001</b>	<b>70,365</b>	<b>14,868</b>	<b>19,784</b>	<b>94,183</b>
<b>Operative builders</b>														
	200,347	152,724	76.2	9,040	21,064	657	4,040	9,512	194	1,001	4,883	1,704	1,505	1,470
<b>General contractors</b>														
Building	1,866,771	833,002	44.6	113,848	67,160	14,144	3,450	19,673	5,486		49,355	7,043	10,578	92,707
Building not specialized	1,428,443	700,664	49.1	55,814	67,160	14,144	3,450	19,673	5,486		48,804	7,011	10,578	92,238
Residential building only	1,808,776	649,847	35.9	64,714	63,200	12,894	3,450	12,073	5,486		43,406	6,081	10,040	91,823
Highway	119,667	50,817	42.5	1,100	3,960	1,250		7,000			368	380	520	415
Grading	114,239	114,239	100.0	51,250										
Dam and reservoir	12,747	12,747	100.0	3,621										
	11,342	11,342	100.0	3,163										469
<b>Subcontractors</b>														
Concrete	7,852,011	1,313,599	16.8	22,092	400		60,327		20,925		16,127	6,121	7,701	
Electrical	22,096	22,096	100.0	9,700							11,030			
Heating and plumbing	462,546	462,546	100.0											
Heating and piping	760,956	515,119	67.7								30		10	
Plumbing	247,387	216,436	87.5											
Painting and decorating	301,683	301,683	100.0								30		10	
Plastering and lathing	36,275	36,275	100.0											
Roofing and sheet-metal work	25,612	25,612	100.0	2,874							293	5,796	7,601	
Roofing	180,832	100,832	55.8	100										
Sheet-metal work	122,918	87,918	71.5	100										
Marble and tiling	32,914	12,914	39.2											
Ornamental iron	97,534	97,534	100.0	6,168			60,327		20,925		2,049	325		
Sewer, gas, water, conduit	40,000	40,000	100.0	3,860	400						2,125			
	10,585	10,585	100.0											
<b>SCRANTON</b>	<b>1,661,418</b>	<b>1,214,630</b>	<b>73.1</b>	<b>156,256</b>	<b>32,006</b>	<b>8,952</b>	<b>3,613</b>	<b>2,849</b>	<b>31,986</b>	<b>500</b>	<b>96,403</b>	<b>3,066</b>	<b>26,289</b>	<b>12,292</b>
<b>General contractors</b>														
Building	1,877,198	578,160	30.8	109,836	32,006	8,952	3,613	2,849	6,827	500	67,778	3,013	9,867	12,292
Building not specialized	1,608,409	361,707	22.5	23,589	27,117	8,952	3,613	2,849	6,827	500	18,080	3,013	9,867	12,292
Residential building only	506,112	337,799	66.7	21,359	26,376	8,952	3,613	1,693	6,827	500	15,138	2,713	7,217	12,292
Highway	78,673	23,908	30.4	2,230	741			1,156			2,948	300	2,650	
	216,453	216,453	100.0	86,247	4,888						40,692			
<b>Subcontractors</b>														
Concrete	784,225	636,470	81.2	46,420					25,159		28,625	53	16,402	
Electrical	120,191	120,191	100.0	46,420							28,625	53		
Heating and plumbing	68,500	54,500	79.6											
Heating and piping	368,007	323,759	88.0											
Plumbing	133,549	133,549	100.0											
Roofing and sheet-metal work	179,909	135,661	75.4											
Roofing	54,549	54,549	100.0											
Plastering and lathing	28,864	17,806	61.7											16,402
Sheet-metal work	110,055	95,055	86.4											
Roofing	90,055	75,055	83.3											
Sheet-metal work	20,000	20,000	100.0											
Stonework	25,159	25,159	100.0						25,159					

Certain establishments did not give a distribution of the cost of their materials by separate items. Amounts reported by such establishments engaged in the following lines of work have been included as indicated in figures shown for "Total cost of all materials":

- <sup>1</sup> Street paving \$17,507; miscellaneous, n. e. s., \$85,000.
- <sup>2</sup> Operative builders, \$25,491.
- <sup>3</sup> Railroad, \$1,907,274; foundation, \$206,425.
- <sup>4</sup> Manufacturing building only, \$3,600,000.
- <sup>5</sup> Excavating, \$10,634.
- <sup>6</sup> Sewer, gas, water, conduit, \$300,000.
- <sup>7</sup> Elevator construction, \$66,407.
- <sup>8</sup> Plumbing and heating combined, \$211,886.
- <sup>9</sup> Roofing and sheet metal combined, \$25,000.
- <sup>10</sup> Street paving, \$52,331.
- <sup>11</sup> Commercial building, \$29,624.
- <sup>12</sup> Carpentering and wood flooring, \$25,000; painting and decorating \$17,200; ornamental iron, \$21,249.
- <sup>13</sup> See footnote 5 of Table 9, on p. 1065.
- <sup>14</sup> See footnote 6 of Table 9, on p. 1065.

<sup>15</sup> Includes the reported cost of cast forms, beads, etc.; chemical and chemical products; sealing materials; and miscellaneous, n. e. s. For total cost of these items see Table 9.



CONSTRUCTION—PENNSYLVANIA

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TABLE 11.—COST OF MATERIAL FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929—Con.

CLASSIFICATION OF ESTABLISHMENTS	Reinforcing steel	Cast iron, miscellaneous excluding pipe	Metal doors, windows, and trim	Metal and wire lath and furring	Orna-mental metal work	Lumber, rough and finished	Laths, shingles, and shakes	Mill-work	Compo-sition board	Water-proofing materials	Hard-ware, rough and finished	Paints, var-nishes, and glass	Roofing and sheet metal	Fin-ished floor-ing, n. e. s.	Screens, shades, awn-ings, etc.	Heating and ven-tilating equip-ment
	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
<b>PENNSYLVANIA</b>	3,617,464	648,410	1,560,761	357,429	980,148	8,854,892	300,298	3,901,400	1,508,509	347,368	1,624,772	3,367,868	6,666,010	421,309	266,605	9,558,308
Operative builders	469	1,110	10,594	493	1,790	312,751	11,886	190,976	3,310	132	42,538	15,001	10,868	3,144	8,814	21,903
General contractors	3,229,396	531,880	606,711	100,442	276,971	7,561,150	200,918	3,360,180	316,358	197,272	1,465,446	622,223	686,373	225,068	41,857	1,006,033
Building	1,646,032	409,185	570,659	105,438	245,027	6,268,051	200,481	3,367,379	297,495	97,290	1,183,226	457,185	631,940	223,390	41,632	1,007,630
Building not specialized	1,636,242	408,002	530,407	95,659	232,873	5,236,136	150,611	2,869,073	264,807	80,647	1,038,002	385,550	566,147	203,752	20,838	927,277
Commercial building only	1,738		2,398	923	946	134,152	18,929	36,593	240	902	6,338	3,038	3,245	504		4,400
Manufacturing building only	729		5,830	340		22,048		675	537		7,925	400				
Residential building only	8,323	1,123	23,024	8,510	11,208	875,115	30,941	401,038	31,911	6,741	130,901	68,197	62,545	19,134	14,794	75,969
Highway	775,645	3,259	1,500		2,434	191,374		3,053	792	25,000	30,436	3,130	1,208			
Bridge and culvert	128,242		20,145		8,784	150,562	50	7,300		8,007	25,770	107,595	3,000		225	
Grading	1,650		50	225		2,943		690	325	48	377	405				
Street paving	136,451	20,976	15			61,203	10	200		5,618	13,618	1,062	040	100		1,400
Sewer, gas, water, conduit	104,523	13,304				137,302	100	200		1,800	7,590	680	150	45		550
Dam and reservoir	686	142				2,934					778					
Waterworks	20,000	7,111				55,553				3,000		3,701				
Dredging, river, harbor, etc.	161,027	67,012	14,072	779	1,520	304,307	277	11,364	17,740	10,301	125,357	15,033	21,621	133		88,508
Railroad	102,439	5,341	270		19,200	130,877				10,170	33,247	28,471		1,400		
Foundation	16,849	3,010				18,940				4,138	35,814		1,400			
Air transport work	91,000					10,000					1,000					10,000
Subway (other than build-ings)	128,640	3,540				177,508				15,025		4,325	26,371			7,939
Telephone line and system	18,382					34,745					3,266					
Subcontractors	287,590	115,420	943,456	250,494	701,387	981,082	87,492	311,238	1,188,841	140,062	110,788	2,730,634	4,988,709	193,007	214,934	8,470,372
Carpentering and wood flooring		28	26,000	1,800	2,814	657,664	5,925	232,181	1,089	12	27,795	23,558	42	8,213	7,927	
Concreting	150,903	12,972	200	300		143,853		25,704	50	44,855	14,609	47,540	4,151			
Electrical		1,916							10,883		200	53				750
Elevator construction		14,874		12,500		7,849					32,316	13,509	240			2,400
Heating and plumbing	100	22,211	364	1,200	1,000	3,592	4,230		121,731	1,708	1,692	7,000	187,865		8,9	163,637
Heating and piping	100	15,635		1,200	1,000	2,097	4,230		2,573		20	667	91,552		84	923,288
Pipe covering				1,000					86,058	1,000		5,000	6,900			565,492
Plumbing		2,000	100	200		1,165			30,100	700	1,612	1,480	56,893			1,096,027
Plumbing and heating combined		4,576	264			300				3	100	519	30,220			695,333
Automatic temperature control																283,497
Masonry	8,043	1,576	159	328	358	24,035	310	5,705	22,814	5,043	3,738	3,200	401			
Painting and decorating						55,000		482			5,000	1,062,780	6,500	2,230	3,511	311
Glass and glazing	2,100			40,842							557,572					
Plastering and lathing	300		177,797	5,800		8,748	61,411		54,770	10,099	942	80,647				
Roofing and sheet-metal work	13,530		92,306	7,800	20,770	5,707	276		98,192	64,744	2,086	44,302	1,652,369			270,717
Roofing	13,530					5,707	276		97,692	51,307	1,899	21,125	2,805,461			108,486
Sheet-metal work			92,306	7,800	24,000					13,337	1,897	22,130	1,000,295			75,325
Roofing and sheet metal combined					5,770				500	100		1,047	846,613			95,090
Steel erection	30,300	27,727	13,837		15,018	3,208					3,992	57,045	18,279			
Stonework	61,121		173		801	1,558	287	450	1,248	1,480	1,266	875	2,816	140		
Marble and tiling	1,750	1,172	2,631	6,927	3,111	1,311	15,053	1,210	114	22	3,375		5,062	27,200	24	2,505
Wrecking						10,275										
Excavating	2,543		170			16,377						167				
Ornamental iron	100	30,394	3,000	1,000	642,315						8,670	3,889	3,500			
Highway						2,500						5,000				
Grading																
Sewer, gas, water, conduit		2,380														
Soundproofing						24,210		45,500	877,352	1,344	1,800	5,291	18,897	6,024		21,052
Metal work, n. e. s.			804,206			15,000			4,760	4,300	3,000			203,464		
Rental of equipment, truck-ing, etc.	1,800					500										
Flooring, n. e. s.										15,000			8,000	149,180		
<b>ERIE</b>	84,508	10,872	12,653	6,100	6,202	141,416	10,853	104,490	13,759	6,075	32,428	68,447	80,695	10,944	987	128,818
General contractors	84,508	10,872	12,614	1,100	3,102	139,850	10,853	104,490	13,759	6,075	31,878	44,045	9,584	9,744	987	12,183
Building	67,672	9,044	12,614	1,100	3,102	134,324	10,853	104,490	13,759	6,075	31,878	44,045	9,584	9,744	987	12,183
Building not specialized	56,843	9,044	11,684	260	3,102	69,615	1,983	99,666	3,222	1,965	28,412	20,045	6,134	8,094	867	4,483
Manufacturing building only	720		830	340		6,109		675	537		870	400				
Residential building only				510		65,700	8,870	4,150	10,000	4,110	2,590	23,600	3,460	1,650	120	7,700
Highway	22,536					3,357										
Street paving		1,485														
Sewer, gas, water, conduit	4,400	343				2,175										
Subcontractors			139	5,000	3,100	1,560					550	19,402	71,101	1,200		110,635
Heating and plumbing																108,885
Heating and piping																59,991
Plumbing																25,394
Plumbing and heating combined																23,500
Masonry			139			1,560					150	381	195			
Painting and decorating												19,041				
Plastering and lathing				5,000	3,100						400					
Roofing and sheet-metal work																
Roofing													70,000			7,750
Sheet-metal work													49,573			7,750
Marble and tiling													21,333			

TABLE 11.—COST OF MATERIAL FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929—Con.

CLASSIFICATION OF ESTABLISHMENTS	Reinforcing steel	Cast iron, miscellaneous excluding pipe	Metal doors, windows, and trim	Metal and wire lath and furring	Ornamental metal work	Lumber, rough and finished	Laths, shingles, and shakes	Mill-work	Composition board	Water-proofing materials	Hardware, rough and finished	Paints, varnishes, and glass	Roofing and sheet metal	Finished flooring, n. e. s.	Screens, shades, awnings, etc.	Heating and ventilating equipment
	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
<b>PHILADELPHIA</b>	1,821,852	508,659	1,014,803	175,085	480,488	4,697,413	127,203	1,500,694	1,185,612	206,417	895,432	2,305,674	1,925,588	183,564	214,108	4,707,177
Operative builders	24	1,110	9,769	290	139,396	7,042	105,222	68	132	18,011	5,616	27	1,815	309	706	194
General contractors	1,578,645	437,570	237,234	8,199	143,993	3,624,217	91,221	1,107,038	158,019	96,508	778,648	171,559	307,895	97,321	11,435	706,194
Building	1,106,954	351,420	223,433	7,420	114,483	2,688,978	91,097	1,097,614	140,434	30,339	563,746	105,789	287,980	95,921	11,210	660,925
Building not specialized	1,103,407	351,420	213,415	5,390	112,792	2,398,195	68,049	948,175	139,934	35,141	510,953	104,124	284,220	95,067	9,217	654,086
Commercial building only	630		1,418	900	691	129,819	18,807	28,731		902	5,288	500		504		
Manufacturing building only			5,000			10,000					5,000					
Residential building only	1,917		3,600	1,130	1,000	180,994	4,241	120,708	500	296	36,505	1,165	3,700	350	1,903	6,839
Highway	73,867	893				74,638		587		10,291	8,691	248	596			
Bridge and culvert	32,287		348		8,784	104,402		300		5,719	15,202	38,840			225	
Street paving	7,713	6,489				7,159				1,095	2,815					
Sewer, gas, water, conduit	81,733	6,709				111,836					5,345					
Waterworks		7,111				50,553						45				
Dredging, river, harbor, etc.	36,778	55,436	13,183	779	1,520	231,628	124	8,537	17,585	4,703	105,522	14,239	21,543			37,330
Railroad	79,442	2,872	270		19,200	115,945				18,238	38,247	5,312		1,400		
Foundation	16,849	3,010				17,315				4,138	35,514		1,400			
Subway (other than buildings)	126,640	3,540				177,508				15,925		4,325	26,371			7,939
Telephone line and system	18,382					34,746					3,266					
Subcontractors	243,213	69,979	767,800	166,806	336,205	903,800	28,940	288,434	1,027,525	109,777	98,773	2,128,499	1,617,666	84,428	202,304	4,000,983
Carpentering and wood flooring		28	26,600	1,800	2,814	637,810	5,925	218,186	1,587		26,059	23,558	42	8,213	7,927	
Concreting	127,424	4,244	200	300		112,562		22,374	50	43,430	11,079	4,140				
Electrical		1,916							10,883			63				750
Elevator construction		281		12,500		4,380					20,777	13,197				2,400
Heating and plumbing	100	10,866	100	1,200	1,000	1,307			91,721	1,100	6,907		68,376		8,033	909
Heating and piping	100	4,400		1,000		297			2,573				40,030		8,207	339
Pipe covering				1,000					89,058	1,000		5,000				90,550
Plumbing		2,000	100	200		1,100			100	100	571	1,300	14,117			732,386
Plumbing and heating combined		4,466											4,723			219,224
Automatic temperature control																234,310
Masonry	149	750				11,891		1,089	22,516	4,532	487	1,598	45			
Painting and decorating						55,000		482			5,000	1,526,721	2,280	1,427		311
Glass and glazing	2,100		40,842									496,572				
Plastering and lathing			101,761	2,200		8,287	7,728		38,232	300		58				
Roofing and sheet-metal work	13,539		7,800	18,770		5,365			4,035	40,246	1,897	42,126	1,517,033			63,613
Roofing	13,539					5,365			4,035	37,646		19,976	648,265			50,365
Sheet-metal work			7,800	13,000						2,500	1,897	21,850	497,778			13,248
Roofing and sheet metal combined					5,770					100		300	370,990			
Steel erection	37,500	24,500	11,537		5,000	835					3,992	7,045	18,279			
Stonework	60,301					85	287					875				
Marble and tiling			2,311	693	2,788	661	15,000	803	112			2,541		13,227		
Wrecking						10,275										
Excavating	2,000					16,052										
Ornamental iron	100	27,394		303,633							8,670	2,679	1,560			
Grading											5,000					
Soundproofing						24,210		45,500	858,080		1,800					
Metal work, n. e. s.			727,052			15,000				4,760	4,300	3,000			193,002	
Flooring, n. e. s.										15,000			8,000	60,708		
<b>PITTSBURGH</b>	452,937	48,687	187,988	43,848	221,081	664,495	8,388	242,777	58,528	28,398	143,422	431,708	2,044,345	44,529	16,360	1,386,189
Operative builders			400	240		7,450		1,700	299		820	940	1,240		265	65
General contractors	443,083	23,747	90,052	5,380	19,218	634,455	860	240,534	19,830	26,154	133,607	117,716	167,012	15,075	5,609	207,910
Building	165,247	15,514	70,255	5,380	17,018	478,360	860	240,534	19,038	15,836	118,455	47,058	167,299	15,075	5,609	187,916
Building not specialized	164,202	15,160	67,030	4,980	16,313	419,511	747	213,158	18,366	15,676	109,932	44,449	167,299	15,075	4,852	195,070
Commercial building only	600		600	255		1,900	122	4,700	90		900	650				
Residential building only	545	394	2,725	400	450	56,859		22,076	532	160	7,623	1,959			757	2,843
Highway	129,957	1,414			2,200	67,407			792	7,149	3,083	1,276	613			
Bridge and culvert	20,599		10,797			9,108				172	7,636	67,725				
Street paving	15,930	4,380				20,882					67					
Sewer, gas, water, conduit	350	2,439				11,029					217					
Waterworks	20,000					5,000				3,000		1,000				
Dredging, river, harbor, etc.						32,671					3,249	657				
Air transport work	91,000					10,000					1,000					10,000
Subcontractors	9,854	24,920	97,474	38,028	201,843	22,590	7,499	543	38,397	2,244	8,995	313,052	1,875,108	28,554	10,486	1,178,205
Carpentering and wood flooring						5,272					682					
Concreting	7,804	8,148				10,338				600	1,400	43,400				
Elevator construction		14,593				3,469					5,539	312				
Heating and plumbing							4,230						1,806			1,047,000
Heating and piping							4,230						1,806			530,437
Plumbing																330,206
Plumbing and heating combined																137,170
Automatic temperature control																49,187

See footnotes on p. 1082.

CONSTRUCTION—PENNSYLVANIA

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TABLE 11.—COST OF MATERIAL FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929—Con.

CLASSIFICATION OF ESTABLISHMENTS	Reinforcing steel	Cast iron, miscellaneous excluding pipe	Metal doors, windows, and trim	Metal and wire lath and furring	Ornamental metal work	Lumber, rough and finished	Laths, shingles, and shakos	Mill-work	Composition board	Water-proofing materials	Hardware, rough and finished	Paints, varnishes, and glass	Roofing and sheet metal	Finished flooring, n. e. s.	Screens, shades, awnings, etc.	Heating and ventilating equipment
<b>PITTSBURGH—Contd.</b>																
Subcontractors—Continued.	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
Masonry		380						130		300	852	400	161			
Painting and decorating												177,672	6,500			
Glass and glazing												34,000				
Plastering and lathing	300			34,284		461	3,269		6,000		284	200				
Roofing and sheet-metal work			20,000		11,000	200			13,123			1,777	1,847,829			107,648
Roofing						200			13,123			1,000	1,522,006			45,571
Sheet-metal work			20,000		11,000							280	205,347			62,077
Roofing and sheet metal combined												497	120,476			
Steel erection		1,127			7,618							50,000				
Marble and tiling	1,750	672	320	3,744		350		413	2		238			100	24	2,505
Ornamental iron					183,225											
Highway						2,500										
Soundproofing									19,272	1,344		5,291	18,897	6,024		21,052
Metal work, n. e. s.			77,154											22,430	10,462	
Flooring, n. e. s.																
<b>READING</b>	8,504	4,304	11,171	8,215	47,145	190,329	19,207	86,914	11,896	1,592	28,298	48,682	114,342	10,674	3,371	280,360
Operative builders	55			60		38,742	2,625	24,495	2,151		3,582	1,911	4,316		776	9,100
General contractors	8,034	1,924	11,171	4,657	7,145	150,999	10,735	62,419	5,849	1,427	24,527	10,316	8,502	10,153	2,595	25,000
Building	7,693	1,782	11,171	4,657	7,145	148,470	10,735	62,419	5,849	1,427	23,752	10,316	8,502	10,153	2,595	25,000
Building not specialized	7,693	1,782	11,171	4,607	7,145	138,390	10,100	53,119	5,849	1,427	23,022	9,551	7,437	8,753	1,965	20,000
Residential building only				150		10,080	635	9,300			730	765	1,125	1,400	640	5,000
Grading						618										
Dam and reservoir	341	142				1,911					775					
Subcontractors	415	2,380		3,498	40,000	588	5,847		3,896	165	189	30,455	101,404	521		246,260
Concreting	415					351										246,260
Heating and plumbing						95						180				151,014
Heating and piping																95,240
Plumbing						95						180				
Painting and decorating												30,275				
Plastering and lathing				2,352			5,521		316							
Roofing and sheet-metal work						142	276		3,580	148	189		90,402			
Roofing						142	276		3,580	143	189		89,488			
Sheet-metal work													12,914			
Marble and tiling				1,146			50			22			5,062	521		
Ornamental iron					40,000											
Sewer, gas, water, conduit		2,380														
<b>SCRANTON</b>	31,429	425	5,252	2,000	333	192,953	3,980	35,909	1,466	405	7,630	4,746	106,768	3,723	350	104,988
General contractors	17,690	425	5,252	2,000	333	174,775	2,576	35,909	1,466	405	7,630	4,746	1,277	3,723	350	578
Building	3,906	425	3,752	2,000	333	172,425	2,576	35,909	1,466	405	7,630	4,746	1,277	3,723	350	578
Building not specialized	3,826	425	3,752	1,250	333	162,678	1,566	35,909	866	395	6,580	4,170	1,277	3,723	350	578
Residential building only	80		750			9,747	1,010		600	70	1,050	570				
Highway	13,784		1,500			2,350										
Subcontractors	13,739					18,178	1,404						105,491			164,410
Concreting	13,739					18,178										164,410
Heating and plumbing													10,436			103,448
Heating and piping																36,006
Plumbing													8,750			
Plumbing and heating combined														1,686		24,896
Plastering and lathing							1,404									
Roofing and sheet-metal work													95,055			
Roofing													75,055			
Sheet-metal work													20,000			

See footnotes on p. 1082.

TABLE 11.—COST OF MATERIAL FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929—Con.

CLASSIFICATION OF ESTABLISHMENTS	Plumbing and gas fitting equipment	Electrical appliances and supplies	Elevators, dumb-waiters etc.	Pipe: Drain tile, vitrified, concrete, etc.	Pipe: Cast iron, sheet and tube steel, etc.	Wire cable, guards, and fencing	Bituminous paving materials	Wood piling and timber	Ready mixed concrete	Machinery	Freight, hauling, or trucking to job	Metal products, n. e. s.	Mineral products (non-metallic) n. e. s.	Textiles and calking materials	Miscellaneous
	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
<b>PENNSYLVANIA</b>	10,614,187	8,144,071	4,185,806	1,343,501	3,213,846	566,703	1,902,519	325,666	689,893	4,659,461	291,263	103,431	554,139	17,950	1,086,001
Operative builders	36,770	11,148	271	652	676		950					154			1,770
General contractors	1,208,028	1,498,310	199,887	1,197,849	2,684,904	495,987	1,769,712	325,666	676,169	4,620,583	265,231	36,902	539,038	15,888	911,724
Building	1,047,689	1,401,957	198,887	142,930	1,718,776	304,775	41,876	44,666	237,723	4,351,829	32,295	10,324	74,889		346,185
Building not specialized	900,701	1,364,539	192,481	136,603	1,712,686	301,734	39,376	44,666	232,380	4,351,829	32,295	10,194	74,889		329,770
Commercial building only	1,500	1,400	360	70											
Manufacturing building only									4,843						
Residential building only	85,488	46,018	6,046	6,257	6,090	3,041	2,500		500			130			16,409
Highway	2,116	1,862		103,014	99,253	25,439	944,036		220,337		168,373		3,810	977	48,044
Bridge and culvert	3,875	626		11,785	30,260	3,033	12,458	13,083				14,061			103,409
Grading	48	269		6,560	5,735	100	15,356								3,096
Street paving	8,824	1,036		87,826	26,579	19,672	681,619		193,081		64,663			233	108,050
Sewer, gas, water, conduit	300	200		200,137	156,075	1,103	19,008		945						39,916
Dam and reservoir	373			29	527	153									1,705
Waterworks	74,769			1,046	543,161		5,995								21,036
Dredging, river, harbor, etc.	54,693	57,019	1,000	7,579	66,291	60,080	14,691	267,918		174,754				3,808	72,140
Railroad	486	1,285		27,776	16,645	4,363	26,050		2,336			12,517	460,333		168,143
Foundation		4,000		97			5,169								
Subway (other than buildings)															
Telephone line and system	14,951	30,056		2,680	22,762	77,264								10,870	
Subcontractors	9,869,389	6,634,613	3,985,648	145,000	523,306	70,716	131,657		13,714	32,878	26,032	66,376	15,101	2,062	172,501
Carpentering and wood flooring															
Concreting		3,645						6,209				14,206			2,755
Electrical	275	6,481,998		10,237	4,327	38	67,181		6,372		13,540		343		37,503
Elevator construction		31,453	3,984,748		52,570	86,479				32,500					
Heating and plumbing	9,207,846	111,690		124,360	313,392	1,031				378				10	7,809
Heating and piping	882,669	76,013		10,761	156,345		200				1,327				15,767
Plumbing	4,474,952	35,847		75,938	22,624		200				1,327			10	12,343
Plumbing and heating combined	882,772	300		31,671	120,423										3,414
Automatic sprinkler system	2,967,453		900		5,000										
Masonry							120		892		11,150		90		11,604
Painting and decorating									7,342					2,000	7,012
Glass and glazing												20,000			
Plastering and lathing															17,657
Roofing and sheet-metal work	150,789				11,778		39,582								4,947
Roofing					2,900		37,440								3,000
Sheet-metal work															1,887
Roofing and sheet metal combined	150,789				8,878		2,142								
Steel erection				1,000	125,000										1,650
Stonework	3,372	1,343		36	36										2,451
Marble and tiling	7,107	559					1,893								44,930
Excavating				5,747								1,300	14,668		90
Ornamental iron					4,861	17,962									5,160
Highway						6,500									2,000
Grading						1,600									
Sewer, gas, water, conduit				1,820											
Soundproofing															
Metal work, n. e. s.		3,025			16,311		1,200								
Rental of equipment, trucking, etc.				760		1,800						30,779			7,183
Flooring, n. e. s.							15,000								3,593
<b>ERIE</b>	191,085	104,188	280	72,186	24,285		177,743		4,843			520	3,589		8,973
General contractors	51,146	25,156	280	71,485	9,265		177,743		4,843			520	3,589		8,973
Building	51,146	24,887	280	300	6,000				4,843			520	3,589		1,473
Building not specialized	26,346	7,787	280	200								520	3,589		1,473
Manufacturing building only															
Residential building only	24,800	17,100		100	6,000				4,843						
Highway				404	3,100										
Grading		269					137,501								7,560
Street paving							13,746								
Sewer, gas, water, conduit				10,272	165		20,496								
60,509															
Subcontractors	139,940	79,032		700	15,000										
Electrical		79,032													
Heating and plumbing	139,940			700	15,000										
Heating and piping	30,077														
Plumbing	85,863														
Plumbing and heating combined	18,000			700	15,000										
<b>PHILADELPHIA</b>	16,058,425	4,484,043	3,461,212	795,382	2,623,663	473,276	1,117,847	286,535	371,330	4,524,822	74,507	54,473	547,603	16,740	459,291
Operative builders	14,016	3,384	271	127											
General contractors	728,201	1,303,173	43,503	684,917	2,380,340	427,648	989,458	286,535	371,330	4,522,034	62,024	8,098	535,480	14,678	374,650
Building	649,471	1,215,630	42,503	81,327	1,076,287	231,550	10,897	44,665	174,106	4,351,829	7,970	71,300			164,398
Building not specialized	641,167	1,210,214	36,143	80,227	1,076,287	231,550	14,697	44,665	174,106	4,351,829	7,970	71,300			163,398
Commercial building only			360												
Residential building only	8,304	5,425	6,000	1,100			2,200								1,000
Highway	1,341			1,852	30,785	2,236	470,039				62,024				
Bridge and culvert	3,875			3,804	8,522	2,033	7,200					3,810			2,270
Street paving	2,389			3,724	1,784		434,024		173,791			128			56,558
Sewer, gas, water, conduit				147,291	55,770	1,103	3,336								34,019
Waterworks	18,247			1,046	540,162		995								21,036
Dredging, river, harbor, etc.	34,942	52,193	1,000	5,464	44,268	59,100	14,691	241,870		170,205				59,012	
Railroad	486	1,285		6,242		4,363	25,563		2,336				3,808	37,367	
Foundation		4,000		97			5,169								
Subway (other than buildings)	14,951	30,056		2,680	22,762	77,264								10,870	
Telephone line and system				426,390			2,504		21,097						

See footnotes on p. 1082.

TABLE 11.—COST OF MATERIAL FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929—Con.

CLASSIFICATION OF ESTABLISHMENTS	Plumbing and gas fitting equipment	Electrical appliances and supplies	Elevators, dumb-waiters etc.	Pipe: Drain tile, vitrified, concrete, etc.	Pipe: Cast iron, sheet and tube steel, etc.	Wire cable, guards, and fencing	Bituminous paving materials	Wood piling and timber	Ready mixed concrete	Machinery	Freight, hauling, or trucking to job	Metal products, n. e. s.	Mineral products (non-metallic) n. e. s.	Textiles and calking materials	Miscellaneous <sup>1</sup>
<b>PHILADELPHIA—Continued</b>															
Subcontractors	Dollars 5,318,208	Dollars 3,177,486	Dollars 3,417,438	Dollars 110,338	Dollars 243,323	Dollars 45,627	Dollars 128,389	Dollars	Dollars	Dollars 2,788	Dollars 12,483	Dollars 46,375	Dollars 12,144	Dollars 2,062	Dollars 84,641
Carpentering and wood flooring		3,645					6,209					14,206			2,755
Concrete		925		9,144	4,327	38	67,155								
Electrical	275	3,134,655			27,096	25,913				2,410					
Elevator construction		3,900	3,417,438		1,031	2,487				378					7,669
Heating and plumbing	5,313,805	31,078		99,278	187,797						1,327			10	14,567
Heating and piping	294,950	29,878		5,000	111,340										
Plumbing	1,759,911	1,500		64,010	3,320						1,327			10	12,042
Plumbing and heating combined	301,461			27,262	68,137										2,525
Automatic sprinkler system	2,067,453				5,000										
Masonry						92					11,156				9,739
Painting and decorating														2,000	
Roofing and sheet-metal work					2,900		37,440								4,547
Roofing					2,900		37,440								3,050
Sheet-metal work															1,837
Steel erection				1,000											1,650
Stonework		108					1,385							52	2,000
Marble and tiling	4,128											1,390	12,144		25,941
Excavating				916											90
Ornamental iron					4,861	15,697									5,160
Grading						1,500									
Soundproofing							1,200								
Metal work, n. e. s.		3,025			15,311							30,779			7,183
Flooring, n. e. s.							15,000								3,000
<b>PITTSBURGH</b>	1,794,130	1,317,972	705,170	112,611	290,651	50,406	52,212	38,795	81,476		52,748	21,727	515	1,024	228,981
General contractors	252,727	87,915	137,800	103,051	138,177	29,482	52,212	38,795	75,104		52,748	21,727		1,024	166,761
Building	195,930	85,922	137,800	14,507	19,475	11,051	5,102		54,275		30,185				19,612
Building not specialized	187,494	84,337	137,800	14,397	19,475	11,051	5,102		54,275		30,185				19,612
Residential building only	8,446	1,585		110											
Highway		1,442		26,400	2,241	6,998	10,612							977	5,633
Bridge and culvert	275	551		2,062	10,911		4,858	12,747				9,210			94,877
Grading				5,428		50									
Street paving				17,530	13,783	10,397	23,771		19,884		22,563			47	30,294
Sewer, gas, water, conduit				35,309	80,881		1,436		945						3,056
Waterworks	56,522				3,000		5,000								
Dredging, river, harbor, etc.				1,225	2,886	980		26,048				12,517			4,289
Subcontractors	1,541,403	1,230,057	567,310	9,560	157,474	20,923			6,372				515		62,170
Concrete									6,372						34,825
Electrical		1,202,005			25,474	10,565									
Elevator construction		27,493	567,310			3,830									
Heating and plumbing	1,540,156			9,560	7,000										
Plumbing	1,402,986			9,560	7,000										
Plumbing and heating combined	137,170														
Masonry						28									
Painting and decorating															5,056
Plastering and lathing															1,300
Steel erection					125,000										
Marble and tiling	1,247	559											515		18,980
Highway						6,500									2,000
<b>READING</b>	14 287,128	14 478,794	255	6,235	5,772	746	64,504					154			5,922
Operative builders	6,500	2,580		125	476							154			
General contractors	20,078	9,728	255	4,280	5,206	740	64,504								5,153
Building	19,700	9,728	255	4,234	5,888		1,515								3,500
Building not specialized	15,000	8,438	255	4,234	5,888		1,515								3,500
Residential building only	4,700	1,290													
Highway							62,929								
Grading				46	5,224										1,193
Dam and reservoir	378				72	158									455
Subcontractors	270,553	404,486		1,820											709
Electrical		462,546													
Heating and plumbing	269,604	1,940													
Heating and piping	65,422														
Plumbing	204,182	1,940													769
Plastering and lathing															
Marble and tiling	949														
Sewer, gas, water, conduit				1,820											
<b>SCRANTON</b>	13 129,138	62,395		8,920	13,154	671	23,098				38,484	53			4,179
General contractors	418	423		5,998	1,068	671	23,098				27,194	53			2,570
Building	418	423			37							53			2,570
Building not specialized	418	423			37							53			2,570
Highway				5,998	1,031	671	23,098				27,194				
Subcontractors	128,710	61,972		922	12,086						11,290				1,609
Concrete				277							11,290				1,609
Electrical		54,500													
Heating and plumbing	128,710	7,472		645	12,086										
Heating and piping	20,101			500	9,500										
Plumbing	83,373	7,472													
Plumbing and heating combined	25,236			145	2,586										

See footnotes on p. 1082.

CONSTRUCTION—PENNSYLVANIA

TABLE 12.—NUMBER OF, AND VOLUME OF BUSINESS REPORTED BY, ESTABLISHMENTS DOING A CONSTRUCTION BUSINESS OF LESS THAN \$25,000 IN 1929, PERCENTAGE OF TOTAL NUMBER OF KNOWN ESTABLISHMENTS, AND AVERAGE VOLUME PER ESTABLISHMENT

TYPE OF WORK	PENNSYLVANIA 1930 population, 9,631,360								ERIE 1930 population, 115,967			PHILADELPHIA 1930 population, 1,950,961		
	Known contracting establishments				Volume of business reported				Total number active in 1929	Volume of business		Total number active in 1929	Volume of business	
	Total Number	Inactive in 1929	Active in 1929 Number	Per cent	Number of reporting establishments	Per cent of active	Amount	Average per establishment		Amount	Amount		Number of reporting establishments	Amount
Total contractors canvassed (under \$25,000).....	11,378	160	11,218					119			5,161			
Total contractors, type of work unknown.....	648	9	639		86	13.5	\$641,200	\$7,456	5	3	\$26,768	247	13	\$22,360
Total general and subcontractors classified.....	10,730	151	10,579	100.0				114			4,914			
Total general contractors classified.....	2,552	82	2,470	23.3	400	16.2	4,623,965	11,560	47	11	123,742	855	35	362,231
Building.....	2,419	73	2,346	22.2	370	16.1	4,865,335	11,518	45	11	123,742	830	35	362,231
Highway.....	104	8	96	.9	10	16.7	215,765	13,485	1			14		
Bridge and culvert.....	6		6	.1	2	33.3	19,920	9,960				2		
Sewer, gas, water, conduit.....	16		16	.2	2	12.5	19,446	9,723	1			9		
Dredging, river and harbor.....	2	1	1	(?)										
Foundation.....	5		5	(?)	1	20.0	3,500	3,500						
Total subcontractors classified.....	8,178	60	8,109	76.7	1,803	22.2	15,688,859	8,040	67	32	358,177	4,059	461	3,358,105
Carpentering.....	397	17	380	3.6	127	33.4	942,371	7,424	1	1	11,200	123	36	251,257
Concreting.....	348	3	345	3.3	86	24.9	708,524	8,230	5	3	27,478	144	10	96,741
Electrical.....	942	7	935	8.8	180	19.3	1,650,981	9,170	6	6	72,861	388	29	229,371
Elevator.....	18		18	.2	1	5.6	5,000	5,000				16	1	5,000
Heating, ventilating, and piping.....	366	1	365	3.5	91	24.9	893,506	9,819	1	1	10,650	160	17	140,612
Masonry.....	300	5	295	2.8	62	21.0	614,052	9,904				165	13	94,733
Painting and decorating.....	1,682	5	1,677	15.9	312	18.6	2,076,510	6,655	9	7	87,039	993	54	357,702
Glass and glazing.....	51	2	49	.5	4	8.2	22,452	5,613	2			25	1	12,952
Plastering.....	232		232	2.2	62	26.7	660,670	9,043	1			91	9	83,045
Plumbing and heating.....	2,677	25	2,652	25.1	634	23.9	5,617,929	8,861	25	9	95,532	1,410	245	1,651,274
Sheet metal and roofing.....	764	2	762	7.2	162	21.3	1,691,220	9,822	11	4	46,427	336	26	202,491
Steel erection.....	17		17	.2	7	41.2	92,232	13,170				7	1	20,000
Stone work.....	34	1	33	.3	9	27.3	126,528	14,059				10	2	40,366
Marble and tiling.....	154	1	153	1.4	33	21.6	407,049	12,335	3	1	7,000	84	8	99,990
Wrecking.....	17		17	.2	1	5.9	5,525	5,525				9		
Excavating.....	34		34	.3	8	23.5	80,380	10,047				4		
Ornamental iron.....	125		125	1.2	21	16.8	165,326	7,873	3			93	9	62,625
Street paving.....	6		6	.1	2	33.3	18,395	9,197				1		
Soundproofing and calking.....	4		4	(?)										
Flooring (other than wood, tile, concrete, and terrazzo).....	10		10	.1	1	10.0	9,943	9,943				10	1	9,943

1 Of these 160 inactive contractors, 3 were in Erie, 25 in Philadelphia, 17 in Pittsburgh, 5 in Scranton, 5 in Reading, and 105 in the remainder of the State.  
 2 Less than one-tenth of 1 per cent.



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TABLE 13.—ESTABLISHMENTS (WHOSE BUSINESS WAS LESS THAN \$25,000 IN 1929) WHICH REPORTED THEIR VOLUME OF CONSTRUCTION WORK, CLASSIFIED BY RANGE OF VOLUME OF BUSINESS

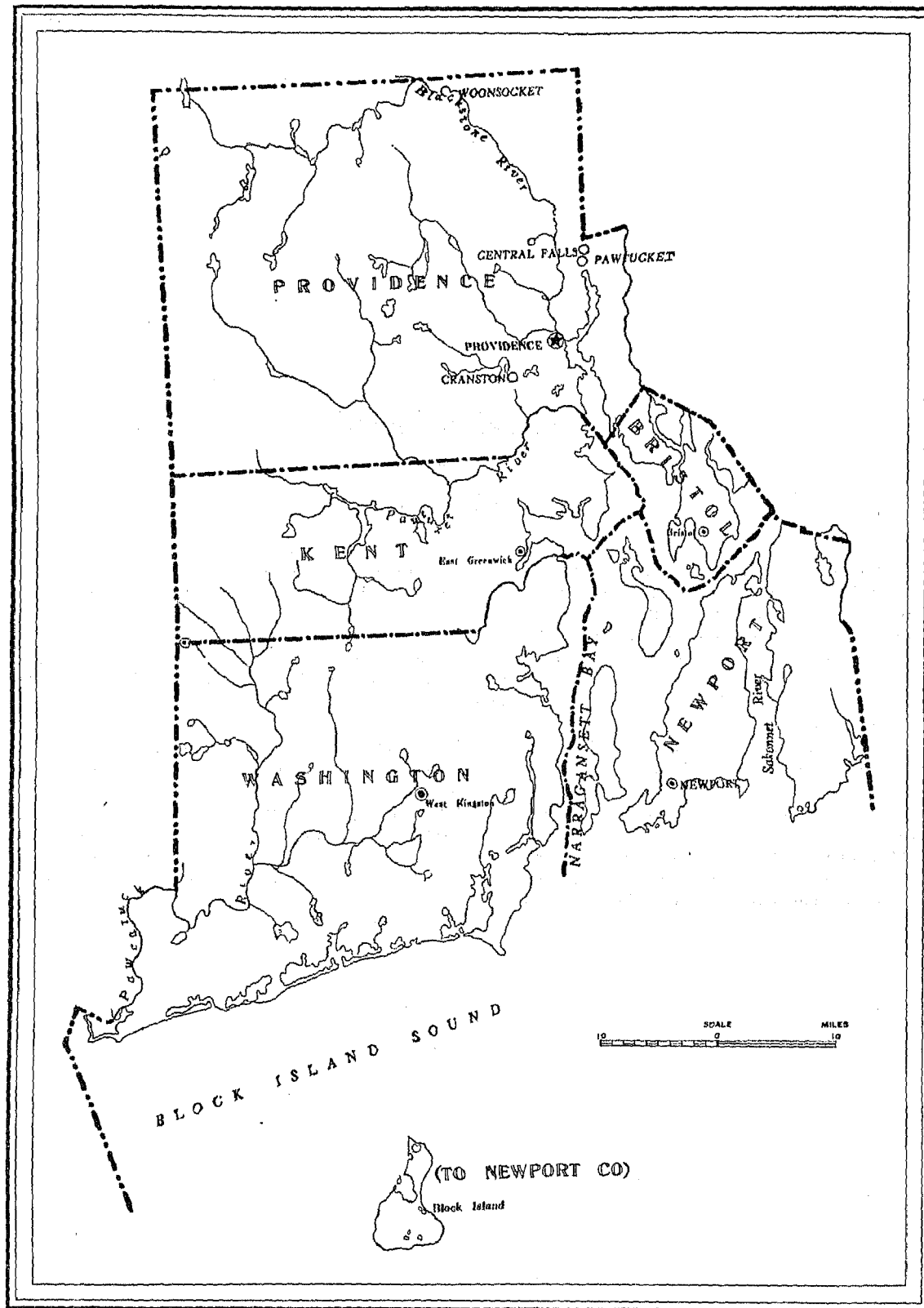
CLASSIFICATION	Total	Less than \$2,500	\$2,500 to \$4,999	\$5,000 to \$7,499	\$7,500 to \$9,999	\$10,000 to \$12,499	\$12,500 to \$14,999	\$15,000 to \$17,499	\$17,500 to \$19,999	\$20,000 to \$22,499	\$22,500 to \$24,999
PENNSYLVANIA											
Total general and subcontractors.....	2,289	332	434	321	280	260	169	163	110	124	96
General contractors.....	400	31	61	36	48	51	31	50	26	33	33
Subcontractors.....	1,803	280	362	276	221	203	129	105	76	89	62
Type of contracting unknown.....	86	21	11	9	11	6	9	8	8	2	1

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CONSTRUCTION—RHODE ISLAND

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TABLE 1.—VALUE OF CONSTRUCTION BUSINESS DURING 1929 AND PRINCIPAL ITEMS OF EXPENDITURE

[Values expressed in thousands]

AREA, CLASSIFICATION OF ESTABLISHMENTS, AND SIZE OF BUSINESS GROUPS	Number of establishments	VALUE OF CONSTRUCTION BUSINESS			PRINCIPAL EXPENDITURES			AREA, CLASSIFICATION OF ESTABLISHMENTS, AND SIZE OF BUSINESS GROUPS	Number of establishments	VALUE OF CONSTRUCTION BUSINESS			PRINCIPAL EXPENDITURES		
		Total	Under general contract or directly for owner	Under sub-contract	Sub-contract work let	Wages paid	Cost of materials			Total	Under general contract or directly for owner	Under sub-contract	Sub-contract work let	Wages paid	Cost of materials
<b>RHODE ISLAND</b> .....	226	\$30, 675	\$25, 317	\$5, 358	\$5, 385	\$6, 566	\$9, 958	<b>RHODE ISLAND—Continued.</b>							
<i>Counties and principal city</i>								<i>Size of business groups—Continued</i>							
<b>Counties:</b>								<b>Subcontractors.....</b>	122	\$10, 538	\$5, 287	\$5, 251	\$122	\$2, 973	\$4, 808
Bristol.....	4	956	902	54	7	277	238	\$25, 000 to \$49, 999.....	64	2, 307	1, 055	1, 252	15	727	1, 027
Kent.....	7	437	301	40	37	147	221	\$50, 000 to \$99, 999.....	30	1, 905	1, 075	920	37	664	864
Newport.....	21	1, 334	1, 066	208	138	499	521	\$100, 000 to \$199, 999.....	20	2, 649	967	1, 682	50	731	1, 244
Providence.....	180	26, 067	22, 170	4, 797	5, 156	7, 400	8, 644	\$200, 000 to \$499, 999.....	5	1, 345	931	414	4	321	591
Washington.....	14	979	787	192	47	331	334	\$500, 000 to \$999, 999.....	2	1, 232	250	982	16	270	518
Principal city: <sup>1</sup>								\$1, 000, 000 and over.....	1	1, 009	1, 009			260	564
Providence.....	120	18, 286	14, 735	3, 551	3, 840	4, 968	5, 490	<b>PROVIDENCE</b> .....	120	18, 286	14, 735	3, 551	3, 840	4, 968	5, 490
<i>Classification of establishments</i>								<i>Classification of establishments</i>							
<b>General contractors.....</b>	104	20, 137	20, 030	107	5, 263	5, 593	5, 140	<b>General contractors.....</b>	50	11, 076	10, 989	87	3, 785	2, 899	2, 373
Building.....	81	13, 869	13, 861	7	5, 069	3, 564	3, 579	Building.....	38	8, 620	8, 613	7	3, 689	2, 052	1, 927
Building not specialized.....	49	11, 020	11, 022	7	4, 254	2, 901	2, 070	Building not specialized.....	25	7, 008	7, 001	7	3, 153	1, 715	1, 490
Commercial building only.....	7	1, 273			326	310	430	Commercial building only.....	6	1, 003	1, 003		251	252	302
Residential building only.....	25	1, 566	1, 566		489	343	479	Residential building only.....	7	609	609		285	85	135
Highway.....	7	4, 084	4, 079	5	116	1, 169	1, 251	Highway and street paving.....	4	1, 343	1, 343		82	398	321
Grading.....	4	506	503	3	8	223	50	Grading.....	3	316	313	3	8	128	50
Street paving.....	5	491	476	15		192	98	Other classes <sup>2</sup> .....	5	797	710	77	6	320	75
Other classes <sup>2</sup> .....	7	1, 188	1, 110	77	70	445	171	<b>Subcontractors.....</b>	70	7, 210	3, 746	3, 464	55	2, 068	3, 118
<b>Subcontractors.....</b>	122	10, 538	5, 287	5, 251	122	2, 973	4, 808	Electrical.....	9	514	348	166	140	256	
Electrical.....	19	1, 373	900	473	3	386	696	Heating and plumbing.....	23	2, 737	2, 113	624	29	698	1, 376
Heating and plumbing.....	51	4, 205	2, 830	1, 376	41	1, 037	2, 245	Heating and piping.....	11	928	513	414	1	245	396
Heating and pipe covering.....	13	1, 059	510	549	1	279	483	Plumbing.....	12	1, 810	1, 600	210	28	452	980
Plumbing.....	20	2, 786	2, 059	727	33	673	1, 565	Masonry <sup>3</sup> .....	5	244	52	191		121	72
Plumbing and heating combined.....	9	361	261	100	7	85	198	Painting and decorating.....	12	829	407	302	3	302	226
Masonry.....	4	161	81	80	8	73	36	Roofing and sheet-metal work.....	11	980	398	583	7	288	395
Plastering and lathing.....	4	311	1	310	20	154	97	Roofing.....	6	428	299	129	1	107	163
Painting and decorating.....	12	829	467	362	3	392	226	Sheet-metal work.....	5	552	99	454	6	182	232
Roofing and sheet-metal work.....	19	1, 542	592	950	31	444	641	Steel erection <sup>4</sup> .....	4	1, 302	288	1, 014	16	201	544
Roofing.....	10	719	363	356	25	193	282	Marble and tiling.....	6	604	81	523		137	249
Sheet-metal work.....	6	467	142	325	5	162	176	<i>Size of business groups</i>							
Roofing and sheet metal combined.....	3	356	87	269	1	90	183	<b>General contractors.....</b>	50	11, 076	10, 989	87	3, 785	2, 899	2, 373
Steel erection <sup>5</sup> .....	4	1, 302	288	1, 014	16	291	544	\$25, 000 to \$49, 999.....	9	348	348		133	80	73
Marble and tiling.....	6	604	81	523		137	249	\$50, 000 to \$99, 999.....	15	1, 038	1, 028	10	203	315	249
Other classes <sup>6</sup> .....	3	210	47	162		58	74	\$100, 000 to \$199, 999.....	12	1, 724	1, 724		410	490	497
<i>Size of business groups</i>								\$200, 000 to \$499, 999.....	9	2, 870	2, 793	77	758	772	576
<b>General contractors.....</b>	104	20, 137	20, 030	107	5, 263	5, 593	5, 140	\$500, 000 to \$999, 999.....	4	3, 145	3, 145		1, 142	725	622
\$25, 000 to \$49, 999.....	26	941	941		255	282	249	\$1, 000, 000 and over.....	1	1, 950	1, 950		1, 139	450	356
\$50, 000 to \$99, 999.....	30	2, 103	2, 080	25	420	642	608	<b>Building contractors.....</b>	38	8, 620	8, 613	7	3, 689	2, 052	1, 927
\$100, 000 to \$199, 999.....	20	2, 810	2, 805	5	551	861	782	\$25, 000 to \$49, 999.....	8	301	301		133	60	53
\$200, 000 to \$499, 999.....	20	6, 016	5, 939	77	1, 344	1, 716	1, 584	\$50, 000 to \$99, 999.....	10	725	718	7	191	196	206
\$500, 000 to \$999, 999.....	6	4, 917	4, 915		1, 540	1, 310	957	\$100, 000 to \$199, 999.....	10	1, 467	1, 467		410	375	459
\$1, 000, 000 and over.....	2	3, 340	3, 340		1, 153	774	970	\$200, 000 to \$499, 999.....	6	1, 928	1, 928		676	477	509
<b>Building contractors.....</b>	81	13, 868	13, 861	7	5, 069	3, 564	3, 579	\$500, 000 to \$999, 999.....	3	2, 249	2, 249		1, 140	488	344
\$25, 000 to \$49, 999.....	25	894	894		255	268	229	\$1, 000, 000 and over.....	1	1, 950	1, 950		1, 139	450	356
\$50, 000 to \$99, 999.....	23	1, 064	1, 057	7	403	484	544	<b>Subcontractors.....</b>	70	7, 210	3, 746	3, 464	55	2, 068	3, 118
\$100, 000 to \$199, 999.....	15	2, 142	2, 145		548	550	700	\$25, 000 to \$49, 999.....	32	1, 161	591	570	5	432	442
\$200, 000 to \$499, 999.....	13	4, 067	4, 067		1, 188	1, 045	1, 261	\$50, 000 to \$99, 999.....	18	1, 218	717	501	6	466	473
\$500, 000 to \$999, 999.....	4	3, 151	3, 148		1, 531	766	489	\$100, 000 to \$199, 999.....	14	1, 780	683	1, 097	23	469	891
\$1, 000, 000 and over.....	1	1, 950	1, 950		1, 139	450	356	\$200, 000 to \$499, 999.....	3	810	497	313		172	291
								\$500, 000 to \$999, 999.....	2	1, 232	250	982	16	270	518
								\$1, 000, 000 and over.....	1	1, 009	1, 009			260	564

<sup>1</sup> Figures are included in respective county totals.

<sup>2</sup> Includes bridge and culvert; sewer, gas, water, conduit; dredging, river, harbor, etc.; an l central station, light and power plant.

<sup>3</sup> Includes ornamental iron; and metal work, n. e. s.

<sup>4</sup> Includes carpentering and woodflooring; concreting; and foundation.

<sup>5</sup> Includes pipe covering; and plumbing and heating combined.

<sup>6</sup> Includes plastering and lathing.

CONSTRUCTION—RHODE ISLAND

TABLE 2.—CONSTRUCTION BUSINESS OF REPORTING ESTABLISHMENTS DURING 1929, BY CLASS OF OWNERSHIP AND BY TYPE OF WORK

CLASS OF OWNERSHIP AND TYPE OF CONSTRUCTION WORK	CONSTRUCTION BUSINESS REPORTED BY—						CLASS OF OWNERSHIP AND TYPE OF CONSTRUCTION WORK	CONSTRUCTION BUSINESS REPORTED BY—					
	All classes of establishments		General contractors		Subcontractors			All classes of establishments		General contractors		Subcontractors	
	Number reporting	Value	Number reporting	Value	Number reporting	Value		Number reporting	Value	Number reporting	Value	Number reporting	Value
<b>RHODE ISLAND</b>						<b>PROVIDENCE</b>							
All construction business.....	226	\$30,674,507	104	\$20,136,864	122	\$10,537,643	All construction business.....	120	\$18,286,139	50	\$11,075,739	70	\$7,210,400
Distribution not reported.....	27	4,233,190	5	2,542,772	22	1,690,418	Distribution not reported.....	11	3,192,644	2	2,250,185	0	942,450
Distributed by class of ownership.....	199	26,441,317	99	17,594,092	100	8,847,225	Distributed by class of ownership.....	109	15,093,495	48	8,825,554	61	6,267,941
Private.....	189	17,805,350	89	10,411,318	100	7,394,038	Private.....	105	11,410,483	44	6,228,107	61	5,182,376
Quasi public or community.....	46	1,973,290	16	1,334,763	30	638,527	Quasi public or community.....	29	1,184,380	10	735,707	19	448,583
Public.....	61	6,662,671	28	5,848,011	33	814,660	Public.....	33	2,498,632	12	1,861,650	21	636,982
Distribution not reported.....	11	426,476	3	300,630	8	124,846	Distribution not reported.....	4	67,346			4	67,346
Distributed by class of public ownership.....	50	6,237,195	25	5,547,381	25	689,814	Distributed by class of public ownership.....	20	2,431,286	12	1,801,650	17	569,636
Federal.....	6	520,484	3	492,269	3	28,215	Federal.....	4	447,963	2	1,239,991	2	210,069
State.....	25	3,824,789	12	3,621,356	13	203,433	State.....	14	1,002,007	5	1,032,223	3	120,024
County or township.....	12	291,331	6	162,479	6	128,852	County or township.....	8	223,247	5	103,223	3	120,024
Municipal.....	31	1,600,591	16	1,271,277	15	329,314	Municipal.....	19	757,979	8	518,436	11	239,543
All business under general contract or directly for owners.....	186	25,316,660	104	20,030,140	82	5,286,520	All business under general contract or directly for owners.....	99	14,735,065	50	10,988,718	40	3,740,347
Distribution not reported.....	3	229,691	1	98,569	2	131,022	Distribution not reported.....	1	51,022			1	51,022
Distributed by class.....	183	25,086,975	103	19,931,471	80	5,155,504	Distributed by class.....	98	14,684,043	50	10,988,718	48	3,695,325
Building.....	161	18,111,859	83	13,703,809	78	4,408,550	Building.....	87	11,600,540	40	8,596,001	47	3,004,539
Distribution not reported.....	14	3,238,814	6	2,582,637	8	656,177	Distribution not reported.....	7	3,025,048	4	2,498,637	3	620,411
Distributed by class.....	147	14,873,045	77	11,121,172	70	3,751,878	Distributed by class.....	80	8,575,492	36	6,007,364	44	2,478,128
Commercial.....	62	2,972,380	37	2,442,951	25	529,429	Commercial.....	42	2,237,533	23	1,850,250	19	387,283
Educational.....	33	1,179,198	15	902,507	18	276,661	Educational.....	18	460,226	6	270,710	12	189,516
Hotel.....	9	26,352	2	( <sup>1</sup> )	7	( <sup>1</sup> )	Hotel.....	6	20,577	2	( <sup>1</sup> )	4	( <sup>1</sup> )
Hospital and institutional.....	19	1,305,696	7	1,114,004	12	191,692	Hospital and institutional.....	12	1,118,880	5	1,004,211	7	114,675
Manufacturing.....	45	2,283,956	21	1,471,536	24	812,388	Manufacturing.....	26	1,073,011	11	536,429	15	536,582
Military and naval.....	1	509,802	6	478,314	10	31,488	Public: Courts, jails, etc.....	8	325,244	1	( <sup>1</sup> )	7	( <sup>1</sup> )
Public: Courts, jails, etc.....	16	509,802	6	478,314	10	31,488	Religious and memorial.....	20	363,634	10	319,637	10	33,997
Religious and memorial.....	34	650,166	18	533,027	16	66,539	Residential.....	60	2,442,321	24	1,469,608	36	972,713
Residential.....	115	4,891,280	57	3,339,788	58	1,551,498	Social and recreational.....	7	222,397	0	( <sup>1</sup> )	1	( <sup>1</sup> )
Social and recreational.....	14	454,375	11	420,531	3	33,844	Rail and water transportation.....	2				2	
Air transport.....	2		2	( <sup>1</sup> )			Miscellaneous.....	9	321,693	5	118,951	4	202,712
Rail and water transportation.....	3	15,491	1	( <sup>1</sup> )	2	( <sup>1</sup> )	Public works and utilities.....	13	991,118	9	916,124	4	74,994
Miscellaneous.....	23	534,393	16	342,154	7	242,209	Bridge, tunnel, etc.....	5	105,043	3		2	
Public works and utilities.....	25	1,594,917	19	1,505,923	6	88,994	Central station, light and power plant.....	4	348,290	2	378,339	2	74,994
Bridge, tunnel, etc.....	10	409,740	7	748,236	3	79,994	Sewage disposal and drainage.....	3	79,120	3	79,120		
Central station, light and power plant.....	6	418,484	4		2		Dock, pier, retaining wall, etc.....	1		1			
Dock, pier, retaining wall, etc.....	4	152,227	3	( <sup>1</sup> )	1	( <sup>1</sup> )	Park, grounds, etc.....	1	458,605	1	458,605		
Park, grounds, etc.....	3	92,323	3	92,323			River and harbor improvement.....	1		0	( <sup>1</sup> )	1	( <sup>1</sup> )
Sewage disposal and drainage.....	5	205,664	5	205,664			Highway and street.....	7	2,092,385	1	( <sup>1</sup> )	1	( <sup>1</sup> )
Flood control, irrigation, and land drainage.....	1		1				Miscellaneous.....	2		1	( <sup>1</sup> )	1	( <sup>1</sup> )
River and harbor improvement.....	1	316,473	1	316,473			All business under subcontract.....	54	3,551,074	3	87,021	51	3,464,053
Water supply.....	1		1				Distribution not reported.....	1	29,728			1	29,728
Highway and street.....	16	4,617,299	15	4,721,739	4	658,460	Distributed by class.....	53	3,521,346	3	87,021	50	3,434,325
Miscellaneous.....	8	762,900	4		1		Concrete.....	2				2	
All business under subcontract.....	101	5,357,841	5	106,724	96	5,251,117	Street paving.....	1	110,243			1	
Distribution not reported.....	1	29,728			1	29,728	Masonry.....	3		1	( <sup>1</sup> )	2	
Distributed by class.....	100	5,328,113	5	106,724	95	5,221,389	Stone work.....	1				1	
Concrete.....	5	87,427	1		4	147,307	Electrical.....	5	166,606			6	166,606
Street paving.....	2		1	17,745	1		Heating and plumbing.....	5	598,077			5	598,077
Masonry.....	5	77,025	1		1		Heating and piping.....	8	413,183			8	413,183
Stonework.....	1		1		1		Pipe covering.....	1				6	
Electrical.....	14	477,468			14	477,468	Plumbing.....	6				6	
Heating and plumbing.....	1	1,333,530			1	1,333,530	Plumbing and heating combined.....	1	179,804			1	179,804
Heating and piping.....	23	562,847			23	562,847	Painting and decorating.....	8	361,904			8	361,904
Pipe covering.....	3	66,470			3	66,470	Plastering and lathing.....	2	633,920			2	633,920
Plumbing.....	24	575,022			24	575,022	Marble and tiling.....	6				6	
Plumbing and heating combined.....	7	129,191			7	129,191	Roofing and sheet-metal work.....	7	555,096			7	555,096
Painting and decorating.....	8	364,904			8	364,904	Roofing.....	7	104,100			7	104,100
Glass and glazing.....	1				1		Sheet-metal work.....	7				7	
Plastering and lathing.....	4	309,636			4	309,636	Roofing and sheet metal combined.....	1	450,900			1	450,900
Roofing and sheet-metal work.....	12	900,518			12	900,518	Steel erection.....	2				2	
Roofing.....	12	280,631			12	280,631	Ornamental iron.....	2	1,013,968			2	1,013,968
Sheet-metal work.....	13				13		Other classes.....	3	86,532	2	( <sup>1</sup> )	1	( <sup>1</sup> )
Roofing and sheet metal combined.....	2	619,887			2	619,887							
Steel erection.....	2				2								
Ornamental iron.....	2	1,013,968			2	1,013,968							
Marble and tiling.....	6	517,557			6	517,557							
Excavating.....	4	17,370	3	88,979	1	166,511							
Other classes.....	4	228,120	1		3								

<sup>1</sup> Value omitted in order to avoid disclosing individual operations. The amounts omitted are, however, included in the respective totals.

<sup>2</sup> Includes 1 establishment reporting work on automatic sprinkler systems.

<sup>3</sup> Includes establishments reporting the following types of work: General contractors—Dredging, river, harbor, etc., 1. Subcontractors: Carpentering and woodflooring, 2; foundation, 1.

<sup>4</sup> Includes establishments reporting the following types of work: General contractors—Excavating, 1; dredging, river, harbor, etc., 1. Subcontractors: Carpentering and woodflooring, 1.

CONSTRUCTION—RHODE ISLAND

TABLE 3.—CONSTRUCTION BUSINESS DURING 1929, BY LOCATION

CLASSIFICATION OF ESTABLISHMENTS	Establishments reporting	RHODE ISLAND			CLASSIFICATION OF ESTABLISHMENTS	Establishments reporting	PROVIDENCE				
		Total	In home city	In home State			Outside home State	Total	In home city	In home State	Outside home State
<b>RHODE ISLAND</b> .....	<b>220</b>	<b>\$29,915,293</b>	<b>\$17,634,874</b>	<b>\$23,760,422</b>	<b>\$6,154,871</b>	<b>PROVIDENCE</b> .....	<b>118</b>	<b>\$18,121,278</b>	<b>\$12,487,404</b>	<b>\$15,463,986</b>	<b>\$2,657,292</b>
General contractors.....	102	19,810,864	11,073,529	15,422,865	4,390,999	General contractors.....	50	11,075,739	7,693,682	9,868,580	1,207,149
Building.....	80	13,741,813	9,632,002	12,350,319	1,391,494	Building.....	33	8,020,154	7,023,333	8,346,409	273,745
Building not specialized.....	49	11,020,118	7,364,569	9,735,715	1,293,403	Building not specialized.....	25	7,007,657	5,602,902	6,825,503	182,154
Commercial building only.....	7	1,273,491	1,091,365	1,181,000	91,591	Commercial building only.....	0	1,003,306	821,180	911,715	91,591
Residential building only.....	24	1,439,204	1,170,068	1,432,704	6,500	Residential building only.....	7	609,191	599,191	609,191	
Highway.....	7	4,033,592	180,082	1,399,745	2,633,788	Highway and street paving.....	4	1,843,135	172,074	731,448	611,687
Grading.....	3	315,770	58,312	315,770		Grading.....	3	315,770	58,312	315,770	
Street paving.....	5	490,790	415,291	490,790		Other classes <sup>1</sup> .....	5	790,680	489,963	474,963	321,717
Other classes <sup>1</sup> .....	7	1,187,059	781,242	806,242	321,717	Subcontractors.....	68	7,045,539	4,793,722	5,595,390	1,450,143
Subcontractors.....	118	10,095,429	6,561,445	8,337,557	1,787,872	Electrical.....	8	414,194	372,535	414,194	
Electrical.....	18	1,273,323	892,850	1,078,823	195,000	Heating and plumbing.....	22	2,072,558	1,201,604	1,545,959	1,128,599
Heating and plumbing.....	50	4,140,486	2,102,293	2,984,244	1,140,242	Heating and piping <sup>2</sup> .....	10	862,671	537,795	663,671	199,000
Heating and pipe covering.....	12	993,816	674,940	794,816	169,000	Plumbing.....	12	1,809,887	963,809	880,288	929,599
Plumbing.....	29	2,786,036	1,088,619	1,842,794	943,242	Masonry <sup>3</sup> .....	5	243,736	166,864	242,531	1,204
Plumbing and heating combined.....	0	360,634	338,734	356,634	4,000	Painting and decorating.....	12	825,561	748,542	781,410	47,151
Plastering and lathing.....	18	1,273,323	109,842	282,982	27,704	Roofing and sheet-metal work.....	11	979,906	706,110	915,916	63,989
Painting and decorating.....	12	828,561	748,542	791,410	47,151	Roofing.....	0	427,574	274,189	404,574	23,000
Roofing and sheet-metal work.....	18	1,398,486	979,305	1,278,310	120,176	Sheet-metal work.....	5	552,331	431,021	511,342	40,989
Roofing.....	10	719,240	444,434	667,018	92,222	Steel erection <sup>4</sup> .....	4	1,302,244	1,146,244	1,146,244	156,000
Sheet-metal work.....	8	679,240	531,871	611,202	67,054	Marble and tiling.....	6	604,342	452,763	551,142	53,200
Steel erection <sup>2</sup> .....	4	1,302,244	1,146,244	1,146,244	156,000						
Marble and tiling.....	6	604,342	452,763	551,142	53,200						
Other classes <sup>5</sup> .....	6	237,301	132,606	224,902	12,399						

<sup>1</sup> Includes bridge and culvert; sewer, gas, water, conduit; dredging, river, harbor, etc.; and central station, light and power plant.  
<sup>2</sup> Includes ornamental iron; and metal work, n. s. s.  
<sup>3</sup> Includes concreting; masonry; and foundation.  
<sup>4</sup> Includes pipe covering; and plumbing and heating combined.  
<sup>5</sup> Includes plastering and lathing.

TABLE 4.—CONSTRUCTION BUSINESS OUTSIDE HOME STATE, BY LOCATION

STATE	LOCATION REPORTED BY—			STATE	LOCATION REPORTED BY—		
	All classes of establishments	General contractors	Subcontractors		All classes of establishments	General contractors	Subcontractors
<b>RHODE ISLAND</b>				<b>PROVIDENCE</b>			
Total distributed by State <sup>1</sup> .....	\$6,154,871	\$4,396,999	\$1,757,872	Total distributed by State <sup>2</sup> .....	\$2,657,292	\$1,207,149	\$1,450,143
Connecticut.....	1,682,408	1,007,001	675,407	Connecticut.....	1,363,963	843,934	520,029
Maine.....	4,000		4,000	Maine.....	4,000		4,000
Massachusetts.....	2,500,943	1,479,427	1,021,516	Massachusetts.....	1,044,519	151,955	892,564
New Hampshire.....	131,282	126,500	4,782	New Hampshire.....	4,782		4,782
New Jersey.....	119,000	114,000	5,000	New Jersey.....	5,000		5,000
New York.....	225,065	201,666	23,399	New York.....	201,666	201,666	
Vermont.....	498,449	489,449	9,000	Vermont.....	9,000		9,000
Other States, n. s.....	998,724	978,956	14,768	Other States, n. s.....	24,362	9,594	14,768

Number of establishments reporting:  
<sup>1</sup> All classes, 58—General contractors, 27; subcontractors, 31.  
<sup>2</sup> All classes, 20—General contractors, 11; subcontractors, 18.



TABLE 5.—NUMBER AND SALARIES OF PROPRIETORS, FIRM MEMBERS, AND SALARIED EMPLOYEES: 1929

CLASSIFICATION OF ESTABLISHMENTS	Estab-lish-ments report-ing	PROPRIETORS AND FIRM MEMBERS			SALARIED EMPLOYEES									
		Re-ceiving no salary	Receiving sal-aries		All salaried em-ployees		Officers and clerical staff		Superintendents, foremen, etc.		Number reported, by sex			Sex not re-ported
			Num-ber	Total annual salaries	Total num-ber	Total annual salaries	Num-ber	Total annual salaries	Num-ber	Total annual salaries	Total	Male	Fe-male	
<b>RHODE ISLAND</b> .....	<b>222</b>	<b>90</b>	<b>102</b>	<b>\$293, 485</b>	<b>682</b>	<b>\$1, 751, 969</b>	<b>396</b>	<b>\$970, 211</b>	<b>286</b>	<b>\$781, 768</b>	<b>611</b>	<b>477</b>	<b>134</b>	<b>71</b>
General contractors.....	103	54	32	115, 708	371	1, 069, 941	163	492, 771	208	577, 170	348	293	55	23
Building.....	81	49	23	84, 318	217	611, 025	117	340, 182	100	270, 843	204	168	30	13
Building not specialized.....	40	28	12	43, 480	174	490, 282	94	270, 470	80	219, 812	164	135	29	10
Commercial building only.....	7	5	1	2, 600	24	75, 031	12	46, 098	12	28, 935	24	20	4	3
Residential building only.....	25	16	10	38, 229	19	45, 712	11	23, 616	8	22, 096	16	13	3	8
Highway.....	7	1	3	13, 120	100	290, 450	24	77, 966	76	212, 484	90	79	11	10
Grading.....	4	1	2	5, 830	15	49, 472	3	3, 184	12	46, 288	15	13	2	-----
Street paving.....	4	1	2	5, 830	8	19, 820	7	15, 020	1	3, 900	8	7	1	-----
Other classes <sup>1</sup> .....	7	2	4	12, 440	31	99, 174	12	56, 519	19	43, 655	31	20	5	-----
Subcontractors.....	119	36	70	177, 787	311	682, 028	233	477, 440	78	204, 588	263	184	79	48
Electrical.....	19	5	13	37, 370	48	88, 351	37	62, 502	11	25, 759	42	28	14	0
Heating and plumbing.....	50	13	35	83, 584	116	234, 004	82	143, 763	33	90, 901	101	67	34	14
Heating and pipe covering.....	12	2	10	14, 407	41	93, 555	26	55, 205	15	38, 360	33	28	5	8
Plumbing.....	29	7	19	58, 737	66	130, 508	48	77, 967	18	52, 541	60	36	24	0
Plumbing and heating combined.....	9	4	6	10, 380	8	10, 591	8	10, 591	-----	-----	8	3	5	-----
Masonry.....	4	3	6	7, 600	2	2, 028	2	2, 028	-----	-----	2	1	1	-----
Painting and decorating.....	12	3	5	15, 805	30	58, 490	22	45, 278	8	13, 212	20	15	5	10
Plastering and lathing.....	3	3	-----	-----	2	5, 590	1	1, 040	-----	4, 550	-----	-----	-----	-----
Roofing and sheet-metal work.....	19	4	7	24, 428	55	120, 838	40	80, 822	15	40, 016	40	30	10	0
Roofing.....	10	3	4	10, 628	28	52, 686	18	27, 400	10	26, 226	25	19	0	3
Sheet-metal work.....	6	1	2	4, 080	22	54, 112	18	42, 442	4	11, 670	16	13	0	6
Roofing and sheet metal combined.....	3	-----	1	3, 120	5	14, 040	4	10, 920	1	3, 120	5	4	1	-----
Steel erection <sup>2</sup> .....	4	1	2	4, 000	31	110, 000	27	94, 500	4	15, 500	31	21	10	3
Marble and tiling.....	5	4	-----	-----	17	39, 276	13	27, 070	4	12, 200	14	11	3	2
Other classes <sup>3</sup> .....	3	-----	2	5, 000	11	22, 791	9	20, 341	2	2, 460	7	5	2	4
<b>PROVIDENCE</b> .....	<b>117</b>	<b>46</b>	<b>53</b>	<b>149, 723</b>	<b>415</b>	<b>1, 081, 858</b>	<b>247</b>	<b>645, 247</b>	<b>188</b>	<b>436, 611</b>	<b>382</b>	<b>304</b>	<b>78</b>	<b>33</b>
General contractors.....	50	23	19	65, 169	203	581, 276	95	301, 084	108	280, 192	200	168	32	3
Building.....	38	19	16	58, 030	141	402, 297	76	229, 984	65	172, 313	138	115	23	3
Building not specialized.....	25	13	11	40, 839	112	316, 990	60	175, 018	53	141, 972	109	92	17	3
Commercial building only.....	6	3	1	2, 600	21	67, 001	12	46, 098	9	20, 905	21	17	4	-----
Residential building only.....	7	3	4	14, 000	8	18, 306	5	8, 870	3	9, 439	8	6	2	-----
Highway and street paving.....	4	1	-----	-----	28	90, 302	10	48, 166	18	51, 136	28	24	4	-----
Grading.....	3	1	2	5, 830	12	25, 472	2	2, 184	10	23, 288	12	11	1	-----
Other classes <sup>1</sup> .....	5	2	1	1, 300	22	54, 205	7	20, 750	15	33, 455	22	18	4	-----
Subcontractors.....	67	23	34	84, 554	212	500, 582	152	344, 163	60	156, 419	182	130	46	30
Electrical.....	9	4	2	6, 884	19	36, 577	14	26, 137	5	10, 440	18	12	0	1
Heating and plumbing.....	22	5	13	27, 917	76	171, 195	44	83, 414	32	87, 781	60	51	18	10
Heating and piping <sup>4</sup> .....	10	2	8	11, 490	38	83, 816	23	45, 456	15	38, 360	31	26	5	7
Plumbing.....	12	3	5	16, 427	38	87, 379	21	37, 958	17	49, 421	35	25	10	3
Masonry <sup>5</sup> .....	4	3	6	7, 600	2	2, 028	2	2, 028	-----	-----	2	1	1	-----
Painting and decorating.....	12	3	5	15, 805	30	58, 490	22	45, 278	8	13, 212	20	15	5	10
Roofing and sheet-metal work.....	11	3	6	22, 348	37	83, 016	30	65, 730	7	17, 289	31	25	0	6
Roofing.....	6	3	4	10, 628	14	25, 300	11	19, 684	3	5, 616	14	10	4	-----
Sheet-metal work.....	5	-----	2	5, 720	23	57, 716	19	46, 046	4	11, 670	17	15	2	6
Steel erection <sup>6</sup> .....	4	1	2	4, 000	31	110, 000	27	94, 500	4	15, 500	31	21	10	3
Marble and tiling.....	5	4	-----	-----	17	39, 276	13	27, 070	4	12, 200	14	11	3	-----

<sup>1</sup> Includes bridge and culvert; sewers, gas, water, conduit; dredging, river, harbor; and central station, light and power plant.  
<sup>2</sup> Includes ornamental iron; and metal work, n. e. s.  
<sup>3</sup> Includes carpentering and wood flooring; foundation; and concreting.  
<sup>4</sup> Includes pipe covering; and plumbing and heating combined.  
<sup>5</sup> Includes plastering and lathing.  
<sup>6</sup> Includes ornamental iron; and metal work, n. e. s.

CONSTRUCTION—RHODE ISLAND

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TABLE 6.—VALUE OF CONSTRUCTION EQUIPMENT, IN COMPARISON WITH CONSTRUCTION BUSINESS AND WAGES PAID DURING 1929

CLASSIFICATION OF ESTABLISHMENTS AND PERCENTAGE OF EQUIPMENT OWNED	Establishments reporting	EQUIPMENT		Value of construction business reported	Wages paid	CLASSIFICATION OF ESTABLISHMENTS AND PERCENTAGE OF EQUIPMENT OWNED	Establishments reporting	EQUIPMENT		Value of construction business reported	Wages paid
		Purchased during the year	Inventory value at end of year					Purchased during the year	Inventory value at end of year		
<b>RHODE ISLAND</b> .....	<b>197</b>	<b>\$463,822</b>	<b>\$2,204,343</b>	<b>\$28,510,135</b>	<b>\$8,065,821</b>	<b>PROVIDENCE</b> .....	<b>104</b>	<b>\$205,115</b>	<b>\$1,059,098</b>	<b>\$16,942,229</b>	<b>\$4,680,005</b>
<i>Classification of establishments</i>						<i>Classification of establishments</i>					
General contractors.....	96	366,639	1,807,717	19,082,502	5,474,499	General contractors.....	46	151,892	813,045	10,862,853	2,857,395
Building.....	73	109,432	443,509	13,414,451	3,445,088	Building.....	34	58,980	201,152	8,407,208	2,010,388
Building not specialized.....	45	95,603	380,809	10,893,562	2,853,125	Building not specialized.....	23	55,664	183,114	6,946,271	1,706,996
Commercial building only.....	6	9,551	40,238	1,190,991	295,700	Commercial building only.....	5	2,296	14,538	920,806	228,462
Residential building only.....	22	4,278	22,462	1,329,898	206,263	Residential building only.....	6	1,000	3,500	540,191	74,980
Highway.....	7	133,109	811,796	4,083,532	1,169,156	Highway and street paving.....	4	27,214	197,546	1,343,135	398,232
Grading.....	4	25,650	161,249	505,770	223,478	Grading.....	3	25,000	116,249	315,770	128,478
Street paving.....	5	50,720	67,835	480,790	192,061	Other classes <sup>1</sup> .....	5	40,718	298,698	796,680	320,297
Other classes <sup>1</sup> .....	7	47,668	333,328	1,187,950	444,716	Subcontractors.....	58	53,223	245,453	6,079,376	1,822,610
Subcontractors.....	101	97,183	396,626	8,827,633	2,591,322	Electrical.....	6	1,691	6,316	423,826	114,706
Electrical.....	13	18,011	20,817	1,041,959	292,396	Heating and plumbing.....	20	37,820	80,010	2,602,608	665,051
Heating and plumbing.....	44	56,702	162,444	3,910,870	976,689	Heating and pipe covering.....	9	8,282	33,332	822,509	218,970
Heating and pipe covering.....	12	14,815	61,084	986,950	266,263	Plumbing.....	11	29,538	46,684	1,780,159	446,981
Plumbing.....	26	40,176	90,954	2,699,814	657,814	Masonry <sup>2</sup> .....	4	610	23,303	213,735	109,663
Plumbing and heating combined.....	6	1,711	10,406	224,106	52,512	Painting and decorating.....	12	3,199	16,585	828,561	392,324
Plastering and lathing.....	4	760	6,954	310,680	153,631	Roofing and sheet-metal work.....	8	1,512	27,738	683,137	220,989
Painting and decorating.....	12	3,199	16,585	828,561	392,324	Roofing.....	4	329	19,313	242,574	75,431
Roofing and sheet-metal work.....	15	7,470	41,191	1,101,718	357,625	Sheet-metal work.....	4	1,183	8,426	440,563	151,558
Roofing.....	8	5,902	30,252	534,240	161,494	Steel erection <sup>3</sup> .....	3	2,571	77,350	772,244	196,027
Sheet-metal work.....	7	1,568	10,939	567,478	196,131	Marble and tiling.....	5	6,420	14,134	555,205	110,950
Steel erection <sup>3</sup> .....	3	2,571	77,356	772,244	196,027	<i>Percentage of equipment owned</i>					
Marble and tiling.....	5	6,420	14,134	555,205	116,950	General contractors.....	46	151,892	813,045	10,862,853	2,857,395
Other classes <sup>3</sup> .....	5	2,050	57,145	306,390	105,880	None.....	2	—	—	308,750	68,728
<i>Percentage of equipment owned</i>						1% to 25%, inclusive.....	2	200	2,000	178,474	35,875
General contractors.....	96	366,639	1,807,717	19,082,502	5,474,499	26% to 50%, inclusive.....	1	—	17,726	109,470	50,970
None.....	3	—	—	894,750	77,751	51% to 75%, inclusive.....	5	28,477	270,850	2,608,265	680,600
1% to 25%, inclusive.....	4	7,455	27,950	481,650	113,803	76% to 99%, inclusive.....	30	123,215	523,009	7,606,888	2,012,125
26% to 50%, inclusive.....	4	53,335	107,023	1,070,007	353,327	Not reported.....	—	—	—	—	—
51% to 75%, inclusive.....	17	67,709	450,196	4,489,329	1,267,104	Subcontractors.....	58	53,223	245,453	6,079,376	1,822,610
76% to 99%, inclusive.....	66	248,040	1,211,548	13,126,036	3,629,580	None.....	2	—	—	107,857	60,163
100%.....	2	100	2,000	120,721	32,874	1% to 25%, inclusive.....	—	—	—	—	—
Not reported.....	2	—	—	—	—	26% to 50%, inclusive.....	—	—	—	—	—
Subcontractors.....	101	97,183	396,626	8,827,633	2,591,322	51% to 75%, inclusive.....	1	350	1,752	36,100	7,910
None.....	4	—	—	175,183	77,826	76% to 99%, inclusive.....	51	52,713	238,601	5,761,302	1,691,600
1% to 25%, inclusive.....	—	—	—	—	—	100%.....	4	160	5,100	174,027	50,937
26% to 50%, inclusive.....	—	—	—	—	—	Not reported.....	—	—	—	—	—
51% to 75%, inclusive.....	—	—	—	—	—						
76% to 99%, inclusive.....	3	2,105	12,652	106,500	26,310						
100%.....	88	94,154	357,943	8,202,570	2,385,742						
Not reported.....	6	804	26,031	343,380	101,444						

<sup>1</sup> Includes bridge and culvert; sewer, gas, water, conduit; dredging, river, harbor, etc.; and central station, light and power plant.  
<sup>2</sup> Includes ornamental iron; and metal work, n. e. s.  
<sup>3</sup> Includes carpentering and woodflooring; concreting; masonry; and foundation.  
<sup>4</sup> Includes bridge and culvert; sewer, gas, water, conduit; dredging, river, harbor, etc.  
<sup>5</sup> Includes plastering and lathing.

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TABLE 7.—WAGE EARNERS, BY MONTHS, AND WAGES PAID DURING 1929

CLASSIFICATION OF ESTABLISHMENTS AND LENGTH OF WORKING WEEK	Establishments reporting	NUMBER EMPLOYED ON 15TH DAY OF THE MONTH OR NEAREST REPRESENTATIVE DAY												Wages paid during year
		January	February	March	April	May	June	July	August	September	October	November	December	
<b>RHODE ISLAND</b> .....	<b>213</b>	<b>3,316</b>	<b>3,056</b>	<b>3,420</b>	<b>4,331</b>	<b>4,889</b>	<b>5,057</b>	<b>5,500</b>	<b>5,527</b>	<b>5,461</b>	<b>5,401</b>	<b>4,974</b>	<b>4,022</b>	<b>88,125,610</b>
<i>Classification of establishments</i>														
General contractors.....	97	1,936	1,726	2,003	2,852	3,406	3,555	3,953	3,889	3,833	3,657	3,214	2,389	5,243,932
Building.....	75	1,402	1,338	1,471	1,016	2,087	2,024	2,261	2,089	2,067	1,938	1,756	1,756	3,285,278
Building not specialized.....	44	1,118	1,061	1,110	1,501	1,642	1,586	1,749	1,620	1,646	1,678	1,620	1,481	2,082,166
Commercial building only.....	6	139	120	203	228	241	212	272	207	164	191	148	125	250,781
Residential building only.....	25	145	167	158	187	204	226	240	253	255	198	170	150	343,331
Highway.....	7	217	125	181	438	725	935	1,108	1,007	1,099	978	769	207	1,169,156
Grading.....	4	67	65	85	121	164	174	178	174	162	137	115	85	228,478
Street paving.....	4	26	25	39	81	109	108	109	99	99	103	110	78	121,804
Other classes <sup>1</sup> .....	7	224	173	227	296	321	319	305	430	408	372	270	263	444,716
Subcontractors.....	116	1,380	1,330	1,417	1,479	1,483	1,502	1,547	1,038	1,028	1,744	1,700	1,633	2,881,978
Electrical.....	17	100	175	183	170	172	151	164	100	153	174	185	108	328,698
Heating and plumbing.....	49	588	548	512	516	502	522	528	572	573	602	580	570	1,021,360
Heating and pipe covering.....	13	143	144	135	138	128	151	158	168	174	201	183	174	278,561
Plumbing.....	28	374	363	337	332	322	322	324	303	354	349	349	349	660,301
Plumbing and heating combined.....	8	59	41	40	46	42	40	40	46	45	52	48	47	70,408
Plastering and lathing.....	4	65	73	108	75	46	34	40	63	60	75	81	74	153,531
Painting and decorating.....	12	147	91	105	152	163	195	201	241	250	298	314	252	392,324
Roofing and sheet-metal work.....	18	178	170	208	236	276	288	283	275	275	277	290	241	434,884
Roofing.....	9	72	75	98	126	150	155	138	136	138	143	152	110	188,000
Sheet-metal work.....	9	76	74	70	70	72	70	75	70	85	81	82	70	161,600
Roofing and sheet metal combined.....	3	30	25	36	40	62	58	40	54	50	53	56	46	90,234
Steel erection <sup>2</sup> .....	4	160	158	163	169	175	182	182	174	169	167	171	174	201,027
Marble and tiling.....	6	67	59	69	61	68	72	68	77	75	72	67	65	130,950
Other classes <sup>3</sup> .....	6	47	59	66	100	81	88	99	76	78	79	72	50	128,204
<i>Length of working week<sup>4</sup></i>														
General contractors.....	97	1,936	1,726	2,003	2,852	3,406	3,555	3,953	3,889	3,833	3,657	3,214	2,389	5,243,932
40-hour, 5-day week.....	1	8	6	6	11	15	19	16	13	17	18	15	12	20,356
44-hour, 5½-day week.....	65	973	990	1,065	1,335	1,536	1,600	1,653	1,480	1,472	1,341	1,309	1,251	2,408,309
All other 5½-day week.....	9	422	349	405	552	567	431	594	620	620	620	513	440	807,233
48-hour, 6-day week.....	3	20	30	40	58	67	60	70	80	79	54	61	49	62,254
64-hour, 6-day week.....	11	278	160	238	544	861	1,057	1,251	1,298	1,261	1,136	913	337	1,347,840
60-hour, 6-day week.....	3	19	21	48	97	108	145	129	171	100	189	96	38	206,919
All other 6-day week.....	3	78	87	146	140	112	113	91	169	182	211	155	155	286,148
All other not designated.....	2	129	87	114	109	118	116	118	136	116	108	100	101	145,873
Subcontractors.....	116	1,380	1,330	1,417	1,479	1,483	1,502	1,547	1,038	1,028	1,744	1,700	1,633	2,881,978
40-hour, 5-day week.....	16	206	200	241	251	220	215	265	314	340	400	405	359	678,553
44-hour, 5½-day week.....	76	803	762	779	777	796	798	824	875	842	890	905	867	1,618,051
All other 5½-day week.....	10	242	245	255	275	266	287	287	273	277	275	270	250	428,547
48-hour, 6-day week.....	5	27	26	29	52	57	50	44	44	45	51	49	37	68,668
64-hour, 6-day week.....	2	12	12	22	23	41	47	37	31	23	20	20	21	46,130
60-hour, 6-day week.....	5	71	66	67	74	76	72	57	74	74	73	73	70	106,928
All other 6-day week.....	1	1	1	5	10	10	10	10	10	10	10	10	10	12,000
All other not designated.....	1	19	19	10	17	17	17	17	17	17	19	19	19	27,492
Not reported.....	1	19	19	10	17	17	17	17	17	17	19	19	19	27,492
<b>PROVIDENCE</b> .....														
<i>Classification of establishments</i>														
General contractors.....	47	1,135	1,065	1,233	1,781	1,954	1,792	1,848	1,894	1,822	1,742	1,567	1,344	2,770,138
Building.....	35	868	861	930	1,287	1,285	1,157	1,245	1,174	1,155	1,113	1,070	987	1,923,131
Building not specialized.....	23	717	707	692	1,035	1,045	963	981	961	976	930	914	857	1,645,155
Commercial building only.....	5	113	117	190	211	196	158	214	155	107	126	98	81	192,543
Residential building only.....	7	38	37	42	41	44	40	50	58	72	67	58	40	85,433
Highway and street paving.....	4	56	46	86	199	319	293	275	254	237	235	140	308,232	
Grading.....	3	42	40	45	61	94	79	83	94	92	77	75	45	128,478
Other classes <sup>1</sup> .....	5	169	118	172	234	256	244	227	351	321	315	187	172	320,297
Subcontractors.....	69	942	871	937	981	989	1,002	1,057	1,157	1,149	1,218	1,218	1,139	2,058,861
Electrical.....	9	68	67	67	63	68	59	68	69	71	84	82	83	140,274
Heating and plumbing.....	23	359	353	327	327	311	312	322	365	367	378	367	377	607,857
Heating and piping.....	11	121	119	113	117	108	128	128	139	151	177	157	151	245,888
Plumbing.....	12	238	234	214	210	203	184	194	226	216	201	210	226	452,469
Masonry.....	5	32	38	75	62	44	46	64	64	40	53	53	51	121,441
Painting and decorating.....	12	147	91	105	152	163	195	201	241	250	298	314	252	392,324
Roofing and sheet-metal work.....	10	109	105	131	147	160	166	157	167	168	160	164	137	278,688
Roofing.....	6	36	40	56	75	81	84	79	76	77	77	72	49	97,027
Sheet-metal work.....	5	73	65	75	72	79	82	78	91	91	89	92	88	181,901
Steel erection <sup>2</sup> .....	4	160	158	163	169	175	182	182	174	169	167	171	174	291,027
Marble and tiling.....	6	67	59	69	61	68	72	68	77	75	72	67	65	130,950
<i>Length of working week<sup>4</sup></i>														
General contractors.....	47	1,135	1,065	1,233	1,781	1,954	1,792	1,848	1,894	1,822	1,742	1,567	1,344	2,770,138
40-hour, 5-day week.....	1	8	6	6	11	15	19	16	13	17	18	15	12	20,356
44-hour, 5½-day week.....	28	573	599	610	702	830	801	815	768	804	740	698	685	1,321,888
All other 5½-day week.....	6	252	227	264	309	330	269	321	327	205	231	209	198	438,095
64-hour, 6-day week.....	7	114	82	162	333	461	460	537	486	458	331	216	216	607,040
60-hour, 6-day week.....	2	3	3	8	17	28	28	30	37	38	30	30	12	40,732
All other 6-day week.....	2	56	61	69	120	107	84	88	76	156	157	178	120	187,148
All other not designated.....	2	129	87	114	109	118	116	118	136	116	108	106	101	145,873
Subcontractors.....	69	942	871	937	981	989	1,002	1,057	1,157	1,149	1,218	1,218	1,139	2,058,861
40-hour, 5-day week.....	14	104	158	191	202	184	193	229	207	249	345	349	317	486,004
44-hour, 5½-day week.....	40	503	446	455	464	479	475	511	501	534	554	555	529	1,068,897
All other 5½-day week.....	6	189	188	199	202	201	208	214	208	216	215	209	199	345,022
48-hour, 6-day week.....	4	21	18	22	40	45	44	39	30	37	41	41	28	50,102
64-hour, 6-day week.....	1	3	3	5	9	16	10	13	12	5	4	4	4	13,235
60-hour, 6-day week.....	2	43	39	41	37	37	34	24	34	33	30	31	33	55,509
All other 6-day week.....	1	10	10	5	10	10	10							

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TABLE 8.—EXPENDITURES OF REPORTING ESTABLISHMENTS: 1929

CLASSIFICATION OF ESTABLISHMENTS	Establishments reporting	Value of construction business reported	PRINCIPAL ITEMS OF EXPENDITURE			OTHER ITEMS OF EXPENDITURE							
			Subcontract work let	Wages paid	Cost of materials	Salaries		Rent for		Interest	Contract bond premiums	Compensation and liability insurance premiums	All other overhead expenses
						Proprietors and firm members	Employees	Equipment	Offices, etc.				
<b>RHODE ISLAND</b> .....	189	\$26,069,760	\$4,933,000	\$7,330,091	\$8,461,432	\$258,262	\$1,473,988	\$204,957	\$95,257	\$105,832	\$96,445	\$171,594	\$1,397,821
General contractors.....	88	17,582,989	4,823,000	4,845,948	4,440,512	107,908	951,116	202,262	32,760	80,683	83,278	129,505	801,230
Building.....	70	12,407,874	4,636,000	3,226,818	3,025,973	79,638	555,395	6,499	26,069	50,852	47,724	68,559	277,551
Building not specialized.....	44	10,407,877	4,064,000	2,769,960	2,424,931	43,489	455,842	6,273	22,724	34,764	46,826	60,224	231,298
Commercial building only.....	4	617,634	109,000	159,989	192,181	—	55,941	—	3,493	7,148	898	3,725	15,207
Residential building only.....	22	1,382,663	463,000	297,669	408,866	36,149	48,912	—	136	3,752	8,940	4,610	31,046
Highway.....	6	3,837,738	108,000	1,059,714	1,166,660	10,000	280,570	160,431	1,673	17,552	29,350	47,992	450,689
Grading.....	3	315,770	8,000	128,478	49,932	5,830	25,472	23,310	869	675	2,593	3,847	46,801
Street paving.....	3	221,265	—	108,854	27,483	—	14,880	8,207	1,600	303	80	1,945	21,118
Other classes <sup>1</sup> .....	6	800,242	70,000	322,284	171,459	12,440	74,799	3,005	1,649	11,301	3,631	7,252	94,981
Subcontractors.....	101	8,486,761	110,000	2,484,143	4,020,920	150,354	522,872	2,695	62,497	25,149	3,167	42,089	506,591
Electrical.....	14	1,104,805	2,000	326,171	550,015	24,885	72,293	1,770	11,734	5,834	799	4,003	54,116
Heating and plumbing.....	44	3,628,134	41,000	872,439	2,005,744	80,264	167,810	75	27,941	7,264	2,863	13,507	199,407
Heating and pipe covering.....	9	588,464	1,000	145,833	308,620	12,447	31,235	75	7,473	2,460	118	1,605	49,735
Plumbing.....	26	2,670,036	33,000	641,893	1,501,334	57,177	125,574	—	16,188	4,137	2,190	11,113	133,081
Plumbing and heating combined.....	9	360,634	7,000	85,213	197,700	10,880	10,591	—	4,280	667	55	789	16,591
Plastering and lathing <sup>2</sup> .....	4	336,734	20,000	173,232	92,669	5,000	7,618	300	1,137	2,247	—	1,016	14,221
Painting and decorating.....	12	828,561	3,000	392,324	225,763	15,805	58,490	—	7,023	1,495	5	5,081	39,222
Roofing and sheet-metal work.....	16	1,267,373	30,000	368,715	543,363	15,460	99,230	—	8,968	6,007	—	9,780	107,767
Roofing.....	7	444,127	24,000	116,921	184,848	7,660	31,078	—	7,007	4,445	—	4,680	46,166
Sheet-metal work.....	9	467,469	5,000	161,560	175,800	4,080	54,112	—	1,461	636	—	3,688	35,770
Roofing and sheet metal combined.....	3	355,777	1,000	90,234	182,625	3,120	14,040	—	500	928	—	1,412	25,841
Steel erection <sup>3</sup> .....	3	772,244	14,000	196,027	365,692	4,000	75,000	—	2,496	680	—	4,624	47,454
Marble and tiling.....	5	339,842	—	97,436	164,124	—	19,640	—	2,098	799	—	959	25,076
Other classes <sup>4</sup> .....	3	210,068	—	57,799	78,550	5,000	22,791	550	1,100	853	—	1,919	18,728
<b>PROVIDENCE</b> .....	102	15,237,223	3,519,000	4,265,257	4,532,992	132,150	801,306	42,521	61,250	57,517	48,131	95,322	785,823
General contractors.....	45	9,775,009	3,467,000	2,593,952	2,060,266	62,599	512,941	41,846	24,154	44,210	46,809	66,467	444,034
Building.....	34	7,707,141	3,371,000	1,869,377	1,604,604	55,439	358,337	4,382	21,038	33,528	35,132	36,332	155,818
Building not specialized.....	23	6,480,810	2,977,000	1,623,955	1,277,193	40,839	284,390	4,332	16,973	22,309	34,234	31,327	131,141
Commercial building only.....	4	617,634	109,000	159,989	192,181	—	55,941	—	3,493	7,148	898	3,725	15,207
Residential building only.....	7	600,191	285,000	85,433	135,230	14,600	18,300	50	672	4,071	—	1,280	9,470
Highway and street paving.....	4	1,343,135	82,000	398,232	321,054	—	99,302	12,854	598	4,356	8,247	20,591	191,940
Grading.....	3	315,770	8,000	128,478	49,932	5,830	25,472	23,310	869	675	2,593	3,847	46,801
Other classes <sup>1</sup> .....	4	408,963	6,000	197,865	74,876	1,300	20,830	1,300	1,640	5,651	837	5,697	49,385
Subcontractors.....	57	5,462,214	52,000	1,671,305	2,482,726	69,581	348,365	675	37,096	13,307	1,322	28,855	341,789
Electrical.....	6	318,870	—	100,959	144,274	3,479	21,284	300	5,860	1,789	70	1,227	7,460
Heating and plumbing.....	20	3,114,938	29,000	575,457	1,233,272	27,917	110,515	75	15,922	4,630	1,247	10,168	143,451
Heating and piping <sup>5</sup> .....	8	505,051	1,000	122,988	253,266	11,490	23,186	75	5,899	2,108	143	1,234	48,101
Plumbing.....	12	1,809,887	28,000	452,469	980,006	16,427	87,379	—	10,023	2,522	1,104	8,934	95,350
Masonry <sup>6</sup> .....	3	183,461	—	66,283	61,000	5,000	2,028	300	867	668	—	1,016	10,371
Painting and decorating.....	12	828,561	3,000	392,324	225,763	15,805	58,490	—	7,023	1,495	5	5,081	39,222
Roofing and sheet-metal work.....	8	704,792	6,000	212,819	297,701	13,380	61,408	—	2,830	3,276	—	5,180	68,155
Roofing.....	3	152,461	—	80,858	65,563	7,660	3,692	—	1,694	2,657	—	1,397	25,349
Sheet-metal work.....	5	552,331	6,000	181,961	232,138	5,720	57,716	—	1,136	619	—	3,788	42,806
Steel erection <sup>3</sup> .....	3	772,244	14,000	196,027	365,692	4,000	75,000	—	2,496	680	—	4,624	47,454
Marble and tiling.....	5	339,842	—	97,436	164,124	—	19,640	—	2,098	799	—	959	25,076

<sup>1</sup> Includes bridge and culvert; sewer, gas, water, conduit; dredging, river, harbor, etc.; and central station, light and power plant.

<sup>2</sup> Includes masonry.

<sup>3</sup> Includes ornamental iron; and metal work, n. o. s.

<sup>4</sup> Includes carpentering and wood flooring; concreting; and foundation.

<sup>5</sup> Includes pipe covering; and plumbing and heating combined.

<sup>6</sup> Includes plastering and lathing.

TABLE 9.—COST OF MATERIALS FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929, BY KIND

KIND OF MATERIAL	COST OF MATERIALS REPORTED BY—				KIND OF MATERIAL	COST OF MATERIALS REPORTED BY—					
	All classes of establishments			General contractors		Subcontractors	All classes of establishments			General contractors	Subcontractors
	Amount	Per cent distribution	Per \$1,000 construction work done <sup>1</sup>				Amount	Per cent distribution	Per \$1,000 construction work done <sup>1</sup>		
<b>RHODE ISLAND</b>					<b>PROVIDENCE</b>						
All kinds of material.....	\$0,957,738		\$303.74	\$5,149,316	\$4,808,422	\$5,490,427		\$380.07	\$2,372,898	\$3,117,529	
Distribution not reported.....	1,704,758	17.7		1,344,849	419,909	699,700	12.7		501,125	138,575	
Distributed by kind.....	8,192,980	100.0		3,804,467	4,388,513	4,790,727	100.0		1,811,773	2,978,954	
Sand, gravel, stone, slag, cinders, etc.....	505,401	6.2	24.29	402,520	12,881	106,415	2.2	8.44	102,487	3,023	
Brick (face, common, fire, paving, etc.).....	436,900	5.3	21.00	435,000	1,900	347,307	7.3	27.56	347,307		
Tile (fireproofing).....	49,859	.6	2.40	34,710	15,149	47,287	1.0	3.75	82,238	15,049	
Tile, facing, terra cotta, floor and wall.....	163,360	2.0	7.85	18,607	144,759	140,121	3.0	11.59	1,362	144,759	
Concrete and cinder block.....	20,186	.3	1.26	26,186		15,880	.3	1.26	15,880		
Cut stone, granite and marble.....	154,119	1.9	7.41	71,369	82,750	115,761	2.4	0.18	34,201	81,560	
Riprap, rubble, etc.....	12,567	.2	.60	12,567		12,176	.3	.97	12,176		
Cement.....	734,940	9.0	35.32	719,862	15,078	319,355	6.7	25.34	314,563	4,792	
Lime.....	79,935	1.0	3.84	70,302	9,633	63,478	1.3	5.04	59,445	4,033	
Plaster, etc.....	58,628	.7	2.82	11,308	47,320	22,097	.5	1.75	8,116	13,981	
Structural steel.....	503,869	6.9	27.10	123,869	440,000	401,561	10.3	39.00	51,561	440,000	
Reinforcing steel.....	113,099	1.4	5.43	113,099		13,890	.3	1.10	13,890		
Cast iron, miscellaneous, excluding pipe.....	70,451	.9	3.39	4,451	66,000	67,875	1.4	5.39	1,875	66,000	
Metal doors, windows, and trim.....	17,189	.2	.83	11,476	5,713	12,147	.3	.97	6,734	5,413	
Metal and wire lath and furring.....	30,202	.4	1.45	8,980	21,222	24,647	.5	1.95	3,675	20,972	
Ornamental metal work.....	3,163	( <sup>3</sup> )	.15	3,163		1,584	( <sup>3</sup> )	.13	1,584		
Lumber, rough and finished.....	901,906	11.0	43.34	900,206	1,700	530,736	11.1	42.10	530,411	325	
Lath, shingles and shakes (wood).....	57,152	.7	2.75	54,506	2,646	9,479	.2	.75	7,533	1,946	
Millwork.....	167,008	2.0	8.02	167,008		70,464	1.5	5.59	70,464		
Composition board.....	24,125	.3	1.16	23,835	290	12,355	.3	.98	12,265	90	
Waterproofing materials.....	10,367	.1	.50	10,069	298	7,327	.2	.58	7,020	298	
Hardware, rough and finished.....	75,792	.9	3.64	73,099	2,693	44,905	.9	3.56	42,212	2,693	
Paints, varnishes, glass.....	207,252	3.3	12.84	38,499	223,753	243,877	5.1	10.35	15,274	228,603	
Roofing and sheet metal.....	610,184	7.4	20.33	58,197	551,987	333,932	7.0	26.49	18,151	315,781	
Finished flooring other than cement, wood, or tile.....	54,241	.7	2.61	54,241		42,067	.9	3.34	42,067		
Screens, shades, awnings, etc.....	20,010	.4	1.39	12,509	16,501	17,852	.4	1.42	1,351	16,501	
Heating and ventilating equipment.....	691,295	8.4	33.22	14,187	677,108	450,335	9.6	30.44	4,646	454,689	
Plumbing and gas fitting equipment.....	1,233,120	15.1	59.26	7,715	1,225,405	777,134	16.2	61.65	4,864	772,270	
Electrical appliances and supplies.....	679,280	8.3	32.64	7,424	671,856	253,591	5.3	20.12	2,997	260,594	
Elevators, dumb-waiters, and equipment.....	1,549	( <sup>3</sup> )	.07	1,549		1,049	( <sup>3</sup> )	.08	1,049		
Pipe: Drain tile, vitrified, concrete, segment tile, corrugated.....	76,876	.9	3.69	73,776	3,100	3,980	.1	.32	3,830	150	
Pipe: Cast-iron, sheet and tube steel, etc.....	149,582	1.8	7.19	28,192	121,390	126,403	2.6	10.03	14,200	112,203	
Wire cable, guards, and fencing.....	19,780	.2	.95	17,377	2,403	2,989	.1	.24	586	2,403	
Bituminous paving materials, tar, asphalt, and oil.....	94,538	1.2	4.54	83,100	11,378	19,750	.4	1.57	8,372	11,378	
Wood piling and timber.....	9,284	.1	.44	9,284		9,284	.2	.74	9,284		
Freight, hauling or trucking to job.....	5,059	.1	.24	5,059		5,059	.1	.40	5,059		
Miscellaneous.....	16,706	.2	.76	7,106	8,600	11,506	.2	.91	2,906	8,600	

<sup>1</sup> The value of construction work done is obtained from figures presented in Table 1, by subtracting the value of subcontract work let from the total value of construction business.

