SECTION E

Nonfarm Residential Construction

Tables E 1–6 summarize National Bureau estimates, prepared by methods described in Chapter V. Detailed descriptions of the processes, together with discussions concerning the nature and limitations of the data and the methods of handling, are in the text and footnotes of Part Two that describe methods of estimating construction, referred to above. Table E 7 was derived from Bureau of Labor Statistics building permit data, as part of the process of estimating value of residential construction (see Ch. V).
**TABLE E 1**

Dwelling Units Built by Type, Class of City, and Geographic Division, 1920-1936 (thousands of units)

<table>
<thead>
<tr>
<th>Year</th>
<th>1920</th>
<th>1921</th>
<th>1922</th>
<th>1923</th>
<th>1924</th>
<th>1925</th>
<th>1926</th>
<th>1927</th>
<th>1928</th>
<th>1929</th>
<th>1930</th>
<th>1931</th>
<th>1932</th>
<th>1933</th>
<th>1934</th>
<th>1935</th>
<th>1936</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>247</td>
<td>449</td>
<td>716</td>
<td>871</td>
<td>928</td>
<td>956</td>
<td>984</td>
<td>910</td>
<td>873</td>
<td>759</td>
<td>609</td>
<td>506</td>
<td>426</td>
<td>374</td>
<td>334</td>
<td>286</td>
<td>212</td>
</tr>
</tbody>
</table>

**A Type of Dwelling**

1. Total
2. Other
3. Nonfarm
4. Farm

<table>
<thead>
<tr>
<th>Type of Dwelling</th>
<th>1920</th>
<th>1921</th>
<th>1922</th>
<th>1923</th>
<th>1924</th>
<th>1925</th>
<th>1926</th>
<th>1927</th>
<th>1928</th>
<th>1929</th>
<th>1930</th>
<th>1931</th>
<th>1932</th>
<th>1933</th>
<th>1934</th>
<th>1935</th>
<th>1936</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>247</td>
<td>449</td>
<td>716</td>
<td>871</td>
<td>928</td>
<td>956</td>
<td>984</td>
<td>910</td>
<td>873</td>
<td>759</td>
<td>609</td>
<td>506</td>
<td>426</td>
<td>374</td>
<td>334</td>
<td>286</td>
<td>212</td>
</tr>
</tbody>
</table>

**B Class of City**

1. 150 central cities
2. 200 central cities
3. 250 central cities
4. 500 central cities
5. 1,000 central cities
6. 2,000 central cities
7. 5,000 central cities
8. 10,000 central cities
9. 25,000 central cities

<table>
<thead>
<tr>
<th>Class of City</th>
<th>1920</th>
<th>1921</th>
<th>1922</th>
<th>1923</th>
<th>1924</th>
<th>1925</th>
<th>1926</th>
<th>1927</th>
<th>1928</th>
<th>1929</th>
<th>1930</th>
<th>1931</th>
<th>1932</th>
<th>1933</th>
<th>1934</th>
<th>1935</th>
<th>1936</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>247</td>
<td>449</td>
<td>716</td>
<td>871</td>
<td>928</td>
<td>956</td>
<td>984</td>
<td>910</td>
<td>873</td>
<td>759</td>
<td>609</td>
<td>506</td>
<td>426</td>
<td>374</td>
<td>334</td>
<td>286</td>
<td>212</td>
</tr>
</tbody>
</table>

**C Geographic Division**

1. Mid. Atlantic
2. N. Central
3. S. Central
4. Western
5. Mountain
6. Pacific

<table>
<thead>
<tr>
<th>Geographic Division</th>
<th>1920</th>
<th>1921</th>
<th>1922</th>
<th>1923</th>
<th>1924</th>
<th>1925</th>
<th>1926</th>
<th>1927</th>
<th>1928</th>
<th>1929</th>
<th>1930</th>
<th>1931</th>
<th>1932</th>
<th>1933</th>
<th>1934</th>
<th>1935</th>
<th>1936</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>247</td>
<td>449</td>
<td>716</td>
<td>871</td>
<td>928</td>
<td>956</td>
<td>984</td>
<td>910</td>
<td>873</td>
<td>759</td>
<td>609</td>
<td>506</td>
<td>426</td>
<td>374</td>
<td>334</td>
<td>286</td>
<td>212</td>
</tr>
</tbody>
</table>

**TABLE E 2**

Aggregate Value of Residential Construction by Class of City, 1920-1936 (millions of dollars)

