
MOTION PICTURES, NOT INCLUDING PROJECTION IN THEATERS

SPECIAL REPORT

MOTION PICTURES, NOT INCLUDING PROJECTION IN THEATERS

[A preliminary report for this industry was issued on February 28, 1941]

This report presents statistics on the *production* activities of motion-picture studios and laboratories, and *does not* cover the maintenance and operation of exchanges. The references to "distribution" employees in this report relate to employees of the laboratories who are concerned with the final operations in the preparation of positive films. Although the production of motion pictures is not strictly a manufacturing industry, its commercial importance is so great that data in regard to it have been collected at the biennial censuses of manufactures for 1921 and subsequent years.

Description of the industry.—The "Motion pictures, not including projection in theaters" industry, as constituted for census purposes, embraces all processes and activities connected with the production of motion-picture films, such as the preparation and photography of scenes, the development of exposed films, the printing of projection films, and other studio and laboratory work necessary in connection with the production of projection films for use. *It does not, however, include the distribution of these films and their projection in theaters.* No data are included for establishments that reported less than \$5,000 as the cost of work done during the census year.

Persons engaged.—Persons engaged, as reported for the industry, comprise salaried personnel, wage earners, and distribution and construction employees. The salaried personnel consists of officers of corporations

and supervisory and clerical employees, as well as certain classes of production employees, such as scenario writers, unit managers and assistant directors, actors, technical employees, and extra talent. The wage earners are those engaged chiefly in skilled and unskilled manual labor, and comprise carpenters, painters, prop makers, laboratory and wardrobe workers, property men, etc.

Total cost of work done during the year.—Since the Motion Pictures industry does not sell its products, but rents them, it is impossible to determine the actual value of the output in a given year until long after its close. It is therefore necessary to use the total cost of work done during the year as the index of production for the industry. This total cost of work done includes the cost of work done within the census year on films that were completed after the close of that year, but does not include the cost of work done prior to the census year on films completed within the year. It also includes receipts for laboratory and other work done for others, and rentals received for the use of studio facilities. Expenditures not covered by salaries, wages, or cost of materials, etc., electric energy, and contract work are represented by the figure for "Other expenses," which embraces payments for rights and royalties and other payments to persons who are not employees of the establishments reporting.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1921 TO 1939

CENSUS YEAR	Number of establishments	Wage earners (average for the year)	Wages	Cost of studio supplies, containers for films, fuel, electric energy, and contract work	Other expenses ¹	Total cost of work done during the year ¹	Horsepower of prime movers
1939.....	178	24, 052	\$45, 735, 926	\$46, 696, 622	\$26, 460, 042	\$215, 700, 034	6, 977
1937 ²	83	19, 338	37, 157, 753	42, 587, 536	15, 602, 742	197, 741, 358	(3)
1935.....	129	14, 917	24, 686, 405	34, 686, 094	22, 749, 160	161, 864, 842	(1)
1933.....	92	10, 777	18, 395, 489	30, 180, 961	17, 817, 964	119, 342, 866	(3)
1931.....	140	(5)	(5)	44, 238, 126	(5)	154, 435, 688	(2)
1929.....	142	10, 784	24, 860, 092	40, 752, 741	(5)	184, 102, 419	6, 864
1927.....	142	8, 415	18, 637, 005	50, 344, 020	(5)	134, 343, 360	5, 911
1925.....	132	5, 573	13, 065, 756	38, 626, 961	(5)	93, 636, 348	5, 083
1923.....	97	6, 408	16, 601, 153	32, 265, 636	(5)	86, 418, 170	(1)
1921 ³	127	6, 259	14, 740, 009	31, 753, 496	(5)	77, 397, 381	(2)

¹ See fourth paragraph of text.

² Figures revised.

³ Not called for on schedule.

⁴ No data.

⁵ Not called for separately on schedule.

⁶ No comparable data.

⁷ No comparable data for years prior to 1921.