<sup>2</sup> The percentage of total cost shown for this item is high, because a considerable part of the business of reporting establishments consisted of work done outside this area.

<sup>3</sup> Less than one-tenth of 1 per cent.

TABLE 10.—COMPARISON OF COST OF DESIGNATED MATERIALS FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929, WITH COST OF MATERIALS AND VALUE OF CONSTRUCTION BUSINESS

[Based exclusively upon reports of establishments which gave the distributed cost of materials]

KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	COST OF DESIGNATED MATERIAL				Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>	KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	COST OF DESIGNATED MATERIAL				Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>
	Cost of all materials distributed by kind	Amount	Per cent of—					Cost of all materials distributed by kind	Amount	Per cent of—			
			Total cost	Cost of all distributed materials						Total cost	Cost of all distributed materials		
<b>RHODE ISLAND</b>						<b>RHODE ISLAND—Contd.</b>							
<i>Sand, gravel, stone, slag, cinders, etc.</i>						<i>Cement—Continued</i>							
All classes.....	\$8,192,980	\$505,401	100.0	6.2	\$23,935,562	82.4	Subcontractors.....	\$4,388,513	\$15,078	2.1	0.3	\$9,521,317	98.8
General contractors.....	3,804,467	492,520	97.5	12.9	14,414,245	73.9	Concreting.....	9,260	4,600	.6	40.7	25,400	100.0
Building.....	2,634,746	99,594	19.7	3.8	10,370,249	63.5	Masonry.....	5,082	1,200	.2	21.1	34,264	95.0
Building not specialized.....	2,023,745	74,376	14.7	3.7	8,545,982	61.4	Plastering and lathing.....	82,470	480	.1	.6	270,686	93.6
Commercial building only.....	353,911	18,699	3.7	5.3	925,741	74.4	Roofing and sheet-metal work.....	2,575,849	5,724	.8	1.0	1,376,177	98.0
Residential building only.....	257,090	6,519	1.3	2.5	898,526	68.8	Roofing.....	257,334	5,724	.8	2.2	664,699	96.5
Highway.....	947,859	347,256	68.7	36.6	2,896,439	97.2	Marble and tiling.....	248,744	3,068	.4	1.2	604,342	100.0
Bridge and culvert.....	99,538	10,000	2.2	11.0	327,000	81.0	<i>Structural steel</i>						
Grading.....	21,079	8,614	1.7	40.9	159,556	98.4	All classes.....	8,192,980	563,869	100.0	6.9	23,935,562	82.4
Street paving.....	29,324	10,665	3.3	56.8	218,879	100.0	General contractors.....	3,804,467	123,869	22.0	3.3	14,414,245	73.9
Sewer, gas, water, conduit.....	17,245	2,436	.5	14.1	111,279	95.8	Building.....	2,634,746	112,519	20.0	4.3	10,370,249	63.5
Dredging, river, harbor, etc.....	12,770	855	.2	6.7	67,557	100.0	Building not specialized.....	2,023,745	44,837	8.0	2.2	8,545,982	61.4
Central station, light and power plant.....	41,900	6,200	1.2	14.8	263,286	99.2	Commercial building only.....	353,911	59,414	10.5	16.8	925,741	74.4
Subcontractors.....	4,388,513	12,881	2.5	.3	9,521,317	98.8	Residential building only.....	257,090	8,268	1.5	3.2	898,526	68.8
Concreting.....	9,260	2,000	.4	21.6	25,400	100.0	Highway.....	947,859	10,350	1.8	1.1	2,896,439	97.2
Masonry.....	5,082	892	.2	15.7	34,264	95.0	Bridge and culvert.....	99,538	1,000	.2	1.0	327,000	81.0
Plastering and lathing.....	82,470	5,793	1.1	7.0	270,686	93.6	Subcontractors.....	4,388,513	440,000	78.0	10.0	9,521,317	98.8
Roofing and sheet-metal work.....	2,575,849	3,653	.7	.6	1,376,177	98.0	Steel erection.....	518,100	440,000	78.0	84.9	1,231,600	98.7
Roofing.....	257,334	3,653	.7	1.4	664,699	96.5	<i>Reinforcing steel</i>						
Marble and tiling.....	248,744	543	.1	1.2	604,342	100.0	All classes.....	8,192,980	113,089	100.0	1.4	23,935,562	82.4
<i>Brick (face, common, fire, paving, etc.)</i>						<i>General contractors.....</i>							
All classes.....	8,192,980	436,900	100.0	5.3	23,935,562	82.4	Building.....	2,634,746	31,866	28.2	1.2	10,370,249	63.5
General contractors.....	3,804,467	435,000	99.6	11.4	14,414,245	73.9	Building not specialized.....	2,023,745	19,149	16.9	.9	8,545,982	61.4
Building.....	2,634,746	412,957	94.5	15.7	10,370,249	63.5	Commercial building only.....	353,911	11,817	10.4	3.3	925,741	74.4
Building not specialized.....	2,023,745	355,117	81.3	17.5	8,545,982	61.4	Residential building only.....	257,090	900	.8	.4	898,526	68.8
Commercial building only.....	353,911	45,262	10.4	12.8	925,741	74.4	Highway.....	947,859	69,233	61.2	7.3	2,896,439	97.2
Residential building only.....	257,090	12,578	2.9	4.9	898,526	68.8	Bridge and culvert.....	99,538	12,000	10.6	12.1	327,000	81.0
Highway.....	947,859	1,068	.5	.2	2,896,439	97.2	<i>Lumber, rough and finished</i>						
Bridge and culvert.....	99,538	1,068	.7	3.0	327,000	81.0	All classes.....	8,192,980	901,906	100.0	11.0	23,935,562	82.4
Street paving.....	29,324	3,400	.1	1.4	218,879	100.0	General contractors.....	3,804,467	900,209	99.8	23.7	14,414,245	73.9
Sewer, gas, water, conduit.....	17,245	3,675	.8	21.3	111,279	95.8	Building.....	2,634,746	856,137	94.9	32.5	10,370,249	63.5
Central station, light and power plant.....	41,900	13,000	3.0	31.0	263,286	99.2	Building not specialized.....	2,023,745	619,076	68.6	30.6	8,545,982	61.4
Subcontractors.....	4,388,513	1,900	.4	(*)	9,521,317	98.8	Commercial building only.....	353,911	91,855	10.2	26.0	925,741	74.4
Concreting.....	9,260	1,600	.3	16.2	25,400	100.0	Residential building only.....	257,090	145,206	16.1	56.5	898,526	68.8
Masonry.....	5,682	400	.1	7.0	34,264	95.0	Highway.....	947,859	7,087	.8	.7	2,896,439	97.2
<i>Tile, facing, terra cotta, floor and wall</i>						<i>Bridge and culvert.....</i>							
All classes.....	8,192,980	163,366	100.0	2.0	23,935,562	82.4	99,538	16,163	1.8	16.2	327,000	81.0	
General contractors.....	3,804,467	18,607	11.4	.5	14,414,245	73.9	Grading.....	21,079	4,700	.5	22.3	159,556	98.4
Building.....	2,634,746	18,607	11.4	.7	10,370,249	63.5	Sewer, gas, water, conduit.....	17,245	2,160	.2	12.5	111,279	95.8
Building not specialized.....	2,023,745	11,757	7.2	.6	8,545,982	61.4	Dredging, river, harbor, etc.....	12,770	2,259	.3	17.7	67,557	100.0
Commercial building only.....	353,911	5,850	3.6	1.7	925,741	74.4	Central station, light and power plant.....	41,900	11,700	1.3	27.9	263,286	99.2
Residential building only.....	257,090	1,000	.6	.4	898,526	68.8	Subcontractors.....	4,388,513	1,700	2.5	(*)	9,521,317	98.8
Subcontractors.....	4,388,513	144,759	88.6	3.3	9,521,317	98.8	Concreting.....	9,260	250	(*)	2.7	25,400	100.0
Marble and tiling.....	248,744	144,759	88.6	58.2	604,342	100.0	Roofing and sheet-metal work.....	2,575,849	1,450	.2	.3	1,376,177	98.0
<i>Cut stone, granite, and marble</i>						<i>Roofing.....</i>							
All classes.....	8,192,980	154,119	100.0	1.9	23,935,562	82.4	257,334	1,450	.2	.6	664,699	96.5	
General contractors.....	3,804,467	71,369	46.3	1.9	14,414,245	73.9	<i>Millwork</i>						
Building.....	2,634,746	46,699	30.3	1.8	10,370,249	63.5	All classes.....	8,192,980	167,008	100.0	2.0	23,935,562	82.4
Building not specialized.....	2,023,745	22,908	14.9	1.1	8,545,982	61.4	General contractors.....	3,804,467	167,008	100.0	4.4	14,414,245	73.9
Commercial building only.....	353,911	22,591	14.7	6.4	925,741	74.4	Building.....	2,634,746	167,008	100.0	6.8	10,370,249	63.5
Residential building only.....	257,090	1,200	.8	.5	898,526	68.8	Building not specialized.....	2,023,745	142,450	85.3	7.0	8,545,982	61.4
Highway.....	947,859	341,115	46.4	36.0	2,896,439	97.2	Commercial building only.....	353,911	8,868	5.3	2.5	925,741	74.4
Bridge and culvert.....	99,538	23,500	15.2	23.6	327,000	81.0	Residential building only.....	257,090	15,690	9.4	6.1	898,526	68.8
Grading.....	21,079	6,605	.4	3.2	159,556	98.4	<i>Paints, varnishes, glass</i>						
Street paving.....	29,324	505	.3	1.7	218,879	100.0	All classes.....	8,192,980	267,252	100.0	3.3	23,935,562	82.4
Subcontractors.....	4,388,513	82,750	53.7	1.9	9,521,317	98.8	General contractors.....	3,804,467	38,490	14.4	1.0	14,414,245	73.9
Masonry.....	5,682	1,250	.8	22.0	34,264	95.0	Building.....	2,634,746	37,171	13.9	14.1	10,370,249	63.5
Marble and tiling.....	248,744	81,500	52.9	32.8	604,342	100.0	Building not specialized.....	2,023,745	32,401	12.1	1.6	8,545,982	61.4
<i>Cement</i> <sup>3</sup>						<i>Commercial building only.....</i>							
All classes.....	8,192,980	734,940	100.0	9.0	23,935,562	82.4	353,911	1,750	.7	.5	925,741	74.4	
General contractors.....	3,804,467	719,862	97.9	18.9	14,414,245	73.9	Residential building only.....	257,090	3,020	1.1	1.2	898,526	68.8
Building.....	2,634,746	336,387	46.8	12.8	10,370,249	63.5	Highway.....	947,859	1,328	.5	.1	2,896,439	97.2
Building not specialized.....	2,023,745	295,676	40.2	14.6	8,545,982	61.4	Subcontractors.....	4,388,513	228,753	85.6	5.2	9,521,317	98.8
Commercial building only.....	353,911	29,744	4.0	8.4	925,741	74.4	Painting and decorating.....	225,763	224,103	83.9	99.3	795,557	99.0
Residential building only.....	257,090	11,037	1.5	4.3	898,526	68.8	Roofing and sheet-metal work.....	2,575,849	1,150	.4	.2	1,376,177	98.0
Highway.....	947,859	341,115	46.4	36.0	2,896,439	97.2	Roofing.....	257,334	150	.1	.1	664,699	96.5
Bridge and culvert.....	99,538	24,000	3.3	24.1	327,000	81.0	Sheet-metal work.....	135,890	1,000	.4	.7	358,791	93.9
Grading.....	21,079	2,000	.3	9.5	159,556	98.4	Steel erection.....	518,100	3,500	1.3	.7	1,231,600	98.7
Street paving.....	29,324	4,123	.6	14.1	218,879	100.0	<i>Roofing and sheet metal</i>						
Sewer, gas, water, conduit.....	17,245	1,237	.2	7.2	111,279	95.8	All classes.....	8,192,980	610,184	100.0	7.4	23,935,562	82.4
Central station, light and power plant.....	41,900	11,000	1.5	26.3	263,286	99.2	General contractors.....	3,804,467	58,197	9.5	1.5	14,414,245	73.9
						<i>General contractors.....</i>							
						Building.....							
						Building not specialized.....							
						Commercial building only.....							
						Residential building only.....							
						Highway.....							
						Bridge and culvert.....							
						Grading.....							
						Street paving.....							
						Sewer, gas, water, conduit.....							
						Dredging, river, harbor, etc.....							
						Central station, light and power plant.....							

See footnotes end of table, p. 1103.



TABLE 10.—COMPARISON OF COST OF DESIGNATED MATERIALS FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929, WITH COST OF MATERIALS AND VALUE OF CONSTRUCTION BUSINESS—Continued

KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	COST OF DESIGNATED MATERIAL				Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>	KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	COST OF DESIGNATED MATERIAL				Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>
	Cost of all materials distributed by kind	Amount	Per cent of—					Cost of all materials distributed by kind	Amount	Per cent of—			
			Total cost	Cost of all distributed materials						Total cost	Cost of all distributed materials		
<b>RHODE ISLAND—Contd.</b>						<b>PROVIDENCE</b>							
<i>Roofing and sheet metal—Continued</i>						<i>Sand, gravel, stone, slag, cinders, etc.</i>							
Subcontractors.....	\$4,388,513	\$551,987	90.5	12.6	\$9,521,317	98.8	All classes.....	\$4,700,727	\$106,415	100.0	2.2	\$15,131,200	79.0
Heating and plumbing.....	2,031,855	16,017	2.6	8.3	3,817,392	99.0	General contractors.....	1,811,773	102,487	96.3	5.7	3,353,093	65.8
Heating and piping.....	371,279	7,306	1.2	2.0	820,573	99.9	Building.....	1,698,242	73,742	99.3	4.3	7,659,652	57.2
Plumbing.....	853,745	7,505	1.2	.9	1,498,423	97.9	Building not specialized.....	1,416,737	61,366	97.7	4.3	6,708,640	55.0
Plumbing and heating combined.....	94,305	1,206	.2	1.3	163,225	98.1	Commercial building only.....	226,275	9,999	9.4	4.4	655,556	75.0
Roofing and sheet-metal work.....	575,849	535,970	87.8	93.1	1,376,177	98.0	Residential building only.....	55,230	2,377	2.2	4.3	295,456	53.2
Roofing.....	257,334	228,968	37.5	89.0	664,609	96.5	Bridge and culvert.....	20,000	6,000	5.6	30.0	47,000	100.0
Sheet-metal work.....	135,890	128,013	21.0	94.2	355,701	98.9	Grading.....	21,079	8,614	8.1	49.9	159,556	97.5
Roofing and sheet metal combined.....	182,625	178,994	20.3	98.0	355,777	99.7	Street paving.....	17,776	7,076	6.0	39.8	159,042	100.0
<i>Heating and ventilating equipment<sup>2</sup></i>						<i>Brick (face, common, fire, paving, etc.)</i>							
All classes.....	8,192,980	691,295	100.0	8.4	23,935,562	82.4	Subcontractors.....	2,978,954	3,928	3.7	.1	6,778,116	99.2
General contractors.....	3,804,467	14,187	2.1	.4	14,414,245	73.9	Plastering and lathing.....	41,701	2,693	2.5	6.5	117,413	100.0
Building.....	2,634,746	14,187	2.1	.5	10,370,249	63.5	Roofing and sheet-metal work.....	330,187	692	.7	.2	313,596	99.3
Building not specialized.....	2,023,745	14,187	2.1	.7	8,545,982	61.4	Roofing.....	138,049	692	.7	.5	373,933	99.8
Subcontractors.....	4,388,513	677,108	97.9	15.4	9,521,317	98.8	Marble and tiling.....	248,744	543	.5	.2	604,342	100.0
Electrical.....	675,959	200	(4)	(4)	1,327,623	99.8	<i>Tile, facing, terra cotta, floor and wall</i>						
Heating and plumbing.....	2,031,855	671,970	97.2	33.1	3,817,392	99.0	All classes.....	4,700,727	146,121	100.0	3.1	15,131,200	79.0
Heating and piping.....	371,279	309,111	44.7	83.3	820,573	99.9	General contractors.....	1,811,773	1,362	.9	.1	3,353,093	65.8
Pipe covering.....	42,000	42,000	6.1	100.0	107,000	100.0	Building.....	1,698,242	1,362	.9	.1	7,659,652	57.2
Plumbing.....	853,745	167,745	24.3	19.6	1,498,423	97.9	Building not specialized.....	1,416,737	1,362	.9	.1	6,708,640	55.0
Plumbing and heating combined.....	94,305	40,250	5.8	42.7	163,225	98.1	Commercial building only.....	226,275	27,312	7.9	12.1	655,556	75.0
Automatic sprinkler systems.....	670,526	112,864	16.3	16.8	1,228,171	100.0	Residential building only.....	55,230	4,851	1.4	8.8	295,456	53.2
Roofing and sheet-metal work.....	575,849	4,938	.7	.9	1,376,177	98.0	Central station, light and power plant.....	41,000	13,000	3.7	31.0	263,286	99.2
Roofing.....	257,334	3,938	.0	1.6	664,609	96.5	<i>Cut stone, granite and marble</i>						
Sheet-metal work.....	135,890	1,000	.1	.7	355,701	98.9	All classes.....	4,700,727	115,761	100.0	2.4	15,131,200	79.0
<i>Plumbing and gas-fitting equipment<sup>3</sup></i>						<i>Lime</i>							
All classes.....	8,192,980	1,233,120	100.0	15.1	23,935,562	82.4	All classes.....	4,700,727	63,478	100.0	1.3	15,131,200	79.0
General contractors.....	3,804,467	7,715	.6	.2	14,414,245	73.9	General contractors.....	1,811,773	59,445	93.6	3.3	3,353,093	65.8
Building.....	2,634,746	7,715	.6	.3	10,370,249	63.5	Building.....	1,698,242	59,445	93.6	3.3	7,659,652	57.2
Building not specialized.....	2,023,745	7,715	.6	.4	8,545,982	61.4	Building not specialized.....	1,416,737	59,445	93.6	3.3	6,708,640	55.0
Subcontractors.....	4,388,513	1,225,405	90.4	27.9	9,521,317	98.8	Commercial building only.....	226,275	18,994	8.9	8.4	655,556	75.0
Electrical.....	675,959	1,221,028	99.0	60.1	1,327,623	99.0	Residential building only.....	55,230	4,275	1.3	7.7	295,456	53.2
Heating and plumbing.....	2,031,855	53,862	4.4	14.5	820,573	99.9	Bridge and culvert.....	20,000	1,200	1.0	2.1	47,000	100.0
Heating and piping.....	371,279	53,862	4.4	14.5	820,573	99.9	Grading.....	21,079	665	3.0	3.2	159,556	97.5
Plumbing.....	853,745	660,345	54.3	78.4	1,498,423	97.9	Street paving.....	17,776	505	.4	2.8	159,042	100.0
Plumbing and heating combined.....	94,305	46,365	3.8	49.2	163,225	98.1	Subcontractors.....	2,978,954	81,500	70.4	2.7	6,778,116	99.2
Automatic sprinkler systems.....	670,526	451,456	36.6	67.3	1,228,171	100.0	Marble and tiling.....	248,744	81,500	70.4	32.8	604,342	100.0
Roofing and sheet-metal work.....	575,849	4,377	.4	.8	1,376,177	98.0	<i>Cement<sup>4</sup></i>						
Sheet-metal work.....	135,890	4,377	.4	3.2	355,701	98.0	All classes.....	4,700,727	310,355	100.0	6.7	15,131,200	79.0
<i>Electrical appliances and supplies<sup>5</sup></i>						<i>General contractors.....</i>							
All classes.....	8,192,980	679,280	100.0	8.3	23,935,562	82.4	Building.....	1,811,773	314,563	98.5	17.4	3,353,093	65.8
General contractors.....	3,804,467	7,424	1.1	.2	14,414,245	73.9	Building not specialized.....	1,698,242	298,140	93.4	17.6	7,659,652	57.2
Building.....	2,634,746	4,710	.7	.3	10,370,249	63.5	Commercial building only.....	226,275	20,200	16.6	1.4	6,708,640	55.0
Building not specialized.....	2,023,745	2,905	.4	.1	8,545,982	61.4	Residential building only.....	55,230	9,191	7.9	4.1	655,556	75.0
Residential building only.....	287,090	1,754	.3	.7	898,526	68.8	Bridge and culvert.....	20,000	1,200	1.0	2.2	47,000	100.0
Highway.....	947,859	2,705	.4	.3	2,806,439	97.2	Grading.....	21,079	665	3.0	3.2	159,556	97.5
Subcontractors.....	4,388,513	671,850	98.9	15.3	9,521,317	98.8	Street paving.....	17,776	505	.4	2.8	159,042	100.0
Electrical.....	675,959	670,856	98.8	99.2	1,327,623	99.8	Subcontractors.....	2,978,954	81,500	70.4	2.7	6,778,116	99.2
Heating and plumbing.....	2,031,855	1,000	.1	(4)	3,817,392	99.0	Marble and tiling.....	248,744	81,500	70.4	32.8	604,342	100.0
Heating and piping.....	371,279	1,000	.1	.3	820,573	99.9	<i>Lime</i>						
<i>Pipe: Cast-iron, sheet and tube steel, etc.</i>						<i>All classes.....</i>							
All classes.....	8,192,980	140,582	100.0	1.8	23,935,562	82.4	All classes.....	4,700,727	63,478	100.0	1.3	15,131,200	79.0
General contractors.....	3,804,467	28,192	18.8	.7	14,414,245	73.9	General contractors.....	1,811,773	59,445	93.6	3.3	3,353,093	65.8
Building.....	2,634,746	14,200	9.5	.5	10,370,249	63.5	Building.....	1,698,242	59,445	93.6	3.3	7,659,652	57.2
Commercial building only.....	353,911	14,200	9.5	4.0	925,741	74.4	Building not specialized.....	1,416,737	59,445	93.6	3.3	6,708,640	55.0
Highway.....	947,859	11,492	7.7	1.2	2,898,439	97.2	Commercial building only.....	226,275	2,930	4.6	1.3	655,556	75.0
Bridge and culvert.....	99,538	2,500	1.7	2.5	327,000	81.0	Residential building only.....	55,230	2,930	4.6	1.3	295,456	53.2
Subcontractors.....	4,388,513	121,390	81.2	2.8	9,521,317	98.8	Central station, light and power plant.....	41,000	11,000	3.4	26.3	263,286	99.2
Electrical.....	675,959	2,500	1.7	.4	1,327,623	99.8	Subcontractors.....	2,978,954	4,792	1.5	.2	6,778,116	99.2
Heating and plumbing.....	2,031,855	118,890	79.5	5.9	3,817,392	99.0	Plastering and lathing.....	41,701	216	.1	.5	117,413	100.0
Heating and piping.....	371,279	6,200	4.1	.7	1,498,423	97.9	Roofing and sheet-metal work.....	330,187	1,508	.5	.5	313,596	99.3
Plumbing.....	853,745	6,200	4.1	.7	1,498,423	97.9	Roofing.....	138,049	1,508	.5	1.1	373,933	99.8
Plumbing and heating combined.....	94,305	6,484	4.3	6.9	163,225	98.1	Marble and tiling.....	248,744	3,068	1.0	1.2	604,342	100.0
Automatic sprinkler systems.....	670,526	106,206	71.0	15.8	1,228,171	100.0	<i>Lime</i>						

See footnotes end of table, p. 1103.

CONSTRUCTION—RHODE ISLAND

TABLE 10.—COMPARISON OF COST OF DESIGNATED MATERIALS FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929, WITH COST OF MATERIALS AND VALUE OF CONSTRUCTION BUSINESS—Continued

KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	Cost of all materials distributed by kind	COST OF DESIGNATED MATERIAL			Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>	KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	Cost of all materials distributed by kind	COST OF DESIGNATED MATERIAL			Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>			
		Amount	Per cent of—						Amount	Total cost	Cost of all distributed materials			Amount	Per cent of—	
			Total cost	Cost of all distributed materials											Total cost	Cost of all distributed materials
<b>PROVIDENCE—Continued</b>						<b>PROVIDENCE—Continued</b>										
<i>Lime—Continued</i>						<i>Roofing and sheet metal</i>										
Subcontractors.....	\$2,978,954	\$4,033	6.4	0.1	\$6,778,116	99.2	All classes.....	\$4,790,727	\$333,932	100.0	7.0	\$15,131,209	79.0			
Plastering and lathing.....	41,701	3,094	4.9	7.4	117,413	100.0	General contractors.....	1,811,773	18,161	5.4	1.0	\$8,353,093	65.8			
Roofing and sheet-metal work.....	230,187	10	( <sup>4</sup> )	( <sup>4</sup> )	813,596	99.3	Building.....	1,698,242	18,161	5.4	1.1	7,659,652	57.2			
Roofing.....	138,049	10	( <sup>4</sup> )	( <sup>4</sup> )	373,033	99.8	Building not specialized.....	1,416,737	6,909	1.8	.4	6,708,640	55.0			
Marble and tiling.....	248,744	929	1.5	.4	604,342	100.0	Commercial building only.....	226,275	11,342	3.4	5.0	655,556	75.0			
							Residential building only.....	55,230	000	.3	1.6	295,456	53.2			
<i>Structural steel<sup>2</sup></i>							Subcontractors.....	2,978,954	315,781	94.0	10.6	\$6,778,116	99.2			
All classes.....	4,790,727	491,561	100.0	10.3	15,131,209	79.0	Heating and plumbing.....	1,343,921	7,306	2.2	.5	7,659,652	98.0			
General contractors.....	1,811,773	51,561	10.5	2.8	8,353,093	65.8	Heating and piping.....	321,915	7,306	2.2	2.3	746,251	99.9			
Building.....	1,698,242	51,561	10.5	3.0	7,659,652	57.2	Roofing and sheet-metal work.....	330,187	308,475	92.4	93.4	813,596	99.3			
Building not specialized.....	1,416,737	16,107	3.3	1.1	6,708,640	55.0	Roofing.....	138,049	122,468	88.7	88.7	373,033	99.8			
Commercial building only.....	226,275	28,214	5.7	12.5	655,556	75.0	Sheet-metal work.....	119,513	117,013	97.9	97.9	302,861	98.8			
Residential building only.....	55,230	7,240	1.5	13.1	295,456	53.2	Roofing and sheet metal combined.....	72,625	68,994	20.7	95.0	137,702	99.3			
Subcontractors.....	2,978,954	440,000	89.5	14.8	6,778,116	99.2	<i>Heating and ventilating equipment<sup>3</sup></i>									
Steel erection.....	518,100	440,000	89.5	84.9	1,231,600	98.7	All classes.....	4,790,727	459,335	100.0	9.6	15,131,209	79.0			
<i>Cast iron, miscellaneous, excluding pipe</i>							General contractors.....	1,811,773	4,646	1.0	.3	\$8,353,093	65.8			
All classes.....	4,790,727	67,875	100.0	1.4	15,131,209	79.0	Building.....	1,698,242	4,646	1.0	.3	7,659,652	57.2			
General contractors.....	1,811,773	1,875	2.8	.1	8,353,093	65.8	Building not specialized.....	1,416,737	4,646	1.0	.3	6,708,640	55.0			
Building.....	1,698,242	1,875	2.8	.1	7,659,652	57.2	Subcontractors.....	2,978,954	454,680	99.0	15.3	\$6,778,116	99.2			
Building not specialized.....	1,416,737	1,875	2.8	.1	6,708,640	55.0	Electrical.....	255,697	200	( <sup>4</sup> )	.1	514,194	100.0			
Subcontractors.....	2,978,954	66,000	97.2	2.2	6,778,116	99.2	Heating and plumbing.....	1,343,921	454,499	98.9	33.8	2,663,138	98.9			
Steel erection.....	518,100	66,000	97.2	12.7	1,231,600	98.7	Heating and piping.....	321,915	270,600	60.9	84.9	746,251	99.9			
<i>Lumber, rough and finished</i>							Pipe covering.....	42,000	42,000	0.1	100.0	107,900	100.0			
All classes.....	4,790,727	530,736	100.0	11.1	15,131,209	79.0	Plumbing.....	309,480	20,016	4.4	6.5	581,716	95.2			
General contractors.....	1,811,773	530,411	99.9	29.3	8,353,093	65.8	Automatic sprinkler systems.....	670,526	112,864	24.6	16.8	1,228,171	100.0			
Building.....	1,698,242	504,752	95.1	29.7	7,659,652	57.2	<i>Plumbing and gas fitting equipment<sup>4</sup></i>									
Building not specialized.....	1,416,737	410,653	77.4	29.0	6,708,640	55.0	All classes.....	4,790,727	777,134	100.0	16.2	15,131,209	79.0			
Commercial building only.....	226,275	72,755	13.7	32.2	655,556	75.0	General contractors.....	1,811,773	4,864	.6	.3	\$8,353,093	65.8			
Residential building only.....	55,230	21,344	4.0	38.6	295,456	53.2	Building.....	1,698,242	4,864	.6	.3	7,659,652	57.2			
Bridge and culvert.....	20,000	7,000	1.3	35.0	47,000	100.0	Building not specialized.....	1,416,737	4,864	.6	.3	6,708,640	55.0			
Grading.....	21,079	4,700	.9	22.3	159,556	97.5	Subcontractors.....	2,978,954	772,270	99.4	25.9	\$6,778,116	99.2			
Dredging, river, harbor, etc.....	12,776	2,259	.4	17.7	67,557	100.0	Heating and plumbing.....	1,343,921	772,270	99.4	57.5	2,663,138	98.9			
Central station, light and power plant.....	41,900	11,700	2.2	27.9	263,286	99.2	Heating and piping.....	321,915	35,000	4.5	10.9	746,251	99.9			
Subcontractors.....	2,978,954	325	.1	( <sup>4</sup> )	6,778,116	99.2	Plumbing.....	309,480	285,814	36.8	92.4	581,716	95.2			
Roofing and sheet-metal work.....	230,187	325	.1	.1	813,596	99.3	Automatic sprinkler systems.....	670,526	451,456	58.1	67.3	1,228,171	100.0			
Roofing.....	138,049	325	.1	.2	373,033	99.8	<i>Electrical appliances and supplies</i>									
<i>Millwork</i>							All classes.....	4,790,727	253,591	100.0	5.3	15,131,209	79.0			
All classes.....	4,790,727	70,464	100.0	1.5	15,131,209	79.0	General contractors.....	1,811,773	2,997	1.2	.2	\$8,353,093	65.8			
General contractors.....	1,811,773	70,464	100.0	3.9	8,353,093	65.8	Building.....	1,698,242	2,997	1.2	.2	7,659,652	57.2			
Building.....	1,698,242	70,464	100.0	4.1	7,659,652	57.2	Building not specialized.....	1,416,737	1,345	.5	.1	6,708,640	55.0			
Building not specialized.....	1,416,737	84,596	91.7	4.6	6,708,640	55.0	Residential building only.....	55,230	1,652	.7	3.0	295,456	53.2			
Commercial building only.....	226,275	5,888	8.3	2.6	655,556	75.0	Subcontractors.....	2,978,954	250,594	98.8	8.4	\$6,778,116	99.2			
<i>Paints, varnishes, glass</i>							Electrical.....	255,697	250,594	98.8	98.0	514,194	100.0			
All classes.....	4,790,727	243,877	100.0	5.1	15,131,209	79.0	<i>Pipe: Cast-iron, sheet, and tube steel, etc.</i>									
General contractors.....	1,811,773	15,274	6.3	.8	8,353,093	65.8	All classes.....	4,790,727	126,406	100.0	2.6	15,131,209	79.0			
Building.....	1,698,242	15,274	6.3	.9	7,659,652	57.2	General contractors.....	1,811,773	14,200	11.2	.8	\$8,353,093	65.8			
Building not specialized.....	1,416,737	14,554	6.0	1.0	6,708,640	55.0	Building.....	1,698,242	14,200	11.2	.8	7,659,652	57.2			
Commercial building only.....	226,275	350	.1	.2	655,556	75.0	Commercial building only.....	226,275	14,200	11.2	6.3	655,556	75.0			
Residential building only.....	55,230	370	.2	.7	295,456	53.2	Subcontractors.....	2,978,954	112,206	88.8	3.8	\$6,778,116	99.2			
Subcontractors.....	2,978,954	228,603	93.7	7.7	6,778,116	99.2	Electrical.....	255,697	2,500	2.0	1.0	514,194	100.0			
Painting and decorating.....	225,763	224,103	91.9	99.3	795,557	99.6	Heating and plumbing.....	1,343,921	109,706	86.8	8.2	2,663,138	98.9			
Roofing and sheet-metal work.....	230,187	1,000	.4	.3	813,596	99.3	Plumbing.....	309,480	3,500	2.8	1.1	581,716	95.2			
Sheet-metal work.....	119,513	1,000	.4	.8	302,861	98.8	Automatic sprinkler system.....	670,526	106,206	84.0	15.8	1,228,171	100.0			
Steel erection.....	518,100	3,500	1.4	.7	1,231,600	98.7										

<sup>1</sup> Based upon the difference between the total value of all construction business reported and the value of subcontract work let.  
<sup>2</sup> Includes cost of materials reported by establishments which did not include designated material in their distributed lists.  
<sup>3</sup> Includes construction work reported by establishments which did not include the designated material in their distributed lists.  
<sup>4</sup> Less than one-tenth of 1 per cent.  
<sup>5</sup> See footnote 2, Table 9, p. 1100.  
<sup>6</sup> Includes cost of materials reported by subcontracting establishments which did not include designated material in their distributed lists.  
<sup>7</sup> Includes construction work reported by subcontracting establishments which did not include the designated material in their distributed lists.

CONSTRUCTION—RHODE ISLAND

TABLE 11.—COST OF MATERIAL FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929

CLASSIFICATION OF ESTABLISHMENTS	Total cost of all materials	COST OF ALL MATERIALS DISTRIBUTED BY KIND		Sand, gravel, crushed stone, slag, cinders, etc.	Brick (face, common, fire, paving, etc.)	Tile (fire-proofing)	Tile, facing, terra cotta, floor, and wall	Concrete and cinder block	Cut stone, granite and marble	Cement	Lime	Plaster, etc.	Structural steel	Reinforcing steel	Cast iron, miscellaneous, excluding pipe	Metal doors, windows, and trim	Metal and wire lath and furring
		Amount	Per cent of total														
<b>RHODE ISLAND</b> .....	\$9,967,739	\$8,192,980	82.3	\$505,401	\$438,900	\$49,859	\$163,368	\$26,186	\$154,119	\$734,940	\$79,935	\$58,628	\$563,869	\$113,099	\$70,451	\$17,189	\$30,292
General contractors.....	5,149,316	3,804,467	73.9	492,520	435,000	34,710	18,607	26,186	71,369	719,862	70,302	11,308	123,869	113,099	4,451	11,476	8,980
Building.....	3,578,756	2,634,746	73.6	90,594	412,957	33,710	18,607	24,086	46,600	336,387	69,891	11,058	112,519	31,860	2,415	8,476	8,480
Building not specialized.....	2,609,793	2,023,745	75.8	74,376	355,117	33,457	11,757	18,500	22,908	295,606	61,464	6,428	44,837	19,149	2,375	3,228	4,311
Commercial building only.....	429,517	353,911	82.4	18,669	45,262	-----	5,850	2,364	22,591	29,744	5,030	3,500	59,414	11,817	-----	429	2,690
Residential building only.....	479,446	257,090	53.6	6,519	12,578	253	1,000	3,222	1,200	11,037	3,397	1,130	8,268	900	40	4,819	1,479
Highway.....	1,251,137	947,850	75.8	347,256	1,968	-----	-----	-----	-----	341,115	30	-----	10,350	69,233	420	-----	-----
Bridge and culvert.....	99,538	99,538	100.0	10,900	3,000	1,000	-----	-----	23,500	24,000	225	-----	1,000	12,000	-----	3,000	500
Grading.....	49,932	21,079	42.2	8,614	-----	-----	-----	2,100	665	2,000	-----	-----	-----	-----	-----	-----	-----
Street paving.....	98,032	29,324	29.9	16,665	400	-----	-----	-----	505	4,123	150	250	-----	-----	-----	-----	-----
Sewer, gas, water, conduit.....	17,245	17,245	100.0	2,436	3,675	-----	-----	-----	-----	1,237	-----	-----	-----	-----	1,610	-----	-----
Dredging, river, harbor, etc.....	12,776	12,776	100.0	855	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Central station, light and power plant.....	41,900	41,900	100.0	6,200	13,000	-----	-----	-----	-----	11,000	-----	-----	-----	-----	-----	-----	-----
Subcontractors.....	3,480,822	4,388,513	91.3	12,881	1,900	15,149	144,759	-----	82,750	15,078	9,633	47,320	440,000	-----	66,000	5,713	21,222
Concrete.....	9,250	9,250	100.0	2,000	1,500	100	-----	-----	-----	4,600	800	-----	-----	-----	-----	-----	-----
Electrical.....	696,379	676,959	97.1	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Heating and plumbing.....	2,245,479	2,031,855	90.5	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Heating and piping.....	440,657	371,279	84.2	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Pipe covering.....	42,000	42,000	100.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Plumbing.....	894,206	853,745	95.6	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Plumbing and heating combined.....	197,790	94,305	47.7	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Automatic sprinkler system.....	670,526	670,526	100.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Masonry.....	35,990	5,682	15.8	892	400	-----	-----	-----	1,250	1,200	-----	1,240	-----	-----	-----	300	250
Painting and decorating.....	225,763	225,763	100.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Plastering and lathing.....	97,470	82,470	84.6	5,793	-----	-----	-----	-----	-----	486	7,894	45,029	-----	-----	-----	-----	20,822
Roofing and sheet-metal work.....	640,849	575,849	89.9	3,653	-----	-----	-----	-----	-----	5,724	10	10	-----	-----	-----	5,131	-----
Roofing.....	282,334	257,334	91.1	3,653	-----	-----	-----	-----	-----	5,724	10	10	-----	-----	-----	-----	-----
Sheet-metal work.....	175,890	135,890	77.3	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	1,500	-----
Roofing and sheet metal combined.....	182,625	182,625	100.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Steel erection.....	518,100	518,100	100.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	440,000	-----	66,000	3,631	-----
Marble and tiling.....	248,744	248,744	100.0	543	-----	15,049	144,759	-----	81,500	3,068	929	1,041	-----	-----	-----	282	150
Metal work, n. e. s.....	14,841	14,841	100.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
<b>PROVIDENCE</b> .....	5,490,427	4,790,727	87.3	106,416	347,367	47,287	146,121	15,889	115,761	319,355	63,478	22,097	491,561	13,890	67,875	12,147	24,647
General contractors.....	4,272,868	1,811,773	76.4	102,487	347,367	32,238	1,362	15,889	34,261	314,563	60,445	8,116	51,561	13,890	1,875	6,734	3,675
Building.....	1,427,236	1,008,242	88.1	73,742	334,367	32,238	1,362	13,789	29,591	268,140	69,445	8,116	51,561	10,890	1,875	6,734	3,675
Building not specialized.....	1,400,125	1,416,737	95.1	61,366	302,204	32,129	1,362	11,425	19,200	274,871	55,406	4,428	16,107	6,773	1,875	1,836	3,176
Commercial building only.....	301,881	223,275	75.0	9,999	27,312	-----	-----	2,364	9,191	18,994	2,930	3,500	28,214	3,217	-----	429	130
Residential building only.....	135,230	55,230	40.8	2,377	4,851	109	-----	-----	1,200	4,275	1,109	188	7,240	900	-----	4,469	360
Bridge and culvert.....	20,000	20,000	100.0	6,000	-----	-----	-----	-----	3,500	-----	-----	-----	3,000	-----	-----	-----	-----
Grading.....	49,932	21,079	42.2	8,614	-----	-----	-----	2,100	665	2,000	-----	-----	-----	-----	-----	-----	-----
Street paving.....	17,776	17,776	100.0	7,079	-----	-----	-----	-----	505	3,423	-----	-----	-----	-----	-----	-----	-----
Sewer, gas, water, conduit.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Dredging, river, harbor, etc.....	12,776	12,776	100.0	855	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Central station, light and power plant.....	41,900	41,900	100.0	6,200	13,000	-----	-----	-----	-----	11,000	-----	-----	-----	-----	-----	-----	-----
Subcontractors.....	3,117,529	2,978,954	95.6	3,928	-----	15,049	144,759	-----	81,500	4,792	4,033	13,981	440,000	-----	66,000	5,413	20,972
Electrical.....	255,697	255,697	100.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Heating and plumbing.....	1,375,931	1,343,921	97.7	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Heating and piping.....	341,915	321,615	94.2	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Pipe covering.....	42,000	42,000	100.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Plumbing.....	309,480	309,480	100.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Automatic sprinkler system.....	670,526	670,526	100.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Painting and decorating.....	225,763	225,763	100.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Plastering and lathing.....	41,701	41,701	100.0	2,693	-----	-----	-----	-----	-----	216	3,094	12,930	-----	-----	-----	-----	20,822
Roofing and sheet-metal work.....	395,187	330,187	83.6	692	-----	-----	-----	-----	-----	1,508	10	10	-----	-----	-----	5,131	-----
Roofing.....	163,049	138,049	84.7	692	-----	-----	-----	-----	-----	1,508	10	10	-----	-----	-----	-----	-----
Sheet-metal work.....	159,513	119,513	74.9	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	1,500	-----
Roofing and sheet metal combined.....	72,625	72,625	100.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Steel erection.....	518,100	518,100	100.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	440,000	-----	66,000	3,631	-----
Marble and tiling.....	248,744	248,744	100.0	543	-----	15,049	144,759	-----	81,500	3,068	929	1,041	-----	-----	-----	282	150
Metal work, n. e. s.....	14,841	14,841	100.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

See footnotes end of table, p. 1105.

CONSTRUCTION—RHODE ISLAND

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TABLE 11.—COST OF MATERIAL FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929—Continued

CLASSIFICATION OF ESTABLISHMENTS	Lumber, rough and finished	Laths, shingles, and shakes	Mill-work	Composition board	Hardware, rough and finished	Paints, varnishes, and glass	Roofing and sheet metal	Finished flooring n. e. s.	Screens, shades, awnings, etc.	Heating and ventilating equipment	Plumbing and gas fitting equipment	Electrical appliances and supplies	Pipe: Drain tile, vitrified, concrete, etc.	Pipe: Cast iron, sheet and tube steel, etc.	Wire cable, guards, and fencing	Bituminous paving materials	Miscellaneous <sup>7</sup>
<b>RHODE ISLAND</b>	\$901,906	\$57,152	\$167,008	\$24,125	\$75,792	\$227,252	\$610,184	\$54,241	\$29,010	\$691,295	\$1,233,120	\$679,280	\$76,876	\$149,582	\$19,780	\$94,638	\$57,695
General contractors	900,200	54,500	167,008	23,835	73,099	38,499	58,197	54,241	12,509	14,187	7,715	7,424	73,776	28,192	17,377	83,100	48,797
Building	850,137	54,500	167,008	23,835	71,345	37,171	58,197	53,741	12,509	14,187	7,715	4,719	2,912	14,200	706	600	35,513
Building not specialized	619,076	39,172	142,450	20,163	56,230	32,401	41,147	43,525	11,240	14,187	7,715	2,965	2,721	706	600	600	35,928
Commercial building only	91,855	3,920	8,808	1,036	7,258	1,750	11,342	3,450	127				130	14,200			2,585
Residential building only	145,200	11,414	15,090	2,636	7,851	3,020	5,708	6,700	1,142			1,754	61				
Highway	7,087				1,376	1,328						2,705	62,893	11,492	16,271	74,520	
Bridge and culvert	10,163						500						250	2,500			1,000
Grading	4,700												1,600		400	1,000	7,231
Street paving	2,100												6,121				
Sewer, gas, water, conduit	2,259				378												9,284
Dredging, river, harbor, etc.	11,700																
Central station, light and power plant	1,700	2,046		290	2,693	228,753	551,987		16,501	677,108	1,225,405	671,866	3,100	121,390	2,403	11,378	8,808
Subcontractors	250									200		670,856		2,500	2,403		
Electrical										671,970	1,221,028	1,000	2,950	118,890			
Heating and plumbing							10,017			309,111	53,802	1,000					
Heating and piping							7,306			42,000							
Pipe covering										167,745	669,345		2,950	6,200			
Plumbing							7,505										
Plumbing and heating combined							1,208			40,250	40,365			6,484			
Automatic sprinkler system										112,864	451,456			106,200			
Masonry													150				
Painting and decorating						224,103			1,660								
Plastering and lathing		2,446															
Roofing and sheet-metal work	1,450	200		290	1,293	1,150	535,970			4,938	4,377					11,378	275
Roofing	1,450	200		290	1,293	150	228,993			3,938						11,378	275
Sheet-metal work						1,000	128,013			1,000	4,377						
Roofing and sheet metal combined							178,994										8,600
Steel erection						3,500											23
Marble and tiling					1,400												
Metal work, n. e. s.									14,841								
<b>PROVIDENCE</b>	530,736	9,479	70,464	12,355	44,905	243,877	393,932	42,067	17,862	469,336	777,134	253,591	3,980	126,400	2,989	19,750	47,695
General contractors	530,411	7,533	70,464	12,265	42,212	15,274	18,151	42,067	1,351	4,646	4,864	2,997	3,830	14,200	586	8,372	39,057
Building	504,752	7,533	70,464	12,265	41,834	15,274	18,151	42,067	1,351	4,646	4,864	2,997	2,280	14,200	186	600	29,303
Building not specialized	410,653	3,318	64,590	10,558	34,730	14,564	5,909	38,451	900	4,046	4,804	1,345	2,100		180	600	27,109
Commercial building only	72,755	2,620	5,868	1,036	5,933	350	11,342	3,450	127				130	14,200			2,134
Residential building only	21,344	1,595		671	1,121	370	900	166	324			1,652					500
Bridge and culvert	7,000																
Grading	4,700												1,600		400	1,000	6,772
Street paving																	
Sewer, gas, water, conduit	2,259				378												9,284
Dredging, river, harbor, etc.	11,700																
Central station, light and power plant	325	1,940		90	2,693	228,603	315,781		16,501	454,689	772,270	250,594	150	112,200	2,403	11,378	8,898
Subcontractors										200		250,594		2,500	2,403		
Electrical										454,489	772,270		150	109,700			
Heating and plumbing							7,306			279,609	35,000						
Heating and piping							7,306			42,000							
Pipe covering										20,016	285,814		150	3,500			
Plumbing																	
Automatic sprinkler system										112,864	451,456			106,200			
Painting and decorating						224,103			1,660								
Plastering and lathing		1,946															
Roofing and sheet-metal work	325			90	1,293	1,000	308,475										11,378
Roofing	325			90	1,293	1,000	122,468										11,378
Sheet-metal work						1,000	117,013										275
Roofing and sheet metal combined							68,994										275
Steel erection						3,500											8,600
Marble and tiling					1,400												23
Metal work, n. e. s.									14,841								

<sup>1</sup> Certain establishments did not give a distribution of the cost of their materials by separate items. The total cost of materials reported by such establishments is, however, included in totals in this column which carry a footnote to that effect.

<sup>2</sup> See note 2, Table 9, p. 1100.

<sup>3</sup> Carpentering and wood flooring, \$60,000; ornamental iron, \$11,251; foundation, \$4,300.

<sup>4</sup> Highway, \$303,278.

<sup>5</sup> Masonry, \$30,314; ornamental iron, \$11,251.

<sup>6</sup> Plumbing and heating combined, \$12,010.

<sup>7</sup> Includes the reported cost of riprap, rubble, etc.; ornamental metal work; waterproofing material; elevators and dumb waiters; wood piling and timber; freight, hauling, or trucking; and miscellaneous, n. e. s. For total cost of these items see Table 9.

CONSTRUCTION—RHODE ISLAND

TABLE 12.—NUMBER OF AND VOLUME OF BUSINESS REPORTED BY ESTABLISHMENTS DOING A CONSTRUCTION BUSINESS OF LESS THAN \$25,000 IN 1929, PERCENTAGE OF TOTAL NUMBER OF KNOWN ESTABLISHMENTS, AND AVERAGE VOLUME PER ESTABLISHMENT

TYPES OF WORK	RHODE ISLAND (1930 population, 687,497)							PROVIDENCE (1930 population, 252,981)			REMAINDER OF STATE (1930 population, 434,510)				
	Known contracting establishments				Number of reporting establishments	Volume of business reported			Volume of business			Total number active in 1929	Volume of business		
	Total number	Inactive in 1929	Active in 1929			Per cent of active	Amount	Average per establishment	Total number active in 1929	Number of reporting establishments	Amount		Total number active in 1929	Number of reporting establishments	Amount
			Number	Per cent											
Total establishments canvassed (under \$25,000).....	990	10	980					490			400				
Total establishments, type of work unknown.....	53	3	50		11	22.0	\$91,755	\$8,341	32	5	\$30,815	18	0	\$51,940	
Total general and subcontractors classified.....	937	7	930	100.0				468			472				
Total general contractors classified.....	235	5	280	80.1	57	20.4	583,653	10,240	103	17	101,340	177	40	422,304	
Building.....	270	5	271	20.1	50	20.7	564,653	10,083	90	16	142,340	172	40	422,304	
Highway.....	4		4	.4					2			2			
Sewer, gas, water conduit.....	3		3	.3	1	33.3	10,000	10,000	1	1	10,000	2			
Dam and reservoir.....	1		1	.1					1						
Dredging.....	1		1	.1								1			
Total subcontractors classified.....	652	2	650	69.9	142	21.8	1,172,304	8,250	355	70	580,034	205	72	501,400	
Carpentering.....	40	1	39	4.2	13	33.3	64,076	4,920	20	8	31,044	10	5	32,432	
Concreting.....	24		24	2.6	2	8.3	10,900	5,460	14	1	4,900	10	1	0,000	
Electrical.....	03		93	10.0	21	22.6	100,644	7,935	40	12	100,898	47	0	65,740	
Heating and ventilating.....	17	1	16	1.7	2	12.5	30,805	15,402	15	2	30,805	1			
Masonry.....	42		42	4.5	9	21.4	80,444	8,938	9	1	10,250	33	8	64,185	
Painting and decorating.....	106		106	11.4	30	28.3	223,119	7,437	55	12	72,321	51	18	150,798	
Plastering.....	13		13	1.4	2	15.4	11,030	5,515	10	1	5,500	3	1	5,530	
Plumbing and heating.....	254		254	27.3	53	20.9	480,674	9,069	144	25	230,605	110	28	244,069	
Sheet metal and roofing.....	47		47	5.1	8	17.0	79,702	9,963	34	7	72,002	13	1	7,790	
Marble and tiling.....	8		8	.9	1	12.5	15,000	15,000	5			3	1	15,000	
Excavating.....	3		3	.3								3			
Ornamental iron.....	5		5	.5	1	20.0	10,000	10,000	3	1	10,000	2			

TABLE 13.—ESTABLISHMENTS (WHOSE BUSINESS WAS LESS THAN \$25,000 IN 1929) WHICH REPORTED THEIR VOLUME OF CONSTRUCTION WORK, CLASSIFIED BY RANGE OF VOLUME OF BUSINESS

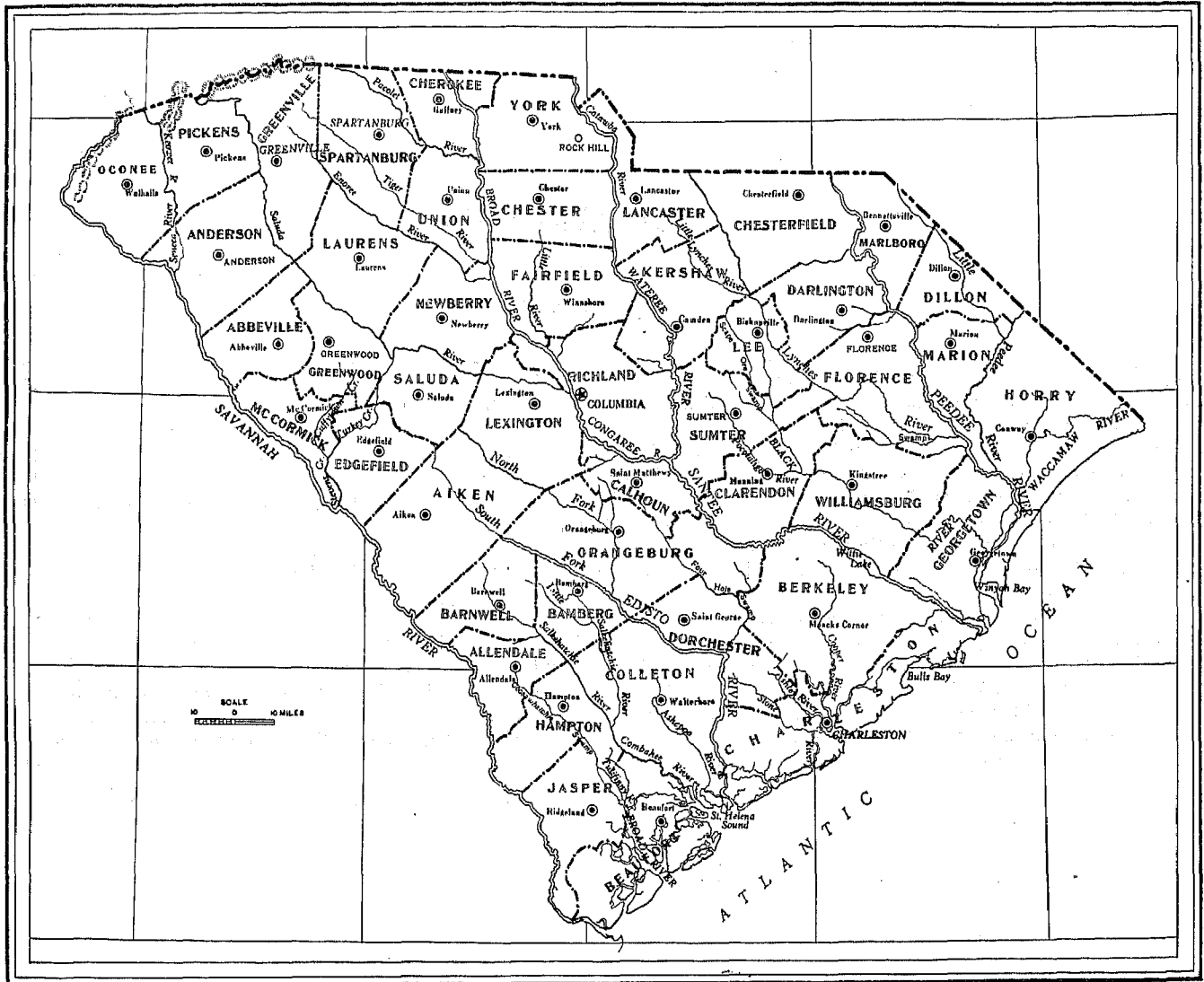
CLASSIFICATION	Total	Less than \$2,500	\$2,500 to \$4,999	\$5,000 to \$7,499	\$7,500 to \$9,999	\$10,000 to \$12,499	\$12,500 to \$14,999	\$15,000 to \$17,499	\$17,500 to \$19,999	\$20,000 to \$22,499	\$22,500 to \$24,999
<b>RHODE ISLAND</b>											
Total general and subcontractors.....	210	30	35	42	26	28	9	12	11	9	8
General contractors.....	57	8	8	6	6	11	3	3	5	5	2
Subcontractors.....	142	20	25	34	18	16	0	8	6	3	6
Type of contracting unknown.....	11	2	2	2	2	1		1		1	

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CONSTRUCTION—SOUTH CAROLINA

TABLE 3.—CONSTRUCTION BUSINESS DURING 1929, BY LOCATION

CLASSIFICATION OF ESTABLISHMENTS	Establishments reporting	Total	In home city	In home State	Outside home State	CLASSIFICATION OF ESTABLISHMENTS	Establishments reporting	Total	In home city	In home State	Outside home State
General contractors <sup>1</sup> .....	74	11,960,601	3,284,360	9,208,167	2,752,434	Subcontractors—Continued					
Building.....	49	6,918,806	3,199,338	5,289,820	1,628,980	Electrical.....	6	\$784,557	\$205,043	\$497,835	\$286,722
Building not specialized <sup>1</sup> .....	42	6,483,902	2,769,434	4,854,916	1,628,980	Heating and plumbing.....	16	1,686,197	809,284	1,156,767	529,430
Residential building only.....	7	434,904	429,004	434,904	-----	Heating and piping.....	4	522,411	142,037	367,281	155,130
Highway.....	12	3,611,126	10,424	3,243,160	367,966	Plumbing.....	7	710,001	441,001	441,001	260,000
Bridge and culvert.....	7	824,506	24,500	279,740	544,766	Plumbing and heating combined.....	5	453,785	226,246	348,485	105,300
Street paving.....	3	417,717	47,831	207,001	210,716	Roofing and sheet-metal work.....	8	803,635	363,114	560,310	243,325
Other classes <sup>2</sup> .....	3	188,446	2,267	188,446	-----	Other classes <sup>3</sup> .....	5	187,683	122,878	171,688	16,000
Subcontractors.....	38	3,856,311	1,623,319	2,704,595	1,151,716						
Concreting.....	3	394,239	123,000	318,000	76,239						

<sup>1</sup> Includes operative builders.

<sup>2</sup> Includes grading; and waterworks.

<sup>3</sup> Includes painting and decorating; and marble and tiling.

TABLE 4.—CONSTRUCTION BUSINESS OUTSIDE HOME STATE, BY LOCATION

STATE OR COUNTRY	LOCATION REPORTED BY—			STATE OR COUNTRY	LOCATION REPORTED BY—		
	All classes of establishments	General contractors	Subcontractors		All classes of establishments	General contractors	Subcontractors
<b>SOUTH CAROLINA</b>				<b>SOUTH CAROLINA—Continued</b>			
Total distributed by State or country <sup>1</sup> .....	\$3,904,150	\$2,752,434	\$1,151,716	Total distributed by State or country—Continued			
Alabama.....	341,420	282,977	68,443	Tennessee.....	\$320,717	\$320,717	-----
District of Columbia.....	134,600	134,600	-----	Virginia.....	270,733	148,692	\$122,041
Georgia.....	1,183,328	1,109,190	74,138	West Virginia.....	8,543	-----	8,543
Kentucky.....	76,239	-----	76,239	Other States, n. s.....	100,225	-----	100,225
Louisiana.....	3,200	-----	3,200	Mexico.....	47,500	-----	47,500
Nebraska.....	6,500	-----	6,500				
North Carolina.....	1,405,145	750,258	648,887				

<sup>1</sup> Number of establishments reporting: All classes, 30; general contractors, 16; subcontractors, 14.

TABLE 5.—NUMBER AND SALARIES OF PROPRIETORS, FIRM MEMBERS, AND SALARIED EMPLOYEES: 1929

CLASSIFICATION OF ESTABLISHMENTS	Establishments reporting	PROPRIETORS AND FIRM MEMBERS				SALARIED EMPLOYEES									
		Receiving no salary	Receiving salaries			All salaried employers		Officers and clerical staff		Superintendents, foremen, etc.		Number reported, by sex			Sex not reported
			Number	Total annual salaries	Total number	Total annual salaries	Number	Total annual salaries	Number	Total annual salaries	Total	Male	Female		
<b>SOUTH CAROLINA</b> .....	114	80	32	\$142,191	380	\$884,801	164	\$414,766	226	\$470,145	331	297	34	49	
General contractors <sup>1</sup> .....	75	58	20	97,828	278	635,994	88	255,369	190	380,625	244	221	23	34	
Building.....	48	39	16	82,308	144	340,743	49	168,006	95	182,737	131	114	17	13	
Building not specialized <sup>1</sup> .....	41	34	16	82,308	134	321,710	45	150,223	89	171,487	121	105	16	13	
Residential building only.....	7	5	-----	-----	10	19,038	4	7,783	6	11,250	10	9	1	-----	
Highway.....	13	6	2	5,920	90	213,671	26	74,419	64	130,252	71	66	5	10	
Bridge and culvert.....	7	7	-----	-----	27	51,704	9	15,724	18	35,980	25	24	1	2	
Street paving.....	4	3	2	9,600	11	18,604	2	3,320	9	15,284	11	11	-----	-----	
Other classes <sup>2</sup> .....	3	3	-----	-----	6	11,272	2	3,900	4	7,372	6	6	-----	-----	
Subcontractors.....	39	22	12	44,363	102	248,907	66	159,387	36	89,520	87	76	11	15	
Concreting.....	3	2	1	2,500	15	46,180	4	11,700	11	34,480	15	12	3	-----	
Electrical.....	6	2	1	3,358	26	70,047	18	62,185	8	16,862	21	20	1	5	
Heating and plumbing.....	17	11	8	29,905	28	49,202	20	33,804	8	15,398	21	16	5	7	
Heating and piping.....	5	4	1	12,000	9	13,264	6	9,264	3	4,000	8	7	1	1	
Plumbing.....	7	4	2	6,460	12	17,010	9	10,760	3	6,250	9	7	2	3	
Plumbing and heating combined.....	5	3	5	11,445	7	18,928	5	13,750	2	5,148	4	2	2	3	
Roofing and sheet-metal work.....	8	5	1	2,600	26	58,388	19	40,028	7	18,360	24	22	2	2	
Other classes <sup>3</sup> .....	5	2	1	6,000	7	16,090	5	11,670	2	4,420	6	6	-----	1	

<sup>1</sup> Includes operative builders.

<sup>2</sup> Includes grading; and waterworks.

<sup>3</sup> Includes painting and decorating; and marble and tiling.

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**TABLE 6.—VALUE OF CONSTRUCTION EQUIPMENT, IN COMPARISON WITH CONSTRUCTION BUSINESS AND WAGES PAID DURING 1929**

CLASSIFICATION OF ESTABLISHMENTS AND PERCENTAGE OF EQUIPMENT OWNED	Establishments reporting	EQUIPMENT		Value of construction business reported	Wages paid	CLASSIFICATION OF ESTABLISHMENTS AND PERCENTAGE OF EQUIPMENT OWNED	Establishments reporting	EQUIPMENT		Value of construction business reported	Wages paid
		Purchased during the year	Inventory value at end of year					Purchased during the year	Inventory value at end of year		
<b>SOUTH CAROLINA</b> .....	<b>99</b>	<b>\$121,549</b>	<b>\$703,373</b>	<b>\$15,155,618</b>	<b>\$3,387,502</b>	<i>Percentage of equipment owned</i>					
<i>Classification of establishments</i>						General contractors <sup>1</sup> .....	66	\$98,254	\$605,802	\$11,845,158	\$2,573,746
Building.....	42	25,794	152,008	6,475,353	1,041,277	None.....	1		30,000	13,425	
Building not specialized <sup>1</sup> .....	36	23,294	149,608	6,007,958	1,533,852	1 to 25 per cent.....	1	400	1,000	60,000	
Residential building only.....	6	2,500	3,000	407,400	107,425	26 to 50 per cent.....					
Highway.....	13	46,481	327,450	4,180,032	644,794	51 to 75 per cent.....	1	13,500	14,200	93,000	
Bridge and culvert.....	6	10,307	57,019	697,506	178,311	76 to 99 per cent.....	6	32,761	109,475	1,526,290	
Other classes <sup>2</sup> .....	5	15,672	68,710	491,062	109,364	100 per cent.....	55	49,976	473,010	9,095,601	
Subcontractors.....	33	23,295	97,571	3,310,460	793,756	Not reported.....	2	1,617	8,117	137,267	
Concrete.....	3	5,000	31,200	394,230	74,770	Subcontractors.....	33	23,295	97,571	3,310,460	793,756
Electrical.....	5	2,967	14,272	754,557	217,392	None.....					
Heating and plumbing.....	14	6,885	26,200	1,267,594	312,471	1 to 25 per cent.....					
Heating and piping.....	4	2,535	5,728	522,411	107,740	26 to 50 per cent.....					
Plumbing.....	4	1,100	5,070	246,001	92,078	51 to 75 per cent.....					
Plumbing and heating combined.....	6	3,250	11,853	480,132	112,647	76 to 99 per cent.....	4	8,814	12,048	276,293	
Roofing and sheet-metal work.....	8	6,403	22,693	803,635	144,823	100 per cent.....	20	14,481	85,623	3,034,167	
Other classes <sup>3</sup> .....	3	1,140	3,146	100,435	44,291	Not reported.....					

<sup>1</sup> Includes operative builders.

<sup>2</sup> Includes grading; street paving; and waterworks.

<sup>3</sup> Includes painting and decorating; and marble and tiling.

**TABLE 7.—WAGE EARNERS BY MONTHS, AND WAGES PAID DURING 1929**

CLASSIFICATION OF ESTABLISHMENTS AND LENGTH OF WORKING WEEK	Establishments reporting	NUMBER EMPLOYED ON 15TH DAY OF THE MONTH OR NEAREST REPRESENTATIVE DAY												Wages paid during year
		January	February	March	April	May	June	July	August	September	October	November	December	
<b>SOUTH CAROLINA</b> .....	<b>85</b>	<b>2,228</b>	<b>2,264</b>	<b>3,074</b>	<b>3,118</b>	<b>3,556</b>	<b>3,858</b>	<b>4,212</b>	<b>4,270</b>	<b>4,196</b>	<b>3,484</b>	<b>2,985</b>	<b>2,802</b>	<b>\$3,066,492</b>
<i>Classification of establishments</i>														
General contractors.....	51	1,040	1,732	2,524	2,566	2,905	3,128	3,511	3,580	3,550	2,848	2,320	2,214	2,228,020
Building.....	34	822	876	1,001	1,613	1,704	1,948	2,317	2,316	2,397	1,601	1,281	1,128	1,526,907
Building not specialized.....	31	801	852	1,573	1,504	1,095	1,881	2,265	2,204	2,352	1,601	1,265	1,108	1,487,541
Residential building only.....	3	21	24	28	49	69	67	62	52	45	30	16	20	38,366
Highway.....	9	657	662	730	718	857	873	885	801	800	830	777	800	502,913
Bridge and culvert.....	4	65	92	88	91	80	110	109	113	126	150	150	162	94,651
Other classes <sup>1</sup> .....	4	96	102	105	144	204	197	200	200	227	177	121	124	104,540
Subcontractors.....	34	588	532	550	552	681	730	701	690	646	636	656	588	338,472
Concrete.....	3	47	50	118	134	205	220	150	98	56	47	98	71	74,779
Electrical.....	5	106	107	97	101	114	107	110	108	111	124	117	118	220,723
Heating and plumbing.....	15	283	235	194	104	178	206	230	271	284	293	285	250	342,291
Heating and piping.....	5	136	108	80	74	67	79	75	93	100	114	109	84	136,066
Plumbing.....	4	63	62	49	46	48	50	64	71	70	68	68	65	93,578
Plumbing and heating combined.....	6	84	65	65	44	63	77	91	107	114	111	108	101	112,647
Roofing and sheet-metal work.....	6	102	92	94	96	116	126	118	114	112	120	107	100	125,020
Other classes <sup>2</sup> .....	5	50	48	47	57	68	71	87	99	83	52	40	40	75,669
<i>Length of working week</i>														
General contractors.....	51	1,040	1,732	2,524	2,566	2,905	3,128	3,511	3,580	3,550	2,848	2,320	2,214	2,228,020
40-hour, 5-day week.....	1	64	34	26	53	60	91	101	194	143	139	137	111	113,583
45-hour, 5-day week.....	1	10	10	10	20	20	20	20	20	20	20	20	20	10,900
All other 5-day week.....	1	92	94	87	70	85	70	95	105	95	117	95	80	69,413
44-hour, 5½-day week.....	5	62	59	66	95	125	233	303	302	294	268	229	125	178,358
49½-hour, 5½-day week.....	25	950	1,010	1,775	1,725	1,841	1,932	2,128	2,072	2,243	1,562	1,174	1,154	1,286,239
All other 5½-day week.....	4	54	75	83	77	81	87	85	90	82	82	98	99	96,496
48-hour, 6-day week.....	3	116	92	72	52	56	57	68	99	102	102	99	69	104,969
54-hour, 6-day week.....	3	92	94	83	86	98	91	93	93	94	107	101	101	196,109
60-hour, 6-day week.....	3	16	14	14	15	78	63	74	13	13	16	74	18	37,727
All other 6-day week.....	1	15	13	14	17	19	22	21	22	23	16	14	15	16,650
All other not designated.....	1	4	4	4	6	15	25	25	25	25		5	6	15,397
Subcontractors.....	34	588	532	550	552	681	730	701	690	646	636	656	588	338,472
40-hour, 5-day week.....	1	5	5	5	5	5	5	5	5	5	5	5	5	6,950
45-hour, 5-day week.....	13	180	153	128	123	150	176	192	205	207	219	211	204	261,161
50-hour, 5-day week.....	4	71	66	67	64	76	84	79	71	66	78	68	61	94,517
All other 5-day week.....	2	47	50	118	134	140	168	95	93	56	47	38	71	58,079
44-hour, 5½-day week.....	3	42	41	45	50	44	39	40	59	55	46	41	38	47,913
49½-hour, 5½-day week.....	3	116	92	72	52	56	57	68	99	102	102	99	69	104,969
All other 5½-day week.....	3	92	94	83	86	98	91	93	93	94	107	101	101	196,109
48-hour, 6-day week.....	3	16	14	14	15	78	63	74	13	13	16	74	18	37,727
54-hour, 6-day week.....	3	15	13	14	17	19	22	21	22	23	16	14	15	16,650
60-hour, 6-day week.....	1	4	4	4	6	15	25	25	25	25		5	6	15,397

<sup>1</sup> Includes grading; street paving; and waterworks.

<sup>2</sup> Includes painting and decorating; and marble and tiling.

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TABLE 8.—EXPENDITURES OF REPORTING ESTABLISHMENTS: 1929

CLASSIFICATION OF ESTABLISHMENTS	Establishments reporting	Value of construction business reported	PRINCIPAL ITEMS OF EXPENDITURE			OTHER ITEMS OF EXPENDITURE							
			Subcontract work let	Wages paid	Cost of materials	Salaries		Rent for		Interest	Contract bond premiums	Compensation and liability insurance premium	All other overhead expenses
						Proprietors and firm members	Employees	Equipment	Officers, etc.				
<b>SOUTH CAROLINA</b> .....	91	\$13,412,878	\$1,386,000	\$2,975,011	\$6,772,700	\$124,591	\$715,824	\$27,750	\$41,924	\$59,418	\$51,988	\$66,735	\$487,074
General contractors <sup>1</sup> .....	57	9,893,252	1,365,000	2,114,491	4,855,797	88,228	494,334	27,325	15,096	43,490	43,330	51,631	302,612
Building.....	38	5,729,568	813,000	1,406,956	2,914,973	82,308	307,903	60	9,617	26,341	22,426	32,042	112,810
Building, not specialized <sup>1</sup> .....	33	5,349,158	777,000	1,365,771	2,730,324	82,308	290,690	60	9,452	15,020	22,426	31,777	102,777
Residential building only.....	5	380,400	36,000	101,185	184,649	-----	17,213	-----	165	11,321	-----	265	10,033
Highway.....	11	3,384,683	474,000	439,524	1,626,166	5,920	152,471	9,265	4,867	10,090	16,755	15,982	139,017
Bridge and culvert.....	3	306,964	35,000	90,197	143,262	-----	13,904	-----	222	-----	3,153	1,502	16,410
Other classes <sup>2</sup> .....	5	472,057	43,000	117,814	171,396	-----	20,056	18,000	900	5,474	-----	2,105	34,375
Subcontractors.....	34	3,519,626	21,000	800,520	1,916,903	36,363	221,490	425	26,228	15,928	8,052	15,104	184,462
Electrical.....	5	718,710	-----	212,040	352,375	3,358	63,532	-----	7,187	1,414	325	2,774	42,763
Heating and plumbing.....	17	1,765,060	17,000	411,596	1,027,072	24,405	55,000	25	12,261	10,545	6,742	6,651	27,462
Heating and piping.....	5	640,877	7,000	136,065	405,193	12,000	13,204	25	5,376	5,615	2,227	1,071	30,980
Plumbing.....	6	635,001	-----	162,883	367,600	960	14,760	-----	1,430	1,085	1,031	1,776	24,357
Plumbing and heating combined.....	6	480,182	10,000	112,047	254,279	11,445	26,976	-----	5,455	3,845	3,484	3,204	26,125
Roofing and sheet-metal work.....	6	680,934	4,000	116,540	422,957	2,600	54,198	-----	5,440	3,013	85	1,983	30,903
Other classes <sup>3</sup> .....	6	348,922	-----	119,738	114,499	6,000	48,710	400	1,340	956	900	3,096	17,334

<sup>1</sup> Includes operative builders.  
<sup>2</sup> Includes grading; street paving; and waterworks.  
<sup>3</sup> Includes concreting; painting and decorating; and marble and tiling.

TABLE 9.—COST OF MATERIALS FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929, BY KIND

KIND OF MATERIAL	COST OF MATERIALS REPORTED BY				KIND OF MATERIAL	COST OF MATERIALS REPORTED BY					
	All classes of establishments			General contractors <sup>1</sup>		Subcontractors	All classes of establishments			General contractors <sup>2</sup>	Subcontractors
	Amount	Per cent distribution	Per \$1,000 construction work done <sup>1</sup>				Amount	Per cent distribution	Per \$1,000 construction work done <sup>1</sup>		
<b>SOUTH CAROLINA</b> .....											
All kinds of material.....	\$3,160,823	-----	\$550.18	\$5,999,220	\$2,161,603						
Distribution not reported.....	3,244,842	39.8	-----	2,629,513	615,329						
Distributed by kind.....	4,915,981	100.0	-----	3,369,707	1,546,274						
Sand, gravel, stone, slag, cinders, etc.	889,944	18.1	99.60	824,967	64,977						
Brick (face, common, fire, paving, etc.).....	220,634	4.5	24.60	219,829	805						
Tile (fireproofing).....	15,074	.3	1.09	15,074	-----						
Tile, facing, terra cotta, floor, and wall.....	49,183	1.0	5.50	20,559	28,624						
Concrete and cinder block.....	8,571	.2	.96	8,571	-----						
Out stone, granite, and marble.....	23,050	.5	2.58	13,002	9,448						
Riprap, rubble, etc.....	4,300	.1	.45	4,300	-----						
Cement.....	736,294	15.0	82.41	600,135	76,159						
Lime.....	23,082	.5	2.59	22,832	200						
Plaster, etc.....	53,610	1.1	6.00	53,610	100						
Structural steel.....	94,539	1.9	10.58	94,539	-----						
Reinforcing steel.....	136,000	2.8	15.22	129,780	6,220						
Cast iron, miscellaneous (excluding pipe).....	6,467	.1	.73	5,807	660						
Metal doors, windows, and trim.....	28,621	.6	3.20	28,621	-----						
Metal and wire lath and furring.....	12,388	.3	1.39	12,388	-----						
Ornamental metal work.....	15,817	.3	1.77	15,817	2,000						
Lumber, rough and finished.....	459,470	9.3	51.42	456,110	3,360						
						Distributed by kind—Continued.					
						Laths, shingles, and shakes (wood).....	\$10,396	.2	\$1.16	\$10,396	-----
						Millwork.....	154,321	3.1	17.27	154,021	\$300
						Composition board.....	15,730	.3	1.76	8,030	6,800
						Waterproofing materials.....	135,806	2.8	15.21	5,396	130,500
						Hardware, rough and finished.....	63,958	1.3	7.16	62,658	1,300
						Paints, varnishes, glass.....	80,514	1.6	9.01	51,479	29,035
						Roofing and sheet metal.....	357,391	7.3	40.00	74,500	282,891
						Finished flooring other than cement, wood, or tile.....	34,210	.7	3.83	34,210	-----
						Screens, shades, awnings, etc.....	3,335	.1	.37	3,335	-----
						Hoisting and ventilating equipment.....	293,250	6.0	32.82	10,090	274,160
						Plumbing and gas-fitting equipment.....	248,175	5.0	27.77	42,900	205,275
						Electrical appliances and supplies.....	384,305	7.8	43.07	8,792	376,013
						Elevators, dumb-waiters, and equipment.....	363	(?)	.04	363	-----
						Pipe: Drain tile, vitrified, concrete, segment tile, corrugated.....	48,187	1.0	5.30	37,044	10,243
						Pipe: Cast-iron, sheet and tube steel, etc.....	52,520	1.1	5.88	42,476	10,044
						Wire cable, guards, and fencing.....	376	(?)	.04	376	-----
						Bituminous paving materials, tar, asphalt, and oil.....	172,789	3.5	19.34	147,789	25,000
						Wood piling and timber.....	26,783	.5	3.00	26,783	-----
						Sealing materials.....	651	(?)	.07	651	-----
						Miscellaneous.....	55,288	1.1	6.19	53,068	2,220

<sup>1</sup> The value of construction work done is obtained from figures presented in Table 1, by subtracting the value of subcontract work let from the total value of construction business.  
<sup>2</sup> Includes operative builders.  
<sup>3</sup> Less than one-tenth of 1 per cent.  
\* The high percentage of total cost shown for this item is due to the fact that business of establishments reporting this material constitute a large part of the total business reported for this area.  
† The percentage of total cost shown for this item is high because establishments located within this area reported that the large part of their construction work (on which this material was used) was done on contracts outside this area.

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TABLE 10.—COMPARISON OF COST OF DESIGNATED MATERIALS FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929, WITH COST OF MATERIALS AND VALUE OF CONSTRUCTION BUSINESS

[Based exclusively upon reports of establishments which gave the distributed cost of materials]

KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	Cost of all materials distributed by kind	COST OF DESIGNATED MATERIAL				Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>	KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	Cost of all materials distributed by kind	COST OF DESIGNATED MATERIAL				Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>
		Amount	Per cent of—		Amount					Amount	Per cent of—	Amount	Per cent of—		
			Total cost	Cost of all distributed materials											
<b>SOUTH CAROLINA</b>							<b>SOUTH CAROLINA—Con.</b>								
<i>Sand, gravel, stone, slag, cinders, etc.*</i>							<i>Lumber, rough and finished</i>								
All classes.....	\$4, 015, 981	\$389, 944	100. 0	18. 1	\$10, 202, 209	89. 2	All classes.....	\$4, 015, 981	\$450, 470	100. 0	9. 3	\$10, 202, 209	89. 2		
General contractors.....	3, 369, 707	824, 967	92. 7	24. 5	7, 320, 809	86. 2	General contractors.....	2, 369, 707	456, 110	99. 3	13. 5	7, 320, 809	86. 2		
Building.....	1, 332, 118	45, 914	5. 2	3. 4	2, 843, 899	84. 8	Building.....	1, 332, 118	302, 090	65. 7	22. 7	2, 843, 899	84. 8		
Building not specialized.....	1, 129, 969	40, 414	4. 5	3. 6	2, 436, 499	84. 4	Building not specialized.....	1, 129, 969	234, 962	51. 1	20. 8	2, 436, 499	84. 4		
Residential building only.....	202, 149	5, 500	0. 6	2. 7	407, 400	91. 0	Residential building only.....	202, 149	67, 128	14. 6	33. 2	407, 400	91. 0		
Highway.....	1, 520, 446	641, 384	72. 1	42. 2	3, 380, 742	86. 5	Highway.....	1, 520, 446	110, 910	25. 4	7. 7	3, 380, 742	86. 5		
Bridge and culvert.....	356, 628	100, 665	11. 3	28. 2	697, 508	89. 9	Bridge and culvert.....	356, 628	34, 035	7. 4	9. 5	697, 508	89. 9		
Street paving.....	141, 177	36, 491	4. 1	25. 8	363, 216	91. 4	Street paving.....	141, 177	19, 338	4. 3	15. 9	363, 216	91. 4		
Waterworks.....	19, 338	613	1. 1	2. 7	35, 446	100. 0	Waterworks.....	19, 338	3, 075	0. 7	15. 9	35, 446	100. 0		
Subcontractors.....	21, 546, 274	64, 977	7. 3	4. 2	2, 881, 400	99. 5	Subcontractors.....	21, 546, 274	3, 360	0. 7	0. 2	2, 881, 400	99. 5		
Concreting.....	162, 220	62, 425	7. 0	38. 5	394, 239	100. 0	Concreting.....	162, 220	3, 160	0. 7	1. 9	394, 239	100. 0		
Roofing and sheet-metal work.....	2, 463, 300	2, 200	0. 2	0. 5	759, 172	99. 5	Roofing and sheet-metal work.....	2, 463, 300	200	( <sup>1</sup> )	( <sup>1</sup> )	759, 172	99. 5		
Roofing.....	441, 902	2, 200	0. 2	0. 5	716, 609	99. 4	Roofing.....	441, 902	200	( <sup>1</sup> )	( <sup>1</sup> )	716, 609	99. 4		
Marble and tiling.....	39, 849	352	( <sup>1</sup> )	0. 9	112, 253	100. 0	Marble and tiling.....	39, 849	352	( <sup>1</sup> )	0. 9	112, 253	100. 0		
<i>Brick (face, common, fire, paving, etc.)</i>							<i>Millwork</i>								
All classes.....	4, 915, 981	220, 634	100. 0	4. 5	10, 202, 209	89. 2	All classes.....	4, 915, 981	154, 321	100. 0	3. 1	10, 202, 209	89. 2		
General contractors.....	2, 369, 707	219, 829	99. 6	6. 5	7, 320, 809	86. 2	General contractors.....	2, 369, 707	154, 021	99. 8	4. 0	7, 320, 809	86. 2		
Building.....	1, 332, 118	176, 043	79. 8	13. 2	2, 843, 899	84. 8	Building.....	1, 332, 118	143, 194	92. 8	10. 7	2, 843, 899	84. 8		
Building not specialized.....	1, 129, 969	146, 153	66. 2	12. 9	2, 436, 499	84. 4	Building not specialized.....	1, 129, 969	127, 294	82. 5	11. 3	2, 436, 499	84. 4		
Residential building only.....	202, 149	29, 890	13. 5	14. 8	407, 400	91. 0	Residential building only.....	202, 149	15, 900	10. 3	7. 9	407, 400	91. 0		
Highway.....	1, 520, 446	41, 960	19. 0	2. 8	3, 380, 742	86. 5	Highway.....	1, 520, 446	10, 803	7. 0	0. 7	3, 380, 742	86. 5		
Bridge and culvert.....	356, 628	41, 960	19. 0	2. 8	3, 380, 742	86. 5	Bridge and culvert.....	356, 628	24	( <sup>1</sup> )	0. 1	35, 446	100. 0		
Street paving.....	141, 177	1, 462	0. 7	1. 0	363, 216	91. 4	Street paving.....	141, 177	10, 338	2. 4	1. 1	363, 216	91. 4		
Waterworks.....	19, 338	304	0. 2	1. 9	35, 446	100. 0	Waterworks.....	19, 338	10, 338	2. 4	1. 1	35, 446	100. 0		
Subcontractors.....	21, 546, 274	805	0. 4	0. 1	2, 881, 400	99. 5	Subcontractors.....	21, 546, 274	300	0. 2	( <sup>1</sup> )	2, 881, 400	99. 5		
Concreting.....	162, 220	480	0. 2	0. 3	394, 239	100. 0	Concreting.....	162, 220	300	0. 2	0. 2	394, 239	100. 0		
Heating and plumbing.....	2, 479, 243	325	0. 1	0. 1	789, 749	99. 1	Heating and plumbing.....	2, 479, 243	300	0. 2	0. 2	789, 749	99. 1		
Plumbing and heating combined.....	25, 769	325	0. 1	1. 3	71, 337	98. 0	Plumbing and heating combined.....	25, 769	325	0. 1	1. 3	71, 337	98. 0		
<i>Cement *</i>							<i>Waterproofing materials</i>								
All classes.....	4, 915, 981	736, 294	100. 0	15. 0	10, 202, 209	89. 2	All classes.....	4, 915, 981	135, 896	100. 0	2. 8	10, 202, 209	89. 2		
General contractors.....	3, 369, 707	660, 136	89. 7	19. 6	7, 320, 809	86. 2	General contractors.....	3, 369, 707	5, 396	4. 0	0. 2	7, 320, 809	86. 2		
Building.....	1, 332, 118	64, 403	8. 8	4. 8	2, 843, 899	84. 8	Building.....	1, 332, 118	5, 396	4. 0	0. 4	2, 843, 899	84. 8		
Building not specialized.....	1, 129, 969	58, 743	8. 0	5. 2	2, 436, 499	84. 4	Building not specialized.....	1, 129, 969	4, 286	3. 8	0. 4	2, 436, 499	84. 4		
Residential building only.....	202, 149	5, 720	0. 8	2. 8	407, 400	91. 0	Residential building only.....	202, 149	1, 100	0. 8	0. 5	407, 400	91. 0		
Highway.....	1, 520, 446	479, 907	65. 2	31. 6	3, 380, 742	86. 5	Highway.....	1, 520, 446	16, 280	4. 6	8. 1	407, 400	91. 0		
Bridge and culvert.....	356, 628	47, 402	6. 4	33. 6	697, 508	89. 9	Bridge and culvert.....	356, 628	15	( <sup>1</sup> )	0. 1	697, 508	89. 9		
Street paving.....	141, 177	47, 402	6. 4	33. 6	363, 216	91. 4	Street paving.....	141, 177	15	( <sup>1</sup> )	0. 1	363, 216	91. 4		
Waterworks.....	19, 338	291	( <sup>1</sup> )	1. 5	35, 446	100. 0	Waterworks.....	19, 338	15	( <sup>1</sup> )	0. 1	35, 446	100. 0		
Subcontractors.....	21, 546, 274	76, 159	10. 3	4. 0	2, 881, 400	99. 5	Subcontractors.....	21, 546, 274	130, 500	96. 0	8. 4	2, 881, 400	99. 5		
Concreting.....	162, 220	75, 015	10. 2	46. 2	394, 239	100. 0	Concreting.....	162, 220	130, 500	96. 0	8. 4	394, 239	100. 0		
Heating and plumbing.....	2, 479, 243	19	( <sup>1</sup> )	( <sup>1</sup> )	789, 749	99. 1	Heating and plumbing.....	2, 479, 243	130, 500	96. 0	28. 2	789, 749	99. 1		
Plumbing and heating combined.....	25, 769	19	( <sup>1</sup> )	0. 1	71, 337	98. 0	Plumbing and heating combined.....	25, 769	130, 500	96. 0	20. 5	716, 609	99. 4		
Marble and tiling.....	39, 849	1, 125	0. 2	2. 8	112, 253	100. 0	Marble and tiling.....	39, 849	130, 500	96. 0	20. 5	716, 609	99. 4		
<i>Structural steel</i>							<i>Roofing and sheet metal</i>								
All classes.....	4, 915, 981	94, 539	100. 0	1. 9	10, 202, 209	89. 2	All classes.....	4, 915, 981	357, 391	100. 0	7. 3	10, 202, 209	89. 2		
General contractors.....	3, 369, 707	94, 539	100. 0	2. 8	7, 320, 809	86. 2	General contractors.....	3, 369, 707	74, 500	20. 8	2. 2	7, 320, 809	86. 2		
Building.....	1, 332, 118	68, 824	72. 8	5. 2	2, 843, 899	84. 8	Building.....	1, 332, 118	74, 485	20. 8	5. 0	2, 843, 899	84. 8		
Building not specialized.....	1, 129, 969	67, 999	71. 9	6. 0	2, 436, 499	84. 4	Building not specialized.....	1, 129, 969	53, 205	16. 3	5. 2	2, 436, 499	84. 4		
Residential building only.....	202, 149	825	0. 9	0. 4	407, 400	91. 0	Residential building only.....	202, 149	16, 280	4. 6	8. 1	407, 400	91. 0		
Highway.....	1, 520, 446	9, 363	9. 9	0. 6	3, 380, 742	86. 5	Highway.....	1, 520, 446	16, 280	4. 6	8. 1	407, 400	91. 0		
Bridge and culvert.....	356, 628	16, 332	17. 3	4. 6	697, 508	89. 9	Bridge and culvert.....	356, 628	15	( <sup>1</sup> )	0. 1	697, 508	89. 9		
Waterworks.....	19, 338	30	( <sup>1</sup> )	0. 2	35, 446	100. 0	Waterworks.....	19, 338	15	( <sup>1</sup> )	0. 1	35, 446	100. 0		
Subcontractors.....	21, 546, 274	76, 159	10. 3	4. 0	2, 881, 400	99. 5	Subcontractors.....	21, 546, 274	282, 891	79. 2	18. 3	2, 881, 400	99. 5		
Concreting.....	162, 220	75, 015	10. 2	46. 2	394, 239	100. 0	Concreting.....	162, 220	282, 891	79. 2	18. 3	394, 239	100. 0		
Heating and plumbing.....	2, 479, 243	19	( <sup>1</sup> )	( <sup>1</sup> )	789, 749	99. 1	Heating and plumbing.....	2, 479, 243	4, 282	1. 2	0. 9	789, 749	99. 1		
Plumbing and heating combined.....	25, 769	19	( <sup>1</sup> )	0. 1	71, 337	98. 0	Plumbing and heating combined.....	25, 769	4, 282	1. 2	2. 4	71, 337	98. 0		
Marble and tiling.....	39, 849	1, 125	0. 2	2. 8	112, 253	100. 0	Marble and tiling.....	39, 849	4, 282	1. 2	2. 4	112, 253	100. 0		
<i>Reinforcing steel</i>							<i>Waterproofing materials</i>								
All classes.....	4, 915, 981	136, 000	100. 0	2. 8	10, 202, 209	89. 2	All classes.....	4, 915, 981	135, 896	100. 0	2. 8	10, 202, 209	89. 2		
General contractors.....	3, 369, 707	120, 780	95. 4	3. 9	7, 320, 809	86. 2	General contractors.....	3, 369, 707	135, 896	100. 0	2. 8	7, 320, 809	86. 2		
Building.....	1, 332, 118	18, 507	13. 6	1. 4	2, 843, 899	84. 8	Building.....	1, 332, 118	135, 896	100. 0	2. 8	2, 843, 899	84. 8		
Building not specialized.....	1, 129, 969	18, 507	13. 6	1. 6	2, 436, 499	84. 4	Building not specialized.....	1, 129, 969	135, 896	100. 0	2. 8	2, 436, 499	84. 4		
Residential building only.....	202, 149	23, 013	17. 0	1. 6	407, 400	91. 0	Residential building only.....	202, 149	23, 013	17. 0	1. 6	407, 400	91. 0		
Highway.....	1, 520, 446	87, 335	64. 2	24. 5	3, 380, 742	86. 5	Highway.....	1, 520, 446	87, 335	64. 2	24. 5	3, 380, 742	86. 5		
Bridge and culvert.....	356, 628	87, 335	64. 2	24. 5	697, 508	89. 9	Bridge and culvert.....	356, 628	87, 335	64. 2	24. 5	697, 508	89. 9		
Waterworks.....	19, 338	25	( <sup>1</sup> )	0. 1	35, 446	100. 0	Waterworks.....	19, 338	25	( <sup>1</sup> )	0. 1	35, 446	100. 0		
Subcontractors.....	21, 546, 274	6, 220	4. 6	0. 4	2, 881, 400	99. 5	Subcontractors.....	21, 546, 274	18, 000	5. 0	84. 1	2, 881, 400	99. 5		
Concreting.....	162, 220	6, 220	4. 6	3. 8	394, 239	100. 0	Concreting.....	162, 220	18, 000	5. 0	84. 1</				

CONSTRUCTION—SOUTH CAROLINA

TABLE 10.—COMPARISON OF COST OF DESIGNATED MATERIALS FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929, WITH COST OF MATERIALS AND VALUE OF CONSTRUCTION BUSINESS—Con.

KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	Cost of all materials distributed by kind	COST OF DESIGNATED MATERIAL				Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>	KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	Cost of all materials distributed by kind	COST OF DESIGNATED MATERIAL				Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>				
		Amount	Per cent of—		Amount					Total cost	Cost of all distributed materials	Amount	Per cent of—			Amount	Total cost	Cost of all distributed materials	
			Total cost	Cost of all distributed materials									Total cost						Cost of all distributed materials
<b>SOUTH CAROLINA—Con.</b>							<b>SOUTH CAROLINA—Con.</b>												
<i>Plumbing and gas fitting equipment</i>							<i>Electrical appliances and supplies—Con.</i>												
All classes.....	\$4,015,981	\$248,175	100.0	5.0	\$10,202,209	80.2	General contractors—Con. Waterworks.....	\$19,338	\$42	(4)	0.2	\$35,446	100.0						
General contractors.....	3,309,707	42,900	17.3	1.3	7,320,809	86.2	Subcontractors.....	1,546,274	376,013	97.7	24.3	2,881,400	99.5						
Building.....	1,332,118	42,900	17.3	3.2	2,843,899	84.8	Electrical.....	376,013	376,013	97.7	100.0	750,557	100.0						
Building not specialized...	1,129,909	31,000	12.5	2.7	2,436,499	84.4	<i>Bituminous paving materials, tar, asphalt, and oil</i>												
Residential building only.....	202,149	11,900	4.8	5.9	407,400	91.0	All classes.....	4,915,981	172,789	100.0	3.5	10,202,209	80.2						
Subcontractors.....	1,546,274	205,275	82.7	13.3	2,881,400	99.5	General contractors.....	3,309,707	147,789	85.5	4.4	7,320,809	86.2						
Heating and plumbing.....	479,243	205,275	82.7	42.8	789,749	99.1	Building.....	1,332,118	400	.2	(4)	2,843,899	84.8						
Heating and piping.....	275,193	76,408	30.8	27.8	402,411	98.9	Building not specialized...	1,129,909	400	.2	(4)	2,436,499	84.4						
Plumbing.....	178,281	116,105	46.8	65.1	316,001	100.0	Highway.....	1,520,446	145,057	84.5	9.6	3,380,742	86.5						
Plumbing and heating combined.....	25,769	12,762	5.1	49.5	71,337	98.0	Bridge and culvert.....	356,628	1,432	.8	.4	697,506	89.9						
<i>Electrical appliances and supplies †</i>							Subcontractors.....												
All classes.....	4,915,981	384,805	100.0	7.8	10,202,209	89.2	Roofing and sheet-metal work.....	403,300	25,000	14.5	5.4	750,172	90.5						
General contractors.....	3,309,707	8,792	2.3	.3	7,320,809	86.2	Roofing.....	441,902	25,000	14.5	5.7	710,609	99.4						
Building.....	1,332,118	8,750	2.3	.7	2,843,899	84.8													
Building not specialized...	1,129,909	6,500	1.7	.0	2,436,499	84.4													
Residential building only.....	202,149	2,260	.6	1.1	407,400	91.0													

<sup>1</sup> Based upon the difference between the total value of all construction work reported and the value of subcontract work let.  
<sup>2</sup> Includes cost of materials reported by establishments which did not include designated material in their distributed lists.  
<sup>3</sup> Includes construction work reported by establishments which did not include the designated material in their distributed lists.  
<sup>4</sup> Less than one-tenth of 1 per cent.  
<sup>5</sup> Includes cost of materials reported by subcontracting establishments which did not include the designated material in their distributed lists.  
<sup>6</sup> Includes construction work reported by subcontracting establishments which did not include the designated material in their distributed lists.

\* See note \* of table 9 on p. 1112.  
 † See note † of table 9 on p. 1112.

# CONSTRUCTION—SOUTH CAROLINA

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TABLE 11.—COST OF MATERIAL FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929

CLASSIFICATION OF ESTABLISHMENTS	Total cost of all materials <sup>1</sup>	COST OF ALL MATERIALS DISTRIBUTED BY KIND		Sand, gravel, crushed stone, slag, cinders, etc.	Brick (face, common, fire-paving, etc.)	Tile (fire-proofing)	Tile, facing, terra cotta, floor, and wall	Concrete and cinder block	Cut-stone, granite, and marble	Cement	Lime	Plaster, etc.	Structural steel	Reinforcing steel	Metal doors, windows, and trim	Metal and wire lath and furring	Ornamental metal work
		Amount	Per cent of total														
<b>SOUTH CAROLINA.....</b>	<b>\$8,160,823</b>	<b>\$4,915,981</b>	<b>60.2</b>	<b>*\$889,944</b>	<b>\$220,634</b>	<b>\$15,074</b>	<b>\$49,183</b>	<b>\$8,571</b>	<b>\$23,050</b>	<b>*\$736,294</b>	<b>\$23,082</b>	<b>\$59,610</b>	<b>\$94,639</b>	<b>\$136,000</b>	<b>\$28,621</b>	<b>\$12,988</b>	<b>\$15,817</b>
General contractors.....	5,988,449	3,369,707	56.3	824,067	219,820	15,074	20,550	8,571	13,602	660,136	22,882	53,510	94,539	129,780	28,621	12,388	13,817
Building.....	3,372,478	1,332,118	39.5	45,914	170,043	15,074	20,559	8,571	13,602	64,463	22,882	53,510	68,824	18,507	28,600	12,388	13,817
Building not specialized.....	3,160,320	1,129,960	35.8	40,414	146,153	14,074	19,309	8,221	13,102	58,743	20,872	47,770	67,999	18,507	28,600	8,903	13,817
Residential building only.....	216,149	202,149	93.5	5,500	29,890	1,000	1,250	350	500	5,720	2,010	5,740	825	30	25	3,485	
Highway.....	1,058,713	1,520,440	77.0	641,384	41,960					479,007		9,353		23,013			
Bridge and culvert.....	416,061	356,628	85.7	100,665						68,072				87,836			
Street paving.....	221,859	141,177	63.6	36,491	1,462					47,402							
Waterworks.....	19,338	10,338	100.0	513	364					201							
Subcontractors.....	2,161,603	1,546,274	71.5	64,977	805		28,624		9,448	76,169	200	100		6,220			2,000
Concreting.....	162,220	162,220	100.0	62,425	480					75,015				6,220			
Electrical.....	388,513	376,013	96.8														
Heating and plumbing.....	1,057,072	479,243	45.3		325					19							
Heating and piping.....	405,193	275,193	67.9														
Plumbing.....	307,600	178,281	44.8														
Plumbing and heating combined.....	254,279	25,769	10.1		325					19							
Painting and decorating.....	25,649	25,649	100.0														
Roofing and sheet metal work.....	348,300	463,300	94.9	2,200													2,000
Roofing.....	441,902	441,902	100.0	2,200													2,000
Sheet-metal work.....	21,398	21,398	100.0														
Marble and tiling.....	39,840	39,840	100.0	352			28,624		9,448	1,125	200	100					

CLASSIFICATION OF ESTABLISHMENTS	Lumber, rough and finished	Laths, shingles, and shakes	Mill-work	Composition board	Water-proofing materials	Hardware, rough and finished	Paints, varnishes, and glass	Roofing and sheet metal	Finished flooring, n. e. s.	Heating and ventilating equipment	Plumbing and gas fitting equipment	Electrical appliances and supplies	Pipe: Drain tile, vitrified, concrete, etc.	Pipe: Cast iron, sheet and tube steel, etc.	Bituminous paving materials	Wood piling and timber	Miscellaneous <sup>4</sup>
<b>SOUTH CAROLINA.....</b>	<b>\$459,470</b>	<b>\$10,396</b>	<b>\$154,321</b>	<b>\$15,730</b>	<b>\$135,896</b>	<b>\$63,958</b>	<b>\$80,514</b>	<b>\$367,391</b>	<b>\$34,210</b>	<b>\$293,250</b>	<b>\$243,176</b>	<b>\$384,806</b>	<b>\$48,187</b>	<b>\$62,520</b>	<b>\$172,769</b>	<b>\$26,783</b>	<b>\$70,779</b>
General contractors.....	456,110	10,396	154,021	8,630	5,396	62,658	51,479	74,500	34,210	19,090	42,900	8,792	37,944	42,476	147,789	20,783	67,959
Building.....	302,090	10,396	143,194	8,630	5,396	39,131	50,262	74,485	32,731	10,090	42,900	8,760	5,920	4,220	400		21,469
Building not specialized.....	234,062	8,548	127,294	5,580	4,206	31,203	42,277	58,205	20,131	16,390	31,000	6,500	6,920	4,220	400		20,559
Residential building only.....	67,128	1,848	16,900	3,350	1,100	7,928	7,985	16,230	6,000	2,700	11,900	2,280					910
Highway.....	116,910		10,803		10,547	890			1,479				11,790	4,273	145,957		21,370
Bridge and culvert.....	34,035				12,700	375								3,000	1,432	26,783	5,898
Street paving.....													18,772	19,030			18,020
Waterworks.....	3,075		24		280	42	15					42	1,402	11,933			1,201
Subcontractors.....	3,360		300	6,800	130,500	1,300	29,035	282,891		274,160	205,275	376,013	10,243	10,044	25,000		2,820
Concreting.....	3,160		300		300		100					376,013	9,000	2,400			2,820
Electrical.....																	
Heating and plumbing.....							36	4,282		283,419	205,275		1,243	4,644			
Heating and piping.....										198,785	76,408						
Plumbing.....								4,282		57,894	116,106						
Plumbing and heating combined.....							36			6,740	12,762		1,243	4,644			
Painting and decorating.....							25,649										
Roofing and sheet-metal work.....	200			6,800	130,500	1,000	3,250	278,609		10,741				3,000	25,000		
Roofing.....	200			6,800	130,500	1,000	3,250	260,000		7,343				3,000	25,000		
Sheet-metal work.....								18,000		3,398							

<sup>1</sup> Certain establishments did not give a distribution of the cost of their materials by separate items. Amounts reported by such establishments engaged in the following lines of work have been included as indicated in figures shown for "Total cost of all materials":

<sup>2</sup> Operative builders, \$10,771.

<sup>3</sup> Roofing and sheet metal combined, \$25,000.

<sup>4</sup> Includes reported cost of riprap, rubble, etc.; cast iron, miscellaneous, excluding pipe; screens, shades, awnings, etc.; elevators, dumb-waiters, and equipment; wire cable, guards, and fencing; sealing materials; and miscellaneous. For total cost of these items see Table 9.

\* See note \* of table 9 on p. 1112.

† See note † of table 9 on p. 1112.