<table>
<thead>
<tr>
<th>Year</th>
<th>1920</th>
<th>1921</th>
<th>1922</th>
<th>1923</th>
<th>1924</th>
<th>1925</th>
<th>1926</th>
<th>1927</th>
<th>1928</th>
<th>1929</th>
<th>1930</th>
<th>1931</th>
<th>1932</th>
<th>1933</th>
<th>1934</th>
<th>1935</th>
<th>1936</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total New Residential</td>
<td>1,122</td>
<td>1,841</td>
<td>3,115</td>
<td>3,980</td>
<td>4,444</td>
<td>4,754</td>
<td>4,314</td>
<td>4,064</td>
<td>3,613</td>
<td>2,625</td>
<td>1,456</td>
<td>1,005</td>
<td>204</td>
<td>214</td>
<td>585</td>
<td>1,008</td>
<td></td>
</tr>
</tbody>
</table>

**TABLE E 3**

Dwelling Units Built, Number and Percentage Distribution by Type and Period, 1920-1936

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>3,176</td>
<td>3,669</td>
<td>3,107</td>
<td>3,142</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>1-family</td>
<td>2,000</td>
<td>2,270</td>
<td>795</td>
<td>5,087</td>
<td>63.0</td>
<td>58.6</td>
<td>71.8</td>
<td>68.2</td>
</tr>
<tr>
<td>2-family</td>
<td>569</td>
<td>502</td>
<td>62</td>
<td>1,172</td>
<td>18.5</td>
<td>15.0</td>
<td>7.4</td>
<td>14.4</td>
</tr>
<tr>
<td>Apartments</td>
<td>588</td>
<td>1,087</td>
<td>239</td>
<td>1,903</td>
<td>18.5</td>
<td>28.2</td>
<td>25.4</td>
<td></td>
</tr>
</tbody>
</table>
### TABLE E 4

**Dwelling Units Built, Number, Aggregate Value, and Percentage Distribution, by Class of City and Period, 1920-1936**

<table>
<thead>
<tr>
<th>Period</th>
<th>120 Central cities</th>
<th>Environ</th>
<th>Other urban</th>
<th>Rural nonfarm¹</th>
<th>Total nonfarm²</th>
</tr>
</thead>
<tbody>
<tr>
<td>1920-29</td>
<td>3,102</td>
<td>1,867</td>
<td>1,264</td>
<td>802</td>
<td>7,035</td>
</tr>
<tr>
<td>Number of units (thousands)</td>
<td>44.1</td>
<td>26.5</td>
<td>18.0</td>
<td>11.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Aggregate value (millions of dollars)</td>
<td>15,780</td>
<td>10,077</td>
<td>4,457</td>
<td>1,876</td>
<td>32,199</td>
</tr>
<tr>
<td>Percentage distribution</td>
<td>48.0</td>
<td>51.3</td>
<td>13.9</td>
<td>5.8</td>
<td>100.0</td>
</tr>
<tr>
<td>1930-36</td>
<td>1,975</td>
<td>41.0</td>
<td>812</td>
<td>375</td>
<td>4,819²</td>
</tr>
<tr>
<td>Number of units (thousands)</td>
<td>55.0</td>
<td>22.6</td>
<td>15.6</td>
<td></td>
<td>100.0</td>
</tr>
<tr>
<td>Aggregate value (millions of dollars)</td>
<td>1,107</td>
<td>1,245</td>
<td>18.5</td>
<td>7.5</td>
<td>100.0</td>
</tr>
</tbody>
</table>

¹Excludes rural towns and villages (under 2,500) and unincorporated areas in environs of metropolitan districts considered as urban.

²Housekeeping units only.

### TABLE E 5

**Dwelling Units Built, Number and Percentage Distribution by Geographic Division and Period, 1920-1936**

<table>
<thead>
<tr>
<th>Geographic Division</th>
<th>1920-29</th>
<th>1930-36</th>
<th>1920-36</th>
<th>1920-29</th>
<th>1930-36</th>
<th>1920-36</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>7,035</td>
<td>1,107</td>
<td>8,142</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>New England</td>
<td>388</td>
<td>55</td>
<td>443</td>
<td>5.5</td>
<td>5.0</td>
<td>5.4</td>
</tr>
<tr>
<td>Mid. Atlantic</td>
<td>1,227</td>
<td>305</td>
<td>2,332</td>
<td>27.4</td>
<td>27.6</td>
<td>27.4</td>
</tr>
<tr>
<td>E. N. Central</td>
<td>1,456</td>
<td>152</td>
<td>1,608</td>
<td>20.7</td>
<td>11.0</td>
<td>19.4</td>
</tr>
<tr>
<td>W. N. Central</td>
<td>429</td>
<td>67</td>
<td>496</td>
<td>5.8</td>
<td>6.1</td>
<td>5.8</td>
</tr>
<tr>
<td>S. Atlantic</td>
<td>808</td>
<td>163</td>
<td>971</td>
<td>11.5</td>
<td>10.6</td>
<td>12.2</td>
</tr>
<tr>
<td>E. S. Central</td>
<td>320</td>
<td>51</td>
<td>371</td>
<td>4.5</td>
<td>4.5</td>
<td>4.8</td>
</tr>
<tr>
<td>W. S. Central</td>
<td>590</td>
<td>130</td>
<td>720</td>
<td>8.4</td>
<td>11.7</td>
<td>8.6</td>
</tr>
<tr>
<td>Mountain</td>
<td>144</td>
<td>27</td>
<td>171</td>
<td>5.0</td>
<td>5.4</td>
<td>2.1</td>
</tr>
<tr>
<td>Pacific</td>
<td>973</td>
<td>167</td>
<td>1,140</td>
<td>15.8</td>
<td>15.1</td>
<td>14.0</td>
</tr>
</tbody>
</table>