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TABLE 2.—GENERAL STATISTICS IN DETAIL FOR THE UNITED STATES AND FOR STATES, FOR THE CITY OF LOS ANGELES, AND FOR THE LOS ANGELES AND SAN FRANCISCO INDUSTRIAL AREAS: 1939

ITEM	United States	California	LOS ANGELES INDUSTRIAL AREA			San Francisco Industrial Area	Illinois	Michigan	Missouri	New York	Other States ¹
			Total	Los Angeles City	Remainder of area						
Number of establishments.....	178	93	88	65	23	5	9	5	5	43	23
Proprietors and firm members.....	60	29	21	15	6	8	5	-----	6	10	10
Personnel reported, total.....	35,345	31,108	31,095	14,436	16,659	13	143	323	104	1,967	1,700
Salaried officers of corporations.....	228	116	116	76	40	-----	9	12	6	52	33
Production:											
Salaried employees.....	9,407	8,574	8,571	4,478	4,093	3	44	113	14	525	137
Wage earners (average for year).....	24,052	21,573	21,563	9,597	11,966	10	72	138	11	1,268	990
Distribution ²	1,192	444	444	242	202	-----	18	51	73	93	513
Construction.....	466	401	401	43	358	-----	-----	9	-----	29	27
Salaries and wages, total.....	\$142,543,420	\$133,043,029	\$133,022,514	\$64,206,918	\$68,815,596	\$20,515	\$302,574	\$990,209	\$137,906	\$5,117,312	\$2,943,390
Salaried officers.....	4,223,349	3,442,875	3,442,875	1,711,333	1,731,542	-----	43,247	113,994	25,248	408,017	189,968
Production:											
Salaries.....	89,117,788	86,441,966	86,435,066	41,968,204	44,466,862	6,900	119,085	222,482	17,513	2,069,823	246,919
Wages.....	45,735,926	41,086,235	41,082,620	19,700,549	21,382,071	13,615	96,884	334,304	8,843	2,396,962	1,802,698
Distribution ²	2,718,101	1,447,171	1,447,171	738,882	708,289	-----	43,358	311,129	86,302	156,045	674,096
Construction.....	748,256	614,782	614,782	87,950	526,832	-----	-----	17,300	-----	86,465	29,709
Cost of studio supplies, containers for films, fuel, electric energy, and contract work, total.....	46,696,622	33,141,806	33,109,830	21,296,259	11,813,571	31,976	227,068	714,683	33,635	8,073,402	4,506,028
Studio supplies and containers for films.....	42,092,555	30,382,343	30,352,739	20,108,171	10,244,568	29,604	215,422	662,642	29,393	6,408,236	4,394,519
Fuel.....	165,055	111,215	111,053	47,962	63,091	162	2,967	6,123	542	30,330	13,578
Electric energy.....	794,123	624,719	623,635	308,255	315,430	1,034	6,907	10,918	1,955	102,691	46,993
Contract work.....	3,644,889	2,028,529	2,022,353	831,871	1,190,482	1,176	1,772	35,000	1,445	1,532,145	50,998
Other expenses ³	26,460,042	20,664,136	20,636,357	9,816,874	10,819,483	27,779	-----	51,580	-----	4,868,956	875,370
Cost of work done during the year ³	215,700,084	186,848,971	186,768,701	95,320,051	91,448,650	80,270	529,642	1,765,472	171,541	18,059,670	8,324,788

¹ Colorado, 2 establishments; Florida, 2; Georgia, 2; Iowa, 1; Louisiana, 2; Maryland, 1; Massachusetts, 2; Minnesota, 2; New Jersey, 2; Ohio, 2; Pennsylvania, 2; Texas, 1; Washington, 1; Wisconsin, 1.

² Figures do not include data for independent establishments engaged in contract distribution.

³ See fourth paragraph of text.