## CONSTRUCTION—SOUTH CAROLINA

TABLE 12.—NUMBER OF, AND VOLUME OF BUSINESS REPORTED BY, ESTABLISHMENTS DOING A CONSTRUCTION BUSINESS OF LESS THAN \$25,000 IN 1929, PERCENTAGE OF TOTAL NUMBER OF KNOWN ESTABLISHMENTS, AND AVERAGE VOLUME PER ESTABLISHMENT

TYPES OF WORK	SOUTH CAROLINA (1930 population, 1,738,765)							
	Known contracting establishments				Volume of business reported			
	Total number	Inactive in 1929	Active in 1929		Number of reporting establishments	Per cent of active	Amount	Average per establishment
			Number	Per cent				
Total establishments canvassed (under \$25,000):								
Total general contractors and subcontractors classified.....	292	7	285	100.0	62	21.8	\$644,451	\$10,394
Total general contractors classified.....	121	6	115	40.4	15	13.0	207,340	13,823
Building.....	86	5	81	28.4	13	16.0	171,422	13,180
Highway.....	33	1	32	11.2	2	6.3	35,918	17,950
Dredging.....	1		1	.4				
Power plants and waterworks.....	1		1	.4				
Total subcontractors classified.....	171	1	170	59.6	47	27.6	437,111	9,300
Carpentering.....	9		9	3.2	3	33.3	19,000	6,333
Concreting.....	2		2	.7				
Electrical.....	32		32	11.2	11	34.4	104,726	9,521
Heating and ventilating.....	3		3	1.1	1	33.3	18,000	18,000
Painting and decorating.....	18	1	17	6.0	2	11.8	24,375	12,187
Plastering.....	5		5	1.8	1	20.0	800	800
Plumbing and heating.....	71		71	24.9	23	32.4	211,525	9,197
Sheet metal and roofing.....	12		12	4.2	2	16.7	13,185	6,593
Steel erection.....	2		2	.7				
Stonework.....	2		2	.7	1	50.0	16,000	16,000
Marble and tiling.....	5		5	1.8	1	20.0	16,000	16,000
Wrecking.....	1		1	.4				
Excavating and grading.....	7		7	2.5	2	28.6	13,500	6,750
Miscellaneous subcontractors.....	2		2	.7				

TABLE 13.—ESTABLISHMENTS (WHOSE BUSINESS WAS LESS THAN \$25,000 IN 1929) WHICH REPORTED THEIR VOLUME OF CONSTRUCTION WORK, CLASSIFIED BY RANGE OF VOLUME OF BUSINESS

CLASSIFICATION	Total	Less than \$2,500	\$2,500 to \$4,999	\$5,000 to \$7,499	\$7,500 to \$9,999	\$10,000 to \$12,499	\$12,500 to \$14,999	\$15,000 to \$17,499	\$17,500 to \$19,999	\$20,000 to \$22,499	\$22,500 to \$24,999
SOUTH CAROLINA											
Total general and subcontractors.....	62	10	8	7	6	7	4	9	3	4	4
General contractors.....	15	1	1	1	1	3		3	2	1	2
Subcontractors.....	47	9	7	6	5	4	4	6	1	3	2

# SOUTH DAKOTA

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# CONSTRUCTION—SOUTH DAKOTA

1119

**TABLE 1.—VALUE OF CONSTRUCTION BUSINESS DURING 1929, AND PRINCIPAL ITEMS OF EXPENDITURE**

[Values expressed in thousands]

AREA, CLASSIFICATION OF ESTABLISHMENTS, AND SIZE OF BUSINESS GROUPS	Number of establishments	VALUE OF CONSTRUCTION BUSINESS				PRINCIPAL EXPENDITURES			AREA, CLASSIFICATION OF ESTABLISHMENTS, AND SIZE OF BUSINESS GROUPS	Number of establishments	VALUE OF CONSTRUCTION BUSINESS				PRINCIPAL EXPENDITURES			
		Total	Under general contract or directly for owner	Under sub-contract	Sub-contract work let	Wages paid	Cost of materials	Total			Under general contract or directly for owner	Under sub-contract	Sub-contract work let	Wages paid	Cost of materials			
<b>SOUTH DAKOTA</b>	70	\$8,384	\$7,583	\$781	\$773	\$1,894	\$2,958											
<b>Counties</b>																		
Beadle	5	622	523	99	55	118	306											
Brown	9	509	470	129	76	134	240											
Codington	5	1,543	1,535	8	22	415	568											
Davidson	3	791	791			153	171											
Minnehaha	13	2,282	2,005	277	1	487	1,079											
Pennington	6	591	551	40	71	128	198											
Yankton	4	249	199	50	77	47	82											
Other counties <sup>1</sup>	25	1,684	1,508	176	218	412	310											
<b>Classification of establishments</b>																		
General contractors	53	7,348	7,248	100	770	1,640	2,515											
Building	26	3,098	3,098		209	673	1,462											
Building, not specialized	23	3,009	3,009		189	657	1,422											
Residential building only	3	89	89		20	16	40											
Highway and street paving	12	3,126	3,098	28	416	708	824											
Bridge, culvert, and railroad	5	528	528		31	124	185											
Grading	7	448	376	72	49	105	2											
Other classes <sup>2</sup>	3	147	147		65	30	42											
Subcontractors	17	1,016	336	681	3	254	443											
Heating and plumbing	10	648	296	352		128	369											
Plumbing	3	185	158	32		42	102											
Plumbing and heating combined	7	463	143	320		86	267											
Other classes <sup>3</sup>	7	368	40	327	3	126	75											
<b>Size of business groups</b>																		
General contractors	53	\$7,348	\$7,248	\$100	\$770	\$1,640	\$2,515											
\$25,000 to \$49,999	18	628	628		55	147	243											
\$50,000 to \$99,999	20	1,314	1,222	92	163	292	385											
\$100,000 to \$199,999	7	1,057	1,057		189	201	362											
\$200,000 to \$499,999	5	1,483	1,483		413	311	345											
\$500,000 to \$999,999	1	513	513			75	250											
\$1,000,000 and over	2	2,352	2,343	8		613	931											
Building contractors	26	3,098	3,098		209	673	1,462											
\$25,000 to \$49,999	11	356	356		40	84	180											
\$50,000 to \$99,999	8	513	513		24	134	241											
\$100,000 to \$199,999	5	779	779		104	140	360											
\$200,000 to \$499,999	1	325	325		35	60	158											
\$500,000 to \$999,999																		
\$1,000,000 and over	1	1,124	1,124			265	524											
Subcontractors	17	1,016	336	681	3	254	443											
\$25,000 to \$49,999	7	267		267		62	116											
\$50,000 to \$99,999	8	546	151	395	3	161	189											
\$100,000 to \$199,999	2	202	185	17		42	139											
\$200,000 to \$499,999																		
\$500,000 to \$999,999																		
\$1,000,000 and over																		

<sup>1</sup> Includes Bon Homme, Brookings, Butte, Charles Mix, Clark, Clay, Corson, Fall River, Hughes, Jones, Kingsbury, Lake, Lawrence, McCook, McPherson, Marshall, Moody, and Roberts, for which data can not be shown without revealing individual operations. From areas other than those listed, no reports were received from establishments, which handled as much as \$25,000 business during 1929.

<sup>2</sup> Includes sewer, gas, water, conduit; dam and reservoir; and foundation.

<sup>3</sup> Includes electrical; masonry; roofing; sheet-metal work; excavating; and grading.

**TABLE 2.—CONSTRUCTION BUSINESS OF REPORTING ESTABLISHMENTS DURING 1929, BY CLASS OF OWNERSHIP AND BY TYPE OF WORK**

CLASS OF OWNERSHIP AND TYPE OF CONSTRUCTION WORK	CONSTRUCTION BUSINESS REPORTED BY—						CLASS OF OWNERSHIP AND TYPE OF CONSTRUCTION WORK	CONSTRUCTION BUSINESS REPORTED BY—					
	All classes of establishments		General contractors		Subcontractors			All classes of establishments		General contractors		Subcontractors	
	Number reporting	Value	Number reporting	Value	Number reporting	Value		Number reporting	Value	Number reporting	Value	Number reporting	Value
<b>SOUTH DAKOTA</b>							<b>SOUTH DAKOTA—Con.</b>						
All construction business	70	\$8,364,316	53	\$7,348,263	17	\$1,016,053	All business under general contract or directly for owners—Contd.						
Distribution not reported	11	1,051,678	4	601,117	7	450,561	Distributed by class—Contd.						
Distributed by class of ownership	59	7,312,638	49	6,747,146	10	565,492	Highway and street	22	\$3,541,676	21	( <sup>1</sup> )	1	( <sup>1</sup> )
Private	36	2,156,977	28	2,482,059	8	336,908	Railroad and car line	2		2	( <sup>1</sup> )		
Quasi public or community	14	661,990	12		2		Public works and utilities	13	528,441	12	( <sup>1</sup> )	1	( <sup>1</sup> )
Public	41	4,493,671	35	4,265,087	6	228,584	Bridge, tunnel, etc.	7	363,250	7	\$363,250		
Distribution not reported	2	79,990	2	79,990			Central station, light and power plant	2		2	( <sup>1</sup> )		
Distributed by class of public ownership	39	4,413,681	33	4,185,097	6	228,584	Dock, pier, retaining wall, etc.	1	36,600	1		1	( <sup>1</sup> )
Federal	9	363,192	6	223,851	3	129,341	Water supply	3	76,825	3	76,825		
State	21	3,043,051	19		2		Sewage disposal and drainage	2		2			
County or township	17	672,871	15	3,624,794	2	91,128	Flood control, irrigation, and land drainage	1	51,697	1	51,697		
Municipal	17	344,567	14	336,452	3	8,115	Miscellaneous	1		1			
All business under general contract or directly for owners	57	7,583,496	52	7,247,990	5	335,506	All business under subcontract	18	780,820	4	100,273	14	\$680,547
Distribution not reported	2	220,482	2	220,482			Distribution not reported	1	31,823	4		1	31,823
Distributed by class	55	7,363,014	50	7,027,508	5	335,506	Distribution by class of subcontract	17	748,997	4	100,273	13	648,724
Building	32	3,292,897	28	2,997,726	4	295,171	Carpentering and wood flooring	1		1	( <sup>1</sup> )		( <sup>1</sup> )
Distribution not reported	4	497,574	3	397,574	1	100,000	Electrical	2	70,420	2		2	( <sup>1</sup> )
Distributed by class of building	23	2,795,323	25	2,600,152	3	195,171	Concrete	1		1	( <sup>1</sup> )		( <sup>1</sup> )
Commercial	18	1,123,723	16		2		Masonry	1	114,331	1		1	( <sup>1</sup> )
Educational	9	487,692	7	1,536,697	2	74,718	Excavating	1		1		1	( <sup>1</sup> )
Hotel	4	49,453	3		1		Heating and plumbing		338,408				338,498
Hospital and institutional	4	84,900	2	130,353	2	4,000	Heating and pipe covering	4	46,427	4		4	46,427
Manufacturing	2		1		1		Plumbing and heating combined	5	292,066	5		5	292,066
Public: Courts, jails, etc.	7	246,561	6	366,330	1	6,190	Roofing and sheet-metal work	4	73,150	4		4	73,150
Religious and memorial	6	125,959	5		1		Grading and highway	3	152,003	2	( <sup>1</sup> )	1	( <sup>1</sup> )
Residential	22	504,725	19	437,987	3	66,738							
Social and recreational	5	93,641	4		1								
Rail and water transportation	2		1	128,785	1	43,525							
Miscellaneous	8	78,669	7		1								

<sup>1</sup> Value omitted in order to avoid disclosing individual operations. The amounts omitted are, however, included in the respective totals.

CONSTRUCTION—SOUTH DAKOTA

TABLE 3.—CONSTRUCTION BUSINESS DURING 1929, BY LOCATION

CLASSIFICATION OF ESTABLISHMENTS	Establishments reporting	Total	In home city	In home State	Outside home State	CLASSIFICATION OF ESTABLISHMENTS	Establishments reporting	Total	In home city	In home State	Outside home State
General contractors.....	51	6,815,760	2,696,085	4,923,089	1,892,671	Subcontractors.....	16	\$913,755	\$606,384	\$336,019	\$77,736
Building.....	25	2,947,730	2,220,884	2,850,075	67,064	Heating and plumbing.....	9	540,039	545,030	540,030	-----
Building not specialized.....	22	2,858,792	2,154,487	2,791,728	67,064	Plumbing.....	3	185,000	185,000	185,000	-----
Residential building only.....	3	88,947	66,307	88,947	-----	Plumbing and heating combined.....	6	361,030	360,030	361,030	-----
Highway and street paving.....	11	2,743,808	240,076	1,120,141	1,614,667	Other classes <sup>2</sup> .....	7	367,716	151,545	289,980	77,736
Bridge, culvert, and railroad.....	5	528,479	95,709	503,236	25,243						
Grading.....	7	448,329	32,003	262,632	185,697						
Other classes <sup>1</sup> .....	3	147,405	107,823	147,405	-----						

<sup>1</sup> Includes sewer, gas, water, conduit; dam and reservoir; and foundation.  
<sup>2</sup> Includes electrical; masonry; roofing; sheet-metal work; excavating; and grading.

TABLE 4.—CONSTRUCTION BUSINESS OUTSIDE HOME STATE, BY LOCATION

STATE	LOCATION REPORTED BY—			STATE	LOCATION REPORTED BY—		
	All classes of establishments	General contractors	Subcontractors		All classes of establishments	General contractors	Subcontractors
<b>SOUTH DAKOTA</b>				<b>SOUTH DAKOTA—Continued</b>			
Total distributed by State <sup>1</sup> .....	\$1,970,407	\$1,892,671	\$77,736	Total distributed by State—Continued.			
Arkansas.....	178,840	178,840	-----	Missouri.....	\$965,290	\$965,290	-----
Illinois.....	55,772	55,772	-----	North Dakota.....	334,427	266,691	\$77,736
Iowa.....	36,469	36,469	-----	Wyoming.....	103,000	103,000	-----
				Other States, n. s.....	206,609	206,609	-----

Number of establishments reporting:  
<sup>1</sup> All classes, 13; general contractors, 11; subcontractors, 2.

TABLE 5.—NUMBER AND SALARIES OF PROPRIETORS, FIRM MEMBERS, AND SALARIED EMPLOYEES: 1929

CLASSIFICATION OF ESTABLISHMENTS	Establishments reporting	PROPRIETORS AND FIRM MEMBERS			SALARIED EMPLOYEES									
		Receiving no salary	Receiving salaries		All salaried employees		Officers and clerical staff		Superintendents, foremen, etc.		Number reported, by sex			Sex not reported
			Number	Total annual salaries	Total number	Total annual salaries	Number	Total annual salaries	Number	Total annual salaries	Total	Male	Female	
<b>SOUTH DAKOTA</b> .....	<b>70</b>	<b>56</b>	<b>25</b>	<b>\$69,904</b>	<b>153</b>	<b>\$344,416</b>	<b>65</b>	<b>\$146,589</b>	<b>88</b>	<b>\$197,827</b>	<b>150</b>	<b>134</b>	<b>16</b>	<b>3</b>
General contractors.....	53	43	15	43,432	130	301,842	47	116,101	83	185,741	128	118	10	2
Building.....	26	12	11	34,632	63	143,172	30	72,504	33	75,668	63	56	7	-----
Building not specialized.....	23	12	9	33,232	63	143,172	30	72,504	33	75,668	63	56	7	-----
Residential building only.....	3	2	2	1,400	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Highway and street paving.....	12	11	3	4,300	43	113,050	12	33,480	31	79,600	43	42	1	-----
Bridge, culvert, and railroad.....	5	3	1	4,500	15	24,946	2	3,413	13	21,533	13	12	1	2
Grading.....	7	11	-----	-----	5	7,544	1	704	4	6,840	5	4	1	-----
Other classes <sup>1</sup> .....	3	4	-----	-----	4	8,100	2	6,000	2	2,100	4	4	-----	-----
Subcontractors.....	17	13	10	26,472	23	42,574	18	30,488	5	12,086	22	16	6	1
Heating and plumbing.....	10	8	9	22,872	7	5,840	5	4,654	2	4,188	6	3	3	1
Plumbing.....	3	2	2	6,014	1	1,040	1	1,040	-----	-----	1	1	-----	-----
Plumbing and heating combined.....	7	6	7	16,858	6	7,800	4	3,614	2	4,186	5	2	3	1
Other classes <sup>2</sup> .....	7	6	1	3,600	16	33,734	13	25,834	3	7,600	16	13	3	-----

<sup>1</sup> Includes sewer, gas, water, conduit; dam and reservoir; and foundation.  
<sup>2</sup> Includes electrical; masonry; roofing; sheet-metal work; excavating; and grading.

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TABLE 6—VALUE OF CONSTRUCTION EQUIPMENT, IN COMPARISON WITH CONSTRUCTION BUSINESS AND WAGES PAID DURING 1929

CLASSIFICATION OF ESTABLISHMENTS AND PERCENTAGE OF EQUIPMENT OWNED	Establishments reporting	EQUIPMENT		Value of construction business reported	Wages paid	CLASSIFICATION OF ESTABLISHMENTS AND PERCENTAGE OF EQUIPMENT OWNED	Establishments reporting	EQUIPMENT		Value of construction business reported	Wages paid
		Purchased during the year	Inventory value at end of year					Purchased during the year	Inventory value at end of year		
<b>SOUTH DAKOTA</b>	61	\$386,224	\$1,202,428	\$7,907,690	\$1,801,017	<b>SOUTH DAKOTA—Con.</b>					
<i>Classification of establishments</i>						<i>Percentage of equipment owned</i>					
General contractors	50	374,827	1,097,035	7,232,174	1,609,651	General contractors	50	\$374,827	\$1,097,035	\$7,232,174	\$1,609,651
Building	24	18,002	71,465	3,025,953	652,945	None					
Building not specialized	21	18,577	69,365	2,937,006	637,126	1% to 25%					
Residential building only	3	25	2,100	88,947	15,819	26% to 50%					
Highway and street paving	12	261,523	685,772	3,126,311	708,045	51% to 75%	1	31,700	40,000	92,697	20,191
Bridge and culvert	4	9,378	51,869	429,461	100,103	76% to 99%	2	35,530	179,154	570,708	80,340
Grading	7	32,873	288,163	448,329	104,872	100%	47	307,507	877,881	6,568,769	1,509,120
Other classes <sup>1</sup>	3	2,451	29,766	202,120	43,686	Not reported					
Subcontractors	11	11,397	105,393	675,516	191,306	Subcontractors	11	11,397	105,393	675,516	191,366
Heating and plumbing	5	2,559	20,865	341,145	70,274	None					
Other classes <sup>2</sup>	6	8,808	78,528	334,371	121,092	1% to 25%					
						26% to 50%					
						51% to 75%					
						76% to 99%	1	968	1,500	37,000	12,016
						100%	10	10,429	103,893	638,516	179,350
						Not reported					

<sup>1</sup> Includes sewer, gas, water, conduit; dam and reservoir; and railroad.  
<sup>2</sup> Includes electrical; masonry; roofing; sheet metal work; excavating; and grading.

TABLE 7.—WAGE EARNERS, BY MONTHS, AND WAGES PAID DURING 1929

CLASSIFICATION OF ESTABLISHMENTS AND LENGTH OF WORKING WEEK	Establishments reporting	NUMBER EMPLOYED ON 15TH DAY OF THE MONTH OR NEAREST REPRESENTATIVE DAY—												Wages paid
		January	February	March	April	May	June	July	August	September	October	November	December	
<b>SOUTH DAKOTA</b>	63	466	411	603	1,236	1,671	2,001	2,070	2,288	2,265	2,323	1,932	1,208	\$1,761,386
<i>Classification of establishments</i>														
General contractors	49	397	347	523	1,123	1,544	1,866	1,901	2,087	2,039	2,008	1,742	1,094	1,556,650
Building	23	297	242	332	433	491	508	571	654	627	680	739	589	609,672
Building not specialized	20	291	237	323	421	478	555	555	639	614	670	728	581	593,853
Residential building only	3	6	5	9	12	13	13	16	15	13	10	11	8	15,819
Highway and street paving	12	31	55	112	526	794	987	998	1,082	1,003	1,013	701	308	708,045
Bridge, culvert, and railroad	5	40	33	42	78	103	122	149	162	221	223	183	129	124,456
Grading	6	20	17	20	67	125	151	147	144	145	129	76	37	84,681
Other classes <sup>1</sup>	3			17	10	31	38	41	45	43	53	43	31	20,796
Subcontractors	14	69	64	80	113	127	135	169	201	226	225	190	114	204,746
Heating and plumbing	7	36	36	35	38	39	43	55	60	62	55	51	47	78,915
Other classes <sup>2</sup>	7	33	28	45	75	88	92	114	135	164	170	139	67	125,831
<i>Length of working week</i>														
General contractors	49	397	347	523	1,123	1,544	1,866	1,901	2,087	2,039	2,008	1,742	1,094	1,556,650
40-hour, 5-day week														
45-hour, 5-day week														
50-hour, 5-day week														
All other 5-day week														
44-hour, 5½-day week														
49½-hour, 5½-day week														
55-hour, 5½-day week														
All other 5½-day week														
48-hour, 6-day week	4	9	15	23	31	44	63	60	63	59	61	51	38	49,266
54-hour, 6-day week	6	197	152	235	299	318	347	371	418	360	487	540	438	368,426
60-hour, 6-day week	39	191	180	265	793	1,182	1,466	1,470	1,606	1,620	1,550	1,151	618	1,143,953
All other 6-day week														
All other not designated														
Not reported														
Subcontractors	14	69	64	80	113	127	135	169	201	226	225	190	114	204,746
40-hour, 5-day week														
45-hour, 5-day week														
50-hour, 5-day week														
All other 5-day week														
44-hour, 5½-day week	1	4	5	8	8	8	8	7	9	8	5	5	3	6,508
49½-hour, 5½-day week														
55-hour, 5½-day week														
All other 5½-day week														
48-hour, 6-day week	8	49	43	49	51	64	70	101	127	150	163	149	88	139,680
54-hour, 6-day week	1	4	4	4	5	5	5	7	7	8	8	7	6	11,796
60-hour, 6-day week	1	1	1	5	25	36	36	40	40	40	30	10	1	27,108
All other 6-day week														
All other not designated														
Not reported	3	11	11	14	14	14	14	14	18	20	19	19	16	19,374

<sup>1</sup> Includes sewer, gas, water, conduit; dam and reservoir; and foundation.  
<sup>2</sup> Includes electrical; masonry; roofing; sheet-metal work; excavating; and grading.

CONSTRUCTION—SOUTH DAKOTA

TABLE 8.—EXPENDITURES OF REPORTING ESTABLISHMENTS: 1929

CLASSIFICATION OF ESTABLISHMENTS	Establishments reporting	Value of construction business reported	PRINCIPAL ITEMS OF EXPENDITURE			OTHER ITEMS OF EXPENDITURE							
			Subcontract work let	Wages paid	Cost of materials	Salaries		Rent for		Interest	Contract bond premiums	Compensation and liability insurance premiums	All other overhead expenses
						Proprietors and firm members	Employees	Equipment	Offices, etc.				
<b>SOUTH DAKOTA</b> .....	56	\$6,715,802	\$642,000	\$1,544,347	\$2,545,422	\$51,250	\$285,143	\$72,672	\$16,493	\$20,280	\$45,328	\$66,129	\$554,679
General contractors.....	40	5,779,484	539,000	1,314,409	2,104,622	24,778	245,169	72,672	7,060	16,908	43,752	50,349	768,269
Building.....	23	2,927,529	207,000	620,849	1,386,021	17,778	143,899	445	4,231	4,244	8,844	19,293	67,969
Building not specialized.....	20	2,838,582	187,000	614,030	1,346,477	16,378	143,899	445	4,216	4,094	8,758	18,023	67,209
Residential building only.....	3	88,947	20,000	15,810	39,544	1,400	-----	-----	15	150	80	370	760
Highway and street paving.....	7	2,026,205	287,000	482,700	633,839	2,500	71,780	35,700	2,353	6,794	27,665	33,223	465,045
Bridge, culvert, and railroad.....	5	528,479	31,000	124,456	184,702	4,500	24,046	-----	726	2,557	4,043	3,310	107,321
Grading.....	5	297,271	14,000	77,404	-----	-----	4,544	30,527	350	3,403	3,200	3,523	127,334
Subcontractors.....	16	936,418	3,000	229,938	440,800	26,472	39,974	-----	8,833	3,282	1,576	6,780	86,410
Heating and plumbing.....	10	648,337	-----	128,011	308,851	22,872	8,840	-----	4,983	1,703	465	1,708	49,620
Plumbing.....	3	185,000	-----	42,240	102,000	6,014	1,040	-----	1,204	391	465	604	13,004
Plumbing and heating combined.....	7	463,337	-----	85,771	266,851	16,858	7,800	-----	3,779	1,312	-----	1,104	36,616
Other classes <sup>1</sup> .....	6	288,081	3,000	101,927	71,949	3,000	31,134	-----	3,850	1,579	1,111	5,072	36,790

<sup>1</sup> Includes electrical; masonry; roofing; sheet-metal work; and grading.

TABLE 9.—COST OF MATERIALS FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929, BY KIND

KIND OF MATERIAL	COST OF MATERIALS REPORTED BY—				KIND OF MATERIAL	COST OF MATERIALS REPORTED BY—					
	All classes of establishments			General contractors		Subcontractors	All classes of establishments			General contractors	Subcontractors
	Amount	Per cent distribution	Per \$1,000 construction work done <sup>1</sup>				Amount	Per cent distribution	Per \$1,000 construction work done <sup>1</sup>		
<b>SOUTH DAKOTA</b> .....					<b>SOUTH DAKOTA—Continued</b>						
All kinds of material.....	\$2,658,057	-----	\$389.68	\$2,514,057	\$443,400	Distributed by kind—Continued.					
Distribution not reported.....	900,510	30.4	-----	600,178	301,341	Composition board.....	\$14,006	0.7	\$2.67	\$14,006	-----
Distributed by kind.....	2,057,538	100.0	-----	1,915,479	142,059	Waterproofing materials.....	2,348	.1	.44	2,348	-----
Sand, gravel, stone, slag, cinders, etc.....	240,149	11.7	45.48	240,140	-----	Hardware, rough and finished.....	34,710	1.7	6.57	34,710	-----
Brick (face, common, fire, paving, etc.).....	104,980	5.1	19.89	104,580	400	Paints, varnishes, and glass.....	15,283	.7	2.90	15,283	-----
Tile, fireproofing.....	27,574	1.3	5.22	27,574	-----	Roofing and sheet metal.....	72,357	3.5	13.71	20,857	\$52,000
Tile, facing, terra cotta, floor and wall.....	32,879	1.6	6.23	32,870	-----	Finished flooring (other than cement, wood, or tile).....	18,491	.9	3.50	18,491	-----
Concrete and cinder block.....	6,024	.3	1.14	6,024	-----	Screens, shades, awnings, etc.....	934	(?)	.18	934	-----
Cut stone, granite and marble.....	60,093	2.9	11.38	60,093	-----	Heating and ventilating equipment.....	42,275	2.1	8.01	6,075	35,000
Riprap, rubble, etc.....	50,439	2.5	9.55	50,439	-----	Plumbing and gas-fitting equipment.....	41,861	2.0	7.93	0,361	32,500
Cement.....	280,998	13.7	53.22	280,988	10	Electrical appliances and supplies.....	23,743	1.2	4.50	5,294	18,449
Lime.....	5,314	.3	1.01	5,314	-----	Elevators, dumb-waiters, and equipment.....	20,085	1.4	5.51	20,085	-----
Plaster, etc.....	20,018	1.0	3.79	20,018	-----	Pipe: Drain tile, vitrified, concrete, segment-tile, corrugated.....	4,834	.2	.92	2,434	2,400
Structural steel.....	149,586	7.3	28.33	149,586	-----	Pipe: Cast iron, sheet and tube steel.....	3,666	.2	.60	3,666	-----
Reinforcing steel.....	172,572	8.4	32.08	172,572	-----	Wire cable, guards, and fencing.....	1,500	.1	.28	1,500	-----
Cast iron, miscellaneous, excluding pipe.....	2,525	.1	.48	2,525	-----	Bituminous paving materials, tar, asphalt, and oil.....	3,129	.2	.59	3,129	-----
Metal doors, windows, and trim.....	17,439	.8	3.30	17,439	-----	Freight, hauling or trucking to job.....	138,245	6.7	26.18	138,245	-----
Metal and wire lath and furring.....	22,399	1.1	4.24	22,399	-----	Chemicals and chemical products.....	8,394	.4	1.59	8,394	-----
Ornamental metal work.....	8,009	.4	1.52	8,009	-----	Miscellaneous.....	2,282	.1	.42	1,752	500
Lumber, rough and finished.....	275,933	13.4	52.26	275,733	200						
Laths, shingles, and shakes (wood).....	7,210	.4	1.37	7,210	-----						
Millwork.....	116,176	5.6	22.00	116,176	-----						

<sup>1</sup> The value of construction work done is obtained from figures presented in Table 1, by subtracting the value of subcontract work let from the total value of construction business.

<sup>2</sup> Less than one-tenth of 1 per cent.

<sup>3</sup> The percentage of total cost shown for this item is high because establishments located within this area reported that a large part of their construction work (on which this material was used) was done on contracts outside this area.



TABLE 10.—COMPARISON OF COST OF DESIGNATED MATERIALS FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929, WITH COST OF MATERIALS AND VALUE OF CONSTRUCTION BUSINESS

[Based exclusively upon reports of establishments which gave the distributed cost of materials]

KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	COST OF SPECIFIED MATERIAL				Indicated per cent of all business done by own force	KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	COST OF SPECIFIED MATERIAL				Indicated per cent of all business done by own force		
	Cost of all materials distributed by kind	Per cent of—					Value of construction business	Cost of all materials distributed by kind	Per cent of—			Value of construction business	
		Amount	Total cost	Cost of all distributed materials					Amount	Total cost			Cost of all distributed materials
<b>SOUTH DAKOTA</b>						<b>SOUTH DAKOTA—Continued</b>							
<i>Sand, gravel, crushed stone, slag, and cinders *</i>						<i>Structural steel</i>							
All classes.....	\$2,057,538	\$240,149	100.0	11.7	\$5,201,717	90.8	All classes.....	\$2,057,538	\$149,586	100.0	7.3	\$5,201,717	90.8
General contractors.....	\$1,915,479	240,149	100.0	12.5	\$4,944,737	89.5	General contractors.....	\$1,915,479	149,586	100.0	7.8	\$4,944,737	89.5
Building.....	1,214,600	54,410	22.7	4.5	2,545,641	93.3	Building.....	1,214,600	108,647	72.6	8.9	2,545,641	93.3
Building not specialized.....	1,152,259	52,390	21.8	4.5	2,426,202	93.6	Building not specialized.....	1,162,259	105,567	70.6	9.2	2,420,202	93.6
Commercial building only.....	32,797	700	2.3	3.3	65,947	77.5	Commercial building only.....	32,797	2,800	1.9	8.5	63,492	100.0
Residential building only.....	29,544	1,209	5.1	4.3	63,492	100.0	Residential building only.....	29,544	280	2.0	9.0	55,947	77.5
Highway.....	485,277	141,529	59.1	20.2	1,804,632	86.2	Highway.....	485,277	18,000	12.0	3.7	1,804,632	86.2
Bridge and culvert.....	149,941	28,405	11.8	18.9	364,658	92.8	Bridge and culvert.....	149,941	22,939	15.3	15.3	364,658	92.8
Street paving.....	28,073	6,560	2.7	23.4	53,753	100.0	Street paving.....	28,073	2,542	1.5	9.1	53,753	100.0
Dam and reservoir.....	10,000	3,915	1.6	39.2	28,750	89.7	Dam and reservoir.....	10,000	3,630	2.0	13.5	44,303	97.7
Foundation.....	26,088	5,021	2.1	19.2	44,303	97.7	Foundation.....	26,088	3,630	2.0	13.5	44,303	97.7
<i>Brick (face, common, fire, paving, etc.)</i>						<i>Reinforcing steel</i>							
All classes.....	2,057,538	104,989	100.0	5.1	5,201,717	90.8	All classes.....	\$2,057,538	172,672	100.0	8.4	\$5,201,717	90.8
General contractors.....	\$1,915,479	104,580	99.6	5.5	\$4,944,737	89.5	General contractors.....	\$1,915,479	172,672	100.0	9.0	\$4,944,737	89.5
Building.....	1,214,600	96,519	91.9	7.9	2,545,641	93.3	Building.....	1,214,600	63,817	37.0	5.3	2,545,641	93.3
Building not specialized.....	1,152,259	93,294	88.9	8.1	2,426,202	93.6	Building not specialized.....	1,162,259	63,817	37.0	5.5	2,420,202	93.6
Commercial building only.....	32,797	2,050	2.0	6.3	63,492	100.0	Commercial building only.....	32,797	79,770	46.2	16.4	63,492	100.0
Residential building only.....	29,544	1,175	1.1	4.0	53,947	77.5	Residential building only.....	29,544	15,718	5.7	53.2	55,947	77.5
Highway.....	485,277	270	0.3	1.1	1,804,632	86.2	Highway.....	485,277	10,004	3.6	2.1	1,804,632	86.2
Bridge and culvert.....	149,941	7,800	7.4	5.2	364,658	92.8	Bridge and culvert.....	149,941	6,420	2.3	4.3	364,658	92.8
Subcontractors.....	\$142,059	400	.4	.5	\$346,980	99.7	Subcontractors.....	\$142,059	200	.1	.1	\$346,980	99.7
Heating and plumbing.....	475,510	400	.4	.5	143,000	100.0	Excavating.....	2,600	200	.1	7.7	79,635	100.0
Plumbing and heating combined.....	33,510	400	.4	1.2	58,000	100.0	<i>Lumber, rough and finished</i>						
<i>Tile, facing, terra cotta, floor and wall</i>						All classes.....							
All classes.....	2,057,538	32,879	100.0	1.6	5,201,717	90.8	All classes.....	2,057,538	275,933	100.0	13.4	5,201,717	90.8
General contractors.....	\$1,915,479	32,879	100.0	1.7	\$4,944,737	89.5	General contractors.....	\$1,915,479	275,733	99.9	14.4	\$4,944,737	89.5
Building.....	1,214,600	32,879	100.0	2.7	2,545,641	93.3	Building.....	1,214,600	254,909	92.4	21.0	2,545,641	93.3
Building not specialized.....	1,152,259	31,149	94.7	2.7	2,426,202	93.6	Building not specialized.....	1,162,259	232,191	84.1	20.2	2,420,202	93.6
Commercial building only.....	32,797	950	2.9	2.9	63,492	100.0	Commercial building only.....	32,797	7,000	2.5	21.3	63,492	100.0
Residential building only.....	29,544	780	2.4	2.6	53,947	77.5	Residential building only.....	29,544	15,718	5.7	53.2	55,947	77.5
<i>Cut stone, granite and marble</i>						Highway.....							
All classes.....	2,057,538	60,093	100.0	2.9	5,201,717	90.8	All classes.....	2,057,538	3,000	1.1	30.0	28,750	89.7
General contractors.....	\$1,915,479	60,093	100.0	3.1	\$4,944,737	89.5	Dam and reservoir.....	10,000	1,400	.5	5.4	44,303	97.7
Building.....	1,214,600	60,093	100.0	4.9	2,545,641	93.3	Foundation.....	26,088	1,400	.5	5.4	44,303	97.7
Building not specialized.....	1,152,259	58,013	97.5	5.1	2,426,202	93.6	<i>Subcontractors</i>						
Commercial building only.....	32,797	1,400	2.3	4.3	63,492	100.0	Subcontractors.....	\$142,059	200	.1	.1	\$346,980	99.7
Residential building only.....	29,544	75	.1	.3	53,947	77.5	Excavating.....	2,600	200	.1	7.7	79,635	100.0
<i>Riprap, rubble, etc.</i>						<i>Millwork</i>							
All classes.....	2,057,538	50,439	100.0	2.5	5,201,717	90.8	All classes.....	\$2,057,538	110,170	100.0	5.6	\$5,201,717	90.8
General contractors.....	\$1,915,479	50,439	100.0	2.0	\$4,944,737	89.5	General contractors.....	\$1,915,479	110,170	100.0	6.1	\$4,944,737	89.5
Building.....	1,214,600	50,434	100.0	4.2	2,545,641	93.3	Building.....	1,214,600	114,411	93.5	9.4	2,545,641	93.3
Building not specialized.....	1,152,259	50,434	100.0	4.4	2,426,202	93.8	Building not specialized.....	1,162,259	108,111	93.1	9.4	2,420,202	93.0
Commercial building only.....	32,797	5	(*)	(*)	63,492	100.0	Commercial building only.....	32,797	2,500	2.2	7.6	63,492	100.0
Residential building only.....	29,544	75	.1	.3	53,947	77.5	Residential building only.....	29,544	3,800	3.3	12.9	55,947	77.5
<i>Cement *</i>						Bridge and culvert.....							
All classes.....	2,057,538	280,998	100.0	13.7	5,201,717	90.8	All classes.....	\$2,057,538	34,710	100.0	1.7	\$5,201,717	90.8
General contractors.....	\$1,915,479	280,988	100.0	14.7	\$4,944,737	89.5	General contractors.....	\$1,915,479	34,710	100.0	1.8	\$4,944,737	89.5
Building.....	1,214,600	134,018	47.9	11.1	2,545,641	93.3	Building.....	1,214,600	29,385	84.7	2.4	2,545,641	93.3
Building not specialized.....	1,152,259	131,064	46.8	11.4	2,426,202	93.6	Building not specialized.....	1,162,259	27,867	80.3	2.4	2,420,202	93.6
Commercial building only.....	32,797	2,054	7.7	3.2	63,492	100.0	Commercial building only.....	32,797	300	.9	9.0	63,492	100.0
Residential building only.....	29,544	900	3.0	3.2	53,947	77.5	Residential building only.....	29,544	1,218	3.5	4.1	55,947	77.5
Highway.....	485,277	84,212	30.0	17.4	1,804,632	86.2	Highway.....	485,277	1,300	3.7	3.3	1,804,632	86.2
Bridge and culvert.....	149,941	31,398	11.2	20.9	364,658	92.8	Bridge and culvert.....	149,941	2,756	7.9	1.8	364,658	92.8
Street paving.....	28,073	15,418	5.5	54.9	53,753	100.0	Street paving.....	28,073	650	1.9	6.5	28,750	89.7
Foundation.....	26,088	15,362	5.5	58.8	44,303	97.7	Foundation.....	26,088	619	1.8	2.4	44,303	97.7
Subcontractors.....	\$142,059	10	(*)	(*)	\$346,980	99.7	<i>Roofing and sheet metal</i>						
Heating and plumbing.....	475,510	10	(*)	(*)	143,000	100.0	All classes.....	2,057,538	72,357	100.0	3.5	5,201,717	90.8
Plumbing and heating combined.....	33,510	10	(*)	(*)	58,000	100.0	General contractors.....	\$1,915,479	20,357	28.1	1.1	\$4,944,737	89.5
See footnotes at end of table.						Building.....							
						1,214,600							
						16,857							
						19.7							
						1.2							
						6.1							
						3.8							
						2.1							
						2.3							
						32.8							
						14.0							
						32.8							
						58,000							
						100.0							

CONSTRUCTION—SOUTH DAKOTA

TABLE 10.—COMPARISON OF COST OF DESIGNATED MATERIALS FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929, WITH COST OF MATERIALS AND VALUE OF CONSTRUCTION BUSINESS—Continued

[Based exclusively upon reports of establishments which gave the distributed cost of materials]

KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	COST OF SPECIFIED MATERIAL				Value of construction business	Indicated per cent of all business done by own force	KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	COST OF SPECIFIED MATERIAL				Value of construction business	Indicated per cent of all business done by own force
	Cost of all materials distributed by kind	Amount	Per cent of—					Cost of all materials distributed by kind	Amount	Per cent of—			
			Total cost	Cost of all distributed materials						Total cost	Cost of all distributed materials		
<b>SOUTH DAKOTA—Continued</b>						<b>SOUTH DAKOTA—Continued</b>							
<i>Roofing and sheet metal—Continued</i>						<i>Plumbing and gas-fitting equipment</i>							
Subcontractors—Continued.						All classes.....							
Roofing and sheet-metal work	\$45,500	\$41,000	56.7	90.1	\$91,000	100.0	\$2,057,538	\$41,861	100.0	2.0	\$5,291,717	90.8	
Roofing	26,000	20,000	35.9	100.0	45,000	100.0	General contractors.....	\$1,915,470	9.361	22.4	.5	\$4,944,737	89.5
Sheet-metal work	19,500	15,000	20.7	76.9	46,000	100.0	Building.....	1,214,600	2,911	7.0	.2	2,545,641	93.3
<i>Heating and ventilating equipment</i>						Building not specialized.....							
All classes.....	2,057,538	42,275	100.0	2.1	5,291,717	90.8	Commercial building only.....	1,152,259	2,091	5.0	.2	2,426,202	93.6
General contractors.....	\$1,915,470	6,875	15.8	.3	\$4,944,737	89.5	Residential building only.....	32,797	460	1.1	1.4	69,492	100.0
Building.....	1,214,600	6,275	14.8	.5	2,545,641	93.3	Dam and reservoir.....	29,544	360	.9	1.2	55,947	77.5
Building not specialized.....	1,152,259	3,000	7.1	.3	2,426,202	93.6	Subcontractors.....	10,000	350	.8	3.5	28,750	89.7
Commercial building only.....	32,797	3,000	7.1	.1	66,492	100.0	Heating and plumbing.....	\$142,059	32,500	77.6	22.0	\$346,980	99.7
Residential building only.....	29,544	275	.7	.0	55,947	77.5	Plumbing.....	75,510	32,500	77.6	43.0	143,000	100.0
Dam and reservoir.....	10,000	400	.9	4.0	28,750	89.7	Plumbing and heating combined.....	42,000	27,000	64.5	64.3	85,000	100.0
Subcontractors.....	\$142,059	35,000	84.2	25.1	\$346,980	99.7	Roofing and sheet-metal work.....	33,510	10,600	30.3	40.5	58,000	100.0
Heating and plumbing.....	75,510	31,600	74.7	41.8	143,000	100.0	Sheet-metal work.....	\$45,500	4,000	0.5	8.8	\$91,000	100.0
Plumbing.....	42,000	15,000	35.5	35.7	85,000	100.0		19,500	4,000	9.5	20.5	46,000	100.0
Plumbing and heating combined.....	33,510	10,600	30.3	40.5	58,000	100.0							
Roofing and sheet-metal work.....	\$45,500	4,000	0.5	8.8	\$91,000	100.0							
Sheet-metal work.....	19,500	4,000	9.5	20.5	46,000	100.0							

1 Based upon the difference between the total value of all construction business reported and the value of subcontract work let.  
 2 Includes cost of materials reported by subcontracting establishments which did not include the designated material in their distributed lists.  
 3 Includes construction work reported by subcontracting establishments which did not include the designated material in their distributed lists.  
 4 Includes cost of materials reported by establishments which did not include designated material in their distributed lists.  
 5 Includes construction work reported by establishments which did not include the designated material in their distributed lists.  
 6 Less than one-tenth of 1 per cent.  
 \* See note 3, table 9, on p. 1122.

TABLE 11.—COST OF MATERIAL FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929

CLASSIFICATION OF ESTABLISHMENTS	Total cost of all materials	COST OF ALL MATERIALS DISTRIBUTED BY KIND		Sand, gravel, crushed stone, slag, cinders, etc.	Brick (face, common, fire, paving, etc.)	Tile (fire-proofing)	Tile, facing, terra cotta, floor and wall	Concrete and cinder block	Cut stone, granite and marble	Riprap, rubble, etc.	Cement	Lime	Plaster, etc.	Structural steel	Reinforcing steel	Metal doors, windows, and trim
		Amount	Per cent of total													
<b>SOUTH DAKOTA.....</b>	\$2,968,067	\$2,057,538	69.6	\$240,149	\$104,089	\$27,574	\$32,879	\$6,024	\$60,093	\$50,439	\$280,998	\$5,314	\$20,018	\$149,586	\$172,572	\$17,489
General contractors.....	2,514,657	1,915,470	76.2	240,149	104,589	27,574	32,879	6,024	60,093	50,439	280,998	5,314	20,018	149,586	172,572	17,489
Building.....	1,461,833	1,214,600	83.1	54,419	96,519	27,556	32,879	4,089	60,093	50,434	134,618	4,129	16,212	108,647	63,817	16,556
Building, not specialized.....	1,389,542	1,152,259	82.9	52,390	93,204	27,306	31,149	4,000	58,618	50,434	131,604	4,129	18,132	105,567	63,817	16,556
Commercial building only.....	32,797	32,797	100.0	760	2,050	-----	950	-----	1,400	-----	2,054	-----	480	2,800	-----	-----
Residential building only.....	39,544	29,544	74.7	1,269	1,175	160	780	89	75	-----	960	-----	600	280	-----	-----
Highway.....	759,277	485,277	63.9	141,829	270	-----	-----	-----	-----	-----	84,212	-----	-----	18,000	79,770	-----
Bridge and culvert.....	184,762	149,941	81.2	28,405	7,800	-----	-----	-----	-----	-----	31,388	1,080	490	22,999	22,913	883
Grading.....	1,500	1,500	100.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Street paving.....	65,147	28,073	43.1	6,569	-----	-----	-----	1,585	-----	-----	-----	-----	-----	-----	-----	-----
Dam and reservoir.....	10,000	10,000	100.0	3,915	-----	18	-----	350	-----	5	15,418	105	-----	-----	2,542	-----
Foundation.....	26,088	26,088	100.0	5,021	-----	-----	-----	-----	-----	-----	15,352	-----	160	-----	3,530	-----
Subcontractors.....	443,400	142,059	32.0	-----	400	-----	-----	-----	-----	-----	10	-----	-----	-----	-----	-----
Electrical.....	26,449	18,449	69.8	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Heating and plumbing.....	368,351	75,510	20.5	-----	400	-----	-----	-----	-----	-----	10	-----	-----	-----	-----	-----
Plumbing.....	102,000	42,000	41.2	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Plumbing and heating combined.....	266,351	33,510	12.6	-----	400	-----	-----	-----	-----	-----	10	-----	-----	-----	-----	-----
Roofing and sheet-metal work.....	45,500	45,500	100.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Roofing.....	26,000	26,000	100.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Sheet-metal work.....	19,500	19,500	100.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Excavating.....	2,600	2,600	100.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

See footnotes at end of table.

TABLE 11.—COST OF MATERIAL FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929—Continued

CLASSIFICATION OF ESTABLISHMENTS	Metal and wire lath and furring	Orna-mental metal work	Lum-ber, rough and finished	Laths, shingles, and shakes	Mill-work	Compo-sition board	Hard-ware, rough and fin-ished	Paints, var-nishes, and glass	Roof-ing and sheet metal	Fin-ished floor-ing, n. e. s.	Heat-ing and ven-tilating equip-ment	Plumb-ing and gas-fitting equip-ment	Elec-trical appli-ances and sup-plies	Eleva-tors, dumb-waiters, etc.	Freight, hauling, or truck-ing to job	Chem-icals, and chem-ical prod-ucts	Mis-cella-neous <sup>2</sup>
<b>SOUTH DAKOTA</b> .....	\$22, 399	\$8, 009	\$275, 933	\$7, 219	\$116, 176	\$14, 096	\$34, 710	\$15, 283	\$72, 357	\$18, 491	\$42, 275	\$41, 861	\$23, 743	\$29, 085	\$138, 245	\$8, 394	\$21, 188
General contractors.....	22, 399	8, 009	275, 933	7, 219	116, 176	14, 096	34, 710	15, 283	20, 357	18, 491	6, 675	9, 361	5, 294	20, 085	138, 245	8, 394	18, 288
Building.....	21, 803	6, 128	254, 909	7, 219	114, 411	14, 096	29, 385	11, 793	16, 857	16, 691	6, 275	2, 911	2, 744	28, 800			7, 610
Building not special-ized.....	21, 603	5, 500	232, 191	6, 154	108, 111	13, 266	27, 867	10, 713	14, 238	15, 475	3, 000	2, 091	774	26, 700			7, 400
Commercial building only.....	150	628	7, 000	255	2, 500	400	300	600	1, 994	1, 216	3, 000	460	1, 700	2, 100			
Residential building only.....	50		15, 718	810	3, 800	430	1, 218	480	625		275	360	270				120
Highway.....			10, 004				1, 300	300							138, 245	8, 394	2, 953
Bridge and culvert.....	596	1, 881	6, 420		1, 015		2, 756	3, 040	3, 500	1, 800		6, 100	2, 300	285			4, 350
Grading.....																	1, 500
Street paving.....																	1, 840
Dam and reservoir.....			3, 000		750		650	150			400	350	250				35
Foundation.....			1, 400				619										
Subcontractors.....			200						52, 000		35, 600	32, 500	18, 440				2, 900
Electrical.....													18, 440				
Heating and plumbing.....									11, 000		31, 600	32, 500					
Plumbing.....											15, 000	27, 000					
Plumbing and heat-ing combined.....									11, 000		16, 000	5, 500					
Roofing and sheet-metal work.....									41, 000		4, 000						500
Roofing.....									26, 000								500
Sheet-metal work.....									15, 000		4, 000						500
Excavating.....			200														2, 400

Certain establishments did not give a distribution of the cost of their materials by separate items. Amounts reported by such establishments engaged in the following lines of work have been included as indicated in figures shown for "Total cost of all materials":

<sup>1</sup> Sewer, gas, water, conduit, \$6,000.  
<sup>2</sup> Includes the reported cost of cast iron, miscellaneous (excluding pipe); waterproofing materials; screens, shades, awnings, etc.; pipe: drain tile, vitrified, concrete, etc.; pipe: cast iron, sheet and tube steel, etc.; wire cable, guards, and fencing; bituminous paving materials; and miscellaneous, n. e. s.  
<sup>3</sup> See note 3 of table 9, on p. 1122.

TABLE 12.—NUMBER OF, AND VOLUME OF BUSINESS REPORTED BY, ESTABLISHMENTS DOING A CONSTRUCTION BUSINESS OF LESS THAN \$25,000 IN 1929, PERCENTAGE OF TOTAL NUMBER OF KNOWN ESTABLISHMENTS, AND AVERAGE VOLUME PER ESTABLISHMENT

TYPES OF WORK	SOUTH DAKOTA (1930 population, 692,849)							
	Known contracting establishments				Volume of business reported			
	Total number	Inactive in 1929	Active in 1929		Number of report-ing es-tablish-ments	Per cent of active	Amount	Average per es-tablish-ment
			Number	Per cent				
Total establishments canvassed (under \$25,000).....	461	7	454		122	26.9		
Total establishments, type of work unknown.....	34		34		3	8.8	\$8, 650	\$2, 888
Total general and subcontractors classified.....	427	7	420	100.0	119	28.3		
Total general contractors classified.....	203	7	196	46.7	62	31.6	578, 352	9, 328
Building.....	182	6	176	41.9	59	33.5	536, 751	9, 097
Highway.....	13	1	12	2.9	1	8.3	17, 032	17, 032
Bridge and culvert.....	4		4	1.0	1	25.0	10, 000	10, 000
Sewer, gas, water.....	4		4	1.0	1	25.0	14, 569	14, 569
Total subcontractors classified.....	224		224	53.3	57	25.4	414, 230	7, 267
Plumbing and heating.....	68		68	16.2	18	26.5	224, 481	12, 471
Electrical.....	38		38	9.0	8	21.1	49, 025	6, 203
Ornamental iron.....	1		1	.2				
Sheet metal and roofing.....	10		10	2.4	2	20.0	25, 110	12, 555
Painting and decorating.....	28		28	6.7	6	21.4	14, 406	2, 401
Plastering.....	7		7	1.7				
Heating and ventilating.....	8		8	1.9	2	25.0	8, 744	4, 372
Carpentering.....	36		36	8.6	15	41.7	60, 343	4, 023
Concreting.....	18		18	4.3	5	27.8	27, 521	5, 504
Masonry.....	3		3	.7	1	33.3	4, 000	4, 000
Wrecking.....	1		1	.2				
Excavating and grading.....	6		6	1.4				

TABLE 13.—ESTABLISHMENTS (WHOSE BUSINESS WAS LESS THAN \$25,000 IN 1929) WHICH REPORTED THEIR VOLUME OF CONSTRUCTION WORK, CLASSIFIED BY RANGE OF VOLUME OF BUSINESS

CLASSIFICATION	Total	Less than \$2,500	\$2,500 to \$4,999	\$5,000 to \$7,499	\$7,500 to \$9,999	\$10,000 to \$12,499	\$12,500 to \$14,999	\$15,000 to \$17,499	\$17,500 to \$19,999	\$20,000 to \$22,499	\$22,500 to \$24,999
<b>SOUTH DAKOTA</b>											
Total general contractors and subcontractors.....	122	25	31	17	8	12	4	7	6	8	4
General contractors.....	62	6	13	12	6	9	3	3	0	2	2
Subcontractors.....	57	17	18	4	2	3	1	4		6	2
Type of contracting unknown.....	3	2		1							

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COUNTIES, PRINCIPAL CITIES, RIVERS, AND MOUNTAINS

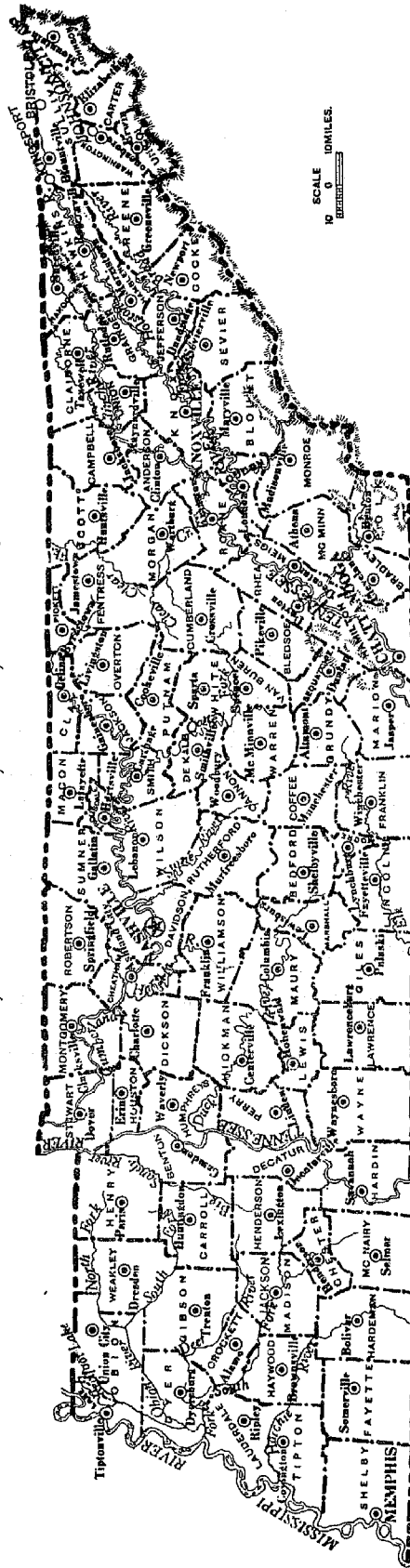


TABLE 1.—VALUE OF CONSTRUCTION BUSINESS DURING 1929 AND PRINCIPAL ITEMS OF EXPENDITURE

[Values expressed in thousands]

AREA, CLASSIFICATION OF ESTABLISHMENTS, AND SIZE OF BUSINESS GROUPS	Number of establishments	VALUE OF CONSTRUCTION BUSINESS			PRINCIPAL EXPENDITURES			AREA, CLASSIFICATION OF ESTABLISHMENTS, AND SIZE OF BUSINESS GROUPS	Number of establishments	VALUE OF CONSTRUCTION BUSINESS			PRINCIPAL EXPENDITURES		
		Total	Under general contract or directly for owner	Under subcontract	Sub-contract work let	Wages paid	Cost of materials			Total	Under general contract or directly for owner	Under subcontract	Sub-contract work let	Wages paid	Cost of materials
<b>TENNESSEE</b>	314	\$62,829	\$45,794	\$17,032	\$9,761	\$13,349	\$23,706	<b>CHATTANOOGA</b>	41	\$8,381	\$7,424	\$967	\$1,266	\$1,506	\$3,351
<i>Counties and principal cities</i>								<i>Classification of establishments</i>							
Counties:								General contractors	25	7,226	7,198	28	1,262	1,323	2,853
Davidson	63	18,057	10,035	8,022	3,363	3,680	0,550	Building	15	2,577	2,577		718	501	1,114
Dyer	3	1,219	1,191	28	64	312	410	Building not specialized	11	1,910	1,910		521	404	823
Hamilton	41	8,381	7,424	957	1,266	3,351	3,351	Residential building only	4	666	666		107	97	291
Knox	53	15,495	10,972	4,524	2,508	3,527	0,119	Highway	4	2,028	2,000	28	421	454	844
Madison	11	1,101	1,018	83	130	189	483	Street paving	3	1,743	1,743		120	272	790
Roane	3	196	33	163	3	40	37	Other classes	3	279	279		3	95	105
Rutherford	4	215	197	18	29	45	108	Subcontractors	10	1,155	220	929	4	273	498
Shelby	112	15,829	12,970	2,859	2,248	3,231	5,619	Electrical	3	288	97	191		70	137
Sullivan	6	508	544	54	38	146	271	Heating and plumbing	4	225	43	181		35	121
Washington	7	899	775	224	17	343	429	Roofing and sheet-metal work	3	287	41	246		60	108
Other counties	11	834	734	100	95	238	320	Other classes	0	350	45	310	4	108	133
Principal cities:								<i>Size of business groups</i>							
Chattanooga	41	8,381	7,424	957	1,266	1,596	3,351	General contractors	25	7,226	7,198	28	1,262	1,323	2,853
Knoxville	53	15,495	10,972	4,524	2,508	3,527	0,119	\$25,000 to \$49,999	2	90	90		44	16	23
Memphis	112	15,829	12,970	2,859	2,248	3,231	5,619	\$50,000 to \$99,999	8	586	586		160	147	180
Nashville	63	18,057	10,035	8,022	3,363	3,680	0,550	\$100,000 to \$199,999	3	514	514		60	151	267
								\$200,000 to \$499,999	7	1,991	1,991		448	344	912
								\$500,000 to \$999,999	4	2,628	2,000	28	421	454	844
								\$1,000,000 and over	1	1,417	1,417		120	211	627
<i>Classification of establishments</i>								Building contractors	15	2,577	2,577		718	501	1,114
Operative builders	5	305	305		109	92	112	\$25,000 to \$49,999	1	41	41		41		
General contractors	158	42,046	41,700	337	9,063	8,500	13,369	\$50,000 to \$99,999	6	425	425		169	79	131
Building	94	18,559	18,465	94	6,213	3,559	6,128	\$100,000 to \$199,999	2	374	374		60	111	197
Building not specialized	74	16,373	16,270	94	5,508	3,174	5,392	\$200,000 to \$499,999	6	1,736	1,736		448	311	786
Commercial building only	8	927	927		336	171	225	\$500,000 to \$999,999	5	620	620		145	210	
Residential building only	12	1,250	1,250		369	214	511	\$1,000,000 and over	1	1,417	1,417		120	211	627
Highway	22	12,631	12,509	62	1,575	2,462	4,741	Subcontractors	10	1,155	226	929	4	273	498
Bridge and culvert	0	1,425	1,425		33	445	475	\$25,000 to \$49,999	6	212	98	114		40	101
Grading	3	866	810	50	318	318	1	\$50,000 to \$99,999	5	322	128	194	4	88	130
Street paving	14	3,323	3,235	88	202	654	1,372	\$100,000 to \$199,999	5	620	620		145	210	
Sewer, gas, water, conduit	5	808	782	24	29	205	213	\$200,000 to \$499,999	4	2,628	2,000	28	421	454	844
Levee	8	2,064	2,045	19	211	622	78	\$500,000 to \$999,999	3	2,872	2,872		120	211	627
Other classes	3	2,372	2,372		800	304	361	\$1,000,000 and over	1	1,417	1,417		120	211	627
Subcontractors	151	20,415	3,720	16,695	589	4,667	10,225	KNOXVILLE	53	15,496	10,972	4,624	2,508	3,527	6,119
Carpentering and wood flooring	3	216	24	192		90	89	<i>Classification of establishments</i>							
Concreting	3	253	47	206	2	85	90	General contractors	31	10,688	10,553	135	2,487	2,327	3,479
Electrical	20	1,331	620	811		310	944	Building	10	4,701	4,701		1,408	983	1,588
Elevator construction	3	266	190	76	2	61	133	Highway	4	2,033	2,899	84	277	656	1,349
Heating and plumbing	50	3,787	1,311	2,476	40	818	1,980	Railroad, bridge, and culvert	4	2,474	2,474		800	493	355
Heating and piping	14	1,277	106	1,171	25	257	732	Other classes	4	580	479	101	4	195	187
Plumbing	23	1,662	710	953	10	373	827	Subcontractors	22	4,808	420	4,389	21	1,200	2,640
Plumbing and heating combined	13	847	495	352	5	187	421	Heating and plumbing	8	560	243	317		135	288
Masonry	10	1,300	316	984		525	584	Heating and piping	4	315	55	260		75	170
Painting, decorating, and glazing	8	572	380	192		170	284	Plumbing and heating combined	4	244	188	57		60	118
Plastering and lathing	6	564	9	555	1	240	184	Roofing and sheet-metal work	3	129	35	94		19	52
Roofing and sheet-metal work	22	1,801	775	1,026	10	324	845	Marble, tiling, and plastering	5	3,383	28	3,356	1	788	2,185
Roofing	13	1,111	741	370	5	158	495	Other classes	6	736	114	622	20	250	115
Sheet-metal work	9	690	34	656	5	166	349	<i>Size of business groups</i>							
Steel erection	3	4,974		4,974	500	751	2,631	General contractors	31	10,688	10,553	135	2,487	2,327	3,479
Stonework	5	254		254		78	97	\$25,000 to \$49,999	5	179	179		9	35	70
Marble and tiling	11	4,171	88	4,083		995	2,544	\$50,000 to \$99,999	5	345	312	24	22	75	109
Excavating and grading	4	664	60	604	24	202	1	\$100,000 to \$199,999	0	1,386	1,382	34	313	379	295
Other classes	3	262		262	10	48	110	\$200,000 to \$499,999	7	2,541	2,484	77	357	734	946
								\$500,000 to \$999,999	2	1,604	1,604		255	178	644
								\$1,000,000 and over	3	4,632	4,632		1,531	926	1,355
<i>Size of business groups</i>								Building contractors	19	4,701	4,701		1,406	983	1,588
General contractors	163	42,412	42,074	337	9,172	8,682	13,481	\$25,000 to \$49,999	3	108	108		9	14	52
\$25,000 to \$49,999	29	1,077	1,077		237	243	344	\$50,000 to \$99,999	4	261	261		22	63	125
\$50,000 to \$99,999	44	3,194	3,139	55	742	766	983	\$100,000 to \$199,999	5	647	647		155	153	241
\$100,000 to \$199,999	36	5,324	5,169	165	1,205	1,178	1,668	\$200,000 to \$499,999	5	1,791	1,791		353	468	695
\$200,000 to \$499,999	30	9,432	9,336	96	1,588	2,133	3,421	\$500,000 to \$999,999	1	668	668		255	76	100
\$500,000 to \$999,999	16	11,070	11,039	31	1,912	2,092	2,698	\$1,000,000 and over	1	1,226	1,226		612	209	375
\$1,000,000 and over	8	12,313			3,488	2,278	4,307	Subcontractors	22	4,808	420	4,389	21	1,200	2,640
Building contractors	99	18,924	18,830	94	6,322	3,652	6,240	\$25,000 to \$49,999	9	340	143	197		82	152
\$25,000 to \$49,999	21	766	766		175	156	298	\$50,000 to \$99,999	8	550	230	320	1	149	246
\$50,000 to \$99,999	32	2,286	2,266	20	681	466	781	\$100,000 to \$199,999	3	437	47	390		139	241
\$100,000 to \$199,999	25	3,488	3,417	71	996	727	1,228	\$200,000 to \$499,999	1	450	450		20	181	
\$200,000 to \$499,999	14	4,399	4,309		1,199	932	1,632	\$500,000 to \$999,999	1	1,226	1,226		612	209	375
\$500,000 to \$999,999	3	2,123	2,120	3	536	246	543	\$1,000,000 and over	1	1,417	1,417		120	211	627
\$1,000,000 and over	4	5,862	5,862		2,435	1,124	1,763	Subcontractors	22	4,808	420	4,389	21	1,200	2,640
Subcontractors	151	20,415	3,720	16,695	589	4,667	10,225	\$25,000 to \$49,999	9	340	143	197		82	152
\$25,000 to \$49,999	61	2,216	775	1,441		898	1,610	\$50,000 to \$99,999	8	550	230	320	1	149	246
\$50,000 to \$99,999	25	3,528	940	2,588	29	885	1,512	\$100,000 to \$199,999	3	437	47	390		139	241
\$100,000 to \$199,999	51	3,312	599	2,713	5	808	1,512	\$200,000 to \$499,999	1	450	450		20	181	
\$200,000 to \$499,999	12	3,648	1,406	2,242											

TABLE 1.—VALUE OF CONSTRUCTION BUSINESS DURING 1929 AND PRINCIPAL ITEMS OF EXPENDITURE—Con.

[Values expressed in thousands]

AREA, CLASSIFICATION OF ESTABLISHMENTS, AND SIZE OF BUSINESS GROUPS	Number of establishments	VALUE OF CONSTRUCTION BUSINESS			PRINCIPAL EXPENDITURES			AREA, CLASSIFICATION OF ESTABLISHMENTS, AND SIZE OF BUSINESS GROUPS	Number of establishments	VALUE OF CONSTRUCTION BUSINESS			PRINCIPAL EXPENDITURES		
		Total	Under general contract or directly for owner	Under subcontract	Subcontract work let	Wages paid	Cost of materials			Total	Under general contract or directly for owner	Under subcontract	Subcontract work let	Wages paid	Cost of materials
<b>MEMPHIS</b> .....	112	\$15,820	\$12,070	\$2,859	\$2,248	\$3,231	\$5,619	<b>NASHVILLE</b> .....	63	\$18,057	\$10,035	\$8,022	\$3,393	\$3,680	\$6,599
<i>Classification of establishments</i>								<i>Classification of establishments</i>							
Operative builders.....	3	172	172	-----	16	66	69	General contractors <sup>1</sup> .....	21	8,991	8,968	23	2,823	1,811	2,040
General contractors.....	53	11,189	11,070	99	2,205	2,023	3,406	Building <sup>2</sup> .....	13	5,199	5,176	23	2,270	952	1,340
Building.....	30	4,823	4,823	-----	1,096	820	1,481	Highway.....	4	2,541	2,541	-----	558	360	586
Building not specialized.....	21	3,798	3,798	-----	1,352	681	1,207	Other classes <sup>12</sup> .....	4	1,251	1,251	-----	-----	491	114
Commercial building only.....	5	744	744	-----	206	180	163	Subcontractors.....	42	9,067	1,067	7,999	535	1,868	4,519
Residential building only.....	4	281	281	-----	48	60	112	Heating and plumbing.....	13	1,190	397	793	15	263	589
Highway and grading.....	6	2,486	2,430	50	215	398	1,159	Plumbing.....	9	753	241	512	10	179	372
Street paving.....	0	781	781	-----	57	120	354	Plumbing and heating combined.....	4	437	156	281	5	84	217
Levee.....	2	2,054	2,045	10	211	522	78	Masonry.....	5	944	47	897	-----	374	423
Other classes <sup>11</sup> .....	3	985	985	-----	26	192	335	Painting and decorating <sup>10</sup> .....	4	231	45	185	10	79	85
Subcontractors.....	50	4,518	1,728	2,791	27	1,141	2,144	Roofing and sheet metal work.....	6	733	407	326	10	103	365
Electrical.....	11	788	393	375	-----	181	353	Roofing.....	3	408	407	61	5	66	205
Heating and plumbing.....	10	1,342	461	882	25	283	697	Roofing and sheet metal combined.....	3	266	-----	260	5	37	161
Heating and piping <sup>13</sup> .....	8	756	85	672	25	150	440	Plastering and lathing.....	3	285	-----	285	-----	86	87
Plumbing.....	8	588	370	210	-----	134	257	Stone work and concreting.....	3	191	-----	191	-----	64	61
Masonry and stone work.....	4	286	235	51	-----	127	132	Marble and tiling.....	3	453	53	400	-----	117	243
Painting, decorating, and glazing.....	4	405	300	105	-----	80	237	Other classes <sup>17</sup> .....	5	5,040	119	4,921	600	782	2,666
Roofing and sheet-metal work.....	8	508	199	307	-----	110	255	<i>Size of business groups <sup>8</sup></i>							
Roofing.....	5	365	199	166	-----	66	184	General contractors <sup>1</sup> .....	21	8,991	8,968	23	2,823	1,811	2,040
Sheet-metal work.....	3	141	-----	141	-----	43	71	\$25,000 to \$49,999.....	2	66	66	-----	20	15	12
Steel erection <sup>13</sup> .....	4	409	71	338	2	81	192	\$50,000 to \$99,999.....	3	259	239	20	128	26	59
Marble, tiling, and plastering.....	5	509	19	491	-----	210	176	\$100,000 to \$199,999.....	7	1,054	1,054	-----	386	203	261
Other classes <sup>14</sup> .....	4	292	40	244	-----	69	102	\$200,000 to \$499,999.....	2	599	599	-----	50	200	120
<i>Size of business groups <sup>5</sup></i>								\$500,000 to \$999,999.....	5	3,440	3,437	3	769	631	610
General contractors <sup>1</sup> .....	50	11,311	11,242	69	2,221	2,089	3,475	\$1,000,000 and over.....	2	3,573	3,573	-----	1,475	736	970
\$25,000 to \$49,999.....	12	457	457	-----	105	108	120	Building contractors <sup>6</sup> .....	13	5,199	5,176	23	2,270	952	1,340
\$50,000 to \$99,999.....	16	1,121	1,121	-----	204	258	292	\$25,000 to \$49,999.....	2	66	66	-----	20	15	12
\$100,000 to \$199,999.....	12	1,645	1,595	50	357	291	511	\$50,000 to \$99,999.....	3	259	239	20	128	26	59
\$200,000 to \$499,999.....	11	3,212	3,193	19	700	631	847	\$100,000 to \$199,999.....	5	704	704	-----	386	203	261
\$500,000 to \$999,999.....	3	2,185	2,185	-----	403	397	291	\$200,000 to \$499,999.....	1	597	594	3	261	80	162
\$1,000,000 and over.....	2	2,690	2,690	-----	362	404	1,416	\$500,000 to \$999,999.....	2	3,573	3,573	-----	1,475	736	970
Building contractors <sup>4</sup> .....	33	4,995	4,995	-----	1,712	887	1,550	\$1,000,000 and over.....	2	3,573	3,573	-----	1,475	736	970
\$25,000 to \$49,999.....	7	266	266	-----	40	58	110	Subcontractors.....	42	9,067	1,067	7,999	535	1,868	4,519
\$50,000 to \$99,999.....	13	897	897	-----	294	190	272	\$25,000 to \$49,999.....	12	433	79	354	-----	150	103
\$100,000 to \$199,999.....	8	1,038	1,038	-----	306	211	308	\$50,000 to \$99,999.....	16	1,117	12	1,105	20	309	518
\$200,000 to \$499,999.....	3	874	874	-----	398	157	152	\$100,000 to \$199,999.....	6	785	182	603	5	165	370
\$500,000 to \$999,999.....	1	858	858	-----	320	90	201	\$200,000 to \$499,999.....	7	2,052	705	1,257	10	553	968
\$1,000,000 and over.....	1	1,062	1,062	-----	348	181	418	\$1,000,000 and over.....	1	4,679	-----	4,679	500	692	2,600
Subcontractors.....	50	4,518	1,728	2,791	27	1,141	2,144								
\$25,000 to \$49,999.....	27	1,014	382	632	-----	282	431								
\$50,000 to \$99,999.....	16	1,126	363	763	2	273	502								
\$100,000 to \$199,999.....	9	1,233	369	864	-----	386	545								
\$200,000 to \$499,999.....	4	1,147	613	534	25	198	663								

<sup>1</sup> Includes Gibson, Haywood, Jefferson, Lincoln, Maury, Montgomery, Obion, and Unicoi, for which data can not be shown separately without revealing individual operations. From areas other than those listed, no reports were received for establishments which handled as much as \$25,000 business during 1929.

<sup>2</sup> Figures included in respective county totals.

<sup>3</sup> Includes waterworks and railroad.

<sup>4</sup> Includes bridge and culvert; soundproofing; and flooring, n. a. s.

<sup>5</sup> Includes operative builders.

<sup>6</sup> Includes bridge and culvert, and sewer, gas, water, conduit.

<sup>7</sup> Includes masonry; stonework; marble and tiling; and grading.

<sup>8</sup> For complete classification see tabulation for the State above.

<sup>9</sup> Includes grading; street paving; and sewer, gas, water, conduit.

<sup>10</sup> Includes concreting; electrical; painting and decorating; and excavating.

<sup>11</sup> Includes bridge and culvert; sewer, gas, water, conduit; and waterworks.

<sup>12</sup> Includes plumbing and heating combined.

<sup>13</sup> Includes elevator construction.

<sup>14</sup> Includes carpentering and wood flooring; excavating; and flooring, n. e. s.

<sup>15</sup> Includes bridge and culvert; grading; street paving; and sewer, gas, water, conduit.

<sup>16</sup> Includes carpentering and wood flooring; and soundproofing.

<sup>17</sup> Includes electrical; elevator construction; steel erection; and bridge and culvert.



CONSTRUCTION—TENNESSEE

TABLE 2.—CONSTRUCTION BUSINESS OF REPORTING ESTABLISHMENTS DURING 1929, BY CLASS OF OWNERSHIP AND BY TYPE OF WORK

CLASS OF OWNERSHIP AND TYPE OF CONSTRUCTION WORK	CONSTRUCTION BUSINESS REPORTED BY—						CLASS OF OWNERSHIP AND TYPE OF CONSTRUCTION WORK	CONSTRUCTION BUSINESS REPORTED BY—					
	All classes of establishments		General contractors		Subcontractors			All classes of establishments		General contractors		Subcontractors	
	Number reporting	Value	Number reporting	Value	Number reporting	Value		Number reporting	Value	Number reporting	Value	Number reporting	Value
<b>TENNESSEE</b>													
All construction business.....	314	\$82,826,401	169	\$42,411,606	151	\$20,414,795	All construction business.....	41	\$8,381,488	25	\$7,226,191	16	\$1,155,278
Distribution not reported.....	21	9,683,206	4	938,517	17	8,644,770	Distribution not reported.....	2	89,946	2	89,946	2	89,946
Distributed by class of ownership.....	293	53,243,105	159	41,473,089	134	11,770,016	Distributed by class of ownership.....	39	8,291,523	25	7,226,191	14	1,065,332
Private.....	239	26,069,843	111	10,301,423	128	9,678,420	Private.....	34	3,345,703	20	2,523,834	14	1,008,160
Quasi public or community.....	46	2,198,758	23	1,700,189	23	498,569	Quasi public or community.....	5	186,281	4	4,702,357	1	67,182
Public.....	140	24,974,504	89	23,381,477	51	1,503,027	Public.....	23	4,759,530	17	152,543	6	57,182
Distribution not reported.....	10	2,076,193	7	2,046,437	3	29,761	Distribution not reported.....	1	152,543	1	152,543	1	152,543
Distributed by class of public ownership.....	130	22,898,306	82	21,335,040	48	1,563,266	Distributed by class of public ownership.....	22	4,606,996	16	4,549,814	0	57,182
Federal.....	24	3,083,422	17	3,041,512	7	41,910	Federal.....	2	2,134,761	2	2,216,140	1	21,000
State.....	50	12,080,812	40	11,188,080	10	892,726	State.....	7	102,449	3	2,333,674	4	36,122
County or township.....	37	1,699,801	19	1,678,637	18	321,164	County or township.....	7	2,369,796	11	3,071,007	6	36,122
Municipal.....	65	6,734,271	30	6,426,806	28	307,406	Municipal.....	17	2,369,796	3	3,071,007	6	36,122
All business under general contract or directly for owners.....	224	45,794,290	102	42,074,151	62	3,720,139	All business under general contract or directly for owners.....	32	7,424,262	25	7,198,191	7	226,071
Distribution not reported.....	1	64,517	1	64,517	1	64,517	Distribution not reported.....	23	2,697,371	16	2,480,906	7	216,465
Distributed by class.....	165	22,097,741	104	18,307,011	61	3,700,730	Distributed by class.....	2	207,019	1	207,019	1	13,500
Building.....	12	708,144	4	484,250	8	313,894	Building.....	21	2,416,252	15	2,213,287	6	202,965
Distribution not reported.....	153	21,290,597	100	17,812,761	53	3,386,836	Distribution not reported.....	11	439,775	7	403,503	4	30,272
Commercial.....	88	6,076,374	62	5,946,912	26	729,462	Commercial.....	4	77,200	3	(?)	1	(?)
Educational.....	37	1,702,000	22	1,644,316	15	168,684	Educational.....	2	66,108	2	(?)	1	(?)
Hotel.....	13	838,146	6	701,478	7	136,668	Hotel.....	2	66,108	1	(?)	1	(?)
Hospital and institutional.....	16	981,109	0	934,348	6	46,261	Public: Courts, jails, etc.....	2	301,344	5	301,344	5	301,344
Manufacturing.....	31	2,063,710	20	2,702,499	11	201,211	Manufacturing.....	4	276,788	4	276,788	4	276,788
Military and naval.....	13	418,076	8	302,788	5	110,187	Religious and memorial.....	5	301,344	5	301,344	5	301,344
Public: Courts, jails, etc.....	13	418,076	8	302,788	5	110,187	Social and recreational.....	4	276,788	4	276,788	4	276,788
Religious and memorial.....	28	649,035	18	612,446	10	37,489	Residential.....	16	1,051,809	12	928,300	4	122,619
Residential.....	103	5,432,765	64	3,960,010	39	1,441,849	Air transport.....	1	50,728	1	50,728	1	50,728
Social and recreational.....	13	591,744	0	666,921	4	26,823	Rail and water transportation.....	2	50,728	2	50,728	2	50,728
Rail and water transportation.....	3	194,409	3	194,409	2	433,802	Miscellaneous.....	7	147,000	4	107,726	3	39,274
Air transport.....	7	193,429	5	416,728	14	433,802	Public works and utilities.....	0	395,378	6	395,378	6	395,378
Miscellaneous.....	29	656,101	16	416,728	14	(?)	Bridge, tunnel, etc.....	2	190,564	2	190,564	2	190,564
Highway and street.....	48	10,327,236	46	(?)	2	(?)	Dock, pier, retaining wall, etc.....	1	198,814	1	198,814	1	198,814
Water power development.....	2	200,549	2	200,549	2	200,549	Refuse disposal plant.....	1	198,814	1	198,814	1	198,814
Air transport work.....	1	1,194	1	1,194	1	1,194	Sewage disposal and drainage.....	3	4,175,701	3	4,175,701	3	4,175,701
Public works and utilities.....	30	5,245,764	38	5,244,570	1	1,194	Highway and street.....	10	4,175,701	9	4,321,007	1	9,006
Distribution not reported.....	1	1,194	1	1,194	1	1,194	Railroad and car line.....	2	115,394	1	4,321,007	1	9,006
Distributed by class.....	38	5,244,570	38	5,244,570	1	1,194	Air transport work.....	1	115,394	1	4,321,007	1	9,006
Bridge, tunnel, etc.....	14	1,670,603	14	1,670,603	1	1,194	Public works and utilities.....	3	40,418	1	28,000	13	928,207
Central station, light and power plant.....	3	23,910	3	23,910	1	1,194	Distribution not reported.....	1	28,000	1	28,000	1	28,000
Dock, pier, retaining wall, etc.....	2	2,226,150	2	2,226,150	1	1,194	Distributed by class.....	13	929,207	13	928,207	13	928,207
Flood control, irrigation, and land drainage.....	11	751,873	11	751,873	1	1,194	Heating and plumbing.....	4	230,207	4	230,207	4	230,207
Refuse disposal plant.....	1	751,873	1	751,873	1	1,194	Heating and piping.....	2	230,207	2	230,207	2	230,207
Sewage disposal and drainage.....	11	751,873	11	751,873	1	1,194	Plumbing.....	3	78,168	3	78,168	3	78,168
Water supply.....	6	600,924	6	600,924	1	1,194	Masonry.....	3	78,168	3	78,168	3	78,168
Miscellaneous.....	3	11,110	3	11,110	1	1,194	Roofing and sheet-metal work.....	2	191,720	2	191,720	2	191,720
Railroad and car line.....	0	1,715,925	0	(?)	1	(?)	Stonework.....	3	189,946	3	189,946	3	189,946
Miscellaneous, n. e. s.....	0	76,558	4	(?)	2	(?)	Marble and tiling.....	1	233,166	1	233,166	1	233,166
All business under subcontract.....	135	17,032,111	10	337,456	125	16,694,656	Other classes.....	3	233,166	3	233,166	3	233,166
Distribution not reported.....	1	246,153	1	246,153	1	246,153	<b>KNOXVILLE</b>						
Distributed by class.....	134	16,785,958	10	337,456	124	16,448,503	All construction business.....	53	16,496,276	31	10,698,007	22	4,808,209
Carpentering and wood flooring.....	5	331,020	5	331,020	5	331,020	Distribution not reported.....	7	4,201,229	2	813,000	5	3,388,229
Sound proofing.....	1	331,020	1	331,020	1	331,020	Distributed by class of ownership.....	46	11,295,047	29	9,875,007	17	1,419,980
Flooring, n. e. s.....	2	331,020	2	331,020	2	331,020	Private.....	38	5,435,131	22	4,607,651	16	877,480
Concrete.....	9	333,481	4	115,818	5	1,257,004	Quasi public or community.....	6	753,087	6	753,087	6	753,087
Masonry.....	11	1,040,241	1	115,818	10	1,257,004	Public.....	20	5,056,829	17	4,614,329	3	542,500
Electrical.....	16	777,620	1	115,818	10	1,257,004	Federal.....	2	(?)	2	(?)	2	(?)
Elevator construction.....	3	63,102	1	115,818	10	1,257,004	State.....	10	3,921,996	8	(?)	2	(?)
Heating and plumbing.....	2	2,015,713	1	23,190	2	2,502,523	County or township.....	4	288,444	4	288,444	1	(?)
Heating and piping.....	20	1,018,004	1	(?)	28	(?)	Municipal.....	9	846,359	8	(?)	1	(?)
Pipe covering.....	8	104,732	2	(?)	8	100,732	All business under general contract or directly for owners.....	42	10,972,462	31	10,552,870	11	419,592
Plumbing.....	31	1,049,775	2	(?)	29	(?)	Distribution not reported.....	1	8,000	1	8,000	1	8,000
Plumbing and heating combined.....	10	318,112	10	318,112	10	318,112	Distributed by class.....	41	10,963,853	31	10,552,870	10	419,983
Painting and decorating.....	7	104,221	7	104,221	7	104,221	Building.....	31	5,165,304	21	4,764,321	10	410,983
Glass and glazing.....	1	104,221	1	104,221	1	104,221	Distribution not reported.....	5	145,801	5	145,801	5	145,801
Plastering and lathing.....	5	418,912	5	418,912	5	418,912	Distributed by class.....	26	5,019,503	21	4,764,321	5	265,182
Roofing and sheet-metal work.....	15	470,217	1	(?)	14	(?)	Commercial.....	16	1,477,684	15	(?)	1	(?)
Roofing.....	10	328,626	1	(?)	10	(?)	Educational.....	7	602,747	6	(?)	1	(?)
Sheet-metal work.....	4	251,322	4	251,322	4	251,322	Hotel.....	3	599,228	2	(?)	1	(?)
Roofing and sheet metal combined.....	3	4,901,653	3	4,901,653	3	4,901,653	Public: Courts, jails, etc.....	3	314,558	3	314,558	3	314,558
Steel erection.....	4	148,378	4	148,378	4	148,378	Hospital and institutional.....	5	235,401	5	235,401	5	235,401
Stonework.....	11	3,895,473	11	3,895,473	11	3,895,473	Manufacturing.....	3	77,785	3	77,785	3	77,785
Excavating.....	10	674,734	4	104,289	6	674,734	Religious and memorial.....	19	1,233,773	15	1,122,051	4	111,722
Ornamental iron.....	2	45,965	2	45,965	2	45,965	Residential.....	3	307,471	3	307,471	3	307,471
Metal work, n. e. s.....	1	45,965	1	45,965	1	45,965	Social and recreational.....	5	170,956	4	(?)	1	(?)
Highway.....	1	202,248	1	(?)	1	(?)	Miscellaneous.....	9	3,404,008	0	3,404,008	0	3,404,008
Bridge and culvert.....	1	202,248	1	(?)	1	(?)	Highway and street.....	5	749,089	5	749,089	5	749,089
Grading.....	1	202,248	1	(?)	1	(?)	Public works and utilities.....	3	578,182	3	578,182	3	578,182
Street paving.....	1	202,248	1	(?)	1	(?)	Bridge, tunnel, etc.....	2	170,907	2	170,907	2	170,907
Other classes.....	4	28,675	2	(?)	2	(?)	Sewage disposal and drainage.....	1	170,907	1	170,907	1	170,907
							Water supply.....	1	170,907	1	170,907	1	170,907
							Miscellaneous.....	1	170,907	1	170,907	1	170,907
							Water-power development.....	1	170,907	1	170,907		

TABLE 2.—CONSTRUCTION BUSINESS OF REPORTING ESTABLISHMENTS DURING 1929, BY CLASS OF OWNERSHIP AND BY TYPE OF WORK—Continued

CLASS OF OWNERSHIP AND TYPE OF CONSTRUCTION WORK	CONSTRUCTION BUSINESS REPORTED BY—						CLASS OF OWNERSHIP AND TYPE OF CONSTRUCTION WORK	CONSTRUCTION BUSINESS REPORTED BY—					
	All classes of establishments		General contractors <sup>1</sup>		Subcontractors			All classes of establishments		General contractors <sup>1</sup>		Subcontractors	
	Number reporting	Value	Number reporting	Value	Number reporting	Value		Number reporting	Value	Number reporting	Value	Number reporting	Value
<b>KNOXVILLE—Continued</b>						<b>MEMPHIS—Continued</b>							
All business under subcontract.....	22	\$4,523,814	3	\$135,197	19	\$4,388,617	All business under subcontract—Continued.						
Concreting.....	3	95,008	2	(?)	1	(?)	Distributed by class—Contd.						
Electrical.....	1						Heating and plumbing.....	5	\$647,609			\$647,609	
Painting and decorating.....	1	105,321					Heating and piping.....	1				300,699	
Plastering and lathing.....	1						Pipe covering.....	1	300,699				
Heating and plumbing.....	1	369,935					Plumbing and heating combined.....	1				11,154	
Heating and piping.....	5	205,760					Plumbing.....	2				153,031	
Pipe covering.....	1						Painting and decorating.....	3	280,910			104,835	
Plumbing and heating combined.....	2	11,154					Plastering and lathing.....	2	104,835			490,630	
Plumbing.....	5	153,031					Marble and tiling.....	3	490,630				
Roofing and sheet-metal work.....	5	102,523	1	4,000	4	98,523	Roofing and sheet-metal work.....	3	294,950			294,950	
Marble and tiling.....	4	3,299,838				3,299,838	Roofing.....	4	146,086			146,086	
Excavating.....	3	470,288	1	(?)	2	(?)	Sheet-metal work.....	4	148,273			148,273	
Highway.....	1						Other classes <sup>2</sup> .....	4	119,855	2	(?)	(?)	
Street paving.....	1						<b>NASHVILLE</b>						
Rental of equipment, trucking, etc.....	1	71,301	1	71,301			All construction business.....	63	18,057,425	21	\$8,990,741	42	\$9,066,684
<b>MEMPHIS</b>						<b>DISTRIBUTION NOT REPORTED</b>							
All construction business.....	112	16,828,921	56	11,310,760	56	4,518,161	Distribution not reported.....	4	4,796,548			4	4,796,548
Distribution not reported.....	3	184,358			3	184,358	Distributed by class of ownership.....						
Distributed by class of ownership.....	109	15,644,563	56	11,310,760	53	4,333,803	Private.....	59	13,260,877	21	8,990,741	38	4,270,136
Private.....	91	8,304,269	38	4,469,524	53	3,834,745	Quasi public or community.....	51	7,620,959	15	4,062,600	36	3,558,350
Quasi public or community.....	11	357,694	5	239,470	6	118,515	Public.....	14	582,883	3	257,668	11	325,218
Public.....	44	6,982,800	28	6,601,757	10	380,543	Distribution not reported.....	28	5,057,032	11	4,070,473	17	386,550
Distribution not reported.....	4	1,060,620	2	1,037,053	2	23,567	Distributed by class of public ownership.....	2	110,884	1	104,690	1	6,194
Distributed by class of public ownership.....	40	5,321,080	26	4,964,704	14	350,076	Federal.....	20	4,940,148	10	4,565,783	10	380,365
Federal.....	15	2,174,190	12	2,158,368	3	15,822	State.....	4	7,620,959	4	26,088	4	20,088
State.....	15	1,484,383	11	1,363,848	4	120,535	County or township.....	13	3,299,062	7	3,177,299	6	121,763
County or township.....	9	407,882	3	220,418	6	187,464	Municipal.....	9	744,410	3	650,023	6	94,387
Municipal.....	14	1,255,225	10	1,222,070	4	33,155	All business under general contract or directly for owners.....	33	10,035,029	21	8,967,551	12	1,067,478
All business under general contract or directly for owners.....	79	12,969,510	56	11,841,902	23	1,727,608	Building.....	20	5,789,604	14	4,722,126	12	1,067,478
Distribution not reported.....	1	1,194			1	1,194	Distribution not reported.....	20	28,145			20	28,145
Distributed by class.....	78	12,968,316	56	11,241,902	22	1,720,414	Distributed by class.....	25	5,701,459	13	4,693,981	12	1,067,478
Building.....	57	6,504,862	34	4,838,448	23	1,720,414	Commercial.....	12	1,455,090	7	1,344,911	5	110,149
Distribution not reported.....	3	243,079	1	88,480	2	154,603	Educational.....	7	353,303	3	304,715	4	48,848
Distributed by class.....	54	6,321,783	33	4,740,062	21	1,571,821	Hotel.....	2	401,876	1	357,250	1	44,626
Commercial.....	36	2,910,631	23	2,362,989	13	547,642	Hospital and institutional.....	5	1,501,955	2	(?)	2	(?)
Educational.....	8	239,736	1	(?)	7	(?)	Manufacturing.....	4	81,398	2	(?)	2	(?)
Hotel.....	5	103,647			4	100,103	Public: Courts, jails, etc.....	5	315,978	4	289,103	4	26,815
Hospital and institutional.....	5	396,415	3	399,059	2	100,103	Religious and memorial.....	19	1,400,100	10	961,919	9	528,271
Manufacturing.....	12	813,248	6	693,217	6	120,031	Residential.....	2	181,439	1	21,353	1	160,086
Military and naval.....	1	275,000	2	(?)	3	(?)	Social and recreational.....	7	428,791	3	428,791		
Public: Courts, jails, etc.....	5						Miscellaneous.....	2	3,816,634	1	3,816,634		
Religious and memorial.....	6	14,824	2	(?)	4		Public works and utilities <sup>3</sup> .....	3					
Social and recreational.....	6	37,434	3	22,487	3	29,821	Highway and street.....	8					
Residential.....	30	1,153,515	16	649,010	14	504,406	Water power development.....	1					
Air transport.....	5		3		2		Miscellaneous, n. e. s.....	1					
Rail and water transportation.....	1	247,110	1	260,025		108,308	All business under subcontract.....	41	8,022,366	2	(?)	39	(?)
Miscellaneous.....	6	130,223	2		4		Carpentering and wood flooring.....	2					
Public works and utilities.....	18	3,279,469	13	3,279,469			Soundproofing.....	1	111,913			111,913	
Bridge, tunnel, etc.....	4		4				Flooring, n. e. s.....	1					
Central station, light and power plant.....	2	397,449	2	397,449			Concreting.....	3	195,064			195,064	
Dock, pier, retaining wall, etc.....	1		1				Stone work.....	1	140,555			140,555	
Flood control, irrigation, and land drainage.....	11	2,143,466	11	2,143,466			Electrical.....	4	140,555			140,555	
Sewage disposal and drainage.....	3	267,625	3	267,625			Elevator construction.....	2					
Water supply.....	2	470,929	1	470,929			Steel erection.....	1	4,709,279			4,709,279	
Miscellaneous.....	1		1				Ornamental iron.....	1					
Highway and street.....	14		14				Heating and plumbing.....	11	1,065,587		(?)	(?)	
Railroad and car line.....	1	3,123,985	1	3,123,985			Heating and piping.....	11	293,042	1	(?)	10	(?)
Miscellaneous, n. e. s.....	1		1				Pipe covering.....	4	163,732			163,732	
All business under subcontract.....	44	2,859,411	2	(?)	42	(?)	Plumbing.....	12	369,533	2	(?)	10	(?)
Distribution not reported.....	1	246,153			1	246,153	Plumbing and heating combined.....	3	209,280			209,280	
Distributed by class.....	43	2,613,258	2	(?)	41	(?)	Masonry.....	6	885,284			885,284	
Carpentering and wood flooring.....	3	219,107			3	219,107	Painting and decorating.....	3	65,886			65,886	
Flooring, n. e. s.....	1						Glass and glazing.....	1					
Electrical.....	7	374,758			7	374,758	Plastering and lathing.....	2	362,914			362,914	
Elevator construction.....	1						Marble and tiling.....	3					
Steel erection.....	2	361,601			2	361,601	Roofing and sheet-metal work.....	2	380,463			380,463	
Ornamental iron.....	1						Roofing.....	2	129,141			129,141	
Metal work, n. e. s.....	1						Sheet-metal work.....	1					
							Roofing and sheet metal combined.....	4	251,322			251,322	
							Excavating.....	2					
							Bridge and culvert.....	1	105,451			105,451	
							Dam and reservoir.....	1					
							Miscellaneous, n. e. s.....	1					

<sup>1</sup> Includes operative builders.  
<sup>2</sup> Value omitted in order to avoid disclosing individual operations. The amounts omitted are, however, included in the respective totals.  
<sup>3</sup> Includes establishments reporting the following types of work: General contractors—Dam and reservoir, 1; rental of equipment, 1. Subcontractors—Dam and reservoir, 1; miscellaneous, 1.  
<sup>4</sup> Includes establishments reporting the following types of subcontract work: Electrical, 2; grading, 1.  
<sup>5</sup> Includes establishments reporting the following types of work: General contractors—Excavating, 1; dam and reservoir, 1. Subcontractors—Masonry, 1; stone work, 1.  
<sup>6</sup> Includes general contractors establishments reporting the following types of work: Bridge, tunnel, etc., 1; sewage disposal, 1; water supply, 1.

TABLE 3.—CONSTRUCTION BUSINESS DURING 1929, BY LOCATION

CLASSIFICATION OF ESTABLISHMENTS	Establishments reporting	Total	In home city	In home State	Outside home State	CLASSIFICATION OF ESTABLISHMENTS	Establishments reporting	Total	In home city	In home State	Outside home State
<b>TENNESSEE</b> .....						<b>KNOXVILLE—Continued</b>					
Operative builders.....	5	365,244	330,544	365,244	-----	Subcontractors.....	22	\$4,808,209	\$1,038,364	\$1,235,730	\$3,572,479
General contractors.....	140	40,176,469	13,477,146	23,133,047	12,043,412	Heating and plumbing.....	5	559,696	488,674	559,696	-----
Building.....	61	18,152,172	11,821,300	16,430,306	1,721,806	Heating and piping.....	4	315,353	251,481	315,353	-----
Building not specialized.....	71	15,965,768	9,397,995	14,401,902	1,563,866	Plumbing and heating combined.....	4	244,343	237,193	244,343	-----
Commercial building only.....	8	927,404	884,305	927,404	-----	Roofing and sheet-metal work.....	3	128,651	118,744	128,651	-----
Residential building only.....	12	1,269,000	1,039,000	1,101,000	168,000	Marble, tiling, and plastering.....	5	3,383,426	161,910	210,947	3,172,479
Highway.....	20	11,568,641	968,184	8,139,990	3,428,651	Other classes <sup>7</sup> .....	6	736,436	269,036	336,436	400,000
Bridges and culvert.....	8	1,360,773	55,000	757,191	603,582	<b>MEMPHIS</b> .....					
Street paving.....	13	3,235,102	804,384	1,271,467	1,963,635	Operative builders.....	3	172,050	172,050	172,050	-----
Sewer, gas, water, conduit.....	4	597,132	298,528	367,528	229,604	General contractors.....	52	10,792,799	3,376,780	5,732,363	5,010,436
Levee.....	8	2,064,024	-----	-----	2,064,024	Building.....	30	4,823,377	2,993,488	4,078,121	745,256
Other classes <sup>1</sup> .....	5	3,198,615	29,750	1,166,555	2,032,050	Building not specialized.....	21	3,798,203	1,938,374	3,063,007	745,256
Subcontractors.....	149	20,120,808	8,823,141	11,457,568	8,663,240	Commercial building only.....	5	744,208	744,208	744,208	-----
Carpentering and wood flooring.....	3	215,526	203,512	203,512	12,014	Residential building only.....	4	280,906	280,906	280,906	-----
Concrete.....	3	252,521	148,189	252,521	-----	Highway and grading.....	5	2,139,680	-----	1,055,544	1,084,136
Electrical.....	20	1,330,910	1,203,558	1,277,845	53,065	Street paving.....	0	781,134	289,093	476,461	305,673
Elevator construction.....	3	260,128	212,539	260,128	-----	Levee.....	2	2,004,024	-----	-----	2,004,024
Heating and plumbing.....	50	3,789,804	3,004,799	3,018,030	168,774	Other classes <sup>8</sup> .....	3	984,584	124,200	173,237	811,347
Heating and piping.....	14	1,277,055	946,430	1,271,467	156,510	Subcontractors.....	55	4,368,161	3,710,387	3,063,172	404,980
Plumbing.....	23	1,662,306	1,333,288	1,554,042	8,264	Electrical.....	11	768,226	712,875	715,161	53,065
Plumbing and heating combined.....	13	847,443	725,081	843,443	4,000	Heating and plumbing.....	10	1,342,317	1,043,370	1,193,543	148,774
Masonry.....	9	1,149,906	476,179	701,217	448,748	Heating and piping.....	8	756,445	555,692	610,935	145,510
Painting, decorating, and glazing.....	8	572,161	512,527	572,161	-----	Plumbing.....	8	586,872	487,678	582,008	3,204
Plastering and lathing.....	6	564,335	364,139	379,212	185,123	Masonry and stone work.....	3	136,265	131,845	136,265	-----
Roofing and sheet-metal work.....	21	1,656,985	1,388,697	1,615,985	41,000	Painting, decorating, and glazing.....	4	404,835	379,072	404,835	-----
Roofing.....	13	1,110,975	890,588	1,069,975	41,000	Roofing and sheet-metal work.....	3	506,856	480,856	494,856	11,000
Sheet-metal work.....	8	546,010	498,109	546,010	-----	Roofing.....	5	365,083	352,083	354,083	11,000
Steel erection.....	3	4,973,653	294,997	973,653	4,000,000	Sheet-metal work.....	3	140,773	134,773	140,773	-----
Stone work.....	5	254,291	239,371	244,291	10,000	Steel erection <sup>10</sup> .....	4	408,736	374,636	408,736	-----
Marble and tiling.....	11	4,171,330	656,351	936,023	3,235,307	Marble, tiling, and plastering.....	5	509,430	339,979	363,611	145,828
Excavating and grading.....	4	664,000	72,217	263,900	400,100	Other classes <sup>11</sup> .....	4	262,487	242,354	240,165	49,322
Other classes <sup>2</sup> .....	3	262,139	46,066	153,090	109,049	<b>NASHVILLE</b> .....					
<b>CHATTANOOGA</b> .....						<b>NASHVILLE</b> .....					
General contractors.....	25	7,226,101	2,476,021	3,080,943	3,245,248	General contractors <sup>1</sup> .....	19	8,636,517	2,231,559	7,781,155	855,362
Building.....	15	2,576,920	2,001,140	2,267,172	309,748	Building.....	12	5,054,296	2,117,728	4,399,434	654,862
Building not specialized.....	11	1,910,488	1,542,714	1,758,740	151,748	Building <sup>2</sup> .....	4	2,540,818	107,267	2,340,318	200,500
Residential building only.....	4	666,432	458,432	608,432	158,000	Highway.....	3	1,041,403	6,564	1,041,403	-----
Highway.....	4	2,627,513	194,658	1,892,497	1,235,016	Other classes <sup>12</sup> .....	3	1,041,403	-----	-----	-----
Street paving.....	3	1,743,167	71,148	85,205	1,657,962	Subcontractors.....	42	9,066,684	2,677,938	4,401,072	4,665,612
Other classes <sup>3</sup> .....	3	278,561	200,000	230,000	42,522	Heating and plumbing.....	13	1,190,465	939,684	1,190,465	-----
Subcontractors.....	15	1,011,201	900,443	1,003,131	8,160	Plumbing.....	9	753,457	594,783	753,457	-----
Electrical.....	3	287,723	287,723	287,723	-----	Plumbing and heating combined.....	4	437,008	344,901	437,008	-----
Heating and plumbing.....	4	224,632	186,632	210,632	8,000	Masonry.....	5	943,502	269,716	494,764	448,748
Masonry and stone work.....	4	197,352	197,352	197,352	-----	Painting and decorating <sup>13</sup> .....	4	230,550	117,494	155,809	74,741
Other classes <sup>4</sup> .....	4	301,584	228,736	301,424	160	Roofing and sheet-metal work.....	6	733,493	578,493	703,493	30,000
<b>KNOXVILLE</b> .....						<b>KNOXVILLE</b> .....					
General contractors <sup>4</sup> .....	29	10,503,939	4,384,539	7,883,573	2,620,366	Roofing.....	3	467,796	312,796	437,796	30,000
Building <sup>5</sup> .....	18	4,555,963	3,311,896	4,555,963	-----	Roofing and sheet-metal combined.....	3	265,697	265,697	265,697	-----
Highway.....	4	2,933,434	647,218	2,189,435	743,999	Plastering and lathing.....	3	285,180	188,042	202,037	83,123
Railroad, bridge, and culvert.....	4	2,473,599	-----	697,232	1,876,367	Marble and tiling.....	3	452,649	225,659	433,649	19,000
Other classes <sup>6</sup> .....	3	540,943	425,425	540,943	-----	Stone work and concreting.....	3	190,835	123,326	180,835	10,000
						Other classes <sup>14</sup> .....					
						5					
						6,040,039					
						230,624					
						1,040,039					
						4,000,000					

<sup>1</sup> Includes grading; waterworks; and railroad.  
<sup>2</sup> Includes bridge and culvert; soundproofing; and flooring, n. e. s.  
<sup>3</sup> Includes bridge and culvert; and sewer, gas, water, conduit.  
<sup>4</sup> Includes roofing; marble and tiling; and grading.  
<sup>5</sup> Includes operative builders.  
<sup>6</sup> Includes street paving; and sewer, gas, water, conduit.  
<sup>7</sup> Includes concreting; electrical; painting and decorating; and excavating.  
<sup>8</sup> Includes bridge and culvert; sewer, gas, water, conduit; and waterworks.  
<sup>9</sup> Includes plumbing and heating combined.  
<sup>10</sup> Includes elevator construction.  
<sup>11</sup> Includes carpentering and wood flooring; excavating; and flooring, n. e. s.  
<sup>12</sup> Includes bridge and culvert; grading; and street paving.  
<sup>13</sup> Includes carpentering and wood flooring; and soundproofing.  
<sup>14</sup> Includes electrical; elevator construction; steel erection; and bridge and culvert.

