APPENDIXES

APPENDIX A—Instructions to enumerators ............................................. 390
APPENDIX B—Form 61—Construction schedule—short form .................. 393
APPENDIX C—Form 60—Construction schedule—long form .................. 394
APPENDIX D—Explanation of inquires appearing on the construction schedules
               for which no data are published ........................................ 395
APPENDIX E—Explanation of classifications of special trade contractors .... 396
APPENDIX A—INSTRUCTIONS TO ENUMERATORS

Each enumerator was furnished a pocket-sized handbook of instructions to enumerators, which he carried as a ready reference while making the canvass for the Census of Business and the Census of Manufactures for 1939. The following instructions pertain to the Construction phase of the Census of Business and have been extracted in total from this handbook:

SCOPE OF THE CONSTRUCTION CENSUS

The Census of Construction for 1939 is to include all persons or establishments utilizing construction materials and labor in construction work for others, or for themselves for speculative or investment purposes (see exceptions below). The term construction work includes "alterations and repairs" as well as "new construction and additions." A schedule is to be obtained not only from those who have a recognized place of business but also from those who conduct their business from their homes.

Contractors.—Business organizations or individuals (other than employees) engaged in construction work for others are known as contractors. A contractor in the construction industry is either a general contractor or a special trade contractor.

A general contractor is one who contracts for the entire work on a given project directly with the owner (or his agent); who is responsible for the execution of the work; and who usually does part of the actual work with his own forces. General contractors are classified into three groups—building, highway, and heavy. Building contractors are primarily engaged in constructing buildings. The types of structures which highway and heavy contractors construct are shown on Form 60 (long form) in the footnotes to inquiry 4.

A special trade contractor is one who contracts for and is primarily engaged in a specialized line of work such as plumbing, concreting, painting, etc. (See Form 60 or 61, inquiry 2.) He sometimes performs work on subcontract (contracts received from other contractors) but frequently receives contracts direct from the owners.

Builders.—Business organizations or individuals (other than employees) who engage in construction work for speculative or investment purposes for their own account, are of three types—speculative or operative builders usually build for profit through sale of the finished structure; investment builders usually build for profit through lease or rental of the finished structure; the occasional builder is usually engaged in some other kind of work and builds now and then for profit through sale or rental. He would be considered an operative or investment builder, except for the fact that he builds only occasionally as a side line.

Other establishments reporting on construction schedules.—In addition to contractors and builders census reports on the construction schedule should be obtained from certain manufacturers, retailers, wholesale, and service shops, as described in more detail below.

Manufacturing establishments which maintain a department, subsidiary, or other unit for the installation or erection of their own products should furnish a construction report as well as a manufactures report. The value of materials or equipment used on the job should be included in the construction schedule just as though they had been purchased from an outside firm. The most common examples are manufacturers of structural steel and manufacturers of building specialties such as metal window frames, elevators, and heating equipment.

Retailers or wholesalers whose business includes construction work for others should furnish two schedules. The value of materials used and equipment installed on the job should be included in the construction report just as though they had been purchased from an outside firm. The same material or equipment should also be included in total sales on the retail or wholesale schedule. The most common examples are among building-material dealers and lumberyards.

Small shops, showrooms, or stores (such as plumbing shops, electrical shops, tin shops) operated in connection with a special trade, which sell merchandise or repair services and perform work on buildings or other construction should be reported only on one form as a construction, retail, or service establishment, depending upon which activity the largest part of their receipts come from. Most businesses of this kind, when reported on the construction schedule, are classified as special trade contractors.

What the construction census excludes.—Persons or establishments doing construction work with their own forces on structures for their own use or occupancy (force account work) are not to be reported on the construction schedule. Examples are: Persons building or repairing their own homes, farmers building or repairing their own buildings, factories repairing or constructing their own plants, railroads, telephone companies, and other public utilities doing work on their own properties with their own forces.
Government agencies doing work with their own forces on public property are not to be canvassed. However, work performed by contractors on projects paid for with public funds should be reported by the contractor in the same manner as work performed which is paid for with private funds.

