

Section S: Construction and Housing

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The statistics in this section are arranged in five subsections. The first subsection (series S1-64) contains summary statistics for construction by type and by region. It also contains general statistics of the construction industry. The second subsection (series S65-166) contains statistics for non-residential construction by the sector 'purchasing' the construction. The third subsection (series S167-219) covers residential construction, the fourth (series S220-246) the housing stock and the fifth (series S247-335) mortgage funding. A major difference between this section and the similar section in the first edition of *Historical Statistics of Canada* is the elimination of most of the series on repair construction detail. On the other hand, a large number of series have been added. These include the series on mortgage funding and housing unit costs.

A substantial amount of the data in this section was obtained directly from the producing agency. In some cases the series do not appear in any publication. In other cases the series available in published sources are obsolete because of data revision and reclassification. The sources of the data in this section are given below.

Statistics Canada publications: *Private and Public Investment in Canada, Outlook*, (Catalogue 61-205); *Private and Public Investment in Canada, Outlook, Mid-Year Review*, (Catalogue 61-206); *Construction in Canada*, (Catalogue 64-201); *Building Permits*, (Catalogue 64-203); *National Income and Expenditure Accounts, 1926-1974*, (Catalogue 13-531) and subsequent annual issues, (Catalogue 13-201); *Housing Starts and Completions*, (Catalogue 64-002); *Fixed Capital Flows and Stocks in Manufacturing*, (Catalogue 13-522); *Fixed Capital Flows and Stocks*, (Catalogue 13-211).

Summary Statistics of Construction (Series S1-64)

General note

Virtually every series in this section and the next has to do with non-residential construction. There are three major sources of these data. One of these, the building permits survey, gives the value of building construction and some engineering construction at a point in time usually slightly before construction starts. Currently its geographic coverage is very good because almost all municipalities require building permits. A second source, the industry censuses, survey producers of construction output and have varied greatly in coverage. Further information on these two sources is given in notes to individual tables.

The most important of the three major sources used in this section is the capital expenditure survey. Information about this survey was obtained from *Private and Public Investment, Mid-Year Review, 1977*, *Construction in Canada*, *Private and Public Investment in Canada*, a xeroxed paper written in 1973 and from the staff of the Capital Expenditure Section, Construction Division, Statistics Canada. Unless otherwise indicated, references to estimation procedures used by this survey refer to those used in 1973.

The capital expenditure survey gathers information on investment in machinery and equipment and in construction, and information on repair expenditure. It is a survey of the purchasers of construction and other capital goods rather than of suppliers and its values relate to a later point in time than building permit values. Currently over 24,000 establishments are surveyed, compared with about 16,000 in the 1950s; these include institutions and governments as well as businesses. This survey is not a random sample survey. Instead, generally the aim is to get complete coverage of all establishments with sales greater than a certain cut-off amount. This cut off varies by industry, by province and over time. It was typically \$500,000 in the mid-1970s and \$200,000 in the early years of the survey.

Estimation of total construction for an industry is typically done in two stages. First, construction from the survey is divided into two categories. For manufacturing, for instance, the first category is construction purchased by ongoing establishments. The second category, called 'net additions', is roughly construction creating a new establishment. The first category is then grossed up to get an estimate for the universe of ongoing establishments. Grossing thus accomplishes coverage of non-surveyed and non-responding establishments; it is done using related series.

It can be seen that a problem for this survey is capturing construction which creates a new establishment, especially if the new establishment is also a new firm. A new firm may not be noticed until construction is well under way or has been completed. This is a problem of identifying the universe, not a sampling problem. Another problem for the survey is the grossing factor. An alternative grossing factor might be the ratio of the change in shipments in the industry, exclusive of 'net additions' establishments, to the change in shipments in the sample used for grossing. These difficulties should not be exaggerated, however, since it is estimated that survey coverage (the total in both categories before grossing) is about 90 per cent.

Construction is divided into new and repair. Conceptually new construction is construction having a life of more than one year. Thus, additions are included as well as entirely new buildings and engineering structures. Construction cost encompasses all overhead costs such as administrative, architectural, legal and engineering costs. It includes land improvement costs, so that land servicing as well as site preparation costs are covered. It also includes the cost of installed equipment such as elevators, heating systems and air conditioning. The construction may be carried out under contract or by the 'purchaser's' own labour force.

Construction does not include the purchase of existing buildings or land. Because land is excluded, 'new construction' understates substantially the non-equipment portion of investment by particular industries. Of course, industry investment will also be further understated when a firm purchases existing buildings from a firm in another industry. The use of rented buildings is attributed to the firm owning the building, not the firm renting the building. Thus a large part of all retail and office space and a small amount of industrial space is classified under 'other finance'. An exception to this is stores built under leaseback for some food chains; this construction is included under retail trade.