CONSTRUCTION—TENNESSEE

TABLE 4.—CONSTRUCTION BUSINESS OUTSIDE HOME STATE, BY LOCATION

STATE	LOCATION REPORTED BY—			STATE	LOCATION REPORTED BY—		
	All classes of establishments	General contractors	Subcontractors		All classes of establishments	General contractors	Subcontractors
<b>TENNESSEE</b>				<b>KNOXVILLE—Continued</b>			
Total distributed by State <sup>1</sup> .....	\$20,706,652	\$12,043,412	\$8,663,240	Total distributed by State—Continued.			
Alabama.....	1,481,739	1,321,232	160,457	Missouri.....	\$1,484,828	\$1,484,828	-----
Arkansas.....	1,788,593	1,630,898	107,695	North Carolina.....	798,007	798,007	-----
Florida.....	707,602	795,256	1,316	Pennsylvania.....	135,417	-----	\$135,417
Georgia.....	1,578,448	1,391,790	216,658	Texas.....	70,000	70,000	-----
Kansas.....	90,643	90,643	-----	Other States, n. s.....	3,091,942	50,880	3,032,062
Kentucky.....	845,182	407,182	438,000				
Louisiana.....	505,037	500,983	4,054	<b>MEMPHIS</b>			
Mississippi.....	2,544,963	2,255,334	288,629	Total distributed by State <sup>1</sup> .....	5,415,425	5,010,436	404,989
Missouri.....	1,644,223	1,631,669	12,554	Alabama.....	126,465	123,604	2,801
North Carolina.....	1,438,465	1,407,869	30,596	Arkansas.....	1,078,593	1,570,898	107,695
Oklahoma.....	13,000	-----	13,000	Florida.....	421,941	421,941	-----
Pennsylvania.....	135,417	-----	135,417	Georgia.....	87,905	85,000	2,905
South Carolina.....	1,981	-----	1,981	Kansas.....	76,112	76,112	-----
Texas.....	70,000	70,000	-----	Kentucky.....	292,814	292,814	-----
Virginia.....	190,600	-----	190,600	Louisiana.....	505,037	500,983	4,054
West Virginia.....	300,000	300,000	-----	Mississippi.....	1,878,346	1,633,587	244,759
Other States, n. s.....	7,280,759	218,479	7,062,283	Missouri.....	150,395	146,841	12,554
				Other States, n. s.....	188,817	158,590	30,221
<b>CHATTANOOGA</b>				<b>NASHVILLE</b>			
Total distributed by State <sup>1</sup> .....	3,253,408	3,245,248	8,160	Total distributed by State <sup>1</sup> .....	5,520,974	855,362	4,665,612
Alabama.....	807,659	889,659	8,000	Alabama.....	457,615	307,959	140,656
Florida.....	173,845	173,845	-----	Florida.....	201,816	200,500	1,316
Georgia.....	1,276,950	1,276,950	160	Georgia.....	213,593	-----	213,593
Kentucky.....	30,948	30,948	-----	Kentucky.....	30,300	300	30,000
Mississippi.....	264,144	264,144	-----	Mississippi.....	300,473	346,603	43,870
North Carolina.....	609,862	609,862	-----	North Carolina.....	25,596	-----	25,596
				Oklahoma.....	13,000	-----	13,000
<b>KNOXVILLE</b>				South Carolina.....	1,981	-----	1,981
Total distributed by State <sup>1</sup> .....	6,102,845	2,620,366	3,472,479	Virginia.....	186,000	-----	186,000
Arkansas.....	110,000	110,000	-----	Other States, n. s.....	4,000,000	-----	4,000,000
Kansas.....	\$14,531	14,531	-----				
Kentucky.....	488,120	83,120	\$405,000				

Number of establishments reporting in the State and cities respectively:

<sup>1</sup>All classes, 81; 13; 9; 43; 11; General contractors, 46; 11; 6; 24; 3; Subcontractors, 35; 2; 3; 19; 8.

TABLE 5.—NUMBER AND SALARIES OF PROPRIETORS, FIRM MEMBERS, AND SALARIED EMPLOYEES: 1929

CLASSIFICATION OF ESTABLISHMENTS	Estab-lish-ments report-ing	PROPRIETORS AND FIRM MEMBERS			SALARIED EMPLOYEES									
		Re-ceive-ing no salary	Receiving salaries		All salaried employees		Officers and clerical staff		Superintendents, foremen, etc.		Number reported, by sex			Sex not re-ported
			Num-ber	Total annual salaries	Total num-ber	Total annual salaries	Num-ber	Total annual salaries	Num-ber	Total annual salaries	Total	Male	Fe-male	
<b>TENNESSEE</b> .....	306	190	116	\$968,744	1,097	\$2,683,844	528	\$1,404,353	669	\$1,279,291	982	833	149	115
Operative builders.....	5	3	1	3,013	18	30,955	6	7,205	12	23,600	18	12	6	-----
General contractors.....	156	105	64	218,528	700	1,801,022	271	859,357	429	942,665	645	575	70	55
Building.....	93	66	45	148,282	250	682,269	122	350,831	128	331,438	232	199	33	18
Building not specialized.....	73	54	41	120,282	197	556,178	93	281,987	104	274,191	186	162	24	11
Commercial building only.....	8	5	2	11,800	33	76,830	16	35,403	17	41,427	33	27	6	-----
Residential building only.....	12	7	2	7,200	20	49,261	13	33,441	7	15,820	13	10	3	7
Highway.....	22	16	8	25,796	226	562,919	62	240,758	164	322,161	214	203	11	12
Bridge and culvert.....	9	3	4	19,400	49	85,943	20	32,003	29	53,940	40	23	17	9
Street paving.....	14	7	7	20,450	60	142,144	25	66,210	35	75,934	54	52	2	6
Sewer, gas, water, conduit.....	5	4	-----	-----	16	36,978	6	14,502	10	22,476	16	16	-----	-----
Lanes.....	8	7	-----	-----	36	102,600	19	65,100	17	37,600	26	23	3	10
Other classes <sup>1</sup> .....	5	1	2	3,600	63	189,069	17	89,963	46	99,118	63	59	4	-----
Subcontractors.....	145	82	51	147,203	379	850,767	251	537,701	128	313,066	319	246	73	60
Carpentering and wood flooring.....	3	1	-----	-----	7	16,720	5	11,920	2	4,800	5	5	-----	2
Concrete.....	8	2	2	1,250	8	9,953	4	5,500	4	4,458	8	8	-----	-----
Electrical.....	18	4	7	21,542	65	115,126	48	80,529	17	34,597	61	52	9	4
Elevator construction.....	3	-----	-----	-----	13	27,487	8	14,120	5	13,367	13	10	3	-----
Heating and plumbing.....	60	31	24	69,882	105	249,950	75	172,039	30	77,911	83	61	22	22
Heating and piping.....	14	7	7	24,406	34	80,076	19	43,586	15	36,490	32	28	4	2
Plumbing.....	23	14	14	34,276	48	102,103	38	73,659	10	28,444	38	25	13	10
Plumbing and heating combined.....	13	10	3	11,200	23	67,771	18	64,794	5	12,977	13	8	5	10
Masonry.....	10	11	3	7,600	12	35,650	6	14,950	6	20,700	5	4	1	7
Painting and decorating.....	6	-----	-----	-----	4	5,672	2	1,940	2	3,732	4	3	1	-----
Plastering and lathing.....	0	8	-----	-----	7	17,080	2	1,390	5	15,690	7	5	2	-----
Roofing and sheet-metal work.....	21	8	5	20,309	72	160,162	53	114,947	14	45,215	50	30	20	22
Roofing.....	12	3	-----	-----	51	114,749	40	78,600	11	36,149	29	17	12	22
Sheet-metal work.....	9	5	5	20,309	21	45,413	13	36,319	3	9,066	21	13	8	-----
Stone work.....	5	2	2	5,200	13	36,319	9	25,300	4	11,019	12	11	1	1
Marble and tiling.....	11	2	3	10,200	29	85,897	20	62,565	9	23,332	29	20	9	-----
Excavating and grading.....	4	3	4	10,620	19	40,562	6	16,137	13	24,425	19	17	2	-----
Other classes <sup>2</sup> .....	4	3	-----	-----	25	50,189	8	16,364	17	33,825	23	20	3	2

See footnotes at end of table.

CONSTRUCTION—TENNESSEE

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TABLE 5.—NUMBER AND SALARIES OF PROPRIETORS, FIRM MEMBERS, AND SALARIED EMPLOYEES: 1929—Continued

CLASSIFICATION OF ESTABLISHMENTS	Establishments reporting	PROPRIETORS AND FIRM MEMBERS				SALARIED EMPLOYEES								
		Receiving no salary	Receiving salaries		All salaried employees		Officers and clerical staff		Superintendents, foremen, etc.		Number reported, by sex			Sex not reported
			Number	Total annual salaries	Total number	Total annual salaries	Number	Total annual salaries	Number	Total annual salaries	Total	Male	Female	
<b>CHATTANOOGA</b> .....	41	29	10	\$31,170	157	\$396,154	74	\$203,341	83	\$192,813	152	134	18	5
General contractors.....	25	20	6	20,090	108	283,398	45	132,288	63	151,110	105	99	0	3
Building.....	15	16	4	12,400	43	101,148	19	41,518	24	59,630	40	37	3	3
Building not specialized.....	11	15	2	5,200	34	73,648	13	20,518	21	53,130	34	31	3	
Residential building only.....	4	1	2	7,200	9	27,600	6	21,000	3	6,500	6	0		3
Highway.....	4	2	2	3,000	37	123,900	13	65,200	24	58,700	37	35	2	
Street paving.....	3		1	4,000	19	43,500	10	21,800	9	21,700	19	18	1	
Other classes <sup>1</sup> .....	3	2			9	14,850	3	3,770	6	11,080	9	0		
Subcontractors.....	16	9	4	11,080	49	112,756	29	71,053	20	41,703	47	35	12	2
Electrical.....	3				12	26,513	6	15,405	6	11,108	12	9	3	2
Heating and plumbing.....	4	2	2	6,760	10	21,204	6	13,164	4	8,100	8	6	2	2
Roofing and sheet metal.....	3				14	33,842	12	30,462	2	3,380	14	0	5	2
Other classes <sup>2</sup> .....	6	7	2	4,320	13	31,137	6	12,022	8	10,116	13	11	2	
<b>KNOXVILLE</b> .....	51	18	31	\$6,893	241	\$47,383	99	\$35,039	142	\$12,344	235	195	40	6
General contractors.....	30	11	20	60,440	188	525,448	65	261,685	123	263,863	186	150	27	2
Building.....	19	10	14	39,840	56	145,319	27	79,899	29	65,420	54	43	11	2
Highway.....	4				70	194,729	20	82,986	50	111,743	70	68	2	
Railroad, bridge, and culvert.....	3		2	12,000	41	119,300	10	65,800	31	53,500	41	28	13	
Other classes <sup>3</sup> .....	4	1	4	8,600	21	66,100	8	32,900	13	33,200	21	20	1	
Subcontractors.....	21	7	11	26,453	53	121,935	34	73,454	19	48,481	49	36	13	4
Heating and plumbing.....	8	2	8	16,412	19	37,475	13	19,474	6	18,001	17	12	5	2
Heating and piping.....	4	1	2	6,446	10	23,137	4	5,136	6	18,001	9	9		1
Plumbing and heating combined.....	4	1	6	9,966	0	14,338	9	14,338			8	3	5	1
Roofing and sheet-metal work.....	3		2	9,441	6	12,580	5	9,680	1	2,900	4	2	2	2
Marble, tiling, and plastering.....	5	4			7	24,680	5	19,260	2	5,400	7	4	3	
Other classes <sup>4</sup> .....	5	1	1	600	21	47,200	11	25,040	10	22,180	21	18	3	
<b>MEMPHIS</b> .....	109	86	21	77,131	313	716,166	175	404,853	138	311,313	283	234	49	30
Operative builders.....	3	3			9	14,820	3	3,360	6	11,460	9	6	3	
General contractors.....	53	44	11	44,742	174	409,343	77	196,830	97	212,513	152	131	21	22
Building.....	30	24	6	20,946	82	210,920	39	93,957	43	116,963	74	61	13	8
Building not specialized.....	21	16	5	16,146	54	136,036	25	57,893	29	78,143	50	44	6	4
Commercial building only.....	4	3	1	4,800	21	57,903	10	27,403	11	30,500	21	15	0	
Residential building only.....	5	5			7	16,981	4	8,681	3	8,320	3	2	1	4
Highway and grading.....	6	5	5	23,796	29	40,840	6	13,420	23	27,420	29	25	4	
Street paving.....	6	5			15	26,014	6	12,600	9	13,414	11	11		4
Levee.....	3	2			36	102,600	19	65,100	17	37,500	26	23	3	10
Other classes <sup>5</sup> .....	8	8			12	28,969	7	11,753	5	17,210	12	11	1	
Subcontractors.....	53	39	10	32,389	130	292,093	95	204,093	35	87,340	122	97	25	8
Electrical.....	10	4	4	13,389	40	68,776	32	52,487	8	16,280	39	35	4	1
Heating and plumbing.....	16	11	6	19,000	31	84,342	24	63,843	7	20,499	28	22	6	3
Heating and piping.....	8	4	3	11,200	16	48,469	12	40,370	4	8,099	15	13	2	1
Plumbing.....	8	7	3	7,800	15	35,873	12	23,473	3	12,400	13	9	4	2
Masonry and stone work.....	4	7			3	8,700	3	8,700			3	2	1	
Painting and decorating.....	3	5			1	900	1	900			1	1		
Roofing and sheet-metal work.....	7	6			15	25,844	10	11,413	5	14,431	15	8	7	
Roofing.....	4	2			12	19,954	8	8,700	4	11,255	12	7	5	
Sheet-metal work.....	3	4			3	5,890	2	2,704	1	3,176	3	1	2	
Steel erection.....	4				16	40,771	7	18,420	9	22,351	14	12	2	2
Marble, tiling, and plastering.....	4	3			13	38,100	10	29,780	3	8,320	13	10	3	
Other classes <sup>6</sup> .....	5	3			11	24,570	8	19,120	3	5,450	9	8	1	2
<b>NASHVILLE</b> .....	62	26	30	122,148	278	731,433	138	392,018	140	349,415	227	194	33	61
General contractors.....	21	10	11	62,670	154	445,346	60	217,716	94	227,630	188	120	12	16
Building.....	13	7	8	49,090	51	196,276	30	124,932	21	71,344	47	39	8	4
Highway.....	4	2			57	140,482	18	62,632	39	77,850	45	44	1	12
Other classes <sup>7</sup> .....	4	1	3	13,580	40	108,588	12	30,152	34	78,436	46	49	3	
Subcontractors.....	41	16	19	59,478	124	286,087	78	164,302	46	121,785	89	68	21	35
Heating and plumbing.....	13	6	7	21,710	34	86,218	22	57,507	12	28,711	27	19	8	17
Plumbing.....	9	5	5	16,510	21	41,855	15	28,411	6	13,444	21	14	7	
Plumbing and heating combined.....	4	1	2	5,200	13	44,363	7	29,096	6	15,267	6	5	1	7
Masonry.....	5	1	3	7,600	11	34,150	5	13,450	6	20,700	4	4		7
Painting and decorating.....	4	3			4	9,676	4	9,676			4	4		
Plastering and lathing.....	3	3			5	10,840	2	1,390	3	9,450	5	3	2	
Roofing and sheet-metal work.....	6	1	3	10,868	34	81,244	29	59,104	5	22,080	14	9	5	20
Roofing.....	3	1			27	69,195	22	47,115	5	22,080	7	4	3	20
Roofing and sheet-metal combined.....	3		3	10,868	7	12,049	7	12,049			7	5	2	
Stone work and concreting.....	3	1	2	5,200	9	24,209	7	18,820	2	5,479	8	8		1
Marble and tiling.....	3		3	10,200	6	11,172	2	3,120	4	8,052	6	4	2	
Other classes <sup>8</sup> .....	4	1	1	3,900	21	28,488	11	10,851	10	17,637	21	17	4	

<sup>1</sup> Includes grading; waterworks; and railroad.  
<sup>2</sup> Includes steel erection; bridge and culvert; soundproofing; and flooring, n. e. s.  
<sup>3</sup> Includes sewer, gas, water, conduit; and bridge and culvert.  
<sup>4</sup> Includes masonry, stone work; marble and tiling, and grading.  
<sup>5</sup> Includes operative builders.  
<sup>6</sup> Includes grading; street paving; and sewer, gas, water, conduit.  
<sup>7</sup> Includes concreting; electrical; painting and decorating; and excavating.  
<sup>8</sup> Includes bridge and culvert; sewer, gas, water, conduit; and waterworks.  
<sup>9</sup> Includes plumbing and heating combined.  
<sup>10</sup> Includes elevator construction.  
<sup>11</sup> Includes carpentering and wood flooring; excavating; and flooring, n. e. s.  
<sup>12</sup> Includes bridge and culvert; grading; street paving; and sewer, gas, water, conduit.  
<sup>13</sup> Includes carpentering and wood flooring; and soundproofing.  
<sup>14</sup> Includes electrical; elevator construction; and bridge and culvert.

TABLE 6.—VALUE OF CONSTRUCTION EQUIPMENT, IN COMPARISON WITH CONSTRUCTION BUSINESS AND WAGES PAID DURING 1929

CLASSIFICATION OF ESTABLISHMENTS AND PERCENTAGE OF EQUIPMENT OWNED	Establishments reporting	EQUIPMENT		Value of construction business reported	Wages paid	CLASSIFICATION OF ESTABLISHMENTS AND PERCENTAGE OF EQUIPMENT OWNED	Establishments reporting	EQUIPMENT		Value of construction business reported	Wages paid
		Purchased during the year	Inventor value at end of year					Purchased during the year	Inventor value at end of year		
<b>TENNESSEE</b>	289	\$1,336,383	\$6,765,131	\$68,885,128	\$12,568,747	<b>CHATTANOOGA—Contd.</b>					
<i>Classification of establishments</i>						<i>Percentage of equipment owned<sup>6</sup></i>					
Operative builders	4		200	287,050	92,442	General contractors	23	\$116,823	\$840,521	\$5,768,742	\$1,111,630
General contractors	148	1,176,241	5,484,545	39,193,331	8,070,999	None	1			175,000	35,600
Building	87	123,226	512,649	18,204,231	3,483,704	1% to 25%	1	100	500	67,000	8,000
Building not specialized	70	110,430	469,032	16,121,476	3,109,037	26% to 50%	1		4,000	57,779	3,910
Commercial building only	7	11,150	35,895	896,903	165,085	51% to 75%	2	70,362	183,603	669,390	210,076
Residential building only	10	1,646	7,722	1,186,852	209,582	76% to 99%	18	40,361	652,418	4,799,573	854,044
Highway	22	549,897	2,300,454	12,630,675	2,401,720	100%	13	7,846	114,976	910,872	216,378
Bridge and culvert	9	68,170	141,052	1,425,290	445,205	51% to 75%	1		35	6,048	20,072
Grading	3	82,461	220,410	865,857	317,873	76% to 99%	3	1,900	48,188	130,857	36,025
Street paving	13	110,869	398,305	1,906,235	443,442	100%	9	5,911	60,740	744,343	175,504
Sewer, gas, water, conduit	5	77,678	225,512	806,350	265,194	<b>KNOXVILLE</b>					
Levee	6	95,893	1,359,203	982,801	290,336	<i>Classification of establishments</i>					
Other classes <sup>1</sup>	3	68,547	320,060	2,371,886	363,525	50 289,094 1,198,813 15,184,458 3,439,691					
Subcontractors	137	160,142	1,270,386	19,404,742	4,403,306	<i>General contractors<sup>3</sup></i>					
Concreting	8	19,000	50,758	252,521	85,855	Building <sup>2</sup>	19	16,869	1,065,458	10,688,067	2,320,056
Electrical	17	2,397	42,614	1,105,832	255,578	Building	4	107,308	503,620	2,933,434	680,365
Elevator construction	3	4,069	4,616	260,128	61,111	Highway	4	68,754	307,112	2,473,599	493,074
Heating and plumbing	44	49,825	150,765	3,381,331	728,857	Railroad, bridge, and culvert	4	78,180	140,243	580,071	194,946
Heating and piping	12	4,040	54,369	1,103,167	227,537	Subcontractors	19	17,983	133,855	4,496,301	1,112,075
Plumbing	20	41,845	63,776	1,640,646	342,397	Heating and plumbing	6	1,500	9,453	415,654	101,001
Plumbing and heating combined	12	4,431	32,620	731,629	158,923	Roofing and sheet-metal work	3	844	28,461	128,651	18,900
Masonry	8	14,672	30,239	1,192,659	487,530	Marble, tiling, and plastering	4	1,089	15,376	3,215,650	733,941
Painting, decorating, and glazing	8	3,350	14,946	572,161	160,901	Other classes <sup>2</sup>	6	14,550	80,065	736,436	269,127
Plastering and lathing	6	1,533	6,657	564,335	240,151	<i>Percentage of equipment owned<sup>6</sup></i>					
Roofing and sheet-metal work	22	11,205	101,841	1,800,972	324,359	<i>General contractors<sup>3</sup></i>					
Roofing	13	8,785	54,044	1,110,975	158,246	None	1			115,000	20,052
Sheet-metal work	9	2,420	47,797	689,997	166,113	1% to 25%	1		500	122,972	25,700
Steel erection	3	18,329	597,949	4,373,653	750,964	26% to 50%	1		6,000	84,000	12,000
Stone work	5	871	42,224	3,254,291	78,270	51% to 75%	5	84,579	197,459	1,176,203	350,209
Marble and tiling	9	6,438	42,440	3,945,234	928,215	76% to 99%	23	180,532	861,499	9,189,802	1,603,935
Excavating and grading	4	20,097	159,785	664,060	201,961	Subcontractors	19	17,983	133,855	4,496,301	1,112,075
Other classes <sup>1</sup>	5	3,256	19,545	431,665	90,554	None	1			115,000	20,052
<i>Percentage of equipment owned</i>						<i>None</i>					
General contractors <sup>3</sup>	152	1,176,241	5,484,745	30,480,381	8,163,441	1% to 25%	1		500	122,972	25,700
None	4			440,430	81,774	26% to 50%	1		6,000	84,000	12,000
1% to 25%	4	350	2,955	310,706	77,331	51% to 75%	5	84,579	197,459	1,176,203	350,209
26% to 50%	2		5,500	157,779	20,910	76% to 99%	23	180,532	861,499	9,189,802	1,603,935
51% to 75%	5	73,350	200,404	657,699	247,517	Subcontractors	19	17,983	133,855	4,496,301	1,112,075
76% to 99%	13	217,492	672,002	4,691,847	1,181,084	None	1			115,000	20,052
100%	122	850,657	4,568,349	32,785,746	6,427,324	1% to 25%	1		500	122,972	25,700
Not reported	2	23,392	35,535	336,274	117,861	26% to 50%	1		6,000	84,000	12,000
Subcontractors	137	160,142	1,270,386	19,404,742	4,403,306	51% to 75%	5	84,579	197,459	1,176,203	350,209
None	8			702,855	246,729	76% to 99%	17	3,683	101,855	4,324,391	1,041,888
1% to 25%	1		600	26,224	9,170	<b>MEMPHIS</b>					
26% to 50%	2					<i>Classification of establishments</i>					
51% to 75%	2					104 311,458 2,133,310 14,417,161 2,926,811					
76% to 99%	6	135	6,248	64,672	22,849	<i>Operative builders</i>					
100%	120	130,112	1,169,422	17,899,713	3,809,296	3 200 172,050 66,300					
Not reported						<i>General contractors</i>					
<b>CHATTANOOGA</b>						49 277,878 1,955,565 9,990,671 1,782,679					
<i>Classification of establishments</i>						28 31,911 104,349 4,756,561 812,140					
General contractors	23	116,823	840,521	5,768,742	1,111,630	Building not specialized	20	28,261	138,736	3,763,013	627,734
Building	14	15,229	40,422	2,536,338	501,170	Commercial building only	5	3,650	23,759	744,208	129,606
Building not specialized	11	14,873	43,597	1,010,438	404,149	Residential building only	3		1,854	249,340	54,800
Commercial building only	3	356	2,825	625,850	97,021	Highway and grading	6	87,887	178,429	2,485,591	367,864
Residential building only	6	77,211	698,092	2,953,813	515,153	Street paving	6	24,393	101,744	781,134	120,384
Highway and street paving	3	24,383	96,007	278,591	95,307	Levee	6	95,393	1,859,203	982,801	290,336
Other classes <sup>4</sup>	3					Other classes <sup>7</sup>	3	38,294	151,840	684,584	191,055
Subcontractors	13	7,846	114,976	910,872	216,378	<i>Subcontractors</i>					
Electrical	3	1,500	18,230	287,723	70,070	52 33,580 177,545 4,254,440 1,077,742					
Heating and plumbing	3	1,747	14,311	87,632	14,556	None	9	847	21,595	573,532	135,277
Roofing and sheet-metal work	3	2,749	9,053	287,401	60,208	Heating and plumbing	14	5,679	54,292	1,273,290	205,672
Other classes <sup>4</sup>	4	1,850	73,332	248,116	71,144	Heating and piping <sup>10</sup>	7	3,061	40,782	719,647	140,836
						Plumbing	7	2,518	13,510	553,743	124,836
						Masonry and stonework	4	100	4,855	286,265	123,518
						Painting, decorating, and glazing	4	1,750	10,170	404,835	79,838
						Roofing and sheet-metal work	8	2,243	15,885	505,856	109,612
						Roofing	5	2,243	11,700	368,083	66,265
						Sheet-metal work	3		4,185	140,773	43,347
						Marble, tiling, and plastering	5	1,999	4,399	509,439	210,453
						Steel erection <sup>11</sup>	4	5,497	26,406	408,736	81,434
						Other classes <sup>11</sup>	4	15,666	39,943	292,487	68,938

See footnotes at end of table.

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TABLE 6.—VALUE OF CONSTRUCTION EQUIPMENT, IN COMPARISON WITH CONSTRUCTION BUSINESS AND WAGES PAID DURING 1929—Continued

CLASSIFICATION OF ESTABLISHMENTS AND PERCENTAGE OF EQUIPMENT OWNED	Establishments reporting	EQUIPMENT		Value of construction business reported	Wages paid	CLASSIFICATION OF ESTABLISHMENTS AND PERCENTAGE OF EQUIPMENT OWNED	Establishments reporting	EQUIPMENT		Value of construction business reported	Wages paid
		Purchased during the year	Inventory value at end of year					Purchased during the year	Inventory value at end of year		
<b>MEMPHIS—Continued.</b>						<b>NASHVILLE—Continued.</b>					
<i>Percentage of equipment owned<sup>6</sup></i>						<i>Classification of establishments—Continued</i>					
General contractors <sup>2</sup> .....	52	\$277,878	\$1,955,765	\$10,102,721	\$1,840,069	Subcontractors—Continued.	5	\$14,572	\$27,230	\$943,502	\$373,505
None.....	1			38,500	14,600	Masonry.....	3	1,960	7,742	184,550	61,454
1% to 25%.....	1		100	66,550	29,800	Painting and decorating <sup>4</sup> .....	6	4,654	35,313	733,493	102,701
26% to 50%.....	1		1,500	100,000	26,000	Roofing and sheet-metal work.....	3	2,530	11,285	467,796	65,515
51% to 75%.....	2	2,088	10,801	104,209	25,441	Roofing and sheet-metal combined.....	3	2,124	24,028	265,097	37,186
76% to 99%.....	4	22,122	46,079	1,652,685	233,845	Marble, tiling, and plastering.....	5	4,033	24,234	670,480	190,538
100%.....	43	252,768	1,806,085	8,300,777	1,510,383	Stonework and concreting.....	3	5,571	32,827	190,835	63,540
Subcontractors.....	52	33,530	177,545	4,254,440	1,077,742	Other classes <sup>13</sup> .....	4	21,297	583,580	5,009,655	774,228
None.....	0			550,009	181,900	<i>Percentage of equipment owned<sup>5</sup></i>					
1% to 99%.....	1	463	1,257	117,000	20,927	General contractors.....	19	354,513	1,196,048	8,818,784	1,706,388
100%.....	46	33,117	176,288	3,587,431	874,915	None.....	1			111,930	5,522
<b>NASHVILLE</b>						None.....	2	82,461	331,692	1,082,229	381,940
<i>Classification of establishments</i>						76% to 99%.....	14	243,660	828,821	7,288,351	1,291,075
General contractors.....	10	354,513	1,196,048	8,818,784	1,706,388	100%.....	2	28,392	35,535	336,274	117,851
Building.....	11	45,069	148,013	5,027,339	936,489	Not reported.....	2				
Highway.....	4	142,405	642,187	2,540,818	369,199	Subcontractors.....	38	89,036	760,900	8,876,576	1,812,700
Other classes <sup>13</sup> .....	4	167,039	405,848	1,250,627	400,700	None.....	2			152,846	64,829
Subcontractors.....	38	89,036	760,900	8,876,576	1,812,790	1% to 25%.....	1			26,224	9,170
Heating and plumbing.....	12	36,949	40,965	1,135,061	246,815	26% to 50%.....	1	13,332	13,371	320,421	147,017
Plumbing.....	8	36,215	35,419	698,053	162,724	51% to 75%.....	34	75,704	746,920	8,377,085	1,590,808
Plumbing and heating combined.....	4	734	14,540	437,008	84,091	76% to 99%.....					
						100%.....					

<sup>1</sup> Includes waterworks; and railroad.  
<sup>2</sup> Includes carpentering and wood flooring; bridge and culvert; soundproofing; and flooring, n. e. s.  
<sup>3</sup> Includes operative builders.  
<sup>4</sup> Includes bridge and culvert; and sewer, gas, water, conduit.  
<sup>5</sup> Includes stone work; marble and tiling; and grading.  
<sup>6</sup> For complete classification see tabulation for the State, above.  
<sup>7</sup> Includes grading; street paving; and sewer, gas, water, conduit.  
<sup>8</sup> Includes concreting; electrical; painting and decorating; and excavating.  
<sup>9</sup> Includes bridge and culvert; sewer, gas, water, conduit; and waterworks.  
<sup>10</sup> Includes plumbing and heating combined.  
<sup>11</sup> Includes elevator construction.  
<sup>12</sup> Includes carpentering and wood flooring; excavating; and flooring, n. e. s.  
<sup>13</sup> Includes bridge and culvert; grading; street paving; and sewer, gas, water, conduit.  
<sup>14</sup> Includes soundproofing.  
<sup>15</sup> Includes electrical; elevator construction; steel erection; and bridge and culvert.



CONSTRUCTION—TENNESSEE

TABLE 7.—WAGE EARNERS, BY MONTHS, AND WAGES PAID DURING 1929

CLASSIFICATION OF ESTABLISHMENTS AND LENGTH OF WORKING WEEK	Estab-lishments reporting	NUMBER EMPLOYED ON 15TH DAY OF THE MONTH OR NEAREST REPRESENTATIVE DAY												Wages paid dur-ing year
		Janu-ary	Febru-ary	March	April	May	June	July	August	Sep-tember	October	Novem-ber	Decem-ber	
<b>TENNESSEE</b>	281	7,595	8,080	8,154	9,656	10,143	11,114	11,899	12,180	11,725	10,913	9,222	8,164	\$11,960,253
<i>Classification of establishments</i>														
Operative builders	3	26	25	43	60	51	61	40	37	31	30	35	11	62,642
General contractors	131	5,280	5,664	5,540	6,727	7,383	8,475	9,090	9,337	8,882	8,213	6,833	5,040	7,515,508
Building	81	2,176	2,031	2,553	3,148	3,272	3,655	3,591	3,450	3,110	2,849	2,493	2,240	3,330,323
Building not specialized	64	1,933	2,410	2,276	2,773	2,919	3,292	3,234	3,044	2,630	2,430	2,088	1,926	2,995,031
Commercial building only	7	116	138	171	204	190	161	162	201	305	262	249	178	165,953
Residential building only	10	127	74	106	171	163	202	195	205	184	167	146	186	188,339
Highway	16	1,320	1,333	1,461	1,821	2,038	2,454	2,895	3,171	3,120	2,955	2,261	1,819	1,040,629
Bridge and culvert	9	604	530	321	304	306	460	538	504	483	429	353	320	445,205
Street paving	12	248	183	260	417	443	681	715	765	711	614	538	629	614,397
Sewer, gas, water, conduit	3	125	170	170	138	175	182	175	195	221	220	180	162	200,397
Loco	6	281	233	180	158	379	348	410	454	420	455	443	453	348,947
Other classes <sup>1</sup>	4	582	584	595	741	740	745	766	798	709	691	575	417	611,700
Subcontractors	127	2,283	2,301	2,571	2,860	2,709	2,578	2,769	2,780	2,812	2,670	2,354	2,213	4,382,013
Carpentering and wood flooring	3	34	37	38	38	40	28	30	39	43	47	45	38	60,483
Electrical	18	153	134	134	135	157	166	166	186	190	167	138	133	238,932
Elevator construction	3	36	38	36	39	37	37	38	42	41	34	33	34	61,111
Heating and plumbing	39	428	410	441	434	496	544	546	581	577	558	469	463	703,235
Heating and piping	13	148	150	165	146	147	146	163	170	162	178	154	153	236,537
Plumbing	16	168	164	170	194	194	269	259	273	289	248	204	200	298,772
Plumbing and heating combined	10	112	102	106	144	155	129	124	129	120	132	111	110	167,926
Masonry	10	170	216	314	352	340	322	393	351	341	298	249	245	524,032
Painting and decorating	6	41	60	71	101	107	92	84	62	65	71	59	59	129,242
Plastering and lathing	5	155	160	184	212	196	202	204	237	263	194	115	127	216,151
Roofing and sheet-metal work	20	172	182	196	232	242	253	277	264	250	281	256	236	313,410
Roofing	12	78	89	107	127	131	138	140	133	134	147	132	112	147,297
Sheet-metal work	8	94	93	89	105	111	115	131	131	125	134	124	124	166,113
Steel erection	3	345	337	349	358	366	379	380	404	301	341	320	298	750,964
Stone work	4	52	37	52	54	59	70	71	69	41	38	42	37	68,194
Marble and tiling	8	475	489	510	637	390	243	239	262	311	386	404	417	951,896
Excavating and grading	4	86	155	91	85	91	87	105	113	92	90	46	47	201,961
Other classes <sup>1</sup>	4	136	130	149	142	179	155	167	176	198	165	118	79	111,892
<i>Length of working week</i>														
General contractors <sup>2</sup>	134	5,312	5,689	5,583	6,737	7,434	8,536	9,130	9,374	8,913	8,243	6,868	5,951	7,578,240
40-hour, 5-day week														
45-hour, 5-day week														
50-hour, 5-day week	2	57	57	55	58	50	61	61	67	46	26	15	7	43,143
All other 5-day week														
44-hour, 5½-day week	20	590	1,030	860	1,305	1,264	1,420	990	805	587	638	580	479	1,011,510
49½-hour, 5½-day week	12	370	388	428	493	483	586	599	588	626	671	419	527	531,528
55-hour, 5½-day week	14	608	611	585	657	868	964	1,134	1,133	1,065	846	697	618	964,088
All other 5½-day week	21	403	382	457	490	468	505	682	740	730	670	540	432	678,993
48-hour, 6-day week	3	51	56	52	66	73	91	108	95	88	69	56	43	104,632
54-hour, 6-day week	2	39	7				107	101	126	110	133	127	126	41,690
60-hour, 6-day week	38	2,618	2,666	2,618	3,078	3,510	3,954	4,472	4,795	4,614	4,382	3,784	3,052	3,460,413
All other 6-day week	7	289	281	337	403	472	621	694	686	669	501	410	445	562,123
All other not designated	1	5	287	211	182	228	240	218	280	339	294	232	157	267,374
Not reported	5									75	75	65	43	12,840
Subcontractors	127	2,283	2,301	2,571	2,860	2,709	2,578	2,769	2,780	2,812	2,670	2,354	2,213	4,382,013
40-hour, 5-day week	15	211	238	243	308	298	290	378	298	307	245	204	185	366,669
45-hour, 5-day week														
50-hour, 5-day week														
All other 5-day week	1	10	11	11	0	8	9	8	10	13	10	10	8	15,405
44-hour, 5½-day week	69	1,346	1,312	1,484	1,739	1,561	1,480	1,439	1,477	1,557	1,486	1,367	1,304	2,858,222
49½-hour, 5½-day week	2	10	10	8	14	16	17	16	17	15	14	14	14	20,980
55-hour, 5½-day week	5	64	55	67	67	81	85	97	82	62	64	68	63	84,986
All other 5½-day week	4	109	124	127	97	90	91	107	138	123	117	101	97	135,553
48-hour, 6-day week	5	36	42	57	64	55	56	73	61	55	64	60	43	127,491
54-hour, 6-day week	2	23	38	38	37	38	41	47	47	45	45	44	44	159,452
60-hour, 6-day week	11	246	294	260	257	300	272	297	317	322	287	183	133	231,643
All other 6-day week	9	139	127	110	111	139	126	142	162	170	167	161	147	193,545
All other not designated	1	80	126	142	148	98	84	142	155	122	147	120	154	147,917
Not reported	3	15	14	15	18	25	27	23	22	21	24	22	21	40,150
<b>CHATTANOOGA</b>														
<i>Classification of establishments</i>														
General contractors	21	741	694	753	833	1,059	1,134	1,211	1,259	1,150	1,055	689	725	1,262,923
Building	13	361	363	365	368	407	439	504	421	379	394	306	339	497,260
Building not specialized	10	300	332	338	304	355	352	428	335	276	313	219	266	400,239
Residential building only	3	61	31	27	64	52	87	76	86	103	81	87	73	97,021
Highway	4	228	249	261	300	461	473	456	472	479	473	278	262	453,915
Other classes <sup>1</sup>	4	152	82	127	165	191	222	251	366	292	188	105	124	311,748
Subcontractors	14	109	128	146	146	169	159	174	177	163	149	118	110	243,404
Electrical	3	26	21	21	21	43	47	49	59	50	30	28	27	70,070
Heating and plumbing	3	9	6	6	9	10	10	10	9	9	12	12	13	14,956
Roofing and sheet-metal work	3	35	36	37	39	36	36	37	43	40	50	42	42	60,208
Other classes <sup>1</sup>	5	39	65	82	77	80	66	78	66	64	57	36	28	98,170
<i>Length of working week</i>														
General contractors	21	741	694	753	833	1,059	1,134	1,211	1,259	1,150	1,055	689	725	1,262,923
50-hour, 5-day week	1	50	50	48	51	40	52	50	52	36	20	7	7	28,043
44-hour, 5½-day week	5	137	162	186	214	214	207	185	173	131	156	120	125	227,884
49½-hour, 5½-day week	1	33	33	41	56	61	64	81	92	183	222	64	116	91,339
55-hour, 5½-day week	1	68	29	28	28	26	24	32	63	45	20	12	14	39,510
All other 5½-day week	7	183	192	176	181	176	183	281	198	198	205	170	214	224,376
60-hour, 6-day week	3	93	112	131	163	320	354	301	378	252	164	113	118	383,268
All other 6-day week	1	102	104	122	134	167	196	225	230	236	211	184	116	190,308
All other not designated	2	85	12	21	56	46	64	55	73	69	57	19	22	78,195

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TABLE 7.—WAGE EARNERS, BY MONTHS, AND WAGES PAID DURING 1929—Continued

CLASSIFICATION OF ESTABLISHMENTS AND LENGTH OF WORKING WEEK	Establishments reporting	NUMBER EMPLOYED ON 15TH DAY OF THE MONTH OR NEAREST REPRESENTATIVE DAY												Wages paid during year
		January	February	March	April	May	June	July	August	September	October	November	December	
<b>CHATTANOOGA—Continued.</b>														
<i>Length of working week<sup>6</sup>—Continued</i>														
Subcontractors.....	14	109	123	140	146	169	150	174	177	163	149	118	110	\$243,404
44-hour, 5½-day week.....	6	50	55	81	72	64	66	73	62	66	78	64	60	91,379
All other 5½-day week.....	1	3	3	4	4	7	6	8	10	9	5	4	3	20,724
48-hour, 6-day week.....	1	4	4	12	18	18	18	18	6	6	10	10	4	32,434
60-hour, 6-day week.....	2	22	44	26	24	33	15	21	37	30	20	7	12	18,521
All other 6-day week.....	2	23	18	17	17	36	41	41	40	41	25	24	24	49,346
Not reported.....	2	7	4	6	11	11	13	13	13	11	11	9	7	30,000
<b>KNOXVILLE</b> .....	<b>42</b>	<b>2,268</b>	<b>2,360</b>	<b>2,609</b>	<b>2,589</b>	<b>2,782</b>	<b>2,972</b>	<b>3,416</b>	<b>3,535</b>	<b>3,450</b>	<b>3,160</b>	<b>2,786</b>	<b>2,361</b>	<b>3,221,041</b>
<i>Classification of establishments</i>														
General contractors <sup>2</sup> .....	25	1,065	1,747	1,907	2,110	2,250	2,580	3,060	3,118	2,973	2,645	2,202	1,850	2,081,058
Building <sup>3</sup> .....	15	690	771	855	804	928	1,002	1,188	1,096	968	859	784	793	846,371
Highway.....	3	371	389	471	627	610	786	1,007	1,129	1,127	1,029	819	602	506,265
Railroad, bridge, and culvert.....	3	494	483	475	531	568	644	697	693	696	587	453	262	443,376
Other classes <sup>7</sup> .....	4	110	104	106	148	144	157	204	200	182	170	146	202	104,946
Subcontractors.....	17	603	639	702	789	532	383	350	417	477	505	534	502	1,139,983
Heating and plumbing.....	6	101	102	119	95	86	91	100	110	100	103	91	97	120,899
Roofing and sheet-metal work.....	3	17	18	17	21	22	19	23	23	26	28	26	21	18,906
Marble, tiling, and plastering.....	3	309	309	413	531	274	151	102	149	108	265	318	292	758,051
Other classes <sup>8</sup> .....	5	110	120	153	142	150	122	125	135	153	119	99	92	242,127
<i>Length of working week<sup>6</sup></i>														
General contractors <sup>2</sup> .....	25	1,065	1,747	1,907	2,110	2,250	2,580	3,060	3,118	2,973	2,645	2,202	1,850	2,081,058
44-hour, 5½-day week.....	2	123	162	209	110	133	168	172	133	112	84	90	75	127,901
40½-hour, 5½-day week.....	7	240	248	297	325	351	417	405	384	360	395	319	394	323,809
45-hour, 5½-day week.....	6	307	340	284	289	394	412	671	509	411	286	300	280	333,567
All other 5½-day week.....	2	70	72	115	135	105	85	95	140	139	146	110	65	77,600
60-hour, 6-day week.....	7	805	872	946	1,178	1,178	1,430	1,714	1,852	1,853	1,646	1,302	894	1,055,074
All other 6-day week.....	1	60	54	50	93	89	87	109	100	92	85	81	142	162,447
Subcontractors.....	17	603	639	702	789	532	383	350	417	477	505	534	502	1,139,983
44-hour, 5½-day week.....	12	470	501	537	657	398	280	285	341	383	437	411	411	602,852
55-hour, 5½-day week.....	1	5	5	5	5	5	5	5	5	5	5	5	5	5,391
All other 5½-day week.....	1	40	45	45	20	15	12	20	35	20	25	20	20	24,090
48-hour, 6-day week.....	1	1	1	1	4	4	5	5	5	5	6	4	2	2,101
54-hour, 6-day week.....	1	15	30	30	30	30	35	40	40	40	40	40	40	160,522
60-hour, 6-day week.....	1	73	67	84	73	80	46	45	47	66	46	28	24	54,387
<b>MEMPHIS</b> .....	<b>91</b>	<b>2,134</b>	<b>2,216</b>	<b>2,016</b>	<b>2,144</b>	<b>2,372</b>	<b>2,379</b>	<b>2,768</b>	<b>2,761</b>	<b>2,738</b>	<b>2,761</b>	<b>2,640</b>	<b>2,387</b>	<b>2,819,102</b>
<i>Classification of establishments</i>														
General contractors <sup>2</sup> .....	43	1,022	1,050	1,447	1,483	1,666	1,707	1,957	2,097	2,094	2,151	2,127	1,917	1,769,494
Building.....	20	659	710	749	780	716	657	706	721	705	681	674	604	785,980
Building not specialized <sup>2</sup> .....	19	545	576	619	633	562	504	572	614	547	516	463	422	698,017
Commercial building only.....	4	80	106	94	105	111	106	102	66	126	135	180	149	114,406
Residential building only.....	3	28	28	36	42	43	47	32	41	33	30	31	33	33,567
Highway.....	3	325	316	314	313	314	305	407	544	531	504	507	501	344,273
Street paving.....	5	33	25	25	25	25	29	209	215	265	258	279	200	98,339
Levee.....	6	231	233	150	158	379	348	410	454	420	453	443	453	348,947
Other classes <sup>9</sup> .....	3	374	366	170	147	159	107	225	163	173	163	164	159	191,955
Subcontractors.....	48	512	566	569	661	706	672	811	604	639	610	513	470	1,049,608
Electrical.....	9	87	76	71	73	76	80	79	84	97	96	75	71	160,546
Heating and plumbing.....	13	122	118	108	114	137	134	142	143	148	153	136	118	260,427
Heating and piping <sup>10</sup> .....	7	65	62	57	61	71	70	77	80	81	90	78	74	145,636
Plumbing.....	6	57	56	51	53	66	64	66	63	67	63	58	44	114,791
Masonry and stonework.....	4	34	40	37	34	127	97	114	62	45	40	34	34	126,518
Painting and decorating.....	3	14	17	21	24	27	21	22	15	22	25	18	17	56,179
Roofing and sheet-metal work.....	7	40	41	47	64	63	67	72	67	67	60	48	39	98,663
Roofing.....	4	27	27	32	37	35	30	44	46	48	45	33	25	85,316
Sheet-metal work.....	3	13	14	15	27	28	31	28	21	19	15	15	14	48,347
Steel erection <sup>11</sup> .....	4	47	47	45	51	53	64	52	42	40	32	32	32	81,454
Marble, tiling, and plastering.....	4	116	136	175	205	177	168	267	190	177	148	132	123	196,908
Other classes <sup>12</sup> .....	4	52	91	65	46	46	56	63	55	43	50	38	36	68,998
<i>Length of working week<sup>6</sup></i>														
General contractors <sup>2</sup> .....	43	1,022	1,050	1,447	1,483	1,666	1,707	1,957	2,097	2,094	2,151	2,127	1,917	1,769,494
44-hour, 5½-day week.....	14	229	262	253	228	210	205	241	183	165	172	177	152	244,608
40½-hour, 5½-day week.....	2	23	18	19	43	35	29	29	53	33	32	33	11	36,123
55-hour, 5½-day week.....	3	33	23	18	16	33	43	48	33	72	65	49	35	22,679
All other 5½-day week.....	2	26	22	55	65	48	39	79	113	108	108	89	35	52,590
48-hour, 6-day week.....	1	45	50	46	40	42	45	46	40	42	40	39	39	74,593
54-hour, 6-day week.....	2	39	7			107	101	126	110	133	127	126	41	69,696
60-hour, 6-day week.....	16	1,063	1,107	934	960	1,162	1,130	1,244	1,330	1,207	1,301	1,445	1,344	1,120,849
All other not designated.....	2	104	161	122	126	146	112	175	221	185	148	111	132	152,506
Not reported.....	1								75	75	65	65	43	12,840
Subcontractors.....	48	512	566	569	661	706	672	811	664	639	610	513	470	1,049,608
40-hour, 5-day week.....	14	207	228	230	302	291	278	355	266	252	233	201	171	343,148
All other 5-day week.....	1	10	11	11	9	8	9	8	10	13	10	10	8	15,405
44-hour, 5½-day week.....	25	212	205	229	268	311	284	323	271	274	264	225	230	510,075
40½-hour, 5½-day week.....	1	9	9	7	12	14	15	14	15	13	12	12	12	17,284
49½-hour, 5½-day week.....	2	15	11	12	16	16	17	21	16	11	8	7	7	17,984
55-hour, 5½-day week.....	2	17	23	27	25	19	17	30	27	25	23	21	15	78,924
48-hour, 6-day week.....	1	17	23	27	25	25	26	39	47	35	38	18	8	44,362
60-hour, 6-day week.....	2	20	66	32	25	25	39	48	47	35	38	18	8	44,362
All other 6-day week.....	2	13	13	14	14	13	13	12	12	16	22	19	18	22,420

See footnotes at end of table.

CONSTRUCTION—TENNESSEE

TABLE 7.—WAGE EARNERS, BY MONTHS, AND WAGES PAID DURING 1929—Continued

CLASSIFICATION OF ESTABLISHMENTS AND LENGTH OF WORKING WEEK	Estab-lish-ments report-ing	NUMBER EMPLOYED ON 15TH DAY OF THE MONTH OR NEAREST REPRESENTATIVE DAY												Wages paid dur-ing year
		Janu-ary	Febru-ary	March	April	May	June	July	August	Sep-tember	October	Novem-ber	Decem-ber	
<b>NASHVILLE</b>	55	1,648	1,991	1,922	2,605	2,870	3,272	2,964	3,036	2,810	2,656	2,137	1,865	\$3,415,825
<i>Classification of establishments</i>														
General contractors <sup>1</sup>	18	713	1,046	887	1,649	1,677	2,023	1,675	1,649	1,430	1,415	1,074	860	1,609,988
Building <sup>2</sup>	12	307	624	416	1,024	1,031	1,250	845	806	634	608	501	362	951,589
Highway and grading	3	263	279	308	465	513	562	586	616	587	611	440	322	449,639
Other classes <sup>3</sup>	3	143	143	163	160	133	211	244	227	209	196	133	176	208,700
Subcontractors	37	935	945	1,035	1,150	1,193	1,249	1,289	1,387	1,380	1,241	1,063	1,005	1,805,837
Heating and plumbing	11	134	132	143	207	209	252	216	247	229	191	142	150	235,340
Plumbing	7	87	90	99	126	110	185	152	176	173	138	106	111	151,249
Plumbing and heating combined	4	47	42	44	81	99	67	64	71	56	53	36	39	84,091
Masonry	5	135	171	235	249	218	215	264	283	268	226	197	199	373,505
Painting and decorating <sup>4</sup>	3	22	32	34	61	66	45	45	27	25	46	43	39	68,770
Roofing and sheet-metal work	5	60	70	77	87	101	106	114	98	98	109	110	101	102,701
Marble, tiling, and plastering	5	141	110	100	95	117	113	116	148	193	167	119	125	179,659
Stonework and concreting	3	65	50	49	54	70	82	93	106	95	82	77	57	63,549
Other classes <sup>5</sup>	5	378	380	397	403	412	436	441	478	469	420	375	334	782,313
<i>Length of working week<sup>6</sup></i>														
General contractors <sup>1</sup>	18	713	1,046	887	1,649	1,677	2,023	1,675	1,649	1,430	1,415	1,074	860	1,609,988
60-hour, 5-day week	1	7	7	7	7	7	9	11	15	10	6	8	7	15,100
44-hour, 5½-day week	3	69	424	185	706	658	809	351	287	122	173	150	88	370,877
55-hour, 5½-day week	1	150	150	175	225	300	325	350	350	325	325	250	200	455,900
All other 5½-day week	8	110	83	89	136	121	179	208	204	267	194	143	97	210,546
60-hour, 6-day week	3	263	279	308	465	513	562	586	616	587	611	440	322	449,639
All other 6-day week	2	103	103	123	110	78	130	169	147	119	106	83	146	107,926
Subcontractors	37	935	945	1,035	1,150	1,193	1,249	1,289	1,387	1,380	1,241	1,063	1,005	1,805,837
40-hour, 5-day week	1	4	10	7	6	7	12	23	32	55	12	3	4	23,521
44-hour, 5½-day week	23	565	510	580	704	750	807	740	797	797	678	571	530	1,285,468
55-hour, 5½-day week	2	44	39	49	46	51	63	71	61	46	51	56	50	61,611
All other 5½-day week	2	66	76	78	73	68	73	79	93	94	87	77	74	90,139
60-hour, 6-day week	4	77	92	86	103	133	142	149	152	157	160	122	82	84,677
All other 6-day week	4	99	92	84	76	86	68	85	97	109	116	114	101	112,504
Not reported	1	80	126	142	148	98	84	142	155	122	147	120	194	147,917

<sup>1</sup> Includes grading; waterworks; and railroad.  
<sup>2</sup> Includes concreting; bridge and culvert; and flooring, n. e. s.  
<sup>3</sup> Includes operative builders.  
<sup>4</sup> Includes bridge and culvert; and street paving.  
<sup>5</sup> Includes masonry; stonework; marble and tiling; and grading.  
<sup>6</sup> For complete classification see tabulation for the State above.  
<sup>7</sup> Includes grading; street paving; and sewer, gas, water, conduit.  
<sup>8</sup> Includes concreting; electrical; painting and decorating; and excavating.  
<sup>9</sup> Includes bridge and culvert; sewer, gas, water, conduit; and waterworks.  
<sup>10</sup> Includes plumbing and heating combined.  
<sup>11</sup> Includes elevator construction.  
<sup>12</sup> Includes carpentering and wood flooring; excavating; and flooring, n. e. s.  
<sup>13</sup> Includes bridge and culvert; street paving; and sewer, gas, water, conduit.  
<sup>14</sup> Includes carpentering and wood flooring.  
<sup>15</sup> Includes electrical; elevator construction; steel erection; and bridge and culvert.

TABLE 8.—EXPENDITURES OF REPORTING ESTABLISHMENTS: 1929

CLASSIFICATION OF ESTABLISHMENTS	Estab-lish-ments report-ing	Value of construction busi-ness re-ported	PRINCIPAL ITEMS OF EXPENDITURE			OTHER ITEMS OF EXPENDITURE							
			Subcon-tract work let	Wages paid	Cost of materials	Salaries		Rent for		Interest	Con-tract bond premiums	Com-pen-sation and liability insur-ance premiums	All other over-head ex-penses
						Propri-eters and firm mem-bers	Em-ployees	Equip-ment	Offices, etc.				
<b>TENNESSEE</b>	262	\$49,789,091	\$8,827,000	\$10,645,214	\$19,828,878	\$291,669	\$2,238,501	\$200,566	\$953,214	\$210,097	\$231,071	\$348,304	\$3,384,883
Operative builders	4	250,244	79,000	66,390	68,690	3,013	20,460		2,245	943		341	10,290
General contractors	124	31,245,193	8,179,000	6,420,296	10,310,768	162,632	1,433,068	127,389	759,397	132,272	197,134	216,835	2,046,641
Building	82	10,961,121	5,659,000	3,314,323	5,809,279	129,682	656,720	28,630	734,801	54,274	91,190	105,747	358,902
Building not specialized	65	15,103,785	6,071,000	2,997,605	5,123,155	115,482	548,268	28,630	725,323	46,570	83,262	97,474	314,340
Commercial building only	7	670,484	266,000	107,136	182,752	7,000	69,207		4,322	1,648	4,746	4,921	11,682
Residential building only	10	1,186,852	322,000	200,582	494,372	7,200	49,281		5,156	6,056	3,182	3,352	32,880
Highway	15	7,207,440	1,390,000	1,562,620	2,480,850	5,100	404,997	27,269	11,474	28,060	76,083	40,939	768,959
Bridge and culvert	5	833,936	33,000	253,483	323,382	7,400	62,443	300	1,067	4,354	10,122	10,746	84,845
Street paving	11	2,833,082	166,000	587,267	1,175,104	20,450	132,055	5,315	5,939	13,479	12,372	11,909	158,557
Sewer, gas, water, conduit	3	398,993	3,000	156,631	92,757		18,578	875	770	5,174	875	5,800	35,564
Leves	5	639,435	128,000	191,447	77,601		40,600	65,000	1,905	6,762	3,521	4,013	165,320
Other classes <sup>1</sup>	3	2,371,886	800,000	368,625	360,795		117,669		3,441	20,169	2,371	36,782	484,994
Subcontractors	134	18,203,654	569,000	4,149,628	9,449,420	126,023	784,973	73,170	91,672	76,882	33,037	131,128	1,327,952
Concreting	3	252,521	2,000	85,855	98,758	1,250	9,953	600	565	200	2,050	1,985	13,411
Electrical	19	1,207,910		302,175	621,996	21,542	124,726	200	21,955	3,259	1,012	5,150	108,180
Elevator construction	3	266,128	2,000	61,111	133,370		27,487		3,048	866	55	1,036	5,621
Heating and plumbing	43	3,117,580	40,000	676,360	1,487,035	55,002	213,546	2,806	28,892	8,271	4,091	14,560	222,626
Heating and piping	11	1,053,157	25,000	219,937	615,618	17,640	98,516		9,888	4,039	2,785	2,897	76,853
Plumbing	20	1,244,680	10,000	279,353	641,985	26,156	85,359	2,806	10,985	2,497	738	8,668	91,403
Plumbing and heating combined	12	819,743	5,000	177,076	409,432	11,200	64,671		8,019	1,735	568	2,995	54,280
Masonry	9	1,235,839		499,632	558,632	7,600	35,650	995	2,009	3,728	67	12,696	24,814
Painting and decorating	7	272,161		146,242	73,802	600	5,672		3,647	703		2,391	20,834
Plastering and lathing	4	334,210	1,000	177,210	112,947		6,630	60,000	296	1,341		2,581	11,253
Roofing and sheet-metal work	22	1,800,972	10,000	324,359	844,951	20,309	160,162		17,035	24,115	1,050	12,867	257,533
Roofing	13	1,110,975	5,000	158,240	496,179		114,749		9,127	21,919	1,050	7,124	199,651
Sheet-metal work	9	689,997	5,000	166,113	348,772	20,309	45,413		7,908	2,196		5,743	57,882
Steel erection	3	4,973,653	500,000	750,964	2,630,617		28,031		930	18,971	23,570	64,488	410,713
Stone work	6	254,291		78,270	97,177		38,319	1,205	1,500	4,380		1,690	14,265
Marble and tiling	10	4,003,554		941,330	2,429,682		10,200		9,196	5,171		9,853	189,872
Other classes <sup>2</sup>	6	484,835	14,000	169,008	180,487		4,320		2,499	5,887	902	2,061	68,830

See footnotes at end of table.

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TABLE 8.—EXPENDITURES OF REPORTING ESTABLISHMENTS: 1929—Continued

CLASSIFICATION OF ESTABLISHMENTS	Estab-lishments re-ported	Value of construction business re-ported	PRINCIPAL ITEMS OF EXPENDI-TURE			OTHER ITEMS OF EXPENDITURE									
			Subcon-tract work let	Wages paid	Cost of materials	Salaries		Rent for			Interest	Contract bond premiums	Compen-sation and liability insurance premiums	All other over-head ex-penses	
						Propri-eters and firm mem-bers	Em-ployees	Equip-ment	Offices, etc.						
<b>CHATTANOOGA</b> .....	36	\$6,999,582	\$1,158,000	\$1,269,463	\$2,987,071	\$24,410	\$334,254	\$3,525	\$20,124	\$51,229	\$23,468	\$26,868	\$263,518		
General contractors.....	22	0,035,430	1,154,000	1,040,983	2,587,945	20,090	227,798	1,025	9,831	37,099	22,360	21,900	155,489		
Building.....	14	2,536,338	877,000	501,170	1,114,319	12,463	101,148	150	7,034	19,993	10,126	12,249	75,849		
Building not specialized.....	11	1,910,488	521,000	404,149	822,872	5,200	73,648	150	4,334	15,223	7,451	10,029	60,676		
Residential building only.....	3	625,850	156,000	97,021	291,447	7,260	27,500	-----	2,703	1,370	2,645	1,320	15,173		
Street paving and highway.....	5	3,220,501	474,000	444,506	1,368,869	7,890	111,800	-----	2,005	13,556	11,600	7,941	54,119		
Other classes <sup>1</sup> .....	3	278,591	3,000	95,307	104,757	-----	14,850	875	792	3,550	625	1,800	28,521		
Subcontractors.....	14	954,152	4,000	228,480	399,126	4,320	106,456	7,500	10,293	14,130	1,103	4,878	110,029		
Electrical.....	3	287,723	-----	70,070	136,972	-----	26,513	-----	4,458	1,194	985	685	35,870		
Heating and plumbing.....	3	87,032	-----	14,956	46,922	-----	14,904	-----	1,920	1,326	113	321	6,038		
Roofing and sheet-metal work.....	3	287,401	-----	80,208	107,667	-----	33,842	-----	3,285	9,018	-----	2,120	47,059		
Other classes <sup>4</sup> .....	5	291,306	4,000	83,240	107,566	4,320	31,137	7,600	630	3,182	10	1,752	21,062		
<b>KNOXVILLE</b> .....	42	12,819,584	2,173,000	2,980,862	5,127,207	62,493	547,581	9,815	26,195	55,513	49,877	94,685	939,526		
General contractors.....	23	8,462,151	2,172,000	2,002,165	2,623,247	36,040	461,946	9,315	14,841	48,805	49,484	82,879	769,823		
Building.....	15	3,733,408	1,091,000	848,538	1,369,852	31,040	131,704	1,140	4,116	13,626	21,877	21,125	70,781		
Highway and street paving.....	5	2,454,438	281,000	721,110	948,268	5,000	210,942	8,175	7,035	13,446	24,117	22,411	328,420		
Railroad, bridge, and culvert.....	3	2,274,305	800,000	432,517	305,127	-----	119,300	-----	3,690	21,723	3,400	39,343	370,622		
Subcontracting.....	10	4,157,433	1,000	988,697	2,503,900	26,453	85,635	500	11,354	6,708	393	11,866	169,703		
Heating and plumbing.....	8	559,000	-----	134,735	287,577	16,412	37,475	-----	3,820	2,518	148	1,209	34,750		
Heating and piping.....	4	315,353	-----	74,596	169,538	6,446	23,137	-----	1,200	2,009	-----	633	20,382		
Plumbing and heating combined.....	4	244,343	-----	60,189	118,030	9,966	14,338	-----	2,620	509	148	579	14,368		
Roofing and sheet-metal work.....	3	128,651	-----	18,906	52,449	9,441	12,580	-----	3,265	3,018	-----	1,044	21,726		
Marble, tiling, and plastering.....	4	3,215,650	1,000	733,941	2,071,135	600	21,060	500	1,444	570	-----	7,713	92,244		
Other classes <sup>2</sup> .....	4	253,436	-----	101,066	92,799	-----	14,520	-----	2,825	602	245	1,840	20,983		
<b>MEMPHIS</b> .....	93	10,410,611	1,975,000	2,229,865	3,797,168	50,635	566,614	12,595	62,936	29,955	45,089	66,659	773,974		
Operative builders.....	3	172,050	10,000	66,390	68,690	-----	14,820	-----	-----	1,045	940	-----	225		
General contractors.....	30	6,486,831	1,032,000	1,148,328	1,667,324	18,246	289,001	12,270	22,154	17,243	41,476	40,227	473,919		
Building.....	25	4,323,641	1,662,000	724,195	1,380,455	16,140	190,897	5,150	15,297	9,701	21,911	26,962	87,246		
Building not specialized.....	18	3,587,013	1,294,000	603,806	1,164,770	16,140	133,636	5,130	9,860	4,752	17,440	22,501	71,286		
Commercial building only.....	4	487,288	226,000	65,580	120,493	-----	40,286	-----	3,332	1,000	4,171	3,721	6,271		
Residential building only.....	3	240,340	42,000	54,800	95,192	-----	16,981	-----	2,000	4,030	300	740	9,689		
Highway.....	4	722,180	201,000	124,250	161,810	2,100	21,300	-----	1,644	244	9,730	63,945			
Levee.....	5	639,435	128,000	191,447	77,601	-----	40,600	5,000	1,905	6,752	3,621	4,913	155,320		
Other classes <sup>6</sup> .....	5	801,575	41,000	108,436	347,458	-----	36,744	2,140	3,808	446	6,314	3,562	167,408		
Subcontractors.....	51	3,751,730	27,000	1,015,147	1,701,154	32,389	282,193	325	39,737	11,802	3,613	26,207	295,205		
Electrical.....	11	708,226	-----	181,289	353,420	13,389	80,776	200	13,198	1,115	882	3,709	53,047		
Heating and plumbing.....	13	925,301	25,000	106,192	523,995	19,000	63,482	-----	14,652	2,168	2,575	2,659	71,046		
Heating and piping.....	6	699,547	25,000	133,236	398,277	11,200	43,209	-----	8,830	1,878	2,560	2,002	44,483		
Plumbing.....	7	255,754	-----	62,956	125,718	7,800	20,273	-----	5,772	290	15	867	26,563		
Masonry and stone work.....	4	286,265	-----	126,518	131,650	-----	8,700	125	660	1,635	57	1,835	8,298		
Painting and decorating.....	3	104,835	-----	56,179	27,488	-----	900	-----	1,187	103	-----	1,074	5,477		
Roofing and sheet-metal work.....	8	505,856	-----	109,612	255,249	-----	25,544	-----	3,936	694	50	2,696	66,538		
Roofing.....	5	365,083	-----	66,265	184,393	-----	19,904	-----	1,835	694	50	1,932	57,277		
Sheet-metal work.....	3	140,773	-----	43,347	70,856	-----	5,880	-----	2,100	-----	-----	764	9,261		
Marble, tiling, and plastering.....	5	509,439	-----	210,453	175,970	-----	39,100	-----	1,200	3,528	-----	2,475	39,038		
Steel erection.....	4	408,736	2,000	81,434	191,855	-----	40,771	-----	3,825	208	-----	11,714	24,617		
Other classes <sup>9</sup> .....	3	243,072	-----	63,470	101,527	-----	23,620	-----	1,080	2,053	49	135	26,544		
<b>NASHVILLE</b> .....	55	15,977,550	3,269,000	3,197,314	6,045,769	109,028	640,154	12,058	35,117	64,180	72,375	136,851	1,161,494		
General contractors <sup>10</sup> .....	18	7,274,499	2,734,000	1,432,904	1,672,346	57,670	359,151	7,207	12,446	22,873	45,149	51,668	465,617		
Building <sup>10</sup> .....	12	5,087,366	2,176,000	946,067	1,326,557	44,090	199,276	4,107	9,456	10,441	22,463	30,008	115,082		
Highway.....	3	1,628,235	558,000	278,077	232,492	-----	107,287	2,800	2,130	8,393	18,367	6,041	266,262		
Other classes <sup>11</sup> .....	3	658,898	-----	208,760	113,297	-----	55,588	-----	860	4,044	4,329	9,619	83,873		
Subcontractors.....	37	8,703,051	635,000	1,764,410	4,373,423	51,358	281,003	4,851	22,671	41,302	27,226	85,183	695,877		
Heating and plumbing.....	11	1,102,957	15,000	240,170	534,651	13,590	85,074	2,806	3,547	1,783	273	9,262	83,503		
Plumbing.....	7	665,949	10,000	156,079	318,119	8,390	40,711	2,806	1,997	1,517	112	7,205	46,300		
Plumbing and heating combined.....	4	437,038	5,000	84,091	216,532	5,200	44,363	-----	1,550	265	161	2,057	37,203		
Masonry.....	5	943,502	-----	373,505	423,105	7,600	34,150	965	1,289	1,831	-----	10,802	22,498		
Painting and decorating <sup>12</sup> .....	3	184,650	10,000	61,454	64,875	-----	7,276	-----	1,704	2,500	260	936	8,177		
Roofing and sheet-metal work.....	6	733,493	10,000	102,701	365,477	10,868	81,244	-----	6,160	10,135	1,000	5,872	102,163		
Roofing.....	3	467,796	5,000	65,515	204,827	-----	69,195	-----	4,540	8,937	1,000	3,074	79,033		
Roofing and sheet-metal combined.....	3	265,997	5,000	37,186	160,650	10,868	12,049	-----	1,620	1,193	-----	2,798	23,080		
Marble, tiling, and plastering.....	4	507,675	-----	140,713	258,404	10,200	20,472	-----	6,848	2,149	250	1,480	49,843		
Stone work and concreting.....	3	190,835	-----	63,549	60,698	5,200	24,299	1,080	1,350	2,565	1,235	1,630	10,193		
Other classes <sup>13</sup> .....	3	5,040,039	500,000	782,313	2,606,213	3,900	28,488	-----	1,733	20,339	24,208	55,189	419,500		

1 Includes waterworks and railroad.  
2 Includes carpentering and wood flooring; bridge and culvert; grading; soundproofing; and flooring, n. e. s.  
3 Includes bridge and culvert; and sewer, gas, water, conduit.  
4 Includes masonry; stone work; marble and tiling; and grading.  
5 Includes concreting; electrical; and painting and decorating.  
6 Includes street paving; waterworks; and dredging, river, harbor, etc.  
7 Includes heating and plumbing combined.  
8 Includes elevator construction.  
9 Includes carpentering and wood flooring; and flooring, n. e. s.  
10 Includes operative builders.  
11 Includes bridge and culvert; street paving; and sewer, gas, water, conduit.  
12 Includes soundproofing.  
13 Includes electrical; elevator construction; steel erection; and bridge and culvert.

TABLE 9.—COST OF MATERIALS FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929, BY KIND

KIND OF MATERIAL	COST OF MATERIALS REPORTED BY—					KIND OF MATERIAL	COST OF MATERIALS REPORTED BY—				
	All classes of establishments			General contractors ?	Subcontractors		All classes of establishments			General contractors ?	Subcontractors
	Amount	Per cent distribution	Per \$1,000 construction work done <sup>1</sup>				Amount	Per cent distribution	Per \$1,000 construction work done <sup>1</sup>		
<b>TENNESSEE</b>					<b>CHATTANOOGA—Continued.</b>						
All kinds of material	Dolls. 23,705,661			Dolls. 13,480,599	Dolls. 10,225,065	Distributed by kind—Continued.	Dolls.	Dolls.	Dolls.	Dolls.	
Distribution not reported	3,150,265	13.3		2,229,025	112,082	Metal and wire lath and furring	1,200	(4)	0.18	1,200	
Distributed by kind	20,555,399	100.0		11,251,574	9,303,825	Ornamental metal work	15,150	0.5	2.33	15,150	
Sand, gravel, stone, slag, cinders, etc.	3,410,888	16.6	74.13	3,297,900		Lumber, rough and finished	152,143	5.0	23.37	152,143	
Brick (face, common, fire, paving, etc.)	702,929	3.4	15.28	521,001	181,928	Lath, shingles, and shakes (wood)	9,540	3	1.46	9,540	
Tile (fireproofing)	58,886	.3	1.28	22,638	36,248	Millwork	122,980	4.0	18.89	122,980	
Tile, facing, terra cotta, floor, and wall	220,954	1.1	4.80	39,119	181,835	Composition board	1,674	.1	.26	1,674	
Concrete and cinder block	44,041	.2	.96	41,541	2,600	Waterproofing materials	4,000	.1	.61	4,000	
Cut stone, granite and marble	2,455,034	11.9	53.35	220,026	2,235,008	Hardware, rough and finished	26,058	.8	4.00	26,058	
Riprap, rubble, etc.	9,271	(4)	.20	9,271		Paints, varnishes, glass	63,946	2.1	9.83	15,586	
Cement	2,391,056	11.6	51.96	2,268,902	122,154	Roofing and sheet metal	45,471	1.5	6.98	18,974	
Lime	45,628	.2	.99	26,983	18,640	Finished flooring (other than cement, wood, or tile)	11,375	.4	1.75	8,175	
Plaster, etc.	86,335	.4	1.88	36,285	50,050	Screens, shades, awnings, etc.	4,000	.1	.61	4,000	
Structural steel	2,974,025	14.5	64.65	346,322	2,628,303	Heating and ventilating equipment	97,177	3.2	14.93	4,900	
Reinforcing steel	606,823	2.5	11.02	484,762	22,061	Plumbing and gas fitting equipment	63,658	2.1	9.78	27,665	
Cast iron, miscellaneous, excluding pipe	51,490	.3	1.12	51,490		Electrical appliances and supplies	144,072	4.7	22.13	7,100	
Metal doors, windows, and trim	155,136	.8	3.37	135,759	19,377	Elevators, dumb-waiters, and equipment	100	(4)	.01	100	
Metal and wire lath and furring	41,388	.2	.90	7,989	33,399	Pipe: Drain tile, vitrified, concrete, segment tile, corrugated	53,041	1.7	8.15	50,041	
Ornamental metal work	62,602	.3	1.36	63,492	9,200	Pipe: Cast-iron, sheet and tube steel, etc.	4,704	.2	.72	3,704	
Lumber, rough and finished	1,207,184	5.9	26.24	1,117,877	89,307	Bituminous paving materials, tar, asphalt, and oil	247,548	8.1	38.03	247,548	
Lath, shingles, and shakes (wood)	34,409	.2	.75	31,467	3,012	Freight, hauling or trucking to job	4,333	.1	.60	4,333	
Millwork	514,504	2.5	11.18	514,447	57	Chemicals and chemical products	5,541	.2	.85	5,541	
Composition board	89,553	.4	1.95	46,386	43,167	Miscellaneous	15,310	.5	2.35	14,870	
Waterproofing materials	16,714	.1	.36	9,330	7,384						
Hardware, rough and finished	123,797	.6	2.09	120,069	3,698						
Paints, varnishes, glass	347,904	1.7	7.56	40,372	298,532						
Roofing and sheet metal	722,074	3.5	15.60	87,340	634,734						
Finished flooring (other than cement, wood, or tile)	50,093	.2	1.09	24,707	25,380						
Screens, shades, awnings, etc.	24,245	.1	.53	11,601	12,644						
Heating and ventilating equipment	802,376	3.9	17.44	54,349	748,027						
Plumbing and gas fitting equipment	992,458	4.8	21.57	84,104	908,354						
Electrical appliances and supplies	664,909	3.2	14.45	23,868	641,041						
Elevators, dumb-waiters, and equipment	95,119	.5	2.07	270	94,849						
Pipe: Drain tile, vitrified, concrete, segment tile, corrugated	177,380	.9	3.86	160,883	16,497						
Pipe: Cast-iron, sheet and tube steel, etc.	111,438	.5	2.42	95,208	16,170						
Wire cable, guards, and fencing	3,295	(4)	.07	3,295							
Bituminous paving materials, tar, asphalt, and oil	930,873	4.5	20.23	919,990	10,883						
Wood piling and timber	5,000	(4)	.11	5,000							
Machinery	5,405	(4)	.12		5,405						
Freight, hauling or trucking to job	130,507	.6	2.84	105,878	24,620						
Chemicals and chemical products	5,541	(4)	.12	5,541							
Metal products, n. a. s. (including metal furniture)	68,043	.3	1.48	14,800	53,243						
Textiles and calking materials	12,863	.1	.28	2,012	10,851						
Miscellaneous	202,479	1.0	4.40	200,209	2,270						
<b>CHATTANOOGA</b>					<b>KNOXVILLE</b>						
All kinds of material	3,351,177		471.00	2,853,051	498,126	All kinds of material	6,118,790		471.11	3,478,604	
Distribution not reported	285,022	8.5		195,324	80,698	Distribution not reported	649,158	10.6		575,158	
Distributed by kind	3,066,155	100.0		2,657,727	408,428	Distributed by kind	5,469,632	100.0		2,903,506	
Sand, gravel, stone, slag, cinders, etc.	1,080,518	35.4	166.90	1,080,518		Sand, gravel, stone, slag, cinders, etc.	668,464	12.0	56.72	626,814	
Brick (face, common, fire, paving, etc.)	187,955	6.1	28.87	187,955		Brick (face, common, fire, paving, etc.)	213,180	3.9	18.36	213,080	
Tile (fireproofing)	8,811	.3	1.35	8,811		Tile (fireproofing)	9,211	.2	.79	9,211	
Tile, facing, terra cotta, floor, and wall	65,044	2.1	9.99	31,144	33,900	Tile, facing, terra cotta, floor, and wall	27,600	.5	2.38	100	
Concrete and cinder block	5,549	.2	.55	5,549		Concrete and cinder block	22,136	.4	1.91	22,136	
Cut stone, granite and marble	60,423	2.0	9.28	40,423	20,000	Cut stone, granite and marble	2,207,084	40.4	190.10	92,918	
Riprap, rubble, etc.	4,221	.1	.65	4,221		Riprap, rubble, etc.	2,060	(4)	.17	2,060	
Cement	430,895	14.1	66.19	430,895		Cement	588,961	10.8	50.73	577,741	
Lime	8,100	.3	1.24	8,100		Lime	13,521	.2	1.16	8,521	
Plaster, etc.	22,069	.7	3.39	22,069		Plaster, etc.	14,468	.3	1.24	4,458	
Structural steel	31,201	1.0	4.79	29,753	1,448	Structural steel	83,463	1.5	7.19	82,463	
Reinforcing steel	35,240	1.1	5.41	35,240		Reinforcing steel	146,131	2.7	12.59	141,131	
Cast iron, miscellaneous, excluding pipe	2,073	.1	.32	2,073		Cast iron, miscellaneous, excluding pipe	13,846	.3	1.19	13,846	
Metal doors, windows, and trim	25,035	.8	3.84	24,034	1,001	Metal doors, windows, and trim	33,540	.6	2.89	33,540	
						Metal and wire lath and furring	3,622	.1	.31	2,222	
						Ornamental metal work	28,180	.5	2.43	28,180	
						Lumber, rough and finished	258,801	4.7	22.20	255,936	
						Lath, shingles, and shakes (wood)	14,671	.3	1.26	13,671	
						Millwork	136,792	2.6	11.78	136,792	
						Composition board	20,639	.5	2.55	28,639	
						Waterproofing materials	3,822	.1	.33	3,622	
						Hardware, rough and finished	37,420	.7	3.22	37,420	
						Paints, varnishes, glass	46,239	.8	3.08	18,809	
						Roofing and sheet metal	72,406	1.3	6.24	36,957	
						Finished flooring (other than cement, wood, or tile)	8,351	.2	.72	8,351	
						Screens, shades, awnings, etc.	5,234	.1	.45	5,234	
						Heating and ventilating equipment	157,775	2.9	13.69	37,239	
						Plumbing and gas-fitting equipment	150,702	2.8	12.08	27,955	
						Electrical appliances and supplies	48,767	.9	4.20	11,298	
						Elevators, dumb-waiters, and equipment	170	(4)	.01	170	
						Pipe: Drain tile, vitrified, concrete, segment tile, corrugated	10,592	.2	.91	8,118	
						Pipe: Cast-iron, sheet and tube steel, etc.	63,921	1.2	5.51	57,601	
						Wire cable, guards, and fencing	1,620	(4)	.14	1,620	
						Bituminous paving materials, tar, asphalt, and oil	47,147	6.3	29.90	345,647	
						Wood piling and timber	5,000	.1	.43	5,000	
						Miscellaneous	5,110	.1	.44	5,110	

See footnotes at end of table.

# CONSTRUCTION—TENNESSEE

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**TABLE 9.—COST OF MATERIALS FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929, BY KIND—Continued**

KIND OF MATERIAL	COST OF MATERIALS REPORTED BY—					KIND OF MATERIAL	COST OF MATERIALS REPORTED BY—				
	All classes of establishments			General contractors <sup>2</sup>	Subcontractors		All classes of establishments			General contractors <sup>2</sup>	Subcontractors
	Amount	Per cent distribution	Per \$1,000 construction work done <sup>1</sup>				Amount	Per cent distribution	Per \$1,000 construction work done <sup>1</sup>		
<b>MEMPHIS</b>						<b>NASHVILLE</b>					
All kinds of material.....	5,619,168		413.75	3,474,961	2,144,207	All kinds of material.....	6,559,039		446.38	2,040,250	4,518,849
Distribution not reported.....	795,928	14.2		576,939	218,989	Distribution not reported.....	602,744	9.2		170,321	432,423
Distributed by kind.....	4,823,230	100.0		2,898,012	1,925,218	Distributed by kind.....	5,956,355	100.0		1,869,029	4,086,426
Sand, gravel, stone, slag, cinders, etc.	910,620	18.9	78.12	901,110	9,504	Sand, gravel, stone, slag, cinders, etc.	535,695	9.0	40.15	468,300	67,299
Brick (face, common, fire, paving, etc.).....	118,584	2.5	10.17	100,194	18,390	Brick (face, common, fire, paving, etc.).....	167,979	2.8	12.59	4,599	163,410
Tile (fireproofing).....	7,697	.2	.66	3,897	3,800	Tile (fireproofing).....	32,448	.5	2.43		32,448
Tile, facing, terra cotta, floor, and wall.....	72,535	1.5	6.22	6,000	66,535	Tile, facing, terra cotta, floor, and wall.....	55,775	.9	4.18	1,875	53,900
Concrete and cinder block.....	7,337	.2	.63	7,337		Concrete and cinder block.....	9,019	.2	6.87	6,519	2,500
Cut stone, granite and marble.....	126,543	2.6	10.86	85,542	41,001	Cut stone, granite and marble.....	59,841	1.0	4.49		59,841
Riprap, rubble, etc.....	3,000	.1	.26	3,000		Cement.....	453,854	7.6	34.01	357,255	96,599
Cement.....	629,650	13.1	54.02	620,825	8,825	Lime.....	9,410	.2	7.11	1,216	8,200
Lime.....	13,387	.3	1.15	7,947	5,440	Plaster, etc.....	26,829	.5	2.01	2,749	24,080
Plaster, etc.....	20,000	.4	1.72	4,030	15,970	Structural steel.....	2,539,888	42.6	190.35	36,650	2,503,238
Structural steel.....	288,513	6.0	24.75	105,896	122,617	Reinforcing steel.....	116,462	2.0	8.73	105,054	11,408
Reinforcing steel.....	148,711	3.1	12.76	148,711		Cast iron, miscellaneous, excluding pipe.....	10,896	.2	.82	10,896	
Cast iron, miscellaneous, excluding pipe.....	24,665	.5	2.11	24,665		Metal doors, windows, and trim.....	23,967	.4	1.79	23,928	39
Metal doors, windows, and trim.....	70,473	1.5	6.04	52,136	18,337	Metal and wire lath and furring.....	13,016	.2	.98	957	12,059
Metal and wire lath and furring.....	23,110	.5	1.93	3,170	19,940	Ornamental metal work.....	4,649	.1	.35	3,449	1,200
Ornamental metal work.....	14,049	.3	1.26	6,049	8,000	Lumber, rough and finished.....	317,775	5.3	23.81	293,620	24,155
Lumber, rough and finished.....	411,559	8.5	35.31	351,419	60,140	Lath, shingles, and shakes (wood).....	1,790	.0	.13		1,790
Lath, shingles, and shakes (wood).....	2,372	.0	.20	2,150	222	Millwork.....	64,008	1.1	4.80	63,951	57
Millwork.....	175,189	3.6	15.08	175,189		Composition board.....	40,783	.7	3.06	177	40,606
Composition board.....	10,659	.3	1.43	16,098	1,561	Waterproofing materials.....	7,896	.1	.55	212	7,184
Waterproofing materials.....	1,149	.0	.10	1,149		Hardware, rough and finished.....	31,305	.5	2.35	28,552	2,753
Hardware, rough and finished.....	24,740	.5	2.12	23,801	945	Paints, varnishes, glass.....	31,184	.5	2.34	3,375	27,809
Paints, varnishes, glass.....	202,051	4.2	17.33	7,118	194,933	Roofing and sheet metal.....	386,706	6.5	28.91	6,151	379,555
Roofing and sheet metal.....	177,676	3.7	15.24	18,260	159,416	Finished flooring (other than cement, wood, or tile).....	9,332	.2	.70	3,126	6,206
Finished flooring (other than cement, wood, or tile).....	18,670	.4	1.60	2,690	15,980	Screens, shades, awnings, etc.....	745	.0	.06	745	
Screens, shades, awnings, etc.....	13,866	.3	1.19	1,222	12,644	Heating and ventilating equipment.....	156,277	2.6	11.71	4,392	151,885
Heating and ventilating equipment.....	310,013	6.4	26.50	4,800	305,213	Plumbing and gas-fitting equipment.....	289,540	4.9	21.70	22,961	266,579
Plumbing and gas-fitting equipment.....	358,692	7.4	30.77	4,000	354,692	Electrical appliances and supplies.....	79,650	1.3	5.97	1,070	78,580
Electrical appliances and supplies.....	337,020	7.0	23.91	3,000	334,020	Elevators, dumb-waiters, and equipment.....	33,011	.6	2.52		33,011
Elevators, dumb-waiters, and equipment.....	61,238	1.3	5.25		61,238	Pipe: Drain tile, vitrified, concrete, segment tile, corrugated.....	14,599	.2	1.09	11,060	3,539
Pipe: Drain tile, vitrified, concrete, segment tile, corrugated.....	88,660	1.8	7.60	81,766	6,894	Pipe: Cast-iron, sheet and tube steel, etc.....	35,615	.6	2.67	29,895	5,750
Pipe: Cast-iron, sheet and tube steel, etc.....	4,198	.1	.36	4,198		Wire cable, guards, and fencing.....	169	.0	.01	169	
Wire, cable, guards, and fencing.....	1,500	.0	.13	1,500		Bituminous paving materials, tar, asphalt, and oil.....	203,842	3.4	15.28	203,842	
Bituminous paving materials, tar, asphalt, and oil.....	44,677	.9	3.83	35,294	9,383	Freight, hauling or trucking to job.....	17,805	.3	1.34	3,258	14,637
Freight, hauling or trucking to job.....	4,438	.1	.88		4,438	Textiles and caking materials.....	2,012	.0	.15	2,012	
Textiles and caking materials.....	68,043	1.4	5.84	14,800	53,243	Miscellaneous.....	173,387	2.9	12.99	167,878	5,509
Metal products, n. o. s. (including metal furniture).....	10,851	.2	.93		10,851						
Metal products, n. o. s. (including metal furniture).....	10,499	.2	.90	9,443	1,056						
Miscellaneous.....											

<sup>1</sup> The value of construction work done is obtained from figures presented in Table 1, by subtracting the value of subcontract work let from the total value of construction business.

<sup>2</sup> Includes operative builders.

<sup>3</sup> The percentage of total cost shown for this item is high because establishments located within this area reported that the large part of their construction work (on which this material was used) was done on contracts outside this area.

<sup>4</sup> Less than one-tenth of 1 per cent.



TABLE 10.—COMPARISON OF COST OF DESIGNATED MATERIALS FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929, WITH COST OF MATERIALS AND VALUE OF CONSTRUCTION BUSINESS

[Based exclusively upon reports of establishments which gave the distributed cost of materials]

KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	COST OF DESIGNATED MATERIAL				Indicated per cent of all business done by own force <sup>1</sup>	KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	COST OF DESIGNATED MATERIAL				Indicated per cent of all business done by own force <sup>1</sup>		
	Cost of all materials distributed by kind	Amount	Per cent of—				Cost of all materials distributed by kind	Amount	Per cent of—				
			Total cost	Cost of all distributed materials					Total cost	Cost of all distributed materials			
<b>TENNESSEE</b>						<b>TENNESSEE—Continued</b>							
<i>Sand, gravel, stone, slag, cinders, etc.<sup>2</sup></i>						<i>Cement<sup>3</sup>—Continued</i>							
All classes.....	\$20,555,309	\$3,410,888	100.0	16.0	\$50,698,737	84.5	Subcontractors.....	\$9,303,825	\$122,154	5.1	1.3	\$17,681,231	97.1
General contractors <sup>3</sup> .....	11,251,574	3,297,906	98.7	29.3	33,017,506	78.4	Concreting.....	98,758	20,470	9.9	20.7	252,521	99.2
Building.....	4,849,323	579,142	17.0	11.9	14,521,515	66.6	Heating and plumbing.....	1,565,620	1,040	( <sup>0</sup> )	( <sup>0</sup> )	2,899,205	98.9
Building not specialized <sup>3</sup> .....	4,207,296	518,501	15.2	12.2	12,925,863	66.4	Heating and piping.....	655,618	500	( <sup>0</sup> )	1.1	1,135,157	98.0
Commercial building only.....	136,947	22,894	7.7	16.7	476,765	63.8	Plumbing.....	659,250	40	( <sup>0</sup> )	( <sup>0</sup> )	1,260,417	99.4
Residential building only.....	445,080	37,837	1.1	8.5	1,118,887	70.7	Plumbing and heating combined.....	241,609	500	( <sup>0</sup> )	2.2	477,906	99.4
Highway.....	4,420,709	1,846,845	54.1	41.8	11,474,873	87.5	Masonry.....	333,754	76,200	3.2	9.0	681,906	100.0
Bridge and culvert.....	463,091	134,695	3.9	20.1	1,255,768	97.7	Painting and decorating.....	73,802	50	( <sup>0</sup> )	1.1	272,161	100.0
Street paving.....	1,171,324	661,256	19.4	56.5	2,760,224	93.9	Plastering and lathing.....	130,609	2,349	1.8	1.8	461,538	99.0
Sewer, gas, water, conduit.....	168,685	29,218	1.7	17.3	513,132	96.4	Stone work.....	67,177	125	( <sup>0</sup> )	2.2	204,201	100.0
Railroad.....	177,942	47,250	1.4	26.6	1,800,265	59.0	Marble and tiling.....	2,488,499	13,085	5.5	5.5	4,068,010	100.0
Subcontractors.....	9,303,825	112,982	3.3	1.2	17,681,231	97.1	Bridge and culvert.....	31,940	8,745	4.4	27.4	80,369	100.8
Concreting.....	98,758	45,493	1.3	46.1	252,521	99.2	<i>Structural steel<sup>3</sup></i>						
Heating and plumbing.....	1,565,620	634	( <sup>0</sup> )	( <sup>0</sup> )	2,899,205	98.9	All classes.....	20,555,309	2,974,625	100.0	14.5	50,698,737	84.5
Plumbing.....	659,250	634	( <sup>0</sup> )	1.1	1,260,417	99.4	General contractors <sup>3</sup> .....	11,251,574	346,322	11.6	3.1	33,017,506	78.4
Masonry.....	333,754	21,234	6.4	6.4	681,906	100.0	Building.....	4,849,323	258,828	8.7	5.3	14,521,515	66.6
Plastering and lathing.....	130,609	21,003	16.1	16.1	401,538	99.8	Building not specialized <sup>3</sup> .....	4,207,296	238,419	8.0	5.6	12,925,863	66.4
Roofing and sheet-metal work.....	747,659	1,502	( <sup>0</sup> )	2.2	1,596,844	98.4	Commercial building only.....	136,947	12,218	4.4	8.0	476,765	63.8
Roofing.....	496,179	1,602	( <sup>0</sup> )	3.1	1,110,975	99.5	Residential building only.....	445,080	8,191	3.1	1.8	1,118,887	70.7
Stone work.....	67,177	50	( <sup>0</sup> )	1.1	204,201	100.0	Highway.....	4,420,709	36,923	1.2	8.2	11,474,873	87.5
Marble and tiling.....	2,488,499	15,534	6.3	6.3	4,068,010	100.0	Bridge and culvert.....	463,091	42,401	1.4	0.2	1,255,768	97.7
Bridge and culvert.....	31,940	7,532	2.2	23.6	89,369	100.0	Railroad.....	177,942	8,170	3.8	4.6	1,800,265	59.0
Brick (face, common, fire, paving, etc.)	20,555,309	702,929	100.0	3.4	50,698,737	84.5	Subcontractors.....	9,303,825	2,628,303	88.4	28.2	17,681,231	97.1
All classes.....	20,555,309	702,929	100.0	3.4	50,698,737	84.5	Concreting.....	98,758	1,000	( <sup>0</sup> )	1.0	252,521	99.2
General contractors <sup>3</sup> .....	11,251,574	521,001	74.1	4.6	33,017,506	78.4	Roofing and sheet-metal work.....	747,659	1,448	( <sup>0</sup> )	2.2	1,596,844	99.4
Building.....	4,849,323	371,009	52.8	7.7	14,521,515	66.6	Sheet-metal work.....	111,830	1,448	( <sup>0</sup> )	1.3	288,610	100.0
Building not specialized <sup>3</sup> .....	4,207,296	334,860	47.6	7.8	12,925,863	66.4	Steel erection.....	2,630,617	2,622,617	88.2	90.7	4,973,653	89.9
Commercial building only.....	136,947	12,923	1.8	0.4	476,765	63.8	Bridge and culvert.....	31,940	2,581	1.1	8.1	89,369	100.0
Residential building only.....	445,080	23,223	3.3	5.2	1,118,887	70.7	Soundproofing.....	45,891	657	( <sup>0</sup> )	1.4	99,224	89.0
Highway.....	4,420,709	21,098	3.0	5.1	11,474,873	87.5	<i>Reinforcing steel</i>						
Street paving.....	1,171,324	92,148	13.1	7.9	2,760,224	93.9	All classes.....	20,555,309	500,823	100.0	2.5	50,698,737	84.5
Sewer, gas, water, conduit.....	168,685	36,748	5.2	21.8	513,132	96.4	General contractors <sup>3</sup> .....	11,251,574	484,762	95.6	4.3	33,017,506	78.4
Subcontractors.....	9,303,825	181,928	25.9	2.0	17,681,231	97.1	Building.....	4,849,323	266,257	52.5	5.5	14,521,515	66.6
Concreting.....	98,758	100	( <sup>0</sup> )	1.1	252,521	99.2	Building not specialized <sup>3</sup> .....	4,207,296	260,147	51.3	6.1	12,925,863	66.4
Heating and plumbing.....	1,565,620	28	( <sup>0</sup> )	( <sup>0</sup> )	2,899,205	98.0	Commercial building only.....	136,947	4,110	8.3	3.0	476,765	63.8
Plumbing.....	659,250	28	( <sup>0</sup> )	( <sup>0</sup> )	1,260,417	99.4	Residential building only.....	445,080	2,000	4.4	4.4	1,118,887	70.7
Masonry.....	333,754	181,529	25.8	54.4	681,906	100.0	Highway.....	4,420,709	109,882	21.7	2.5	11,474,873	87.5
Plastering and lathing.....	130,609	201	( <sup>0</sup> )	3.3	204,201	100.0	Bridge and culvert.....	463,091	102,533	20.2	22.1	1,255,768	97.7
Stone work.....	67,177	70	( <sup>0</sup> )	( <sup>0</sup> )	4,068,010	100.0	Street paving.....	1,171,324	6,090	1.2	5.2	2,760,224	93.9
Marble and tiling.....	2,488,499	70	( <sup>0</sup> )	( <sup>0</sup> )	4,068,010	100.0	Subcontractors.....	9,303,825	22,061	4.4	2.5	17,681,231	97.1
Cut stone, granite and marble <sup>3</sup>	20,555,309	2,455,034	100.0	11.9	50,698,737	84.5	Concreting.....	98,758	15,653	3.1	15.8	252,521	99.2
All classes.....	20,555,309	2,455,034	100.0	11.9	50,698,737	84.5	Masonry.....	333,754	100	( <sup>0</sup> )	( <sup>0</sup> )	681,906	100.0
General contractors.....	11,225,354	220,026	9.0	2.0	32,050,506	78.4	Bridge and culvert.....	31,940	6,308	1.2	16.7	89,369	100.0
Building.....	4,823,133	192,176	7.8	4.0	14,454,515	66.6	<i>Lumber, rough and finished</i>						
Building not specialized <sup>3</sup> .....	4,241,106	174,028	7.1	4.1	12,858,863	66.4	All classes.....	20,555,309	1,207,184	100.0	5.9	50,698,737	84.5
Commercial building only.....	136,947	2,800	1.1	1.7	476,765	63.8	General contractors <sup>3</sup> .....	11,251,574	1,117,877	92.6	9.9	33,017,506	78.4
Residential building only.....	445,080	15,850	6.6	3.6	1,118,887	70.7	Building.....	4,849,323	892,119	73.9	18.4	14,521,515	66.6
Highway.....	4,420,709	27,850	1.1	6.1	11,474,873	87.5	Building not specialized <sup>3</sup> .....	4,207,296	795,000	65.9	18.7	12,925,863	66.4
Subcontractors.....	9,303,825	2,235,008	91.0	24.0	17,681,231	97.1	Commercial building only.....	136,947	24,258	2.0	17.7	476,765	63.8
Masonry.....	333,754	442	( <sup>0</sup> )	1.1	681,906	100.0	Residential building only.....	445,080	71,061	6.0	16.2	1,118,887	70.7
Stone work.....	67,177	60,801	2.7	99.4	204,201	100.0	Highway.....	4,420,709	91,556	7.6	2.1	11,474,873	87.5
Marble and tiling.....	2,488,499	2,167,765	88.3	87.1	4,068,010	100.0	Bridge and culvert.....	463,091	61,420	5.1	13.3	1,255,768	97.7
Cement <sup>3</sup>	20,555,309	2,391,056	100.0	11.6	50,698,737	84.5	Street paving.....	1,171,324	3,280	3.3	3.2	2,760,224	93.9
All classes.....	20,555,309	2,391,056	100.0	11.6	50,698,737	84.5	Sewer, gas, water, conduit.....	168,685	6,678	6.4	4.0	513,132	96.4
General contractors <sup>3</sup> .....	11,251,574	2,268,902	94.9	20.2	33,017,506	78.4	Railroad.....	177,942	62,824	5.2	35.3	1,800,265	59.0
Building.....	4,849,323	531,868	22.2	11.0	14,521,515	66.6	Subcontractors.....	9,303,825	89,307	7.4	1.0	17,681,231	97.1
Building not specialized <sup>3</sup> .....	4,207,296	485,682	20.3	11.4	12,925,863	66.4	Carpentering and wood flooring.....	89,383	69,508	5.8	77.8	216,526	100.0
Commercial building only.....	136,947	17,888	7.7	13.1	476,765	63.8	Concreting.....	98,758	6,647	6.7	6.7	252,521	99.2
Residential building only.....	445,080	28,298	1.2	6.4	1,118,887	70.7	Heating and plumbing.....	1,565,620	1,000	1.1	1.1	2,899,205	98.9
Highway.....	4,420,709	1,356,061	56.7	30.7	11,474,873	87.5	Plumbing and heating combined.....	241,609	1,000	1.1	4.4	477,906	99.4
Bridge and culvert.....	463,091	93,192	3.9	20.1	1,255,768	97.7	Masonry.....	333,754	48	( <sup>0</sup> )	( <sup>0</sup> )	681,906	100.0
Street paving.....	1,171,324	235,337	9.8	20.1	2,760,224	93.9	Plastering and lathing.....	130,609	165	( <sup>0</sup> )	1.1	461,538	99.8
Sewer, gas, water, conduit.....	168,685	21,944	9.3	13.0	513,132	96.4	Roofing and sheet-metal work.....	747,659	2,615	2.2	3.3	1,596,844	99.4
Railroad.....	177,942	30,060	1.3	16.0	1,800,265	59.0	Roofing.....	496,179	2,615	2.2	5.5	1,110,975	99.5

See footnotes at end of table.