Establishments engaged in the sale and servicing of refrigerators, oil burners, gas stoves, electric ranges, and similar appliances where the installation is purely incidental to the sale and accounts for only a small portion of the receipts, are to be reported as retail or wholesale establishments, rather than as construction establishments.

Ship and boat building is a manufacturing operation to be reported on Manufactures Form 1410 and not on the construction schedule.

Drilling and rig building in connection with oil or gas wells will be reported on a mines schedule obtained by mail and should not be canvassed by enumerator except on special instructions.

**INSTRUCTIONS FOR INQUIRIES ON CONSTRUCTION SCHEDULES**

**Use of the two schedule forms.—**There are two construction schedule forms—Form 60 (long form) and Form 61 (short form). All persons or establishments which either received contracts or orders in 1939 or performed work in that year of $25,000 or more will be reported on Form 60. Operative, speculative, and investment builders whose construction work for the year was $25,000 or more should also report on Form 60. Those which received contracts and orders or performed work in 1939 of less than $25,000 will be reported on Form 61 (short form).

Separate reports on Form 60 should be obtained for the home office and each of the branch offices of a concern which has branches, regardless of volume of business. The operation of offices at the site of construction should be included in the report of either the home office or the branch office under which the site office is operated. Separate reports for offices temporarily at the site of construction should not be obtained.

**Description of establishment.—**In the item, “Is the office located in the corporate limits of city, town, or village named above” be sure to answer “yes” or “no.” Do not assume that the street and number will answer this question.

**Kind of business.—**Only one item should be checked under Inquiry 2a. The list of special trade contractors is not complete. Special trade contractors doing more than one type of work should be checked opposite the type which is their principal kind of business. Any other types should be reported under “Other” at the end of the list. Whenever this item is checked the type of contractor must be written in on the lines provided.

In all cases where “highway” or “heavy construction” is checked on Form 60, the principal kinds of work done must be specified. The enumerator should, in all such cases, refer to footnotes 1 and 2 of inquiry 4 where kinds of work for these two types of contractors are listed in detail.

**Contracts or orders received and work sublet (Form 60—inquiry 3).—**The inquiry on contracts received appears only on Form 60 (inquiry 3) and must be answered by every concern doing a business of $25,000 or over. Contractors will report in terms of contract price (not cost) and will include all contracts received in 1939, whether or not actual work has been started or completed before January 1, 1940. Builders will report in terms of the estimated final cost of the project and will include all projects which they started in 1939, including those which were not yet finished before January 1, 1940.

a-1. This should include all contracts or orders (new construction, repairs, etc.) received from anyone other than another contractor or builder during the year 1939. Orders received on a “cost-plus” basis should be included.

a-2. All contracts and orders received from another contractor or operative builder should be reported under this item.

b. **Dollar value of all work sublet by you during 1939.**—Report here the value of all work let out on subcontract to others. The amount reported should include cost of materials and equipment as well as the labor which is furnished by the subcontractor.

c. This item covers contracts and orders for all kinds of construction work on buildings only, and should include new work, installations, and repairs. The total of the amounts reported here would not be the same as that reported in item “a-1” if any contracts were received for highway or heavy construction. It is important that the break-down by types of buildings be obtained. The enumerator will make every effort to secure book figures for this break-down. If book figures are not available he may accept estimates carefully prepared by the reporting concern. In no case is the enumerator to estimate these figures himself. If for any reason a break-down is not obtained, a full explanation must be made under “Remarks.”

**Work performed in 1939.**—This appears as inquiry 4 on Form 60 and as inquiry 3 on Form 61 (short form).

**Both forms.**—This inquiry is to be answered by every concern that furnishes a construction schedule. Report here the dollar value of all work done by the establishment’s own forces in 1939. Cost of material and equipment furnished by the reporting concern should be included. Contractors will report in terms of contract price (not cost) and should include work done in 1939 on projects covered by contracts which were received prior to that year as well as work done in 1939 on contracts received during the year. Work done on projects which were not completed at the close of the year should be included. In such cases the amount reported should be a proportional amount of the contract price, depending on the degree of completion, not on the basis of cost of materials and labor used in 1939. For example: If the contract price on a building is $50,000 and the building is half completed on December 31, 1939, the amount reported would be $25,000, not cost to date.
Speculative or operative builders, investment builders, and occasional builders will report on the basis of actual costs. They will include work done in 1939 on projects started prior to that year as well as that done on projects started in 1939. Work done on projects which were not completed on December 31, 1939, should be included on the basis of cost as of that date.