Repair construction is construction undertaken to maintain the operating efficiency of existing structures for the original life intended. Routine maintenance such as char service, sanding and snow removal is excluded.

There is some possibility that reported new construction excludes some activity which is conceptually included. Establishments report new construction under the heading 'capital' construction expenditure, and some may on occasion report only the construction costs they capitalize. This implies that the repair expenditure category contains some renovations and improvements which conceptually belong in the 'new' category. Accounting problems make it difficult to identify and report properly new construction, especially where the distinction between engineering work and machinery is a problem (e.g. petroleum refineries), and where categories of account, (as in government departments and institutions), are arranged in a format which does not allow an easy adaptation to the reporting categories of the survey.

Conceptually, the time basis for the capital expenditure survey construction data is work put in place. Because costs are often recorded on a cash flow basis, however, the reported data may lag behind the work put in place. The length of this lag is unknown. Respondents report expenditures, so that the lags may be very short if progress payments are frequent. It is also true that respondents are explicitly asked to report the value of holdbacks attributable to construction work done in the period concerned. Some holdbacks, however, are improperly reported for the period the payment is made, not for the period the work takes place. It is not known how important this problem is. Obviously it is potentially more important the longer the construction time of a project.

The capital expenditure survey was not started until 1941, and was carried out only in a limited way until 1946. Estimates of construction from 1926 to 1941 were first published in *Public Investment and Capital Formation, A Study of Public and Private Investment Outlay, Canada, 1926-1941*, Ottawa, 1945, (referred to as PICF). Total building construction was estimated by estimating the flow of building materials and then applying to this a ratio of the value of building construction to materials used. Ratios were available for several years in this period from censuses of construction. The breakdown into new and repair employed ratios from the same source. Building construction for some user categories was estimated directly. The residual included such categories as manufacturing, finance, universities. Virtually all engineering construction was covered by direct estimation.

The estimates in PICF, prepared under the direction of O.J. Firestone and M.C. Urquhart, were later replaced by estimates prepared under the direction of O.J. Firestone and appearing in *Private and Public Investment in Canada, 1926-1951*, Ottawa, 1951, (referred to as PPI). A major change was direct estimation for the manufacturing, construction, trade, finance (excluding banks) and commercial services sectors, using a sample of income tax returns of corporations. Further information on the PICF and PPI, including an assessment of the differences, is available in Kenneth Buckley's note for this section in the previous edition of *Historical Statistics of Canada*. Information here on PICF and PPI is drawn from that note.

For the years 1956 to 1976, the figures for non-residential construction by purchasing category are taken directly from CANSIM. Many of the figures in earlier years are different from those in any publication. When the series were prepared for CANSIM, in 1976 and 1977, great effort was spent on regrouping, etc. to get series continued back to 1956 on a consistent format. (The basic documentation exists allowing this to be continued back to 1952, but no earlier.) A major problem for this work was the change in the SIC about 1960. It is important to note that while the series are consistent back to 1956 in the sense of the sectors each series conceptually contains, they are not statistically consistent. The new SIC used a more all-inclusive definition of the establishment (see the general note to Section R, Manufactures).

For the period 1946 to 1955, the series are taken from *Private and Public Investment in Canada, 1946-1957*, PPI, 1946-57. Estimates in this source are given at the Canada level only. It must be pointed out that when series were being prepared for CANSIM by province, it was not found possible to generate series which aggregated to the Canada totals given in this publication. Consequently, the Construction Division no longer uses PPI, 1946-57. The disaggregation problems encountered by the Construction Division arose from the use for PPI, 1946-57 of adjustment procedures applied directly to Canada-level numbers rather than to disaggregates. Unfortunately, the unavailability of documentation does not allow this hypothesis to be checked. In view of the fact that PPI, 1946-57 incorporates numerous revisions to the original series and was used for the previous edition of *Historical Statistics of Canada*, it was decided to use it rather than the annual outlook publications published for those years.

S1-7. New and repair construction expenditures, in current and constant dollars, 1926 to 1976

SOURCE: Series S1-3, for 1926 to 1955, the previous edition of *Historical Statistics of Canada*, series R1-3; series S1-3, for 1956 to 1976, CANSIM Matrix No. 001190; series S4-7, see text following.

For concepts and procedures see the general note.

S1 is the series as produced by the Construction Division plus (S180 - S179 + S181 - S9); this adjustment was done to make series S1 consistent with residential construction as it appears in the National Accounts.