TABLE 3.—PERSONS ENGAGED, BY SEX, FOR THE UNITED STATES AND BY STATES, FOR THE CITY OF LOS ANGELES, AND FOR THE LOS ANGELES AND SAN FRANCISCO INDUSTRIAL AREAS: 1939

	ALL CLASSES			SALARIED OFFICERS OF CORPORATION			PRODUCTION EMPLOYEES												DISTRIBUTION EMPLOYEES			Construction employees (male)
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Managers, superintendents, etc.			Clerks, stenographers, etc.			Wage earners (average for year)			Total	Male	Female	
										Total	Male	Female	Total	Male	Female	Total	Male	Female				
United States.....	35,345	28,994	6,351	228	212	16	33,459	27,458	6,001	5,830	4,968	862	3,577	1,750	1,827	24,052	20,740	3,312	1,192	858	334	466
California.....	31,108	25,775	5,333	116	111	5	30,147	24,961	5,186	5,345	4,502	843	3,229	1,600	1,629	21,573	18,859	2,714	444	302	142	401
Los Angeles Industrial Area.....	31,095	25,762	5,333	116	111		530,134	24,948	5,186	5,344	4,501	843	3,227	1,598	1,629	21,563	18,849	2,714	444	302	142	401
Los Angeles City.....	14,436	11,924	2,512	76	72		414,075	11,651	2,424	2,937	2,512	425	1,541	688	853	9,597	8,451	1,146	242	158	84	43
Remainder of Area.....	16,659	13,838	2,821	40	39		116,059	13,297	2,762	2,407	1,989	418	1,686	910	776	11,966	10,395	1,568	202	144	58	358
San Francisco Industrial Area.....	13	13					13	13		1	1		2	2		10	10			13	5	
Illinois.....	143	106	37	9	7	2	116	86	30	26	25	1	18	2	16	72	59	13	18	37	14	9
Michigan.....	323	271	52	12	12		251	213	38	53	53		60	31	29	138	129	9	51	37	14	
Missouri.....	104	73	31	6	6		25	19	6	10	10		4		11	9	2	73	48	25		
New York.....	1,967	1,561	406	52	50	2	1,793	1,423	370	314	299	15	211	97	114	1,268	1,027	241	93	59	34	25
Other States.....	1,700	1,208	492	33	26	7	1,127	756	371	82	79	3	55	20	35	990	657	333	513	399	114	27

CENSUS OF MANUFACTURES: 1939

TABLE 4.—SUMMARY STATISTICS FOR THE UNITED STATES AND BY STATES, FOR THE CITY OF LOS ANGELES, AND FOR THE LOS ANGELES AND SAN FRANCISCO INDUSTRIAL AREAS: 1939, 1937, AND 1935