Cost to contractors or builders of work let out by them to others on subcontracts must not be included since amounts reported under this inquiry represent the value of work performed by the reporting establishment's own forces. For the same reason, materials and equipment furnished by others must not be included.

The break-down on Form 60 is more detailed than that on Form 61. Each item of this inquiry must be answered. If the amount for any item is "zero" enter a "dash" (—) on the proper line. Do not write in "None" or leave any spaces blank. The enumerator will make every effort to secure book figures for this break-down. If book figures are not available he may accept estimates carefully prepared by the reporting concern. In no case is the enumerator to estimate these figures himself. If for any reason a break-down is not obtained, a full explanation must be made under "Remarks."

Form 60 (long form).—The total amount reported in inquiry 4 should not be the same as that reported under inquiry 3, item "a-3" unless:

1. All work which was performed in 1939 was performed on contracts which were both received and totally completed during that year.
2. No work was let out to others under subcontract, and
3. No material or equipment was furnished by anyone other than the contractor or builder.

This is seldom the case with establishments doing a construction business of $25,000 or more in a year.

Footnotes 1 and 2 of this inquiry should be carefully read before reporting heavy construction or highway construction.

Form 61 (short form).—Under item "d" report "Work performed in 1939 by location." The total of amounts reported here should equal the amount reported in "e" above (total work performed). Item "d" on this form corresponds to inquiry 5 on Form 60 (long form).

Materials used, mechanical equipment installed, and merchandise sold in 1939.—This appears as inquiry 6 on Form 60 (long form) and as inquiry 4 on Form 61 (short form).

6a (Form 60) and 4a (Form 61).—It is important that the contractor include here only such materials and equipment as were furnished by him and used on the job during the year 1939. In no case is the contractor to include material or equipment furnished by others. Only that equipment which is built into and becomes a part of the structure is to be included. Revenue equipment which the structure serves to house such as manufacturing or processing machinery in factories or power and generating equipment in power-houses should not be included.

6b (Form 60) and 4b (Form 61).—This inquiry will be used primarily by establishments such as electrical shops, plumbing shops, etc., which sell considerable supplies and material for installation by others, but whose primary receipts are from the installation of their own supplies and equipment with their own forces.

The remaining inquiries on both forms are self-explanatory.
### CENSUS OF BUSINESS: 1939

**DEPARTMENT OF COMMERCE**

**BUREAU OF THE CENSUS**

**WASHINGTON**

**Construction Schedule**

<table>
<thead>
<tr>
<th>Form 61</th>
<th>DEPARTMENT OF COMMERCE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Construction Schedule</strong></td>
<td>BUREAU OF THE CENSUS</td>
</tr>
<tr>
<td><strong>WASHINGTON</strong></td>
<td></td>
</tr>
<tr>
<td><strong>10-39</strong></td>
<td></td>
</tr>
</tbody>
</table>

1. **DESCRIPTION OF ESTABLISHMENT:**
   a. Name of establishment:
   b. Name of owner:
   c. Location of establishment:
   d. Mail address of owner:
   e. Legal form of organization:

2. **KIND OF BUSINESS:**
   a. Specify the kind of business on the basis of the major portion of receipts for the year 1939.
   b. Special trade contractors doing more than one kind of work are to list the several kinds that they do in the order of their relative importance, according to 1939 gross receipts.
   c. If you built or started any residential or other buildings in 1939, give the number of buildings and the value of buildings.
   d. Of the amount reported in a-c above, how much was done under building permit?