### TABLE E 6

**Increase in Number of Families and Dwelling Units Built by Decades, 1890-1929 (thousands)**

<table>
<thead>
<tr>
<th>Period</th>
<th>1890-99</th>
<th>1900-09</th>
<th>1910-19</th>
<th>1920-29</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase in number of nonfarm families</td>
<td>2,262</td>
<td>3,445</td>
<td>4,109</td>
<td>5,541</td>
</tr>
<tr>
<td>Number of new nonfarm dwelling units built</td>
<td>2,417</td>
<td>3,052</td>
<td>3,890</td>
<td>7,035</td>
</tr>
</tbody>
</table>
## TABLE E 7

**I-Family Dwellings for which Building Permits were Issued, Average Cost (dollars) in 257 Cities by Geographic Division and Class of City, 1920-1936**

<table>
<thead>
<tr>
<th>Year</th>
<th>1920</th>
<th>1921</th>
<th>1922</th>
<th>1924</th>
<th>1925</th>
<th>1929</th>
<th>1930</th>
<th>1931</th>
<th>1932</th>
<th>1933</th>
<th>1934</th>
<th>1935</th>
<th>1936</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>113 Central cities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(113)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Mid. Atlantic</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13 New England (15)</td>
<td>4,800</td>
<td>4,800</td>
<td>4,800</td>
<td>4,800</td>
<td>4,800</td>
<td>4,800</td>
<td>4,800</td>
<td>4,800</td>
<td>4,800</td>
<td>4,800</td>
<td>4,800</td>
<td>4,800</td>
<td>4,800</td>
</tr>
<tr>
<td>19 Mid. Atlantic (15)</td>
<td>4,800</td>
<td>4,800</td>
<td>4,800</td>
<td>4,800</td>
<td>4,800</td>
<td>4,800</td>
<td>4,800</td>
<td>4,800</td>
<td>4,800</td>
<td>4,800</td>
<td>4,800</td>
<td>4,800</td>
<td>4,800</td>
</tr>
<tr>
<td>21 E. N. Central (6)</td>
<td>3,800</td>
<td>3,800</td>
<td>3,800</td>
<td>3,800</td>
<td>3,800</td>
<td>3,800</td>
<td>3,800</td>
<td>3,800</td>
<td>3,800</td>
<td>3,800</td>
<td>3,800</td>
<td>3,800</td>
<td>3,800</td>
</tr>
<tr>
<td>23 South Atlantic (12)</td>
<td>4,800</td>
<td>4,800</td>
<td>4,800</td>
<td>4,800</td>
<td>4,800</td>
<td>4,800</td>
<td>4,800</td>
<td>4,800</td>
<td>4,800</td>
<td>4,800</td>
<td>4,800</td>
<td>4,800</td>
<td>4,800</td>
</tr>
<tr>
<td>25 S. Central (8)</td>
<td>3,800</td>
<td>3,800</td>
<td>3,800</td>
<td>3,800</td>
<td>3,800</td>
<td>3,800</td>
<td>3,800</td>
<td>3,800</td>
<td>3,800</td>
<td>3,800</td>
<td>3,800</td>
<td>3,800</td>
<td>3,800</td>
</tr>
<tr>
<td>27 West Central (2)</td>
<td>3,800</td>
<td>3,800</td>
<td>3,800</td>
<td>3,800</td>
<td>3,800</td>
<td>3,800</td>
<td>3,800</td>
<td>3,800</td>
<td>3,800</td>
<td>3,800</td>
<td>3,800</td>
<td>3,800</td>
<td>3,800</td>
</tr>
<tr>
<td>29 Mountain (1)</td>
<td>3,800</td>
<td>3,800</td>
<td>3,800</td>
<td>3,800</td>
<td>3,800</td>
<td>3,800</td>
<td>3,800</td>
<td>3,800</td>
<td>3,800</td>
<td>3,800</td>
<td>3,800</td>
<td>3,800</td>
<td>3,800</td>
</tr>
</tbody>
</table>

**Satellite cities**

<table>
<thead>
<tr>
<th>City</th>
<th>Year</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>36 Satellite cities</td>
<td>4,800</td>
<td>4,800</td>
</tr>
</tbody>
</table>

**1937 Other urban**

<table>
<thead>
<tr>
<th>City</th>
<th>Year</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>36 Satellite cities</td>
<td>4,800</td>
<td>4,800</td>
</tr>
</tbody>
</table>

**257 cities**

<table>
<thead>
<tr>
<th>City</th>
<th>Year</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>4,800</td>
<td>4,800</td>
<td></td>
</tr>
</tbody>
</table>

**Source of basic data:** Bureau of Labor Statistics

*Figures in parentheses represent number of cities for which building permit data were reported in designated year.