	Number of establishments	PERSONS ENGAGED				SALARIES AND WAGES				Cost of studio supplies, containers for films, fuel, and electric energy	Cost of contract work	Other expenses ¹	Total cost of work done during the year ¹
		Total	Salaried officers and employees	Wage earners (average for year)	Distribution and construction employees	Total	Salaries	Wages	Distribution and construction salaries				
UNITED STATES													
1939.....	178	35,345	9,635	24,052	1,658	\$142,543,420	\$93,341,137	\$45,735,926	\$3,466,357	\$43,051,733	\$3,644,889	\$26,460,042	\$215,700,084
1937 ²	83	32,398	13,060	19,338	(³)	139,551,080	102,393,327	37,157,753	(³)	35,574,879	7,012,657	15,602,742	197,741,358
1935.....	129	27,592	12,675	14,917	(³)	104,429,588	79,743,183	24,686,405	(³)	29,541,118	5,144,976	22,749,160	161,864,842
Percent of increase or decrease (-):													
1937-39.....	(⁴)	9.1	-26.2	24.4	-----	2.1	-8.8	23.1	-----	21.0	-48.0	69.6	9.1
1935-37.....	-35.7	17.4	3.0	29.6	-----	33.6	28.4	50.5	-----	20.4	36.3	-31.4	22.2
STATES													
California:													
1939.....	93	31,108	8,690	21,573	845	\$133,043,029	\$89,884,841	\$41,096,235	\$2,061,953	\$31,118,277	\$2,023,529	\$20,664,136	\$186,948,971
1937.....	35	28,179	11,222	16,957	(³)	132,914,402	99,488,430	33,425,972	(³)	25,329,604	5,175,029	8,524,314	171,943,349
1935.....	75	23,278	10,808	12,970	(³)	97,913,864	76,206,641	21,707,223	(³)	20,988,922	3,995,113	15,808,906	138,706,805
Los Angeles Industrial Area (Los Angeles County), total—													
1939.....	88	31,095	8,687	21,563	845	133,022,514	89,877,941	41,082,620	2,061,953	31,087,477	2,022,353	20,636,357	186,768,701
1937 ⁵	35	28,179	11,222	16,957	(³)	132,914,402	99,488,430	33,425,972	(³)	25,329,604	5,175,029	8,524,314	171,943,349
1935 ⁶	75	23,278	10,808	12,970	(³)	97,913,864	76,206,641	21,707,223	(³)	20,988,922	3,995,113	15,808,906	138,706,805
City of Los Angeles—													
1939.....	65	14,436	4,554	9,597	285	64,206,918	43,679,537	19,700,549	826,832	20,464,388	831,871	9,816,874	95,320,051
1937.....	24	14,787	5,588	9,199	(³)	68,730,429	50,646,725	18,083,704	(³)	17,027,250	1,454,407	553,366	87,765,452
1935.....	51	12,275	5,860	6,415	(³)	50,523,344	39,672,400	10,850,944	(³)	12,253,846	1,058,746	10,088,463	73,924,399
Remainder of area—													
1939.....	23	16,659	4,133	11,966	560	68,815,596	46,198,404	21,382,071	1,235,121	10,623,089	1,190,482	10,819,483	91,448,650
1937.....	11	13,392	5,634	7,758	(³)	64,183,973	48,841,705	15,342,268	(³)	8,302,354	3,720,622	7,970,948	84,177,897
1935.....	24	11,003	4,448	6,555	(³)	47,390,520	36,534,241	10,856,279	(³)	8,735,076	2,936,367	5,720,443	64,782,406
San Francisco Industrial Area—													
1939.....	5	13	3	10	-----	20,515	6,900	13,615	-----	30,800	1,176	27,779	80,270
1937.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1935.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Illinois:													
1939.....	9	143	53	72	18	302,574	162,332	96,884	43,358	225,296	1,772	-----	529,642
1937.....	7	156	67	89	(³)	252,377	135,751	116,626	(³)	145,719	14,435	68,494	481,025
1935.....	8	94	34	60	(³)	139,973	61,001	78,972	(³)	141,607	15,110	64,664	361,354
Michigan:													
1939.....	5	323	125	138	60	999,209	336,476	334,304	328,429	679,683	35,000	51,580	1,765,472
1937.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1935.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Missouri:													
1939.....	5	104	20	11	73	137,906	42,761	8,843	86,302	32,190	1,445	-----	171,541
1937.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1935.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
New York:													
1939.....	43	1,967	577	1,268	122	5,117,312	2,477,840	2,396,962	242,510	6,541,257	1,532,145	4,868,956	18,059,670
1937.....	21	2,883	1,421	1,462	(³)	4,516,725	2,038,874	2,477,851	(³)	5,206,182	1,586,063	5,068,562	16,377,532
1935.....	24	3,240	2,031	1,209	(³)	4,953,049	2,938,172	2,014,877	(³)	4,697,965	1,069,289	5,226,769	15,947,072
Other States ⁷ :													
1939.....	23	1,700	170	990	540	2,943,390	436,887	1,802,698	703,805	4,455,030	50,998	875,370	8,324,788
1937.....	20	1,180	350	830	(³)	1,867,576	730,272	1,137,304	(³)	4,893,374	287,130	1,941,372	8,939,452
1935.....	22	980	302	678	(³)	1,422,702	537,369	885,333	(³)	3,712,624	65,464	1,648,821	6,849,611