3. **WORK PERFORMED IN 1939** (Do not include value of land on which buildings were constructed):
   a. Work performed on buildings:
      - New construction and additions:
      - Repairs and alterations:
   b. Work performed other than on buildings:
   c. TOTAL work performed:
   d. Of the total reported in a-c, how much was:
      - In your own city:
      - In your own State outside of city:
      - In other States (list):
   e. TOTAL of other States:

4. **MATERIALS USED, MECHANICAL EQUIPMENT INSTALLED, AND MERCHANDISE SOLD IN 1939**:
   a. Report the total cost delivered on the job of all materials that you furnished and used in construction (lumber, cement, brick, steel, and all other materials) and of all equipment furnished by you and installed or bought into the structure (plumbing, heating, electrical equipment, and other equipment). Do not include materials and equipment furnished by others.
   b. Report the sales value of all materials, equipment, and merchandise sold by your shop, but not used or installed by you.

5. **PROPRIETORS AND FIRM MEMBERS**:
   a. Number of proprietors and firm members working major portion of their time to the business, whether or not paid a regular salary or regular drawing account (number):

6. **EMPLOYMENT AND PAY ROLL**:
   a. Total pay roll for the year 1939: Salaries, wages, bonuses, and commissions paid to all employed persons.
   b. TOTAL number of all paid employees (full-time and part-time combined) on pay roll for period ended nearest 15th of each month:

### CERTIFICATE

This is to certify that the information contained in this schedule is correct and complete to the best of my knowledge and belief, and that it covers the period from ______ to ______.

[Signature and official title of person certifying the information]

[Name of officer]

[Date of certification]
### CENSUS OF BUSINESS: 1939

#### 3. CONTRACTS OR ORDERS RECEIVED AND WORK SUBLET:

| Type of Contract or Order | Dollar Value of Contracts or Orders (New construction, repairs, etc.) during the year 1939 | From:
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Directly from clients</td>
<td></td>
</tr>
<tr>
<td>Other persons or corpora-</td>
<td>Received by contractors, etc. in the year 1939.</td>
</tr>
<tr>
<td>tions</td>
<td></td>
</tr>
</tbody>
</table>

#### 4. WORK PERFORMED IN 1939

Report the dollar value of all work performed and materials supplied by your organization during the year 1939. Contractors will report in terms of contract prices and actual costs.  

**Table:**

<table>
<thead>
<tr>
<th>Type of Construction</th>
<th>Work Completed During the Year 1939</th>
<th>Price Outlay (Purchasing and erecting, etc.)</th>
<th>Revenue and Maintenance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Private construction</td>
<td>Public construction</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Direct</td>
<td>Indirect</td>
</tr>
</tbody>
</table>

#### 2. KIND OF BUSINESS

- **a.** Specify the kind of business on the basis of the major portion of gross receipts for the year 1939.

#### 5. Legal Form of Organization:

- **Individual proprietorship.**
- **Corporation.**
- **Partnership.**
- **Other (Specify).**

#### 6. Total number of offices or units (exclusive of field offices) owned by this organization in the United States any time during 1939 (including the one for which this report is prepared).

#### 7. Repair and alterations to buildings.

<table>
<thead>
<tr>
<th>Type of Repair or Alteration</th>
<th>Work Completed During the Year 1939</th>
<th>Price Outlay (Purchasing and erecting, etc.)</th>
<th>Revenue and Maintenance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Private construction</td>
<td>Public construction</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Direct</td>
<td>Indirect</td>
</tr>
</tbody>
</table>

**Heavy Construction:** This is for all work regularly done by heavy construction contractors and will include railroad construction projects, heavy construction and railroad bridges, heavy construction agencies and water power, works in connection with public works projects, such as irrigation projects, power projects, reclaiming land, water supply, water power development, hydropower development, transmission lines, pipelines, land drainage projects, power projects, irrigation projects, flood control projects, reclamation projects, public works projects, water works, water-power development, hydraulic power development, transmission lines, pipelines, land drainage projects, and general drainage.