*Excludes for 1920-21 as noted.

*Since these averages incorporate separate systems of basic data, they agree with data previously published for 257 cities in 1920-22 and 1923-36 alone; see Statistics of Building Construction (Bureau of Labor Statistics Bulletin 685, 1936), p. 8.*
Annexations, 45

Banks
   number reporting by population groups, 13-4, 65

Building activity, 11
   rate, 43

Building permits, 41-3, 51-3, 66-7

Census, Bureau of the, 15, 42, 45
   Census of Population, 15, 18

CHAWNER, L. J., 59-61

Construction
   method of estimating, 41-61
   nonfarm residential, 10-1
   stages of estimates, 41

Contracts awarded
   F. W. Dodge Corporation, 53, 55-61, 66-7

Coverage, 15-6

Credit, 7-10

Debt, see mortgage debt

Definitions
   dwelling unit (dwellings), 1, 19, 56
   rent, 18-9
   residential, 1
   tenure, 18
   value, 18

Delinquencies, 5-7

Dodge, F. W. Corporation
   contracts awarded, 53, 55-61, 66-7

Dwelling units (dwellings)
   defined, 1, 19, 56
   number built, value, 11, 47-50
   occupied, vacant, 23
   ratio of units built to increase in families, 44, 46-7

Estimates
   construction, 41-61
   limitations, 56
   value
      details, 20-8, 28-32
      major steps necessary, 19, 28

Families
   quasi, 45
   farm, nonfarm, total, 1-2, 54-5
   use in estimating construction, 43-5

Farm and Village Housing, 53

Financial Survey of Urban Housing, 15

Financing, 39-41
   interest rates, 10

Index

lending agencies, 9
   nonfarm residential, 7-10
   term of loan, 10

Geological Survey, U. S.
   building permits, 46, 67

HALLAUER, F. J., 43, 45

HOLDEN, ARTHUR, 41

Housing costs
   contrast by regions, 3-5

Income, 37-9
   comparison by years, 6-7
   in relation to rent and value, 5-7
   limitation of data, 38
   method of enumeration, 38

Interest rates, 10

Labor Statistics, Bureau of
   building permits, 41, 43, 45

Lending agencies, 9

Mayor's Planning Committee, 41

Methods
   estimate of
      aggregate value, 1930 and 1934, 11-4
      construction, 41-61
   presentation, 15-6

Metropolitan districts
   overlapping, 44

Mid-point
   use, displacement, correction, 30-1, 33-4

Mortgage debt, 8
   by tenure, lending agency, 9

Mortgaged properties
   by tenure by debt-value ratios, 8-9

National wealth, 1

New York Building Congress, 41

New York City Tenement House Department, 46, 67

Permits, see Building permits

Philadelphia Housing Association, 55

Ratios
   dwelling units built to increase in number of families, 47
   mid-point correction factor, 30-1, 34
   nonfarm families to total families, 27
   vacancy factor, 23-4

299
vacancy value correction factor, 32
value-rent, 32, 35–7
Real estate
aspects considered, 1
economic significance, 1–11
kinds, 2–3, 12
rent, 4–6
value, 1–3
estimates of aggregate, 11–4
farm, nonfarm, total, 2
Real Property Inventory, Federal, 15
Rent, 18–37
average per month by population group, 4–5
contrast by regions, 5
defined, 18–9
delinquency, 64
differentials by type of dwelling, 34
in relation to value and income, 5–7
Representation, 15
Residential
defined, 1
RIGGLEMAN, J. R., 55
ROWLANDS, D. T., 64
Sources, 15, 37
limitations of data, 16, 38

STONE, PETER A., 59

Tax assessors, 12, 65
number reporting by population groups, 12
TAYLOR, JAMES, 46
Tenure
defined, 18
not reported, 21, 24
TERBORGH, GEORGE, 43
Term of loan, 10

Vacant units, 19–20, 22–6, 43–4, 55, 67
Value, 18–37
assessed, 65
assessed compared to market, 14, 65
average per dwelling unit by population group, 4
defined, 18
estimates of aggregate, 11–4
in relation to income and rent, 5–7
market, 16–8, 65
real estate, 1–3
farm, nonfarm, total, 2

Weighting, 16