¹ See fourth paragraph of text.² Figures revised.³ Not called for separately on schedule.⁴ Percent not computed where base is less than 100.⁵ Data for 1 establishment outside the Los Angeles Industrial Area have been included in order to avoid disclosing the figures for this establishment.⁶ Data for 2 establishments outside the Los Angeles Industrial Area have been included in order to avoid disclosing figures for these establishments.⁷ For 1939—Colorado, 2; Florida, 2; Georgia, 2; Iowa, 1; Louisiana, 2; Maryland, 1; Massachusetts, 2; Minnesota, 2; New Jersey, 2; Ohio, 2; Pennsylvania, 2; Texas, 1; Washington, 1; Wisconsin, 1. For 1937—Colorado, 1; Georgia, 1; Iowa, 1; Louisiana, 1; Maryland, 1; Massachusetts, 1; Michigan, 3; Minnesota, 2; Missouri, 3; New Jersey, 2; Ohio, 2; Texas, 2. For 1935—Colorado, 2; Georgia, 1; Iowa, 1; Louisiana, 1; Maryland, 1; Michigan, 3; Minnesota, 1; Missouri, 4; New Jersey, 3; Ohio, 2; Pennsylvania, 1; Texas, 1; Washington, 1.

TABLE 5.—WORK DONE DURING THE YEAR, BY KIND, QUANTITY, AND COST, FOR THE UNITED STATES: 1939 AND 1937

PRODUCT	1939	1937	PRODUCT	1939	1937
Total cost of work done during the year.....	\$215,700,084	\$197,741,358	Nontheatrical films, total cost.....	\$8,029,836	\$5,715,977
Theatrical films, total cost.....	\$149,017,945	\$134,257,598	Advertising:		
Negative films:			Color-process.....	960,730	4,539,515
Number.....	(²)	3,942	Black-and-white.....	742,150	
Cost.....	\$142,602,372	\$126,039,177	Educational:		
Feature subjects (other than news reels), 3,000 feet or over in length—			Color-process.....	117,767	320,680
Color-process—			Black-and-white.....	608,160	
Number.....	27	12	Industrial:		
Cost.....	\$14,356,442	\$8,777,149	Color-process.....	304,611	855,782
Black-and-white—			Black-and-white.....	1,870,519	
Number.....	493	587	Other.....	1,425,899	(⁵)
Cost.....	\$117,830,011	\$111,731,767	Unfinished productions, total cost.....	38,301,355	33,074,784
Short subjects (other than news reels), under 3,000 feet in length—			Theatrical films.....	37,758,383	(¹)
Color-process—			Nontheatrical films.....	542,968	(¹)
Number.....	125	92	Receipts, total.....	22,350,947	24,692,999
Cost.....	\$1,723,400	\$1,194,095	Receipts for use of studio facilities.....	1,419,621	5,907,131
Black-and-white—			Receipts for laboratory work (including developing and printing) done for others.....	18,594,321	15,317,921
Number.....	(³)	3,251	Value of other work done.....	2,337,005	3,467,947
Cost.....	\$4,251,624	\$4,339,166			
News reels, cost.....	\$4,440,895	(⁴)			
Positive films, cost (excluding cost of producing negatives).....	\$6,415,573	\$8,218,421			

¹ Does not include cost of "News reels."² Data incomplete.³ Revised.⁴ Data for "News reels" included in figure for "Advertising."⁵ Includes cost of "News reels."⁶ Figure for "Educational" includes data for "Other" nontheatrical films.⁷ Not called for separately on schedule.