**Highway Construction:** This is for all work regularly done by highway contractors and will include roads, streets, highways, streets, vast engineering, power and telephone lines, water works, highway bridges, docks, establishments involving highways, light construction work, and other similar improvements.
### APPENDIX C.—SCHEDULE FORM 60, Continued

<table>
<thead>
<tr>
<th>12</th>
<th>4</th>
<th>B</th>
<th>24</th>
<th>C</th>
<th>43</th>
<th>14</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. WORK PERFORMED IN 1939 BY LOCATION.</td>
<td>3. Name of State.</td>
<td>1. In which State (list each State separately).</td>
<td>D. MATERIALS USED, MECHANICAL EQUIPMENT INSTALLED, AND MERCHANDISE SOLD.</td>
<td>E. Tie up.</td>
<td>F. Name of City in which this office is located, omitting State.</td>
<td>G. Total of all columns combined, should agree with.</td>
</tr>
<tr>
<td>a. Number of contracts awarded by municipalities, cities, towns, and villages for construction work, in this State.</td>
<td>b. Number of all contracts awarded in this State, in which the work was performed after the date of the last report.</td>
<td>c. Total amount of contracts awarded, in this State, in which the work was performed after the date of the last report.</td>
<td>d. Total amount of all contracts combined, should agree with.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### APPENDIX D.—EXPLANATION OF INQUIRIES APPEARING ON THE CONSTRUCTION SCHEDULES FOR WHICH NO DATA ARE PUBLISHED

The purpose of inquiry 3-c of Form 60 was (1) to collect data from which correlations between value of permits, as gathered by the Department of Labor within certain "permit areas," and value of work performed "on buildings," as gathered in this census, could be established and (2) to develop a method of projecting permit data obtained periodically for "permit areas" in order to estimate the total volume of construction work done "on buildings" in the United States in any given period. The inquiry was not correctly reported in a sufficient number of cases for the accomplishment of this purpose and therefore no data pertaining to the inquiry are presented in this volume. The lack of uniformity in reporting inquiry 7-b, "Salaries for the year 1939 of paid proprietors and firm members," and inquiry 8-c, "Salaries for the year 1939 of executives and salaried corporation officers," precluded the use of this information.

On Form 61 the primary purpose of inquiry 2-c was to assist in the classification of special trade contractors. The data therefore were not tabulated. The lack of uniformity in reporting inquiry 2-d resulted in data too fragmentary for usage.
APPENDIX E.—EXPLANATION OF CLASSIFICATIONS OF SPECIAL TRADE CONTRACTORS

The classifications of “Builders” and “Building contractors” have been described under “Explanation of classifications”, p. 6, while highway and heavy contractors have been described on the same page, with more detailed information in footnotes 1 and 2 of Form 60, Appendix C.

“Explanation of classifications” did not include explanations for individual kinds of special trade contractors. They are therefore presented in this appendix.

Air conditioning with or without sheet metal, heating, plumbing, etc.—Includes contractors whose primary business is air conditioning and who may or may not do sheet metal, heating, plumbing, and other types of construction work in connection with air conditioning business. It does not include persons primarily engaged in heating and plumbing, heating and sheet metal, or other types of construction work who also do, as a secondary part of their business, some air conditioning.

Carpentering.—Includes those engaged in contracting for the carpentering work in connection with any phase of construction. Quite often carpentering contractors engaged in repair work showed a small volume of other types of construction work which was incidental to the carpentry. Such persons or concerns are still considered carpentering contractors.

Concreting.—Includes those primarily engaged in general concrete work. It does not include highway contractors engaged in concrete paving of roads or streets, who are properly classified under “Highway contractors,” nor does it include heavy contractors engaged in pouring concrete on heavy construction, such as heavy foundations, concrete buildings, and floors.

Electrical (other than power transmission lines).—Includes those engaged in electrical wiring and repairs (other than appliances) except heavy contractors engaged in the construction of transmission, power, and telephone lines, who are properly classified under “Heavy contractors.”

Elevator (installation and repair).—Includes those engaged in installation and repair of elevators. Servicing of elevators at stated periods is included as repair.