# CONSTRUCTION—TENNESSEE

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**TABLE 10.—COMPARISON OF COST OF DESIGNATED MATERIALS FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929, WITH COST OF MATERIALS AND VALUE OF CONSTRUCTION BUSINESS—Continued**

[Based exclusively upon reports of establishments which gave the distributed cost of materials]

KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	COST OF DESIGNATED MATERIAL				Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>	KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	COST OF DESIGNATED MATERIAL				Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>		
	Cost of all materials distributed by kind	Amount	Per cent of—					Cost of all distributed materials	Cost of all materials distributed by kind	Amount	Per cent of—			Cost of all distributed materials	
			Total cost	of all distributed materials							Total cost				of all distributed materials
<b>TENNESSEE—Continued</b>						<b>TENNESSEE—Continued</b>									
<b>Lumber, rough and finished—Continued</b>						<b>Heating and ventilating equipment—Continued</b>									
<b>Subcontractors—Continued.</b>						<b>Subcontractors—Continued.</b>									
Marble and tiling.....	\$2,488,499	\$200	(°)	(°)	\$4,068,010	100.0	\$9,303,825	\$748,027	93.2	8.0	\$17,081,231	97.1			
Bridge and culvert.....	31,940	2,098	.2	6.6	89,369	100.0	1,595,620	631,921	73.8	40.4	2,890,206	98.9			
Soundproofing.....	45,891	1,509	.1	3.3	99,224	89.9	655,618	429,209	53.5	65.5	1,135,167	98.0			
Flooring, n. e. s.....	32,144	5,517	.5	17.2	73,546	100.0	659,250	124,990	15.6	19.0	1,260,417	99.4			
<b>Millwork</b>						<b>Roofing and sheet-metal work—Continued</b>									
All classes.....	20,555,399	514,504	100.0	2.5	50,698,737	84.5	241,609	77,722	9.7	32.2	477,906	90.4			
General contractors <sup>2</sup> .....	11,251,574	514,447	100.0	4.6	33,017,506	78.4	747,659	76,079	9.5	10.2	1,596,844	90.4			
Building.....	4,849,323	512,447	99.0	10.6	14,521,515	66.6	496,179	17,517	2.2	3.5	1,110,975	90.5			
Building not specialized <sup>3</sup> .....	4,267,296	387,722	75.4	9.1	12,925,863	66.4	111,830	33,088	4.1	29.6	288,610	100.0			
Commercial building only.....	136,947	16,313	3.2	11.9	476,765	63.8	Roofing and sheet metal combined.....	139,650	25,474	3.2	18.2	107,259	97.5		
Residential building only.....	445,080	108,412	21.1	24.4	1,118,887	70.7	Marble and tiling.....	2,488,499	40,027	5.0	1.6	4,068,010	100.0		
Highway.....	4,420,709	1,000	.2	(°)	11,474,873	87.5	<b>Plumbing and gas fitting equipment—Continued</b>								
Bridge and culvert.....	463,091	1,000	.2	(°)	1,255,768	97.7	All classes.....	20,555,399	992,458	100.0	4.8	50,698,737	84.5		
Subcontractors.....	9,303,825	57	(°)	(°)	17,081,231	97.1	General contractors.....	11,225,384	84,104	8.5	.7	32,950,506	78.4		
Soundproofing.....	45,891	57	(°)	.1	99,224	89.9	Building.....	4,823,133	83,446	8.4	1.7	14,454,515	66.5		
<b>Paints, varnishes, glass</b>						<b>Building not specialized.....</b>									
All classes.....	20,555,399	347,904	100.0	1.7	50,698,737	84.5	Residential building only.....	4,241,106	54,446	5.5	1.3	12,858,863	66.4		
General contractors <sup>2</sup> .....	11,251,574	49,372	14.2	1.4	33,017,506	78.4	Highway.....	4,420,709	20,000	2.9	6.5	1,118,887	70.7		
Building.....	4,849,323	48,572	14.0	1.0	14,521,515	66.6	Bridge and culvert.....	463,091	658	.1	(°)	11,474,873	87.5		
Building not specialized <sup>3</sup> .....	4,267,296	39,074	11.4	1.9	12,925,863	66.4	<b>Electrical appliances and supplies</b>								
Commercial building only.....	136,947	1,914	.6	1.4	476,765	63.8	All classes.....	20,555,399	664,009	100.0	3.2	50,698,737	84.5		
Residential building only.....	445,080	6,084	2.0	1.6	1,118,887	70.7	General contractors.....	11,225,384	23,868	3.6	.2	32,950,506	78.4		
Highway.....	4,420,709	150	(°)	(°)	11,474,873	87.5	Building.....	4,823,133	20,718	3.1	.4	14,454,515	66.5		
Bridge and culvert.....	463,091	650	.2	.1	1,255,768	97.7	Building not specialized.....	4,241,106	12,418	1.9	.3	12,858,863	66.4		
Subcontractors.....	9,303,825	298,532	85.8	3.2	17,081,231	97.1	Residential building only.....	445,080	8,300	1.2	1.9	1,118,887	70.7		
Carpentering and wood flooring.....	80,383	9,455	2.7	10.6	215,526	100.0	Highway.....	4,420,709	1,000	.2	(°)	11,474,873	87.5		
Concreting.....	98,758	100	(°)	(°)	252,521	99.2	Bridge and culvert.....	463,091	2,150	.3	.5	1,255,768	97.7		
Masonry.....	333,754	65	(°)	(°)	631,908	100.0	<b>Bituminous paving material</b>								
Painting and decorating.....	73,802	73,752	21.2	96.9	272,161	100.0	All classes.....	20,555,399	930,873	100.0	4.5	50,698,737	84.5		
Glass and glazing.....	210,000	100,000	46.0	76.2	300,000	100.0	General contractors.....	11,225,384	919,990	98.8	8.2	32,950,506	78.4		
Plastering and lathing.....	130,600	2,040	.6	1.6	401,538	99.8	Building.....	4,823,133	117,230	12.6	2.4	14,454,515	66.5		
Roofing and sheet-metal work.....	747,659	52,792	15.2	7.1	1,596,844	90.4	Building not specialized.....	4,241,106	117,239	12.0	2.8	12,858,863	66.4		
Roofing.....	496,179	52,792	15.2	10.6	1,110,975	90.5	Highway.....	4,420,709	682,921	73.4	15.4	11,474,873	87.5		
Bridge and culvert.....	31,940	20	(°)	.1	89,369	100.0	Bridge and culvert.....	463,091	2,240	.2	.5	1,255,768	97.7		
Soundproofing.....	45,891	308	.1	.7	99,224	89.9	Street paving.....	1,171,324	117,590	12.0	10.0	2,760,224	93.9		
<b>Roofing and sheet metal</b>						<b>Subcontractors.....</b>									
All classes.....	20,555,399	722,074	100.0	3.5	50,698,737	84.5	Concreting.....	98,758	1,500	.2	1.5	252,521	99.2		
General contractors <sup>2</sup> .....	11,251,574	87,340	12.1	.8	33,017,506	78.4	Roofing and sheet-metal work.....	747,659	9,383	1.0	1.3	1,596,844	90.4		
Building.....	4,849,323	83,538	11.6	1.7	14,521,515	66.6	Roofing.....	496,179	9,383	1.0	1.9	1,110,975	99.5		
Building not specialized <sup>3</sup> .....	4,267,296	72,813	10.1	1.7	12,925,863	66.4	<b>CHATTANOOGA</b>								
Commercial building only.....	136,947	225	(°)	.2	476,765	63.8	All classes.....	9,066,155	1,086,518	100.0	35.4	10,763,119	84.9		
Residential building only.....	445,080	10,500	1.5	2.4	1,118,887	70.7	General contractors.....	2,657,727	1,086,518	100.0	40.9	6,718,089	82.5		
Highway.....	4,420,709	1,000	.1	(°)	11,474,873	87.5	Building.....	930,996	110,836	10.8	12.5	2,158,340	72.1		
Bridge and culvert.....	463,091	1,000	.1	.2	1,255,768	97.7	Building not specialized.....	639,548	97,636	9.0	15.3	1,532,490	72.7		
Street paving.....	1,171,324	1,802	.2	.2	2,760,224	93.9	Residential building only.....	291,447	10,200	1.8	6.6	2,825,860	70.4		
Subcontractors.....	9,303,825	634,734	87.9	6.8	17,081,231	97.1	Highway.....	844,041	439,305	40.4	52.0	2,627,513	84.0		
Concreting.....	98,758	3,000	.4	3.0	252,521	99.2	Street paving.....	789,894	502,620	46.3	63.6	1,743,167	93.1		
Heating and plumbing.....	1,595,620	12,000	1.7	.8	2,890,206	98.9	Sewer, gas, water, conduit.....	92,767	27,767	2.6	29.9	189,069	98.4		
Plumbing and heating combined.....	241,609	12,000	1.7	5.0	477,906	90.4	<b>Sand, gravel, stone, slag, cinders, etc.<sup>2</sup></b>								
Roofing and sheet-metal work.....	747,659	547,048	75.8	73.2	1,596,844	90.4	All classes.....	9,066,155	1,086,518	100.0	35.4	10,763,119	84.9		
Roofing.....	496,179	361,788	50.1	72.9	1,110,975	90.5	General contractors.....	2,657,727	1,086,518	100.0	40.9	6,718,089	82.5		
Sheet-metal work.....	111,830	71,084	9.8	63.6	288,610	100.0	Building.....	930,996	110,836	10.8	12.5	2,158,340	72.1		
Roofing and sheet metal combined.....	139,650	114,176	15.8	81.8	197,259	97.5	Building not specialized.....	639,548	97,636	9.0	15.3	1,532,490	72.7		
Marble and tiling.....	2,488,499	72,200	10.0	2.9	4,068,010	100.0	Residential building only.....	291,447	10,200	1.8	6.6	2,825,860	70.4		
Soundproofing.....	45,891	486	.1	1.1	99,224	89.9	Highway.....	844,041	439,305	40.4	52.0	2,627,513	84.0		
<b>Heating and ventilating equipment</b>						<b>Street paving.....</b>									
All classes.....	20,555,399	802,376	100.0	3.9	50,698,737	84.5	Sewer, gas, water, conduit.....	92,767	27,767	2.6	29.9	189,069	98.4		
General contractors <sup>2</sup> .....	11,225,384	54,349	6.8	.5	32,950,506	78.4	<b>See footnotes at end of table.</b>								
Building.....	4,823,133	54,349	6.8	1.1	14,454,515	66.5	<b>127100—33—73</b>								
Building not specialized.....	4,241,106	44,131	6.5	1.0	12,858,863	66.4									
Commercial building only.....	136,947	3,018	.4	2.2	476,765	63.8									
Residential building only.....	445,080	7,200	.9	1.6	1,118,887	70.7									

TABLE 10.—COMPARISON OF COST OF DESIGNATED MATERIALS FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929, WITH COST OF MATERIALS AND VALUE OF CONSTRUCTION BUSINESS—Continued

[Based exclusively upon reports of establishments which gave the distributed cost of materials]

KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	COST OF DESIGNATED MATERIAL				Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>	KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	COST OF DESIGNATED MATERIAL				Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>
	Cost of all materials distributed by kind	Amount	Per cent of—					Cost of all materials distributed by kind	Amount	Per cent of—			
			Total cost	Cost of all distributed materials						Total cost	Cost of all distributed materials		
<b>CHATTANOOGA—Contd.</b>						<b>CHATTANOOGA—Contd.</b>							
<b>Brick (face, common, fire, paving, etc.)</b>						<b>Paints, varnishes, glass—Continued</b>							
All classes.....	\$ 3,066,155	\$187,955	100.0	6.1	\$7,633,119	84.9	Subcontractors.....	\$ 408,428	\$48,360	75.6	11.8	\$ 8915,030	99.7
General contractors.....	2,657,727	187,955	100.0	7.1	6,718,089	82.5	Roofing and sheet-metal work.....	107,667	48,360	75.6	44.9	\$ 287,401	100.0
Building.....	930,995	85,989	45.7	9.2	2,158,340	72.1	Roofing.....	52,093	48,360	75.6	91.8	143,414	100.0
Building not specialized.....	639,548	78,319	41.7	12.2	1,532,490	72.7	<b>Roofing and sheet metal</b>						
Residential building only.....	291,447	7,070	4.1	2.6	625,850	70.4	All classes.....	3,066,155	45,471	100.0	1.5	7,633,119	84.9
Highway.....	844,041	428	.2	.1	2,627,513	84.0	General contractors.....	2,657,727	18,974	41.7	7.0	6,718,089	82.5
Street paving.....	789,934	91,538	48.7	11.6	1,743,167	93.1	Building.....	930,995	18,974	41.7	2.0	2,158,340	72.1
Sewer, gas, water, conduit.....	92,757	10,000	5.3	10.8	189,069	98.4	Building not specialized.....	639,548	12,174	26.8	1.9	1,532,490	72.7
<b>Tile, facing, terra cotta, floor, and wall</b>						<b>Residential building only.....</b>							
All classes.....	3,066,155	65,044	100.0	2.1	7,633,119	84.9	291,447	6,800	15.0	2.8	625,850	70.4	
General contractors.....	2,657,727	31,144	47.9	1.2	6,718,089	82.5	<b>Subcontractors.....</b>						
Building.....	930,995	30,144	46.3	3.2	2,158,340	72.1	Roofing and sheet-metal work.....	408,428	26,497	58.3	6.5	\$ 915,030	99.7
Building not specialized.....	639,548	24,144	37.1	3.8	1,532,490	72.7	Sheet-metal work.....	107,667	20,497	58.3	24.6	\$ 287,401	100.0
Residential building only.....	291,447	6,000	9.2	2.1	625,850	70.4	<b>Heating and ventilating equipment</b>						
Highway.....	844,041	1,000	1.5	1.1	189,069	98.4	All classes.....	3,066,155	97,177	100.0	3.2	7,633,119	84.9
Street paving.....	789,934	1,000	1.5	1.1	189,069	98.4	General contractors.....	2,657,727	4,900	5.0	.2	6,718,089	82.5
Sewer, gas, water, conduit.....	92,757	1,000	1.5	1.1	189,069	98.4	Building.....	930,995	4,900	5.0	.5	2,158,340	72.1
<b>Subcontractors.....</b>						<b>Marble and tiling.....</b>							
Marble and tiling.....	408,428	33,900	52.1	8.3	\$ 915,030	99.7	Building not specialized.....	639,548	2,900	2.0	.4	1,532,490	72.7
37,100	33,900	52.1	81.4	105,000	100.0	Residential building only.....	291,447	2,400	2.5	.8	625,850	70.4	
<b>Cut stone, granite, and marble</b>						<b>Subcontractors.....</b>							
All classes.....	3,066,155	60,423	100.0	2.0	7,633,119	84.9	Heating and plumbing.....	408,428	92,277	95.0	22.6	\$ 915,030	99.7
General contractors.....	2,657,727	40,423	66.9	1.6	6,718,089	82.5	Heating and piping.....	106,689	60,689	68.6	62.5	194,960	100.0
Building.....	930,995	40,423	66.9	4.3	2,158,340	72.1	Plumbing.....	89,000	60,000	61.7	67.4	162,500	100.0
Building not specialized.....	639,548	29,373	48.6	4.6	1,532,490	72.7	Roofing and sheet-metal work.....	17,689	6,689	6.9	37.8	32,460	100.0
Residential building only.....	291,447	11,050	18.3	3.8	625,850	70.4	Sheet-metal work.....	107,667	25,588	26.3	23.8	\$ 287,401	100.0
General contractors.....	2,657,727	20,000	33.1	4.9	\$ 915,030	99.7	<b>Plumbing and gas fitting equipment</b>						
Stonework.....	20,000	20,000	33.1	100.0	39,946	100.0	All classes.....	3,066,155	63,658	100.0	2.1	7,633,119	84.9
<b>Cement<sup>2</sup></b>						<b>General contractors.....</b>							
All classes.....	3,066,155	430,895	100.0	14.1	7,633,119	84.9	Building.....	2,657,727	27,658	48.4	1.9	6,718,089	82.5
General contractors.....	2,657,727	430,895	100.0	16.2	6,718,089	82.5	Building.....	930,995	27,000	42.4	2.0	2,158,340	72.1
Building.....	930,995	105,113	24.4	11.3	2,158,340	72.1	Building not specialized.....	639,548	2,000	3.1	.3	1,532,490	72.7
Building not specialized.....	639,548	83,063	19.3	13.0	1,532,490	72.7	Residential building only.....	291,447	25,000	39.3	8.0	625,850	70.4
Residential building only.....	291,447	22,020	5.1	7.6	625,850	70.4	Highway.....	844,041	658	1.0	.1	2,627,513	84.0
Highway.....	844,041	188,284	43.7	22.3	2,627,513	84.0	Subcontractors.....	408,428	36,000	56.6	8.8	\$ 915,030	99.7
Street paving.....	789,934	121,498	28.2	15.4	1,743,167	93.1	Heating and plumbing.....	106,689	38,000	58.6	33.7	194,960	100.0
Sewer, gas, water, conduit.....	92,757	16,000	3.7	17.2	189,069	98.4	Heating and piping.....	89,000	28,000	39.3	28.1	162,500	100.0
<b>Reinforcing steel</b>						<b>Plumbing.....</b>							
All classes.....	3,066,155	35,240	100.0	1.1	7,633,119	84.9	17,689	11,000	17.8	62.2	32,460	100.0	
General contractors.....	2,657,727	35,240	100.0	1.3	6,718,089	82.5	<b>Electrical appliances and supplies</b>						
Building.....	930,995	30,789	87.4	3.3	2,158,340	72.1	All classes.....	3,066,155	144,072	100.0	4.7	7,633,119	84.9
Building not specialized.....	639,548	29,189	82.8	4.6	1,532,490	72.7	General contractors.....	2,657,727	7,100	4.9	.3	6,718,089	82.5
Residential building only.....	291,447	1,600	4.5	.5	625,850	70.4	Building.....	930,995	7,100	4.9	.8	2,158,340	72.1
Highway.....	844,041	4,461	12.6	.5	2,627,513	84.0	Building not specialized.....	639,548	1,100	.8	.2	1,532,490	72.7
<b>Lumber, rough and finished</b>						<b>Residential building only.....</b>							
All classes.....	3,066,155	152,143	100.0	5.0	7,633,119	84.9	291,447	6,000	4.2	2.1	625,850	70.4	
General contractors.....	2,657,727	152,143	100.0	5.7	6,718,089	82.5	<b>Subcontractors.....</b>						
Building.....	930,995	149,943	98.6	16.1	2,158,340	72.1	Electrical.....	408,428	136,972	95.1	33.5	\$ 915,030	99.7
Building not specialized.....	639,548	104,443	68.6	16.3	1,532,490	72.7	136,972	136,972	95.1	100.0	287,723	100.0	
Residential building only.....	291,447	45,600	29.9	15.6	625,850	70.4	<b>Pipe: Drain tile, vitrified, concrete, segment tile, corrugated</b>						
Highway.....	844,041	2,200	1.4	2.4	189,069	98.4	All classes.....	3,066,155	53,041	100.0	1.7	7,633,119	84.9
<b>Millwork</b>						<b>General contractors.....</b>							
All classes.....	3,066,155	122,980	100.0	4.0	7,633,119	84.9	Building.....	2,657,727	60,041	94.3	1.9	6,718,089	82.5
General contractors.....	2,657,727	122,980	100.0	4.6	6,718,089	82.5	Building.....	930,995	584	1.1	.1	2,158,340	72.1
Building.....	930,995	122,980	100.0	13.2	2,158,340	72.1	Building not specialized.....	639,548	84	.2	(9)	1,532,490	72.7
Building not specialized.....	639,548	49,460	40.2	7.7	1,532,490	72.7	Residential building only.....	291,447	500	.9	.2	625,850	70.4
Residential building only.....	291,447	73,500	59.8	25.2	625,850	70.4	Highway.....	844,041	12,243	23.1	1.5	2,627,513	84.0
General contractors.....	2,657,727	2,200	1.4	2.4	189,069	98.4	Street paving.....	789,934	2,214	4.2	.3	1,743,167	93.1
Building.....	930,995	2,200	1.4	2.4	189,069	98.4	Sewer, gas, water, conduit.....	92,757	35,000	66.0	37.7	189,069	98.4
Building not specialized.....	639,548	2,200	1.4	2.4	189,069	98.4	<b>Subcontractors.....</b>						
Residential building only.....	291,447	2,200	1.4	2.4	189,069	98.4	Heating and plumbing.....	408,428	3,000	5.7	.7	\$ 915,030	99.7
<b>Paints, varnishes, glass</b>						<b>Heating and piping.....</b>							
All classes.....	3,066,155	68,946	100.0	2.1	7,633,119	84.9	89,000	3,000	5.7	3.4	162,600	100.0	
General contractors.....	2,657,727	15,586	24.4	.6	6,718,089	82.5	<b>Bituminous paving materials, tar, asphalt, and oil<sup>3</sup></b>						
Building.....	930,995	15,586	24.4	1.7	2,158,340	72.1	All classes.....	3,066,155	247,548	100.0	8.1	7,633,119	84.9
Building not specialized.....	639,548	10,786	16.0	1.7	1,532,490	72.7	General contractors.....	2,657,727	247,548	100.0	9.3	6,718,089	82.5
Residential building only.....	291,447	4,800	7.5	1.6	625,850	70.4	Highway.....	844,041	175,484	70.9	20.8	2,627,513	84.0
<b>See footnotes at end of table.</b>						<b>Street paving.....</b>							
						789,934							
						72,064							
						29.1							
						9.1							
						1,743,167							
						93.1							

TABLE 10.—COMPARISON OF COST OF DESIGNATED MATERIALS FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929, WITH COST OF MATERIALS AND VALUE OF CONSTRUCTION BUSINESS—Continued

[Based exclusively upon reports of establishments which gave the distributed cost of materials]

KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	COST OF DESIGNATED MATERIAL				Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>	KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	COST OF DESIGNATED MATERIAL				Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>
	Cost of all materials distributed by kind	Amount	Per cent of—					Cost of all materials distributed by kind	Amount	Per cent of—			
			Total cost	Cost of all distributed materials						Total cost	Cost of all distributed materials		
<b>KNOXVILLE</b>						<b>KNOXVILLE—Continued</b>							
<i>Sand, gravel, stone, slag, cinders, etc.<sup>2</sup></i>						<i>Reinforcing steel</i>							
All classes.....	\$5,469,632	\$658,464	100.0	12.0	\$12,454,959	83.8	All classes.....	\$5,469,632	\$146,131	100.0	2.7	\$12,454,959	83.8
General contractors.....	2,903,506	626,814	95.2	21.6	8,249,389	76.8	General contractors.....	2,903,506	141,131	90.0	4.9	8,249,389	76.8
Building.....	1,181,920	78,373	11.9	6.8	3,150,617	70.0	Building.....	1,181,920	86,777	59.4	7.3	3,150,617	70.0
Building not specialized....	1,150,315	70,973	11.7	6.7	3,066,027	69.4	Building not specialized....	1,150,315	86,477	59.2	7.5	3,066,027	69.4
Residential building only....	31,605	1,400	2.2	4.4	84,590	81.2	Residential building only....	31,605	300	2.9	9.9	84,590	81.2
Highway.....	1,948,870	447,425	67.9	33.2	2,742,333	90.6	Highway.....	1,948,870	13,623	9.3	1.0	2,742,333	90.6
Bridge and culvert.....	176,756	42,958	6.5	24.3	524,174	100.0	Bridge and culvert.....	176,756	40,733	27.9	23.0	524,174	100.0
Street paving.....	18,018	10,810	1.6	60.0	32,000	99.1	Street paving.....	18,018	5,000	3.4	2.2	32,000	99.1
Railroad.....	177,942	47,250	7.2	26.6	1,800,265	59.0	Railroad.....	177,942	5,000	3.4	10.0	1,800,265	59.0
Subcontractors.....	2,566,126	31,650	4.8	1.2	4,205,570	99.6	Subcontractors.....	2,566,126	5,000	3.4	10.0	4,205,570	99.6
Concreting.....	50,000	30,000	4.0	60.0	137,000	100.0	Concreting.....	50,000	5,000	3.4	10.0	137,000	100.0
Plastering and lathing.....	17,185	600	1.1	3.5	63,588	98.4	Plastering and lathing.....	17,185	185	1.0	1.0	63,588	98.4
Marble and tiling.....	2,148,116	1,050	2.2	( <sup>c</sup> )	3,274,838	100.0	Marble and tiling.....	2,148,116	200	1.1	( <sup>e</sup> )	3,274,838	100.0
<i>Brick (face, common, fire, paving, etc.)<sup>3</sup></i>						<i>Lumber, rough and finished</i>							
All classes.....	5,469,632	213,180	100.0	3.9	12,454,959	83.8	All classes.....	5,469,632	258,801	100.0	4.7	12,454,959	83.8
General contractors.....	2,903,506	213,080	100.0	7.3	8,249,389	76.8	General contractors.....	2,903,506	255,938	98.0	8.8	8,249,389	76.8
Building.....	1,181,920	107,432	92.6	16.7	3,150,617	70.0	Building.....	1,181,920	141,015	54.5	11.9	3,150,617	70.0
Building not specialized....	1,150,315	103,632	90.8	16.8	3,066,027	69.4	Building not specialized....	1,150,315	132,615	51.2	11.5	3,066,027	69.4
Residential building only....	31,605	3,800	1.8	12.0	84,590	81.2	Residential building only....	31,605	8,500	3.3	26.0	84,590	81.2
Highway.....	1,948,870	15,645	7.3	1.2	2,742,333	90.6	Highway.....	1,948,870	14,567	5.6	1.1	2,742,333	90.6
Subcontractors.....	2,566,126	100	( <sup>c</sup> )	( <sup>c</sup> )	4,205,570	99.6	Subcontractors.....	2,566,126	2,865	1.1	.1	4,205,570	99.6
Concreting.....	50,000	100	( <sup>e</sup> )	.2	137,000	100.0	Concreting.....	50,000	1,500	.6	3.0	137,000	100.0
<i>Cut stone, granite, and marble<sup>4</sup></i>						<i>Millwork</i>							
All classes.....	5,469,632	2,207,084	100.0	40.4	12,454,959	83.8	All classes.....	5,469,632	136,792	100.0	2.5	12,454,959	83.8
General contractors.....	2,903,506	92,018	4.2	3.2	8,249,389	76.8	General contractors.....	2,903,506	136,792	100.0	4.7	8,249,389	76.8
Building.....	1,181,920	65,068	2.9	5.5	3,150,617	70.0	Building.....	1,181,920	136,792	100.0	11.6	3,150,617	70.0
Building not specialized....	1,150,315	62,868	2.8	5.5	3,066,027	69.4	Building not specialized....	1,150,315	127,992	93.8	11.1	3,066,027	69.4
Residential building only....	31,605	2,200	1.0	7.0	84,590	81.2	Residential building only....	31,605	8,800	6.4	27.8	84,590	81.2
Highway.....	1,948,870	27,850	1.3	2.1	2,742,333	90.6	Highway.....	1,948,870	8,800	6.4	27.8	2,742,333	90.6
Subcontractors.....	2,566,126	2,114,166	95.8	82.4	4,205,570	99.6	Subcontractors.....	2,566,126	2,114,166	95.8	82.4	4,205,570	99.6
Marble and tiling.....	2,148,116	2,114,166	95.8	98.4	3,274,838	100.0	Marble and tiling.....	2,148,116	2,114,166	95.8	98.4	3,274,838	100.0
<i>Cement<sup>5</sup></i>						<i>Roofing and sheet metal</i>							
All classes.....	5,469,632	588,961	100.0	10.8	12,454,959	83.8	All classes.....	5,469,632	72,406	100.0	1.3	12,454,959	83.8
General contractors.....	2,903,506	577,741	98.1	19.9	8,249,389	76.8	General contractors.....	2,903,506	36,957	51.0	1.3	8,249,389	76.8
Building.....	1,181,920	91,356	15.5	7.7	3,150,617	70.0	Building.....	1,181,920	35,155	48.0	3.0	3,150,617	70.0
Building not specialized....	1,150,315	89,976	15.3	7.8	3,066,027	69.4	Building not specialized....	1,150,315	34,955	48.3	3.0	3,066,027	69.4
Residential building only....	31,605	1,380	2.4	4.4	84,590	81.2	Residential building only....	31,605	200	3.8	6.0	84,590	81.2
Highway.....	1,948,870	408,749	60.4	30.8	2,742,333	90.6	Highway.....	1,948,870	1,802	2.5	10.0	2,742,333	90.6
Bridge and culvert.....	176,756	42,230	7.2	23.9	524,174	100.0	Street paving.....	18,018	1,802	2.5	10.0	32,000	99.1
Street paving.....	18,018	5,408	9.0	30.0	32,000	99.1	Subcontractors.....	2,566,126	35,449	49.0	1.4	4,205,570	99.6
Railroad.....	177,942	30,000	5.1	16.9	1,800,265	59.0	Concreting.....	50,000	3,000	4.1	6.0	137,000	100.0
Subcontractors.....	2,566,126	11,220	1.9	.4	4,205,570	99.6	Roofing and sheet-metal work.....	32,449	32,449	44.8	100.0	76,012	100.0
Concreting.....	50,000	5,000	8.8	10.0	137,000	100.0	Roofing.....	32,449	32,449	44.8	100.0	76,012	100.0
Heating and plumbing.....	253,577	1,000	.2	.4	504,696	100.0	<i>Heating and ventilating equipment</i>						
Heating and piping.....	135,538	500	1.1	.6	260,353	100.0	All classes.....	5,469,632	157,775	100.0	2.9	12,454,959	83.8
Plumbing and heating combined.....	82,230	500	1.1	.4	175,814	100.0	General contractors.....	2,903,506	37,239	23.6	1.3	8,249,389	76.8
Plastering and lathing.....	17,185	420	1.1	2.4	63,588	98.4	Building.....	1,181,920	37,239	23.6	3.2	3,150,617	70.0
Marble and tiling.....	2,148,116	4,800	.8	.2	3,274,838	100.0	Building not specialized....	1,150,315	37,239	23.6	3.2	3,066,027	69.4
<i>Structural steel</i>						<i>Plumbing and gas fitting equipment</i>							
All classes.....	5,469,632	83,463	100.0	1.5	12,454,959	83.8	All classes.....	5,469,632	150,702	100.0	2.8	12,454,959	83.8
General contractors.....	2,903,506	82,463	98.8	2.8	8,249,389	76.8	General contractors.....	2,903,506	27,955	18.5	1.0	8,249,389	76.8
Building.....	1,181,920	46,630	55.7	3.9	3,150,617	70.0	Building.....	1,181,920	27,955	18.5	2.4	3,150,617	70.0
Building not specialized....	1,150,315	46,030	55.2	4.0	3,066,027	69.4	Building not specialized....	1,150,315	27,955	18.5	2.4	3,066,027	69.4
Residential building only....	31,605	500	6.0	1.8	84,590	81.2	Subcontractors.....	2,566,126	120,536	76.4	4.7	4,205,570	99.6
Highway.....	1,948,870	22,906	27.4	1.7	2,742,333	90.6	Heating and plumbing.....	253,577	120,536	76.4	47.5	504,696	100.0
Bridge and culvert.....	176,756	4,857	5.8	2.7	524,174	100.0	Heating and piping.....	135,538	82,000	52.0	60.5	260,353	100.0
Railroad.....	177,942	8,170	9.8	4.6	1,800,265	59.0	Plumbing and heating combined.....	82,230	38,536	24.4	46.9	175,814	100.0
Subcontractors.....	2,566,126	1,000	1.2	( <sup>e</sup> )	4,205,570	99.6	<i>Plumbing and gas fitting equipment</i>						
Concreting.....	50,000	1,000	1.2	2.0	137,000	100.0	All classes.....	5,469,632	150,702	100.0	2.8	12,454,959	83.8

See footnotes at end of table.

TABLE 10.—COMPARISON OF COST OF DESIGNATED MATERIALS FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929, WITH COST OF MATERIALS AND VALUE OF CONSTRUCTION BUSINESS—Continued

[Based exclusively upon reports of establishments which gave the distributed cost of materials]

KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	Cost of all materials distributed by kind	COST OF DESIGNATED MATERIAL			Value of construction business	Indicated per cent of all business done by own force	KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	Cost of all materials distributed by kind	COST OF DESIGNATED MATERIAL			Value of construction business	Indicated per cent of all business done by own force
		Amount	Total cost	Per cent of— Cost of all distributed materials					Amount	Total cost	Per cent of— Cost of all distributed materials		
<b>KNOXVILLE—Continued</b>						<b>MEMPHIS—Continued</b>							
<i>Plumbing and gas fitting equipment—Continued</i>						<i>Tile, facing, terra cotta, floor, and wall</i>							
Subcontractors	\$2,566,126	\$122,747	81.5	4.8	\$4,205,570	99.6	All classes	\$4,823,230	\$72,535	100.0	1.5	\$11,465,637	85.9
Heating and plumbing	253,577	122,747	81.5	48.4	504,696	100.0	General contractors	2,371,822	6,000	8.3	.2	7,416,840	80.2
Heating and piping	135,538	46,979	31.2	34.7	280,353	100.0	Building	1,283,030	6,000	8.3	.5	3,935,128	64.8
Plumbing	85,809	35,809	23.8	100.0	68,529	100.0	Building not specialized	1,075,036	1,000	1.4	.1	3,256,580	64.4
Plumbing and heating combined	82,230	39,959	26.5	48.6	175,814	100.0	Residential building only	95,192	5,000	6.9	5.3	249,340	82.9
<i>Pipe: Cast-iron, sheet and tube steel, etc.</i>						<i>Cut stone, granite, and marble</i>							
All classes	5,469,632	63,921	100.0	1.2	12,454,959	83.8	All classes	74,823,230	126,543	100.0	2.6	11,465,637	85.9
General contractors	2,903,506	57,501	90.0	2.0	8,249,589	78.8	General contractors	2,371,822	85,542	67.0	3.0	7,416,840	80.2
Building	1,181,920	444	.7	(0)	5,150,617	70.0	Building	1,283,030	85,542	67.0	6.7	3,935,128	64.8
Building not specialized	1,150,315	444	.7	(0)	3,006,027	69.4	Building not specialized	1,075,036	80,642	63.7	7.5	3,256,580	64.4
Highway	1,848,870	48,957	76.6	3.8	2,742,333	90.6	Commercial building only	112,802	2,300	1.8	2.0	429,208	60.2
Railroad	177,942	8,100	12.7	4.6	1,800,265	59.0	Residential building only	95,192	2,600	2.1	2.7	249,340	82.0
Subcontractors	2,566,126	0,420	10.0	.3	4,205,570	99.6	Subcontractors	1,925,218	41,001	32.4	2.1	3,981,797	99.4
Concreting	50,000	100	.2	.2	137,000	100.0	Masonry	32,120	6,200	8.5	19.3	58,825	100.0
Heating and plumbing	253,577	6,320	9.9	2.5	504,696	100.0	Roofing and sheet-metal work	220,249	2,269	3.1	1.0	441,208	100.0
Heating and piping	135,538	4,500	7.0	3.5	260,353	100.0	Sheet-metal work	35,859	2,269	3.1	6.3	70,185	100.0
Plumbing and heating combined	82,230	1,820	2.8	2.2	175,814	100.0	Marble and tiling	96,104	58,069	80.1	60.4	293,852	100.0
<i>Bituminous paving material</i>						<i>Cement</i>							
All classes	5,469,632	347,147	100.0	6.3	12,454,959	83.8	All classes	4,823,230	629,650	100.0	13.1	11,465,637	85.9
General contractors	2,903,506	345,647	99.6	11.9	8,249,589	76.8	All classes	4,823,230	629,650	100.0	13.1	11,465,637	85.9
Highway	1,848,870	345,647	99.6	25.6	2,742,333	90.6	General contractors	2,371,822	620,825	98.0	21.4	7,483,840	80.4
Subcontractors	2,566,126	1,600	.4	1.1	4,205,570	99.6	Building	1,309,220	124,354	16.7	9.5	4,002,128	65.7
Concreting	50,000	1,500	.4	3.0	137,000	100.0	Building not specialized	1,101,226	105,248	16.7	9.0	3,323,580	65.5
<b>MEMPHIS</b>						<i>Structural steel</i>							
<i>Sand, gravel, stone, slag, cinders, etc.<sup>2</sup></i>						<i>All classes</i>							
All classes	4,823,230	910,620	100.0	18.9	11,465,637	85.9	All classes	4,823,230	288,513	100.0	6.0	11,465,637	85.9
General contractors	2,898,012	901,119	99.0	31.1	7,483,840	80.4	General contractors	2,898,012	165,896	67.5	5.7	7,483,840	80.4
Building	1,309,220	158,995	17.2	12.0	4,002,128	65.7	Building	1,309,220	158,818	65.4	12.2	4,002,128	65.7
Building not specialized	1,101,226	120,431	13.2	10.9	3,323,580	65.5	Building not specialized	1,101,226	147,632	61.1	13.4	3,323,580	65.5
Commercial building only	112,802	19,708	2.2	17.5	429,208	60.2	Commercial building only	112,802	630	.4	.0	429,208	60.2
Residential building only	95,192	16,826	1.8	17.7	249,340	82.9	Residential building only	95,192	1,750	4.1	10.4	429,208	60.2
Highway	1,158,742	591,317	64.9	51.0	2,276,390	90.9	Highway	1,158,742	6,078	2.1	.5	2,276,390	90.9
Bridge and culvert	75,797	40,300	4.4	53.2	238,000	100.0	Subcontractors	1,925,218	122,617	42.5	6.4	3,981,797	99.4
Street paving	278,325	111,075	12.2	39.0	643,199	92.7	Steel erection	130,617	122,617	42.5	93.9	294,997	100.0
Sewer, gas, water, conduit	75,928	1,461	.2	1.9	324,063	92.0	<i>Reinforcing steel</i>						
Subcontractors	1,925,218	9,504	1.0	.5	3,981,797	99.4	All classes	4,823,230	148,711	100.0	3.1	11,465,637	85.9
Heating and plumbing	839,896	624	.1	.1	1,223,290	95.1	General contractors	2,898,012	148,711	100.0	5.1	7,483,840	80.4
Plumbing	232,476	624	.1	.3	528,018	100.0	Building	1,309,220	60,067	40.4	4.6	4,002,128	65.7
Plastering and lathing	55,480	2,920	.3	5.2	146,036	100.0	Building not specialized	1,101,226	59,337	39.9	5.4	3,323,580	65.5
Roofing and sheet-metal work	220,249	1,476	.2	.7	441,208	100.0	Commercial building only	112,802	630	.4	.0	429,208	60.2
Roofing	184,393	1,476	.2	.8	365,033	100.0	Residential building only	95,192	100	.1	.1	249,340	82.9
Marble and tiling	96,104	4,484	.5	4.7	293,852	100.0	Highway	1,158,742	62,907	35.6	4.6	2,276,390	90.9
<i>Brick (face, common, fire, paving, etc.)</i>						<i>Metal doors, windows, and trim</i>							
All classes	4,823,230	118,584	100.0	2.5	11,465,637	85.9	All classes	74,823,230	70,473	100.0	1.5	11,465,637	85.9
General contractors	2,898,012	100,194	84.5	3.5	7,483,840	80.4	General contractors	2,371,822	52,136	74.0	1.8	7,416,840	80.2
Building	1,309,220	67,838	57.2	5.2	4,002,128	65.7	Building	1,283,030	52,136	74.0	4.1	3,935,128	64.8
Building not specialized	1,101,226	48,020	40.5	4.4	3,323,580	65.5	Building not specialized	1,075,036	48,093	68.2	4.5	3,256,580	64.4
Commercial building only	112,802	11,059	9.3	9.3	429,208	60.2	Commercial building only	112,802	3,543	5.0	3.1	429,208	60.2
Residential building only	95,192	8,759	7.4	9.2	249,340	82.9	Residential building only	95,192	500	.7	.5	249,340	82.0
Highway	1,158,742	5,000	4.2	.4	2,276,390	90.9	<b>See footnotes at end of table.</b>						
Street paving	278,325	608	.5	.2	643,199	92.7							
Sewer, gas, water, conduit	75,928	26,748	22.8	35.2	324,063	92.0							
Subcontractors	1,925,218	18,390	15.5	1.0	3,981,797	99.4							
Masonry	32,120	18,320	15.4	57.0	68,825	100.0							
Marble and tiling	96,104	70	.1	.1	293,852	100.0							

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TABLE 10.—COMPARISON OF COST OF DESIGNATED MATERIALS FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929, WITH COST OF MATERIALS AND VALUE OF CONSTRUCTION BUSINESS—Continued

[Based exclusively upon reports of establishments which gave the distributed cost of materials]

KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	COST OF DESIGNATED MATERIAL				Value of construction business	Indicated per cent of all business done by own force	KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	COST OF DESIGNATED MATERIAL				Value of construction business	Indicated per cent of all business done by own force
	Cost of all materials distributed by kind	Per cent of—						Cost of all materials distributed by kind	Per cent of—				
		Amount	Total cost	Cost of all distributed materials					Amount	Total cost	Cost of all distributed materials		
<b>MEMPHIS—Continued</b>						<b>MEMPHIS—Continued</b>							
<i>Metal doors, windows, and trim—Continued</i>						<i>Plumbing and gas fitting equipment</i>							
Subcontractors.....	\$1,925,218	\$18,337	26.0	1.0	\$3,981,797	99.4	All classes.....	\$4,823,230	\$358,692	100.0	7.4	\$11,465,637	85.9
Carpentering and wood flooring.....	69,383	5,737	8.1	8.3	169,526	100.0	General contractors.....	\$2,871,822	4,000	1.1	.1	\$7,416,840	80.2
Plastering and lathing.....	56,480	12,600	17.9	22.3	146,086	100.0	Building.....	\$1,283,030	4,000	1.1	.3	\$3,935,128	64.8
<i>Lumber, rough and finished</i>						Residential building only.....							
All classes.....	4,823,230	411,559	100.0	8.5	11,465,637	85.9	95,192	4,000	1.1	4.2	249,340	82.9	
General contractors <sup>3</sup> .....	\$2,898,012	351,419	86.4	12.1	\$7,483,840	80.4	Subcontractors.....	\$1,925,218	354,692	98.9	18.4	\$3,981,797	99.4
Building.....	1,909,220	208,375	65.2	20.5	4,002,128	65.7	Heating and plumbing.....	639,896	354,692	98.9	55.4	1,228,200	98.1
Building not specialized <sup>3</sup> .....	1,101,226	234,082	56.0	21.3	3,323,580	65.5	Heating and piping.....	370,580	106,571	29.7	28.8	601,965	96.4
Commercial building only.....	112,802	21,775	5.3	19.3	429,208	60.2	Plumbing.....	232,476	225,178	62.8	96.9	528,018	100.0
Residential building only.....	95,192	12,518	3.0	13.2	249,340	82.9	Plumbing and heating combined.....	27,697	13,800	3.8	49.8	67,582	100.0
Highway.....	1,158,742	75,286	18.3	6.5	2,270,390	90.9	Automatic sprinkler systems.....	9,143	9,143	2.5	100.0	25,725	100.0
Street paving.....	278,325	3,280	.8	1.2	643,199	92.7	<i>Electrical appliances and supplies</i>						
Sewer, gas, water, conduit.....	75,928	4,478	1.1	5.9	324,063	92.0	All classes.....	\$4,823,230	337,020	100.0	7.0	\$11,465,637	85.0
Subcontractors.....	\$1,925,218	60,140	14.0	3.1	\$3,981,797	99.4	General contractors.....	\$2,871,822	3,000	.9	.1	\$7,416,840	80.2
Carpentering and wood flooring.....	69,383	53,508	13.0	77.1	169,526	100.0	Building.....	\$1,283,030	2,000	.6	.2	\$3,935,128	64.8
Roofing and sheet-metal work.....	\$220,249	1,115	.3	.5	\$441,268	100.0	95,192	2,000	.6	2.1	249,340	82.9	
Roofing.....	184,393	1,115	.3	.6	365,083	100.0	Highway.....	1,158,742	1,000	.3	.1	2,270,390	90.9
Flooring, n. e. s.....	32,144	5,617	1.3	17.2	73,546	100.0	Subcontractors.....	\$1,925,218	334,020	99.1	17.3	\$3,981,797	99.4
<i>Millwork</i>						Electrical.....							
All classes.....	\$4,823,230	175,189	100.0	3.6	\$11,465,637	85.9	334,020	334,020	99.1	100.0	724,625	100.0	
General contractors <sup>3</sup> .....	\$2,898,012	175,189	100.0	6.0	\$7,483,840	80.4	<i>Elevators, dumb-waiters, and equipment</i>						
Building.....	1,909,220	174,189	99.4	13.3	4,002,128	65.7	All classes.....	\$4,823,230	61,238	100.0	1.3	\$11,465,637	85.9
Building not specialized <sup>3</sup> .....	1,101,226	142,321	81.2	12.9	3,323,580	65.5	Subcontractors.....	\$1,925,218	61,238	100.0	3.2	\$3,981,797	99.4
Commercial building only.....	112,802	14,808	8.5	13.1	429,208	60.2	Elevator construction.....	61,238	61,238	100.0	100.0	113,739	98.2
Residential building only.....	95,192	17,060	9.7	17.9	249,340	82.9	<i>Pipe: Drain tile, vitrified, concrete, segment tile, corrugated</i>						
Highway.....	1,158,742	1,000	.6	.1	2,270,390	90.9	All classes.....	\$4,823,230	88,650	100.0	1.8	\$11,465,637	85.9
<i>Paints, varnishes, glass</i>						General contractors.....							
All classes.....	4,823,230	202,051	100.0	4.2	11,465,637	85.9	Building.....	\$2,871,822	81,760	92.2	2.8	\$7,416,840	80.2
General contractors <sup>3</sup> .....	\$2,898,012	7,118	3.5	.2	\$7,483,840	80.4	Building not specialized.....	\$1,283,030	1,884	2.1	.1	\$3,935,128	64.8
Building.....	1,909,220	6,068	3.4	.5	4,002,128	65.7	Highway.....	1,076,036	1,884	2.1	.2	\$3,256,580	64.4
Building not specialized <sup>3</sup> .....	1,101,226	4,934	2.4	.4	3,323,580	65.5	Street paving.....	1,158,742	4,692	5.3	.4	2,270,390	90.9
Commercial building only.....	112,802	2,034	1.0	2.1	249,340	82.9	Sewer, gas, water, conduit.....	278,325	44,109	49.8	15.8	643,199	92.7
Residential building only.....	95,192	150	.1	(*)	2,270,390	90.9	75,928	31,081	35.1	40.9	324,083	92.0	
Highway.....	1,158,742	150	.1	(*)	2,270,390	90.9	Subcontractors.....	\$1,925,218	6,884	7.8	.4	\$3,981,797	99.4
Subcontractors.....	\$1,925,218	194,033	96.5	10.1	\$3,981,797	99.4	Heating and plumbing.....	\$639,896	4,384	4.9	.7	\$1,228,200	98.1
Carpentering and wood flooring.....	69,383	5,455	2.7	7.9	169,526	100.0	Plumbing.....	232,476	684	.7	.3	528,018	100.0
Painting and decorating.....	27,488	27,438	13.6	99.8	104,835	100.0	Plumbing and heating combined.....	27,697	3,750	4.2	13.5	67,582	100.0
Glass and glazing.....	210,000	160,000	79.2	76.2	300,000	100.0	Roofing and sheet-metal work.....	\$220,249	2,500	2.8	1.1	\$441,268	100.0
Plastering and lathing.....	56,480	2,040	1.0	3.6	146,086	100.0	Sheet-metal work.....	35,856	2,500	2.8	7.0	76,185	100.0
<i>Roofing and sheet metal</i>						Metal products, n. e. s. (including metal furniture)							
All classes.....	4,823,230	177,676	100.0	3.7	11,465,637	85.9	All classes.....	\$4,823,230	68,043	100.0	1.4	\$11,465,637	85.9
General contractors <sup>3</sup> .....	\$2,898,012	18,260	10.3	.6	\$7,483,840	80.4	General contractors.....	\$2,871,822	14,800	21.8	.5	\$7,416,840	80.2
Building.....	1,909,220	17,260	9.7	1.3	4,002,128	65.7	Building.....	\$1,283,030	14,800	21.8	1.2	\$3,935,128	64.8
Building not specialized <sup>3</sup> .....	1,101,226	13,700	7.7	1.2	3,323,580	65.5	Building not specialized.....	1,076,036	14,800	21.8	1.4	\$3,256,580	64.4
Commercial building only.....	112,802	3,500	2.0	3.7	249,340	82.9	Subcontractors.....	\$1,925,218	53,243	78.2	2.8	\$3,981,797	99.4
Residential building only.....	95,192	1,000	.6	.1	2,270,390	90.9	Glass and glazing.....	210,000	50,000	73.5	23.8	300,000	100.0
Highway.....	1,158,742	1,000	.6	.1	2,270,390	90.9	Flooring, n. e. s.....	32,144	3,243	4.8	10.1	73,546	100.0
Subcontractors.....	\$1,925,218	169,410	89.7	8.3	\$3,981,797	99.4	<b>NASHVILLE</b>						
Roofing and sheet-metal work.....	220,249	159,410	89.7	72.4	441,268	100.0	<i>Sand, gravel, stone, slag, cinders, etc.<sup>1</sup></i>						
Roofing.....	184,393	135,829	76.4	73.7	365,083	100.0	All classes.....	\$5,956,355	535,695	100.0	9.0	\$16,131,037	81.4
Sheet-metal work.....	35,856	23,587	13.3	65.8	76,185	100.0	General contractors.....	\$1,869,929	468,396	87.4	25.0	\$8,092,010	69.0
<i>Heating and ventilating equipment</i>						Building.....							
All classes.....	\$4,823,230	310,013	100.0	6.4	\$11,465,637	85.9	Building not specialized.....	1,263,579	218,501	40.8	17.3	\$4,741,182	57.7
General contractors.....	\$2,871,822	4,800	1.5	.2	\$7,416,840	80.2	26,836	411	.1	1.5	169,107	32.1	
Building.....	\$1,283,030	4,800	1.5	.4	\$3,935,128	64.8	Highway.....	465,717	210,381	39.3	45.2	2,150,318	78.0
Residential building only.....	95,192	4,800	1.5	5.0	249,340	82.9	Bridge and culvert.....	10,000	10,000	1.9	13.9	160,000	100.0
Subcontractors.....	\$1,925,218	305,213	98.5	15.9	\$3,981,797	99.4	Street paving.....	60,297	29,133	5.4	48.3	199,074	100.0
Heating and plumbing.....	\$639,896	280,196	90.4	43.8	\$1,229,290	98.1	Subcontractors.....	\$4,086,426	67,299	12.6	1.6	\$8,039,027	94.1
Heating and piping.....	370,580	204,009	85.2	71.2	601,965	98.4	Concreting.....	29,000	11,000	2.1	37.9	63,699	100.0
Plumbing.....	232,476	6,040	1.9	2.6	628,018	100.0	Masonry.....	301,634	21,234	4.0	7.0	623,081	100.0
Plumbing and heating combined.....	27,697	10,147	3.3	36.6	67,582	100.0	Plastering and lathing.....	86,944	17,483	3.3	30.7	191,864	100.0
Roofing and sheet-metal work.....	220,249	25,017	8.1	11.4	441,268	100.0	Stone work.....	50	(*)	.2	.2	127,137	100.0
Roofing.....	184,393	17,517	5.7	9.5	365,083	100.0	Marble and tiling.....	81,698	10,000	1.9	4.8	394,320	100.0
Sheet-metal work.....	35,856	7,500	2.4	20.9	76,185	100.0	Bridge and culvert.....	207,179	7,532	1.4	23.7	89,359	100.0

See footnotes at end of table.

TABLE 10.—COMPARISON OF COST OF DESIGNATED MATERIALS FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929, WITH COST OF MATERIALS AND VALUE OF CONSTRUCTION BUSINESS—Continued

[Based exclusively upon reports of establishments which gave the distributed cost of materials]

KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	COST OF DESIGNATED MATERIAL				Indicated per cent of all business done by own force	KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	COST OF DESIGNATED MATERIAL				Indicated per cent of all business done by own force
	Cost of all materials distributed by kind	Per cent of—		Value of construction business			Cost of all materials distributed by kind	Per cent of—		Value of construction business	
		Amount	Total cost					Cost of all distributed materials	Amount		
<b>NASHVILLE—Continued</b>						<b>NASHVILLE—Continued</b>					
<b>Brick (face, common, fire, paving, etc.)</b>						<b>Roofing and sheet metal</b>					
All classes	\$5,956,355	\$167,979	100.0	2.8	\$16,131,037	\$5,956,355	\$385,700	100.0	6.5	\$16,131,037	81.4
General contractors	1,869,929	4,509	2.7	.2	8,092,010	6,151	1.6	.3	.8	8,092,010	69.0
Building	1,290,415	4,509	2.7	.4	4,900,289	5,151	1.3	.4	.4	4,900,289	56.9
Building not specialized	1,263,579	1,575	.9	.1	4,741,182	5,151	1.3	.4	.4	4,741,182	57.7
Residential building only	26,836	2,994	1.8	11.2	159,107	1,000	.3	1.9	.9	159,107	100.0
Subcontractors	4,086,426	183,470	97.3	4.0	8,092,027	379,555	9.3	9.3	8.0	8,092,027	94.1
Masonry	301,634	103,209	97.2	54.1	623,081	306,869	70.0	84.0	73.3	623,081	98.0
Stone work	31,940	201	.1	.6	127,137	204,827	44.5	83.8	47.7	127,137	98.9
<b>Cement<sup>1</sup></b>						<b>Roofing and sheet metal combined</b>					
All classes	5,956,355	453,854	100.0	7.6	16,131,037	139,650	114,176	20.6	81.8	197,250	97.5
General contractors	1,869,929	357,255	78.7	19.1	8,092,010	207,179	72,200	18.7	84.8	394,320	100.0
Building	1,290,415	205,151	45.2	15.9	4,900,289	45,891	480	1.1	1.1	99,224	89.9
Building not specialized	1,263,579	204,673	45.1	16.2	4,741,182						
Residential building only	26,836	478	.1	1.8	159,107						
Highway	465,717	111,092	24.5	23.9	2,150,318						
Bridges and culvert	53,000	20,000	4.4	37.7	150,000						
Grading	500	500	1.0	100.0	691,729						
Street paving	60,297	20,512	4.5	34.0	199,674						
Subcontractors	4,086,426	96,599	21.3	2.4	8,092,027						
Concreting	20,000	10,000	2.2	34.5	63,698						
Masonry	301,634	74,890	16.5	24.8	623,081						
Plastering and lathing	56,944	889	.2	1.6	191,804						
Stone work	31,940	126	(*)	.4	127,137						
Marble and tiling	207,179	1,950	.4	.9	394,320						
Bridges and culvert	31,940	8,745	1.9	27.4	89,369						
<b>Structural steel<sup>2</sup></b>						<b>Heating and ventilating equipment</b>					
All classes	5,956,355	2,530,888	100.0	42.6	16,131,037	5,956,355	156,277	100.0	2.6	16,131,037	81.4
General contractors	1,869,929	36,950	1.4	2.0	8,092,010	1,869,929	4,392	2.8	.2	8,092,010	69.0
Building	1,290,415	18,711	.7	1.4	4,900,289	1,290,415	4,392	2.8	.3	4,900,289	56.9
Building not specialized	1,263,579	17,370	.7	1.4	4,741,182	1,263,579	4,392	2.8	.3	4,741,182	57.7
Residential building only	26,836	1,341	.1	5.0	159,107						
Highway	465,717	7,939	.3	1.7	2,150,318						
Bridges and culvert	53,000	10,000	4.4	18.9	150,000						
Subcontractors	4,086,426	2,503,238	95.6	61.3	8,092,027	4,086,426	151,885	97.2	3.7	8,092,027	94.1
Steel erection	2,500,000	2,500,000	98.4	100.0	4,078,656	843,406	86,384	55.3	25.2	634,845	98.7
Bridges and culvert	31,940	2,581	.1	8.1	89,369	33,400	11,200	7.2	33.5	72,339	100.0
Soundproofing	45,891	657	(*)	1.4	99,224	263,626	75,184	48.1	28.6	480,519	98.7
<b>Reinforcing steel</b>						<b>Roofing and sheet metal work</b>					
All classes	5,956,355	116,462	100.0	2.0	16,131,037	365,477	25,474	10.3	7.0	733,493	98.6
General contractors	1,869,929	105,054	90.2	5.6	8,092,010	139,650	25,474	16.3	18.2	197,250	97.5
Building	1,290,415	84,554	72.6	6.0	4,900,289	207,179	40,027	25.6	19.3	394,320	100.0
Building not specialized	1,263,579	84,554	72.6	6.7	4,741,182						
Residential building only	26,836	5,443	1.7	20.3	159,107						
Highway	465,717	17,500	15.0	3.8	2,150,318						
Bridges and culvert	53,000	3,000	2.6	5.7	150,000						
Subcontractors	4,086,426	11,408	0.8	.8	8,092,027	139,650	25,474	16.3	18.2	197,250	97.5
Concreting	20,000	5,000	4.3	17.2	63,698						
Masonry	301,634	100	.1	(*)	623,081						
Bridges and culvert	31,940	6,308	5.4	19.7	89,369						
<b>Lumber, rough and finished</b>						<b>Plumbing and gas fitting equipment</b>					
All classes	5,956,355	317,775	100.0	5.3	16,131,037	5,956,355	289,540	100.0	4.9	16,131,037	81.4
General contractors	1,869,929	293,620	92.4	15.7	8,092,010	1,869,929	22,961	7.9	1.2	8,092,010	69.0
Building	1,290,415	287,759	90.6	22.3	4,900,289	1,290,415	22,961	7.9	1.8	4,900,289	56.9
Building not specialized	1,263,579	282,316	88.8	22.3	4,741,182	1,263,579	22,961	7.9	1.8	4,741,182	57.7
Residential building only	26,836	5,443	1.7	20.3	159,107						
Highway	465,717	861	.3	.2	2,150,318						
Bridges and culvert	53,000	5,000	1.6	9.4	150,000						
Subcontractors	4,086,426	24,155	7.6	.6	8,092,027	4,086,426	266,579	92.1	6.5	8,092,027	94.1
Carpentering and woodflooring	20,000	16,000	5.0	80.0	46,000	72,138	29,975	10.4	41.6	152,389	100.0
Concreting	29,000	3,000	.9	10.3	63,698	843,406	236,604	81.7	68.9	634,845	98.7
Masonry	301,634	48	(*)	(*)	623,081	33,400	16,000	5.5	47.9	72,339	100.0
Roofing and sheet-metal work	365,477	1,500	.5	.4	733,493	263,626	174,224	60.2	66.1	480,519	98.7
Roofing	204,827	1,500	.5	.7	407,798						
Bridges and culvert	31,940	2,098	.7	6.6	89,369						
Soundproofing	45,891	1,509	.5	3.3	99,224						
<b>Electrical appliances and supplies</b>						<b>Bituminous paving materials, tar, asphalt, and oil</b>					
All classes	5,956,355	79,660	100.0	1.3	16,131,037	5,956,355	203,842	100.0	3.4	16,131,037	81.4
General contractors	1,869,929	1,070	1.3	.1	8,092,010	1,869,929	1,070	1.3	.1	8,092,010	69.0
Building	1,290,415	1,070	1.3	.1	4,900,289	1,290,415	1,070	1.3	.1	4,900,289	56.9
Building not specialized	1,263,579	1,070	1.3	.1	4,741,182	1,263,579	1,070	1.3	.1	4,741,182	57.7
Subcontractors	4,086,426	78,590	98.7	1.9	8,092,027	4,086,426	78,590	98.7	1.9	8,092,027	94.1
Electrical	62,135	62,135	78.0	100.0	119,625	62,135	62,135	78.0	100.0	119,625	100.0
Elevator construction	72,138	3,147	4.0	4.4	152,389	72,138	3,147	4.0	4.4	152,389	100.0
Heating and plumbing	343,406	13,298	16.7	3.9	634,845	343,406	13,298	16.7	3.9	634,845	98.7
Plumbing	263,626	13,298	16.7	5.0	480,519	263,626	13,298	16.7	5.0	480,519	98.7
<b>General contractors</b>						<b>General contractors</b>					
All classes	5,956,355	203,842	100.0	10.9	16,131,037	5,956,355	203,842	100.0	10.9	16,131,037	81.4
General contractors	1,869,929	203,842	100.0	10.9	8,092,010	1,869,929	203,842	100.0	10.9	8,092,010	69.0
Building	1,290,415	117,239	57.5	9.1	4,900,289	1,290,415	117,239	57.5	9.3	4,900,289	56.9
Building not specialized	1,263,579	117,239	57.5	9.3	4,741,182	1,263,579	117,239	57.5	9.3	4,741,182	57.7
Highway	465,717	73,971	36.3	15.9	2,150,318	465,717	73,971	36.3	15.9	2,150,318	78.0
Bridges and culvert	53,000	2,000	1.0	3.8	150,000	53,000	2,000	1.0	3.8	150,000	100.0
Street paving	60,297	10,632	5.2	17.6	199,674	60,297	10,632	5.2	17.6	199,674	100.0

1 Based upon the difference between the total value of all construction business reported and the value of subcontract work let.  
 2 See footnote 3 of Table 8 on p. 1143.  
 3 Includes operative builders.  
 4 Includes cost of materials reported by establishments which did not include designated material in their distributed lists.  
 5 Includes construction work reported by establishments which did not include the designated material in their distributed lists.  
 6 Less than one-tenth of 1 per cent.  
 7 Includes cost of materials reported by operative builders who did not include the designated materials in their distributed lists.  
 8 Includes construction work reported by subcontracting establishments which did not include the designated materials in their distributed lists.  
 9 Includes cost of materials reported by subcontracting establishments which did not include the designated material in their distributed lists.  
 10 Includes construction work reported by subcontracting establishments which did not include the designated material in their distributed lists.  
 11 Includes cost of materials reported by general contracting establishments which did not include the designated material in their distributed lists.  
 12 Includes construction work reported by general contracting establishments which did not include the designated material in their distributed lists.



TABLE 11.—COST OF MATERIAL FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929

[This table is made up in three sections; the second section begins on p. 1153, the third on p. 1154]

CLASSIFICATION OF ESTABLISHMENTS	Total cost of all materials	COST OF ALL MATERIALS DISTRIBUTED BY KIND		Sand, gravel, crushed stone, slag, cinders, etc.	Brick (face, common, fire, paving, etc.)	Tile, (fire-proofing)	Tile, facing, terra cotta, floor, and wall	Concrete and cinder block	Cut stone, granite, and marble	Rip-rap, rubble, etc.	Cement	Lime	Plaster, etc.	Structural steel
		Amount	Per cent of total											
<b>TENNESSEE</b> .....	\$23,706,664	\$20,655,399	86.7	\$3,410,888	\$702,929	\$58,886	\$220,954	\$44,041	\$2,455,034	\$9,271	\$2,391,056	\$45,628	\$68,395	\$2,974,625
Operative builders.....	112,058	26,190	23.4	1,200	2,680						1,800	400	880	100
General contractors.....	\$13,368,541	11,225,384	84.0	3,206,706	518,321	22,638	39,119	41,541	220,026	9,271	2,267,102	26,588	35,405	346,222
Building.....	6,128,315	4,823,133	78.7	577,942	368,329	22,638	38,110	41,541	192,176	6,271	530,068	25,188	35,405	258,728
Building not specialized.....	5,392,481	4,241,108	78.6	517,301	332,180	17,564	27,119	27,132	174,026	2,671	483,882	20,648	27,821	238,310
Commercial building only.....	225,061	136,947	60.8	22,804	12,026	2,074		3,990	2,300		17,888	994	927	12,218
Residential building only.....	510,773	445,080	87.1	37,837	23,223	3,000	11,000	10,410	15,850	3,600	28,298	3,546	6,057	8,101
Highway.....	4,741,030	4,420,709	93.2	1,846,345	21,098				27,850	3,000	1,356,061	1,000		36,923
Bridge and culvert.....	475,091	463,091	97.5	134,695							93,192			42,401
Grading.....	500	500	100.0								500			
Street paving.....	1,372,324	1,171,324	85.4	661,256	92,146						235,337			
Sewer, gas, water, conduit.....	212,885	168,685	79.2	29,218	36,748		1,000				21,944	400		
Railroad.....	177,942	177,942	100.0	47,250							30,000			8,170
Subcontractors.....	10,225,065	9,809,825	91.0	112,982	181,928	36,248	181,835	2,500	2,235,008		122,154	18,640	50,050	2,628,303
Carpentering and wood flooring.....	80,383	80,383	100.0											
Concreting.....	98,758	98,758	100.0	45,493	100						20,470	900		1,000
Electrical.....	643,996	624,596	97.0											
Elevator construction.....	133,376	133,376	100.0											
Heating and plumbing.....	1,980,466	1,866,620	94.2	634	28						1,040			
Heating and piping.....	731,770	655,018	89.6								500			
Plumbing.....	818,121	659,250	80.6	634	28						40			
Plumbing and heating combined.....	421,432	241,609	57.3								500			
Automatic sprinkler systems.....	9,143	9,143	100.0											
Masonry.....	583,632	333,754	57.2	21,234	181,529	36,248	6,500	2,500	442		78,200	8,769		
Painting and decorating.....	73,802	73,802	100.0								50			
Glass and glazing.....	210,000	210,000	100.0											
Plastering and lathing.....	183,995	136,609	74.3	21,003							2,340	8,731	48,262	
Roofing and sheet-metal work.....	844,951	747,659	88.5	1,502			2,269							1,448
Roofing.....	496,179	496,179	100.0	1,502										1,448
Sheet-metal work.....	209,122	111,830	53.5				2,269							
Roofing and sheet-metal combined.....	139,650	139,650	100.0											
Steel erection.....	2,630,617	2,630,617	100.0											2,622,617
Stone work.....	97,177	67,177	69.1	50	201				66,801		125			
Marble and tiling.....	2,543,828	2,488,499	97.8	15,534	70		173,066		2,167,765		13,085	250	990	
Bridge and culvert.....	31,940	31,940	100.0	7,532							8,745			2,681
Soundproofing.....	45,891	45,891	100.0										798	667
Flooring, n. e. s.....	32,144	32,144	100.0											
<b>CHATTANOOGA</b> .....	3,351,177	3,066,155	91.5	2,086,518	187,955	8,811	65,044	5,549	60,423	4,221	2,430,895	8,100	22,069	31,201
General contractors.....	2,863,051	2,657,727	92.8	1,066,518	187,955	8,811	31,144	5,549	40,423	4,221	430,895	8,100	22,069	20,763
Building.....	1,114,319	930,905	83.5	116,836	85,989	8,811	30,144	5,549	40,423	4,221	105,113	7,700	22,069	20,763
Building not specialized.....	822,872	639,548	77.7	97,636	78,319	6,311	24,144	1,649	29,373	621	83,093	6,340	18,737	23,903
Residential building only.....	291,447	291,447	100.0	10,200	7,670	2,500	6,000	3,900	11,050	3,600	22,020	1,360	3,332	5,860
Highway.....	844,041	844,041	100.0	439,305	428						188,284			
Street paving.....	789,934	789,934	100.0	502,620	91,538						121,493			
Sewer, gas, water, conduit.....	92,757	92,757	100.0	27,757	10,000				1,000		16,000	400		
Subcontractors.....	498,126	408,428	82.0				33,900		20,000					1,448
Electrical.....	136,972	136,972	100.0											
Heating and plumbing.....	120,922	106,689	88.2											
Heating and piping.....	89,000	89,000	100.0											
Plumbing.....	17,689	17,689	100.0											
Roofing and sheet-metal work.....	107,667	107,667	100.0											1,448
Roofing.....	52,693	52,693	100.0											
Sheet-metal work.....	54,974	54,974	100.0											1,448
Stone work.....	50,000	20,000	40.0						20,000					
Marble and tiling.....	37,100	37,100	100.0				33,900							
<b>KNOXVILLE</b> .....	6,118,790	5,469,632	89.4	2,658,464	213,180	9,211	27,600	22,136	2,207,084	2,050	2,588,961	13,521	14,458	83,483
General contractors.....	3,435,296	2,903,506	84.5	620,814	213,080	9,211	100	22,136	92,918	2,050	577,741	8,521	4,458	82,403
Building.....	1,544,510	1,181,920	76.5	78,373	197,432	9,211	100	22,136	65,068	2,050	91,856	8,521	4,458	46,530
Building not specialized.....	1,477,905	1,150,315	77.8	76,973	193,632	8,711	100	22,136	62,868	2,050	89,976	8,321	3,933	46,030
Residential building only.....	31,605	31,605	100.0	1,400	3,800	500			1,350		200	525		500
Highway.....	1,348,870	1,348,870	100.0	447,425	15,648				408,749		42,280			22,906
Bridge and culvert.....	176,756	176,756	100.0	42,950					42,280					4,867
Street paving.....	143,018	18,018	12.6	10,810					5,406					
Railroad.....	177,942	177,942	100.0	47,250					30,000					8,170
Subcontractors.....	2,640,126	2,566,126	97.2	31,650	100		27,500		2,114,166		11,220	5,000	10,000	1,000
Concreting.....	50,000	50,000	100.0	30,000	100						5,000	900		1,000
Electrical.....	37,469	37,469	100.0											
Heating and plumbing.....	287,577	253,577	88.2								1,000			
Heating and piping.....	169,538	135,538	79.9								500			
Plumbing.....	35,809	35,809	100.0											
Plumbing and heating combined.....	82,230	82,230	100.0								500			
Painting and decorating.....	27,330	27,330	100.0											
Plastering and lathing.....	17,185	17,185	100.0	600							420	4,000	10,000	
Roofing and sheet-metal work.....	52,449	32,449	61.9											
Roofing.....	32,449	32,449	100.0											
Marble and tiling.....	2,168,116	2,148,116	99.1	1,050			27,500		2,114,166		4,800	100		

See footnotes at end of table.



TABLE 11.—COST OF MATERIAL FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929—Con.

CLASSIFICATION OF ESTABLISHMENTS	Total cost of all materials	COST OF ALL MATERIALS DISTRIBUTED BY KIND		Sand, gravel, crushed stone, slag, cinders, etc.	Brick (face, common, fire, paving, etc.)	Tile, (fire-proofing)	Tile, facing, terra cotta, floor, and wall	Concrete and cinder block	Cut stone, granite and marble	Rip-rap, rubble, etc.	Cement	Lime	Plaster, etc.	Structural steel
		Amount	Per cent of total											
<b>MEMPHIS</b>	\$5,619,168	\$4,623,230	85.8	\$910,620	\$118,584	\$7,697	\$72,535	\$7,337	\$126,543	\$3,000	\$829,650	\$13,387	\$20,000	\$288,513
Operative builders	68,690	26,100	38.1	1,200	2,680						1,800	400	880	100
General contractors	\$3,406,261	2,871,822	84.3	899,916	97,514	3,897	6,000	7,337	85,542	3,000	610,025	7,547	3,150	165,796
Building	1,481,015	1,283,030	86.6	155,765	65,158	3,897	6,000	7,337	85,542		122,554	6,547	3,150	169,718
Building not specialized	1,206,620	1,075,036	89.1	119,231	45,340	2,342	1,000	3,347	80,642		103,448	4,166	350	147,432
Commercial building only	162,802	112,802	69.3	19,708	11,059	1,555		3,990	2,300		14,686	621		11,786
Residential building only	111,693	95,192	85.3	16,826	8,759		5,000		2,600		4,420	1,770	2,800	500
Highway	1,158,742	1,158,742	100.0	591,317	5,000					3,000	410,606	1,000		6,078
Bridge and culvert	75,797	75,797	100.0	40,300							79,921			
Street paving	354,325	278,325	78.6	111,073	608									
Sewer, gas, water, conduit	75,928	75,928	100.0	1,461	26,748						5,944			
Subcontractors	2,144,207	1,925,218	89.8	9,504	18,890	3,800	66,535		41,001		8,825	5,440	15,970	122,617
Carpentering and wood flooring	69,383	69,383	100.0											
Electrical	353,420	334,020	94.5											
Elevator construction	61,238	61,238	100.0											
Heating and plumbing	697,048	639,396	91.8	624										
Heating and piping	412,732	370,580	89.8											
Plumbing	247,476	232,476	93.9	624										
Plumbing and heating combined	27,697	27,697	100.0											
Automatic sprinkler system	9,143	9,143	100.0											
Masonry	116,171	32,120	27.6		18,320	3,800	6,200				1,400	2,400		
Painting and decorating	27,488	27,488	100.0								50			
Glass and glazing	210,000	210,000	100.0											
Plastering and lathing	79,866	56,480	70.7	2,920							1,040	3,040	15,080	
Roofing and sheet-metal work	255,249	220,249	86.3	1,476			2,269							
Roofing	184,393	184,393	100.0	1,476										
Sheet-metal work	70,856	35,856	50.6				2,269							
Steel erection	130,617	130,617	100.0											122,617
Stone work	15,470	15,470	100.0						15,470					
Marble and tiling	96,104	96,104	100.0	4,484	70		58,066		25,522		6,336		800	
Flooring, n. o. s.	32,144	32,144	100.0											
<b>NASHVILLE</b>	6,559,099	5,956,555	90.8	\$55,695	167,979	32,448	55,775	9,019	59,841		\$453,854	9,416	26,829	\$2,539,888
General contractors	2,040,250	1,809,929	91.7	468,396	4,569		1,875	6,519			357,255	1,216	2,740	38,650
Building	1,340,415	1,290,415	96.3	218,912	4,569		1,875	6,519			205,151	1,216	2,740	18,711
Building not specialized	1,313,579	1,263,579	96.2	218,501	1,575		1,875				204,073	1,000	2,740	17,370
Residential building only	26,836	26,836	100.0	411	2,994			6,519			478	216		1,341
Highway	588,038	466,717	79.5	210,331							111,092			7,939
Bridge and culvert	53,000	53,000	100.0	10,000							20,000			10,000
Grading	500	500	100.0								500			
Street paving	60,297	60,297	100.0	29,153							20,512			
Subcontractors	4,518,849	4,086,426	90.4	67,299	163,410	32,448	53,900	2,500	59,841		96,599	8,200	24,080	2,503,238
Carpentering and wood flooring	20,000	20,000	100.0											
Concreting	20,000	20,000	100.0	11,000							10,000			
Electrical	62,135	62,135	100.0											
Elevator construction	72,138	72,138	100.0											
Heating and plumbing	589,029	343,405	58.3											
Heating and piping	33,400	33,400	100.0											
Plumbing	372,497	263,626	70.8											
Plumbing and heating combined	183,132	40,380	25.3											
Masonry	423,105	301,634	71.3	21,234	163,209	32,448	300	2,500	442		74,890	6,359		
Painting and decorating	18,984	18,984	100.0											
Plastering and lathing	86,944	56,944	65.5	17,483							889	1,691	23,182	
Roofing and sheet-metal work	365,477	365,477	100.0											
Roofing	204,827	204,827	100.0											
Sheet-metal work	21,000	21,000	100.0											
Roofing and sheet metal combined	139,650	139,650	100.0											
Steel erection	2,500,000	2,500,000	100.0											2,500,000
Stone work	31,698	31,698	100.0	50	201				31,822		125			
Marble and tiling	242,508	207,179	85.4	10,099			58,600		28,077		1,950	150	100	
Bridge and culvert	31,940	31,940	100.0	7,532							8,745			2,581
Soundproofing	45,891	45,891	100.0										798	657

See footnotes at end of table.

CONSTRUCTION—TENNESSEE

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TABLE 11.—COST OF MATERIAL FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929—Con.

CLASSIFICATION OF ESTABLISHMENTS	Reinforcing steel	Cast iron, miscellaneous, excluding pipe	Metal doors, windows, and trim	Metal and wire lath and furring	Ornamental metal work	Lumber, rough and finished	Laths, shingles, and shakes	Millwork	Composition board	Water-proofing materials	Hardware, rough and finished	Paints, varnishes, and glass	Roofing and sheet metal	Finished flooring, n. e. s.	Screens, shades, awnings, etc.
<b>TENNESSEE</b> .....	\$506,823	\$51,480	\$155,136	\$41,388	\$62,692	\$1,207,184	\$34,469	\$514,504	\$89,553	\$16,714	\$123,797	\$347,904	\$722,074	\$50,093	\$24,245
Operative builders.....	30					9,000		5,000	800		700	1,100	2,500		
General contractors.....	484,732	51,400	135,759	7,989	53,492	1,108,877	31,457	509,447	45,586	0,330	119,399	48,272	84,840	24,707	11,601
Building.....	266,227	38,501	135,759	7,989	53,492	883,110	31,457	507,447	27,586	0,330	113,493	47,472	81,098	24,707	11,601
Building not specialized.....	260,117	36,821	129,873	3,399	49,693	786,000	21,117	382,722	20,546	8,758	100,240	38,574	70,313	13,132	7,351
Commercial building only.....	4,110		3,886	3,390	549	24,258		16,313		307	1,666	1,914	225	1,100	
Residential building only.....	2,000	1,680	2,000	1,200	3,250	71,061	10,340	108,412	1,040	175	11,587	6,984	10,500	10,475	4,250
Highway.....	109,882	1,573				91,556		1,000			3,306	150	1,000		
Bridge and culvert.....	102,538	5,200				61,420		1,000			2,200	650	1,000		
Street paving.....	6,090					3,280							1,802		
Sewer, gas, water, conduit.....		6,216				6,678									
Railroad.....						62,824			18,000		400				
Subcontractors.....	22,061		19,377	33,399	9,200	89,307	3,012	57	43,167	7,384	3,698	298,532	634,734	25,386	12,644
Carpentering and wood flooring.....			5,737			69,508						9,455		398	4,285
Concreting.....	15,653			100		6,647			1,000	200		100	3,000		
Heating and plumbing.....					1,200	1,000							12,000		
Heating and piping.....					1,200										
Plumbing and heating combined.....						1,000							12,000		
Masonry.....	100		39			48							65		
Painting and decorating.....													73,752		
Glass and glazing.....													160,000		
Plastering and lathing.....			12,600	32,669		165	2,790						2,040		
Roofing and sheet-metal work.....			1,001			2,615	222		6,916	7,184	945	52,792	547,048		
Roofing.....						2,615	222		6,916	7,184	945	52,792	361,788		
Sheet-metal work.....			1,001										71,084		
Roofing and sheet metal combined.....													114,176		
Steel erection.....					8,000								72,200		3,757
Marble and tiling.....				630		200					175				
Bridge and culvert.....	6,308					2,098					1,959	20			
Soundproofing.....						1,509		57	35,251		619	308	486	8,208	
Flooring, n. e. s.....						5,517								15,025	8,359
<b>CHATTANOOGA</b> .....	35,240	2,073	25,035	1,200	15,150	152,143	9,540	122,980	1,674	4,000	26,058	63,946	45,471	11,375	4,000
General contractors.....	35,240	2,073	24,034	1,200	15,150	152,143	9,540	122,980	1,674	4,000	26,058	15,586	18,974	8,175	4,000
Building.....	30,789	1,500	24,034	1,200	15,150	149,943	9,540	122,980	1,674	4,000	25,658	15,586	18,974	8,175	4,000
Building not specialized.....	29,189		22,534		12,000	104,443		49,480	1,074	3,900	17,058	10,786	12,174	300	700
Residential building only.....	1,600	1,500	1,500	1,200	3,150	45,500	9,540	73,500	600	100	8,600	4,800	6,800	7,875	3,300
Highway.....	4,451	573				2,200					400				
Sewer, gas, water, conduit.....															
Subcontractors.....			1,001									48,360	26,497	3,200	
Roofing and sheet-metal work.....			1,001									48,360	26,497		
Roofing.....												48,360			
Sheet-metal work.....			1,001										26,497		
Marble and tiling.....														3,200	
<b>KNOXVILLE</b> .....	148,131	13,846	33,540	3,622	28,180	258,801	14,871	136,792	29,639	3,622	37,420	46,239	72,406	8,351	5,234
General contractors.....	141,131	13,846	33,540	2,222	28,180	255,916	13,671	136,792	28,639	3,622	37,420	18,809	36,957	8,351	5,234
Building.....	86,777	13,846	33,540	2,222	28,180	141,015	13,671	136,792	10,639	3,622	36,420	18,509	35,155	8,351	5,234
Building not specialized.....	86,477	13,846	33,540	2,222	28,180	132,515	13,471	127,992	10,539	3,622	35,620	18,359	34,955	7,251	4,784
Residential building only.....	300					8,500	200	8,800	100		800	150	200	1,100	450
Highway.....	13,621					14,567									
Bridge and culvert.....	40,733					37,630					1,000	300			
Street paving.....															
Railroad.....						62,824			18,000					1,802	
Subcontractors.....	5,000			1,400		2,865	1,000		1,000	200		27,430	35,449		
Concreting.....	5,000			100		1,500			1,000	200		100	3,000		
Heating and plumbing.....						1,000									
Plumbing and heating combined.....						1,000									
Painting and decorating.....													27,330		
Plastering and lathing.....				1,000		165	1,000								
Roofing and sheet-metal work.....													32,449		
Roofing.....													32,449		
Marble and tiling.....				300		200									
<b>MEMPHIS</b> .....	148,711	24,665	70,473	23,110	14,649	411,559	2,372	175,189	16,659	1,149	24,746	202,051	177,676	18,870	13,866
Operative builders.....	30					9,000		5,000	800		700	1,100	2,500		
General contractors.....	148,681	24,665	52,136	3,170	6,649	342,419	2,150	170,189	14,298	1,149	23,101	6,018	15,760	2,690	1,222
Building.....	60,037	13,249	52,136	3,170	6,649	250,375	2,150	169,189	14,298	1,149	19,795	5,868	14,760	2,690	1,222
Building not specialized.....	59,307	13,069	48,093	30	6,000	225,082	1,550	137,321	13,958	974	16,538	3,834	11,260	90	722
Commercial building only.....	630		3,543	3,140	549	21,775		14,808		100	1,452			1,100	
Residential building only.....	100	180	500		100	12,518	600	17,060	340	75	1,805	2,034	3,500	1,500	500
Highway.....	52,907	1,000				75,286		1,000			3,306	150	1,000		
Bridge and culvert.....	31,297	4,200													
Street paving.....	4,440					3,280									
Sewer, gas, water, conduit.....		6,216				4,478									

See footnotes at end of table.

TABLE 11.—COST OF MATERIAL FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929—Con.

CLASSIFICATION OF ESTABLISHMENTS	Reinforcing steel	Cast iron, miscellaneous, excluding pipe	Metal doors, windows, and trim	Metal and wire lath and furring	Orna-mental metal work	Lumber, rough and finished	Laths, shingles, and shakes	Millwork	Compo-sition board	Water-proofing materials	Hard-ware, rough and finished	Paints, var-nishes, and glass	Roofing and sheet metal	Fin-ished floor-ing, n. e. s.	Screens, shades, awn-ings, etc.	MATERIALS									
																Heating and ven-tilating equip-ment	Plumbing and gas-fitting equip-ment	Electri-cal ap-pliances and supplies	Eleva-tors, dumb-waiters, etc.	Pipe: Drain, tile, vitrified, con-crete, etc.	Pipe: Cast iron, sheet and tube steel, etc.	Wire, cable, guards, and fencing	Bitu-minous paving materials	Wood piling and timber	Ma-chinery
<b>MEMPHIS—Continued.</b>																									
Subcontractors			\$18,337	\$19,940	\$8,000	\$60,140	\$222		\$1,561		\$945	\$194,933	\$159,416	\$15,980	\$12,644										
Carpentering and wood flooring			5,737			53,508						5,455		308	4,285										
Painting and decorating												27,438													
Glass and glazing												160,000													
Plastering and lathing			12,600	19,780								2,040													
Roofing and sheet-metal work						1,116	222		1,561		945		159,416												
Roofing						1,116	222		1,561		945		135,829												
Sheet-metal work													23,587												
Steel erection					8,000																				
Marble and tiling				180										557											
Flooring, n. e. s.						5,517								15,025	8,350										
<b>NASHVILLE</b>																									
	\$116,482	\$10,896	23,927	13,018	4,649	\$17,775	1,790	\$84,008	40,783	\$7,396	\$1,305	\$1,184	\$85,706	9,382	745										
General contractors	105,054	10,896	23,928	957	3,449	293,620		63,951	177	212	28,552	3,375	6,151	3,120	745										
Building	84,554	9,896	23,928	957	3,449	287,769		62,951	177	212	28,552	3,375	5,151	3,126	745										
Building not specialized	84,554	9,896	23,928	957	3,449	282,316		53,899	177	212	28,170	3,375	5,151	3,126	745										
Residential building only						5,443		9,052			382														
Highway	17,500					861																			
Bridge and culvert	3,000	1,000				5,000		1,000					1,000												
Subcontractors	11,408		39	12,059	1,200	24,155	1,790	57	40,806	7,184	2,753	27,809	379,555	6,206											
Carpentering and wood flooring						16,000						4,000													
Concreting	5,000					3,000																			
Heating and plumbing					1,200																				
Heating and piping					1,200																				
Masonry	100		39			48							65												
Painting and decorating													18,984												
Plastering and lathing				11,909																					
Roofing and sheet-metal work						1,500			5,355	7,184		4,432	306,869												
Roofing						1,500			5,355	7,184		4,432	171,693												
Sheet-metal work													21,000												
Roofing and sheet metal combined													114,176												
Marble and tiling				150							175		72,200												
Bridge and culvert	6,308					2,098					1,959	20													
Soundproofing						1,509		57	35,251		619	308	486	6,206											
<b>TENNESSEE</b>																									
	\$802,376	\$992,458	\$664,909	\$95,119	\$177,380	\$111,438	\$3,295	\$930,873	\$5,000	\$5,405	\$130,507	\$5,541	\$69,043	\$12,883	\$202,479										
General contractors	54,349	84,104	23,868	270	160,883	95,268	3,285	919,990	5,000		105,878	5,541	14,800	2,012	200,209										
Building	54,349	83,440	20,718	270	8,055	7,711	2,205	117,239			3,258		14,800		175,369										
Building not specialized	44,131	54,446	12,418	270	7,355	6,211	1,795	117,239			3,258		14,800		174,904										
Commercial building only	3,018														405										
Residential building only	7,200	29,000	8,300		700	1,500	500								22,092										
Highway		658	1,000		20,326	79,457	1,000	682,921			95,958	5,541		2,012	2,748										
Bridge and culvert			2,150					117,590	5,000		6,662														
Street paving					53,823																				
Sewer, gas, water, conduit					66,081																				
Railroad					3,598	8,100																			
Subcontractors	748,027	908,354	641,041	94,849	16,497	16,170		10,883	5,405		24,629		53,243	10,851	2,270										
Concreting					500	100		1,500			1,221				774										
Electrical			624,596																						
Elevator construction		29,975	3,147	94,849					5,405																
Heating and plumbing	631,921	878,379	13,298		10,800	15,320																			
Heating and piping	429,209	206,050			5,159	19,500																			
Plumbing	124,990	518,784	13,298		1,476																				
Plumbing and heating combined	77,722	144,402			4,165	1,820																			
Automatic sprinkler systems																									
Glass and glazing		9,143											50,000												
Roofing and sheet-metal work						2,500		9,383			23,408			10,851	1,496										
Roofing	76,079					2,500		9,383			23,408			10,851	1,050										
Sheet-metal work	17,517														440										
Roofing and sheet metal combined	33,088																								
Marble and tiling	25,474																								
Bridge and culvert	40,027				2,697	750																			
Flooring, n. e. s.													3,243												
<b>CHATTANOOGA</b>																									
	87,177	63,658	144,072	100	53,041	4,704		247,548			4,333	5,541			15,310										
General contractors	4,900	27,658	7,100	100	50,041	3,704		247,548				5,541			14,870										
Building	4,900	27,000	7,100	100	584	1,500																			
Building not specialized	2,500	2,000	1,100	100	84																				
Residential building only	2,400	25,000	6,000		500	1,500																			
Highway		658			12,243	2,204		175,484			5,541				14,870										
Street paving					2,214			72,064																	
Sewer, gas, water, conduit					35,000																				

See footnotes at end of table.

CONSTRUCTION—TENNESSEE

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TABLE 11.—COST OF MATERIAL FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929—Con.

CLASSIFICATION OF ESTABLISHMENTS	Heating and ventilating equipment	Plumbing and gas-fitting equipment	Electrical appliances and supplies	Elevators, dumb-waiters, etc.	Pipe: Drain, tile, vitrified, concrete, etc.	Pipe: Cast iron, sheet and tube steel, etc.	Wire, cable, guards, and fencing	Bituminous paving materials	Wood piling and timber	Machinery	Freight, hauling, or trucking to job	Chemicals, and chemical products	Metal products, n. e. s.	Textiles and calking materials	Miscellaneous
<b>CHATTANOOGA—Contd.</b>															
Subcontractors.....	\$92,277	\$30,000	\$136,972		\$3,000	\$1,000					\$4,333				\$440
Electrical.....			136,972												
Heating and plumbing.....	65,659	30,000			3,000	1,000									
Heating and piping.....	60,000	25,000			3,000	1,000									
Plumbing.....	6,659	11,000													
Roofing and sheet-metal work.....	25,588										4,333				440
Roofing.....											4,333				440
Sheet-metal work.....	25,588														
<b>KNOXVILLE</b> .....	137,775	150,792	48,767	\$170	10,592	63,921	\$1,626	\$347,147	\$5,000						5,110
General contractors.....	37,239	27,955	11,298	170	8,118	57,501	1,626	345,647	5,000						5,110
Building.....	37,239	27,955	9,148	170	1,020	444	1,626								5,110
Building not specialized.....	37,239	27,955	8,848	170	820	444	1,626								5,110
Residential building only.....			300		200										
Highway.....					3,500	48,957		345,647							
Bridge and culvert.....			2,150						5,000						
Railroad.....					3,598	3,100									
Subcontractors.....	120,536	122,747	37,469		2,474	6,420		1,500							
Concreting.....					500	100		1,500							
Electrical.....			37,469												
Heating and plumbing.....	120,536	122,747			1,074	6,320									
Heating and piping.....	82,000	46,979			1,559	4,500									
Plumbing.....		35,809													
Plumbing and heating combined.....	38,536	39,959			415	1,820									
<b>MEMPHIS</b> .....	310,013	358,692	337,020	61,238	88,650	4,198	1,500	44,677			4,438		\$68,043	\$10,851	10,499
General contractors.....	4,800	4,000	3,000		81,766	4,198	1,500	35,294					14,800		9,443
Building.....	4,800	4,000	2,000		1,884	4,108	500						14,800		9,443
Building not specialized.....					1,884	4,108							14,800		9,038
Residential building only.....	4,800	4,000	2,000				500								405
Highway.....			1,000		4,692		1,000	400							
Street paving.....					44,109			34,894							
Sewer, gas, water, conduit.....					31,081										
Subcontractors.....	305,213	354,692	334,020	61,238	6,884			9,383			4,438		53,243	10,851	1,056
Electrical.....			334,020												
Elevator construction.....				61,238											
Heating and plumbing.....	280,196	354,692			4,384										
Heating and piping.....	264,069	106,571													
Plumbing.....	6,040	225,178			634										
Plumbing and heating combined.....	10,147	13,800			3,750										
Automatic sprinkler system.....		9,143											50,000		
Glass and glazing.....															
Roofing and sheet-metal work.....	25,017				2,500			9,383			4,438			10,851	1,056
Roofing.....	17,517							9,383			4,438			10,851	1,056
Sheet-metal work.....	7,500				2,500								3,243		
Flooring, n. e. s.....															
<b>NASHVILLE</b> .....	156,277	269,540	79,650	33,611	14,599	35,615	169	203,842			17,895			2,012	173,387
General contractors.....	4,392	22,961	1,070		11,060	29,865	169	203,842			3,258			2,012	167,878
Building.....	4,392	22,961	1,070		4,567	1,669	169	117,239			3,258				160,656
Building not specialized.....	4,392	22,961	1,070		4,567	1,669	169	117,239			3,258				160,656
Highway.....					6,493	28,296		73,971						2,012	7,222
Bridge and culvert.....								2,000							
Street paving.....								10,632							
Subcontractors.....	151,885	209,579	78,580	33,611	3,539	5,750					14,637				5,509
Electrical.....			62,135												
Elevator construction.....		29,975		33,611											5,405
Heating and plumbing.....	86,384	236,604	13,298		842	5,000									78
Heating and piping.....	11,200	16,000				5,000									78
Plumbing.....	75,184	174,224	13,298		842										
Plumbing and heating combined.....		40,380													
Roofing and sheet metal work.....	26,474										14,637				26
Roofing.....											14,637				26
Roofing and sheet-metal combined.....	26,474														
Marble and tiling.....	40,027					750									
Bridge and culvert.....					2,697										

1 Certain establishments did not give a distribution of the cost of their materials by separate items. The total cost of materials reported by such establishments is, however, included in totals in this column which carry a footnote to that effect.

2 See footnote 3 of Table 9 on p. 1143.

3 Includes waterworks, \$182,853; and levee, \$77,001.

4 Includes grading, \$1,109.

5 Includes bridge and culvert, \$12,000.

6 Includes masonry, \$44,359; and grading, \$1,109.

7 Includes plumbing and heating combined, \$14,233.

8 Includes operative builders, \$43,363.

9 Includes sewer, gas, water, conduit, \$44,200.

10 Includes commercial building only, \$35,000.

11 Includes sheet-metal work, \$20,000.

CONSTRUCTION—TENNESSEE

TABLE 12.—NUMBER OF, AND VOLUME OF BUSINESS REPORTED BY ESTABLISHMENTS DOING A CONSTRUCTION BUSINESS OF LESS THAN \$25,000 IN 1929, PERCENTAGE OF TOTAL NUMBER OF KNOWN ESTABLISHMENTS, AND AVERAGE VOLUME PER ESTABLISHMENT

TYPES OF WORK	TENNESSEE 1930 population, 2,616,556								CHATTANOOGA 1930 population, 119,798		
	Known contracting establishments				Volume of business reported				Total number active in 1929	Volume of business	
	Total number	Inactive in 1929	Active in 1929		Number of reporting establishments	Per cent of active	Amount	Average per establishment		Number of reporting establishments	Amount
			Number	Per cent							
Total establishments canvassed (less than \$25,000).....	888	1 21	867					110			
Total establishments, type of work unknown.....	6		6					1			
Total general and subcontractors classified.....	882	21	861	100.0				100			
Total general contractors classified.....	242	13	229	26.6	55	24.0	\$612,993	\$11,145	17	3	\$27,209
Building.....	204	10	194	22.5	52	26.8	569,158	10,945	15	3	27,200
Highway.....	31	2	29	3.4	2	6.9	28,835	14,417	2		
Street paving.....	2		2	.2	1	50.0	15,000	15,000			
Sewer, gas, water, conduit.....	1		1	.1							
Dredging, river and harbor.....	3	1	2	.2							
Levees.....	1		1	.1							
Total subcontractors classified.....	640	8	632	73.4	113	17.9	984,274	8,710	92	4	45,108
Carpentering.....	42		42	4.9	12	28.6	73,623	6,135	4		
Concreting.....	16		16	1.9	6	37.5	50,972	8,495	2		
Electrical.....	77	1	76	8.8	11	14.5	99,074	9,007	17	1	11,041
Elevator.....	3		3	.3							
Heating and ventilating.....	34	1	33	3.8	3	9.1	53,507	17,836	2		
Masonry.....	22		22	2.6	2	9.1	6,250	3,125	10		
Painting and decorating.....	60	1	59	6.9	8	13.6	87,141	10,893	12		
Glass and glazing.....	5		5	.6	1	20.0	24,000	24,000	2	1	24,000
Plastering.....	24		24	2.8	6	25.0	63,091	10,515	7		
Plumbing and heating.....	216	5	211	24.5	50	23.7	421,953	8,439	19	1	5,537
Sheet metal and roofing.....	74		74	8.6	8	10.8	46,294	5,787	14	1	3,600
Stone work.....	8		8	.9							
Marble and tiling.....	10		10	1.2					1		
Wrecking.....	3		3	.3	1	33.3	12,000	12,000			
Excavating.....	6		6	.7	1	16.7	5,000	5,000			
Ornamental iron.....	12		12	1.4	1	8.3	7,169	7,169	2		
Miscellaneous.....	28		28	3.3	3	10.7	34,200	11,400			

TYPES OF WORK	KNOXVILLE 1930 population, 105,802			MEMPHIS 1930 population, 253,143			NASHVILLE 1930 population, 153,866			REMAINDER OF STATE 1930 population, 1,983,947		
	Total number active in 1929	Volume of business		Total number active in 1929	Volume of business		Total number active in 1929	Volume of business		Total number active in 1929	Volume of business	
		Number of reporting establishments	Amount		Number of reporting establishments	Amount		Number of reporting establishments	Amount		Number of reporting establishments	Amount
	Total establishments canvassed (less than \$25,000).....	69			228			143			317	
Total establishments, type of work unknown.....	2			2						1		
Total general and subcontractors classified.....	67			226			143			316		
Total general contractors classified.....	21	2	\$45,000	31	9	\$130,543	24	3	\$45,031	136	38	\$365,210
Building.....	18	2	45,000	24	7	100,012	19	3	45,031	120	37	351,906
Highway.....	5			4	1	15,531	5			13	1	13,304
Street paving.....				1	1	15,000				1		
Sewer, gas, water, conduit.....										1		
Dredging, river and harbor.....				1						1		
Levees.....				1						1		
Total subcontractors classified.....	46	2	29,000	195	27	287,944	119	26	254,134	180	54	368,088
Carpentering.....	2			1	1	5,000	10	3	29,048	25	8	39,575
Concreting.....	2			2	2	25,972	4	2	14,000	8	2	11,000
Electrical.....	7	1	20,000	15	1	10,000	13	2	17,633	24	6	30,500
Elevator.....	1			1			1					
Heating and ventilating.....	4			25	3	53,507				2		
Masonry.....	2			2	1	5,000	2			8	1	1,250
Painting and decorating.....	5			15	2	37,600	9	2	29,541	18	4	20,000
Glass and glazing.....	2			1						9	2	21,000
Plastering.....	6			6	3	34,091	2	1	8,000	9	25	188,042
Plumbing and heating.....	15	1	9,000	78	11	92,840	41	12	126,504	58	25	188,042
Sheet metal and roofing.....	6			36	3	23,934	11	2	10,239	7	2	8,521
Stone work.....				4			4					
Marble and tiling.....	2			3			1			3		
Wrecking.....				1			2	1	12,000			
Excavating.....										6	1	5,000
Ornamental iron.....	2			4			4	1	7,169			
Miscellaneous.....				1			15			12	3	34,200

1 Of these 21 inactive contractors, 1 was in Knoxville, 3 were in Memphis, 2 in Nashville, and 15 in the remainder of the State exclusive of Chattanooga.

CONSTRUCTION—TENNESSEE

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TABLE 13.—ESTABLISHMENTS (WHOSE BUSINESS WAS LESS THAN \$25,000 IN 1929) WHICH REPORTED THEIR VOLUME OF CONSTRUCTION WORK, CLASSIFIED BY RANGE OF VOLUME OF BUSINESS

CLASSIFICATION	Total	Less than \$2,500	\$2,500 to \$4,999	\$5,000 to \$7,499	\$7,500 to \$9,999	\$10,000 to \$12,499	\$12,500 to \$14,999	\$15,000 to \$17,499	\$17,500 to \$19,999	\$20,000 to \$22,499	\$22,500 to \$24,999
<b>TENNESSEE</b>											
Total general and subcontractors.....	168	30	26	20	24	13	9	17	10	11	8
General contractors.....	55	0	10	3	9	3	3	6	4	7	4
Subcontractors.....	113	24	16	17	15	10	6	11	6	4	4

# TEXAS

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# TEXAS



CONSTRUCTION—TEXAS

TABLE 1.—VALUE OF CONSTRUCTION BUSINESS DURING 1929 AND PRINCIPAL ITEMS OF EXPENDITURE

[Value expressed in thousands]

AREA, CLASSIFICATION OF ESTABLISHMENTS, AND SIZE OF BUSINESS GROUPS	Number of establishments	VALUE OF CONSTRUCTION BUSINESS			PRINCIPAL EXPENDITURES		
		Total	Under general contract or directly for owner	Under sub-contract	Sub-contract work let	Wages paid	Cost of materials
<b>TEXAS</b> .....	1,001	\$199,442	\$166,289	\$33,153	\$34,960	\$45,373	\$77,250
<i>Counties and principal cities</i>							
<b>Counties:</b>							
Angelina.....	4	868	823	45	301	83	252
Bell.....	5	925	895	30	188	183	389
Bexar.....	126	22,748	17,425	5,324	4,610	4,898	8,509
Bowie.....	3	361	361	-----	86	97	135
Brazos.....	3	471	471	-----	79	98	212
Caldwell.....	3	147	117	30	5	26	95
Cameron.....	13	1,879	1,737	142	76	508	735
Comal.....	3	271	204	67	73	53	101
Dallas.....	135	67,124	56,042	11,082	9,578	15,884	25,790
El Paso.....	41	8,984	7,567	1,417	1,650	2,235	3,552
Galveston.....	45	3,558	2,475	1,083	589	839	1,245
Gray.....	4	644	644	-----	218	111	252
Grayson.....	12	2,753	2,420	333	228	040	1,371
Guadalupe.....	3	341	341	-----	50	83	145
Hale.....	5	539	469	70	53	108	298
Harris.....	159	32,659	25,911	6,748	9,200	7,147	10,707
Harrison.....	3	623	590	33	33	165	258
Hidalgo.....	12	2,252	2,176	76	384	404	736
Jefferson.....	51	6,014	4,557	1,457	1,062	1,317	2,375
Lubbock.....	22	2,313	2,096	217	410	506	1,020
McLennan.....	16	2,219	1,480	733	362	701	823
Nacogdoches.....	4	325	222	103	72	64	78
Navarro.....	5	4,790	4,790	-----	478	598	2,665
Nolan.....	5	601	574	27	16	70	359
Nueces.....	11	1,549	1,450	99	813	320	695
Potter.....	27	4,710	4,348	362	363	1,104	2,220
Smith.....	7	581	550	31	158	105	237
Tarrant.....	115	12,133	10,387	1,796	2,303	2,862	4,760
Taylor.....	20	2,272	1,982	290	288	477	1,202
Tom Green.....	20	1,884	1,496	388	254	444	751
Travis.....	29	4,859	4,262	597	518	1,219	1,930
Uvalde.....	3	107	71	36	30	65	80
Webb.....	5	1,074	1,025	49	60	200	491
Wichita.....	9	1,033	1,000	33	233	214	385
Other counties <sup>1</sup> .....	74	5,730	5,322	408	626	1,520	2,404
<b>Principal cities<sup>2</sup></b>							
Dallas.....	135	67,124	56,042	11,082	9,578	15,884	25,790
El Paso.....	41	8,984	7,567	1,417	1,650	2,235	3,552
Fort Worth.....	115	12,133	10,387	1,796	2,303	2,862	4,760
Houston.....	169	32,659	25,911	6,748	9,200	7,147	10,707
San Antonio.....	126	22,748	17,425	5,324	4,610	4,898	8,509
<b>Classification of establishments</b>							
<b>Operative builders</b> .....	12	1,038	1,038	-----	361	170	272
<b>General contractors</b> .....	580	152,576	150,940	1,637	34,071	33,968	52,528
Building.....	410	78,380	77,962	418	27,430	15,448	25,816
Building not specialized.....	298	68,101	67,683	418	22,882	13,787	22,592
Commercial building only.....	24	4,816	4,816	-----	3,282	635	790
Residential building only.....	98	5,463	5,463	-----	1,272	1,227	2,434
Highway.....	64	23,703	23,217	486	2,474	4,539	10,691
Bridge and culvert.....	15	4,090	3,971	119	147	1,161	1,842
Street paving.....	33	11,651	11,320	331	573	2,784	4,385
Sewer, gas, water, conduit.....	9	3,349	3,267	82	295	754	1,476
Dam and reservoir.....	5	4,218	4,206	12	610	1,137	1,246
Waterworks.....	9	2,817	2,817	-----	92	540	1,888
Dredging, river, harbor, etc.....	6	1,250	1,213	37	16	333	7
Railroad.....	7	3,695	3,584	111	483	1,371	100
Central station, light and power plant.....	3	5,012	5,012	-----	260	1,054	2,668
Oil and natural-gas pipe line.....	6	13,592	13,592	-----	1,567	4,449	2,890
Other classes <sup>3</sup> .....	8	819	775	44	118	398	19
<b>Subcontractors</b> .....	400	45,827	14,312	31,516	528	11,235	24,450
Concreting.....	21	1,115	110	1,005	-----	424	454
Electrical.....	65	5,675	2,047	3,628	-----	1,425	2,649
Elevator construction.....	6	3,841	746	3,095	-----	188	429
Heating and plumbing.....	144	12,561	3,327	9,235	-----	135	2,903
Heating and piping <sup>4</sup> .....	11	1,676	193	1,483	-----	360	960
Plumbing.....	112	8,098	1,779	6,319	-----	135	1,936
Plumbing and heating combined.....	18	2,490	1,355	1,144	-----	565	1,391
Automatic sprinkler systems.....	3	280	-----	280	-----	42	195
Masonry.....	7	432	-----	432	-----	2	207
Painting and decorating <sup>5</sup> .....	25	1,251	162	1,090	-----	4	557
Plastering and lathing.....	27	3,093	44	3,049	-----	140	1,536
Roofing and sheet-metal work.....	50	4,213	597	3,615	-----	23	895
Roofing.....	34	3,116	553	2,563	-----	23	614
Sheet-metal work.....	13	741	18	723	-----	-----	191
Roofing and sheet metal combined.....	3	355	20	329	-----	-----	89

See footnotes at end of table.