Unfortunately, constant dollar series corresponding to series S1-3 are not available for the entire period 1926 to 1976, because of revisions to series S1-3. Constant dollar series corresponding to recent current dollar values for series S1 are available in *Private and Public Investment in Canada, Mid-Year Review, 1977*, table 21, and earlier editions of the same publication. Series S4-7 was produced especially for this volume as follows. Series S4 is residential construction (S180 - S179 + S181) deflated using the GNP residential construction deflator plus non-residential construction (S1 - (S180 - S179 + S181)) deflated using the GNP non-residential construction deflator. The deflators are from *National Income and Expenditure Accounts*, (Catalogues 13-531 and 13-201). Series S7 is S1 divided by S4. Series S5 is S2 divided by S7. Series S6 is S4 plus S5.

S8. Estimates of total new and repair construction, 1896 to 1930

SOURCE: Buckley, *Capital Formation in Canada*, 1896 to 1930, p. 128. The basic estimation procedure used for these estimates was similar to that used in PICF. First the annual flow of construction materials to construction uses was estimated. From this the total value of construction was estimated on the basis of data on the relation of the material component to the labour component and overhead and profit. The relation of material component to labour was the subject of substantial investigation. For 1896 to 1920 it was assumed that the ratio of materials to labour was constant, but for 1921 to 1930 this ratio of real inputs was varied. For the whole period it was assumed that overhead and profit was 14.3 per cent of the total value of construction.

S9-22. Total value of new construction work performed, by principle type of construction, 1926 to 1976

SOURCE: for 1926 to 1950, the previous edition of *Historical Statistics of Canada*, for 1951 to 1976, *Construction in Canada*, table 6.

See the general note to this section for a description of concepts and procedures. Much more detail on type of structure than is given here is available in the source document. For instance under commercial are listed eight categories: office buildings; stores, retail and wholesale; theatres, arenas, amusement and recreational buildings; hotels, clubs, restaurants, cafeterias, tourist cabins; warehouses, storehouses, refrigerated storage, etc.; garages and service stations; laundries and dry cleaning establishments.

Conceptually, series S1 and S22 are the same. They are in fact different because statistical revisions in the residential and agriculture components made for the years 1961 and earlier are incorporated in series S1 but not in S18 (or the relevant component series in this table).

S23-28. Total value of new construction work performed, by region and by major type, 1951 to 1976

SOURCE: *Construction in Canada*.

See the general note to this section for a description of concepts and procedures.

S29-58. Building permits issued, by region and major type, 1951 to 1976

SOURCE: Mr. J.P. Delisle, Housing and Building Permits Section, Construction Division. Current data are published in *Building Permits, Annual Summary*.

Almost all municipalities require a building permit to be taken out for a new building or for alterations and additions to an existing building. Statistics Canada has been collecting data on permits issued for many years and detail is available on a variable basis in bulletins beginning in 1922. Over the last two decades great efforts have been put forth to expand coverage, so that 1,900 municipalities were covered in 1977. Unfortunately, however, series on a consistent coverage basis, and with the region and type of detail shown here, are not available. There are, however, just two instances where substantial breaks occur because of coverage increases: 1957-58 and 1962-63. Coverage in some census years is given in the following table.

Building permits, geographic coverage

<u>Year</u>	<u>Canada</u>	<u>Atlantic provinces</u>	<u>Quebec</u>	<u>Ontario</u>	<u>Prairie provinces</u>	<u>British Columbia</u> ¹
(Per cent of population covered)						
1976	86	74	82	94	74	93
1971	82	52	79	93	73	91
1961	68	37	67	81	61	77
1951	57	34	51	72	45	73
(Number of municipalities covered)						
1976	1,875	302	562	497	402	112
1971	1,445	102	325	527	381	110
1961	1,003	71	217	324	271	120
1951	439	35	70	177	75	82

¹ Includes Yukon Territory and Northwest Territories.

The percentage coverage of buildings erected in the intended universe is probably much greater than the percentage population coverage, because municipalities with substantial building activity are more apt to have well-organized building departments than those where building is quiescent.

Not all types of construction are covered by building permits. The biggest gap is non-building (i.e. engineering) construction. Some types of buildings also frequently do not require building permits, most notably municipal and local school buildings. Some types of construction may legally require a permit but may often - perhaps even ordinarily - proceed without a permit. This is the case with alterations and additions. According to a survey of Kenneth Buckley, in Saskatoon for 1941 to 1951 only 20 to 25 per cent of residential conversions were covered by a permit, (see *Historical Statistics of Canada*, previous edition, p. 500). It is the writer's impression that even in the city of Toronto, where enforcement of building regulations might be expected to be better than in smaller cities, a very large percentage of alteration jobs are not covered by a permit.