Excavating and foundation.—Includes those engaged in small excavating and foundation projects who did not describe themselves as heavy contractors. Concerns which reported themselves as heavy contractors engaged in activities such as excavating, grading, foundation, pile driving, and tunneling were classified as “Heavy contractors.”

Excavating and grading.—Includes those engaged in excavating and grading who did not describe themselves as either highway or heavy contractors. Those doing excavating and grading on highways are classified as “Highway contractors,” and those reporting themselves as “Heavy” are classified as such.

Flooring (wood only).—Includes those who are engaged in laying wood flooring only. This type of contractor also surfaces and finishes the new flooring. It does not include those engaged in laying both wood floors and other types of floors such as linoleum, asphalt flooring, cork flooring, rubber tiling, etc., who are properly classified as “Flooring (wood and other).”

Flooring (wood and other).—Includes those engaged in laying both wood and other types of flooring. Flooring contractors usually do their own surfacing and finishing and may also do some refinishing and resurfacing.

Flooring (surfacing and resurfacing).—Includes contractors engaged in surfacing, resurfacing, finishing, and refinishing floors of any type, but does not include contractors engaged in the laying of any type of flooring, who are properly classified as “Flooring (wood only)” or “Flooring (wood and other).”

Heating and piping.—Includes those engaged in installation of heating plants and piping done in connection with building construction. Highway and heavy contractors laying sewer, water, gas, and pipe lines are not included but are classified “Highway” or “Heavy” as indicated on their reports.

Heating and piping, with sheet metal.—Includes those engaged in heating and piping and sheet-metal work who may or may not also do some air conditioning.

Heating, piping, and plumbing.—Self-explanatory.

Heating, piping, and plumbing, with sheet metal.—Includes those doing heating, piping, plumbing, and sheet-metal work, who may or may not also do some air conditioning.

Plumbing.—Includes those engaged solely in plumbing.

Plumbing with sheet metal.—Includes those engaged in both plumbing and sheet-metal work.

Insulation.—Includes those engaged in insulation of buildings. It also includes those whose primary activity is insulation but who also do, in connection with that work, weather stripping, air conditioning, and caulking. It does not include those engaged in insulation of pipes, which are properly classified under “Other.”

Lathing.—Includes those engaged in lathing only, of any type or types, including metal and composition board.

Lathing and plastering.—Includes those primarily engaged in both lathing and plastering.
Plastering.—Includes those engaged in plastering only.

Ornamental iron.—Includes those engaged in installation and repair of ornamental iron, such as fire escapes, iron rails, steps, etc.

Painting.—Includes those engaged in painting only, both on new structures and in connection with the repair and maintenance of old structures.

Painting, paperhanging, and decorating.—Includes those engaged in both painting and paperhanging or in painting, paperhanging, and decorating (new and repair). Sign painters are not included in the construction industry.

Roofing.—Includes those who are engaged in roofing only.

Roofing and sheet metal.—Includes those engaged in both roofing and sheet-metal work and who may do some air conditioning.

Sheet metal.—Includes those doing sheet-metal work, who may or may not also do some air conditioning, but no roofing. Sheet-metal shops where the work is done in the shop rather than at the sites of construction are not included in the Construction Census.

Masonry.—Includes those engaged in either brick or stone masonry, or both.

Tile and mantel.—Includes those engaged in tile setting and in mantel work, including hard tile floors. It does not include those engaged in setting rubber and other resilient forms of tile floors, who are properly classified under “Flooring (wood and other)”.

Steel erection and repair.—Self-explanatory.

Weather stripping.—Includes those engaged primarily in weather stripping, who may also do other work such as caulking or insulation.

Glass and glazing.—Includes those engaged in installation of glass at sites of construction; excludes establishments which are primarily glass stores and those engaged in installation of auto glass.

Wrecking and demolition.—Self-explanatory.

House moving.—Self-explanatory.

Other.—This classification includes two groups of special trade establishments: (1) Those engaged in any types of construction which are not described above and (2) those which did not give sufficient descriptions of their activities so that they might be properly classified.