TABLE 1.—VALUE OF CONSTRUCTION BUSINESS DURING 1929 AND PRINCIPAL ITEMS OF EXPENDITURE—Continued

[Value express in thousands]

AREA, CLASSIFICATION OF ESTABLISHMENTS, AND SIZE OF BUSINESS GROUPS	Number of establishments	VALUE OF CONSTRUCTION BUSINESS			PRINCIPAL EXPENDITURES			AREA, CLASSIFICATION OF ESTABLISHMENTS, AND SIZE OF BUSINESS GROUPS	Number of establishments	VALUE OF CONSTRUCTION BUSINESS			PRINCIPAL EXPENDITURES		
		Total	Under general contract or directly for owner	Under sub-contract	Sub-contract work let	Wages paid	Cost of materials			Total	Under general contract or directly for owner	Under sub-contract	Sub-contract work let	Wages paid	Cost of materials
<b>DALLAS—Continued.</b>							<b>FORT WORTH—Con.</b>								
<i>Size of business groups—Continued</i>							<i>Size of business groups—Continued</i>								
Subcontractors.....	70	\$18,008	\$8,897	\$10,208	\$212	\$3,424	\$11,265	General contractors—Contd.							
\$25,000 to \$49,999.....	18	875	138	537	44	200	279	\$50,000 to \$99,999.....	10	\$671	\$667	\$4	\$184	\$157	\$244
\$50,000 to \$99,999.....	12	894	213	681	-----	242	418	\$100,000 to \$199,999.....	7	1,076	986	90	274	230	800
\$100,000 to \$199,999.....	21	2,873	644	2,329	-----	765	1,431	\$200,000 to \$499,999.....	7	2,178	2,176	-----	608	535	741
\$200,000 to \$499,999.....	15	4,914	1,405	3,449	137	1,141	2,495	\$500,000 to \$999,999.....	3	1,643	1,043	-----	431	327	503
\$500,000 to \$999,999.....	1	528	-----	528	30	73	348	\$1,000,000 and over.....	2	2,477	2,477	-----	592	561	940
\$1,000,000 and over.....	3	8,721	6,039	2,682	1	1,003	6,293	Building contractors.....	74	6,551	6,539	12	1,320	1,477	2,338
								\$25,000 to \$49,999.....	53	1,744	1,739	8	183	457	810
								\$50,000 to \$99,999.....	10	671	667	4	184	157	244
								\$100,000 to \$199,999.....	4	650	650	-----	128	137	221
								\$200,000 to \$499,999.....	4	1,165	1,165	-----	471	204	323
								\$500,000 to \$999,999.....	2	1,131	1,131	-----	425	171	305
								\$1,000,000 and over.....	1	1,190	1,190	-----	420	290	430
<b>EL PASO.....</b>	<b>41</b>	<b>8,984</b>	<b>7,587</b>	<b>1,417</b>	<b>1,650</b>	<b>2,235</b>	<b>3,559</b>	Subcontractors.....	31	2,329	634	1,095	20	580	1,185
<i>Classification of establishments</i>								\$25,000 to \$49,999.....	20	660	76	584	-----	200	259
General contractors.....	20	7,268	7,268	-----	1,649	1,760	2,596	\$50,000 to \$99,999.....	6	393	131	262	-----	109	200
Building.....	16	6,082	6,082	-----	1,500	1,437	2,043	\$100,000 to \$199,999.....	2	202	-----	202	-----	79	75
Highway and grading.....	4	1,186	1,186	-----	59	323	553	\$200,000 to \$499,999.....	2	572	322	250	-----	118	302
Subcontractors.....	21	1,715	298	1,417	1	475	956	\$500,000 to \$999,999.....	1	500	104	396	20	74	350
Electrical.....	3	221	38	183	-----	58	131	\$1,000,000 and over.....							
Heating and plumbing.....	9	737	211	526	1	176	435								
Roofing and sheet-metal work.....	5	492	49	443	-----	108	292								
Other classes <sup>11</sup> .....	4	265	-----	265	-----	132	98								
<i>Size of business groups</i>								<b>HOUSTON.....</b>	<b>159</b>	<b>32,659</b>	<b>25,911</b>	<b>6,748</b>	<b>9,266</b>	<b>7,147</b>	<b>10,707</b>
General contractors.....	20	7,268	7,268	-----	1,649	1,760	2,596	<i>Classification of establishments</i>							
\$25,000 to \$49,999.....	3	94	94	-----	30	23	43	Operative builders.....	4	538	538	-----	243	99	61
\$50,000 to \$99,999.....	7	532	532	-----	103	136	189	General contractors.....	76	24,102	24,010	80	8,337	4,618	6,077
\$100,000 to \$199,999.....	3	381	381	-----	94	69	178	Building.....	52	18,450	18,419	31	8,404	3,211	4,975
\$200,000 to \$499,999.....	1	356	356	-----	107	98	143	Building not specialized.....	46	17,640	17,609	31	8,355	3,032	4,515
\$500,000 to \$999,999.....	4	2,508	2,508	-----	445	674	1,080	Residential building only.....	6	810	810	-----	49	179	459
\$1,000,000 and over.....	2	3,399	3,399	-----	870	760	962	Highway.....	7	2,106	2,106	-----	244	403	801
Building contractors.....	16	6,082	6,082	-----	1,590	1,437	2,043	Street paving.....	8	1,434	1,410	24	70	322	540
\$25,000 to \$49,999.....	3	94	94	-----	30	23	43	Railroad.....	3	413	413	-----	105	111	4
\$50,000 to \$99,999.....	6	414	414	-----	62	101	185	Other classes <sup>11</sup> .....	6	1,700	1,690	31	14	571	558
\$100,000 to \$199,999.....	3	381	381	-----	94	69	178	Subcontractors.....	79	8,019	1,357	6,662	186	2,430	3,069
\$200,000 to \$499,999.....	1	356	356	-----	107	98	143	Concreting <sup>14</sup> .....	7	482	72	410	2	185	143
\$500,000 to \$999,999.....	4	2,508	2,508	-----	445	674	1,080	Electrical.....	12	1,322	440	876	-----	366	620
\$1,000,000 and over.....	2	3,399	3,399	-----	870	760	962	Heating and plumbing.....	25	2,670	452	2,218	68	592	1,616
Building contractors.....	16	6,082	6,082	-----	1,590	1,437	2,043	Plumbing.....	21	1,765	279	1,486	68	383	995
\$25,000 to \$49,999.....	3	94	94	-----	30	23	43	Plumbing and heating combined <sup>15</sup> .....	4	905	173	732	-----	209	521
\$50,000 to \$99,999.....	6	414	414	-----	62	101	185	Painting and decorating <sup>16</sup> .....	5	357	43	315	-----	171	98
\$100,000 to \$199,999.....	3	381	381	-----	94	69	178	Plastering and lathing.....	7	1,034	40	994	98	511	308
\$200,000 to \$499,999.....	1	356	356	-----	107	98	143	Roofing and sheet-metal work.....	10	827	213	614	20	170	437
\$500,000 to \$999,999.....	2	1,438	1,438	-----	427	386	531	Marble and tiling.....	5	767	-----	767	-----	243	395
\$1,000,000 and over.....	2	3,399	3,399	-----	870	760	962	Metal work, n. e. s. <sup>20</sup> .....	4	347	46	301	-----	105	147
General contractors.....	21	1,715	298	1,417	1	475	956	Other classes <sup>21</sup> .....	4	212	45	167	-----	86	15
\$25,000 to \$49,999.....	7	293	35	258	-----	85	154	<i>Size of business groups</i>							
\$50,000 to \$99,999.....	7	484	101	383	-----	151	266	General contractors.....	80	24,640	24,554	86	9,080	4,717	7,038
\$100,000 to \$199,999.....	6	716	161	555	1	195	406	\$25,000 to \$49,999.....	12	479	471	8	64	85	195
\$200,000 to \$499,999.....	1	242	-----	242	-----	42	140	\$50,000 to \$99,999.....	18	1,307	1,271	36	240	310	444
\$500,000 to \$999,999.....	7	484	101	383	-----	151	266	\$100,000 to \$199,999.....	17	2,125	2,106	19	784	363	455
\$1,000,000 and over.....	6	716	161	555	1	195	406	\$200,000 to \$499,999.....	21	5,909	5,886	23	1,197	1,434	2,145
Subcontractors.....	21	1,715	298	1,417	1	475	956	\$500,000 to \$999,999.....	8	5,616	5,616	-----	713	1,438	2,411
Concreting <sup>14</sup> .....	4	163	163	-----	59	72	74	\$1,000,000 and over.....	4	9,205	9,205	-----	6,082	1,088	1,387
Electrical.....	6	568	366	202	-----	109	204	Building contractors.....	56	18,987	18,956	31	8,647	3,310	5,035
Heating and plumbing.....	10	444	125	319	-----	116	211	\$25,000 to \$49,999.....	10	388	380	8	60	72	170
Painting and decorating.....	3	166	28	138	-----	70	48	\$50,000 to \$99,999.....	11	750	750	-----	238	139	260
Steel erection <sup>15</sup> .....	3	595	114	480	20	104	382	\$100,000 to \$199,999.....	11	1,325	1,325	-----	546	211	382
Other classes <sup>15</sup> .....	5	393	-----	393	-----	114	179	\$200,000 to \$499,999.....	15	3,995	3,972	23	1,092	928	1,518
								\$500,000 to \$999,999.....	5	3,325	3,325	-----	629	872	1,318
								\$1,000,000 and over.....	4	9,205	9,205	-----	6,082	1,088	1,387
<i>Size of business groups</i>								Subcontractors.....	79	8,019	1,357	6,662	186	2,430	3,069
General contractors.....	84	9,854	9,753	102	2,283	2,282	3,575	\$25,000 to \$49,999.....	23	812	275	537	6	204	342
\$25,000 to \$49,999.....	55	1,311	1,303	8	194	470	847	\$50,000 to \$99,999.....	30	2,070	432	1,638	18	659	874
								\$100,000 to \$199,999.....	16	2,115	216	1,899	52	744	930
								\$200,000 to \$499,999.....	10	3,022	434	2,588	110	825	1,522
								\$500,000 to \$999,999.....							
								\$1,000,000 and over.....							

See footnotes at end of table.

TABLE 1.—VALUE OF CONSTRUCTION BUSINESS DURING 1929 AND PRINCIPAL ITEMS OF EXPENDITURE—Continued

[Value expressed in thousands]

AREA, CLASSIFICATION OF ESTABLISHMENTS, AND SIZE OF BUSINESS GROUPS	Number of establishments	VALUE OF CONSTRUCTION BUSINESS			PRINCIPAL EXPENDITURES			AREA, CLASSIFICATION OF ESTABLISHMENTS, AND SIZE OF BUSINESS GROUPS	Number of establishments	VALUE OF CONSTRUCTION BUSINESS			PRINCIPAL EXPENDITURES		
		Total	Under general contract or directly for owner	Under sub-contract	Sub-contract work let	Wages paid	Cost of materials			Total	Under general contract or directly for owner	Under sub-contract	Sub-contract work let	Wages paid	Cost of materials
<b>SAN ANTONIO</b> .....	126	\$22, 748	\$17, 425	\$5, 324	\$4, 610	\$4, 898	\$8, 509	<b>SAN ANTONIO—Con.</b>							
<i>Classification of establishments</i>								<i>Size of business groups</i>							
General contractors <sup>7</sup> .....	59	16, 078	16, 320	358	4, 556	3, 124	5, 547	General contractors <sup>7</sup> .....	59	\$16, 078	\$16, 320	\$358	\$4, 556	\$3, 124	\$5, 547
Building.....	45	10, 923	10, 610	307	4, 292	1, 046	3, 427	\$25, 000 to \$49, 999.....	8	282	282		56	64	122
Building not specialized <sup>7</sup> .....	39	10, 538	10, 228	307	4, 106	1, 570	3, 257	\$50, 000 to \$99, 999.....	10	628	628		188	147	193
Residential building only.....	6	388	388		96	71	170	\$100, 000 to \$199, 999.....	19	2, 872	2, 821	51	758	626	938
Street paving and highway.....	7	2, 931	2, 880	51	34	898	1, 030	\$200, 000 to \$499, 999.....	14	4, 144	4, 144		941	936	1, 470
Other classes <sup>22</sup> .....	7	2, 824	2, 824		229	640	1, 091	\$500, 000 to \$999, 999.....	6	4, 409	4, 102	307	1, 002	752	1, 556
Subcontractors.....	67	6, 070	1, 105	4, 966	55	1, 774	2, 963	\$1, 000, 000 and over.....	2	4, 349	4, 349		1, 610	900	1, 200
Concrete and stone work.....	4	186	2	183		78	69	Building contractors <sup>7</sup> .....	45	10, 923	10, 610	307	4, 292	1, 646	3, 427
Electrical.....	8	1, 023	360	657		215	572	\$25, 000 to \$49, 999.....	8	282	282		56	64	122
Heating and plumbing.....	23	2, 122	427	1, 696	8	522	1, 160	\$50, 000 to \$99, 999.....	9	565	565		188	125	168
Painting and decorating <sup>8</sup> .....	4	225		225		80	94	\$100, 000 to \$199, 999.....	15	2, 252	2, 252		763	384	893
Plastering and lathing.....	10	972		967	44	431	330	\$200, 000 to \$499, 999.....	9	2, 260	2, 260		928	432	623
Roofing and sheet-metal work.....	7	589	88	501	3	111	349	\$500, 000 to \$999, 999.....	3	2, 241	1, 934	307	757	257	346
Roofing.....	3	377	79	298	3	56	238	\$1, 000, 000 and over.....	1	3, 323	3, 323		1, 610	355	366
Sheet-metal work.....	4	212	9	203		55	111	Subcontractors.....	67	6, 070	1, 105	4, 966	55	1, 774	2, 963
Marble and tiling.....	4	423		423		120	202	\$25, 000 to \$49, 999.....	28	1, 042	261	781	12	284	508
Ornamental iron <sup>23</sup> .....	3	139	50	89		26	88	\$50, 000 to \$99, 999.....	17	1, 201	152	1, 049	13	360	513
Other classes <sup>24</sup> .....	4	390	167	223		190	109	\$100, 000 to \$199, 999.....	19	2, 610	471	2, 139	28	834	1, 168
								\$200, 000 to \$499, 999.....	2	716	71	645	2	196	442
								\$500, 000 to \$999, 999.....	1	500	150	350		71	330
								\$1, 000, 000 and over.....	1						

<sup>1</sup> Includes Anderson, Burleson, Cherokee, Childress, Clay, Coleman, Colorado, Cooke, Crosby, Denton, DeWitt, Dickens, Dimmit, Donley, Eastland, Ellis, Floyd, Freestone, Gillespie, Grimes, Hall, Hamphill, Hill, Howard, Hunt, Hutchinson, Jim Wells, Johnson, Jones, Karnes, Kendall, Kerr, Kleberg, Lamar, Lee, Leon, Liberty, McCulloch, Matagorda, Mitchell, Montague, Orange, Palo Pinto, Presidio, Reeves, Runnels, San Augustine, San Patricio, Shelby, Stephens, Titus, Trinity, Val Verde, Victoria, Washington, Wharton, Williamson, Wise, and Wood, for which data can not be shown separately without revealing individual operations. From areas other than those listed no reports were received from establishments which handled as much as \$25,000.

<sup>2</sup> Figures are included in respective county totals.  
<sup>3</sup> Includes foundation and grading.  
<sup>4</sup> Includes pipe covering; and automatic temperature control.  
<sup>5</sup> Includes glass and glazing; and flooring, n. e. s.  
<sup>6</sup> Includes carpentering and wood flooring; street paving; waterworks; soundproofing; foundation; rental of equipment, trucking, etc.  
<sup>7</sup> Includes operative builders.  
<sup>8</sup> Includes central station, light, and power plant; and sewer, gas, water, conduit.  
<sup>9</sup> Includes heating and piping; and automatic temperature control.  
<sup>10</sup> Includes steel erection.  
<sup>11</sup> Includes carpentering and woodflooring; soundproofing; and rental of equipment, trucking, etc.  
<sup>12</sup> Includes concreting; painting and decorating; plastering and lathing; and marble and tiling.  
<sup>13</sup> Includes bridge and culvert; sewer, gas, water, conduit; and central station, light and power plant.  
<sup>14</sup> Includes masonry and stonework.  
<sup>15</sup> Includes ornamental iron; and metal work, n. e. s.  
<sup>16</sup> Includes roofing; sheet-metal work; marble and tiling; and excavating.  
<sup>17</sup> Includes grading; sewer, gas, water, conduit; dam and reservoir; dredging, river, harbor, etc.; and oil and natural-gas pipe line.  
<sup>18</sup> Includes heating and piping and pipe covering.  
<sup>19</sup> Includes flooring, n. e. s.  
<sup>20</sup> Includes elevator construction; steel erection; and ornamental iron.  
<sup>21</sup> Includes excavating; street paving; and glass and glazing.  
<sup>22</sup> Includes bridge and culvert; sewer, gas, water, conduit; dam and reservoir; waterworks; and oil and natural-gas pipe line.  
<sup>23</sup> Includes metal work, n. e. s.  
<sup>24</sup> Includes masonry; excavating; waterworks; and foundation.

TABLE 2.—CONSTRUCTION BUSINESS OF REPORTING ESTABLISHMENTS DURING 1929, BY CLASS OF OWNERSHIP AND BY TYPE OF WORK

CLASS OF OWNERSHIP AND TYPE OF CONSTRUCTION WORK	CONSTRUCTION BUSINESS REPORTED BY—						CLASS OF OWNERSHIP AND TYPE OF CONSTRUCTION WORK	CONSTRUCTION BUSINESS REPORTED BY—					
	All classes of establishments		General contractors <sup>1</sup>		Subcontractors			All classes of establishments		General contractors <sup>1</sup>		Subcontractors	
	Number reporting	Value	Number reporting	Value	Number reporting	Value		Number reporting	Value	Number reporting	Value	Number reporting	Value
<b>TEXAS</b>						<b>TEXAS—Continued</b>							
All construction business.....	1,001	169,442,115	592	153,614,770	409	45,827,345	<b>All business under subcontract—Continued.</b>						
Distribution not reported.....	87	10,034,044	21	4,012,490	66	6,021,554	Distributed by class—Contd.		<i>Dollars</i>		<i>Dollars</i>		<i>Dollars</i>
Distributed by class of ownership.....							Painting and decorating.....	20	940,261			20	940,261
Private.....	914	189,408,071	571	149,602,280	343	39,805,791	Glass and glazing.....	4	145,011			4	145,011
Quasi public or community.....	793	117,436,170	461	83,485,289	332	34,000,881	Plastering and lathing.....	20	3,001,794	2	(?)	27	(?)
Public.....	201	5,583,889	95	6,174,701	106	2,409,188	Roofting and sheet-metal work.....	3	3,713,630		(?)		(?)
Distribution not reported.....	395	63,338,012	261	59,942,290	134	3,395,722	Roofting.....	40	2,905,622	1	(?)	39	(?)
Distributed by class of public ownership.....	46	4,377,539	29	3,849,509	17	527,940	Sheet-metal work.....	36	1,123,869			36	1,123,869
Federal.....	349	58,900,473	232	50,092,691	117	2,867,782	Roofting and sheet metal combined.....	4	286,139			4	286,139
State.....	50	2,786,288	22	2,385,019	28	400,269	Steel erection.....	6	941,158	1	(?)	6	(?)
County or township.....	128	21,175,376	100	20,680,747	28	494,623	Stonework.....	6	442,209			6	442,209
Municipal.....	122	13,208,107	68	12,593,087	64	610,020	Marble and tiling.....	28	2,782,736			28	2,782,736
All business under general contract or directly for owners.....	715	160,289,466	588	151,977,866	127	14,311,600	Wrecking.....	3	27,200	2	06,022	3	478,515
Distribution not reported.....	5	1,376,217	3	1,049,412	2	326,805	Excavating.....	10	547,837	7		9	283,865
Distributed by class.....	710	164,913,249	585	150,928,454	125	13,984,795	Ornamental iron.....	6	283,866			6	283,866
Building.....	547	80,652,700	436	78,534,023	111	8,118,677	Highway.....	3	393,120		303,120		303,120
Distribution not reported.....	38	3,911,588	17	2,845,480	21	1,066,098	Bridge and culvert.....	5	197,987	5	197,987		197,987
Distributed by class.....	509	82,741,112	419	75,688,533	90	7,052,579	Grading.....	4	240,257	2		2	
Commercial.....	314	35,101,895	259	31,964,269	55	3,137,626	Street paving.....	2	104,296	1	20,197	2	318,356
Educational.....	140	8,007,493	104	7,549,823	36	457,070	Sewer, gas, water, conduit.....	1		1		1	
Hotel.....	60	0,129,653	36	5,905,313	33	824,340	Foundation.....	2		2		2	
Hospital and institutional.....	56	2,067,600	34	2,473,855	22	193,745	Metal work, n. e. s.....	6	564,181			6	564,181
Manufacturing.....	55	4,481,310	37	4,200,074	18	231,236	Dam and reservoir.....	1		1		1	
Military and naval.....	72	1,837,446	34	1,763,921	18	73,525	Central station, light and power plant.....	1	267,787	1	267,787		267,787
Public: Courts, jails, etc.....	58	2,345,304	56	2,272,550	22	72,835	Pipe line.....	1		1		1	
Religious and memorial.....	367	17,326,193	300	15,736,691	67	1,589,502	Flooring, n. e. s.....	4	158,470			4	158,470
Residential.....	44	1,722,032	31	1,621,854	13	100,178	Waterworks.....	1		1		1	
Social and recreational.....	16	398,382	10	356,849	6	41,533	Rental of equipment, trucking, etc.....	2	218,402			2	218,402
Air transport.....	12	902,293	8	769,468	4	132,825	Miscellaneous, n. e. s.....	1		1		1	
Rail and water transportation.....	04	1,871,421	45	1,673,857	10	197,564	<b>DALLAS</b>						
Miscellaneous.....	128	34,591,692	122	34,479,131	6	112,561	All construction business.....	135	67,124,185	65	48,519,157	70	18,605,028
Highway and street.....	3	163,053	3	143,053			Distribution not reported.....	12	1,402,749			12	1,402,749
Water-power development.....	122	32,056,895	109	32,456,133	13	490,212	Distributed by class of ownership.....	123	65,721,436	65	48,519,157	58	17,202,270
Public works and utilities.....	4	912,391	3	905,514	1	6,877	Private.....	100	48,256,713	49	32,997,088	57	16,259,625
Distribution not reported.....	118	32,043,004	106	31,550,669	12	492,335	Quasi public or community.....	25	1,568,036	7	603,790	18	904,246
Bridge, tunnel, etc.....	43	5,112,281	40	5,075,302	3	36,979	Public.....	56	15,806,687	35	14,868,279	21	1,035,408
Central station, light and power plant.....	16	5,050,510	11	5,041,018	5	18,501	Distribution not reported.....	6	1,313,933	4	1,150,933	2	168,000
Deck, pier, retaining wall, etc.....	5	310,430	5	310,430			Distributed by class of public ownership.....	50	14,582,764	31	13,707,340	19	875,408
Flood control, irrigation, and land drainage.....	17	2,081,776	16	(?)	1	(?)	Federal.....	8	218,184	1		7	266,344
Refuse-disposal plant.....	2	3,869,701	2	3,832,554	3	37,147	State.....	22	5,183,191	15	5,133,531	7	100,900
Sewage disposal and drainage.....	35	121,344	9	(?)	1	(?)	County or township.....	16	4,452,658	8	4,351,755	8	507,664
Park, grounds, etc.....	10	1,256,519	5	1,256,519			Municipal.....	33	4,729,724	17	4,222,060	16	507,664
River and harbor improvement.....	5	9,340,028	5	9,340,028			All business under general contract or directly for owners.....	87	56,041,964	65	47,645,098	22	8,390,866
Oil and natural-gas pipe line.....	28	4,872,707	25	4,486,899	3	385,808	Building.....	53	10,002,523	34	15,542,685	19	3,459,838
Water supply.....	1	18,699	1	(?)			Distribution not reported.....	1	55,814	1	55,814		
Telephone line and system.....	3	3,776,378	13	5,295,164	1	5,254,345	Distributed by class.....	52	18,946,709	33	15,480,871	19	3,459,838
Miscellaneous.....	14	6,773,131	18				Commercial.....	43	9,381,135	28	7,197,321	16	2,183,814
Railroad and car line.....	2	0,773,131					Educational.....	13	381,009	7	306,437	6	74,672
Air-transport work.....	20	33,152,649	33	1,636,904	360	31,515,745	Hotel.....	15	3,214,538	7	2,671,653	8	542,885
Distribution not reported.....	5	465,102	5	465,102			Hospital and institutional.....	6	210,935	3	166,023	3	44,912
Distributed by class.....	394	32,687,547	33	1,636,904	361	31,050,643	Manufacturing.....	9	2,745,693	6	2,725,214	3	20,449
Carpentering and wood flooring.....	2	253,730			2	253,730	Public: Courts, jails, etc.....	8	392,376	4	379,630	4	12,746
Soundproofing.....	27	1,215,791	7	278,055	20	937,736	Religious and memorial.....	6	6,025	1	642,990	5	75,100
Concreting.....	72	3,693,121	72	3,693,121	72	3,693,121	Social and recreational.....	6	712,071	4	926,436	10	319,943
Electrical.....	3	708,780	3	708,780			Residential.....	22	1,246,379	12	926,436	10	319,943
Elevator construction.....	11	313,584					Air transport.....	3	276,268	1	363,835	2	150,897
Heating and plumbing.....	53	4,532,939	1	(?)	52	(?)	Rail and water transportation.....	4	238,464	4	107,332	4	84,514
Heating and piping.....	1	240,232					Miscellaneous.....	8	141,846	4	107,332	4	84,514
Automatic temperature control.....	12	5,201,406					Railroad and car line.....	5	3,188,355	5	3,188,355		
Pipe covering.....	104	973,389					Public works and utilities.....	22	540,159	19	22,124,880	3	421,279
Plumbing.....	8	296,618					Distribution not reported.....	1	94,014	1	94,014		
Plumbing and heating combined.....	4	582,830	3	43,458	9	439,372	Distributed by class.....	21	22,462,145	18	22,030,806	3	421,279
Automatic sprinkler systems.....	12						Bridge, tunnel, etc.....	8	2,619,481	7	(?)	1	(?)
Masonry.....							Central station, light and power plant.....	3	4,561,729	2	(?)	1	(?)
							Park, grounds, etc.....	4	19,630	4	19,630		
							Sewage disposal and drainage.....	7	1,479,721	6	(?)	1	(?)
							Water supply.....	9	3,411,056	8	(?)	1	(?)
							Flood control, irrigation, and land drainage.....	1		1			
							River and harbor improvement.....	1	10,360,528	1	10,360,528		
							Oil and natural-gas pipe line.....	2		2			
							Highway and street.....	18	5,908,200	17	6,789,178	1	4,615,749
							Miscellaneous, n. e. s.....	7	5,396,727	3		4	

See footnotes at end of table.

CONSTRUCTION—TEXAS

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TABLE 2.—CONSTRUCTION BUSINESS OF REPORTING ESTABLISHMENTS DURING 1929, BY CLASS OF OWNERSHIP AND BY TYPE OF WORK—Continued

CLASS OF OWNERSHIP AND TYPE OF CONSTRUCTION WORK	CONSTRUCTION BUSINESS REPORTED BY—						CLASS OF OWNERSHIP AND TYPE OF CONSTRUCTION WORK	CONSTRUCTION BUSINESS REPORTED BY—					
	All classes of establishments		General contractors <sup>1</sup>		Subcontractors			All classes of establishments		General contractors <sup>1</sup>		Subcontractors	
	Number reporting	Value	Number reporting	Value	Number reporting	Value		Number reporting	Value	Number reporting	Value	Number reporting	Value
<b>DALLAS—Continued</b>		<i>Dollars</i>		<i>Dollars</i>		<i>Dollars</i>							
All business under subcontract.....	67	11,082,221	7	874,059	60	10,208,162	All construction business.....	115	12,182,989	84	9,854,339	31	2,328,660
Distribution not reported.....	1	269,337			1	269,337	Distribution not reported.....	8	1,473,378	1	600,000	7	873,378
Distributed by class.....	66	10,812,884	7	874,059	59	9,938,825	Distributed by class of ownership.....	107	10,709,611	83	9,254,339	24	1,455,272
Carpentering and woodflooring.....	2	205,055			2	205,055	Private.....	101	6,689,700	79	5,455,941	22	1,233,759
Painting and decorating.....	3			(?)	2		Quasi public or community.....	15	701,821	8	590,951	7	110,870
Concreting.....	1	409,634		(?)	1		Public.....	21	3,318,090	18	3,207,447	3	110,643
Masonry.....	1						Distribution not reported.....	6	446,058	3	335,415	3	110,643
Stonework.....	1						Distributed by class of public ownership.....	15	2,872,032	15	2,872,032		
Electrical.....	10	611,960			10	611,960	Federal.....	1		1			
Elevator construction.....	1				1		State.....	6	874,178	6	874,178		
Steel erection.....	2	717,406			2	717,406	County or township.....	5	320,649	5	320,649		
Heating and plumbing.....	4	4,294,514			4	4,294,514	Municipal.....	9	1,668,205	9	1,668,205		
Heating and piping.....	5	2,850,043			5	2,850,043	All business under general contract or directly for owners.....	92	10,386,649	84	9,752,685	8	633,964
Pipe covering.....	2				2		Distribution not reported.....	1	321,805	1	321,805		
Automatic temperature control.....	1	591,480			1	591,480	Distributed by class.....	91	10,064,844	84	9,752,685	7	312,159
Plumbing and heating combined.....	1				1		Building.....	83	6,837,016	76	6,525,757	7	312,159
Plumbing.....	7	843,985			7	843,985	Distribution not reported.....	3	735,974	2	698,000	1	37,974
Automatic sprinkler systems.....	1				1		Distributed by class.....	80	6,101,942	74	5,827,757	6	274,185
Plastering and lathing.....	4	760,787			4	760,787	Commercial.....	24	1,582,508	21	1,543,622	3	38,986
Roofing and sheet-metal work.....	8	634,525			8	634,525	Educational.....	5	40,940	4	(?)	1	
Marble and tiling.....	9	1,103,410			9	1,103,410	Hotel.....	4	29,279	3	(?)	1	
Wrecking.....	1				1		Hospital and institutional.....	5	495,562	3	497,153	2	27,688
Excavating.....	3	251,839			3	251,839	Manufacturing.....	4	387,145	2	(?)	2	
Ornamental iron.....	1				1		Religious and memorial.....	9	152,693	7	210,368	2	46,771
Metal work, n. e. s.....	2	466,300			2	466,300	Social and recreational.....	4	104,476	2	(?)	2	
Highway.....	2			(?)			Residential.....	68	2,457,412	64	2,400,313	4	57,099
Bridge and culvert.....	2	685,657		(?)			Public: Courts, jails, etc.....	2		2			
Grading.....	1				1		Air transport.....	1	76,350	1	76,350		
Dam and reservoir.....	1				1		Miscellaneous.....	6	775,607	4	(?)	2	(?)
Pipe line.....	1				1		Highway and street.....	8	2,752,634	8	2,752,634		
Rental of equipment, trucking, etc.....	1	309,404			1		Public works and utilities.....	8	474,294	8	474,294		
Soundproofing.....	1				1		Bridge, tunnel, etc.....	2		2			
Flooring, n. e. s.....	2	182,253			2	182,253	Central station, light and power plant.....	2	349,039	2	349,039		
<b>EL PASO</b>							Refuse disposal plant.....	1		1			
All construction business.....	41	8,083,831	20	7,268,428	21	1,715,403	Sewage disposal and drainage.....	3	125,255	3	125,255		
Distribution not reported.....	4	308,248			4	308,248	All business under subcontract.....	31	1,796,340	6	101,654	25	1,694,686
Distributed by class of ownership.....	37	8,075,583	20	7,268,428	17	1,407,155	Concreting.....	2					
Private.....	35	5,005,235	18	4,758,633	17	1,236,602	Masonry.....	1					
Quasi public or community.....	12	635,721	6	521,786	6	113,936	Stone work.....	1	248,654				
Public.....	10	2,044,627	10	1,988,010	6	56,617	Bridge and culvert.....	1					
Distribution not reported.....	1	65,935			1	65,935	Sewer, gas, water conduit.....	1					
Distributed by class of public ownership.....	15	1,078,642	9	1,022,025	6	56,617	Wrecking.....	2	48,133				
Federal.....	9	677,072	5	1,842,288	4	28,425	Excavating.....	2					
State.....	6	1,193,641	3	79,737	2	28,192	Electrical.....	4	201,870				
County or township.....	5	85,718					Heating and plumbing.....	3	319,034				
Municipal.....	3	22,211					Heating and piping.....	3	40,805				
All business under general contract or directly for owners.....	27	7,566,504	19	7,268,428	8	298,136	Plumbing.....	8	278,279				
Building.....	24	6,107,696	19	5,809,500	8	298,136	Painting and decorating.....	2					
Distribution not reported.....	2	34,801			2	34,801	Glass and glazing.....	1	421,588				
Distributed by class.....	22	6,072,895	16	5,809,500	6	263,335	Marble and tiling.....	2					
Commercial.....	11	1,802,913	13	1,835,580	5	57,333	Roofing and sheet-metal work.....	3	103,154				
Educational.....	5	341,580	3	(?)	2	(?)	Steel erection.....	1					
Hotel.....	7	1,026,111	3	1,278,701	4	47,858	Ornamental iron.....	1					
Hospital and institutional.....	5	300,448	3	226,286	3	3,048	Metal work, n. e. s.....	2	453,857				
Manufacturing.....	6	229,334	3	169,067			<b>HOUSTON</b>						
Military and naval.....	1	169,067	2	(?)	3	(?)	All construction business.....	150	32,659,078	80	24,639,885	79	8,019,193
Public: Courts, jails, etc.....	2		11	1,213,573	6	90,200	Distribution not reported.....	10	1,458,775	4	914,817	6	543,958
Religious and memorial.....	5	24,231	3	(?)	2	(?)	Distributed by class of ownership.....	149	31,200,308	76	23,725,068	73	7,475,235
Residential.....	17	1,303,773	11	1,213,573	6	90,200	Private.....	133	21,728,976	62	15,817,970	71	5,911,006
Social and recreational.....	5	389,051	3	(?)	2	(?)	Quasi public or community.....	41	2,532,781	12	1,783,035	29	749,746
Air transport.....	5		4		1		Public.....	62	6,938,546	31	6,124,063	31	814,483
Rail and water transportation.....	2	328,981	2	306,177	2	32,610	Distribution not reported.....	4	233,804	3	229,204	1	4,600
Miscellaneous.....	6	69,800	4				Distributed by class of public ownership.....	58	6,704,742	28	5,894,859	30	809,883
Highway and street.....	4	1,180,181	4	1,180,181			Federal.....	7	376,888	3	344,692	4	34,196
Public works and utilities.....	4	243,171	4	243,171			State.....	15	2,489,243	11	2,409,256	4	79,987
Water power development.....	1		1				County or township.....	24	817,579	6	551,533	18	266,046
Air-transport work.....	1	35,510					Municipal.....	37	3,019,032	18	2,589,378	19	429,654
Miscellaneous, n. e. s.....	2						All business under general contract or directly for owners.....	102	25,911,453	80	24,554,182	22	1,357,271
All business under subcontract.....	19	1,417,267			19	1,417,267	Building.....	77	19,995,547	57	18,730,313	20	1,235,234
Electrical.....	3	182,412			3	182,412	Distribution not reported.....	7	1,556,595	4	1,388,348	3	168,247
Heating and plumbing.....	4	485,611			4	485,611	Distributed by class.....	70	18,408,952	53	17,341,965	17	1,066,987
Heating and piping.....	4				4		Commercial.....	45	10,905,387	33	10,500,405	12	404,982
Pipe covering.....	2	253,302			2	253,302	Educational.....	22	1,520,659	11	1,315,879	11	213,780
Plumbing.....	5	232,309			5	232,309	Hotel.....	6	56,468	5	515,868	4	79,193
Painting and decorating.....	2	134,225			2	134,225	Hospital and institutional.....	9	538,593	5	279,231	3	30,500
Glass and glazing.....	1				1		Manufacturing.....	6	309,821	3			
Concreting.....	1				1								
Plastering and lathing.....	1	200,133			1	200,133							
Marble and tiling.....	2				2								
Roofing and sheet-metal work.....	3	414,886			3	414,886							
Roofing.....	3	238,312			3	238,312							
Sheet-metal work.....	3	176,574			3	176,574							

See footnotes at end of table.

TABLE 2.—CONSTRUCTION BUSINESS OF REPORTING ESTABLISHMENTS DURING 1929, BY CLASS OF OWNERSHIP AND BY TYPE OF WORK—Continued

CLASS OF OWNERSHIP AND TYPE OF CONSTRUCTION WORK	CONSTRUCTION BUSINESS REPORTED BY—						CLASS OF OWNERSHIP AND TYPE OF CONSTRUCTION WORK	CONSTRUCTION BUSINESS REPORTED BY—					
	All classes of establishments		General contractors <sup>1</sup>		Subcontractors			All classes of establishments		General contractors <sup>1</sup>		Subcontractors	
	Number reporting	Value	Number reporting	Value	Number reporting	Value		Number reporting	Value	Number reporting	Value	Number reporting	Value
<b>HOUSTON—Continued</b>						<b>SAN ANTONIO—Continued</b>							
All business under general contract or directly for owners—Contd. Building—Continued.						All business under general contract or directly for owners—	Dollars		Dollars		Dollars		
Distribution not reported.....						Distribution not reported.....	80	17,424,782	50	16,320,133	24	1,104,649	
Distributed by class—Contd.		Dollars		Dollars		Distributed by class.....	79	16,812,222	55	15,707,573	24	1,104,649	
Public: Courts, jails, etc.....	6	41,548	2	(?)	4	(?)	65	10,584,070	45	9,581,895	20	1,022,081	
Religious and memorial.....	15	898,455	9	876,931	6	21,524	3	281,149			3	281,149	
Residential.....	46	3,727,824	34	3,473,735	12	254,089							
Social and recreational.....	5	25,956	3	(?)	2	(?)							
Air transport.....	1												
Rail and water transportation	1	375,242			1	42,106							
Miscellaneous.....	12		9	333,136	3								
Highway and street.....	21	3,527,864	18	3,495,474	3	32,390							
Public works and utilities.....	17	1,645,066	14	1,623,369	3	21,697							
Bridge, tunnel, etc.....	5	317,621	5	317,621									
Central station, light and power plant.....	2				2								
Flood control, irrigation, and land drainage.....	6	475,027	5	453,330	1	21,697							
Sewage disposal and drainage.....	7	680,858	7	680,858									
Water supply.....	6	60,989	5	60,989									
Other classes <sup>5</sup> .....	4	110,571	4	110,571									
Railroad and car line.....	5	426,341	4	705,026	1	67,950							
Miscellaneous, n. e. s.....	8	346,635	5										
All business under subcontract.....	76	6,747,625	5	85,703	71	6,661,922							
Distribution not reported.....	1	70,376			1	70,376							
Distributed by class.....	75	6,677,250	5	85,703	70	6,591,547							
Concreting.....	8	332,656	2		6								
Masonry.....	3	145,453	1	20,241	2	457,867							
Stone work.....	1				1								
Electrical.....	18	898,483			18	898,483							
Heating and plumbing.....	7	2,009,284			7	2,009,284							
Heating and piping.....	7	540,659			7	540,659							
Pipe covering.....	2				2								
Plumbing and heating combined.....	1	231,271			1	231,271							
Automatic sprinkler systems.....	1				1								
Plumbing.....	18	1,237,354			18	1,237,354							
Painting and decorating.....	5	341,712			5	341,712							
Glass and glazing.....	1				1								
Plastering and lathing.....	9	945,480	2	(?)	7	(?)							
Roofing and sheet-metal work.....	8	727,763			8	727,763							
Roofing.....	8	519,281			8	519,281							
Sheet-metal work.....	4	208,482			4	208,482							
Roofing and sheet metal combined.....	1				1								
Steel erection.....	1				1								
Ornamental iron.....	1	301,000			1	301,000							
Metal work, n. e. s.....	1				1								
Marble and tiling.....	5	767,390			5	767,390							
Excavating.....	4	70,310	2		2								
Highway.....	1		1	30,179	1	137,496							
Grading.....	2	91,359	1		2								
Street paving.....	2				2								
Other classes <sup>6</sup> .....	3	40,345	1	(?)	2	(?)							
<b>SAN ANTONIO</b>						<b>SAN ANTONIO</b>							
All construction business.....	120	22,748,375	50	16,678,095	67	6,070,280							
Distribution not reported.....	7	1,008,261	3	851,270	4	154,991							
Distributed by class of ownership.....	119	21,742,114	56	15,826,825	63	5,915,289							
Private.....	107	13,169,657	44	8,195,989	63	4,973,668							
Quasi public or community.....	26	706,897	7	479,595	19	227,302							
Public.....	62	7,865,560	26	7,151,241	36	714,319							
Distribution not reported.....	4	358,091	1	212,081	3	146,010							
Distributed by class of public ownership.....	58	7,507,469	25	6,039,160	33	508,309							
Federal.....	11	190,148	2		9								
State.....	13	741,798	5	728,422	8	203,524							
County or township.....	19	1,713,634	0	1,557,803	13	155,831							
Municipal.....	45	4,861,889	21	4,652,935	24	205,954							

<sup>1</sup> Includes operative builders.

<sup>2</sup> Value omitted in order to avoid disclosing individual operations. The amounts omitted are, however, included in the respective totals.

<sup>3</sup> Includes 1 establishment reporting metal work, n. e. s.

<sup>4</sup> Includes establishments reporting the following types of work: Bridge, tunnel, etc., and dock, pier, retaining wall, etc., 1; central station, light and power plant and sewage disposal and drainage, 1; flood control, irrigation and land drainage, 1; telephone line and system, 1.

<sup>5</sup> Includes establishments reporting the following types of work: Dock, pier, retaining wall, etc., 1; park, grounds, etc., 1; river and harbor improvement, 1; and oil and natural-gas pipe line, 1.

<sup>6</sup> Includes establishments reporting the following types of work: General contractors—Central station, light and power plant, 1; Subcontractors—Rental of equipment, 1; flooring, n. e. s., 1.



# CONSTRUCTION—TEXAS

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TABLE 3.—CONSTRUCTION BUSINESS DURING 1929, BY LOCATION

CLASSIFICATION OF ESTABLISHMENTS	Establishments reporting	Total	In home city	In home State	Outside home State	CLASSIFICATION OF ESTABLISHMENTS	Establishments reporting	Total	In home city	In home State	Outside home State
<b>TEXAS</b> .....	<b>980</b>	<b>\$192,408,181</b>	<b>\$92,269,458</b>	<b>\$177,741,126</b>	<b>\$14,867,085</b>						
Operative builders.....	12	1,038,476	1,038,476	1,038,476		<b>EL PASO—Continued.</b>					
General contractors.....	570	147,875,842	65,837,772	136,033,475	10,742,307	Subcontractors.....	21	\$1,715,403	\$1,427,934	\$1,565,532	\$149,871
Building.....	408	70,875,015	51,597,591	71,379,930	5,295,035	Electrical.....	3	220,912	196,897	207,242	13,670
Building not specialized.....	287	66,517,555	42,779,907	61,225,903	5,291,652	Heating and plumbing.....	9	730,721	558,016	615,754	121,037
Commercial building only.....	24	4,816,299	4,194,742	4,816,299		Roofing and sheet-metal work.....	5	492,369	407,690	477,205	15,164
Residential building only.....	97	5,341,161	4,622,942	5,337,728	3,433	Other classes <sup>10</sup> .....	4	265,331	265,331	265,331	
Highway.....	64	23,702,858	1,797,122	22,723,674	979,184						
Bridge and culvert.....	15	4,089,693	275,307	3,463,745	625,948	<b>FORT WORTH</b> .....	<b>113</b>	<b>11,759,876</b>	<b>7,166,473</b>	<b>11,428,272</b>	<b>383,403</b>
Street paving.....	33	11,651,453	6,107,833	11,451,073	200,380	Operative builders.....	3	188,313	188,313	188,313	
Sewer, gas, water, conduit.....	9	3,349,469	1,635,371	3,349,466		General contractors.....	81	9,666,020	5,750,767	9,366,177	299,849
Dam and reservoir.....	5	4,218,045	297,635	2,317,117	1,900,928	Building.....	71	9,362,710	4,838,300	9,164,710	198,000
Waterworks.....	9	2,817,397	1,423,233	2,762,397	55,000	Building not specialized.....	24	4,620,844	3,107,344	4,422,844	198,000
Dredging, river, harbor, etc.....	0	1,249,783		1,005,071	244,712	Commercial building only.....	3	284,715	284,715	284,715	
Railroad.....	7	3,095,497	42,480	3,265,690	429,807	Residential building only.....	44	1,457,151	1,446,151	1,457,151	
Central station, light and power plant.....	3	5,011,895	2,239,698	4,489,502	522,393	Highway.....	4	931,308	80,356	931,308	
Oil and natural-gas pipe line.....	5	10,591,563	53,000	10,193,724	397,839	Street paving.....	3	1,838,294	428,913	1,736,445	101,849
Other classes <sup>1</sup> .....	0	623,177	368,502	532,086	91,091	Other classes <sup>11</sup> .....	3	533,714	403,198	533,714	
Subcontractors.....	308	43,093,873	25,393,210	39,769,175	3,924,698	Subcontractors.....	20	1,905,336	1,220,393	1,871,782	33,554
Concreting.....	21	1,114,821	865,885	1,056,484	58,337	Concreting <sup>12</sup> .....	4	162,700	133,110	162,700	
Electrical.....	63	5,278,505	4,048,882	5,095,289	179,206	Electrical.....	5	245,933	179,081	217,880	28,053
Elevator construction.....	0	3,341,080	400,880	2,485,740	1,355,340	Heating and plumbing.....	10	444,090	413,598	444,090	
Heating and plumbing.....	144	12,561,076	9,044,049	11,982,819	578,257	Steel erection <sup>13</sup> .....	3	595,092	186,455	595,091	5,601
Heating and piping <sup>2</sup> .....	11	1,075,784	827,018	1,522,782	163,002	Other classes <sup>14</sup> .....	7	457,512	314,149	457,512	
Plumbing.....	112	8,097,829	6,540,178	7,764,574	333,255						
Plumbing and heating combined.....	18	2,498,685	1,504,775	2,448,685	50,000	<b>HOUSTON</b> .....	<b>164</b>	<b>31,905,515</b>	<b>23,686,849</b>	<b>31,695,183</b>	<b>210,332</b>
Automatic sprinkler systems.....	3	288,778	172,078	246,778	42,000	Operative builders.....	4	537,699	537,699	537,699	
Masonry.....	7	431,559	349,160	431,559		General contractors.....	74	23,781,969	17,363,113	23,652,685	129,284
Painting and decorating <sup>3</sup> .....	24	1,149,615	891,588	1,149,615		Building.....	51	18,238,568	15,044,352	18,235,135	3,433
Plastering and lathing.....	26	2,794,941	1,818,473	2,738,072	56,869	Building not specialized.....	46	17,428,909	14,702,120	17,428,909	
Roofing and sheet-metal work.....	47	3,597,391	2,821,494	3,526,162	41,239	Residential building only.....	0	809,659	342,226	806,226	3,433
Roofing.....	32	2,045,273	2,066,984	2,004,034	41,239	Highway.....	7	2,105,548	138,518	2,105,548	
Sheet-metal work.....	15	922,118	754,510	922,118		Street paving.....	8	1,434,494	1,261,690	1,434,494	
Steel erection.....	4	1,002,508	1,405,729	1,897,008	5,500	Railroad.....	3	412,806	38,000	412,806	
Stonework.....	6	507,909	166,145	507,909		Other classes <sup>15</sup> .....	5	1,590,553	880,356	1,464,702	125,851
Marble and tiling.....	20	2,754,052	1,661,442	2,693,472	121,180	Subcontractors.....	76	7,685,847	5,765,837	7,504,799	81,048
Excavating.....	7	595,253	469,546	595,253		Concreting <sup>12</sup> .....	7	482,237	356,871	476,946	5,287
Ornamental iron.....	4	323,165	204,320	323,165		Electrical.....	11	1,247,030	1,106,617	1,235,947	11,083
Metal work, n. e. s. <sup>4</sup> .....	7	6,122,952	194,477	4,594,242	1,528,710	Heating and plumbing.....	25	2,669,909	1,935,920	2,628,909	41,000
Other classes <sup>4</sup> .....	0	748,446	882,128	748,446		Plumbing.....	21	1,764,679	1,654,961	1,764,679	
						Plumbing and heating combined <sup>16</sup> .....	4	905,230	380,959	864,230	41,000
						Painting and decorating <sup>17</sup> .....	5	357,337	282,978	357,337	
						Plastering and lathing.....	6	736,067	534,508	736,067	
						Roofing and sheet-metal work.....	10	826,685	727,666	814,810	11,875
						Marble and tiling.....	5	767,959	474,666	765,687	11,803
						Metal work, n. e. s. <sup>18</sup> .....	4	347,285	234,777	347,285	
						Other classes <sup>19</sup> .....	3	151,911	112,834	151,911	
<b>DALLAS</b> .....	<b>180</b>	<b>\$3,189,304</b>	<b>15,579,589</b>	<b>\$3,678,960</b>	<b>9,490,344</b>	<b>SAN ANTONIO</b> .....	<b>126</b>	<b>22,748,375</b>	<b>15,106,972</b>	<b>22,042,794</b>	<b>705,641</b>
General contractors.....	64	45,519,157	10,325,291	39,471,133	6,048,024	General contractors.....	59	16,678,095	9,901,797	15,972,454	705,641
Building.....	32	14,206,924	5,783,050	12,146,437	2,060,487	Building.....	45	10,923,560	7,128,609	10,316,450	607,110
Building not specialized.....	26	13,475,917	5,493,600	11,415,430	2,060,487	Building not specialized.....	39	10,535,394	6,744,803	9,928,254	607,110
Commercial building only.....	6	731,007	289,450	731,007		Residential building only.....	0	388,196	388,196	388,196	
Highway.....	10	4,147,704	269,453	4,032,214	115,560	Street paving and highway.....	7	2,930,605	1,975,303	2,832,074	98,531
Bridge and culvert.....	3	2,174,357		1,548,409	625,948	Other classes <sup>20</sup> .....	7	2,823,939	797,795	2,823,939	
Street paving.....	4	1,697,554	907,776	1,597,554							
Sewer, gas, water, conduit.....	4	550,799	149,631	550,799		Subcontractors.....	67	6,070,280	5,205,175	6,070,280	
Waterworks, dam, and reservoir.....	4	4,761,317	1,271,303	2,865,317	1,896,000	Concreting and stone work.....	4	186,748	164,609	185,748	
Railroad.....	3	3,158,984	4,480	2,729,177	429,807	Electrical.....	8	1,023,224	981,669	1,023,224	
Other classes <sup>6</sup> .....	4	14,921,458	1,930,698	14,001,226	920,232	Heating and plumbing.....	23	2,122,393	1,837,533	2,122,393	
Subcontractors.....	60	17,650,147	5,254,298	14,207,827	3,442,320	Painting and decorating <sup>3</sup> .....	4	224,846	169,001	224,845	
Concreting and stone work.....	3	654,575	89,714	354,575		Plastering and lathing.....	10	971,074	907,322	971,074	
Electrical.....	12	912,182	637,696	790,105	122,077	Roofing and sheet-metal work.....	7	589,264	440,411	589,264	
Elevator construction.....	4	3,767,996	841,080	2,412,655	1,355,340	Roofing.....	3	377,313	308,408	377,313	
Heating and plumbing.....	16	2,831,118	1,194,177	2,465,573	365,545	Sheet-metal work.....	4	211,951	142,942	211,951	
Plumbing.....	10	1,573,134	573,694	1,224,227	348,907	Marble and tiling.....	4	423,378	324,766	423,378	
Plumbing and heating combined.....	6	1,257,984	620,483	1,241,346	16,638	Ornamental iron <sup>21</sup> .....	3	139,468	110,000	139,468	
Painting and decorating.....	3	113,198	90,058	113,198		Other classes <sup>22</sup> .....	4	390,284	293,784	390,284	
Plastering and lathing.....	4	760,787	206,955	703,918	56,869						
Roofing.....	6	422,284	319,479	422,284							
Marble and tiling.....	8	953,642	448,991	852,066	101,577						
Metal work, n. e. s. <sup>4</sup> .....	5	6,781,083	1,375,300	5,290,771	1,440,912						
Other classes <sup>4</sup> .....	5	802,683	550,942	802,683							
<b>EL PASO</b> .....	<b>41</b>	<b>\$,983,831</b>	<b>4,093,597</b>	<b>\$,209,512</b>	<b>2,774,319</b>						
General contractors.....	20	7,268,428	2,665,653	4,643,980	2,624,448						
Building not specialized.....	10	6,081,620	2,018,236	4,051,736	2,029,784						
Highway and grading.....	4	1,186,808	47,377	592,244	594,664						

<sup>1</sup> Includes foundation; and central station, light and power plant.  
<sup>2</sup> Includes pipe covering; and automatic temperature control.  
<sup>3</sup> Includes glass and glazing; and flooring, n. e. s.  
<sup>4</sup> Includes carpentering and woodflooring; street paving; waterworks; soundproofing; foundation; and rental of equipment, trucking, etc.  
<sup>5</sup> Includes operative builders.  
<sup>6</sup> Includes central station, light and power plant; and oil and natural-gas pipe line.  
<sup>7</sup> Includes heating and piping; and automatic temperature control.  
<sup>8</sup> Includes steel erection.  
<sup>9</sup> Includes carpentering and woodflooring; excavating; soundproofing; and rental of equipment, trucking, etc.  
<sup>10</sup> Includes concreting; painting and decorating; plastering and lathing; and marble and tiling.  
<sup>11</sup> Includes bridge and culvert; sewer, gas, water, conduit; and central station, light and power plant.  
<sup>12</sup> Includes masonry; and stonework.  
<sup>13</sup> Includes ornamental iron; and metal work, n. e. s.  
<sup>14</sup> Includes painting and decorating; roofing; sheet-metal work; marble and tiling; and excavating.  
<sup>15</sup> Includes sewer, gas, water, conduit; dam and reservoir; dredging, river, harbor, etc.; and oil and natural-gas pipe line.  
<sup>16</sup> Includes heating and piping; and pipe covering.  
<sup>17</sup> Includes flooring, n. e. s.  
<sup>18</sup> Includes elevator construction; steel erection; and ornamental iron.  
<sup>19</sup> Includes glass and glazing; excavating; and street paving.  
<sup>20</sup> Includes bridge and culvert; sewer, gas, water, and conduit; dam and reservoir; waterworks; and oil and natural-gas pipe line.  
<sup>21</sup> Includes metal work, n. e. s.  
<sup>22</sup> Includes masonry; excavating; waterworks; and foundation.

## CONSTRUCTION—TEXAS

TABLE 4.—CONSTRUCTION BUSINESS OUTSIDE HOME STATE, BY LOCATION

STATE OR COUNTRY	LOCATION REPORTED BY—			STATE OR COUNTRY	LOCATION REPORTED BY—		
	All classes of establishments	General contractors	Subcontractors		All classes of establishments	General contractors	Subcontractors
<b>TEXAS</b>				<b>EL PASO</b>			
Total distributed by State or country <sup>1</sup>	\$14,607,065	\$10,742,367	\$3,024,698	Total distributed by State or country <sup>2</sup>	\$2,774,319	\$2,624,448	\$149,871
Alabama	71,379		71,379	Arizona	852,945	751,163	101,782
Arizona	1,241,023	1,128,693	112,330	California	505,295	505,295	
Arkansas	1,108,304	974,462	128,842	Colorado	75,268	75,268	
California	505,295	505,295		Louisiana	6,587	6,587	
Colorado	75,268	75,268		New Mexico	1,261,391	1,214,860	46,531
Florida	320,692		320,692	Washington	71,275	71,275	
Georgia	35,002	30	34,966	Other States, n. s.			
Illinois	891,000	891,000		Mexico	1,558		1,558
Kansas	204,950	39,602	165,348	<b>FORT WORTH</b>			
Louisiana	1,905,934	1,305,275	510,659	Total distributed by State	333,403	299,849	33,554
Michigan	292,096	292,096		Arkansas	101,849	101,849	
Minnesota	48	48		Louisiana	98,000	98,000	
Mississippi	203,748	95,832	107,916	Oklahoma	33,554		33,554
Missouri	1,111,490	1,111,490		Other States, n. s.	100,000	100,000	
Montana	63,598	63,598		<b>HOUSTON</b>			
Nebraska	28,000	28,000		Total distributed by State or country <sup>5</sup>	210,332	129,284	81,048
New Mexico	1,050,203	1,508,377	149,826	Louisiana	141,849	129,284	12,565
North Carolina	15,842		15,842	Mississippi	5,500		5,500
Ohio	756	756		Oklahoma	4,450		4,450
Oklahoma	2,119,215	1,237,790	881,425	Tennessee	1,679		1,679
Oregon	18,188	18,188		Other States, n. s.	52,083		52,083
South Carolina	44,359		44,359	Mexico	4,771		4,771
Tennessee	1,200,739	1,186,531	14,208	<b>SAN ANTONIO</b>			
Utah	20,755	20,755		Total distributed by State <sup>4</sup>	705,641	705,641	
Washington	71,275	71,275		Arizona	140,013	149,013	
Other States, n. s.	1,456,142	100,000	1,356,142	Arkansas	12,222	12,222	
Mexico	10,764		10,764	Georgia	30	30	
<b>DALLAS</b>				Kansas	22,314	22,314	
Total distributed by State or country <sup>3</sup>	9,490,344	6,048,024	3,442,320	Louisiana	113,606	113,606	
Alabama	71,379		71,379	Michigan	292,096	292,096	
Arizona	10,548		10,548	Minnesota	48	48	
Arkansas	642,172	536,330	105,842	Mississippi	43,296	43,296	
Florida	320,692		320,692	Montana	11	11	
Georgia	34,966		34,966	Nebraska	28,000	28,000	
Illinois	891,000	891,000		Ohio	756	756	
Kansas	125,036	17,288	108,348	Oregon	18,138	18,138	
Louisiana	1,317,636	819,742	497,894	Tennessee	5,200	5,200	
Mississippi	154,952	52,536	102,416	Utah	20,755	20,755	
Missouri	1,111,490	1,111,490					
New Mexico	293,997	236,517	57,480				
North Carolina	15,842		15,842				
Oklahoma	1,053,321	1,201,790	751,531				
South Carolina	44,359		44,359				
Tennessee	1,193,860	1,181,331	12,529				
Other States, n. s.	1,304,059		1,304,059				
Mexico	4,435		4,435				

## Number of establishments reporting:

- <sup>1</sup> All classes, 82—general contractors, 42; subcontractors, 40.
- <sup>2</sup> All classes, 32—general contractors, 14; subcontractors, 18.
- <sup>3</sup> All classes, 18—general contractors, 10; subcontractors, 8.
- <sup>4</sup> All classes, 5—general contractors, 3; subcontractors, 2.
- <sup>5</sup> All classes, 8—general contractors, 3; subcontractors, 5.
- <sup>6</sup> All classes, 4—general contractors, 4.

CONSTRUCTION—TEXAS

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TABLE 5.—NUMBER AND SALARIES OF PROPRIETORS, FIRM MEMBERS, AND SALARIED EMPLOYEES: 1929

CLASSIFICATION OF ESTABLISHMENTS	Establishments reporting	PROPRIETORS AND FIRM MEMBERS			SALARIED EMPLOYEES									
		Receiving no salary	Receiving salaries		All salaried employees		Officers and clerical staff		Superintendents, foremen, etc.		Number reported, by sex			Sex not reported
			Number	Total annual salaries	Total number	Total annual salaries	Number	Total annual salaries	Number	Total annual salaries	Total	Male	Female	
<b>TEXAS</b> .....	986	671	343	\$1,322,812	3,038	\$7,828,814	1,629	\$4,254,027	1,409	\$3,574,787	2,705	2,338	367	333
Operative builders.....	10	6	4	20,120	14	29,922	11	21,282	3	8,640	11	9	2	3
General contractors.....	579	446	158	629,374	2,091	5,657,644	989	2,797,743	1,102	2,859,901	1,805	1,689	206	198
Building.....	415	345	108	408,882	801	2,229,870	431	1,029,176	460	1,200,694	788	685	103	103
Building not specialized.....	293	236	90	358,231	784	2,042,804	373	944,944	411	1,097,960	604	611	83	90
Commercial building only.....	24	19	5	12,006	35	89,877	18	53,012	17	36,075	34	28	6	1
Residential building only.....	98	90	13	83,645	72	97,870	40	31,220	32	66,659	60	46	14	12
Highway.....	64	48	23	109,140	337	880,921	159	479,738	178	401,183	315	278	37	22
Bridge and culvert.....	15	14	4	6,480	93	317,201	43	161,843	50	155,358	80	78	2	13
Street paving.....	33	5	15	68,001	253	720,250	124	439,617	129	289,633	205	187	18	48
Sewer, gas, water, conduit.....	5	7	1	4,800	45	119,116	16	82,295	30	86,821	45	40	5	---
Dam and reservoir.....	9	1	---	---	58	228,851	22	96,001	36	127,850	54	50	4	4
Waterworks.....	5	7	6	28,347	47	133,733	20	57,824	27	75,909	47	40	7	---
Dredging, river, harbor, etc.....	9	7	2	18,664	33	104,819	16	60,412	17	43,907	33	29	4	---
Railroad.....	7	4	---	---	56	129,874	20	70,269	27	50,005	56	51	5	---
Central station, light and power plant.....	3	1	---	---	101	173,824	62	81,996	39	91,828	99	92	7	2
Oil and natural-gas pipe line.....	6	5	---	---	163	589,365	64	272,372	90	316,993	163	160	13	---
Other classes <sup>1</sup> .....	7	9	---	---	14	26,320	4	7,200	10	19,120	10	9	1	4
Subcontractors.....	397	219	181	677,818	933	2,141,248	629	1,435,002	304	709,246	799	640	159	134
Concreting.....	21	15	4	10,760	29	65,530	18	39,130	11	26,400	29	24	5	---
Electrical.....	64	31	33	148,610	168	329,279	112	212,628	56	116,651	150	114	36	18
Elevator construction.....	6	1	6	26,106	32	75,089	17	33,329	15	41,700	19	13	6	13
Heating and plumbing.....	142	79	68	223,033	275	722,177	221	571,165	54	161,012	230	183	42	45
Heating and piping <sup>2</sup> .....	11	5	5	18,099	38	89,795	18	69,795	10	20,000	27	24	3	1
Plumbing.....	110	68	48	170,181	181	468,485	144	362,737	37	105,748	144	116	28	37
Plumbing and heating combined.....	18	3	15	34,753	51	144,396	45	123,032	6	21,364	44	35	9	7
Automatic sprinkler systems.....	3	3	---	---	15	10,501	14	15,601	1	3,900	15	13	2	---
Masonry.....	7	6	---	8,000	6	12,900	6	12,900	6	12,900	6	6	---	7
Painting and decorating <sup>3</sup> .....	24	11	11	27,370	34	78,624	22	47,894	12	30,730	27	20	7	---
Plastering and lathing.....	26	17	12	51,694	45	135,684	23	58,770	42	76,908	42	39	3	23
Roofing and sheet-metal work.....	47	27	17	65,942	135	293,068	86	194,317	49	98,741	121	101	20	14
Roofing.....	31	17	7	35,220	110	243,150	69	168,167	41	74,933	103	88	15	7
Sheet-metal work.....	13	7	7	22,220	20	39,843	14	21,573	6	18,270	13	9	4	---
Roofing and sheet metal combined.....	3	3	3	8,850	5	10,065	3	4,577	2	5,488	5	4	1	---
Stonework.....	6	3	3	17,249	13	47,226	8	14,959	10	32,267	13	13	5	---
Marble and tiling.....	27	11	15	54,769	51	104,337	43	86,089	8	18,248	43	29	14	8
Excavating and grading.....	8	8	---	5,400	13	33,375	9	16,345	9	17,030	18	15	3	---
Ornamental iron.....	3	1	2	4,620	3	9,400	2	6,760	2	6,516	8	6	2	---
Metal work, n. e. s.....	8	5	2	14,010	46	103,367	36	79,511	10	23,856	40	29	11	6
Other classes <sup>4</sup> .....	8	4	1	15,601	48	124,320	28	71,093	20	53,227	48	43	5	---
<b>DALLAS</b> .....	130	65	47	265,883	908	2,735,296	485	1,508,766	423	1,228,530	840	737	103	68
General contractors.....	64	36	12	87,300	663	2,045,524	322	1,028,980	341	1,016,544	629	571	58	34
Building.....	31	20	9	67,253	143	401,986	60	178,270	77	223,716	136	119	17	7
Building not specialized.....	25	14	8	64,863	132	386,779	59	170,858	73	215,921	125	111	14	7
Commercial building only.....	6	6	1	2,400	11	15,207	7	7,412	4	7,795	11	8	3	---
Highway.....	10	5	1	3,600	57	133,544	27	111,350	30	72,194	40	36	4	17
Bridge and culvert.....	3	2	---	---	61	238,898	33	135,732	28	103,166	51	50	1	10
Street paving.....	4	---	---	---	38	132,121	25	90,337	13	41,784	38	33	5	---
Waterworks, dam, and reservoir.....	4	1	2	10,447	62	223,248	29	92,171	30	130,077	62	54	8	---
Railroad.....	3	1	---	---	34	95,115	19	66,860	15	28,265	34	32	2	---
Oil and natural-gas pipe line.....	3	3	---	---	156	573,015	61	265,472	95	307,543	156	144	12	---
Other classes <sup>5</sup> .....	6	4	---	---	112	192,597	65	88,798	47	103,799	112	103	9	---
Subcontractors.....	66	29	35	168,383	245	689,772	163	477,786	82	211,986	211	166	45	34
Concreting and stone work.....	3	2	2	4,160	12	27,025	7	11,161	5	15,867	12	8	4	---
Electrical.....	12	5	8	25,718	20	40,984	13	22,760	7	18,234	18	13	5	---
Elevator construction.....	4	---	4	22,500	30	71,189	16	32,020	14	39,160	17	12	5	13
Heating and plumbing.....	15	6	7	28,259	57	241,906	47	204,457	10	37,449	54	47	7	3
Plumbing.....	9	6	3	11,236	36	153,167	28	123,938	8	29,220	34	30	4	1
Plumbing and heating combined <sup>6</sup> .....	6	---	4	17,023	21	88,739	19	80,519	2	8,220	20	17	3	4
Painting and decorating.....	3	2	---	---	7	11,568	7	11,568	3	11,568	3	1	2	5
Plastering and lathing.....	4	3	---	---	14	42,903	7	27,291	7	15,612	9	8	1	---
Roofing.....	7	3	2	21,000	38	85,406	18	47,894	20	37,512	38	34	4	---
Marble and tiling.....	9	6	7	31,175	12	27,675	8	16,675	4	11,000	5	2	3	7
Excavating and grading.....	4	1	2	14,610	28	66,584	25	60,987	3	5,597	28	18	10	---
Ornamental iron.....	4	1	2	4,620	3	9,400	2	6,760	2	6,516	8	6	2	---
Metal work, n. e. s.....	4	3	3	20,901	27	74,529	15	42,974	12	31,555	27	23	4	---
Other classes <sup>7</sup> .....	5	---	---	---	---	---	---	---	---	---	---	---	---	---
<b>EL PASO</b> .....	40	33	13	62,474	161	372,189	72	155,125	89	217,064	196	123	13	25
General contractors.....	19	16	10	53,274	131	295,579	49	97,480	82	198,999	109	99	10	22
Building.....	10	13	10	53,274	110	260,329	43	84,130	76	182,199	97	88	9	22
Highway and grading.....	3	3	---	---	12	29,250	6	13,350	6	15,900	12	11	1	---
Subcontractors.....	21	17	3	9,200	30	76,610	23	57,645	7	18,965	27	24	3	3
Electrical.....	3	2	---	---	5	10,297	4	7,252	1	3,045	5	4	1	---
Heating and plumbing.....	9	6	1	3,600	13	37,853	11	33,233	2	4,620	10	9	1	---
Roofing and sheet metal.....	5	5	---	---	12	28,460	8	17,160	4	11,800	12	11	1	---
Other classes <sup>8</sup> .....	4	4	2	5,600	---	---	---	---	---	---	---	---	---	---

See footnotes at end of table.

TABLE 5.—NUMBER AND SALARIES OF PROPRIETORS, FIRM MEMBERS, AND SALARIED EMPLOYEES: 1929—  
Continued

CLASSIFICATION OF ESTABLISHMENTS	Estab-lish-ments report-ing	PROPRIETORS AND FIRM MEMBERS			SALARIED EMPLOYEES									
		Receiv-ing no salary	Receiving salaries		All salaried em-ployees		Officers and cler-ical staff		Superintendents, foremen, etc.		Number reported, by sex			Sex not re-ported
			Num-ber	Total annual salaries	Total num-ber	Total annual salaries	Num-ber	Total annual salaries	Num-ber	Total annual salaries	Total	Male	Fe-male	
<b>FORT WORTH</b> .....	114	95	18	\$41,908	222	\$490,429	129	\$255,505	93	\$234,924	170	134	36	52
Operative builders.....	3	2	2	5,720	1	420	1	420			1	1		
General contractors.....	81	77	5	14,128	152	352,884	76	160,064	76	192,820	110	89	21	42
Building.....	71	66	5	14,128	89	180,106	46	74,876	43	105,230	62	47	15	27
Building not specialized.....	24	20	5	14,128	60	136,836	30	61,316	30	75,520	40	33	7	20
Commercial building only.....	3	3			2	1,800	1	840	1	060	2	2		
Residential building only.....	44	43			27	41,470	15	12,720	12	28,750	20	12	8	7
Highway.....	4	6			29	80,624	13	42,460	16	38,164	20	26	3	
Street paving.....	4				31	84,252	15	49,055	16	44,197	18	16	2	13
Other classes <sup>9</sup> .....	3	5			3	7,902	2	2,673	1	5,229	1		1	2
Subcontractors.....	30	16	9	22,060	69	137,125	52	95,021	17	42,104	50	44	15	10
Concreting <sup>10</sup> .....	4	5			3	4,080	2	1,680	1	2,400	3	1	2	
Electrical.....	5	1	3	5,100	6	12,895	5	10,605	1	2,290	6	5	1	
Heating and plumbing.....	10	5	4	14,590	11	15,638	9	11,758	2	3,880	7	4	3	4
Painting and decorating.....	3	2	2	2,400	6	13,490	1	1,040	5	12,450	6	5	1	
Steel erection <sup>11</sup> .....	3	2			25	52,132	20	35,528	5	13,604	25	22	3	
Other classes <sup>12</sup> .....	5	1			18	38,890	15	31,410	3	7,480	12	7	5	6
<b>HOUSTON</b> .....	155	62	70	\$31,268	486	1,327,087	280	776,584	206	550,603	459	369	60	27
Operative builders.....	3		2	14,400	10	25,342	7	16,702	3	8,640	10	8	2	
General contractors.....	76	35	27	110,289	273	806,363	157	469,560	116	336,803	270	244	26	3
Building.....	52	27	18	63,007	159	507,065	91	283,857	68	223,208	156	142	14	3
Building not specialized.....	46	24	15	57,907	145	493,285	81	278,057	64	214,328	142	120	13	3
Residential building only.....	6	3	3	6,000	14	13,780	10	4,800	4	8,980	14	13	1	
Highway.....	7	4	3	20,315	33	94,258	21	65,353	12	28,905	33	30	3	
Street paving.....	8	2	6	26,967	32	81,363	21	53,771	11	27,692	32	23	4	
Railroad.....	3	1			17	28,750	10	12,410	7	16,340	17	14	3	
Other classes <sup>13</sup> .....	6	1			32	94,918	14	54,160	18	40,758	32	30	2	
Subcontractors.....	76	27	41	206,879	203	495,362	116	290,302	87	205,060	179	147	32	24
Concreting <sup>10</sup> .....	7	1	3	9,600	23	64,660	9	24,260	14	40,300	23	20	3	
Electrical.....	12	6	5	74,041	35	85,804	21	44,144	14	41,160	33	26	7	2
Heating and plumbing.....	25	9	13	52,051	58	158,098	41	113,077	17	45,021	51	44	7	7
Plumbing.....	21	9	12	49,051	41	101,224	34	76,203	7	25,021	34	27	7	7
Plumbing and heating combined <sup>14</sup> .....	4		1	3,000	17	56,874	7	36,874	10	20,000	17	17		
Painting and decorating <sup>15</sup> .....	4	1	5	10,870	8	16,788	5	10,286	3	6,500	8	5	3	
Plastering and lathing.....	6	1	5	20,151	31	52,416	7	18,823	24	33,593	20	20		11
Roofing and sheet-metal work.....	9	4	4	14,972	28	64,375	21	48,613	7	15,762	24	16	8	4
Metal work, n. e. s. <sup>16</sup> .....	4	2	1	3,600	6	15,428	2	2,224	4	13,204	6	4	2	
Marble and tiling.....	5	5	5	16,494	10	28,855	8	23,955	2	4,600	10	8	2	
Other classes <sup>17</sup> .....	3	3			4	9,540	2	4,920	2	4,620	4	4		
<b>SAN ANTONIO</b> .....	125	72	47	169,085	480	1,161,685	280	645,180	220	516,505	421	363	58	59
General contractors <sup>18</sup> .....	59	36	24	81,961	301	791,346	181	370,539	170	420,807	261	231	30	40
Building.....	45	30	18	57,482	158	397,283	81	203,942	77	193,341	142	121	21	16
Building not specialized <sup>19</sup> .....	39	26	16	47,105	147	377,440	77	200,434	70	177,012	131	113	18	16
Residential building only.....	6	4	2	10,377	11	19,837	4	3,508	7	16,329	11	8	3	
Street paving and highway.....	7		4	14,779	106	264,999	39	127,526	67	137,473	82	75	7	24
Other classes <sup>20</sup> .....	7	6	2	9,700	37	120,064	11	39,071	26	89,993	37	35	2	
Subcontractors.....	66	36	23	86,124	179	370,339	120	274,641	50	95,698	160	132	28	19
Concreting and stonework.....	4	3	4	8,361	4	9,788	3	8,288	1	1,500	4	3	1	
Electrical.....	8	1	5	12,500	50	102,356	34	78,469	16	23,887	50	44	6	
Heating and plumbing.....	23	19	3	21,500	62	140,087	49	107,413	13	32,674	58	48	10	4
Painting and decorating <sup>15</sup> .....	4				10	28,780	8	23,400	2	5,380	7	6	1	3
Plastering and lathing.....	10	6	5	28,843	11	23,060	7	10,098	4	12,962	6	4	2	5
Roofing and sheet-metal work.....	7	2	2	5,600	15	21,321	6	11,276	9	10,045	15	11	4	
Roofing.....	3				11	15,084	3	8,159	8	6,925	11	10	1	
Sheet-metal work.....	4	2	2	5,000	4	6,237	3	3,117	1	3,120	4	1	3	
Marble and tiling.....	4	1			13	20,954	12	19,464	1	1,490	12	9	3	1
Other classes <sup>20</sup> .....	6	4	4	9,320	14	23,993	10	16,233	4	7,760	8	7	1	6

<sup>1</sup> Includes foundation; and grading.  
<sup>2</sup> Includes pipe covering; and automatic temperature control.  
<sup>3</sup> Includes glass and glazing; and flooring, n. e. s.  
<sup>4</sup> Includes carpentering and woodflooring; steel erection; street paving; waterworks; soundproofing; foundation; and rental of equipment, trucking, etc.  
<sup>5</sup> Includes sewer, gas, water, conduit; and central station, light and power plant.  
<sup>6</sup> Includes heating and piping; and automatic temperature control.  
<sup>7</sup> Includes carpentering and woodflooring; excavating; grading; soundproofing; rental of equipment, trucking, etc.  
<sup>8</sup> Includes concreting; painting and decorating; plastering and lathing; and marble and tiling.  
<sup>9</sup> Includes bridge and culvert; sewer, gas, water, conduit; and central station, light and power plant.  
<sup>10</sup> Includes masonry; and stonework.  
<sup>11</sup> Includes ornamental iron; and metal work, n. e. s.  
<sup>12</sup> Includes roofing; sheet metal; marble and tiling; and excavating.  
<sup>13</sup> Includes grading; sewer, gas, water, conduit; dam and reservoir; dredging, river, harbor, etc.; and oil and natural-gas pipe line.  
<sup>14</sup> Includes heating and piping; and pipe covering.  
<sup>15</sup> Includes flooring, n. e. s.  
<sup>16</sup> Includes elevator construction; ornamental iron; and steel erection.  
<sup>17</sup> Includes excavating; and street paving.  
<sup>18</sup> Includes operative builders.  
<sup>19</sup> Includes bridge and culvert; sewer, gas, water, conduit; dam and reservoir; waterworks; and oil and natural-gas pipe line.  
<sup>20</sup> Includes masonry; excavating; ornamental iron; waterworks; foundation; and metal work, n. e. s.

TABLE 6.—VALUE OF CONSTRUCTION EQUIPMENT, IN COMPARISON WITH CONSTRUCTION BUSINESS AND WAGES PAID DURING 1929

CLASSIFICATION OF ESTABLISHMENTS AND PERCENTAGE OF EQUIPMENT OWNED	Establishments reporting	EQUIPMENT		Value of construction business reported	Wages paid	CLASSIFICATION OF ESTABLISHMENTS AND PERCENTAGE OF EQUIPMENT OWNED	Establishments reporting	EQUIPMENT		Value of construction business reported	Wages paid
		Purchased during the year	Inventory value at end of year					Purchased during the year	Inventory value at end of year		
<b>TEXAS</b> .....	868	\$4,979,274	\$13,056,840	\$183,223,048	\$41,809,688	<b>DALLAS—Continued</b>					
<i>Classification of establishments</i>						<i>Classification of establishments—Continued</i>					
Operative builders.....	10	225	844	674,927	78,176	Subcontractors—Continued.					
General contractors.....	508	4,343,569	10,671,018	140,959,331	31,644,114	Heating and plumbing—Con-					
Building.....	351	467,838	1,024,258	71,125,411	13,929,570	Plumbing and heating com-					
Building not specialized.....	269	417,685	1,740,129	62,298,093	12,620,725	bined <sup>7</sup> .....	6	\$65,959	\$22,516	\$1,257,984	\$244,315
Commercial building only.....	23	20,715	115,866	4,779,299	525,014	Plastering and lathing.....	4	8,251	11,760	760,787	403,544
Residential building only.....	59	20,438	68,263	4,043,019	783,831	Roofing.....	5	2,517	14,041	601,260	132,519
Highway.....	02	1,430,642	3,424,236	23,130,683	4,380,678	Marble and tiling.....	7	4,225	23,690	992,308	262,638
Bridge and culvert.....	15	185,879	303,202	4,089,693	1,160,559	Excavating and grading.....	3	23,743	117,246	450,524	171,500
Grading.....	5	58,089	148,096	560,577	346,787	Metal work, n. e. s. <sup>8</sup> .....	5	92,910	221,958	6,954,126	811,314
Street paving.....	31	467,287	1,598,053	11,367,023	2,743,449	Other classes <sup>9</sup> .....	6	39,549	360,992	836,562	292,575
Sewer, gas, water, conduit.....	8	62,885	232,818	3,125,857	725,864	<i>Percentage of equipment</i>					
Dam and reservoir.....	4	165,704	449,575	3,974,352	1,070,300	owned <sup>10</sup>					
Waterworks.....	8	104,899	267,786	2,387,397	507,842	General contractors <sup>5</sup> .....	61	1,989,674	3,236,990	45,076,693	11,740,033
Dredging, river, harbor, etc.....	6	61,849	887,428	1,249,783	332,784	None.....	1			55,814	20,900
Railroad.....	7	216,024	563,692	3,695,497	1,370,862	1% to 25%.....	2	21,200	28,025	588,360	187,238
Oil and natural-gas pipe line.....	6	602,464	757,894	13,591,563	4,448,903	26% to 50%.....	2	7,590	20,375	1,115,370	166,176
Other classes <sup>1</sup> .....	3	153,949	113,980	2,655,495	626,456	51% to 75%.....	12	641,062	1,201,358	15,079,617	4,023,469
Subcontractors.....	352	635,480	2,384,778	41,588,790	10,087,396	76% to 99%.....	44	1,319,822	1,987,232	28,237,542	7,372,250
Concreting.....	18	39,763	167,368	1,022,227	382,078	Subcontractors.....	58	264,737	870,309	17,655,384	3,237,422
Electrical.....	54	36,372	213,555	4,732,860	1,117,808	None.....	1			337,102	11,000
Elevator construction.....	5	12,023	35,552	3,510,409	302,484	51% to 75%.....	1	97	66	25,952	4,091
Heating and plumbing.....	123	121,737	335,626	10,880,478	2,483,220	76% to 99%.....	3	61,743	411,400	668,284	295,824
Heating and piping <sup>2</sup> .....	11	67,559	33,866	1,675,784	300,387	100%.....	52	139,396	460,674	16,533,936	2,911,507
Plumbing.....	96	46,314	240,339	6,832,117	1,634,217	Not reported.....	1	63,501	4,229	100,000	15,000
Plumbing and heating com-						<b>EL PASO</b> .....	35	150,920	414,078	8,565,671	2,117,603
bined.....	13	7,854	57,301	2,083,799	445,639	<i>Classification of establish-</i>					
Automatic sprinkler systems.....	3	10	10	288,778	41,977	<i>ments</i>					
Masonry.....	6	1,840	15,342	349,719	184,195	General contractors.....	19	135,393	367,327	7,100,861	1,750,196
Painting and decorating <sup>3</sup> .....	23	11,985	44,352	1,179,322	522,716	Building not specialized.....	15	53,110	134,729	6,003,953	1,427,205
Plastering and lathing.....	24	10,597	32,005	2,955,156	1,453,115	Highway and grading.....	4	82,283	232,598	1,186,008	322,991
Roofing and sheet-metal work.....	44	64,360	128,269	3,787,408	802,311	Subcontractors.....	16	15,527	46,746	1,374,810	367,407
Roofing.....	30	58,751	82,295	2,806,642	652,522	Heating and plumbing.....	7	5,421	15,902	607,482	147,306
Sheet-metal work.....	11	4,484	35,332	626,736	160,516	Roofing and sheet-metal work.....	5	4,600	16,731	492,369	108,347
Steel erection.....	3	1,131	10,642	355,030	89,273	Other classes <sup>11</sup> .....	4	5,500	14,113	274,959	111,754
Stonework.....	3	12,474	147,381	1,855,613	193,730	<i>Percentage of equipment</i>					
Marble and tiling.....	22	18,229	65,956	428,304	147,161	owned <sup>10</sup>					
Excavating and grading.....	9	122,745	345,849	867,874	308,065	General contractors.....	19	135,393	367,327	7,100,861	1,750,196
Ornamental iron.....	4	207	19,376	323,165	60,685	None.....	1			105,000	4,665
Metal work, n. e. s. <sup>8</sup> .....	8	103,259	275,103	6,392,289	998,965	76% to 99%.....	4	75,810	147,587	3,149,277	719,895
Other classes <sup>4</sup> .....	5	40,182	463,241	645,705	240,275	100%.....	14	59,583	219,760	3,936,584	1,025,636
<i>Percentage of equipment</i>						Subcontractors.....	16	15,527	46,746	1,374,810	367,407
General contractors <sup>5</sup> .....	516	4,343,794	10,671,862	141,634,258	31,722,290	Heating and plumbing.....	7	5,421	15,902	607,482	147,306
None.....	22			1,988,010	337,603	Roofing and sheet-metal work.....	5	4,600	16,731	492,369	108,347
1% to 25%.....	7	1,545	17,799	820,278	101,135	Other classes <sup>11</sup> .....	4	5,500	14,113	274,959	111,754
26% to 50%.....	12	58,268	108,782	1,919,600	473,419	<i>Percentage of equipment</i>					
51% to 75%.....	11	35,549	76,398	2,490,310	393,282	owned <sup>10</sup>					
76% to 99%.....	69	1,080,242	2,894,289	32,996,934	8,009,761	General contractors.....	19	135,393	367,327	7,100,861	1,750,196
100%.....	383	3,132,353	7,526,515	100,617,812	22,247,774	None.....	1			105,000	4,665
Not reported.....	12	26,837	48,079	393,164	159,316	76% to 99%.....	4	75,810	147,587	3,149,277	719,895
Subcontractors.....	352	635,480	2,384,778	41,588,790	10,087,396	100%.....	14	59,583	219,760	3,936,584	1,025,636
None.....	15			1,329,701	204,537	Subcontractors.....	16	15,527	46,746	1,374,810	367,407
1% to 25%.....	2	4,021	9,210	535,500	79,404	51% to 75%.....	1	800	3,582	66,000	15,140
26% to 50%.....	3	897	3,943	132,331	22,231	76% to 99%.....	15	14,727	43,164	1,308,810	332,267
51% to 75%.....	13	75,049	449,238	1,338,500	466,333	<b>FORT WORTH</b> .....	63	258,288	835,349	10,191,888	2,375,179
76% to 99%.....	306	486,879	1,843,158	37,079,694	8,984,292	<i>Classification of establish-</i>					
100%.....	13	68,634	79,224	1,173,004	270,599	<i>ments</i>					
Not reported.....						General contractor <sup>5</sup> .....	41	239,589	762,030	8,152,310	1,880,786
<b>DALLAS</b> .....	119	2,254,411	4,113,859	62,732,077	14,977,455	Building.....	31	26,444	153,967	4,848,994	1,076,644
<i>Classification of establish-</i>						Building not specialized <sup>6</sup> .....	21	21,634	143,792	4,494,909	982,035
<i>ments</i>						Residential building only.....	10	4,810	10,175	354,085	94,559
General contractors <sup>5</sup> .....	61	1,989,674	3,236,990	45,076,693	11,740,033	Highway.....	4	79,085	206,216	931,308	248,649
Building.....	30	97,692	282,847	13,401,069	2,642,389	Street paving.....	3	122,428	384,485	1,838,294	435,426
Building not specialized <sup>6</sup> .....	24	91,417	269,747	12,670,062	2,502,515	Other classes <sup>12</sup> .....	3	11,632	17,362	533,714	120,067
Commercial building only.....	6	6,275	26,100	731,007	139,874	Subcontractors.....	22	18,099	73,319	2,039,578	494,393
Highway.....	10	282,753	1,009,880	4,147,764	736,086	Electrical.....	5	2,163	8,185	540,988	100,927
Bridge and culvert.....	3	138,179	165,626	2,174,357	688,420	Heating and plumbing.....	8	2,853	18,241	389,556	103,470
Street paving.....	4	24,622	117,642	1,597,554	394,775	Steel erection <sup>13</sup> .....	3	4,209	19,816	595,092	103,655
Waterworks, dam, and reser-						Other classes <sup>14</sup> .....	6	9,474	27,077	513,942	186,341
voir.....	4	213,525	434,913	4,761,317	1,207,453	<i>Percentage of equipment</i>					
Railroad.....	3	167,691	456,609	3,158,984	1,237,498	owned <sup>10</sup>					
Oil and natural-gas pipe line.....	3	919,464	632,894	13,239,503	4,254,548	General contractors <sup>5</sup> .....	41	239,589	762,030	8,152,310	1,880,786
Other classes <sup>6</sup> .....	4	145,748	136,579	2,590,085	578,866	None.....	2			71,953	16,683
Subcontractors.....	58	264,737	876,369	17,655,884	3,237,422	1% to 25%.....	1	25	100	62,400	7,931
Electrical.....	10	11,414	37,933	814,189	229,022	26% to 50%.....	2	5,589	10,800	357,512	113,153
Elevator construction.....	3	12,023	30,435	3,446,324	372,924	51% to 75%.....	1	400	800	44,700	15,000
Heating and plumbing.....	15	70,105	58,314	2,790,305	561,386	76% to 99%.....	9	112,535	246,330	2,370,257	455,772
Plumbing.....	9	4,149	35,798	1,532,321	317,071	100%.....	25	121,040	503,731	5,167,075	1,253,914
						Not reported.....	1		269	78,413	18,323
						Subcontractors.....	22	18,099	73,319	2,039,578	494,393
						1% to 25%.....	1	3,971	8,710	500,500	73,800
						26% to 50%.....	20	13,982	62,959	1,518,508	415,807
						76% to 99%.....	1	746	1,650	25,480	4,786
						100%.....					
						Not reported.....	</				

TABLE 6.—VALUE OF CONSTRUCTION EQUIPMENT, IN COMPARISON WITH CONSTRUCTION BUSINESS AND WAGES PAID DURING 1929—Continued

CLASSIFICATION OF ESTABLISHMENTS AND PERCENTAGE OF EQUIPMENT OWNED	Establishments reporting	EQUIPMENT		Value of construction business reported	Wages paid	CLASSIFICATION OF ESTABLISHMENTS AND PERCENTAGE OF EQUIPMENT OWNED	Establishments reporting	EQUIPMENT		Value of construction business reported	Wages paid
		Purchased during the year	Inventory value at end of year					Purchased during the year	Inventory value at end of year		
<b>HOUSTON</b> .....	145	\$334,769	\$1,899,311	\$27,765,043	\$6,142,485	<b>SAN ANTONIO</b> .....	120	\$321,848	\$1,266,787	\$21,749,805	\$4,658,114
<i>Classification of establishments</i>						<i>Classification of establishments</i>					
Operative builders.....	3	200	475	221,650	6,960	General contractors <sup>1</sup> .....	58	269,794	1,082,959	16,375,576	3,043,267
General contractors.....	70	198,615	1,255,793	20,487,451	3,964,177	Building.....	45	81,780	407,138	10,023,560	1,640,301
Building.....	48	38,975	335,445	15,213,706	2,654,857	Building not specialized <sup>2</sup> .....	39	81,591	405,769	10,635,394	1,575,812
Building not specialized.....	44	30,011	325,931	14,495,273	2,495,742	Residential building only.....	6	169	1,379	383,196	70,549
Residential building only.....	4	8,964	9,514	718,433	159,115	Street paving.....	6	95,846	470,159	2,023,086	759,880
Highway.....	0	41,620	213,791	1,835,892	325,742	Other classes <sup>20</sup> .....	7	92,188	205,662	2,823,930	640,026
Street paving.....	8	41,012	180,063	1,434,494	321,626	Subcontractors.....	62	52,054	183,828	5,374,220	1,014,847
Railroad.....	3	40,883	91,802	412,806	111,165	Concreting and stone work.....	4	7,207	18,952	185,748	78,372
Other classes <sup>15</sup> .....	5	36,125	434,692	1,590,533	550,787	Electrical.....	8	9,210	25,506	1,023,224	214,694
Subcontractors.....	72	135,954	643,043	7,055,942	2,171,348	Heating and plumbing.....	19	6,982	38,787	1,561,612	336,025
Concreting and stone work.....	6	35,936	185,784	400,393	161,960	Painting and decorating <sup>21</sup> .....	4	4,514	9,634	224,845	80,448
Electrical.....	9	3,770	53,573	837,461	215,200	Plastering and lathing.....	10	4,260	10,227	971,674	431,170
Heating and plumbing.....	23	8,885	46,237	2,328,193	526,482	Roofing and sheet-metal work.....	6	5,693	17,315	454,000	87,067
Plumbing.....	19	6,496	35,342	1,422,963	317,638	Marble and tiling.....	4	1,071	8,181	423,378	119,984
Plumbing and heating combined <sup>16</sup> .....	4	2,389	10,895	905,230	208,044	Ornamental iron <sup>22</sup> .....	3		10,370	139,468	26,084
Painting and decorating <sup>17</sup> .....	5	2,215	19,871	357,337	170,962	Other classes <sup>23</sup> .....	4	13,117	44,796	300,284	100,195
Plastering and lathing.....	7	6,303	7,701	1,034,413	511,322	<i>Percentage of equipment owned<sup>10</sup></i>					
Roofing and sheet-metal work.....	10	2,518	21,321	826,685	170,748	General contractors <sup>1</sup> .....	58	269,794	1,082,959	16,375,576	3,043,267
Marble and tiling.....	4	5,771	14,512	712,264	223,881	None.....	3			251,270	30,840
Metal work, n. e. s. <sup>18</sup> .....	4	5,556	81,168	347,285	105,249	1% to 25%.....	2	20	370	83,580	7,096
Other classes <sup>19</sup> .....	4	65,000	212,870	211,911	85,544	51% to 75%.....	3	2,003	3,200	429,081	71,475
<i>Percentage of equipment owned<sup>10</sup></i>						76% to 99%.....	11	28,671	145,897	1,037,085	307,727
General contractors <sup>1</sup> .....	73	198,815	1,266,268	20,709,101	3,971,137	100%.....	38	239,010	933,333	13,693,009	2,520,830
None.....	3			688,689	118,443	Not reported.....	1		100	75,861	9,240
1% to 25%.....	2	1,500	3,675	252,335	82,493	Subcontractors.....	62	52,054	183,828	5,374,220	1,014,847
26% to 50%.....	5	27,737	46,907	564,008	96,475	None.....	0			371,490	110,064
51% to 75%.....	7	63,043	360,333	4,789,238	992,425	1% to 25%.....	1	50	500	35,009	5,604
76% to 99%.....	55	106,536	844,536	14,204,813	2,042,896	51% to 75%.....	1		800	40,379	3,000
100%.....	1		817	210,027	38,400	76% to 99%.....	2	3,895	8,950	232,352	35,470
Not reported.....	1					100%.....	50	47,699	170,618	4,560,395	1,416,027
Subcontractors.....	72	135,954	643,043	7,055,942	2,171,348	Not reported.....	2	500	3,400	184,613	44,682
None.....	5			409,864	89,872						
76% to 99%.....	3	2,522	8,132	156,216	41,571						
100%.....	60	132,495	580,036	5,857,555	1,903,762						
Not reported.....	4	937	54,875	632,307	136,143						

1 Includes foundation; and central station, light and power plant.  
2 Includes pipe covering; and automatic temperature control.  
3 Includes glass and glazing; and flooring, n. e. s.  
4 Includes street paving; waterworks; soundproofing; foundation; rental of equipment, trucking, etc.  
5 Includes operative builders.  
6 Includes sewer, gas, water, conduit; and central station, light and power plant.  
7 Includes heating and piping; and automatic temperature control.  
8 Includes steel erection.  
9 Includes concreting; painting and decorating; stonework; soundproofing, rental of equipment, trucking, etc.  
10 For complete classification see tabulation for State above.  
11 Includes concreting; electrical; and painting and decorating.  
12 Includes bridge and culvert; sewer, gas, water, conduit; and central station, light and power plant.  
13 Includes ornamental iron; and metal work, n. e. s.  
14 Includes concreting; masonry; painting and decorating; marble and tiling; and excavating.  
15 Includes sewer, gas, water, conduit; dam and reservoir; dredging, river, harbor, etc.; oil and natural-gas pipe line.  
16 Includes heating and piping; and pipe covering.  
17 Includes flooring, n. e. s.  
18 Includes elevator construction; steel erection; and ornamental iron.  
19 Includes glass and glazing; excavating; and street paving.  
20 Includes bridge and culvert; sewer, gas, water, conduit; dam, reservoir and waterworks; and oil and natural-gas pipe line.  
21 Includes glass and glazing; and flooring, n. e. s.  
22 Includes metal work, n. e. s.  
23 Includes masonry; excavating; waterworks; foundation.

# CONSTRUCTION—TEXAS

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TABLE 7.—WAGE EARNERS, BY MONTHS, AND WAGES PAID DURING 1929

CLASSIFICATION OF ESTABLISHMENTS AND LENGTH OF WORKING WEEK	Establishments reporting	NUMBER EMPLOYED ON 15TH DAY OF THE MONTH OR NEAREST REPRESENTATIVE DAY												Wages paid during year
		January	February	March	April	May	June	July	August	September	October	November	December	
<b>TEXAS</b>	<b>813</b>	<b>22,689</b>	<b>23,617</b>	<b>25,325</b>	<b>27,131</b>	<b>28,205</b>	<b>28,019</b>	<b>30,548</b>	<b>31,395</b>	<b>29,460</b>	<b>29,706</b>	<b>28,000</b>	<b>25,468</b>	<b>\$36,169,343</b>
<i>Classification of establishments</i>														
Operative builders	7	54	60	56	62	60	53	65	63	72	52	44	39	136,942
General contractors	471	18,031	18,731	19,704	21,068	22,205	21,855	24,546	25,452	23,418	23,992	22,587	20,522	26,047,864
Building	346	8,295	8,679	9,688	9,044	9,720	10,034	10,901	10,814	10,215	10,128	9,141	8,902	12,619,759
Building not specialized	244	7,436	7,811	7,712	8,029	8,627	8,910	9,780	9,778	9,240	9,111	8,280	8,075	11,308,231
Commercial building only	12	203	193	159	192	236	249	298	286	249	289	195	179	243,427
Residential building only	90	656	670	717	823	863	875	823	750	726	722	666	648	1,073,101
Highway	47	2,913	2,737	3,083	3,365	3,455	3,709	4,168	4,611	4,312	4,554	4,089	3,542	3,790,322
Bridges and culvert	10	467	517	542	602	657	681	832	832	929	924	1,049	847	980,068
Street paving	26	1,718	2,022	2,108	2,151	2,476	2,393	2,462	2,462	2,253	2,182	2,180	2,076	2,170,454
Sewer, gas, water, conduit	6	574	566	576	561	467	489	592	734	600	675	488	613	704,030
Dam and reservoir	3	124	113	133	112	105	102	107	124	121	111	110	118	107,767
Waterworks	9	276	265	344	360	435	466	391	557	434	427	411	340	540,021
Dredging, river, harbor, etc.	5	240	220	222	204	238	221	231	229	236	227	227	229	287,734
Railroad	7	1,167	1,402	1,642	1,686	1,806	1,072	2,175	2,351	1,884	1,043	1,758	1,380	1,370,682
Oil and natural-gas pipe line	5	1,762	1,751	2,106	2,627	2,305	1,607	1,231	1,122	802	1,341	1,516	1,539	2,948,903
Other classes <sup>1</sup>	7	495	450	465	447	445	357	1,430	1,616	1,632	1,080	1,068	1,336	1,175,014
Subcontractors	335	4,604	4,826	5,565	6,001	5,940	6,111	5,935	5,880	5,970	5,662	5,369	4,907	9,384,537
Concreting	18	247	273	314	370	380	359	448	305	396	421	350	303	378,905
Electrical	52	523	532	547	568	628	661	632	641	619	584	561	531	1,154,551
Elevator construction	5	210	221	221	223	224	233	225	246	251	239	234	221	379,170
Heating and plumbing	122	1,305	1,387	1,490	1,402	1,322	1,350	1,254	1,261	1,311	1,357	1,358	1,325	2,460,172
Heating and piping <sup>2</sup>	8	126	149	170	158	144	145	130	154	145	158	161	169	317,928
Plumbing	98	968	1,018	1,109	1,036	984	1,007	943	918	955	975	970	946	1,751,288
Plumbing and heating combined	13	202	211	193	185	169	171	145	160	188	194	187	177	348,979
Automatic sprinkler system	3	9	9	18	23	25	27	36	29	23	30	40	33	41,977
Masonry	6	39	48	54	83	107	116	112	82	124	85	83	93	147,401
Painting and decorating <sup>3</sup>	20	175	209	231	239	216	256	209	226	220	184	172	167	465,484
Plastering and lathing	23	442	517	691	722	698	682	671	765	768	674	598	505	1,240,964
Roofing and sheet-metal work	38	487	512	517	595	625	664	631	572	621	550	497	455	710,687
Roofing	22	313	331	335	300	418	450	422	371	404	356	311	269	430,189
Sheet-metal work	13	119	121	114	116	126	140	136	130	147	133	131	125	191,225
Roofing and sheet metal combined	3	55	60	68	80	81	74	73	71	70	61	55	61	88,273
Steel erection	3	234	125	170	113	114	134	178	133	119	118	143	131	103,730
Stonework	6	162	136	122	112	107	115	97	98	83	113	139	151	172,733
Marble and tiling	24	305	265	296	342	394	406	430	411	391	398	392	377	656,286
Excavating and grading	5	143	135	170	186	171	173	163	167	205	176	163	164	213,400
Ornamental iron	3	22	26	29	42	43	45	40	37	27	24	30	34	42,334
Metal work, n. e. s.	7	272	382	570	723	645	588	508	449	465	392	420	295	971,515
Other classes <sup>4</sup>	3	48	58	143	251	266	329	337	397	370	347	229	155	190,976
<i>Length of working week</i>														
General contractors	478	18,085	18,791	19,760	21,130	22,265	21,908	24,011	25,515	23,490	24,044	22,631	20,561	26,784,806
40-hour, 5-day week	5	290	330	220	250	264	369	326	374	337	272	240	218	417,367
45-hour, 5-day week														
50-hour, 5-day week														
All other 5-day week														
44-hour, 5½-day week	275	6,555	6,732	7,140	7,631	7,948	7,820	8,414	8,284	7,724	7,909	7,317	7,284	10,435,226
49½-hour, 5½-day week	3	131	174	138	167	175	213	230	193	176	206	128	118	181,746
55-hour, 5½-day week	1	25	27	27	30	30	34	34	34	38	40	40	40	23,887
All other 5½-day week	12	680	675	790	764	771	731	1,007	936	878	908	833	804	739,605
48-hour, 6-day week	76	2,371	2,551	2,273	2,290	2,040	2,777	3,139	3,266	3,258	3,038	2,743	2,632	3,031,027
54-hour, 6-day week	27	1,897	1,646	1,836	2,030	2,101	2,096	2,335	2,400	2,354	2,415	2,459	2,307	2,637,905
60-hour, 6-day week	57	5,191	5,057	6,170	6,925	7,246	7,163	8,038	8,709	7,691	8,216	7,842	6,200	8,192,736
All other 6-day week	8	178	179	242	182	250	142	220	353	319	324	211	190	324,571
All other not designated	7	299	275	343	388	361	276	300	337	309	381	360	324	345,300
Not reported	7	468	547	561	437	479	301	509	629	506	440	452	420	460,783
Subcontractors	335	4,604	4,826	5,565	6,001	5,940	6,111	5,935	5,880	5,970	5,662	5,369	4,907	9,384,537
40-hour, 5-day week	34	423	519	676	698	640	696	697	769	777	725	682	590	1,294,588
45-hour, 5-day week														
50-hour, 5-day week														
All other 5-day week														
44-hour, 5½-day week	218	3,015	2,980	3,232	3,326	3,405	3,518	3,390	3,289	3,326	3,218	3,177	3,016	5,642,345
49½-hour, 5½-day week	2	7	7	11	11	9	8	7	5	15	5	5	6	14,879
55-hour, 5½-day week	1	10	10	12	16	18	10	9	10	15	6	9	7	21,474
All other 5½-day week	7	113	98	105	100	102	125	149	137	126	133	136	130	208,949
48-hour, 6-day week	50	468	481	487	517	521	514	500	448	450	426	424	424	670,025
54-hour, 6-day week	4	270	392	603	597	521	508	415	340	279	240	271	244	737,874
60-hour, 6-day week	7	162	168	253	380	373	424	455	544	544	476	340	259	356,055
All other 6-day week	6	74	88	107	118	115	110	126	128	135	147	75	89	120,077
All other not designated	2	15	15	20	155	157	134	117	139	232	188	193	98	234,078
Not reported	4	47	59	59	83	79	64	70	71	71	61	55	44	84,193
<b>DALLAS</b>	<b>94</b>	<b>6,456</b>	<b>6,841</b>	<b>7,830</b>	<b>8,807</b>	<b>8,886</b>	<b>8,533</b>	<b>9,775</b>	<b>10,361</b>	<b>9,271</b>	<b>9,672</b>	<b>9,475</b>	<b>7,805</b>	<b>11,468,237</b>
<i>Classification of establishments</i>														
General contractors	45	5,199	5,563	6,070	6,008	7,124	6,641	7,897	8,434	7,486	8,019	7,958	6,513	8,661,246
Building	21	900	1,056	937	1,208	1,340	1,397	1,417	1,463	1,482	1,280	1,234	1,225	1,765,427
Highway	7	499	493	502	606	617	742	811	913	601	814	710	629	584,152
Street paving	4	271	318	280	376	447	482	649	543	517	550	502	419	394,775
Waterworks	3	201	180	244	258	303	320	289	423	313	336	301	268	281,353
Railroad, bridge, and culvert	5	1,293	1,544	1,635	1,662	1,084	2,033	2,335	2,617	2,323	2,375	2,391	1,956	1,876,518
Other classes <sup>5</sup>	5	2,065	1,972	2,373	2,708	2,453	1,658	2,396	2,475	2,160	2,664	2,820	2,010	3,758,521
Subcontractors	49	1,257	1,378											



TABLE 7.—WAGE EARNERS, BY MONTHS, AND WAGES PAID DURING 1929—Continued

CLASSIFICATION OF ESTABLISHMENTS AND LENGTH OF WORKING WEEK	Estab-lishments reporting	NUMBER EMPLOYED ON 15TH DAY OF THE MONTH OR NEAREST REPRESENTATIVE DAY												Wages paid during year
		January	February	March	April	May	June	July	August	September	October	November	December	
<b>DALLAS—Continued.</b>														
<i>Length of working week</i> <sup>10</sup>														
General contractors.....	45	5,199	5,563	6,070	6,908	7,124	6,641	7,897	8,434	7,486	8,019	7,958	6,513	85,661,246
44-hour, 5½-day week.....	23	1,403	1,450	1,443	1,697	1,790	1,579	1,789	1,903	1,886	1,725	1,601	1,065	2,380,893
49½-hour, 5½-day week.....	1	128	168	125	150	165	205	170	150	180	125	110	110	165,763
All other 5½-day week.....	3	213	219	198	256	304	386	484	344	296	310	300	277	280,760
48-hour, 6-day week.....	3	114	110	130	113	59	115	139	143	117	140	127	107	140,248
54-hour, 6-day week.....	6	607	612	666	721	807	838	1,063	1,170	1,235	1,192	1,368	1,129	1,304,600
60-hour, 6-day week.....	9	2,734	3,004	3,508	3,971	3,999	3,618	4,257	4,704	3,802	4,472	4,437	3,225	4,430,003
Subcontractors.....	49	1,257	1,378	1,760	1,899	1,762	1,892	1,878	1,947	1,785	1,663	1,617	1,202	2,821,601
40-hour, 5-day week.....	12	105	116	185	200	167	259	315	369	313	272	262	178	480,220
44-hour, 5½-day week.....	26	671	702	752	727	678	699	672	751	760	711	677	630	1,224,409
49½-hour, 5½-day week.....	1	5	5	7	6	6	6	5	3	3	3	3	4	8,282
All other 5½-day week.....	3	32	18	18	19	24	24	25	30	28	33	31	29	74,070
48-hour, 6-day week.....	4	80	63	74	85	87	86	90	74	60	78	71	74	99,858
54-hour, 6-day week.....	1	244	362	549	564	494	465	397	322	263	222	236	185	705,262
60-hour, 6-day week.....	2	120	112	175	298	306	353	374	398	358	334	237	183	220,824
<b>EL PASO.....</b>	<b>35</b>	<b>1,625</b>	<b>1,502</b>	<b>1,594</b>	<b>1,675</b>	<b>1,696</b>	<b>1,644</b>	<b>1,788</b>	<b>1,880</b>	<b>2,149</b>	<b>2,432</b>	<b>2,293</b>	<b>2,605</b>	<b>2,131,168</b>
<i>Classification of establishments</i>														
General contractors.....	17	1,450	1,302	1,360	1,429	1,445	1,358	1,484	1,582	1,841	2,134	1,996	2,323	1,709,555
Building not specialized.....	13	914	922	1,020	962	1,109	1,181	1,210	1,481	1,627	1,624	1,812	1,812	1,886,604
Highway and grading.....	4	536	380	340	467	336	332	303	372	360	507	474	511	322,001
Subcontractors.....	18	175	200	234	246	251	286	304	298	308	208	207	282	421,613
Heating and plumbing.....	8	72	71	87	77	71	67	69	72	75	94	119	112	147,270
Roofing and sheet-metal work.....	5	53	57	57	64	61	71	79	95	100	91	90	85	108,347
Other classes <sup>11</sup> .....	5	50	72	90	105	119	148	156	131	133	113	88	85	165,987
<i>Length of working week</i> <sup>10</sup>														
General contractors.....	17	1,450	1,302	1,360	1,429	1,445	1,358	1,484	1,582	1,841	2,134	1,996	2,323	1,709,555
44-hour, 5½-day week.....	10	231	355	491	539	515	550	551	523	585	754	723	908	617,014
48-hour, 6-day week.....	3	683	567	529	423	594	470	630	687	896	873	801	904	769,550
54-hour, 6-day week.....	3	365	256	238	371	248	256	232	282	236	333	322	355	167,185
60-hour, 6-day week.....	1	171	124	102	96	88	76	71	90	124	174	150	150	155,800
Subcontractors.....	18	175	200	234	246	251	286	304	298	308	208	207	282	421,613
44-hour, 5½-day week.....	14	133	148	173	169	164	191	213	192	194	190	218	214	340,084
48-hour, 6-day week.....	2	14	14	13	17	15	17	16	34	33	28	19	18	17,955
All other 6-day week.....	2	28	38	48	70	72	78	75	72	81	80	60	60	63,594
<b>FORT WORTH.....</b>	<b>97</b>	<b>1,412</b>	<b>1,368</b>	<b>1,587</b>	<b>1,729</b>	<b>1,863</b>	<b>1,956</b>	<b>2,039</b>	<b>1,698</b>	<b>1,845</b>	<b>2,040</b>	<b>1,790</b>	<b>1,796</b>	<b>2,315,853</b>
<i>Classification of establishments</i>														
General contractors.....	73	1,162	1,123	1,212	1,381	1,618	1,680	1,777	1,632	1,600	1,793	1,563	1,571	1,632,366
Building.....	67	747	771	888	948	1,094	1,090	1,219	1,170	1,028	1,197	947	858	1,316,528
Building not specialized.....	25	543	547	644	673	816	809	970	939	820	1,002	787	699	959,483
Residential building only.....	42	204	224	244	275	278	281	249	231	208	195	160	169	367,045
Street paving.....	3	161	278	248	346	389	437	441	313	394	328	346	300	485,420
Other classes <sup>12</sup> .....	3	254	74	76	87	135	153	117	149	178	268	270	353	180,412
Subcontractors.....	24	250	245	325	348	245	276	262	266	245	247	227	225	383,487
Concreting <sup>13</sup> .....	4	33	40	72	97	78	70	83	67	63	66	59	43	58,622
Electrical.....	4	17	16	14	13	14	18	19	22	23	23	22	15	36,680
Heating and plumbing.....	6	36	28	41	42	32	47	34	35	35	35	39	38	61,944
Painting and decorating.....	3	38	45	47	54	32	31	30	42	39	31	12	20	78,528
Steel erection <sup>14</sup> .....	3	72	65	65	65	61	68	78	85	71	75	64	54	103,655
Other classes <sup>15</sup> .....	4	54	58	86	77	29	46	19	18	15	17	31	55	43,749
<i>Length of working week</i> <sup>10</sup>														
General contractors.....	73	1,162	1,123	1,212	1,381	1,618	1,680	1,777	1,632	1,600	1,793	1,563	1,571	1,632,366
44-hour, 5½-day week.....	62	674	703	797	849	953	956	1,024	982	920	1,131	885	810	1,184,936
49½-hour, 5½-day week.....	1	3	5	8	3	5	5	5	6	4	4	5	5	4,760
48-hour, 6-day week.....	2	24	26	18	21	12	16	12	22	24	4	5	4	18,999
54-hour, 6-day week.....	4	386	276	276	332	419	442	484	427	435	466	437	478	488,017
60-hour, 6-day week.....	3	66	107	114	166	229	250	245	168	206	159	223	263	226,823
All other 6-day week.....	1	12	8	2	5	2	2	7	3	9	9	8	2	7,041
Subcontractors.....	24	250	245	325	348	245	276	262	266	245	247	227	225	383,487
40-hour, 5-day week.....	2	9	9	14	21	21	21	18	25	12	13	10	12	31,614
44-hour, 5½-day week.....	16	109	108	136	165	115	127	118	115	120	117	102	89	210,332
All other 5½-day week.....	2	64	58	64	47	42	55	68	69	62	64	56	49	85,301
48-hour, 6-day week.....	2	35	35	38	45	5	6	6	6	6	6	6	6	18,548
54-hour, 6-day week.....	1	18	20	43	25	17	32	7	6	5	7	23	49	15,252
Not reported.....	1	15	15	30	45	45	35	45	45	40	40	30	20	22,380
<b>HOUSTON.....</b>	<b>142</b>	<b>3,811</b>	<b>3,732</b>	<b>4,039</b>	<b>3,938</b>	<b>4,009</b>	<b>4,252</b>	<b>4,312</b>	<b>4,400</b>	<b>4,057</b>	<b>3,702</b>	<b>3,257</b>	<b>3,194</b>	<b>5,669,930</b>
<i>Classification of establishments</i>														
General contractors.....	70	2,623	2,549	2,720	2,669	2,720	2,912	3,039	3,189	2,762	2,574	2,118	2,170	3,816,658
Building.....	49	1,647	1,572	1,639	1,599	1,606	1,775	1,779	1,777	1,546	1,313	1,194	1,112	2,469,174
Building not specialized.....	43	1,540	1,468	1,529	1,498	1,472	1,656	1,638	1,669	1,444	1,209	1,094	993	2,320,522
Residential building only.....	6	107	104	110	101	134	119	141	108	102	104	100	119	178,652
Highway.....	7	189	216	242	302	369	434	453	409	410	316	247	190	402,829
Street paving.....	5	167	120	256	161	173	86	88	206	137	130	99	178	232,126
Railroad.....	3	100	110	137	175	186	170	210	216	174	203	176	155	111,165
Other classes <sup>16</sup> .....	6	520	531	416	432	386	447	509	681	495	612	402	535	571,364

See footnotes at end of table.