TABLE 6.—WAGE EARNERS ENGAGED IN MOTION-PICTURE PRODUCTION, BY MONTHS, FOR THE UNITED STATES, 1939, 1937, AND 1929, AND BY STATES, 1939

STATE	Average number employed during year	NUMBER RECEIVING PAY DURING NORMAL PAY-ROLL PERIOD ENDED NEAREST 15TH OF MONTH—											
		January	February	March	April	May	June	July	August	September	October	November	December
United States:													
1939.....	24,052	23,307	22,514	21,907	23,453	24,880	29,915	28,580	24,886	23,432	22,668	20,970	22,115
1937 ¹	19,338	18,789	19,313	18,091	18,540	18,299	21,335	20,275	18,995	21,276	19,724	18,615	18,807
1929.....	10,784	9,929	9,694	9,113	9,560	10,722	10,805	11,422	11,616	11,938	11,506	11,690	11,407
California.....	21,573	20,856	20,053	19,448	21,057	22,443	27,460	26,075	22,330	20,887	20,055	18,472	19,743
Illinois.....	72	75	73	73	70	69	72	63	70	70	74	75	74
Michigan.....	138	171	181	157	131	134	128	129	126	130	103	131	133
Missouri.....	11	11	11	11	11	11	11	11	11	11	11	12	12
New York.....	1,268	1,312	1,276	1,293	1,258	1,282	1,240	1,237	1,276	1,224	1,298	1,278	1,247

¹ Figures revised.

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TABLE 7.—CONSUMPTION OF FUEL, BY KIND AND QUANTITY,
FOR THE UNITED STATES: 1939

	1939
Establishments:	
Number in the industry.....	178
Number reporting fuel consumption.....	68
Coal (anthracite and bituminous; tons of 2,000 pounds) ¹	5,130
Coke (tons of 2,000 pounds).....	134
Fuel oils (including crude oil and gas oils used as fuel; barrels of 42 gallons).....	31,966
Gas (M cubic feet), total.....	223,725
Natural.....	219,298
Manufactured.....	4,029
Mixed.....	398

¹ Data combined to avoid disclosing figures for individual establishments.

TABLE 8.—EXPENDITURES FOR PLANT AND EQUIPMENT: 1939

	1939
Number of establishments:	
Total for the industry.....	178
Reporting expenditures for plant and equipment.....	90
Cost of work done during year:	
Total for the industry.....	\$215,700,084
Reporting expenditures for plant and equipment.....	192,785,533
Expenditures for plant and equipment:	
Total for the industry.....	6,018,717
Expenditures for new construction or major alterations of buildings and other fixed plant and structures.....	3,035,374
Expenditures for new machinery and operating equipment.....	2,351,175
Expenditures for plant and equipment acquired in a "used" condition from other owners and expenditures for land.....	632,168

TABLE 9.—PRIME MOVERS, MOTORS, GENERATORS, AND ELECTRIC ENERGY: 1939 AND 1929

	1939	1929
Number of establishments.....	178	142
Number of establishments reporting power equipment.....	99	103
Prime movers, aggregate:		
Number.....	50	37
Horsepower.....	6,977	6,864
Prime movers, driving generators, total—		
Number.....	50	137
Horsepower.....	6,977	16,864
Steam engines—		
Number.....		1
Horsepower.....		1439
Diesel and semi-Diesel engines—		
Number.....	2	
Horsepower.....	165	
Other internal-combustion engines ² —		
Number.....	48	132
Horsepower.....	6,812	16,425
Prime movers, driving generators, ordinarily idle (included above), horsepower.....	6,977	(³)
Generators, kilowatt rating, total.....	2,561	301
Generators, driven by—		
Diesel and semi-Diesel engines, kilowatt rating.....	84	
Other internal-combustion engines, ³ kilowatt rating.....	2,477	(³)
Generators, ordinarily idle (included above), kilowatt rating.....	2,561	(⁴)
Electric motors, total:		
Number.....	4,621	3,970
Horsepower.....	56,363	43,106
Driven by purchased energy—		
Number.....	4,621	3,873
Horsepower.....	56,363	42,684
Driven by energy generated in establishments reporting—		
Number.....		236
Horsepower.....		238
Electric energy (kilowatt-hours):		
Generated in plant.....	60,000	(⁴)
Purchased.....	69,460,666	32,589,180

¹ Includes data for prime movers not driving generators. ² Gas, gasoline, etc.³ Not called for on schedule.⁴ No data.