# CONSTRUCTION—TEXAS

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TABLE 7.—WAGE EARNERS, BY MONTHS, AND WAGES PAID DURING 1929—Continued

CLASSIFICATION OF ESTABLISHMENTS AND LENGTH OF WORKING WEEK	Estab-lish-ments report-ing	NUMBER EMPLOYED ON 15TH DAY OF THE MONTH OR NEAREST REPRESENTATIVE DAY												Wages paid during year
		Janu-ary	Febru-ary	March	April	May	June	July	August	Septem-ber	Octo-ber	Novem-ber	Decem-ber	
<b>HOUSTON—Continued.</b>														
<i>Classification of establishments—Contd.</i>														
Subcontractors.....	72	1,188	1,183	1,310	1,260	1,289	1,340	1,273	1,211	1,295	1,128	1,139	1,024	\$2,153,272
Concreting <sup>12</sup> .....	7	146	139	107	131	180	166	208	194	201	159	179	175	185,166
Electrical.....	12	159	161	155	180	172	156	164	162	129	109	113	113	360,432
Heating and plumbing.....	25	256	299	368	304	307	337	289	264	287	284	284	284	691,704
Plumbing.....	21	179	206	256	199	211	235	196	154	166	192	184	160	382,820
Plumbing and heating combined <sup>17</sup> .....	4	77	93	110	105	96	102	93	110	91	102	100	114	208,884
Painting and decorating <sup>18</sup> .....	4	65	76	79	63	51	47	53	76	54	32	36	34	144,062
Plastering and lathing.....	6	216	244	280	243	235	203	159	163	228	192	201	180	400,872
Roofing and sheet-metal work.....	3	75	92	100	144	149	180	143	101	128	84	70	59	145,730
Metal work, n. e. s. <sup>19</sup> .....	8	151	46	80	44	54	68	94	52	80	23	60	62	86,889
Marble and tiling.....	4	101	101	99	103	89	92	112	84	106	100	103	97	165,167
Other classes <sup>20</sup> .....	3	25	25	53	57	72	70	59	83	129	115	88	40	60,544
<i>Length of working week<sup>10</sup></i>														
General contractors.....	70	2,623	2,549	2,720	2,660	2,720	2,912	3,039	3,189	2,762	2,574	2,118	2,170	3,816,658
40-hour, 5-day week.....	2	153	158	115	114	120	181	148	266	267	173	132	117	237,844
44-hour, 5½-day week.....	45	1,473	1,388	1,501	1,404	1,459	1,672	1,601	1,452	1,250	1,102	1,023	945	2,174,789
55-hour, 5½-day week.....	1	25	27	27	30	30	30	34	34	38	4	4	4	23,887
All other 5½-day week.....	1	4	4	4	4	4	4	4	4	4	4	4	4	7,000
54-hour, 6-day week.....	2	60	37	165	136	117	73	40	25	31	41	23	73	92,732
60-hour, 6-day week.....	11	620	675	556	653	684	794	890	976	808	856	589	721	331,633
All other 6-day week.....	4	108	90	147	62	108	89	128	100	182	149	123	114	244,842
All other not designated.....	3	154	150	177	183	172	142	168	187	182	180	160	133	180,800
Not reported.....	1	26	20	28	23	26	27	26	25	30	29	24	23	23,122
Subcontractors.....	72	1,188	1,183	1,310	1,260	1,289	1,340	1,273	1,211	1,295	1,128	1,139	1,024	2,153,272
40-hour, 5-day week.....	10	232	288	344	299	270	245	175	210	260	232	253	242	496,041
44-hour, 5½-day week.....	54	901	821	868	855	888	962	976	851	850	757	777	732	1,640,887
55-hour, 5½-day week.....	1	10	10	12	16	18	10	9	10	15	6	9	7	21,474
48-hour, 6-day week.....	4	17	30	37	38	51	62	54	20	40	28	20	13	41,598
60-hour, 6-day week.....	2	13	19	38	36	32	29	27	76	90	60	40	15	37,372
Not reported.....	1	15	15	20	25	30	32	32	35	50	45	40	15	15,000
<b>SAN ANTONIO</b>														
<i>Classification of establishments</i>														
General contractors <sup>4</sup> .....	40	2,373	2,620	2,544	2,686	2,896	2,867	2,996	3,160	2,724	2,833	2,685	2,557	2,895,306
Building.....	36	1,127	1,134	1,070	1,260	1,304	1,324	1,554	1,639	1,397	1,575	1,407	1,339	1,520,062
Building not specialized <sup>5</sup> .....	32	1,045	1,054	995	1,155	1,201	1,214	1,467	1,547	1,301	1,487	1,327	1,262	1,401,042
Residential building only.....	4	82	80	75	105	103	110	87	92	96	88	80	77	59,320
Street paving and highway.....	7	801	1,064	971	911	1,110	1,128	1,041	1,023	891	797	798	771	838,344
Other classes <sup>21</sup> .....	6	385	422	503	515	482	417	401	498	456	461	450	447	536,000
Subcontractors.....	57	798	830	859	964	1,053	1,040	967	915	970	981	953	922	1,514,629
Concreting and stone work.....	4	94	82	82	67	71	60	67	65	74	83	76	67	78,372
Electrical.....	6	103	104	107	106	117	130	139	132	127	122	124	121	193,389
Heating and plumbing.....	22	243	265	260	289	291	295	283	266	287	299	315	308	506,567
Plastering and lathing.....	0	141	154	201	243	296	195	161	187	203	195	168	156	371,377
Roofing and sheet-metal work.....	7	103	104	86	95	133	156	151	109	123	129	116	106	110,962
Roofing.....	3	77	78	58	65	99	113	108	69	80	79	73	65	55,523
Sheet-metal work.....	4	26	26	28	30	34	43	43	40	43	50	43	41	55,439
Marble and tiling.....	4	51	46	46	81	73	79	85	73	76	72	82	62	119,984
Other classes <sup>22</sup> .....	5	63	75	77	83	72	125	81	83	89	81	72	72	133,978
<i>Length of working week<sup>10</sup></i>														
General contractors <sup>4</sup> .....	40	2,373	2,620	2,544	2,686	2,896	2,867	2,996	3,160	2,724	2,833	2,685	2,557	2,895,306
44-hour, 5½-day week.....	31	939	929	912	979	1,000	1,084	1,246	1,324	1,265	1,528	1,403	1,395	1,332,777
All other 5½-day week.....	1	75	100	195	200	200	230	230	220	230	195	185	185	141,036
48-hour, 6-day week.....	0	635	728	626	665	752	738	838	838	663	522	451	512	644,113
54-hour, 6-day week.....	4	350	364	383	388	403	348	368	350	245	217	194	168	300,524
60-hour, 6-day week.....	2	250	337	231	212	324	327	200	263	173	163	199	133	316,159
All other not designated.....	1	60	60	100	150	100	60	40	60	60	120	120	100	82,437
Not reported.....	1	64	102	97	92	117	80	74	105	88	88	78	64	78,260
Subcontractors.....	57	798	830	859	964	1,053	1,040	967	915	970	981	953	922	1,514,629
44-hour, 5½-day week.....	44	682	693	737	816	898	884	791	750	777	796	775	740	1,278,879
49½-hour, 5½-day week.....	1	2	2	4	5	3	2	2	2	12	2	2	2	6,597
All other 5½-day week.....	2	17	22	23	34	36	46	56	38	36	36	49	52	49,512
48-hour, 6-day week.....	3	72	82	61	69	87	76	72	65	68	81	80	83	88,212
60-hour, 6-day week.....	2	25	31	34	40	29	32	46	60	60	60	47	45	91,429

<sup>1</sup> Includes grading; and central station, light and power plant.  
<sup>2</sup> Includes pipe covering; and automatic temperature control.  
<sup>3</sup> Includes glass and glazing; and flooring, n. e. s.  
<sup>4</sup> Includes street paving; soundproofing; rental of equipment, trucking, etc.  
<sup>5</sup> Includes operative builders.  
<sup>6</sup> Includes sewer, gas, water, conduit; central station, light and power plant; and oil and natural-gas pipe line.  
<sup>7</sup> Includes automatic temperature control; and heating and piping.  
<sup>8</sup> Includes steel erection.  
<sup>9</sup> Includes concreting; plastering and lathing; stonework; grading; soundproofing; rental of equipment, trucking, etc.  
<sup>10</sup> For complete classification see tabulation for State above.  
<sup>11</sup> Includes concreting; electrical; painting and decorating; plastering and lathing; and marble and tiling.  
<sup>12</sup> Includes highway; and sewer, gas, water, conduit.  
<sup>13</sup> Includes masonry; and stonework.  
<sup>14</sup> Includes ornamental iron; and metal work, n. e. s.  
<sup>15</sup> Includes roofing; sheet-metal work; marble and tiling; and excavating.  
<sup>16</sup> Includes grading; sewer, gas, water, conduit; dam and reservoir; dredging, river, harbor, etc.; and oil and natural-gas pipe line.  
<sup>17</sup> Includes heating and piping; and pipe covering.  
<sup>18</sup> Includes flooring, n. e. s.  
<sup>19</sup> Includes elevator construction; and steel erection.  
<sup>20</sup> Includes glass and glazing; excavating; and street paving.  
<sup>21</sup> Includes bridge and culvert; sewer, gas, water, conduit; waterworks; and oil and natural-gas pipe line.  
<sup>22</sup> Includes painting and decorating; excavating; ornamental iron; and metal work, n. e. s.

TABLE 8.—EXPENDITURES OF REPORTING ESTABLISHMENTS: 1929

CLASSIFICATION OF ESTABLISHMENTS	Establishments reporting	Value of construction business reported	PRINCIPAL ITEMS OF EXPENDITURE			OTHER ITEMS OF EXPENDITURE							
			Subcontract work let	Wages paid	Cost of materials	Salaries		Rent for		Interest	Contract bond premiums	Compensation and liability insurance premiums	All other overhead expenses
						Proprietors and firm members	Employees	Equipment	Offices, etc.				
<b>TEXAS</b>	<b>873</b>	<b>\$180,683,862</b>	<b>\$32,603,000</b>	<b>\$40,156,135</b>	<b>\$70,732,809</b>	<b>\$1,183,810</b>	<b>\$7,061,752</b>	<b>\$318,501</b>	<b>\$546,841</b>	<b>\$1,266,039</b>	<b>\$874,224</b>	<b>\$1,591,120</b>	<b>\$11,891,322</b>
Operative builders	9	527,991	130,000	68,801	197,616	20,120	7,780	-----	4,440	8,986	15	870	32,058
General contractors	497	137,438,878	31,901,000	29,795,802	47,456,085	539,213	5,120,474	294,309	250,926	1,148,753	826,507	1,292,917	9,472,391
Building	362	73,050,099	26,310,000	14,376,510	23,533,744	370,609	2,095,824	27,707	124,909	178,359	282,571	650,477	1,382,790
Building not specialized	259	63,719,038	21,900,000	12,918,533	20,796,836	332,131	1,925,714	25,476	108,136	144,430	247,470	601,609	1,201,867
Commercial building only	18	4,499,920	3,257,000	457,183	625,502	6,606	86,087	504	6,978	14,157	4,703	25,675	20,633
Residential building only	85	4,831,141	1,153,000	1,000,704	2,111,408	31,872	84,023	1,727	9,795	19,763	10,398	25,193	94,299
Highway	48	20,021,523	1,715,000	3,712,937	9,574,335	86,740	740,493	101,265	38,169	148,682	208,099	157,977	2,315,390
Bridge and culvert	14	3,889,603	117,000	1,130,559	1,771,620	6,480	311,501	4,020	4,634	12,000	35,891	71,910	330,744
Street paving	30	11,847,013	569,000	2,713,056	4,278,452	42,237	712,721	72,988	27,920	160,038	123,799	95,034	1,405,086
Sewer, gas, water, conduit	6	1,578,855	110,000	275,234	785,933	4,800	46,728	9,916	2,640	2,442	14,593	18,021	44,121
Dam and reservoir	5	4,218,045	610,000	1,187,383	1,245,623	-----	223,851	6,000	3,147	26,193	62,971	32,446	452,361
Waterworks	9	2,817,897	92,000	540,021	1,388,250	28,347	133,733	8,900	7,029	8,634	35,981	21,896	243,793
Dredging, river, harbor, etc	3	635,380	-----	186,602	-----	-----	91,800	-----	1,280	19,378	4,399	8,979	259,923
Railroad	7	3,695,497	483,000	1,370,862	90,938	-----	129,874	12,744	4,835	14,594	2,484	34,114	1,170,416
Central station, light, and power plant	3	5,011,865	260,000	1,054,399	2,668,240	-----	173,824	43,838	6,900	480	1,500	71,780	322,711
Oil and natural-gas pipe line	5	10,591,583	1,567,000	2,948,903	2,090,410	-----	437,365	4,391	27,903	507,718	69,001	122,340	1,414,281
Other classes <sup>1</sup>	5	581,012	68,000	350,336	19,480	-----	22,700	2,600	7,560	4,175	4,618	7,343	64,161
Subcontractors	307	42,716,993	472,000	10,291,532	23,129,108	624,477	1,933,498	24,132	285,575	128,300	47,702	297,333	2,386,273
Concreting	15	866,502	-----	348,183	315,732	6,600	55,090	1,245	5,106	2,829	1,529	8,388	42,097
Electrical	58	4,790,370	-----	1,248,732	2,425,068	140,110	249,659	1,237	59,452	14,458	9,802	22,878	285,242
Elevator construction	6	3,841,080	138,000	429,225	2,710,175	28,100	75,089	100	5,153	1,827	1,764	25,963	32,004
Heating and plumbing	132	11,964,823	135,000	2,748,496	6,651,629	108,340	690,943	1,509	114,414	39,806	23,572	48,256	804,110
Heating and piping <sup>2</sup>	10	1,600,784	-----	341,249	904,413	18,099	86,095	1,509	7,422	3,403	2,844	5,029	110,009
Plumbing	103	7,771,904	135,000	1,857,151	4,287,551	148,488	450,051	-----	80,442	26,425	16,769	30,745	498,931
Plumbing and heating combined	16	2,303,360	-----	508,119	1,295,028	31,753	135,296	-----	22,906	9,135	2,095	11,900	182,933
Automatic sprinkler systems	7	288,778	-----	41,977	194,637	-----	19,501	-----	3,644	843	964	621	12,246
Masonry	3	481,559	2,000	207,401	149,487	-----	8,000	782	11,297	50	66	9,001	5,525
Painting and decorating <sup>3</sup>	23	1,158,425	4,000	503,629	368,627	27,370	76,124	-----	11,194	2,843	567	9,970	49,356
Plastering and lathing	25	2,043,662	140,000	1,442,027	913,131	48,994	127,109	103	8,375	6,665	2,851	22,410	70,430
Roofing and sheet-metal work	46	3,991,999	11,000	842,594	2,163,445	65,942	275,887	-----	32,838	25,617	3,003	32,224	310,691
Roofing	30	2,895,511	11,000	602,096	1,615,961	35,372	225,980	-----	25,247	19,667	2,364	24,263	234,834
Sheet-metal work	13	741,458	-----	191,225	374,657	22,220	36,842	-----	3,240	4,898	639	5,625	39,751
Roofing and sheet-metal combined	3	355,030	-----	89,273	172,827	8,350	10,065	-----	4,345	1,552	-----	2,446	30,006
Steel erection	3	1,855,613	20,000	193,730	1,177,275	-----	47,231	4,000	3,433	8,798	50	26,192	134,408
Stonework	5	470,394	-----	156,161	1,104,401	8,361	47,226	200	2,840	3,321	1,048	4,636	33,970
Marble and tiling	25	2,745,943	-----	781,856	1,410,666	54,769	95,487	1,290	28,061	12,551	891	9,009	174,524
Excavating	6	577,820	-----	268,771	66,224	5,400	12,075	5,867	1,712	7,952	1,900	10,909	106,235
Ornamental iron	4	323,165	-----	60,685	185,300	4,320	16,282	-----	1,080	504	-----	2,930	20,798
Metal work, n. e. s.	8	6,392,289	22,000	998,965	4,274,332	14,610	193,367	-----	7,920	4,037	-----	62,774	182,207
Other classes <sup>4</sup>	4	363,346	-----	61,073	114,956	15,561	49,020	7,808	2,700	2,540	-----	1,788	74,647
<b>DALLAS</b>	<b>124</b>	<b>62,655,477</b>	<b>9,450,000</b>	<b>13,887,744</b>	<b>24,703,844</b>	<b>245,583</b>	<b>2,491,196</b>	<b>99,962</b>	<b>183,209</b>	<b>686,681</b>	<b>299,201</b>	<b>587,622</b>	<b>4,847,745</b>
General contractors <sup>5</sup>	50	44,711,439	9,282,000	10,715,895	13,506,820	87,300	1,839,684	97,175	89,198	653,232	285,028	479,138	4,046,047
Building	31	14,087,545	6,133,000	2,802,611	3,523,480	67,253	401,986	15,184	33,740	10,763	56,731	140,911	163,252
Building not specialized <sup>6</sup>	26	13,475,917	5,787,000	2,747,692	3,406,821	64,853	386,779	15,040	31,888	15,464	55,817	133,513	167,935
Commercial building only	5	611,628	346,000	114,919	1,117,699	2,400	15,207	144	1,858	1,929	914	7,398	5,317
Highway	7	3,632,756	271,000	532,314	1,679,907	3,600	135,944	2,168	7,491	23,752	51,298	30,981	573,204
Bridge and culvert	3	2,174,357	17,000	688,420	967,102	-----	233,898	2,265	2,903	7,370	25,218	50,469	148,108
Street paving	4	1,597,554	121,000	894,775	530,122	-----	132,121	-----	6,808	6,428	5,907	7,866	151,724
Sewer, gas, water, and conduit	3	477,498	5,000	88,769	321,144	-----	21,235	9,200	1,800	1,276	1,785	4,142	17,607
Waterworks, dam, and reservoir	4	4,761,317	677,000	1,207,453	1,757,694	16,447	228,248	9,000	2,087	22,351	77,014	35,739	247,466
Railroad	3	3,158,984	316,000	1,237,498	95,646	-----	95,115	11,494	2,775	9,406	1,705	27,102	1,033,036
Other classes <sup>7</sup>	4	14,921,458	1,742,000	3,704,055	4,633,775	-----	588,137	47,864	30,928	565,856	65,070	181,928	1,711,470
Subcontractors	65	17,944,038	168,000	3,171,849	11,197,024	158,228	651,512	2,787	74,011	33,449	13,273	108,484	801,698
Electrical	11	833,302	-----	249,480	421,957	19,718	37,284	1,237	9,080	2,633	3,845	4,824	63,353
Elevator construction	4	3,767,905	138,000	409,665	2,685,723	22,500	71,189	-----	3,453	1,827	1,704	25,403	26,682
Heating and plumbing	10	2,831,118	25,000	699,668	1,639,463	28,259	241,906	1,500	28,400	6,514	4,399	8,305	200,198
Plumbing	16	1,573,134	25,000	325,353	931,443	11,236	153,107	-----	15,946	2,600	3,528	4,906	103,489
Plumbing and heating combined <sup>8</sup>	6	1,257,984	-----	244,315	708,020	17,028	88,739	1,500	12,553	3,854	871	3,399	96,700
Painting and decorating	3	113,198	-----	55,420	31,528	-----	11,568	-----	1,970	723	-----	1,780	2,660
Plastering and lathing	4	700,787	-----	403,544	232,196	-----	42,903	-----	2,490	1,088	1,664	7,024	15,997
Roofing	7	745,930	-----	161,189	372,390	21,000	85,406	-----	7,765	4,007	501	6,079	55,363
Marble and tiling	9	1,103,410	-----	290,851	823,190	31,175	27,675	50	12,364	2,012	121	2,000	56,430
Metal work, n. e. s.	5	6,954,125	5,000	811,314	4,850,402	14,610	66,584	-----	4,424	6,045	-----	45,045	238,324
Other classes <sup>9</sup>	6	834,164	-----	220,768	349,175	29,901	66,997	-----	3,960	8,000	979	7,100	153,682
<b>EL PASO</b>	<b>39</b>	<b>8,831,284</b>	<b>1,650,000</b>	<b>2,205,785</b>	<b>3,441,137</b>	<b>57,474</b>	<b>363,389</b>	<b>34,791</b>	<b>15,447</b>	<b>26,499</b>	<b>38,810</b>	<b>68,866</b>	<b>444,029</b>
General contractors	19	7,190,861	1,649,000	1,750,196	2,541,144	45,274	290,479	34,791	6,262	20,411	38,447	61,677	355,682
Building not specialized	15	6,003,953	1,590,000	1,427,205	1,987,747	45,274	261,229	1,110	4,600	14,706	28,939	48,038	183,685
Highway and grading	4												

CONSTRUCTION—TEXAS

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TABLE 8.—EXPENDITURES OF REPORTING ESTABLISHMENTS: 1929—Continued

CLASSIFICATION OF ESTABLISHMENTS	Estab-lish-ments reporting	Value of con-struction business reported	PRINCIPAL ITEMS OF EXPENDITURE			OTHER ITEMS OF EXPENDITURE							
			Subcon-tract work let	Wages paid	Cost of materials	Salaries		Rent for		Interest	Contract bond pre-miums	Compen-sation and lia-bility in-surance pre-miums	All other overhead expenses
						Proprie-tors and firm members	Employ-ees	Equip-ment	Offices, etc.				
<b>FORT WORTH</b>	105	\$11,200,042	\$2,030,000	\$2,706,637	\$4,455,208	\$38,908	\$443,824	\$10,685	\$38,453	\$65,790	\$66,394	\$102,458	\$644,958
General contractors <sup>1</sup>	78	9,056,868	2,010,000	2,184,155	3,347,808	16,748	328,854	6,685	19,769	53,951	62,796	89,264	525,950
Building	68	5,753,552	1,547,000	1,380,013	2,111,414	16,748	150,076	3,205	10,812	15,472	25,716	53,982	155,010
Building not specialized <sup>2</sup>	26	4,378,372	1,437,000	1,022,218	1,450,485	16,748	114,606	2,205	7,432	11,451	10,511	39,667	118,335
Residential building only	42	1,375,180	110,000	357,795	660,929	-----	41,470	1,000	3,380	4,021	9,205	14,315	36,675
Highway	4	931,308	132,000	248,049	358,555	-----	80,624	-----	2,913	8,156	9,598	86,633	86,633
Street paving	3	1,838,294	172,000	435,428	723,479	-----	84,252	2,399	5,864	30,223	24,041	19,052	276,155
Other classes <sup>11</sup>	3	533,714	159,000	120,067	154,330	-----	7,902	1,081	180	100	3,441	6,903	9,162
Subcontractors	27	2,143,174	20,000	522,482	1,107,400	22,060	114,970	4,000	18,684	11,839	3,598	13,194	119,008
Concreting <sup>12</sup>	4	162,700	-----	58,622	71,629	-----	4,080	-----	2,140	200	516	2,534	7,563
Electrical	5	477,738	-----	84,787	245,138	5,100	11,470	-----	5,280	111	617	1,520	15,893
Heating and plumbing	10	444,099	-----	116,490	210,794	14,560	15,638	-----	7,433	3,549	1,866	1,614	40,739
Steel erection <sup>13</sup>	3	595,092	20,000	103,665	382,328	-----	52,132	4,000	2,353	870	50	5,705	45,815
Other classes <sup>14</sup>	5	463,545	-----	158,928	197,516	2,400	31,650	-----	1,428	7,100	550	1,821	9,036
<b>HOUSTON</b>	145	\$0,529,473	\$0,043,000	\$0,673,229	\$0,931,636	\$25,168	\$1,236,839	\$0,952	\$107,279	\$144,196	\$0,112	\$257,473	\$1,427,814
Operative builders	3	221,650	57,000	6,960	60,678	14,400	6,840	-----	3,840	3,816	-----	130	26,769
General contractors	72	22,820,167	8,812,000	4,109,207	6,448,312	106,689	774,886	76,966	41,908	111,047	78,764	108,902	957,173
Building	51	18,244,343	8,396,000	3,131,439	4,909,771	95,007	507,065	4,531	28,584	44,744	42,878	154,959	251,039
Building not specialized	45	17,434,684	8,347,000	2,952,787	4,450,412	57,007	493,285	4,831	28,264	41,241	42,488	153,786	231,400
Residential building only	6	809,659	49,000	178,652	459,359	6,000	13,780	-----	900	3,503	390	1,173	10,549
Highway	7	2,105,548	244,000	402,829	890,961	20,316	94,258	27,676	5,955	10,118	15,858	17,039	259,131
Street paving	7	1,389,197	60,000	314,493	537,195	23,367	79,794	43,209	3,326	41,619	15,113	8,588	134,870
Railroad	3	412,806	105,000	111,165	4,292	-----	28,759	1,250	360	5,188	205	5,970	109,480
Other classes <sup>15</sup>	4	668,273	1,000	209,276	106,093	-----	65,010	-----	4,250	9,378	4,716	12,076	202,653
Subcontractors	70	7,487,656	174,000	2,297,062	3,422,640	204,079	455,113	13,980	61,531	29,334	11,348	58,441	443,872
Concreting <sup>12</sup>	7	482,233	2,000	185,166	142,537	9,600	64,800	1,076	3,100	1,851	2,237	6,137	26,924
Electrical	9	1,146,730	-----	316,277	542,139	71,541	72,852	-----	13,545	3,828	1,230	6,518	47,522
Heating and plumbing	23	2,596,034	68,000	583,543	1,480,811	52,051	147,946	-----	19,459	4,987	5,401	9,069	150,220
Plumbing	19	1,691,404	68,000	374,599	959,958	49,051	91,072	-----	15,109	2,323	2,504	5,140	91,422
Plumbing and heating com-bined <sup>16</sup>	4	905,230	-----	208,944	520,833	3,000	56,874	-----	4,390	2,664	2,807	3,920	58,807
Painting and decorating <sup>17</sup>	4	312,337	-----	148,962	88,038	15,670	14,286	-----	2,844	623	200	2,387	10,830
Plastering and lathing	7	1,084,413	96,000	611,322	308,223	20,151	52,416	103	1,903	2,345	-----	7,104	22,467
Roofing and sheet-metal work	9	759,157	8,000	156,810	400,094	14,072	53,430	-----	8,290	12,240	1,580	6,033	58,064
Marble and tiling	4	641,059	-----	219,189	263,142	16,404	26,455	-----	6,060	2,451	450	3,130	61,684
Metal work, n. e. s. <sup>18</sup>	4	347,255	-----	105,240	140,612	3,600	15,428	-----	4,710	-----	250	16,881	26,189
Other classes <sup>19</sup>	3	166,911	-----	70,544	15,000	-----	7,740	12,808	680	1,000	-----	2,892	30,013
<b>SAN ANTONIO</b>	116	\$0,339,818	\$0,198,000	\$0,514,744	\$0,744,058	\$160,361	\$1,033,157	\$0,892	\$69,564	\$105,965	\$0,782	\$188,561	\$1,154,577
General contractors <sup>5</sup>	52	14,928,781	4,143,000	2,855,473	4,904,292	74,237	726,746	4,785	30,934	84,170	80,105	149,348	822,673
Building	40	10,007,489	4,061,000	1,521,002	3,017,681	63,982	377,603	1,435	20,589	30,015	31,339	89,606	306,604
Building not specialized <sup>5</sup>	34	9,019,203	3,965,000	1,450,453	2,848,173	43,605	357,696	1,175	10,539	28,948	31,339	87,358	300,488
Residential building only	6	888,186	96,000	70,540	160,508	10,377	19,837	260	1,050	1,069	-----	2,208	6,116
Street paving and highway	6	2,872,362	34,000	816,933	1,004,675	10,555	260,839	-----	6,625	49,782	30,685	35,164	381,527
Other classes <sup>20</sup>	6	2,045,930	48,000	518,438	881,930	9,700	88,404	3,350	3,720	4,373	18,084	24,618	134,542
Subcontractors	64	5,411,035	55,000	1,659,271	2,544,766	86,124	306,411	2,107	38,630	21,705	10,677	39,213	331,904
Concreting and stone work	4	155,748	-----	78,372	68,039	8,361	9,785	-----	1,710	435	240	1,754	6,654
Electrical	7	523,224	-----	149,974	242,463	12,500	46,813	-----	4,605	3,149	916	2,123	48,259
Heating and plumbing	23	2,122,395	8,000	521,872	1,165,536	21,500	140,087	-----	20,460	8,529	8,050	11,133	119,466
Painting and decorating <sup>3</sup>	4	224,845	-----	80,440	94,363	-----	28,780	-----	2,632	531	367	1,644	14,607
Plastering and lathing	10	971,674	44,000	431,170	329,901	28,843	32,060	-----	3,306	3,057	532	6,870	24,390
Roofing and sheet-metal work	6	532,119	3,000	104,434	316,454	5,600	19,198	-----	3,017	3,273	572	4,672	43,840
Marble and tiling	4	423,378	-----	119,984	202,148	-----	20,954	1,240	3,000	759	-----	2,164	24,699
Ornamental iron <sup>21</sup>	3	139,468	-----	26,084	68,361	4,320	12,528	-----	-----	815	-----	1,045	18,850
Other classes <sup>22</sup>	3	238,184	-----	152,985	53,881	5,000	5,205	867	-----	1,247	-----	7,715	31,139

1 Includes foundation; and grading.  
2 Includes pipe covering; and automatic temperature control.  
3 Includes glass and glazing; and flooring, n. e. s.  
4 Includes carpentering and woodflooring; street paving; foundation; and soundproofing.  
5 Includes operative builders.  
6 Includes central station, light and power plant; and oil and natural-gas pipe line.  
7 Includes heating and piping; and automatic temperature control.  
8 Includes steel erection.  
9 Includes carpentering and woodflooring; concreting; stonework; excavating; and soundproofing.  
10 Includes concreting; painting and decorating; plastering and lathing; and marble and tiling.  
11 Includes bridge and culvert; sewer, gas, water, conduit; and central station, light and power plant.  
12 Includes masonry and stonework.  
13 Includes ornamental iron; and metal work, n. e. s.  
14 Includes sheet-metal work; painting and decorating; and marble and tiling.  
15 Includes sewer, gas, water, conduit; dam and reservoir; dredging, river, harbor, etc.; and oil and natural-gas pipe line.  
16 Includes heating and piping and pipe covering.  
17 Includes flooring, n. e. s.  
18 Includes elevator construction, ornamental iron, and steel erection.  
19 Includes glass and glazing, excavating and street paving.  
20 Includes bridge and culvert; sewer, gas, water, conduit; dam and reservoir; waterworks; and oil and natural-gas pipe line.  
21 Includes metal work, n. e. s.  
22 Includes masonry; excavating; and foundation.

TABLE 9.—COST OF MATERIALS FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929, BY KIND

KIND OF MATERIAL	COST OF MATERIALS REPORTED BY—					KIND OF MATERIAL	COST OF MATERIALS REPORTED BY—				
	All classes of establishments			General contractors <sup>2</sup>	Subcontractors		All classes of establishments			General contractors <sup>2</sup>	Subcontractors
	Amount	Per cent distribution	Per \$1,000 construction work done <sup>1</sup>				Amount	Per cent distribution	Per \$1,000 construction work done <sup>1</sup>		
<b>TEXAS</b>						<b>DALLAS—Continued</b>					
All kinds of material.....	77,250,425		469.60	52,800,490	24,449,929	Distributed by kind—Continued.....	Dolls.	Dolls.	Dolls.	Dolls.	
Distribution not reported.....	23,215,951	30.1		15,550,843	4,665,105	Paints, varnishes, glass.....	95,887	0.6	2.53	64,359	31,523
Distributed by kind.....	54,034,474	100.0		34,249,653	19,784,821	Roofing and sheet metal.....	183,785	1.1	4.85	17,707	166,023
Sand, gravel, stone, slag, cinders, etc.	7,006,165	13.0	60.90	6,715,085	291,097	Finished flooring, other than cement, wood, or tile.....	1,750	( <sup>1</sup> )	.04	1,750	
Brick (face, common, fire, paving, etc.).....	1,719,403	3.2	14.94	1,642,465	75,938	Screens, shades, awnings, etc.....	11,855	1.1	.31	11,855	
Tile (fireproofing).....	352,843	.7	3.07	295,326	57,517	Heating and ventilating equipment.....	320,008	1.9	8.45	3,025	310,880
Tile, facing, terra cotta, floor, and wall.....	936,428	1.7	8.14	436,611	490,817	Plumbing and gas-fitting equipment.....	675,738	4.0	17.84	21,305	654,433
Concrete and cinder block.....	185,568	.3	1.61	189,184	10,382	Electrical appliances and supplies.....	1,206,333	7.1	31.85	425,366	780,967
Cut stone, granite and marble.....	1,266,795	2.3	11.01	632,505	634,290	Elevators, dumb-waiters, and equipment.....	2,212,023	13.0	58.41		2,212,623
Riprap, rubble, etc.....	60,958	.2	.79	90,835	323	Pipe: Drain tile, vitrified, concrete, segment-tile, corrugated.....	127,907	.8	3.37	122,047	5,260
Cement.....	6,210,161	11.5	53.98	5,922,023	288,138	Pipe: Cast-iron, sheet and tube steel, etc.....	405,672	2.9	13.09	370,884	115,789
Lime.....	172,880	.3	1.50	158,911	13,975	Wire cable, guards, and fencing.....	520,846	3.1	13.75	520,846	
Plaster, etc.....	400,480	.7	3.43	217,881	228,608	Bituminous paving materials, tar, asphalt, and oil.....	177,890	1.0	4.70	177,890	
Structural steel.....	2,857,987	5.3	24.84	2,018,280	839,697	Wood piling and timber.....	194,896	1.1	5.14	194,896	
Reinforcing steel.....	2,762,598	5.1	24.01	2,230,401	532,197	Freight, hauling or trucking to job.....	219,276	1.3	5.79	205,800	13,476
Cast iron, miscellaneous, excluding pipe.....	80,706	.2	.78	86,188	3,608	Chemicals and chemical products.....	19,465	.1	.52	19,465	
Metal doors, windows, and trim.....	509,831	.9	4.43	297,834	211,997	Metal products, n. e. s. (including metal furniture).....	3,434,303	20.2	90.66	16,176	3,418,127
Metal and wire lath and furring.....	280,927	.5	2.44	109,436	171,491	Mineral products (nonmetallic), n. e. s.	1,093	( <sup>1</sup> )	.03	1,093	
Ornamental metal work.....	202,826	.4	1.76	124,517	78,309	Sealing materials.....	3,662	( <sup>1</sup> )	.10	3,662	
Lumber, rough and finished.....	4,351,981	8.1	37.83	4,328,795	23,186	Miscellaneous.....	180,845	1.1	4.77	156,845	24,000
Lath, shingles, and shakes (wood).....	144,685	.3	1.26	85,585	59,100	<b>EL PASO</b>					
Millwork.....	1,777,065	3.3	15.45	1,777,065	70,341	All kinds of material.....	3,552,340		484.37	2,506,404	955,855
Composition board.....	233,928	.4	2.03	163,887	70,041	Distribution not reported.....	1,620,985	45.6		1,405,985	215,000
Waterproofing materials.....	80,525	.1	.70	52,683	27,842	Distributed by kind.....	1,931,364	100.0		1,190,509	740,855
Hardware, rough and finished.....	717,738	1.3	6.24	709,401	8,247	Sand, gravel, stone, slag, cinders, etc.	135,653	7.0	34.02	132,526	3,127
Paints, varnishes, glass.....	685,649	1.3	6.96	305,656	370,993	Brick (face, common, fire, paving, etc.).....	127,942	6.6	32.08	127,942	
Roofing and sheet metal.....	1,833,859	3.4	15.94	237,622	1,506,037	Tile (fireproofing).....	17,422	.9	4.37	17,422	
Finished flooring, other than cement, wood, or tile.....	104,668	.2	.91	101,968	2,700	Tile, facing, terra cotta, floor, and wall.....	28,382	1.4	6.62	8,702	17,500
Screens, shades, awnings, etc.....	79,180	.1	.69	78,860	300	Concrete and cinder block.....	626	( <sup>1</sup> )	.15	626	
Heating and ventilating equipment.....	1,451,869	2.7	12.62	119,009	1,332,860	Cut stone, granite and marble.....	16,712	.9	4.19	16,712	
Plumbing and gas-fitting equipment.....	3,404,480	6.3	29.69	252,447	3,152,033	Riprap, rubble, etc.....	500	( <sup>1</sup> )	.13	500	
Electrical appliances and supplies.....	3,452,793	6.4	30.01	533,559	2,919,134	Cement.....	173,735	9.0	43.57	131,836	41,899
Elevators, dumb-waiters, and equipment.....	2,252,452	4.2	10.58	15,377	2,237,075	Lime.....	10,407	.5	2.61	10,344	63
Pipe: Drain tile, vitrified, concrete, segment-tile, corrugated.....	463,702	.9	4.03	411,147	52,555	Plaster, etc.....	29,409	1.5	7.38	22,234	7,175
Pipe: Cast-iron, sheet and tube steel, etc.....	1,385,076	2.6	12.04	1,082,965	302,111	Structural steel.....	18,516	1.0	4.65	18,516	
Wire cable, guards, and fencing.....	568,308	1.1	4.94	560,308	8,000	Reinforcing steel.....	64,264	3.3	16.11	63,064	1,200
Bituminous paving materials, tar, asphalt, and oil.....	1,168,170	2.2	10.15	1,160,268	7,902	Cast iron, miscellaneous, excluding pipe.....	1,750	.1	.44	1,750	
Wood piling and timber.....	240,116	.4	2.09	240,116		Metal doors, windows, and trim.....	29,085	1.5	7.29	29,085	
Machinery.....	15,000	( <sup>1</sup> )	.13	15,000		Metal and wire lath and furring.....	15,666	.8	3.93	11,106	4,560
Freight, hauling or trucking to job.....	389,475	.7	3.39	375,967	13,508	Ornamental metal work.....	11,279	.6	2.83	11,279	
Chemicals and chemical products.....	19,465	( <sup>1</sup> )	.17	19,465		Lumber, rough and finished.....	286,418	14.8	71.83	286,418	
Metal products, n. e. s., (including metal furniture).....	3,641,227	6.7	31.65	22,284	3,618,943	Lath, shingles, and shakes (wood).....	7,252	.4	1.82	7,252	
Mineral products (nonmetallic), n. e. s.	1,093	( <sup>1</sup> )	.06	1,093	5,500	Millwork.....	130,904	6.8	32.83	130,904	
Sealing materials.....	5,162	( <sup>1</sup> )	.05	5,162		Composition board.....	5,283	.3	1.33	5,283	
Textiles and caking materials.....	188	( <sup>1</sup> )	.01	188		Waterproofing materials.....	2,439	.1	.61	2,439	
Miscellaneous.....	515,711	1.0	4.48	491,641	24,070	Hardware, rough and finished.....	51,148	2.6	12.83	51,148	
<b>DALLAS</b>						<b>FORT WORTH</b>					
All kinds of material.....	25,789,957		448.16	14,524,472	11,265,485	All kinds of material.....	4,759,653		451.75	3,574,677	1,184,976
Distribution not reported.....	8,813,601	34.2		7,893,877	1,419,724	Distribution not reported.....	1,475,702	31.0		1,191,068	284,634
Distributed by kind.....	16,976,356	100.0		7,130,595	9,845,761	Distributed by kind.....	3,283,951	100.0		2,383,609	900,342
Sand, gravel, stone, slag, cinders, etc.	1,070,114	6.3	28.25	1,005,636	64,478	Sand, gravel, stone, slag, cinders, etc.	580,873	17.7	85.21	565,429	15,444
Brick (face, common, fire, paving, etc.).....	262,433	1.5	6.93	262,433		Brick (face, common, fire, paving, etc.).....	205,618	6.3	30.15	190,888	14,630
Tile (fireproofing).....	59,845	.4	1.58	59,845		Tile (fireproofing).....	24,659	.8	3.62	24,659	
Tile, facing, terra cotta, floor, and wall.....	207,797	1.2	5.49	62,648	145,149	<b>SEE FOOTNOTES AT END OF TABLE.</b>					
Concrete and cinder block.....	39,251	.2	1.04	27,721	11,530						
Cut stone, granite and marble.....	624,633	3.7	16.49	135,015	489,618						
Riprap, rubble, etc.....	26,415	.2	.70	26,415							
Cement.....	919,787	5.4	24.28	861,684	58,103						
Lime.....	39,475	.2	1.04	39,475							
Plaster, etc.....	80,962	.5	2.14	14,190	66,772						
Structural steel.....	1,105,602	6.5	29.19	527,501	578,101						
Reinforcing steel.....	984,468	5.8	25.99	597,522	386,946						
Cast iron, miscellaneous, excluding pipe.....	11,246	.1	.30	11,200	46						
Metal doors, windows, and trim.....	247,694	1.5	6.54	68,790	178,904						
Metal and wire lath and furring.....	36,676	.2	.97	24,221	12,455						
Ornamental metal work.....	65,840	.4	1.74	5,940	60,000						
Lumber, rough and finished.....	628,681	3.7	16.60	624,943	3,738						
Lath, shingles, and shakes (wood).....	376	( <sup>1</sup> )	.01	376							
Millwork.....	231,854	1.4	6.12	231,854							
Composition board.....	50,686	.3	1.34	10,686	40,000						
Waterproofing materials.....	21,621	.1	.87	10,703	10,918						
Hardware, rough and finished.....	177,118	1.0	4.67	176,725	393						

TABLE 9.—COST OF MATERIALS FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929, BY KIND—Continued

KIND OF MATERIAL	COST OF MATERIALS REPORTED BY—				KIND OF MATERIAL	COST OF MATERIALS REPORTED BY—					
	All classes of establishments			General contractors <sup>2</sup>		Subcontractors	All classes of establishments			General contractors <sup>2</sup>	Subcontractors
	Amount	Per cent distribution	Per \$1,000 construction work done <sup>1</sup>				Amount	Per cent distribution	Per \$1,000 construction work done <sup>1</sup>		
<b>FORT WORTH—Continued</b>					<b>HOUSTON—Continued</b>						
Distributed by kind—Continued.					Distributed by kind—Continued.						
Tile, facing, terra cotta, floor, and wall.....	Dolls. 20,089	0.6	2.94	Dolls. 6,977	Dolls. 13,062	Dolls. 338,930	4.0	Dolls. 18.34	Dolls. 29,319	Dolls. 300,611	
Concrete and cinder block.....	10,391	3.3	1.52	10,391		13,577	.2	.74	10,877	2,700	
Cut stone, granite and marble.....	109,118	3.3	16.01	105,848	3,270	24,486	.9	1.32	24,186	300	
Cement.....	618,094	15.7	75.40	497,995	15,999	401,252	4.7	21.71	12,150	389,102	
Lime.....	9,910	.3	1.45	9,716	200	914,677	10.8	49.49	66,028	848,649	
Plaster, etc.....	17,614	.5	2.58	17,614		598,336	7.1	32.38	22,982	575,348	
Structural steel.....	305,461	9.3	44.81	55,461	250,000						
Reinforcing steel.....	203,087	6.2	29.79	113,037	90,000	11,612	.1	.63		11,612	
Cast iron, miscellaneous, excluding pipe.....	5,892	.2	.80	5,892		Pipe: Drain tile, vitrified, concrete, segment tile, corrugated.....	66,189	.8	3.58	54,337	11,852
Metal doors, windows, and trim.....	15,618	.5	2.29	13,118	2,500	Pipe: Cast-iron, sheet and tube steel, etc.....	140,428	1.7	7.60	62,572	77,856
Metal and wire lath and furring.....	152	( <sup>3</sup> )	.02	152		Wire cable, guards, and fencing.....	8,439	.1	.46	439	8,000
Ornamental metal work.....	1,001	( <sup>3</sup> )	.14	1,001		Bituminous paving materials, tar, asphalt, and oil.....	107,776	1.3	5.83	100,780	6,996
Lumber, rough and finished.....	294,764	9.0	43.24	294,164	600	Textiles and calking materials.....	68	( <sup>3</sup> )	.03		
Lath, shingles, and shakes (wood).....	5,843	.2	.80	5,843		Miscellaneous.....	77,357	.9	4.19	77,357	
Millwork.....	111,566	3.4	16.37	111,566		<b>SAN ANTONIO</b>					
Composition board.....	5,548	.2	.81	5,548		All kinds of material.....	8,509,303	469.14	5,547,120	2,062,183	
Waterproofing materials.....	3,436	.1	.51	3,436		Distribution not reported.....	1,421,804	10.7	1,137,721	284,083	
Hardware, rough and finished.....	32,154	1.0	4.72	32,154		Distributed by kind.....	7,087,499	100.0	4,409,399	2,678,100	
Paints, varnishes, glass.....	80,126	2.4	11.76	30,110	50,016	Sand, gravel, stone, slag, cinders, etc. (face, common, fire, paving, etc.).....	669,622	9.4	587,692	81,930	
Roofing and sheet metal.....	44,420	1.4	6.52	19,426	25,000	Tile (fireproofing).....	104,794	1.5	6.94	101,794	3,000
Finished flooring, other than cement, wood, or tile.....	4,993	.2	.73	4,993		Tile, facing, terra cotta, floor, and wall.....	90,738	1.3	6.00	41,184	49,554
Screens, shades, awnings, etc.....	2,593	.1	.38	2,593		Concrete and cinder block.....	190,152	2.7	12.59	68,096	122,056
Heating and ventilating equipment.....	47,328	1.4	6.94		47,328	Cut stone, granite and marble.....	35,421	.5	2.35	34,543	878
Plumbing and gas-fitting equipment.....	117,319	3.6	17.21	15,859	101,460	Riprap, rubble, etc.....	169,643	2.4	11.23	144,380	25,263
Electrical appliances and supplies.....	282,304	8.6	41.42	11,531	270,833	Cement.....	18,805	.3	1.24	18,805	
Elevators, dumb-waiters, and equipment.....	4,458	.1	.60	4,458		Lime.....	527,111	7.4	34.89	493,933	63,178
Pipe: Drain tile, vitrified, concrete, segment tile, corrugated.....	40,295	1.2	5.91	40,295		Plaster, etc.....	15,552	.2	1.03	10,227	5,325
Pipe: Cast-iron, sheet and tube steel, etc.....	4,911	.1	.72	4,911		Structural steel.....	99,600	1.4	6.60	12,109	87,491
Wire cable, guards, and fencing.....	8,606	.3	1.26	8,606		Reinforcing steel.....	722,474	10.2	47.82	711,453	11,021
Bituminous paving materials, tar, asphalt, and oil.....	158,507	4.8	23.25	158,507		Cast iron, miscellaneous, excluding pipe.....	312,748	4.4	20.70	304,204	8,544
Miscellaneous.....	11,432	.3	1.68	11,432		Metal doors, windows, and trim.....	21,923	.3	1.45	18,711	3,212
<b>HOUSTON</b>					<b>HOUSTON</b>						
All kinds of material.....	10,706,797	457.69	7,037,707	3,669,090		Metal and wire lath and furring.....	91,003	1.3	6.02	62,042	28,961
Distribution not reported.....	2,248,270	21.0	1,457,624	790,646		Ornamental metal work.....	136,897	1.9	9.06	6,682	130,215
Distributed by kind.....	8,458,527	100.0	5,580,083	2,878,444		Structural steel.....	44,070	.6	2.92	25,761	18,309
Sand, gravel, stone, slag, cinders, etc. (face, common, fire, paving, etc.).....	1,280,426	15.1	60.29	1,201,259	79,167	Lumber, rough and finished.....	479,808	6.8	31.76	472,909	6,899
Brick (face, common, fire, paving, etc.).....	313,688	3.7	16.98	289,665	24,023	Lath, shingles, and shakes (wood).....	74,643	1.1	4.94	15,543	59,100
Tile (fireproofing).....	67,320	.8	3.04	62,019	5,301	Millwork.....	213,047	3.0	14.10	218,047	
Tile, facing, terra cotta, floor, and wall.....	264,771	3.1	14.33	143,698	121,073	Composition board.....	35,110	.5	2.32	13,179	21,931
Concrete and cinder block.....	51,523	.6	2.79	47,549	3,974	Waterproofing materials.....	3,836	.1	.25	3,436	406
Cut stone, granite and marble.....	245,635	2.9	13.29	137,740	107,895	Hardware, rough and finished.....	31,667	1.2	5.40	79,109	2,548
Riprap, rubble, etc.....	6,480	.1	.35	6,167	313	Paints, varnishes, glass.....	30,134	1.1	5.31	22,077	8,057
Cement.....	954,028	11.3	51.65	806,233	58,395	Roofing and sheet metal.....	277,276	3.9	18.35	23,352	253,924
Lime.....	38,775	.5	2.10	34,366	4,409	Finished flooring, other than cement, wood, or tile.....	16,863	.2	1.12	16,863	
Plaster, etc.....	64,545	.8	3.49	11,634	52,911	Screens, shades, awnings, etc.....	13,234	.2	.88	13,234	
Structural steel.....	243,244	2.9	13.16	243,044	200	Heating and ventilating equipment.....	342,714	4.8	22.68	33,593	269,151
Reinforcing steel.....	380,601	4.5	20.60	352,950	27,651	Plumbing and gas fitting equipment.....	746,214	10.5	40.40	75,532	670,682
Cast iron, miscellaneous, excluding pipe.....	21,555	.3	1.17	21,555		Electrical appliances and supplies.....	647,219	9.1	42.84	28,929	618,290
Metal doors, windows, and trim.....	55,770	.7	3.02	55,770		Elevators, dumb-waiters, and equipment.....	350	( <sup>3</sup> )	.02	350	
Metal and wire lath and furring.....	32,091	.4	1.73	10,855	21,236	Pipe: Drain tile, vitrified, concrete, segment tile, corrugated.....	123,308	1.7	8.16	106,259	17,049
Ornamental metal work.....	30,600	.4	1.66	30,600		Pipe: Cast-iron, sheet and tube steel, etc.....	293,164	4.1	19.40	222,080	71,084
Lumber, rough and finished.....	848,843	10.0	45.93	845,451	3,392	Wire cable, guards, and fencing.....	860	( <sup>3</sup> )	.06	860	
Lath, shingles, and shakes (wood).....	7,477	.1	.40	7,477		Bituminous paving materials, tar, asphalt, and oil.....	330,380	4.7	21.87	329,474	906
Millwork.....	493,830	5.8	26.72	493,830		Machinery.....	15,000	.2	.99	15,000	
Composition board.....	47,670	.6	2.58	41,691	5,979	Freight, hauling, or trucking to job.....	32	( <sup>3</sup> )	( <sup>3</sup> )		32
Waterproofing materials.....	21,522	.3	1.16	5,969	15,553	Metal products, n. e. s. (including metal furniture).....	158	( <sup>3</sup> )	.01	158	
Hardware, rough and finished.....	140,411	1.7	7.60	135,405	5,006	Miscellaneous.....	61,879	.9	4.10	61,879	
Paints, varnishes, glass.....	143,946	1.7	7.79	44,016	99,930						

<sup>1</sup> The value of construction work done is obtained from figures presented in Table 1, by subtracting the value of subcontract work let from the total value of construction business.  
<sup>2</sup> Includes operative builders.  
<sup>3</sup> The percentage of total cost shown for this item is high because establishments located within this area reported that the large part of their construction work (on which this material was used) was done on contracts outside this area.  
<sup>4</sup> Less than one-tenth of 1 per cent.  
<sup>5</sup> Less than one cent.  
<sup>6</sup> The high percentage of total cost shown for this item is due to the fact that business of establishments reporting this material constituted a large part of the total business reported for this area.



TABLE 10.—COMPARISON OF COST OF DESIGNATED MATERIALS FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929, WITH COST OF MATERIALS AND VALUE OF CONSTRUCTION BUSINESS

[Based exclusively upon reports of establishments which gave the distributed cost of materials]

KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	COST OF DESIGNATED MATERIAL				Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>	KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	COST OF DESIGNATED MATERIAL				Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>		
	Cost of all materials distributed by kind	Amount	Per cent of—					Cost of all materials distributed	Cost of all materials distributed by kind	Amount	Per cent of—			Cost of all materials distributed	
			Total cost	Cost of all distributed materials							Total cost				Cost of all distributed materials
<b>TEXAS</b>						<b>TEXAS—Continued</b>									
<i>Sand, gravel, stone, slag, cinders, etc.<sup>1</sup></i>						<i>Cut stone, granite, and marble</i>									
All classes.....	\$54,034,474	\$7,000,166	100.0	13.0	\$125,515,997	82.5	All classes.....	\$54,034,474	\$1,260,795	100.0	2.3	\$125,515,997	82.5		
General contractors <sup>2</sup> .....	34,249,653	6,715,098	95.8	19.0	90,423,390	77.6	General contractors <sup>2</sup> .....	34,249,653	632,505	49.0	1.8	90,423,390	77.6		
Building.....	17,053,400	1,652,538	22.2	9.1	51,557,998	65.0	Building.....	17,053,400	631,755	49.0	3.7	51,557,998	65.0		
Building not specialized <sup>3</sup> .....	15,184,500	1,438,038	20.5	9.5	44,352,705	66.3	Building not specialized <sup>3</sup> .....	15,184,500	620,425	49.0	4.1	44,352,705	66.3		
Commercial building only.....	384,265	64,840	9.9	16.9	3,787,951	31.9	Commercial building only.....	384,265	2,880	2.2	7.7	3,787,951	31.9		
Manufacturing building only.....	126,700	27,000	4.4	21.3	292,000	80.8	Residential building only.....	1,367,935	8,450	7.7	0.0	3,125,342	70.7		
Residential building only.....	1,357,935	22,660	3.3	1.7	3,125,342	76.7	Central station, light and power plant.....	1,368,240	750	1.1	1.1	2,598,895	94.8		
Highway.....	7,844,012	3,085,445	44.0	39.3	16,691,921	89.6	Subcontractors.....	19,784,821	634,260	50.1	3.2	35,092,607	98.8		
Bridge and culvert.....	1,539,366	190,550	2.7	12.4	3,384,513	96.4	Masonry.....	149,487	7,007	5.7	4.7	340,160	99.5		
Street paving.....	3,195,199	1,264,653	18.1	39.0	8,320,633	95.1	Plastering and lathing.....	538,359	218	0.4	(*)	1,840,369	95.5		
Sewer, gas, water, conduit.....	1,458,711	294,362	4.2	20.2	3,320,957	91.2	Stonework.....	171,013	157,141	12.4	91.9	435,426	100.0		
Dam and reservoir.....	245,023	50,052	7.7	20.4	578,352	85.5	Marble and tiling.....	1,114,655	469,924	37.1	42.2	2,044,363	100.0		
Waterworks.....	1,388,250	205,321	2.9	14.8	2,817,397	96.7	<b>Cement<sup>1</sup></b>								
Dredging, river, harbor, etc.....	6,736	183	(*)	2.7	289,397	98.7	All classes.....	54,034,474	6,210,161	100.0	11.5	125,515,997	82.5		
Railroad.....	95,646	20,964	4.4	31.3	454,727	86.9	General contractors <sup>2</sup> .....	34,249,653	5,022,023	95.4	17.3	90,423,390	77.6		
Foundation.....	10,100	5,000	1.1	49.5	66,600	78.9	Building.....	17,053,400	1,070,205	20.9	9.8	51,557,998	65.0		
Central station, light and power plant.....	1,368,240	36,000	5.6	2.6	2,598,895	94.8	Building not specialized <sup>3</sup> .....	15,184,500	1,549,249	24.9	10.2	44,352,705	66.3		
Oil and natural-gas pipe line.....	44,400	1,000	(*)	2.3	362,000	88.5	Commercial building only.....	384,265	61,442	1.0	16.0	3,787,951	31.9		
Subcontractors.....	19,784,821	291,097	4.2	1.5	35,092,607	98.8	Manufacturing building only.....	126,700	30,000	5.5	23.7	292,000	80.8		
Concreting.....	359,230	114,576	1.6	31.9	895,707	100.0	Residential building only.....	1,357,935	29,474	5.5	2.2	3,125,342	76.7		
Heating and plumbing.....	4,875,055	630	(*)	(*)	8,531,413	98.9	Highway.....	7,844,012	2,920,432	47.2	37.3	16,691,921	89.6		
Plumbing.....	3,532,821	630	(*)	(*)	6,322,293	98.3	Bridge and culvert.....	1,539,366	169,159	2.7	11.0	3,384,513	96.4		
Masonry.....	149,487	24,687	4.4	16.5	349,160	99.5	Street paving.....	3,195,199	543,655	8.8	17.9	8,320,633	95.1		
Plastering and lathing.....	538,359	54,090	8.0	10.0	1,840,369	95.5	Sewer, gas, water, conduit.....	1,458,711	311,923	5.0	21.4	3,320,957	91.2		
Roofing and sheet-metal work.....	1,721,560	10,529	2.2	6.0	3,100,874	99.5	Dam and reservoir.....	245,023	55,555	9.9	22.7	578,352	85.5		
Roofing.....	1,244,076	9,230	1.1	7.7	2,146,489	99.3	Waterworks.....	1,388,250	100,100	3.2	14.1	2,817,397	96.7		
Sheet-metal work.....	374,657	1,299	(*)	3.3	741,458	100.0	Dredging, river, harbor, etc.....	6,736	253	(*)	3.8	289,397	98.7		
Stonework.....	171,013	1,794	(*)	1.0	435,426	100.0	Railroad.....	95,646	13,149	2.2	13.7	454,727	86.9		
Marble and tiling.....	1,114,655	50,553	7.4	4.5	2,044,363	100.0	Foundation.....	10,100	4,300	1.1	42.6	66,600	78.9		
Excavating.....	60,224	23,572	3.3	35.6	247,403	100.0	Central station, light and power plant.....	1,368,240	26,927	4.4	2.0	2,598,895	94.8		
Foundation.....	10,881	7,534	1.1	69.2	37,154	100.0	Oil and natural-gas pipe line.....	44,400	1,000	(*)	2.3	362,000	88.5		
Flooring, n. e. s.....	13,208	3,132	(*)	23.7	47,625	100.0	Subcontractors.....	19,784,821	288,138	4.6	1.5	35,092,607	98.8		
<b>Brick (face, common, fire, paving, etc.)</b>							Concreting.....	359,230	149,532	2.4	41.6	895,707	100.0		
All classes.....	54,034,474	1,719,403	100.0	3.2	125,515,997	82.5	Heating and plumbing.....	4,875,055	2,265	(*)	(*)	8,531,413	98.9		
General contractors <sup>2</sup> .....	34,249,653	1,643,465	95.6	4.8	90,423,390	77.6	Plumbing.....	3,532,821	2,265	(*)	1.1	6,322,293	98.3		
Building.....	17,053,400	1,384,915	80.5	8.1	51,557,998	65.0	Masonry.....	149,487	19,707	3.3	13.2	349,160	99.5		
Building not specialized <sup>3</sup> .....	15,184,500	1,250,779	72.7	8.2	44,352,705	66.3	Plastering and lathing.....	538,359	31,240	5.8	5.8	1,840,369	95.5		
Commercial building only.....	384,265	34,866	2.0	9.1	3,787,951	31.9	Roofing and sheet-metal work.....	1,721,560	371	(*)	(*)	3,100,874	99.5		
Manufacturing building only.....	126,700	5,500	3.3	4.3	292,000	80.8	Roofing.....	1,244,076	325	(*)	(*)	2,146,489	99.3		
Residential building only.....	1,357,935	93,741	5.5	6.0	3,125,342	76.7	Sheet-metal work.....	374,657	20	(*)	(*)	741,458	100.0		
Highway.....	7,844,012	50,075	2.9	6.0	16,691,921	89.6	Stonework.....	171,013	7,529	1.1	4.4	435,426	100.0		
Bridge and culvert.....	1,539,366	16,500	1.0	1.1	3,384,513	96.4	Marble and tiling.....	1,114,655	62,180	1.0	5.6	2,044,363	100.0		
Street paving.....	3,195,199	166,215	0.7	5.2	8,320,633	95.1	Excavating.....	60,224	12,237	2.2	18.5	247,403	100.0		
Sewer, gas, water, conduit.....	1,458,711	6,833	4.4	4.8	3,320,957	91.2	Flooring, n. e. s.....	13,208	3,080	(*)	23.3	47,625	100.0		
Dam and reservoir.....	245,023	1,086	1.1	4.4	578,352	85.5	<b>Structural steel</b>								
Waterworks.....	1,388,250	11,564	7.7	8.8	2,817,397	96.7	All classes.....	54,034,474	2,857,957	100.0	5.3	125,515,997	82.5		
Dredging, river, harbor, etc.....	6,736	183	(*)	2.7	289,397	98.7	General contractors <sup>2</sup> .....	34,249,653	2,018,260	70.6	5.9	90,423,390	77.6		
Railroad.....	95,646	20,964	4.4	31.3	454,727	86.9	Building.....	17,053,400	1,424,682	49.8	8.4	51,557,998	65.0		
Foundation.....	10,100	5,000	1.1	49.5	66,600	78.9	Building not specialized <sup>3</sup> .....	15,184,500	1,388,193	48.4	9.1	44,352,705	66.3		
Central station, light and power plant.....	1,368,240	6,277	4.4	5.5	2,598,895	94.8	Commercial building only.....	384,265	32,012	1.1	8.3	3,787,951	31.9		
Oil and natural-gas pipe line.....	44,400	1,000	(*)	2.3	362,000	88.5	Manufacturing building only.....	126,700	6,500	2.1	5.1	292,000	80.8		
Subcontractors.....	19,784,821	75,938	4.4	4.4	35,092,607	98.8	Residential building only.....	1,357,935	2,977	1.2	2.2	3,125,342	76.7		
Masonry.....	149,487	73,779	4.3	49.4	349,160	99.5	Highway.....	7,844,012	81,241	2.8	1.0	16,691,921	89.6		
Plastering and lathing.....	538,359	2,159	1.1	4.4	1,840,369	95.5	Bridge and culvert.....	1,539,366	329,500	11.5	21.4	3,384,513	96.4		
<b>Tile, facing, terra cotta, floor, and wall</b>							Street paving.....	3,195,199	20,152	7.7	0.6	8,320,633	95.1		
All classes.....	54,034,474	936,428	100.0	1.7	125,515,997	82.5	Sewer, gas, water, conduit.....	1,458,711	30,639	1.3	2.6	3,320,957	91.2		
General contractors <sup>2</sup> .....	34,249,653	436,611	46.0	1.3	90,423,390	77.6	Dam and reservoir.....	245,023	23,620	9.6	9.6	578,352	85.5		
Building.....	17,053,400	427,894	45.7	2.5	51,557,998	65.0	Waterworks.....	1,388,250	102,926	3.6	7.4	2,817,397	96.7		
Building not specialized <sup>3</sup> .....	15,184,500	413,581	44.2	2.7	44,352,705	66.3	Subcontractors.....	19,784,821	839,697	29.4	4.2	35,092,607	98.8		
Commercial building only.....	384,265	4,237	5.1	1.1	3,787,951	31.9	Concreting.....	359,230	650	(*)	(*)	895,707	100.0		
Manufacturing building only.....	126,700	10,076	1.1	7.7	3,125,342	76.7	Heating and plumbing.....	4,875,055	200	(*)	(*)	8,531,413	98.9		
Residential building only.....	1,357,935	2,000	2.2	1.1	3,384,513	96.4	Plumbing.....	3,532,821	200	(*)	(*)	6,322,293	98.3		
Highway.....	7,844,012	2,000	2.2	1.1	3,384,513	96.4	Masonry.....	149,487	375	(*)	3.3	349,160	99.5		
Bridge and culvert.....	1,539,366	2,717	3.1	1.1	8,320,633	95.1	Roofing and sheet-metal work.....	1,721,560	371	(*)	(*)	3,100,874	99.5		
Street paving.....	3,195,199	2,717	3.1	1.1	8,320,633	95.1	Roofing.....	1,244,076	371	(*)	(*)	2,146,489	99.3		
Sewer, gas, water, conduit.....	1,458,711	2,000	2.2	1.1	3,320,957	91.2	Sheet-metal work.....	374,657	1,741	41.2	59.6	741,458	96.6		
Dam and reservoir.....	245,023	2,717	3.1	1.1	578,352	85.5	Stonework.....	171,013	701,592	24.5	59.6	435,426	100.0		
Waterworks.....	1,388,250	4,000	4.3	3.9	2,817,397	96.7	Marble and tiling.....	1,114,655	245	(*)	(*)	2,044,363	100.0		
Dredging, river, harbor, etc.....	6,736	183	(*)	2.7	289,397	98.7	Excavating.....	60,224	12,237	2.2	18.5	247,403	100.0		
Railroad.....	95,646	20,964	4.4	3											



TABLE 10.—COMPARISON OF COST OF DESIGNATED MATERIALS FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929, WITH COST OF MATERIALS AND VALUE OF CONSTRUCTION BUSINESS—Continued

[Based exclusively upon reports of establishments which gave the distributed cost of materials]

KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	COST OF DESIGNATED MATERIAL				Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>	KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	COST OF DESIGNATED MATERIAL				Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>
	Cost of all materials distributed by kind	Amount	Per cent of—					Cost of all materials distributed by kind	Amount	Per cent of—			
			Total cost	Cost of all distributed materials						Total cost	Cost of all distributed materials		
<b>TEXAS—Continued</b>						<b>TEXAS—Continued</b>							
<b>Reinforcing Steel</b>						<b>Roofing and sheet-metal work</b>							
All classes.....	\$54,034,474	\$2,762,508	100.0	5.1	\$125,515,907	82.5	All classes.....	\$54,034,474	\$1,833,650	100.0	3.4	\$125,515,907	82.5
General contractors <sup>2</sup> .....	\$34,240,053	2,230,401	80.7	6.5	\$90,423,390	77.6	General contractors.....	\$34,081,677	237,022	13.0	0.7	\$89,951,213	77.7
Building.....	17,053,400	1,008,371	38.7	6.3	51,557,998	65.0	Building.....	16,885,424	213,142	11.6	1.3	51,085,821	65.0
Building not specialized <sup>3</sup> .....	15,184,500	1,016,260	36.8	6.7	44,352,705	66.3	Building not specialized.....	15,016,524	165,755	9.0	1.1	43,850,528	66.3
Commercial building only.....	384,265	19,737	0.7	5.1	3,787,951	31.9	Commercial building only.....	384,265	8,800	0.5	2.2	3,787,951	31.9
Manufacturing building only.....	126,700	20,000	0.7	15.8	292,000	80.8	Manufacturing building only.....	126,700	3,000	0.2	2.4	292,000	80.8
Residential building only.....	1,357,935	12,344	0.4	5.9	3,125,342	76.7	Residential building only.....	1,357,935	30,084	2.0	2.7	3,125,342	76.7
Highway.....	7,844,012	453,301	16.4	5.8	16,691,921	89.6	Highway.....	7,844,012	11,265	0.6	0.1	16,691,921	89.6
Bridge and culvert.....	1,539,366	269,817	10.9	19.5	3,384,513	96.4	Bridge and culvert.....	1,539,366	2,000	0.1	0.1	3,384,513	96.4
Street paving.....	3,195,169	65,257	3.4	3.0	3,320,633	95.1	Street paving.....	3,195,169	2,000	0.1	0.1	3,320,633	95.1
Sewer, gas, water, conduit.....	1,458,711	75,794	2.7	5.1	3,220,957	91.2	Sewer, gas, water, conduit.....	1,458,711	3,398	0.2	0.2	3,220,957	91.2
Dam and reservoir.....	245,623	36,000	1.3	15.0	578,352	85.5	Dam and reservoir.....	245,623	250	0.1	0.1	578,352	85.5
Waterworks.....	1,388,250	113,475	4.1	8.2	2,817,397	96.7	Waterworks.....	1,388,250	2,500	0.1	0.2	2,817,397	96.7
Railroad.....	95,646	28,826	1.0	30.1	454,727	86.0	Railroad.....	95,646	500	0.0	0.0	454,727	86.0
Foundation.....	10,100	300	(*)	5.0	56,600	78.9	Foundation.....	10,100	5,137	0.3	0.4	56,600	78.9
Central station, light and power plant.....	1,368,240	55,730	2.0	4.1	2,598,895	94.8	Central station, light and power plant.....	1,368,240	5,137	0.3	0.4	2,598,895	94.8
Oil and natural-gas pipe line.....	44,400	4,400	0.2	9.9	352,000	88.5	Oil and natural-gas pipe line.....	44,400	4,400	0.2	9.9	352,000	88.5
Subcontractors.....	\$10,784,821	532,197	19.3	2.7	\$35,092,607	98.8	Subcontractors.....	\$19,784,821	1,596,037	87.0	8.1	\$35,092,607	98.8
Concrete.....	359,230	53,074	1.9	14.8	895,707	100.0	Concrete.....	2,532,149	3,600	0.2	1.1	4,919,763	100.0
Steel erection.....	1,177,275	406,683	16.9	39.6	1,741,412	96.6	Steel erection.....	4,875,055	50,689	2.8	1.0	8,531,413	98.9
Stonework.....	171,013	877	(*)	5.6	435,425	100.0	Heating and plumbing.....	628,682	25,000	1.4	4.0	979,054	100.0
Marble and tiling.....	1,114,655	250	(*)	14.4	247,403	100.0	Heating and piping.....	3,532,821	25,639	1.4	0.7	6,322,293	98.3
Excavating.....	60,224	9,533	3.1	27.8	34,155	100.0	Plumbing.....	1,721,500	1,536,748	83.3	89.3	3,100,874	99.5
Foundation.....	10,881	3,030	1.1	27.8	34,155	100.0	Roofing.....	1,244,076	1,085,593	59.2	87.3	2,146,489	99.3
Roofing and sheet-metal work.....	1,721,500	1,550	(*)	1.1	3,100,874	99.5	Sheet-metal work.....	374,657	348,328	19.0	93.0	741,458	100.0
Roofing.....	1,244,076	1,550	(*)	1.1	2,146,489	99.3	Roofing and sheet metal combined.....	102,827	102,827	5.6	100.0	212,927	100.0
Stonework.....	171,013	893	(*)	4.4	435,425	100.0	Steel erection.....	1,177,275	5,000	0.3	0.4	1,741,412	99.6
Marble and tiling.....	1,114,655	250	(*)	1.1	2,044,363	100.0	<b>Heating and ventilating equipment</b>						
Excavating.....	60,224	3,118	1.1	4.7	247,403	100.0	All classes.....	54,034,474	1,451,869	100.0	2.7	125,515,907	82.5
Foundation.....	10,881	285	(*)	2.6	34,155	100.0	General contractors <sup>2</sup> .....	\$34,240,053	110,009	8.2	0.8	\$90,423,390	77.6
<b>Lumber, rough and finished</b>						<b>Plumbing and gas-fitting equipment</b>							
All classes.....	54,034,474	4,351,981	100.0	8.1	125,515,907	82.5	All classes.....	54,034,474	3,404,480	100.0	6.3	125,515,907	82.5
General contractors <sup>2</sup> .....	\$34,240,053	4,328,795	90.5	12.6	\$90,423,390	77.6	General contractors <sup>2</sup> .....	\$34,240,053	252,447	7.4	0.7	\$90,423,390	77.6
Building.....	17,053,400	5,634,218	83.5	21.3	51,557,998	65.0	Building.....	17,063,400	184,626	5.4	1.1	51,557,998	65.0
Building not specialized <sup>3</sup> .....	15,184,500	2,856,741	65.0	18.8	44,352,705	66.3	Building not specialized <sup>3</sup> .....	15,184,500	112,573	3.3	0.7	44,352,705	66.3
Commercial building only.....	384,265	68,230	1.6	17.8	3,787,951	31.9	Commercial building only.....	384,265	9,727	3.3	2.6	3,787,951	31.9
Manufacturing building only.....	126,700	8,000	0.2	6.3	292,000	80.8	Manufacturing building only.....	126,700	3,800	0.1	3.0	292,000	80.8
Residential building only.....	1,357,935	701,238	16.1	51.0	3,125,342	76.7	Residential building only.....	1,357,935	58,526	1.7	4.3	3,125,342	76.7
Highway.....	7,844,012	128,146	2.9	1.0	16,691,921	89.6	Highway.....	7,844,012	41,867	2.9	2.9	16,691,921	89.6
Bridge and culvert.....	1,539,366	376,393	8.6	24.4	3,384,513	96.4	Bridge and culvert.....	1,539,366	3,568	0.2	(*)	3,384,513	96.4
Street paving.....	3,195,169	35,421	1.1	2.2	3,320,633	95.1	Street paving.....	3,195,169	2,770	0.2	0.2	3,320,633	95.1
Sewer, gas, water, conduit.....	1,458,711	32,787	0.8	2.2	3,220,957	91.2	Sewer, gas, water, conduit.....	1,458,711	3,568	0.2	(*)	3,220,957	91.2
Dam and reservoir.....	245,623	19,225	0.4	7.3	578,352	85.5	Dam and reservoir.....	245,623	2,000	0.2	0.2	578,352	85.5
Waterworks.....	1,388,250	83,050	1.9	6.0	2,817,397	96.7	Waterworks.....	1,388,250	15,564	0.5	1.1	2,817,397	96.7
Railroad.....	95,646	11,919	0.3	12.5	454,727	86.0	Railroad.....	95,646	500	0.0	0.0	454,727	86.0
Foundation.....	10,100	300	(*)	3.0	56,600	78.9	Foundation.....	10,100	500	0.0	0.0	56,600	78.9
Central station, light and power plant.....	1,368,240	7,830	0.2	1.1	2,598,895	94.8	Central station, light and power plant.....	1,368,240	4,300	0.1	0.3	2,598,895	94.8
Oil and natural-gas pipe line.....	44,400	4,400	0.2	1.1	352,000	88.5	Oil and natural-gas pipe line.....	44,400	4,400	0.2	1.1	352,000	88.5
Subcontractors.....	\$19,784,821	23,180	0.5	0.1	\$35,092,607	98.8	Subcontractors.....	\$19,784,821	3,162,033	92.6	15.9	\$35,092,607	98.8
Concrete.....	359,230	15,575	0.4	4.3	895,707	100.0	Concrete.....	2,532,149	5,400	0.2	2.2	4,919,763	100.0
Steel erection.....	1,177,275	1,300	(*)	0.1	1,741,412	96.6	Steel erection.....	4,875,055	3,144,633	92.4	64.5	8,531,413	98.9
Stonework.....	171,013	893	(*)	0.4	435,425	100.0	Heating and plumbing.....	628,682	139,808	4.1	22.2	979,054	100.0
Marble and tiling.....	1,114,655	250	(*)	0.1	2,044,363	100.0	Heating and piping.....	3,532,821	2,567,721	75.1	72.4	6,322,293	98.3
Excavating.....	60,224	3,118	1.1	4.7	247,403	100.0	Plumbing.....	1,721,500	1,536,748	83.3	89.3	3,100,874	99.5
Foundation.....	10,881	285	(*)	2.6	34,155	100.0	Roofing and heating combined.....	497,322	141,602	0.8	28.5	855,750	100.0
Roofing and sheet-metal work.....	1,721,500	1,550	(*)	1.1	3,100,874	99.5	Automatic temperature control.....	21,593	21,593	1.5	100.0	85,538	100.0
Roofing.....	1,244,076	1,550	(*)	1.1	2,146,489	99.3	Roofing and sheet-metal work.....	1,721,500	6,624	0.5	0.4	3,100,874	99.5
Stonework.....	171,013	893	(*)	0.4	435,425	100.0	Sheet-metal work.....	374,657	6,624	0.5	1.8	741,458	100.0
Marble and tiling.....	1,114,655	250	(*)	0.1	2,044,363	100.0	<b>Millwork</b>						
Excavating.....	60,224	3,118	1.1	4.7	247,403	100.0	All classes.....	754,034,474	1,777,065	100.0	3.3	\$125,515,907	82.5
Foundation.....	10,881	285	(*)	2.6	34,155	100.0	General contractors <sup>2</sup> .....	\$34,240,053	1,777,065	100.0	5.2	\$90,423,390	77.6
<b>Millwork</b>						<b>Plumbing and gas-fitting equipment</b>							
All classes.....	754,034,474	1,777,065	100.0	3.3	\$125,515,907	82.5	All classes.....	54,034,474	3,404,480	100.0	6.3	125,515,907	82.5
General contractors <sup>2</sup> .....	\$34,240,053	1,777,065	100.0	5.2	\$90,423,390	77.6	General contractors <sup>2</sup> .....	\$34,240,053	252,447	7.4	0.7	\$90,423,390	77.6
Building.....	17,053,400	1,761,132	99.1	10.3	51,557,998	65.0	Building.....	17,063,400	184,626	5.4	1.1	51,557,998	65.0
Building not specialized <sup>3</sup> .....	15,184,500	1,616,727	91.0	10.6	44,352,705	66.3	Building not specialized <sup>3</sup> .....	15,184,500	112,573	3.3	0.7	44,352,705	66.3
Commercial building only.....	384,265	17,724	1.0	4.6	3,787,951	31.9	Commercial building only.....	384,265	9,727	3.3	2.6	3,787,951	31.9
Manufacturing building only.....	126,700	750	(*)	0.6	292,000	80.8	Manufacturing building only.....	126,700	3,800	0.1	3.0	292,000	80.8
Residential building only.....	1,357,935	125,931	7.1	9.3	3,125,342	76.7	Residential building only.....	1,357,935	58,526	1.7	4.3	3,125,342	76.7
Highway.....	7,844,012	7,230	0.4	0.6	16,691,921	89.6	Highway.....	7,844,012	41,867	2.9	2.9	16,691,921	89.6
Bridge and culvert.....	1,539,366	530	(*)	0.3	3,384,513	96.4	Bridge and culvert.....	1,539,366	3,568	0.2	0.2	3,384,513	96.4
Street													

TABLE 10.—COMPARISON OF COST OF DESIGNATED MATERIALS FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929, WITH COST OF MATERIALS AND VALUE OF CONSTRUCTION BUSINESS—Continued

[Based exclusively upon reports of establishments which gave the distributed cost of materials]

KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	COST OF DESIGNATED MATERIAL				Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>	KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	COST OF DESIGNATED MATERIAL				Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>
	Cost of all materials distributed by kind	Amount	Per cent of—					Cost of all materials distributed by kind	Amount	Per cent of—			
			Total cost	Cost of all distributed materials						Total cost	Cost of all distributed materials		
<b>TEXAS—Continued</b>						<b>TEXAS—Continued</b>							
<i>Electrical appliances and supplies</i>						<i>Bituminous paving materials, tar, asphalt and oil—Continued</i>							
All classes.....	\$54,034,474	\$3,452,793	100.0	0.4	\$125,515,997	82.5	General contractors—Con.						
General contractors <sup>2</sup> .....	\$34,249,653	533,659	15.6	1.6	\$90,423,390	77.6	Waterworks.....	\$1,388,250	\$750	0.1	0.1	\$2,817,397	90.7
Building.....	17,053,400	69,390	2.0	4	51,557,998	65.0	Central station, light and power plant.....	1,368,240	250	( <sup>3</sup> )	( <sup>3</sup> )	2,598,895	94.8
Building not specialized <sup>3</sup> .....	15,184,500	54,370	1.6	4	44,352,705	66.3	Subcontractors.....	\$19,784,821	7,902	( <sup>3</sup> )	( <sup>3</sup> )	\$35,092,607	98.8
Commercial building only.....	384,265	4,894	1.3	3	3,787,951	31.9	Concreteing.....	369,230	460	( <sup>3</sup> )	1	895,707	100.0
Manufacturing building only.....	126,700	6,500	2	5.1	292,000	80.8	Roofting and sheet-metal work.....	\$1,721,660	446	( <sup>3</sup> )	( <sup>3</sup> )	\$3,100,874	99.5
Residential building only.....	1,357,935	3,626	1	( <sup>3</sup> )	3,125,342	78.7	Sheet-metal work.....	374,657	446	( <sup>3</sup> )	1	741,458	100.0
Highway.....	7,844,012	175	( <sup>3</sup> )	1	16,691,921	89.6	Flooring, n. e. s.....	13,208	0,990	0	53.0	47,625	100.0
Bridge and culvert.....	1,539,366	1,674	( <sup>3</sup> )	1	3,384,513	90.4	<i>Metal products, n. e. s. (including metal furniture)</i>						
Sewer, gas, water, conduit.....	1,458,711	25,878	7	1.8	3,320,957	91.2	All classes.....	\$54,034,474	\$3,041,227	100.0	6.7	\$125,515,997	82.5
Dam and reservoir.....	245,623	14,400	4	5.9	578,352	85.5	General contractors.....	\$34,081,677	22,284	0	1	\$80,951,213	77.7
Waterworks.....	1,388,250	100	( <sup>3</sup> )	( <sup>3</sup> )	2,817,397	96.7	Building.....	\$16,885,424	1,893	( <sup>3</sup> )	( <sup>3</sup> )	\$51,085,821	65.0
Central station, light and power plant.....	1,368,240	422,042	12.2	30.8	2,598,895	94.8	Building not specialized.....	15,016,524	1,893	( <sup>3</sup> )	( <sup>3</sup> )	43,880,528	66.3
Subcontractors.....	\$19,784,821	2,019,134	84.5	14.8	\$35,092,607	98.8	Waterworks.....	1,388,250	5,000	1	4	2,817,397	90.7
Electrical.....	2,532,149	2,476,808	71.7	97.8	4,919,763	100.0	Central station, light and power plant.....	1,368,240	15,891	4	1.2	2,598,895	94.8
Elevator construction.....	2,585,175	348,100	10.1	13.5	3,462,899	96.4	Subcontractors.....	\$19,784,821	3,618,943	99.4	18.3	\$35,092,607	98.8
Heating and plumbing.....	4,875,055	94,105	2.7	1.9	8,531,413	98.9	Marble and tiling.....	1,114,655	21,686	6	1.9	2,044,363	100.0
Plumbing.....	3,532,821	73,022	2.1	2.1	6,322,293	98.3	Metal work, n. e. s.....	3,990,107	3,597,257	98.8	90.2	6,001,901	99.7
Plumbing and heating combined.....	497,322	21,083	6	4.2	855,750	100.0	<b>DALLAS</b>						
Roofting and sheet-metal work.....	\$1,721,660	66	( <sup>3</sup> )	( <sup>3</sup> )	\$3,100,874	99.5	<i>Sand, gravel, stone, slag, cinders, etc.</i>						
Sheet-metal work.....	374,657	66	( <sup>3</sup> )	( <sup>3</sup> )	741,458	100.0	All classes.....	16,076,356	1,070,114	100.0	0.3	35,034,185	85.7
<i>Elevators, dumb-waiters, and equipment</i>						<i>Bituminous paving materials, tar, asphalt, and oil</i>							
All classes.....	\$54,034,474	2,252,452	100.0	4.2	\$125,515,997	82.5	General contractors.....	\$7,130,595	1,005,636	94.0	14.1	\$19,998,735	80.7
General contractors.....	\$34,081,677	15,377	7	( <sup>3</sup> )	\$80,951,213	77.7	Building.....	\$2,235,867	265,413	24.8	11.0	\$9,606,987	56.7
Building.....	\$16,885,424	11,877	5	1	\$51,085,821	65.0	Building not specialized.....	2,040,101	256,039	23.9	12.6	\$8,570,624	57.7
Building not specialized <sup>3</sup> .....	15,016,524	10,905	5	1	43,880,528	66.3	Commercial building only.....	116,609	8,374	9	8.0	611,628	52.7
Commercial building only.....	384,265	272	( <sup>3</sup> )	1	3,787,951	31.9	Highway.....	1,000,025	352,474	32.9	32.3	2,712,838	91.5
Manufacturing building only.....	126,700	700	( <sup>3</sup> )	6	292,000	80.8	Bridge and culvert.....	987,102	119,666	11.2	12.4	2,174,357	90.2
Central station, light and power plant.....	1,368,240	3,500	2	3	2,598,895	94.8	Street paving.....	303,696	88,876	8.0	23.6	893,324	92.4
Subcontractors.....	\$19,784,821	2,237,075	99.3	11.3	\$35,092,607	98.8	Sewer, gas, water, conduit.....	332,800	6,073	6	2.0	522,200	98.4
Elevator construction.....	2,585,175	2,237,075	99.3	86.5	3,462,899	96.4	Waterworks.....	757,694	145,671	13.6	19.2	1,365,317	94.4
<i>Pipe: Cast-iron, sheet and tube steel, etc.</i>						<i>Brick (face, common, fire, paving, etc.)</i>							
All classes.....	\$54,034,474	1,385,076	100.0	2.6	\$125,515,997	82.5	All classes.....	16,076,356	262,433	100.0	1.5	\$35,034,185	85.7
General contractors.....	\$34,249,653	1,082,965	78.2	3.2	\$90,423,390	77.6	General contractors.....	\$7,130,595	262,433	100.0	3.7	\$19,998,735	80.7
Building.....	\$17,053,400	20,353	1.5	1	\$51,557,998	65.0	Building.....	\$2,235,867	183,681	70.0	8.2	\$9,606,987	56.7
Building not specialized <sup>3</sup> .....	15,184,500	19,692	1.4	1	44,352,705	66.3	Building not specialized.....	2,040,101	173,615	66.2	8.5	\$8,570,624	57.7
Commercial building only.....	384,265	161	( <sup>3</sup> )	( <sup>3</sup> )	3,787,951	31.9	Commercial building only.....	116,609	10,066	3.8	8.9	611,628	52.7
Manufacturing building only.....	126,700	500	( <sup>3</sup> )	4	292,000	80.8	Street paving.....	303,696	64,000	24.4	17.6	893,324	92.4
Residential building only.....	1,357,935	12,518	9	2	16,691,921	89.6	Sewer, gas, water, conduit.....	332,800	891	3	8	522,200	98.4
Highway.....	7,844,012	3,269	2	2	3,384,513	96.4	Waterworks.....	757,694	11,084	4.2	1.5	1,365,317	94.4
Bridge and culvert.....	1,539,366	87,751	6.3	2.7	8,320,633	95.1	Central station, light and power plant.....	1,368,240	2,777	1.1	2	2,598,895	96.2
Street paving.....	3,195,169	8,000	6	3.3	578,352	85.5	<i>Cut stone, granite and marble</i>						
Sewer, gas, water, conduit.....	1,458,711	381,681	27.0	26.2	3,320,957	91.2	All classes.....	16,076,356	624,633	100.0	3.7	35,034,185	85.7
Dam and reservoir.....	245,623	8,000	6	3.3	578,352	85.5	General contractors.....	\$7,130,595	135,015	21.6	1.9	\$19,998,735	80.7
Waterworks.....	1,388,250	537,413	38.8	38.7	2,817,397	96.7	Building.....	\$2,235,867	135,015	21.6	6.0	\$9,606,987	56.7
Oil and natural-gas pipe line.....	44,400	32,000	2.3	72.1	352,000	88.5	Building not specialized.....	2,040,101	132,215	21.2	6.5	\$8,570,624	57.7
Subcontractors.....	\$19,784,821	302,111	21.8	1.5	\$35,092,607	98.8	Commercial building only.....	116,609	2,800	4	2.4	611,628	52.7
Electrical.....	2,532,149	24,056	1.7	1.0	4,919,763	100.0	Street paving.....	303,696	303,696	100.0	17.6	893,324	92.4
Heating and plumbing.....	4,875,055	213,051	15.4	4.4	8,531,413	98.9	Sewer, gas, water, conduit.....	332,800	891	3	8	522,200	98.4
Heating and piping.....	628,682	2,000	1	3	979,054	100.0	Waterworks.....	757,694	11,084	4.2	1.5	1,365,317	94.4
Plumbing.....	3,532,821	135,944	9.8	3.8	6,322,293	98.3	Central station, light and power plant.....	1,368,240	2,777	1.1	2	2,598,895	96.2
Plumbing and heating combined.....	497,322	75,107	5.4	15.1	855,750	100.0	<i>Bituminous paving materials, tar, asphalt, and oil</i>						
Excavating.....	66,224	15,004	1.1	22.7	247,403	100.0	All classes.....	\$54,034,474	1,168,170	100.0	2.2	\$125,515,997	82.5
Waterworks.....	54,840	60,000	3.0	91.2	102,100	100.0	General contractors.....	\$34,081,677	1,160,208	99.3	3.4	\$89,951,213	77.7
<i>Bituminous paving materials, tar, asphalt, and oil</i>						<i>Brick (face, common, fire, paving, etc.)</i>							
All classes.....	\$54,034,474	1,168,170	100.0	2.2	\$125,515,997	82.5	All classes.....	16,076,356	262,433	100.0	1.5	\$35,034,185	85.7
General contractors.....	\$34,081,677	1,160,208	99.3	3.4	\$89,951,213	77.7	General contractors.....	\$7,130,595	262,433	100.0	3.7	\$19,998,735	80.7
Building.....	\$16,885,424	23,540	2.0	1	\$51,085,821	65.0	Building.....	\$2,235,867	183,681	70.0	8.2	\$9,606,987	56.7
Building not specialized.....	15,016,524	23,540	2.0	1	43,880,528	66.3	Building not specialized.....	2,040,101	173,615	66.2	8.5	\$8,570,624	57.7
Highway.....	7,844,012	305,688	33.9	5.0	16,691,921	89.6	Commercial building only.....	116,609	10,066	3.8	8.9	611,628	52.7
Bridge and culvert.....	1,539,366	10,985	9	7	3,384,513	96.4	Street paving.....	303,696	64,000	24.4	17.6	893,324	92.4
Street paving.....	3,195,169	728,755	62.4	22.8	8,320,633	95.1	Sewer, gas, water, conduit.....	332,800	891	3	8	522,200	98.4
Sewer, gas, water, conduit.....	1,458,711	300	( <sup>3</sup> )	( <sup>3</sup> )	3,320,957	91.2	Waterworks.....	757,694	11,084	4.2	1.5	1,365,317	94.4
<i>See footnotes at end of table.</i>						<i>See footnotes at end of table.</i>							

TABLE 10.—COMPARISON OF COST OF DESIGNATED MATERIALS FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929, WITH COST OF MATERIALS AND VALUE OF CONSTRUCTION BUSINESS—Continued

[Based exclusively upon reports of establishments which gave the distributed cost of materials]

KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	Cost of all materials distributed by kind	COST OF DESIGNATED MATERIAL		Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>	KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	Cost of all materials distributed by kind	COST OF DESIGNATED MATERIAL		Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>		
		Amount	Per cent of—					Amount	Per cent of—				
												Total cost	Cost of all distributed materials
<b>DALLAS—Continued</b>						<b>DALLAS—Continued</b>							
<b>Cement</b>						<b>Heating and ventilating equipment</b>							
All classes.....	\$10,976,356	\$910,787	100.0	5.4	\$35,084,185	85.7	All classes.....	\$10,976,356	\$320,000	100.0	1.0	\$35,084,185	85.7
General contractors.....	7,130,595	561,684	98.7	12.1	19,908,735	80.7	General contractors.....	7,130,595	3,626	1.1	.1	19,908,735	80.7
Building.....	2,235,867	337,380	36.7	15.1	9,600,987	56.7	Building.....	2,235,867	58	( <sup>1</sup> )	( <sup>1</sup> )	9,600,987	56.7
Building not specialized.....	2,040,101	324,566	35.9	15.9	8,570,624	57.7	Building not specialized.....	2,040,101	58	( <sup>1</sup> )	( <sup>1</sup> )	8,570,624	57.7
Commercial building only.....	116,609	12,793	1.4	11.0	611,628	52.7	Bridge and culvert.....	967,102	3,568	1.1	.3	2,712,938	91.5
Highway.....	1,090,025	253,800	27.6	23.8	2,712,838	91.5	Highway.....	1,090,025					
Bridge and culvert.....	967,102	62,547	6.8	6.6	2,174,357	99.2	Subcontractors.....	9,845,761	316,380	98.9	3.2	15,085,450	98.9
Street paving.....	363,696	36,167	3.9	9.9	893,324	92.4	Heating and plumbing.....	1,079,732	316,380	98.9	26.3	1,814,995	99.1
Sewer, gas, water, conduit.....	332,800	5,570	.6	1.7	522,290	98.4	Heating and piping.....	152,000	125,000	39.1	82.2	275,000	100.0
Waterworks.....	757,694	151,029	16.5	20.1	1,395,317	94.4	Plumbing.....	549,335	108,131	33.8	19.7	923,098	98.2
Railroad.....	95,646	13,149	1.4	13.7	454,727	90.0	Plumbing and heating combined.....	250,000	61,650	19.3	24.6	373,581	100.0
Central station, light and power plant.....	1,287,765	1,127	.1	.1	2,268,895	96.2	Automatic temperature control.....	21,593	21,593	6.7	100.0	95,538	100.0
Subcontractors.....	9,845,761	58,103	6.3	6.6	15,085,450	98.9	<b>Plumbing and gas-fitting equipment</b>						
Concreting.....	35,256	16,685	1.8	48.0	89,714	100.0	All classes.....	16,976,356	675,738	100.0	4.0	35,084,185	85.7
Heating and plumbing.....	1,079,732	90	( <sup>1</sup> )	( <sup>1</sup> )	1,814,995	99.1	General contractors.....	7,130,595	21,806	3.2	.3	19,908,735	80.7
Plumbing.....	549,335	90	( <sup>1</sup> )	( <sup>1</sup> )	923,098	98.2	Building.....	2,235,867	2,815	.4	.1	9,600,987	56.7
Marble and tiling.....	583,648	28,841	3.1	4.9	978,541	100.0	Building not specialized.....	2,040,101	2,815	.4	.1	8,570,624	57.7
Excavating.....	66,224	12,237	1.3	18.5	247,403	100.0	Sewer, gas, water, conduit.....	332,800	10,500	1.6	3.2	522,290	98.4
<b>Structural steel</b>						<b>Waterworks.....</b>							
All classes.....	16,976,356	1,105,602	100.0	6.5	35,084,185	85.7	Central station, light and power plant.....	1,287,765	4,390	.6	.3	2,268,895	96.2
General contractors.....	7,130,595	527,501	47.7	7.4	19,908,735	80.7	Subcontractors.....	9,845,761	654,433	96.8	6.6	15,085,450	98.9
Building.....	2,235,867	136,282	12.3	6.1	9,600,987	56.7	Heating and plumbing.....	1,079,732	654,433	96.8	60.6	1,814,995	99.1
Building not specialized.....	2,040,101	128,597	11.6	6.3	8,570,624	57.7	Plumbing.....	549,335	424,669	62.8	77.3	923,098	98.2
Commercial building only.....	116,609	7,685	.7	6.9	611,628	52.7	Plumbing and heating combined.....	250,000	123,560	18.3	49.3	373,581	100.0
Highway.....	1,090,025	30,687	2.8	2.8	2,712,838	91.5	Automatic sprinkler systems.....	106,204	106,204	15.7	100.0	157,778	100.0
Bridge and culvert.....	967,102	257,044	23.3	26.0	2,174,357	99.2	<b>Electrical appliances and supplies</b>						
Street paving.....	363,696	7,685	.7	6.9	893,324	92.4	All classes.....	16,976,356	1,206,333	100.0	7.1	35,084,185	85.7
Sewer, gas, water, conduit.....	332,800	100	( <sup>1</sup> )	( <sup>1</sup> )	522,290	98.4	General contractors.....	7,130,595	425,366	35.3	6.0	19,908,735	80.7
Waterworks.....	757,694	102,888	9.3	13.6	1,395,317	94.4	Building.....	2,235,867	1,350	.1	.1	9,600,987	56.7
Subcontractors.....	9,845,761	578,101	52.3	5.9	15,085,450	98.9	Building not specialized.....	2,040,101	1,350	.1	.1	8,570,624	57.7
Steel erection.....	827,275	451,592	40.8	54.6	1,240,912	96.6	Bridge and culvert.....	967,102	1,674	.1	.2	2,174,357	99.2
Marble and tiling.....	583,648	245	( <sup>1</sup> )	( <sup>1</sup> )	978,541	100.0	Sewer, gas, water, conduit.....	332,800	300	( <sup>1</sup> )	.1	522,290	98.4
Metal work, n. o. s.....	3,761,230	120,264	11.4	3.4	5,376,051	99.9	Central station, light and power plant.....	1,287,765	422,042	35.0	32.8	2,268,895	96.2
<b>Reinforcing steel</b>						<b>Elevators, dumb-waiters, and equipment<sup>2</sup></b>							
All classes.....	16,976,356	984,468	100.0	5.8	35,084,185	85.7	All classes.....	16,976,356	2,212,623	100.0	13.0	35,084,185	85.7
General contractors.....	7,130,595	597,522	60.7	8.4	19,908,735	80.7	Subcontractors.....	9,845,761	2,212,623	100.0	22.5	15,085,450	98.8
Building.....	2,235,867	187,733	11.1	8.4	9,600,987	56.7	Elevator construction.....	2,560,723	2,212,623	100.0	86.4	3,389,814	96.3
Building not specialized.....	2,040,101	171,502	17.4	8.4	8,570,624	57.7	<b>Pipe: Cast-iron, sheet and tube steel, etc.</b>						
Commercial building only.....	116,609	16,231	1.6	13.9	611,628	52.7	All classes.....	16,976,356	495,672	100.0	2.9	35,084,185	85.7
Highway.....	1,090,025	35,122	3.6	3.2	2,712,838	91.5	General contractors.....	7,130,595	379,884	76.6	5.3	19,908,735	80.7
Bridge and culvert.....	967,102	182,279	18.5	18.8	2,174,357	99.2	Building.....	2,235,867	3,269	.7	.3	9,600,987	56.7
Street paving.....	363,696	13,482	1.4	3.7	893,324	92.4	Building not specialized.....	2,040,101	1,350	.1	.1	8,570,624	57.7
Sewer, gas, water, conduit.....	332,800	100	( <sup>1</sup> )	( <sup>1</sup> )	522,290	98.4	Bridge and culvert.....	967,102	1,674	.1	.2	2,174,357	99.2
Waterworks.....	757,694	100,000	10.2	13.2	1,395,317	94.4	Sewer, gas, water, conduit.....	332,800	300	( <sup>1</sup> )	.1	522,290	98.4
Railroad.....	95,646	28,826	2.9	30.1	454,727	90.0	Central station, light and power plant.....	1,287,765	422,042	35.0	32.8	2,268,895	96.2
Central station, light and power plant.....	1,287,765	49,080	5.1	3.9	2,268,895	96.2	Subcontractors.....	9,845,761	780,967	64.7	7.9	15,085,450	98.9
Subcontractors.....	9,845,761	386,946	39.3	3.9	15,085,450	98.9	Electrical.....	404,397	432,867	35.9	93.2	883,391	100.0
Concreting.....	35,256	1,730	.2	4.9	89,714	100.0	Elevator construction.....	2,560,723	348,100	28.9	13.6	3,389,814	96.3
Steel erection.....	827,275	375,683	38.2	45.4	1,240,912	96.6	<b>Elevators, dumb-waiters, and equipment<sup>2</sup></b>						
Excavating.....	66,224	9,533	1.0	14.4	247,403	100.0	All classes.....	16,976,356	2,212,623	100.0	13.0	35,084,185	85.7
<b>Lumber, rough and finished</b>						<b>Pipe: Cast-iron, sheet and tube steel, etc.</b>							
All classes.....	16,976,356	628,681	100.0	3.7	35,084,185	85.7	All classes.....	16,976,356	495,672	100.0	2.9	35,084,185	85.7
General contractors.....	7,130,595	624,943	99.4	8.8	19,908,735	80.7	General contractors.....	7,130,595	379,884	76.6	5.3	19,908,735	80.7
Building.....	2,235,867	245,905	39.1	11.0	9,600,987	56.7	Building.....	2,235,867	3,269	.7	.3	9,600,987	56.7
Building not specialized.....	2,040,101	193,440	30.8	9.5	8,570,624	57.7	Building not specialized.....	2,040,101	1,350	.1	.1	8,570,624	57.7
Commercial building only.....	116,609	21,564	3.4	18.5	611,628	52.7	Bridge and culvert.....	967,102	1,674	.1	.2	2,174,357	99.2
Highway.....	1,090,025	30,001	4.9	39.0	2,712,838	91.5	Sewer, gas, water, conduit.....	332,800	300	( <sup>1</sup> )	.1	522,290	98.4
Bridge and culvert.....	967,102	15,016	2.5	1.5	2,174,357	99.2	Central station, light and power plant.....	1,287,765	422,042	35.0	32.8	2,268,895	96.2
Street paving.....	363,696	267,008	42.6	27.7	893,324	92.4	Subcontractors.....	9,845,761	115,788	23.4	1.2	15,085,450	98.9
Sewer, gas, water, conduit.....	332,800	2,459	.4	.7	522,290	98.4	Electrical.....	404,397	20,000	4.0	4.3	883,391	100.0
Waterworks.....	757,694	74,400	11.8	9.8	1,395,317	94.4	Heating and plumbing.....	1,079,732	80,784	16.3	7.5	1,814,995	99.1
Railroad.....	95,646	11,019	1.9	12.5	454,727	90.0	Heating and piping.....	152,000	2,000	.4	1.3	275,000	100.0
Central station, light and power plant.....	1,287,765	6,036	1.0	.5	2,268,895	96.2	Plumbing.....	549,335	13,400	2.7	2.4	923,098	98.2
Subcontractors.....	9,845,761	3,738	.6	( <sup>1</sup> )	15,085,450	98.9	Plumbing and heating combined.....	250,000	65,384	13.2	26.1	373,581	100.0
Concreting.....	35,256	620	.1	1.8	89,714	100.0	Excavating.....	66,224	15,004	3.0	22.7	247,403	100.0
Steel erection.....	827,275	256	.1	1.8	89,714	100.0							
Excavating.....	66,224	3,118	.5	4.7	247,403	100.0							

See footnotes at end of table



CONSTRUCTION—TEXAS

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TABLE 10.—COMPARISON OF COST OF DESIGNATED MATERIALS FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929, WITH COST OF MATERIALS AND VALUE OF CONSTRUCTION BUSINESS—Continued

[Based exclusively upon reports of establishments which gave the distributed cost of materials]

KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	Cost of all materials distributed by kind	COST OF DESIGNATED MATERIAL		Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>	KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	Cost of all materials distributed by kind	COST OF DESIGNATED MATERIAL		Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>		
		Amount	Percent of—					Amount	Percent of—				
												Total cost	Cost of all distributed materials
<b>EL PASO—Continued</b>						<b>FORT WORTH—Continued</b>							
<i>Plumbing and gas fitting equipment<sup>2</sup></i>						<i>Cement<sup>3</sup></i>							
All classes.....	\$1,931,304	\$172,440	100.0	8.9	\$4,375,394	81.6	All classes.....	\$3,283,951	\$513,904	100.0	15.7	\$8,160,274	81.1
General contractors.....	\$1,190,509	13,513	7.8	1.1	\$3,040,179	77.3	General contractors <sup>3</sup> .....	2,383,609	497,995	90.9	20.9	6,537,378	76.8
Building.....	\$998,910	13,513	7.8	1.4	\$2,525,813	73.9	Building.....	1,147,215	123,615	24.0	10.8	3,234,062	72.2
Building not specialized.....	882,227	12,954	7.5	1.5	2,273,963	74.1	Building not specialized <sup>3</sup> .....	946,970	90,835	17.7	9.6	2,704,897	67.2
Commercial building only.....	13,388	559	.3	4.2	29,950	83.3	Commercial building only.....	24,565	1,820	.4	7.4	44,715	47.7
Manufacturing building only.....							Manufacturing building only.....	126,700	30,000	5.8	23.7	292,000	80.8
Residential building only.....							Residential building only.....	48,980	960	.2	2.0	102,450	90.8
Highway.....							Highway.....	358,585	156,007	30.3	43.4	931,308	85.8
Bridge and culvert.....							Bridge and culvert.....	15,887	770	.1	4.8	30,643	74.2
Street paving.....							Street paving.....	723,479	184,592	35.9	25.5	1,838,294	90.6
Sewer, gas, water, conduit.....							Sewer, gas, water, conduit.....	57,968	7,551	1.5	13.0	173,071	59.0
Central station, light and power plant.....							Central station, light and power plant.....	80,475	25,800	5.0	32.1	330,000	75.8
Subcontractors.....	\$740,855	158,927	92.2	21.5	\$1,335,215	99.9	Subcontractors.....	\$900,342	15,999	3.1	1.8	\$1,652,896	99.1
Heating and plumbing.....	\$245,201	158,927	92.2	64.8	\$411,500	99.9	Concreting.....	29,309	14,850	2.9	50.7	56,634	100.0
Plumbing.....	189,339	158,927	92.2	83.9	336,500	99.8	Masonry.....	19,820	520	.1	2.6	37,476	100.0
							Marble and tiling.....	14,076	629	.1	4.5	33,043	100.0
<i>Electrical appliances and supplies</i>						<i>Structural steel<sup>2</sup></i>							
All classes.....	1,931,304	139,816	100.0	7.2	4,375,394	81.6	All classes.....	\$3,283,951	305,461	100.0	9.3	\$8,190,274	81.1
General contractors.....	\$1,190,509	8,926	6.4	.7	\$3,040,179	77.3	General contractors.....	\$2,319,022	55,461	18.2	2.4	\$6,306,565	77.2
Building.....	\$998,910	8,926	6.4	.9	\$2,525,813	73.9	Building.....	\$1,082,628	24,609	8.1	2.3	\$3,093,249	72.7
Building not specialized.....	882,227	8,855	6.4	1.0	2,273,963	74.1	Building not specialized.....	882,383	13,629	4.5	1.5	2,654,084	67.7
Commercial building only.....	13,388	41	(*)	.3	29,950	83.3	Commercial building only.....	24,565	4,480	1.5	18.2	44,715	47.7
Manufacturing building only.....							Manufacturing building only.....	126,700	6,500	2.1	5.1	292,000	80.8
Residential building only.....							Residential building only.....	48,980	3,600	1.2	1.0	931,308	85.8
Highway.....							Highway.....	358,585	123,469	21.3	34.4	931,308	85.8
Bridge and culvert.....							Bridge and culvert.....	15,887	671	.1	4.2	30,643	74.2
Street paving.....							Street paving.....	723,479	292,254	50.3	40.4	1,838,294	90.6
Sewer, gas, water, conduit.....							Sewer, gas, water, conduit.....	57,968	5,063	1.0	9.8	173,071	59.0
Central station, light and power plant.....							Central station, light and power plant.....	80,475	36,000	6.2	44.7	330,000	75.8
Subcontractors.....	\$740,855	130,890	93.6	17.7	\$1,335,215	99.9	Subcontractors.....	\$900,342	15,444	2.7	1.7	\$1,652,896	99.1
Electrical.....	130,810	130,810	93.6	100.0	220,912	100.0	Concreting.....	29,309	13,859	2.4	47.3	56,634	100.0
Heating and plumbing.....	\$245,201	80	.1	(*)	\$411,500	99.9	Masonry.....	19,820	1,200	.2	6.1	37,476	100.0
Plumbing.....	189,339	80	.1	(*)	336,500	99.8	Marble and tiling.....	14,076	385	.1	2.7	33,043	100.0
<b>FORT WORTH</b>						<b>Reinforcing steel</b>							
<i>Sand, gravel, stone, slag, cinders, etc.<sup>2</sup></i>						<i>Lumber, rough and finished</i>							
All classes.....	3,283,951	580,873	100.0	17.7	8,190,274	81.1	All classes.....	3,283,951	294,764	100.0	9.0	8,190,274	81.1
General contractors <sup>3</sup> .....	2,383,609	565,429	97.3	23.7	6,537,378	76.8	General contractors <sup>3</sup> .....	2,383,609	113,037	55.7	4.7	6,537,378	76.8
Building.....	1,147,215	107,372	18.5	9.4	3,234,062	72.2	Building.....	1,147,215	66,777	32.9	5.8	3,234,062	72.2
Building not specialized.....	946,970	78,363	13.5	8.3	2,794,897	67.2	Building not specialized.....	946,970	45,716	22.5	4.8	2,794,897	67.2
Commercial building only.....	24,565	1,100	.2	4.5	44,715	47.7	Commercial building only.....	24,565	790	.4	3.2	44,715	47.7
Manufacturing building only.....	126,700	27,000	4.6	21.3	292,000	80.8	Manufacturing building only.....	126,700	20,000	9.9	15.8	292,000	80.8
Residential building only.....	48,980	909	.2	1.9	102,450	90.8	Residential building only.....	48,980	271	.1	.6	102,450	90.8
Highway.....	358,585	123,469	21.3	34.4	931,308	85.8	Highway.....	358,585	19,814	9.8	5.5	931,308	85.8
Bridge and culvert.....	15,887	671	.1	4.2	30,643	74.2	Bridge and culvert.....	15,887	1,000	.5	6.3	30,643	74.2
Street paving.....	723,479	292,254	50.3	40.4	1,838,294	90.6	Street paving.....	723,479	2,292	1.1	.3	1,838,294	90.6
Sewer, gas, water, conduit.....	57,968	5,063	1.0	9.8	173,071	59.0	Sewer, gas, water, conduit.....	57,968	17,404	8.6	30.0	173,071	59.0
Central station, light and power plant.....	80,475	36,000	6.2	44.7	330,000	75.8	Central station, light and power plant.....	80,475	5,750	2.8	7.1	330,000	75.8
Subcontractors.....	\$900,342	15,444	2.7	1.7	\$1,652,896	99.1	Subcontractors.....	\$900,342	90,000	44.3	10.0	\$1,652,896	99.1
Concreting.....	29,309	13,859	2.4	47.3	56,634	100.0	Steel erection.....	350,000	90,000	44.3	25.7	500,500	96.0
Masonry.....	19,820	1,200	.2	6.1	37,476	100.0							
Marble and tiling.....	14,076	385	.1	2.7	33,043	100.0							
<i>Brick (face, common, fire, paving, etc.)</i>						<i>Cut stone, granite and marble</i>							
All classes.....	3,283,951	205,518	100.0	6.3	8,190,274	81.1	All classes.....	3,283,951	109,118	100.0	3.3	8,190,274	81.1
General contractors <sup>3</sup> .....	\$2,383,609	190,888	92.9	8.0	\$6,537,378	76.8	General contractors <sup>3</sup> .....	\$2,383,609	105,848	97.0	4.4	\$6,537,378	76.8
Building.....	1,147,215	91,628	44.6	8.0	3,234,062	72.2	Building.....	\$1,147,215	105,098	96.3	9.2	\$3,234,062	72.2
Building not specialized.....	946,970	80,247	39.0	8.5	2,794,897	67.2	Building not specialized.....	946,970	105,018	96.2	11.1	2,794,897	67.2
Commercial building only.....	24,565	2,250	-1.1	9.2	44,715	47.7	Commercial building only.....	24,565	80	.1	.3	44,715	47.7
Manufacturing building only.....	126,700	5,500	2.7	4.3	292,000	80.8	Manufacturing building only.....	126,700	8,000	2.7	6.3	292,000	80.8
Residential building only.....	48,980	3,029	1.8	7.4	102,450	90.8	Residential building only.....	48,980	31,436	10.7	64.2	102,450	90.8
Highway.....	358,585	25,864	12.6	7.2	931,308	85.8	Highway.....	358,585	3,000	1.0	.8	931,308	85.8
Bridge and culvert.....	15,887	671	.1	4.2	30,643	74.2	Bridge and culvert.....	15,887	6,156	2.1	38.7	30,643	74.2
Street paving.....	723,479	69,898	34.0	9.7	1,838,294	90.6	Street paving.....	723,479	3,030	1.0	.4	1,838,294	90.6
Sewer, gas, water, conduit.....	57,968	5,063	1.0	9.8	173,071	59.0	Sewer, gas, water, conduit.....	57,968	485	.2	.8	173,071	59.0
Central station, light and power plant.....	80,475	3,500	1.7	4.3	330,000	75.8	Central station, light and power plant.....	80,475	1,800	.6	2.2	330,000	75.8
Subcontractors.....	\$900,342	14,630	7.1	1.6	\$1,652,896	99.1	Subcontractors.....	\$900,342	600	.2	.1	\$1,652,896	99.1
Masonry.....	19,820	14,630	7.1	73.8	37,476	100.0	Concreting.....	29,309	600	.2	2.0	56,634	100.0

See footnotes at end of table.

TABLE 10.—COMPARISON OF COST OF DESIGNATED MATERIALS FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929, WITH COST OF MATERIALS AND VALUE OF CONSTRUCTION BUSINESS—Continued

[Based exclusively upon reports of establishments which gave the distributed cost of materials]

KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	COST OF DESIGNATED MATERIAL				Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>	KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	COST OF DESIGNATED MATERIAL				Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>
	Cost of all materials distributed by kind	Amount	Per cent of—					Cost of all materials distributed by kind	Amount	Per cent of—			
			Total cost	Cost of all distributed materials						Total cost	Cost of all distributed materials		
<b>FORT WORTH—Continued</b>						<b>HOUSTON—Continued</b>							
<i>Millwork</i>						<i>Sand, gravel, stone, slag, cinders, etc.—Continued</i>							
All classes.....	\$3,283,951	\$111,500	100.0	3.4	\$8,190,274	81.1	General contractors—Contd.	\$761,455	\$418,523	32.7	48.0	\$1,532,548	88.4
General contractors <sup>2</sup> .....	\$2,383,609	111,566	100.0	4.7	\$6,537,378	76.8	Highway.....	461,471	206,028	16.1	44.8	1,137,700	95.1
Building.....	1,147,215	110,900	99.5	9.7	3,234,062	72.2	Street paving.....	504,360	227,922	17.8	45.2	1,070,856	100.0
Building not specialized <sup>3</sup> .....	946,970	106,171	85.2	11.2	2,794,897	67.2	Sewer, gas, water, conduit.....	39,650	1,300	.1	3.3	84,928	98.8
Commercial building only.....	24,565	800	7.3	3.3	44,715	47.7	Dam and reservoir.....						
Manufacturing building only.....	126,700	750	.7	.6	292,000	80.8	Subcontractors.....	\$2,878,444	70,167	6.2	2.8	\$6,127,623	97.7
Residential building only.....	48,980	3,245	2.9	6.6	102,450	90.8	Concreteing.....	95,890	29,390	2.3	30.0	328,303	100.0
Central station, light and power plant.....	80,475	600	.5	.7	330,000	75.8	Masonry.....	39,747	1,987	.2	5.0	81,840	97.6
							Plastering and lathing.....	116,697	18,322	1.4	15.7	581,700	90.7
							Roofing and sheet-metal work.....	\$320,711	5,121	.4	1.0	\$593,641	97.6
<i>Paints, varnishes, glass</i>							Roofing.....	262,365	5,121	.4	2.0	438,890	97.0
All classes.....	3,283,951	80,126	100.0	2.4	3,190,274	81.1	Stonework.....	6,900	(*)		5.8	72,000	100.0
General contractors <sup>2</sup> .....	\$2,383,609	30,110	37.6	1.3	\$6,537,378	76.8	Marble and tiling.....	266,023	20,815	1.6	7.8	544,976	100.0
Building.....	1,147,215	30,110	37.6	2.6	3,234,062	72.2	Flooring, n. e. s.....	13,208	3,132	.2	23.7	47,626	100.0
Building not specialized <sup>3</sup> .....	946,970	27,400	34.2	2.9	2,794,897	67.2	<i>Brick (face, common, fire, paving, etc.)</i>						
Commercial building only.....	24,565	500	.7	2.3	44,715	47.7	All classes.....	\$3,458,527	313,688	100.0	3.7	\$23,887,599	71.6
Manufacturing building only.....	126,700	500	.6	.4	292,000	80.8	General contractors <sup>2</sup> .....	\$5,580,083	280,665	92.3	5.2	\$17,759,976	63.1
Residential building only.....	48,980	1,650	2.1	3.4	102,450	90.8	Building.....	3,798,747	264,370	81.1	6.7	13,861,884	54.5
Subcontractors.....	\$900,342	50,016	62.4	5.6	\$1,652,896	99.1	Building not specialized <sup>3</sup> .....	3,341,762	247,872	79.0	7.4	10,526,681	60.8
Painting and decorating.....	47,514	47,514	59.3	100.0	165,545	100.0	Commercial building only.....	87,004	548	.2	.6	2,707,588	98.6
Steel erection.....	350,000	2,500	3.1	.7	500,500	96.0	Residential building only.....	369,981	5,560	1.9	1.0	627,615	94.0
							Street paving.....	461,471	31,473	10.0	6.8	1,137,700	95.1
<i>Plumbing and gas-fitting equipment</i>							Sewer, gas, water, conduit.....	504,360	3,022	1.0	6.0	1,070,856	100.0
All classes.....	3,283,951	117,310	100.0	3.6	8,190,274	81.1	Dam and reservoir.....	39,650	800	.3	2.0	84,928	98.8
General contractors <sup>2</sup> .....	\$2,383,609	15,859	13.5	.7	\$6,537,378	76.8	Subcontractors.....	\$2,878,444	24,023	7.7	.8	\$6,127,623	97.7
Building.....	1,147,215	15,859	13.5	1.4	3,234,062	72.2	Masonry.....	39,747	21,894	7.0	55.0	81,840	97.6
Building not specialized <sup>3</sup> .....	946,970	10,770	9.2	1.1	2,794,897	67.2	Plastering and lathing.....	116,697	2,159	.7	1.9	581,700	90.7
Commercial building only.....	24,565	1,280	1.1	5.2	44,715	47.7	<i>Tile, facing, terra cotta, floor and wall</i>						
Manufacturing building only.....	126,700	3,800	3.2	3.0	292,000	80.8	All classes.....	\$3,458,527	264,771	100.0	3.1	\$23,887,599	71.6
Residential building only.....	48,980	1,650	1.4	2.1	102,450	90.8	General contractors.....	\$5,519,405	143,698	54.8	2.6	\$17,538,326	63.3
Subcontractors.....	\$900,342	101,460	88.5	11.3	\$1,652,896	99.1	Building.....	\$3,738,069	143,098	54.3	3.8	\$13,640,234	54.4
Heating and plumbing.....	\$148,788	101,460	88.5	68.2	\$308,634	100.0	Building not specialized <sup>3</sup> .....	3,281,084	143,198	54.1	4.4	10,305,031	61.0
Plumbing.....	81,570	79,170	67.5	97.1	183,669	100.0	Residential building only.....	369,981	500	.2	.1	627,615	94.0
Plumbing and heating combined.....	33,435	22,290	19.0	66.7	68,833	100.0	Subcontractors.....	\$2,878,444	121,073	45.7	4.2	\$6,127,623	97.7
							Marble and tiling.....	266,023	121,073	45.7	45.5	544,976	100.0
<i>Electrical appliances and supplies<sup>1</sup></i>							<i>Cut stone, granite, and marble</i>						
All classes.....	3,283,951	282,364	100.0	8.6	8,190,274	81.1	All classes.....	\$3,458,527	245,635	100.0	2.0	\$23,887,599	71.6
General contractors <sup>2</sup> .....	\$2,383,609	11,531	4.1	.5	\$6,537,378	76.8	General contractors.....	\$5,519,405	137,740	56.1	2.5	\$17,538,326	63.3
Building.....	1,147,215	11,531	4.1	1.0	3,234,062	72.2	Building.....	\$3,738,069	137,740	56.1	3.7	\$13,640,234	54.4
Building not specialized <sup>3</sup> .....	946,970	4,231	1.5	.4	2,794,897	67.2	Building not specialized <sup>3</sup> .....	3,281,084	137,740	56.1	4.2	10,305,031	61.0
Commercial building only.....	24,565	800	.7	3.3	44,715	47.7	Residential building only.....	369,981	500	.2	.1	627,615	94.0
Manufacturing building only.....	126,700	6,500	2.3	5.1	292,000	80.8	Subcontractors.....	\$2,878,444	107,895	43.9	3.7	\$6,127,623	97.7
Residential building only.....	48,980	1,650	1.4	2.1	102,450	90.8	Masonry.....	39,747	1,987	.2	5.0	81,840	97.6
Subcontractors.....	\$900,342	270,833	95.9	30.1	\$1,652,896	99.1	Plastering and lathing.....	116,697	3,218	1.1	.2	581,700	90.7
Electrical.....	270,833	270,833	95.9	100.0	503,014	100.0	Stonework.....	6,900	6,500	.2	6.8	72,000	100.0
							Marble and tiling.....	266,023	90,190	40.4	37.3	544,976	100.0
<i>Bituminous paving materials, tar, asphalt, and oil</i>							<i>Cement<sup>1</sup></i>						
All classes.....	\$3,283,951	158,507	100.0	4.8	\$8,190,274	81.1	All classes.....	\$3,458,527	954,028	100.0	11.3	\$23,887,599	71.6
General contractors.....	\$2,319,022	158,507	100.0	6.8	\$6,396,566	77.2	General contractors <sup>2</sup> .....	\$5,580,083	896,233	93.9	16.1	\$17,759,976	63.1
Building.....	\$1,082,628	300	.2	(*)	\$3,093,249	72.7	Building.....	3,798,747	844,711	36.1	9.1	13,861,884	54.5
Building not specialized <sup>3</sup> .....	882,383	300	.2	(*)	2,654,084	67.7	Building not specialized <sup>3</sup> .....	3,341,762	304,879	31.9	9.1	10,526,681	60.8
Highway.....	358,586	9,402	5.9	2.6	931,308	85.8	Commercial building only.....	87,004	37,063	3.0	42.0	2,707,588	98.6
Street paving.....	723,479	148,495	93.7	20.5	1,833,204	90.6	Residential building only.....	369,981	3,239	.3	.9	627,615	94.0
Central station, light and power plant.....	80,475	250	.2	.3	330,000	75.8	Highway.....	761,455	232,657	24.4	30.6	1,532,548	88.4
							Street paving.....	461,471	115,857	12.1	25.1	1,137,700	95.1
<b>HOUSTON</b>							Sewer, gas, water, conduit.....	504,360	199,408	20.9	39.5	1,070,856	100.0
<i>Sand, gravel, stone, slag, cinders, etc.<sup>1</sup></i>							Dam and reservoir.....	39,650	3,600	.4	8.1	84,928	98.8
All classes.....	\$3,458,527	1,280,420	100.0	15.1	\$23,887,599	71.6	Subcontractors.....	\$2,878,444	58,395	6.1	2.0	\$6,127,623	97.7
General contractors <sup>2</sup> .....	\$5,580,083	1,201,259	93.8	21.5	\$17,759,976	63.1	Concreteing.....	95,890	10,424	1.7	17.1	328,303	100.0
Building.....	3,798,747	346,886	27.1	9.1	13,861,884	54.5	Heating and plumbing.....	\$1,344,361	799	.1	.1	\$2,284,322	97.5
Building not specialized <sup>3</sup> .....	3,341,762	309,693	24.2	9.3	10,526,681	60.8	Plumbing.....	897,198	799	.1	.1	1,583,968	95.9
Commercial building only.....	87,004	30,443	2.8	11.9	2,707,588	6.6	Masonry.....	39,747	3,074	.4	10.0	81,840	97.6
Residential building only.....	369,981	750	.1	.2	627,615	94.0	Plastering and lathing.....	116,697	18,502	1.9	15.0	581,700	90.7
							Marble and tiling.....	266,023	15,616	1.6	5.9	544,976	100.0
							Flooring, n. e. s.....	13,208	3,080	.3	23.3	47,626	100.0

See footnotes at end of table.



TABLE 10.—COMPARISON OF COST OF DESIGNATED MATERIALS FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929, WITH COSTS OF MATERIALS AND VALUE OF CONSTRUCTION BUSINESS—Continued

[Based exclusively upon reports of establishments which gave the distributed cost of materials]

KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	Cost of all materials distributed by kind	COST OF DESIGNATED MATERIAL		Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>	KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	Cost of all materials distributed by kind	COST OF DESIGNATED MATERIAL		Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>	
		Amount	Per cent of—					Amount	Per cent of—			
												Total cost
<b>HOUSTON—Continued</b>						<b>HOUSTON—Continued</b>						
<i>Structural steel</i>						<i>Roofing and sheet metal</i>						
All classes.....	\$8,458,527	\$243,244	100.0	2.9	\$23,887,599	71.6	\$8,458,527	\$338,930	100.0	4.0	\$23,887,599	71.6
General contractors <sup>3</sup> .....	\$5,580,083	243,044	99.9	4.4	17,759,976	63.1	5,519,405	29,319	8.7	5	17,538,320	63.3
Building.....	3,798,747	243,044	99.9	6.4	13,861,884	54.5	3,738,099	29,069	8.0	8	13,640,234	54.4
Building not specialized <sup>3</sup> .....	3,841,762	242,297	99.6	7.3	10,526,681	60.8	3,281,084	11,899	3.5	4	10,305,031	61.0
Commercial building only.....	87,004	747	.3	.9	2,707,588	12.6	87,004	748	.2	9	2,707,588	12.6
Residential building only.....	369,981				627,615	94.0	369,981	16,422	4.8	4.4	627,615	94.0
Dam and reservoir.....	80,650				84,928	98.8	80,650	250	.1	6	84,928	98.8
Subcontractors.....	\$2,878,444	200	.1	(*)	6,127,623	97.7	2,878,444	309,611	91.3	10.8	6,127,623	97.7
Heating and plumbing.....	1,844,361	200	.1	(*)	2,284,322	97.5	1,844,361	309,611	91.3	10.8	2,284,322	97.5
Plumbing.....	897,198	200	.1	(*)	1,593,993	95.9	897,198	200	.1	(*)	1,593,993	95.9
<i>Reinforcing steel</i>						<i>Heating and ventilating equipment</i>						
All classes.....	8,458,527	380,601	100.0	4.5	23,887,599	71.6	8,458,527	401,252	100.0	4.7	23,887,599	71.6
General contractors <sup>3</sup> .....	5,580,083	352,950	92.7	6.3	17,759,976	63.1	5,580,083	12,150	3.0	.2	17,759,976	63.1
Building.....	3,798,747	281,563	74.0	7.4	13,861,884	54.5	3,798,747	12,150	3.0	.3	13,861,884	54.5
Building not specialized <sup>3</sup> .....	3,841,762	280,993	73.8	8.4	10,526,681	60.8	3,841,762	12,150	3.0	.4	10,526,681	60.8
Commercial building only.....	869,981	800	.2	.2	627,615	94.0	869,981				627,615	94.0
Residential building only.....	369,981	543	.1	.1	1,377,700	95.1	369,981	543	.1	.1	1,377,700	95.1
Highway.....	461,471	63,394	16.7	8.3	1,532,548	88.4	461,471				1,532,548	88.4
Street paving.....	401,471	543	.1	.1	1,377,700	95.1	401,471				1,377,700	95.1
Sewer, gas, water, conduit.....	504,360	1,260	.3	.2	1,070,850	100.0	504,360	1,260	.3	.2	1,070,850	100.0
Dam and reservoir.....	39,850	1,800	.5	4.5	84,928	98.8	39,850	1,800	.5	4.5	84,928	98.8
Oil and natural-gas pipe line.....	14,400	4,400	1.2	30.6	72,000	100.0	14,400	4,400	1.2	30.6	72,000	100.0
Subcontractors.....	\$2,878,444	27,651	7.3	1.0	6,127,623	97.7	2,878,444	389,102	97.0	13.5	6,127,623	97.7
Concreting.....	95,890	27,651	7.3	28.8	328,393	100.0	95,890	389,102	97.0	28.9	328,393	100.0
<i>Lumber, rough and finished</i>						<i>Plumbing and gas-fitting equipment<sup>1</sup></i>						
All classes.....	8,458,527	848,843	100.0	10.0	23,887,599	71.6	8,458,527	914,677	100.0	10.8	23,887,599	71.6
General contractors <sup>3</sup> .....	5,580,083	848,451	99.8	15.2	17,759,976	63.1	5,580,083	66,028	7.2	1.2	17,759,976	63.1
Building.....	3,798,747	813,823	95.9	21.4	13,861,884	54.5	3,798,747	60,028	6.0	1.0	13,861,884	54.5
Building not specialized <sup>3</sup> .....	3,841,762	606,800	71.5	18.2	10,526,681	60.8	3,841,762	12,618	1.4	.4	10,526,681	60.8
Commercial building only.....	87,004	5,991	.7	6.9	2,707,588	12.6	87,004	1,469	.2	1.7	2,707,588	12.6
Residential building only.....	369,981	200,972	23.7	54.3	627,615	94.0	369,981	45,951	5.0	12.4	627,615	94.0
Highway.....	461,471	3,840	.6	.5	1,532,548	88.4	461,471	6,000	.7	15.1	1,532,548	88.4
Street paving.....	401,471	3,840	.6	.5	1,377,700	95.1	401,471	6,000	.7	15.1	1,377,700	95.1
Sewer, gas, water, conduit.....	504,360	21,402	2.5	4.2	1,070,850	100.0	504,360	21,402	2.5	4.2	1,070,850	100.0
Subcontractors.....	\$2,878,444	3,892	.4	.1	6,127,623	97.7	2,878,444	848,040	92.8	29.5	6,127,623	97.7
Concreting.....	95,890	2,792	.3	2.9	328,393	100.0	95,890	848,040	92.8	29.5	328,393	100.0
Heating and plumbing.....	1,844,361	100	(*)	(*)	2,284,322	97.5	1,844,361	66,040	62.0	63.0	2,284,322	97.5
Plumbing.....	897,198	100	(*)	(*)	1,593,993	95.9	897,198	130,000	14.2	38.8	1,593,993	95.9
Plastering and lathing.....	116,697	350	(*)	.3	531,708	90.7	116,697	62,202	69.1	70.5	531,708	90.7
Marble and tiling.....	266,023	150	(*)	.1	544,976	100.0	266,023	41,721	18.7	2.0	544,976	100.0
<i>Millwork</i>						<i>Electrical appliances and supplies</i>						
All classes.....	8,458,527	493,830	100.0	5.8	23,887,599	71.6	8,458,527	598,330	100.0	7.1	23,887,599	71.6
General contractors <sup>3</sup> .....	5,580,083	493,830	100.0	8.8	17,759,976	63.1	5,580,083	22,082	3.8	.4	17,759,976	63.1
Building.....	3,798,747	493,830	100.0	13.0	13,861,884	54.5	3,798,747	8,582	1.4	.2	13,861,884	54.5
Building not specialized <sup>3</sup> .....	3,841,762	473,410	95.9	14.2	10,526,681	60.8	3,841,762	7,861	1.3	.2	10,526,681	60.8
Commercial building only.....	87,004	743	.2	.9	2,707,588	12.6	87,004	7,861	1.3	.2	2,707,588	12.6
Residential building only.....	369,981	19,666	4.0	5.3	627,615	94.0	369,981	7,861	1.3	.2	627,615	94.0
Dam and reservoir.....	80,650				84,928	98.8	80,650	14,400	2.4	36.3	84,928	98.8
Subcontractors.....	\$2,878,444	3,892	.4	.1	6,127,623	97.7	2,878,444	575,348	96.2	20.0	6,127,623	97.7
Concreting.....	95,890	2,792	.3	2.9	328,393	100.0	95,890	562,915	92.1	20.0	328,393	100.0
Heating and plumbing.....	1,844,361	100	(*)	(*)	2,284,322	97.5	1,844,361	24,480	4.1	1.8	2,284,322	97.5
Plumbing.....	897,198	100	(*)	(*)	1,593,993	95.9	897,198	15,550	2.6	1.7	1,593,993	95.9
Plastering and lathing.....	116,697	350	(*)	.3	531,708	90.7	116,697	15,550	2.6	1.7	531,708	90.7
Marble and tiling.....	266,023	150	(*)	.1	544,976	100.0	266,023	41,721	18.7	2.0	544,976	100.0
<i>Hardware, rough and finished</i>						<i>Pipe: Cast-iron, sheet and tube steel, etc.</i>						
All classes.....	8,458,527	140,411	100.0	1.7	23,887,599	71.6	8,458,527	140,428	100.0	1.7	23,887,599	71.6
General contractors <sup>3</sup> .....	5,580,083	135,405	96.4	2.4	17,759,976	63.1	5,519,405	62,572	44.6	1.1	17,538,320	63.3
Building.....	3,798,747	135,405	96.4	3.6	13,861,884	54.5	3,738,099	7,904	5.0	.2	13,640,234	54.4
Building not specialized <sup>3</sup> .....	3,841,762	123,095	87.6	3.7	10,526,681	60.8	3,281,084	7,904	5.0	.2	10,305,031	61.0
Commercial building only.....	87,004	743	.2	.9	2,707,588	12.6	87,004	7,904	5.0	.2	2,707,588	12.6
Residential building only.....	369,981	12,340	8.8	3.3	627,615	94.0	369,981	7,904	5.0	.2	627,615	94.0
Dam and reservoir.....	80,650				84,928	98.8	80,650	14,400	2.4	36.3	84,928	98.8
Subcontractors.....	\$2,878,444	5,000	3.6	.2	6,127,623	97.7	2,878,444	575,348	96.2	20.0	6,127,623	97.7
Concreting.....	95,890	2,150	1.5	2.2	328,393	100.0	95,890	562,915	92.1	20.0	328,393	100.0
Marble and tiling.....	266,023	2,850	2.0	1.1	544,976	100.0	266,023	2,850	2.0	1.1	544,976	100.0
<i>Paints, varnishes, glass, etc.</i>						<i>General contractors<sup>3</sup></i>						
All classes.....	8,458,527	143,946	100.0	1.7	23,887,599	71.6	5,580,083	44,016	30.6	.8	17,759,976	63.1
General contractors <sup>3</sup> .....	5,580,083	44,016	30.6	.8	17,759,976	63.1	5,580,083	44,016	30.6	.8	17,759,976	63.1
Building.....	3,798,747	44,016	30.6	1.2	13,861,884	54.5	3,798,747	44,016	30.6	1.2	13,861,884	54.5
Building not specialized <sup>3</sup> .....	3,841,762	22,059	15.3	.7	10,526,681	60.8	3,841,762	22,059	15.3	.7	10,526,681	60.8
Commercial building only.....	87,004	299	.2	.3	2,707,588	12.6	87,004	299	.2	.3	2,707,588	12.6
Residential building only.....	369,981	21,658	15.0	5.9	627,615	94.0	369,981	21,658	15.0	5.9	627,615	94.0
Subcontractors.....	\$2,878,444	99,930	69.4	3.5	6,127,623	97.7	2,878,444	4,056	2.9	.7	6,127,623	97.7
Heating and plumbing.....	1,844,361	50	(*)	(*)	2,284,322	97.5	1,844,361	4,056	2.9	.7	2,284,322	97.5
Plumbing.....	897,198	50	(*)	(*)	1,593,993	95.9	897,198	4,056	2.9	.7	1,593,993	95.9
Painting and decorating.....	85,880	59.0	69.4	99.4	309,712	100.0	85,880	59.0	69.4	99.4	309,712	100.0
Glass and glazing.....	15,000	15,000	10.4	100.0	50,000	100.0	15,000	15,000	10.4	100.0	50,000	100.0

See footnotes at end of table.



TABLE 10.—COMPARISON OF COSTS OF DESIGNATED MATERIALS FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929, WITH COSTS OF MATERIALS AND VALUE OF CONSTRUCTION BUSINESS—Continued

[Based exclusively upon reports of establishments which gave the distributed cost of materials]

KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	COST OF DESIGNATED MATERIAL				Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>	KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	COST OF DESIGNATED MATERIAL				Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>
	Cost of all materials distributed by kind	Amount	Per cent of—					Cost of all materials distributed by kind	Amount	Per cent of—			
			Total cost	Cost of all distributed materials						Total cost	Cost of all distributed materials		
<b>HOUSTON—Continued</b>						<b>SAN ANTONIO—Continued</b>							
<i>Bituminous paving materials, tar, asphalt, and oil</i>						<i>Cut stone, granite, and marble</i>							
All classes.....	\$8,458,527	\$107,776	100.0	1.3	\$23,887,509	71.6	All classes.....	\$7,087,400	\$169,643	100.0	2.4	\$18,171,643	79.7
General contractors.....	\$5,519,405	100,780	93.5	1.8	\$17,538,326	63.3	General contractors.....	\$4,390,149	144,986	85.1	3.3	\$12,901,306	72.4
Highway.....	761,456	37,933	84.6	4.9	1,532,548	88.4	Building.....	\$2,826,086	144,986	85.1	5.1	\$8,554,999	60.1
Street paving.....	461,471	69,147	58.0	13.7	1,187,700	56.1	Building not specialized.....	2,697,828	137,988	81.0	5.3	7,915,733	59.4
Sewer, gas, water, conduit.....	504,370	300	3	1	1,070,856	100.0	Residential building only.....	169,508	7,000	4.1	4.1	388,196	75.3
Subcontractors.....	\$2,878,444	6,996	6.5	2	\$6,127,623	97.7	Subcontractors.....	\$2,678,100	25,257	14.9	9	\$5,237,423	99.1
Flooring, n. e. s.....	13,208	6,996	6.5	53.0	47,626	100.0	Marble and tiling.....	167,148	25,257	14.9	16.1	330,024	100.0
<b>SAN ANTONIO</b>						<b>Cement</b>							
<i>Sand, gravel, stone, slag, cinders, etc.<sup>1</sup></i>						<i>All classes.....</i>							
All classes.....	\$7,087,499	669,622	100.0	9.4	\$18,171,643	79.7	All classes.....	7,087,499	627,111	100.0	7.4	\$18,171,643	79.7
General contractors.....	4,390,149	587,692	87.8	13.4	12,901,306	72.4	General contractors.....	\$4,409,399	403,983	88.0	10.5	\$12,934,220	72.7
Building.....	2,826,086	262,880	39.3	9.3	8,554,999	60.1	Building.....	2,846,236	254,274	48.2	8.9	8,587,913	60.7
Building not specialized.....	2,697,828	241,747	96.1	9.3	7,915,733	59.4	Building not specialized.....	2,617,078	244,036	46.3	9.3	7,948,647	60.1
Commercial building only.....	59,650	16,641	2.6	27.9	261,070	62.2	Commercial building only.....	59,650	6,894	1.3	11.6	251,070	62.2
Residential building only.....	169,508	4,492	7	2.7	388,196	75.3	Residential building only.....	169,508	3,344	6	2.0	388,196	75.3
Highway.....	159,622	124,478	18.6	78.0	302,519	98.7	Street paving.....	535,543	50,021	10.6	10.5	1,602,616	98.9
Street paving.....	535,543	95,330	14.2	17.8	1,602,616	98.9	Sewer, gas, water, conduit.....	563,583	99,393	18.9	17.6	1,554,740	86.2
Sewer, gas, water, conduit.....	563,583	54,104	8.1	9.6	1,554,740	86.2	Dam and reservoir.....	185,915	50,895	9.7	27.4	426,584	97.9
Dam and reservoir.....	185,915	46,800	7.0	25.2	426,584	97.9	Waterworks.....	88,500	2,400	5	2.7	179,848	100.0
Waterworks.....	88,500	8,100	5	3.5	179,848	100.0	Oil and natural-gas pipe line.....	30,000	1,000	2	3.3	280,000	98.2
Oil and natural-gas pipe line.....	30,000	1,000	1	3.3	280,000	98.2	Subcontractors.....	\$2,678,100	63,128	12.0	2	\$5,237,423	99.1
Subcontractors.....	\$2,678,100	81,930	12.2	3.1	\$5,237,423	99.1	Concrete.....	51,779	22,500	4.3	43.5	94,305	100.0
Concrete.....	51,779	19,030	2.8	36.8	94,305	100.0	Heating and plumbing.....	\$1,016,493	1,276	2	1	\$1,758,852	99.6
Heating and plumbing.....	\$1,016,493	210	(*)	(*)	\$1,758,852	99.6	Plumbing.....	988,370	1,276	2	1	1,725,852	99.6
Plumbing.....	988,370	210	(*)	(*)	1,725,852	99.6	Masonry.....	43,000	10,000	1.9	23.3	120,000	100.0
Masonry.....	43,000	20,000	3.0	46.5	120,000	100.0	Plastering and lathing.....	312,161	11,107	2.1	3.6	890,137	95.5
Plastering and lathing.....	312,161	27,741	4.1	8.9	890,137	95.5	Roofing and sheet-metal work.....	349,031	371	1	1	589,264	99.5
Roofing and sheet-metal work.....	349,031	2,466	4	7	589,264	99.5	Roofing.....	238,439	325	1	1	377,313	99.2
Roofing.....	238,439	2,377	4	1.0	377,313	99.2	Sheet-metal work.....	110,592	46	(*)	(*)	211,951	100.0
Sheet-metal work.....	110,592	89	(*)	(*)	211,951	100.0	Stone work.....	6,860	4,684	9	68.3	61,049	100.0
Stone work.....	6,860	712	1	10.4	61,049	100.0	Marble and tiling.....	157,148	13,190	2.5	8.4	330,024	100.0
Marble and tiling.....	157,148	4,237	6	2.7	330,024	100.0	Foundation.....	10,881	7,534	1.1	69.2	34,155	100.0
Foundation.....	10,881	7,534	1.1	69.2	34,155	100.0	<b>Brick (face, common, fire, paving, etc.)</b>						
<i>All classes.....</i>						<i>All classes.....</i>							
All classes.....	\$7,087,499	104,794	100.0	1.5	\$18,171,643	79.7	All classes.....	\$7,087,499	104,794	100.0	1.5	\$18,171,643	79.7
General contractors.....	\$4,390,149	101,794	97.1	2.3	\$12,901,306	72.4	General contractors.....	\$4,390,149	101,794	97.1	2.3	\$12,901,306	72.4
Building.....	2,826,086	98,874	94.4	3.5	8,554,999	60.1	Building.....	2,826,086	98,874	94.4	3.5	8,554,999	60.1
Building not specialized.....	2,697,828	89,714	85.6	3.5	7,915,733	59.4	Building not specialized.....	2,697,828	89,714	85.6	3.5	7,915,733	59.4
Commercial building only.....	59,650	8,268	7.9	13.9	251,070	62.2	Commercial building only.....	59,650	8,268	7.9	13.9	251,070	62.2
Residential building only.....	169,508	882	8	5	388,196	75.3	Residential building only.....	169,508	882	8	5	388,196	75.3
Sewer, gas, water, conduit.....	563,583	2,020	2.8	6	1,554,740	86.2	Sewer, gas, water, conduit.....	563,583	2,020	2.8	6	1,554,740	86.2
Subcontractors.....	\$2,678,100	3,000	2.9	1	\$5,237,423	99.1	Subcontractors.....	\$2,678,100	3,000	2.9	1	\$5,237,423	99.1
Masonry.....	43,000	3,000	2.9	7.0	120,000	100.0	Masonry.....	43,000	3,000	2.9	7.0	120,000	100.0
<b>Tile (fireproofing)</b>						<b>Structural steel<sup>1</sup></b>							
<i>All classes.....</i>						<i>All classes.....</i>							
All classes.....	\$7,087,499	90,738	100.0	1.3	\$18,171,643	79.7	All classes.....	\$7,087,499	722,474	100.0	10.2	\$18,171,643	79.7
General contractors.....	\$4,390,149	41,184	45.4	9	\$12,901,306	72.4	General contractors.....	\$4,390,149	711,453	98.5	16.2	\$12,901,306	72.4
Building.....	2,826,086	41,009	45.2	1.5	8,554,999	60.1	Building.....	2,826,086	651,744	90.2	23.1	8,554,999	60.1
Building not specialized.....	2,697,828	38,909	42.9	1.5	7,915,733	59.4	Building not specialized.....	2,697,828	650,218	90.0	25.0	7,915,733	59.4
Commercial building only.....	59,650	1,986	2.2	3	251,070	62.2	Commercial building only.....	59,650	616	3	1.5	251,070	62.2
Residential building only.....	169,508	114	1	1	388,196	75.3	Residential building only.....	169,508	1,526	2	9	388,196	75.3
Sewer, gas, water, conduit.....	563,583	175	2	(*)	1,554,740	86.2	Sewer, gas, water, conduit.....	563,583	36,339	5.0	6.4	1,554,740	86.2
Subcontractors.....	\$2,678,100	49,554	54.6	1.9	\$5,237,423	99.1	Dam and reservoir.....	185,915	23,370	3.2	12.6	426,584	97.9
Roofing and sheet-metal work.....	\$349,031	49,554	54.6	14.2	589,264	99.5	Subcontractors.....	\$2,678,100	11,021	1.5	4	\$5,237,423	99.1
Roofing.....	238,439	49,554	54.6	35.8	377,313	99.2	Concrete.....	51,779	650	1	1.3	94,305	100.0
<b>Tile, facing, terra cotta, floor, and wall</b>						<b>Reinforcing steel</b>							
<i>All classes.....</i>						<i>All classes.....</i>							
All classes.....	\$7,087,499	190,152	100.0	2.7	\$18,171,643	79.7	All classes.....	\$7,087,499	312,748	100.0	4.4	\$18,171,643	79.7
General contractors.....	\$4,390,149	68,098	35.8	1.6	\$12,901,306	72.4	General contractors.....	\$4,390,149	304,204	97.3	6.9	\$12,901,306	72.4
Building.....	2,826,086	66,536	35.0	2.4	8,554,999	60.1	Building.....	2,826,086	190,234	62.7	6.9	8,554,999	60.1
Building not specialized.....	2,697,828	66,469	35.0	2.6	7,915,733	59.4	Building not specialized.....	2,697,828	191,448	61.2	7.4	7,915,733	59.4
Commercial building only.....	59,650	67	(*)	(*)	251,070	62.2	Commercial building only.....	59,650	916	3	1.5	251,070	62.2
Residential building only.....	169,508	67	(*)	(*)	388,196	75.3	Residential building only.....	169,508	3,870	1.2	2.3	388,196	75.3
Street paving.....	535,543	1,560	8	3	1,602,616	98.9	Street paving.....	535,543	17,870	5.7	3.1	1,602,616	98.9
Subcontractors.....	\$2,678,100	122,056	64.2	4.6	\$5,237,423	99.1	Sewer, gas, water, conduit.....	563,583	55,000	17.6	9.8	1,554,740	86.2
Masonry.....	43,000	10,000	5.3	23.3	120,000	100.0	Dam and reservoir.....	185,915	85,100	11.2	18.9	426,584	97.9
Marble and tiling.....	157,148	112,056	68.9	71.3	330,024	100.0	Subcontractors.....	\$2,678,100	8,544	2.7	3	\$5,237,423	99.1
<i>See footnotes at end of table.</i>						<i>See footnotes at end of table.</i>							

TABLE 10.—COMPARISON OF COST OF DESIGNATED MATERIALS FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929, WITH COST OF MATERIALS AND VALUE OF CONSTRUCTION BUSINESS—Continued

[Based exclusively upon reports of establishments which gave the distributed cost of materials]

KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	COST OF DESIGNATED MATERIAL					Indicated per cent of all business done by own force <sup>1</sup>	KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	COST OF DESIGNATED MATERIAL					Indicated per cent of all business done by own force <sup>1</sup>
	Cost of all materials distributed by kind	Amount		Per cent of—	Value of construction business			Cost of all materials distributed by kind	Amount		Per cent of—	Value of construction business	
		Total cost	Cost of all distributed materials						Total cost	Cost of all distributed materials			
<b>SAN ANTONIO—Continued</b>							<b>SAN ANTONIO—Continued</b>						
<i>Metal doors, windows, and trim</i>							<i>Roofing and sheet metal—Continued</i>						
All classes	\$7,087,499	\$91,008	100.0	1.3	\$18,171,643	79.7	Subcontractors	\$2,678,100	\$253,924	91.6	9.5	\$5,237,423	99.1
General contractors	4,390,149	62,942	69.2	1.4	12,901,806	72.4	Roofing and sheet-metal work	349,031	253,924	91.6	72.8	589,264	99.5
Building	2,826,986	61,042	67.1	2.2	8,554,999	60.1	Roofing	238,439	155,558	56.1	65.2	377,313	99.2
Building not specialized	2,597,828	59,927	65.9	2.3	7,915,733	59.4	Sheet-metal work	110,592	98,369	35.5	88.9	211,951	100.0
Commercial building only	59,650	615	.7	1.0	251,070	62.2	<i>Heating and ventilating equipment</i>						
Residential building only	169,508	600	.5	.3	388,196	75.3	All classes	7,087,499	342,714	100.0	4.8	\$18,171,643	79.7
Sewer, gas, water, conduit	563,583	1,000	2.1	.3	1,554,740	86.2	General contractors	4,390,149	83,573	24.4	1.9	12,901,806	72.4
Subcontractors	2,678,100	28,061	30.8	1.0	5,237,423	99.1	Building	2,826,986	4,820	1.4	.2	8,554,999	60.1
Metal work, n. e. s.	28,061	28,061	100.0		44,468	100.0	Building not specialized	2,597,828	3,850	1.1	.1	7,915,733	59.4
<i>Metal and wire lath and furring</i>							Residential building only	169,508	970	.3	1.0	388,196	75.3
All classes	7,087,499	136,897	100.0	1.0	18,171,643	79.7	Sewer, gas, water, conduit	563,583	73,748	23.0	6.0	1,554,740	86.2
General contractors	4,390,149	6,082	4.9	.2	12,901,806	72.4	Subcontractors	2,678,100	259,151	75.6	0.7	5,237,423	99.1
Building	2,826,986	6,082	4.9	.2	8,554,999	60.1	Heating and plumbing	1,010,493	257,131	75.0	25.4	1,725,852	99.6
Building not specialized	2,597,828	6,200	4.5	.2	7,915,733	59.4	Plumbing	988,370	257,131	75.0	26.0	1,725,852	99.6
Commercial building only	59,650	482	.4	.8	251,070	62.2	Roofing and sheet-metal work	349,031	2,020	.6	.6	589,264	99.5
Subcontractors	2,678,100	130,215	95.1	4.9	5,237,423	99.1	Sheet-metal work	110,592	2,020	.6	1.8	211,951	100.0
Plastering and lathing	312,161	122,768	89.7	39.3	890,137	95.5	<i>Plumbing and gas-fitting equipment</i> <sup>14</sup>						
Roofing and sheet-metal work	349,031	5,969	4.4	1.7	589,264	99.5	All classes	7,087,499	746,214	100.0	10.5	18,171,643	79.7
Roofing	238,439	5,969	4.4	2.5	377,313	99.2	General contractors	4,409,399	75,532	10.1	1.7	12,934,220	72.7
Marble and tiling	157,148	1,478	1.1	.9	330,024	100.0	Building	2,846,236	34,665	4.0	1.2	8,587,913	60.7
<i>Lumber, rough and finished</i>							Building not specialized	2,617,078	25,164	3.4	1.0	7,948,647	60.1
All classes	7,087,499	479,808	100.0	6.8	18,171,643	79.7	Residential building only	169,508	9,501	1.3	5.6	388,196	75.3
General contractors	4,409,399	472,909	98.6	10.7	12,934,220	72.7	Sewer, gas, water, conduit	563,583	31,397	4.2	5.9	1,554,740	86.2
Building	2,846,236	434,855	90.6	15.3	8,587,913	60.7	Waterworks	88,500	9,500	1.3	10.7	179,848	100.0
Building not specialized	2,617,078	333,273	69.5	12.7	7,948,647	60.1	Subcontractors	2,678,100	670,682	89.9	25.0	5,237,423	99.1
Commercial building only	59,650	13,840	2.9	23.2	251,070	62.2	Heating and plumbing	1,010,493	670,682	89.9	66.4	1,725,852	99.6
Residential building only	169,508	87,742	15.3	51.8	388,196	75.3	Plumbing	988,370	648,559	89.9	65.6	1,725,852	99.6
Highway	159,022	2,984	.6	1.9	302,619	98.7	Automatic sprinkler systems	22,123	22,123	3.0	100.0	33,000	100.0
Street paving	535,543	6,320	1.4	1.2	1,602,616	98.9	<i>Electrical appliances and supplies</i>						
Sewer, gas, water, conduit	563,583	10,500	2.2	1.0	1,554,740	86.2	All classes	7,087,499	647,210	100.0	9.1	18,171,643	79.7
Dam and reservoir	185,915	17,550	3.7	9.4	426,684	97.9	General contractors	4,409,399	28,926	4.5	.7	12,934,220	72.7
Oil and natural-gas pipe line	30,000	500	.1	1.7	280,000	93.2	Building	2,846,236	8,351	.5	1.1	8,587,913	60.7
Subcontractors	2,678,100	6,899	1.4	.3	5,237,423	99.1	Building not specialized	2,617,078	1,125	.2	(0)	7,948,647	60.1
Concrete	51,779	3,804	.8	7.3	94,305	100.0	Residential building only	169,508	2,226	.3	1.3	388,196	75.3
Heating and plumbing	1,010,493	1,260	.3	1.1	1,725,852	99.6	Sewer, gas, water, conduit	563,583	25,578	4.0	4.5	1,554,740	86.2
Plumbing	988,370	1,260	.3	1.1	1,725,852	99.6	Subcontractors	2,678,100	618,290	95.5	23.1	5,237,423	99.1
Roofing and sheet-metal work	349,031	1,550	.3	.4	589,264	99.5	Electrical	572,463	572,463	88.4	100.0	1,023,224	100.0
Roofing	238,439	1,550	.3	.7	377,313	99.2	Heating and plumbing	1,010,493	45,761	7.1	4.5	1,725,852	99.6
Foundation	10,881	285	.1	2.6	34,155	100.0	Plumbing	988,370	45,761	7.1	4.6	1,725,852	99.6
<i>Millwork</i>							Roofing and sheet-metal work	349,031	66	(4)	(4)	589,264	99.5
All classes	7,087,499	213,047	100.0	3.0	18,171,643	79.7	Sheet-metal work	110,592	66	(4)	.1	211,951	100.0
General contractors	4,409,399	213,047	100.0	4.8	12,934,220	72.7	<i>Pipe: Drain tile, vitrified, concrete, segment tile, corrugated</i>						
Building	2,846,236	212,907	99.8	7.5	8,587,913	60.7	All classes	7,087,499	123,308	100.0	1.7	\$18,171,643	79.7
Building not specialized	2,617,078	102,714	60.5	7.4	7,948,647	60.1	General contractors	4,390,149	106,259	86.2	2.4	12,901,806	72.4
Commercial building only	59,650	892	.4	1.5	251,070	62.2	Building	2,826,986	69,659	63.2	2.3	8,554,999	60.1
Residential building only	169,508	10,091	9.0	11.3	388,196	75.3	Building not specialized	2,597,828	65,899	53.2	(0)	7,915,733	59.4
Sewer, gas, water, conduit	563,583	350	.2	.1	1,554,740	86.2	Residential building only	169,508	80	(0)	.5	388,196	75.3
<i>Roofing and sheet metal</i>							Street paving	535,543	7,912	6.4	1.5	1,602,616	98.9
All classes	7,087,499	277,276	100.0	3.9	18,171,643	79.7	Sewer, gas, water, conduit	563,583	8,888	7.0	1.5	1,554,740	86.2
General contractors	4,390,149	23,352	8.4	.5	12,901,806	72.4	Waterworks	88,500	18,500	15.0	20.9	179,848	100.0
Building	2,826,986	20,144	7.3	.7	8,554,999	60.1	Oil and natural-gas pipe line	30,000	5,500	4.5	18.3	280,000	98.2
Building not specialized	2,597,828	18,414	6.6	.7	7,915,733	59.4	Subcontractors	2,678,100	17,049	13.8	.6	5,237,423	99.1
Commercial building only	59,650	984	.4	1.6	251,070	62.2	Heating and plumbing	1,010,493	12,209	9.9	1.2	1,725,852	99.6
Residential building only	169,508	746	.3	.4	388,196	75.3	Plumbing	988,370	12,209	9.9	1.2	1,725,852	99.6
Sewer, gas, water, conduit	563,583	3,208	1.2	.6	1,554,740	86.2	Waterworks	54,840	4,840	3.9	8.8	102,100	100.0

See footnotes at end of table.

TABLE 10.—COMPARISON OF COST OF DESIGNATED MATERIALS FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929, WITH COST OF MATERIALS AND VALUE OF CONSTRUCTION BUSINESS—Continued

[Based exclusively upon reports of establishments which gave the distributed cost of materials]

KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	Cost of all materials distributed by kind	COST OF DESIGNATED MATERIAL			Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>	KIND OF MATERIAL AND CLASSIFICATION OF ESTABLISHMENTS	Cost of all materials distributed by kind	COST OF DESIGNATED MATERIAL			Value of construction business	Indicated per cent of all business done by own force <sup>1</sup>
		Amount	Per cent of—						Amount	Per cent of—			
			Total cost	Cost of all distributed materials						Total cost	Cost of all distributed materials		
SAN ANTONIO—Continued						SAN ANTONIO—Continued							
<i>Pipe: Cast-iron, sheet and tube steel, etc.</i>						<i>Bituminous paving materials, tar, asphalt, and oil</i>							
All classes.....	\$7,057,499	\$293,164	100.0	4.1	\$18,171,648	79.7	All classes.....	\$7,057,499	\$330,380	100.0	4.7	\$18,171,648	79.7
General contractors.....	\$4,390,149	222,080	75.8	5.1	\$12,901,306	72.4	General contractors.....	\$4,390,149	329,474	99.7	7.5	\$12,901,306	72.4
Building.....	\$2,826,986	9,965	3.4	.4	\$8,554,099	60.1	Building.....	\$2,826,986	2,275	.7	.1	\$8,554,099	60.1
Building not specialized.....	2,597,828	9,965	3.4	.4	7,915,733	59.4	Building not specialized.....	2,597,828	2,275	.7	.1	7,915,733	59.4
Street paving.....	535,543	19,115	6.5	3.0	1,602,616	98.9	Highway.....	159,822	32,160	9.7	20.1	302,510	98.7
Sewer, gas, water, conduit.....	503,583	116,000	39.6	20.6	1,554,740	86.2	Street paving.....	535,543	205,039	80.3	55.1	1,602,616	98.9
Waterworks.....	88,500	55,000	18.8	62.1	170,848	100.0	Subcontractors.....	\$2,678,100	906	.3	( <sup>4</sup> )	\$5,237,423	69.1
Oil and natural-gas pipe line.....	30,000	22,000	7.5	73.3	280,000	98.2	Concreting.....	51,770	460	.1	.9	94,305	100.0
Subcontractors.....	\$2,678,100	71,084	24.2	2.7	\$5,237,423	90.1	Roofing and sheet-metal work.....	\$349,031	446	.1	.1	\$580,264	69.5
Heating and plumbing.....	\$1,010,493	21,084	7.2	2.1	\$1,758,852	99.6	Sheet-metal work.....	110,692	446	.1	.4	211,951	100.0
Plumbing.....	988,370	21,084	7.2	2.1	1,725,852	99.6							
Waterworks.....	54,840	50,000	17.1	91.2	102,100	100.0							

<sup>1</sup> Based upon the difference between the total value of all construction business reported and the value of subcontract work let  
<sup>2</sup> See footnote 3 of Table 9 on page 1179.  
<sup>3</sup> Includes operative builders.  
<sup>4</sup> Less than one-tenth of 1 per cent.  
<sup>5</sup> Includes cost of materials reported by establishments which did not include designated material in their distributed lists.  
<sup>6</sup> Includes construction work reported by establishments which did not include the designated material in their distributed lists.  
<sup>7</sup> Includes cost of materials reported by subcontracting establishments which did not include the designated material in their distributed lists.  
<sup>8</sup> Includes construction work reported by subcontracting establishments which did not include the designated material in their distributed lists.  
<sup>9</sup> Includes cost of materials reported by operative builders who did not include the designated materials in their distributed lists.  
<sup>10</sup> Includes construction work reported by operative builders who did not include the designated materials in their distributed lists.  
<sup>11</sup> Includes cost of materials reported by general contracting establishments which did not include the designated material in their distributed lists.  
<sup>12</sup> Includes construction work reported by general contracting establishments which did not include the designated material in their distributed lists.  
<sup>13</sup> The low percentage in this group is due to unusual conditions reported.  
<sup>14</sup> See footnote 6 of Table 9 on page 1179.

CONSTRUCTION—TEXAS

TABLE 11.—COST OF MATERIALS FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929

[This table is made up in three sections; the second section begins on p. 1194, the third section on p. 1196]

CLASSIFICATION OF ESTABLISHMENTS	Total cost of all materials <sup>1</sup>	COST OF ALL MATERIALS DISTRIBUTED BY KIND		Sand, gravel, crushed stone, slag, cinders, etc.	Brick (face, common, fire, paving, etc.)	Tile (fire-proofing)	Tile, facing, terra cotta, floor, and wall	Concrete and cinder block	Cut stone, granite, and marble	Rip-rap, rubble, etc.	Cement	Lime	Plaster, etc.	Structural steel
		Amount	Per cent of total											
<b>TEXAS</b>	\$77,250,425	\$54,034,474	69.9	\$7,006,165	\$1,719,403	\$352,845	\$936,428	\$185,566	\$1,266,795	\$90,958	\$6,210,161	\$172,886	\$400,489	\$2,557,957
Operative builders	272,196	107,976	61.7	5,409	17,163	100	881	1,050		28	3,740	711	572	475
General contractors	52,528,300	34,091,677	64.9	6,700,659	1,620,302	205,226	435,730	108,134	632,477	90,635	5,918,277	158,200	171,309	2,017,785
Building	25,815,672	16,835,424	65.4	1,547,129	1,367,752	283,403	427,013	151,885	631,727	14,906	1,060,519	138,720	150,248	1,424,207
Building not specialized	22,464,631	15,016,524	66.9	1,432,629	1,253,016	282,184	412,700	122,886	620,397	14,916	1,545,003	109,197	148,024	1,382,718
Commercial building only	790,383	384,255	48.6	64,800	34,895	1,080	4,237	7,601			61,442	3,198	6,565	32,012
Manufacturing building only	126,700	126,700	100.0	27,000	5,500	2,200					30,000	500	500	6,500
Residential building only	2,438,958	1,357,935	55.8	22,660	93,741	7,033	10,070	20,808	8,450	80	20,474	25,825	3,559	2,977
Highway	10,690,866	7,844,012	73.4	3,085,445	60,075			16,740		2,305	2,920,432	8,406	1,885	81,241
Bridge and culvert	4,885,092	3,105,169	72.9	1,900,550	10,500		2,000			2,235	169,159	1,320	5,000	329,300
Street paving	1,476,633	1,458,711	98.9	1,294,653	160,215		2,717			48,180	543,655	9,139		20,152
Sewer, gas, water, conduit	1,245,023	245,623	19.7	294,362	0,833					16,619	311,928		1,361	36,330
Dam and reservoir	1,388,250	1,388,250	100.0	205,321	11,564		4,000				55,855		1,500	23,620
Waterworks	6,736	6,736	100.0								100,100			102,926
Dredging, river, harbor, etc.	99,938	95,649	95.7							0,300				
Railroad	10,100	10,100	100.0	20,964							13,149			
Foundation				5,000							4,300			
Central station, light and power plant	2,668,240	1,368,240	51.3	36,000	0,277	750			750		26,927	186	2,302	
Oil and natural-gas pipe line	2,800,410	44,400	1.5	1,000							1,000			
Subcontractors	24,440,929	19,784,821	80.9	201,097	75,938	57,517	499,817	10,382	634,290	323	288,138	13,976	228,008	839,607
Concreting	454,410	350,230	79.1	114,676			5,034				140,532	135		650
Electrical	2,638,814	2,532,149	95.9					11,530						
Elevator construction	2,710,175	2,585,175	95.4											
Heating and plumbing	6,071,843	4,875,055	80.3	630							2,265	434		200
Heating and piping	798,682	628,682	78.7											
Plumbing	4,425,653	3,532,821	79.8	630							2,265	434		200
Plumbing and heating combined	1,301,278	497,322	38.2											
Automatic temperature control	21,593	21,593	100.0											
Automatic sprinkler systems	104,637	104,637	100.0											
Masonry	149,487	149,487	100.0	24,687	73,779	5,734	10,000	3,974	7,007		10,707	4,224		375
Painting and decorating	209,977	209,977	100.0											
Glass and glazing	49,126	49,126	100.0											
Plastering and lathing	661,281	538,359	81.4	54,090	2,159	1,327			218		31,240	8,605	216,951	
Roofing and sheet-metal work	2,202,727	1,721,560	78.1	10,529		50,456	18,091				371			371
Roofing	1,715,243	1,244,076	72.5	9,230		49,554	17,500				325			371
Sheet-metal work	374,657	374,657	100.0	1,299		902	1,101				40			
Roofing and sheet metal combined	172,827	102,827	59.5											
Steel erection	1,177,275	1,177,275	100.0											701,592
Stonework	201,013	171,013	85.1	1,794							157,141		7,526	2,685
Marble and tiling	1,528,932	1,114,655	73.0	50,553			445,502	878	469,024	323	62,180	577	8,344	245
Excavating	66,224	66,224	100.0	23,572							12,237			
Ornamental iron	186,300	25,000	13.5											10,000
Waterworks	54,840	54,840	100.0											
Soundproofing	60,500	60,500	100.0				20,500							
Foundation	10,881	10,881	100.0	7,534										
Metal work, n. e. s.	4,274,332	3,090,107	72.5											126,204
Flooring, n. e. s.	51,208	13,208	25.8	3,132							3,080			
<b>DALLAS</b>	\$25,789,957	\$16,976,356	65.8	\$1,070,114	\$282,433	\$9,845	\$207,797	\$39,251	\$24,633	\$6,415	\$19,787	\$9,475	\$0,992	\$1,105,602
General contractors	14,404,832	7,130,595	49.2	1,005,036	262,433	59,845	62,648	27,721	135,015	20,415	861,684	39,475	14,190	527,501
Building	3,575,816	2,235,867	62.5	265,413	183,081	59,745	58,648	27,721	135,015		337,389	31,009	10,388	136,282
Building not specialized	3,285,641	2,040,101	62.1	256,030	173,615	59,745	56,648	8,283	132,215		324,596	11,717	6,788	128,597
Commercial building only	108,135	116,609	58.9	9,374	10,060		2,000		2,800		12,793	906	3,600	7,685
Residential building only	91,540	79,157	86.5					19,433				19,288		
Highway	1,785,025	1,000,025	56.1	352,474							253,800	7,566		30,687
Bridge and culvert	967,102	967,102	100.0	119,660						2,235	62,547			257,644
Street paving	530,122	303,696	57.3	85,875	64,000					24,180	36,167			
Sewer, gas, water, conduit	350,152	332,800	95.0	6,073	891	100					5,576			
Waterworks	757,694	757,694	100.0	145,571	11,084		4,000				151,929		1,500	102,888
Railroad	95,646	95,646	100.0	29,964							13,149			
Central station, light and power plant	2,587,765	1,287,765	49.8		2,777						1,127		2,302	
Subcontractors	11,265,485	9,845,761	87.4	64,478			145,149	11,530	480,618		58,109		66,772	578,101
Concreting	35,256	35,256	100.0	15,578							16,935			
Electrical	474,397	464,397	97.9					11,530						
Elevator construction	2,685,723	2,580,723	95.3											
Heating and plumbing	1,639,483	1,079,732	65.9	120										
Heating and piping	152,000	152,000	100.0											
Plumbing	825,239	549,335	66.6	120										
Plumbing and heating combined	534,427	250,600	46.9											
Automatic temperature control	21,593	21,593	100.0											
Automatic sprinkler systems	106,204	106,204	100.0											
Painting and decorating	31,528	31,528	100.0											
Plastering and lathing	232,196	72,583	31.3	2,000									58,128	
Roofing and sheet-metal work	372,390	152,024	40.8	990										
Roofing	372,390	152,024	40.8	990										
Steel erection	827,275	827,275	100.0											451,592
Stonework	150,641	150,641	100.0											
Marble and tiling	623,100	583,648	93.7	22,212			124,646		150,641		28,841		8,644	245
Excavating	66,224	66,224	100.0	23,572							12,237			
Soundproofing	60,500	60,500	100.0				20,500							
Metal work, n. e. s.	4,023,127	3,761,230	93.5											126,204

See footnotes at end of table.

TABLE 11.—COST OF MATERIALS FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929—Continued

CLASSIFICATION OF ESTABLISHMENTS	Total cost of all materials <sup>1</sup>	COST OF ALL MATERIALS DISTRIBUTED BY KIND		Sand, gravel, crushed stone, slag, cinders, etc.	Brick (face, common, fire, paving, etc.)	Tile (fire-proofing)	Tile, facing, terra cotta, floor, and wall	Concrete and cinder block	Cut stone, granite, and marble	Rip-rap, rubble, etc.	Cement	Lime	Plaster, etc.	Structural steel
		Amount	Per cent of total											
<b>EL PASO</b> .....	\$3,562,349	\$1,931,384	54.4	\$136,653	\$127,942	\$17,422	\$26,382	\$626	\$16,712	\$500	\$173,735	\$10,407	\$29,409	\$18,516
General contractors.....	\$2,596,494	1,190,509	45.9	132,526	127,942	17,422	8,792	626	16,712	500	131,836	10,344	22,234	18,516
Building.....	2,043,097	998,910	48.9	45,086	127,942	17,422	8,792	626	16,712	500	107,920	10,344	22,234	18,516
Building not specialized.....	1,920,414	882,227	45.8	43,864	82,134	12,422	8,425	626	15,962	500	104,788	10,046	21,739	18,069
Commercial building only.....	13,338	13,338	100.0	22	633	37	—	—	—	—	1,162	119	245	—
Residential building only.....	103,345	103,345	100.0	1,200	45,176	5,000	330	—	750	—	1,970	180	250	460
Highway.....	549,017	191,699	34.9	87,440	—	—	—	—	—	—	23,910	—	—	—
Subcontractors.....	\$955,855	740,855	77.5	3,127	—	—	17,590	—	—	—	41,899	63	7,175	—
Concreting.....	42,696	42,696	100.0	—	—	—	—	—	—	—	41,496	—	—	—
Electrical.....	130,810	130,810	100.0	—	—	—	—	—	—	—	—	—	—	—
Heating and plumbing.....	435,201	245,201	56.3	—	—	—	—	—	—	—	—	—	—	—
Heating and piping.....	195,862	55,862	28.5	—	—	—	—	—	—	—	—	—	—	—
Plumbing.....	239,330	189,339	79.1	—	—	—	—	—	—	—	—	—	—	—
Painting and decorating.....	15,000	15,000	100.0	—	—	—	—	—	—	—	—	—	—	—
Plastering and lathing.....	15,328	15,328	100.0	3,127	—	—	—	—	—	—	403	63	7,175	—
Roofing and sheet-metal work.....	291,820	291,820	100.0	—	—	—	17,590	—	—	—	—	—	—	—
Roofing.....	219,033	219,933	100.0	—	—	—	17,590	—	—	—	—	—	—	—
Sheet-metal work.....	71,887	71,887	100.0	—	—	—	—	—	—	—	—	—	—	—
<b>FORT WORTH</b> .....	4,759,653	3,283,951	69.0	\$580,873	205,518	24,659	20,039	10,391	109,118	—	\$613,994	9,916	17,614	\$305,461
Operative builders.....	64,587	64,587	100.0	2,759	6,205	—	831	—	28	—	1,760	371	272	—
General contractors.....	3,510,090	2,319,022	66.1	592,070	184,683	24,659	6,099	10,391	105,820	—	496,235	9,345	17,342	55,461
Building.....	2,273,690	1,082,623	47.6	104,613	85,421	23,909	6,099	10,391	105,070	—	121,855	9,160	17,342	24,009
Building not specialized.....	1,372,044	882,383	64.3	75,604	74,042	21,709	6,099	10,391	104,990	—	89,075	8,345	16,842	13,029
Commercial building only.....	71,084	24,505	34.3	1,100	2,260	—	—	—	80	—	1,820	240	4,480	—
Manufacturing building only.....	126,700	126,700	100.0	27,000	5,500	2,200	—	—	—	—	30,000	500	500	6,500
Residential building only.....	703,268	48,980	7.0	909	3,629	—	—	—	—	—	960	75	—	—
Highway.....	358,585	358,585	100.0	123,466	25,864	—	—	—	—	—	165,607	—	—	3,800
Bridge and culvert.....	15,887	15,887	100.0	671	—	—	—	—	—	—	770	—	—	7,100
Street paving.....	723,479	723,479	100.0	292,254	69,898	—	—	—	—	—	184,592	—	—	20,152
Sewer, gas, water, conduit.....	57,968	57,968	100.0	5,663	—	—	—	—	—	—	7,651	—	—	—
Central station, light and power plant.....	80,475	80,475	100.0	36,000	3,500	750	—	—	750	—	25,800	185	—	—
Subcontractors.....	\$1,184,976	900,342	76.0	15,444	14,630	—	13,062	—	3,270	—	15,999	200	—	250,000
Concreting.....	31,809	29,309	92.1	13,859	—	—	—	—	—	—	14,850	—	—	—
Electrical.....	293,633	270,833	92.2	—	—	—	—	—	—	—	—	—	—	—
Heating and plumbing.....	210,794	148,788	70.6	—	—	—	—	—	—	—	—	—	—	—
Heating and piping.....	33,783	33,783	100.0	—	—	—	—	—	—	—	—	—	—	—
Plumbing.....	143,576	81,570	56.8	—	—	—	—	—	—	—	—	—	—	—
Plumbing and heating combined.....	33,435	33,435	100.0	—	—	—	—	—	—	—	—	—	—	—
Masonry.....	19,820	19,820	100.0	1,200	14,630	—	—	—	3,270	—	520	200	—	—
Painting and decorating.....	47,516	47,516	100.0	—	—	—	—	—	—	—	—	—	—	—
Roofing and sheet-metal work.....	1135,000	20,000	1.8	—	—	—	—	—	—	—	—	—	—	—
Sheet-metal work.....	20,000	20,000	100.0	—	—	—	—	—	—	—	—	—	—	—
Steel erection.....	350,000	350,000	100.0	—	—	—	—	—	—	—	—	—	—	250,000
Marble and tiling.....	144,076	14,076	9.8	385	—	—	13,062	—	—	—	629	—	—	—
<b>HOUSTON</b> .....	10,706,797	8,458,527	79.0	\$1,280,426	313,688	87,320	284,771	51,523	245,635	6,480	\$964,628	38,775	64,545	243,244
Operative builders.....	60,678	60,678	100.0	2,580	8,508	100	—	—	—	—	1,610	225	300	475
General contractors.....	\$6,977,029	5,519,405	79.1	1,198,679	281,157	61,919	143,698	47,549	137,740	6,187	894,623	34,141	11,334	242,500
Building.....	4,974,771	3,738,089	75.1	344,806	245,802	61,319	143,698	47,549	137,740	4,625	343,101	25,002	11,334	242,509
Building not specialized.....	4,423,408	3,281,084	74.1	307,113	280,304	61,319	143,198	45,515	137,740	4,625	302,769	24,234	11,334	241,822
Commercial building only.....	87,004	87,004	100.0	36,443	548	—	—	1,459	—	—	37,063	748	—	747
Residential building only.....	459,359	369,981	80.5	760	5,950	—	500	—	—	—	3,239	20	—	—
Highway.....	390,961	701,455	179.5	418,523	—	—	—	—	—	1,532	232,657	—	—	—
Street paving.....	548,595	401,471	73.1	209,028	31,473	—	—	—	—	—	115,857	9,130	—	—
Sewer, gas, water, conduit.....	504,390	504,390	100.0	227,922	3,022	—	—	—	—	—	199,408	—	—	—
Dam and reservoir.....	39,650	39,650	100.0	1,300	800	600	—	—	—	—	3,600	—	—	—
Oil and natural-gas pipe line.....	14,400	14,400	100.0	—	—	—	—	—	—	—	—	—	—	—
Subcontractors.....	\$3,689,090	2,878,444	78.0	79,167	24,023	5,301	121,073	3,974	107,895	323	58,395	4,400	52,911	200
Concreting.....	95,890	95,890	100.0	29,390	—	—	—	—	—	—	16,424	—	—	—
Electrical.....	619,915	592,915	95.6	—	—	—	—	—	—	—	—	—	—	—
Elevator construction.....	11,612	11,612	100.0	—	—	—	—	—	—	—	—	—	—	—
Heating and plumbing.....	\$1,516,361	1,344,361	88.7	—	—	—	—	—	—	—	799	—	—	200
Heating and piping.....	339,132	339,132	100.0	—	—	—	—	—	—	—	—	—	—	—
Plumbing.....	929,198	807,198	86.6	—	—	—	—	—	—	—	799	—	—	200
Plumbing and heating combined.....	41,721	41,721	100.0	—	—	—	—	—	—	—	—	—	—	—
Automatic sprinkler systems.....	66,310	66,310	100.0	—	—	—	—	—	—	—	—	—	—	—
Masonry.....	39,747	39,747	100.0	1,987	21,864	3,974	—	3,974	—	—	3,974	1,987	—	—
Painting and decorating.....	85,380	85,380	100.0	—	—	—	—	—	—	—	—	—	—	—
Glass and glazing.....	15,000	15,000	100.0	—	—	—	—	—	—	—	—	—	—	—
Plastering and lathing.....	308,223	116,097	37.7	18,322	2,159	1,327	—	—	218	—	18,502	1,022	52,711	—
Roofing and sheet-metal work.....	436,512	320,711	73.5	5,121	—	—	—	—	—	—	—	—	—	—
Roofing.....	378,166	202,365	53.5	5,121	—	—	—	—	—	—	—	—	—	—
Sheet-metal work.....	47,939	47,939	100.0	—	—	—	—	—	—	—	—	—	—	—
Roofing and sheet metal combined.....	10,407	10,407	100.0	—	—	—	—	—	—	—	—	—	—	—
Stonework.....	6,900	6,900	100.0	400	—	—	—	—	—	—	6,500	—	—	—
Marble and tiling.....	385,342	266,023	69.0	20,815	—	—	121,073	—	—	—	15,616	500	200	—
Flooring, n. e. s.....	13,208	13,208	100.0	3,132	—	—	—	—	—	—	3,080	—	—	—

See footnotes at end of table.

TABLE 11.—COST OF MATERIALS FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929—  
Continued

CLASSIFICATION OF ESTABLISHMENTS	Total cost of all materials <sup>1</sup>	COST OF ALL MATERIALS DISTRIBUTED BY KIND		Sand, gravel, crushed stone, slag, cinders, etc.	Brick (face, common, fire, paving, etc.)	Tile (fire-proofing)	Tile, facing, terra cotta, floor, and wall	Concrete and cinder block	Cut stone, granite, and marble	Rip-rap, rubble, etc.	Cement	Lime	Plaster, etc.	Structural steel
		Amount	Per cent of total											
<b>SAN ANTONIO</b> .....	\$8,509,303	\$7,087,498	83.3	\$868,622	\$104,794	\$90,738	\$190,152	\$35,421	\$169,643	\$18,805	\$527,111	\$15,552	\$99,680	\$722,474
Operative builders.....	93,830	19,250	20.5								250			
General contractors.....	14 5,453,290	4,390,149	80.5	587,692	101,794	41,184	68,096	34,543	144,386	18,805	463,733	10,227	12,109	711,453
Building.....	3,332,784	2,820,986	84.8	262,380	98,874	41,009	66,536	34,543	144,386	1,186	254,024	9,797	10,748	651,744
Building not specialized.....	3,103,626	2,597,828	83.7	241,747	89,714	38,909	60,469	30,821	137,386	1,100	243,786	8,853	8,214	650,218
Commercial building only.....	59,650	59,650	100.0	16,641	8,298	1,986		3,632			6,894	611	1,920	
Residential building only.....	169,508	169,508	100.0	4,492	862	114	67	90	7,000	80	3,344	339	614	1,526
Highway.....	159,622	159,622	100.0	124,478										
Street paving.....	870,203	535,543	61.5	95,330			1,560			1,000	56,021			
Sewer, gas, water, conduit.....	563,583	563,583	100.0	54,104	2,920	175				16,619	99,393	430	1,361	36,339
Dam and reservoir.....	185,915	185,915	100.0	46,800							50,895			23,370
Waterworks.....	88,500	88,500	100.0	3,100							2,400			
Oil and natural-gas pipe line.....	30,000	30,000	100.0	1,000							1,000			
Subcontractors.....	15 2,962,183	2,678,100	90.4	81,030	3,000	49,554	122,056	878	25,257		63,128	5,325	87,551	11,021
Concreting.....	51,779	51,779	100.0	19,030							22,500	30		650
Electrical.....	672,463	672,463	100.0											
Heating and plumbing.....	17 1,168,536	1,010,493	86.5	210							1,276	434		
Plumbing.....	1,060,364	988,370	93.2	210							1,276	434		
Automatic sprinkler systems.....	22,123	22,123	100.0											
Masonry.....	43,000	43,000	100.0	20,000	3,000		10,000				10,000			
Painting and decorating.....	22,257	22,257	100.0											
Glass and glazing.....	34,126	34,126	100.0											
Plastering and lathing.....	320,001	312,161	94.6	27,741							11,107	4,803	86,342	
Roofing and sheet-metal work.....	349,031	349,031	100.0	2,466		49,554					371			371
Roofing.....	238,439	238,439	100.0	2,377		49,554					325			371
Sheet-metal work.....	110,592	110,592	100.0	89							46			
Stonework.....	16,860	6,860	40.7	712							4,684		1,209	
Marble and tiling.....	202,148	157,148	77.7	4,237			112,056	878	25,257		13,180	52		
Ornamental iron.....	40,300	25,000	62.0											10,000
Waterworks.....	54,840	54,840	100.0											
Foundation.....	10,881	10,881	100.0	7,534										
Metal work, n. e. s.....	28,061	28,061	100.0											

See footnotes at end of table.







TABLE 11.—COST OF MATERIALS FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929—Continued

CLASSIFICATION OF ESTABLISHMENTS	Heating and ventilating equipment	Plumbing and gas-fitting equipment	Electrical appliances and supplies	Elevators, dumb-waiters, etc.	Pipe: Drain tile, vitrified, concrete, etc.	Pipe: Cast iron, sheet and tube steel, etc.	Wire cable, guards, and fencing	Bituminous paving materials	Wood piling and timber	Machinery	Freight, hauling, or trucking to job	Chemicals, and chemical products	Metal products, n. e. s.	Miscellaneous <sup>11</sup>
<b>TEXAS</b> .....	\$1,451,869	\$3,404,480	\$3,462,793	\$2,252,452	\$463,702	\$1,385,076	\$568,308	\$1,168,170	\$240,116	\$15,000	\$389,475	\$19,465	\$3,641,227	\$527,054
Operative builders.....	50	13,578	4,003	-----	150	191	-----	-----	-----	-----	-----	-----	-----	347
General contractors.....	118,959	238,869	529,656	15,377	410,997	1,082,774	560,308	1,160,268	240,116	15,000	375,967	10,465	22,284	497,737
Building.....	33,648	171,048	65,387	11,877	84,447	20,162	8,058	23,540	-----	-----	3,484	-----	1,393	183,297
Building not specialized.....	33,530	98,895	50,367	10,905	84,137	19,501	7,758	23,540	-----	-----	3,484	-----	1,393	182,636
Commercial building only.....	298	9,727	4,894	272	-----	161	-----	-----	-----	-----	-----	-----	-----	-----
Manufacturing building only.....	3,800	3,800	6,500	700	250	500	-----	-----	-----	-----	-----	-----	-----	631
Residential building only.....	2,770	58,526	3,026	-----	60	-----	300	-----	-----	-----	-----	-----	-----	-----
Highway.....	3,568	-----	175	-----	24,822	12,518	31,438	395,688	30,000	-----	372,488	-----	-----	104,235
Bridge and culvert.....	-----	-----	1,074	-----	2,513	3,269	20,400	10,985	18,992	-----	-----	-----	-----	13,100
Street paving.....	-----	-----	-----	-----	116,098	87,761	139	728,755	-----	-----	-----	10,465	-----	40,652
Sewer, gas, water, conduit.....	78,743	41,897	25,878	-----	104,550	381,661	860	300	-----	15,000	-----	-----	-----	23,377
Dam and reservoir.....	-----	0,000	14,400	-----	14,362	8,000	-----	-----	-----	-----	-----	-----	-----	8,500
Waterworks.....	-----	15,564	100	-----	43,869	537,413	550	750	546	-----	-----	5,000	-----	3,787
Railroad.....	-----	-----	-----	-----	1,537	-----	-----	-----	-----	-----	-----	-----	-----	2,243
Central station, light and power plant.....	-----	4,390	422,042	3,500	12,099	-----	498,863	250	190,578	-----	-----	-----	15,891	58,576
Oil and natural-gas pipe line.....	-----	-----	-----	-----	5,500	32,000	-----	-----	-----	-----	-----	-----	-----	-----
Subcontractors.....	1,332,860	3,152,033	2,919,134	2,237,075	52,555	302,111	8,000	7,902	-----	-----	13,508	-----	3,018,943	29,570
Concrete.....	-----	-----	-----	-----	2,680	-----	-----	460	-----	-----	-----	-----	-----	-----
Electrical.....	2,500	5,400	2,470,893	2,237,075	-----	24,056	8,000	-----	-----	-----	-----	-----	-----	-----
Elevator construction.....	-----	-----	348,100	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Heating and plumbing.....	1,323,736	3,144,633	94,105	-----	42,275	213,051	-----	-----	-----	-----	-----	-----	-----	70
Heating and piping.....	401,876	139,800	-----	-----	-----	2,000	-----	-----	-----	-----	-----	-----	-----	-----
Plumbing.....	698,665	2,557,721	73,022	-----	35,214	135,944	-----	-----	-----	-----	-----	-----	-----	70
Plumbing and heating combined.....	141,602	252,469	21,083	-----	7,061	75,107	-----	-----	-----	-----	-----	-----	-----	-----
Automatic temperature control.....	21,593	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Automatic sprinkler systems.....	-----	194,637	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Roofing and sheet-metal work.....	6,624	-----	66	-----	-----	-----	-----	446	-----	-----	-----	-----	-----	-----
Sheet-metal work.....	6,624	-----	66	-----	-----	-----	-----	440	-----	-----	-----	-----	-----	-----
Marble and tiling.....	-----	2,000	-----	-----	-----	-----	-----	-----	-----	-----	13,470	-----	21,680	29,500
Excavating.....	-----	-----	-----	-----	2,760	15,004	-----	-----	-----	-----	-----	-----	-----	-----
Waterworks.....	-----	-----	-----	-----	4,840	50,000	-----	-----	-----	-----	-----	-----	-----	-----
Foundation.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	32	-----	-----	-----
Metal work, n. e. s.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	3,597,257	-----
Flooring, n. e. s.....	-----	-----	-----	-----	-----	-----	-----	6,690	-----	-----	-----	-----	-----	-----
<b>DALLAS</b> .....	320,008	675,738	1,208,353	2,212,623	127,907	495,672	520,846	177,890	194,866	-----	219,276	19,465	3,434,303	185,600
General contractor.....	3,626	21,305	425,366	-----	122,647	379,884	520,846	177,890	194,866	-----	205,800	19,465	10,176	161,600
Building.....	58	2,815	1,350	-----	96	-----	3,032	9,650	-----	-----	-----	-----	285	23,124
Building not specialized.....	58	2,815	1,350	-----	96	-----	3,032	9,650	-----	-----	-----	-----	285	23,124
Highway.....	3,568	-----	-----	-----	-----	-----	3,023	140,851	-----	205,800	-----	-----	-----	41,118
Bridge and culvert.....	-----	-----	1,074	-----	2,518	3,269	15,528	8,870	4,288	-----	-----	-----	-----	11,000
Street paving.....	-----	-----	-----	-----	37,940	55,009	-----	18,419	-----	-----	-----	-----	-----	-----
Sewer, gas, water, conduit.....	-----	10,500	300	-----	42,493	242,015	-----	-----	-----	-----	19,465	-----	-----	23,377
Waterworks.....	-----	3,800	-----	-----	25,369	79,591	400	-----	-----	-----	-----	-----	-----	2,162
Railroad.....	-----	-----	-----	-----	1,537	-----	-----	-----	-----	-----	-----	-----	-----	2,243
Central station, light and power plant.....	-----	4,390	422,042	-----	12,099	-----	498,863	-----	190,578	-----	-----	-----	15,891	58,576
Subcontractors.....	316,380	654,433	780,967	2,212,623	5,260	115,788	-----	-----	-----	-----	13,470	-----	3,418,127	24,000
Electrical.....	-----	-----	432,867	-----	-----	20,000	-----	-----	-----	-----	-----	-----	-----	-----
Elevator construction.....	-----	-----	348,100	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Heating and plumbing.....	316,380	654,433	-----	-----	2,500	80,784	-----	-----	-----	-----	-----	-----	-----	-----
Heating and piping.....	125,000	-----	-----	-----	-----	2,000	-----	-----	-----	-----	-----	-----	-----	-----
Plumbing.....	108,131	424,669	-----	-----	2,500	13,400	-----	-----	-----	-----	-----	-----	-----	-----
Plumbing and heating combined.....	81,656	123,560	-----	-----	-----	65,384	-----	-----	-----	-----	-----	-----	-----	-----
Automatic temperature control.....	21,593	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Automatic sprinkler systems.....	-----	106,204	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Roofing and sheet-metal work.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Sheet-metal work.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Marble and tiling.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	13,470	-----	21,680	24,000
Excavating.....	-----	-----	-----	-----	2,760	15,004	-----	-----	-----	-----	-----	-----	-----	-----
Metal work, n. e. s.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	3,396,441	-----
<b>EL PASO</b> .....	78,828	172,440	139,816	10,029	571	11,580	3,000	384	-----	-----	3,403	-----	-----	26,726
General contractors.....	5,040	13,513	8,928	10,029	-----	152	3,000	384	-----	-----	3,403	-----	-----	26,726
Building.....	5,040	13,513	8,928	10,029	-----	152	3,000	384	-----	-----	3,403	-----	-----	-----
Building not specialized.....	2,942	12,954	8,885	9,757	-----	152	3,000	384	-----	-----	3,403	-----	-----	-----
Commercial building only.....	298	559	41	272	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Residential building only.....	1,800	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Highway.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	26,726
Subcontractors.....	73,789	158,927	130,890	-----	571	11,428	-----	-----	-----	-----	-----	-----	-----	70
Electrical.....	-----	-----	130,810	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Heating and plumbing.....	73,789	158,927	80	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Heating and piping.....	56,862	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Plumbing.....	17,927	158,927	80	-----	571	11,428	-----	-----	-----	-----	-----	-----	-----	70

See footnotes at end of table.

CONSTRUCTION—TEXAS

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TABLE 11.—COST OF MATERIALS FURNISHED AND USED BY REPORTING ESTABLISHMENTS DURING 1929—Continued

CLASSIFICATION OF ESTABLISHMENTS	Heating and ventilating equipment	Plumbing and gas-fitting equipment	Electrical appliances and supplies	Elevators, dumb-waiters, etc.	Pipe: Drain tile, vitrified, concrete, etc.	Pipe: cast iron, sheet and tube steel, etc.	Wire cable, guards, and fencing	Bituminous paving materials	Wood piling and timber	Machinery	Freight, hauling, or trucking to job	Chemicals, and chemical products	Metal products, n. e. s.	Miscellaneous <sup>1</sup>
<b>FORT WORTH</b> .....	\$47,328	\$117,319	\$282,384	\$4,458	\$40,295	\$4,911	\$8,605	\$158,507						\$11,432
Operative builders.....		7,578	1,978			191								
General contractors.....		8,281	9,553	4,458	40,295	4,720	8,605	158,507						11,432
Building.....		8,281	9,553	958	6,657	720	253	360						11,432
Building not specialized.....		3,201	2,253	258	6,407	220	253	360						11,432
Commercial building only.....		1,280	800											
Manufacturing building only.....		3,800	6,500	700	250	500								
Highway.....					5,217	4,000	8,352	9,402						
Street paving.....					2,452			148,495						
Sewer, gas, water, conduit.....					25,969									
Central station, light and power plant.....				3,500				250						
Subcontractors.....	47,328	101,460	270,833											
Electrical.....			270,833											
Heating and plumbing.....	47,328	101,460												
Heating and piping.....	33,783													
Plumbing.....	2,400	79,170												
Plumbing and heating combined.....	11,145	22,290												
<b>HOUSTON</b> .....	401,252	\$914,677	598,850	11,612	66,189	140,428	8,439	107,778						77,420
Operative builders.....	50	2,100	1,375		150									847
General contractors.....	12,100	63,928	21,607		54,187	62,572	439	100,780						77,073
Building.....	12,100	57,928	7,207		7,264	7,904	300							74,573
Building not specialized.....	12,100	10,518	6,486		7,264	7,904	300							74,573
Commercial building only.....		1,459	721											
Residential building only.....		45,951												
Highway.....					4,186			37,333						
Street paving.....					15,137	13,022	139	63,147						
Sewer, gas, water, conduit.....					27,400	23,646		300						
Dam and reservoir.....		6,000	14,400		200	8,000								2,500
Oil and natural-gas pipe line.....						10,000								
Subcontractors.....	389,102	848,649	575,348	11,612	11,852	77,856	8,000	6,996						
Concreting.....					2,680									
Electrical.....			550,859			4,056	8,000							
Elevator construction.....				11,612										
Heating and plumbing.....	389,102	846,649	24,489		9,172	73,800								
Heating and piping.....	209,132	130,000												
Plumbing.....	167,188	632,202	15,559		7,972	73,128								
Plumbing and heating combined.....	12,782	18,137	8,930		1,200	672								
Automatic sprinkler systems.....		66,310												
Marble and tiling.....		2,000												
Flooring, n. e. s.....								6,996						
<b>SAN ANTONIO</b> .....	342,714	\$746,214	647,219	560	123,308	293,184	860	330,380		\$15,000	\$32		\$158	61,879
Operative builders.....		3,900	650											
General contractors.....	83,563	71,632	28,279	350	106,259	222,060	860	320,474		15,000		158		61,879
Building.....	4,820	30,795	2,701	350	65,659	9,965		2,275				158		20,703
Building not specialized.....	3,850	21,294	475	350	65,659	9,965		2,275				158		20,072
Residential building only.....	970	9,501	2,226		60									631
Highway.....								32,160						85,176
Street paving.....					7,912	19,115		295,039						
Sewer, gas, water, conduit.....	78,743	31,367	25,578		8,688	110,000	860		15,000					6,000
Dam and reservoir.....		9,500			18,500	55,000								
Waterworks.....					5,500	22,000								
Oil and natural-gas pipe line.....														
Subcontractors.....	259,151	670,682	618,290		17,040	71,084		906			32			
Concreting.....								460						
Electrical.....			572,463											
Heating and plumbing.....	257,131	670,682	45,761		12,209	21,084								
Plumbing.....	257,131	648,559	45,761		12,209	21,084								
Automatic sprinkler systems.....		22,123												
Roofing and sheet-metal work.....	2,020		66					446						
Sheet-metal work.....	2,020		66					446						
Waterworks.....					4,840	50,000								
Foundation.....											32			

<sup>1</sup> Certain establishments did not give a distribution of the cost of their materials by separate items. The total cost of materials reported by such establishments is, however, included in totals in this column which carry a footnote to that effect.

<sup>2</sup> See footnote 3 of Table 9 on p. 1179.

<sup>3</sup> Includes grading, \$9,380.

<sup>4</sup> Includes carpentering and wood flooring, \$43,575.

<sup>5</sup> Includes pipe covering, \$140,000.

<sup>6</sup> Includes operative builders, \$29,640.

<sup>7</sup> Includes dam and reservoir, \$1,000,000; oil and natural-gas pipe line, \$2,846,010.

<sup>8</sup> Includes grading, \$4,380.

<sup>9</sup> Includes marble and tiling, \$25,000.

<sup>10</sup> Includes stonework, \$20,000; ornamental iron, \$25,000; metal work, n. e. s., \$7,328.

<sup>11</sup> Includes roofing, \$15,000.

<sup>12</sup> Includes railroad, \$4,292.

<sup>13</sup> Includes ornamental iron, \$120,000; metal work, n. e. s., \$15,000.

<sup>14</sup> Includes bridge and culvert, \$222,683.

<sup>15</sup> See footnote 3 of Table 9 on page 1179.

<sup>16</sup> See footnote 3 of Table 9 on page 1179.

<sup>17</sup> Includes flooring, n. e. s., \$38,000.

<sup>18</sup> Includes plumbing and heating combined, \$80,049.

<sup>19</sup> Includes the reported cost of mineral products (nonmetallic), n. e. s.; sealing materials; textiles and calking materials; and miscellaneous, n. e. s. For total cost of these items see Table 9.

CONSTRUCTION—TEXAS

TABLE 12.—NUMBER OF, AND VOLUME OF BUSINESS REPORTED BY, ESTABLISHMENTS DOING A CONSTRUCTION BUSINESS OF LESS THAN \$25,000 IN 1929, PERCENTAGE OF TOTAL NUMBER OF KNOWN ESTABLISHMENTS, AND AVERAGE VOLUME PER ESTABLISHMENT

TYPES OF WORK	TEXAS 1930 population, 5,824,715								DALLAS 1930 population, 260,475			EL PASO 1930 population, 102,421		
	Known contracting establishments				Volume of business reported				Total number active in 1929	Volume of business		Total number active in 1929	Volume of business	
	Total number	Inactive in 1929	Active in 1929		Number of reporting establishments	Per cent of active	Amount	Average per establishment		Number of reporting establishments	Amount		Number of reporting establishments	Amount
			Number	Per cent										
Total establishments canvassed (less than \$25,000)...	2,938	137	2,801					214			117			
Total establishments, type of work unknown...	352	5	347					14			26	1	\$11,000	
Total general and subcontractors classified...	2,586	32	2,554	100.0				200			91			
Total general contractors classified...	977	28	949	37.2	197	20.8	2,558,174	12,986	38	5	\$65,212	54	4	32,162
Building.....	907	27	880	34.5	187	21.3	2,441,349	13,055	27	5	65,212	50	4	32,162
Highway.....	60	1	59	2.3	6	10.2	75,825	12,638	9			4		
Bridge and culvert.....	4		4	.2	1	25.0	4,000	4,000	1					
Sewer, gas, water, conduit.....	6		6	.2	3	50.0	37,000	12,333	1					
Total subcontractors classified.....	1,609	4	1,605	62.8	310	19.3	3,105,099	10,016	162	15	200,601	37	4	40,396
Carpentering.....	195	2	193	7.6	49	25.4	398,958	8,142	6					
Concreting.....	89		89	3.5	19	21.3	121,816	6,411	3					
Electrical.....	266		266	10.4	46	17.3	469,531	10,207	24	3	37,091	5	1	4,896
Heating and ventilating.....	2		2	.1	1	50.0	10,000	10,000						
Masonry.....	41	1	40	1.6	5	12.5	52,591	10,518				3		
Painting and decorating.....	187		187	7.3	32	17.1	204,362	6,386	16	3	38,793	3	1	10,000
Glass and glazing.....	5		5	.2					1					
Plastering.....	34		34	1.3	7	20.6	74,834	10,691	3	1	12,643			
Plumbing and heating.....	543		543	21.3	114	21.0	1,301,889	11,420	52	4	59,057	16	1	3,500
Sheet metal and roofing.....	171		171	6.7	23	13.5	309,745	13,467	45	3	50,017	8		
Steel erection.....	2		2	.1								1		
Stonework.....	8		8	.3					1					
Marble and tiling.....	42		42	1.6	11	26.2	133,238	12,113	8	1	3,000	1	1	22,000
Wrecking.....	10	1	9	.4					2					
Excavating and grading.....	7		7	.3	1	14.3	13,997	13,997						
Ornamental iron.....	6		6	.2	2	33.3	14,138	7,069						
Street paving.....	1		1	(?)					1					

TYPES OF WORK	FORT WORTH 1930 population, 163,447			HOUSTON 1930 population, 292,352			SAN ANTONIO 1930 population, 231,542			REMAINDER OF STATE 1930 population, 4,774,478		
	Total number active in 1929	Volume of business		Total number active in 1929	Volume of business		Total number active in 1929	Volume of business		Total number active in 1929	Volume of business	
		Number of reporting establishments	Amount		Number of reporting establishments	Amount		Number of reporting establishments	Amount		Number of reporting establishments	Amount
	Total establishments canvassed (less than \$25,000)...	291			210			151			1,918	
Total establishments, type of work unknown...	141	4	\$40,705	6			23	4	\$53,533	138	7	\$95,116
Total general and subcontractors classified...	150			205			128			1,780		
Total general contractors classified...	41	20	224,732	49	4	\$57,034	25	7	123,565	742	157	2,055,469
Building.....	40	20	224,732	45	4	57,034	10	7	123,565	699	147	1,938,644
Highway.....	1			4			6			35	6	75,825
Bridge and culvert.....										3	1	4,000
Sewer, gas, water, conduit.....										5	3	37,000
Total subcontractors classified.....	109	25	247,695	156	26	315,516	103	44	529,511	1,038	106	1,771,380
Carpentering.....	14	4	17,730				24	20	233,380	149	25	147,848
Concreting.....	2						4	2	28,500	80	17	93,316
Electrical.....	19	6	53,503	37	4	63,239	6	1	10,000	175	31	300,799
Heating and ventilating.....	2	1	10,000									
Masonry.....				1	1	6,000	1			35	4	46,591
Painting and decorating.....	3	1	12,000	2			3	2	8,091	155	25	135,478
Glass and glazing.....										4		
Plastering.....	1						3			27	6	62,191
Plumbing and heating.....	50	11	114,063	91	14	193,376	23	13	175,562	311	71	756,331
Sheet metal and roofing.....	14	2	40,396	15	3	10,100	19	4	50,840	70	11	143,392
Steel erection.....	1											
Stonework.....							3			4		
Marble and tiling.....	2			9	4	36,801	5			17	5	71,437
Wrecking.....							2			5		
Excavating and grading.....	1									6	1	13,997
Ornamental iron.....				1			5	2	14,138			
Street paving.....												

<sup>1</sup> Of the 37 inactive establishments, 1 is in El Paso, 4 are in Fort Worth, 5 in Houston, 3 in San Antonio, and 24 in the remainder of the State.  
<sup>2</sup> Less than one-tenth of 1 per cent.

CONSTRUCTION—TEXAS

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TABLE 13.—ESTABLISHMENTS (WHOSE BUSINESS WAS LESS THAN \$25,000 IN 1929) WHICH REPORTED THEIR VOLUME OF CONSTRUCTION WORK, CLASSIFIED BY RANGE OF VOLUME OF BUSINESS

CLASSIFICATION	Total	Less than \$2,500	\$2,500 to \$4,999	\$5,000 to \$7,499	\$7,500 to \$9,999	\$10,000 to \$12,499	\$12,500 to \$14,999	\$15,000 to \$17,499	\$17,500 to \$19,999	\$20,000 to \$22,499	\$22,500 to \$24,999
<b>TEXAS</b>											
Total general and subcontractors.....	523	50	73	61	49	64	50	57	38	53	23
General contractors.....	197	7	23	19	21	25	15	20	15	27	19
Subcontractors.....	310	43	50	41	27	32	35	28	21	25	9
Type of contracting unknown.....	16	1	-----	1	1	7	-----	3	2	1	-----