The values of buildings for which permits are taken out are understated. An incentive for understatement exists because the cost of a building permit generally depends on the estimated cost of the work. Comparisons by Mr. J.P. Delisle of the Construction Division of costs given in National Housing Act applications in the early 1970s with permit costs of the same buildings indicated that the permit values of single detached dwellings averaged 87 per cent of the actual value of construction and for multiple unit residential buildings, just 80 per cent.

The building permit series make no adjustment for permits which are allowed to lapse. The importance of lapses is not known but is generally thought to be unimportant. A very large number of apartment buildings covered by permits in the Toronto area in late 1973, however, had no visible work started as late as early 1975. The permits for many of these buildings were probably renewed and the buildings ultimately started, but permits as an indicator of starts were obviously very defective in 1973. This particular problem was presumably caused by the tightness in financial markets in early 1974 and the escalation of construction costs in 1973 and 1974, so that it is plausible that permits are only defective indicators on rare occasions. The views of some Toronto area building officials substantiate this.

The building permit series provide quite similar information to the Canadata (formerly Southam, and earlier, Maclean) contract award series. Some contract award series were given in the previous edition of *Historical Statistics of Canada*; unfortunately, however contract award data are no longer available free of charge. The timing of the contract award series is generally somewhat different from that of the permit series, because contracts are awarded before permits are taken out. In some cases, however, the Canadata series is apparently essentially a permit series. This is probably the case for most residential building. For apartments the Canadata contract series reflects the problem in 1973 referred to above in the discussion of the permit series, i.e. a very large proportion of apartment 'contracts' apparently were cancelled.

The permit series constitute a useful check of the construction series from the capital expenditure survey. Remembering that the permits lead construction by many months, and that values in the permit series probably represent understatements of over 20 per cent, the detail in the building permit and construction publications suggests that the capital expenditure survey substantially understates the construction of retail and wholesale stores and hotels, clubs, restaurants, cafeterias and tourist cabins.

S59. Value of building permits issued, 1910 to 1960

SOURCE: previous edition of *Historical Statistics of Canada*, series R177.

This series like series S25-54, was produced by Statistics Canada and provides some indication of the effects of changes in geographic coverage, 1951 to 1960.

S60-64. Principal statistics of the construction industry (construction contractors), 1934 to 1976

SOURCE: for 1951 to 1975, *Construction in Canada* (Catalogue 64-201); for 1934 to 1950, *Construction Industry in Canada*, (Catalogue 64-D-21).

A construction census was first carried out by Statistics Canada in 1917. It was not carried out for the years 1923 to 1933 nor for the years 1951 to 1974, although partial censuses were carried out providing data for 1967 to 1974. These gaps arose because of dissatisfaction with the quality of the census. It is very difficult to take a census of this industry. There are a very large number of small, widely dispersed establishments, and because of substantial fluctuations in demand the average life of establishments is short.

The data before 1951 are estimated very differently from those of the later period. For 1934 to 1950, all data come directly from the Census of Construction. Because of the intrinsic problems of identifying the universe, the coverage probably varied quite considerably from year to year, and in no year was coverage very good. Coverage of non-residential construction was much better than coverage of residential: for 1938, new residential construction reported in the construction census was just 37 per cent of all new residential construction expenditure as estimated in the national accounts (see series S180); for new non-residential construction the proportion was 66 per cent.

Note that these coverage figures are for all construction reported to the construction census, while series S60-64 relate only to construction carried out by contractors, i.e. series S60-64 do not cover construction carried out by industries other than the construction industry. The 1950 construction census report shows the value of work by contractors and builders to be 65 per cent of all work reported, while owner-builders, 'industrial organizations', steam and electric railways, utilities and governments account respectively for 5, 6, 2, 14 and 7 per cent.

Despite the incomplete coverage of this census, there seems no obvious reason why indexes and ratios constructed from it should be seriously biased and a number of investigators, including Buckley and this writer, have used the census in this way. Contained in the reports are 'capital invested', construction by detailed category (office buildings, stores, theatres, apartment houses, dwellings, etc.), and other useful information.

For 1951, a construction census was carried out, but after the results were compared with the capital expenditure survey, it was decided to discontinue the census. Starting in 1951 the value of work performed is taken from the response of 'purchasers' of construction to the capital expenditure survey. In that survey respondents are asked the amount of their construction expenditure carried out by contractors. Salaries and wages are estimated as follows. For each of the residential, non-residential building and engineering construction sectors, reports from the contract construction industry are used to compute the ratio of salaries and wages to value of work performed; this ratio times the value of work from the capital expenditure survey yields the estimate of salaries and wages for each sector and thus total salaries and wages. The remaining series are estimated similarly.

From 1951 to 1966, the contract construction industry data were obtained from all firms with sales over \$100,000. These firms were identified by using sources such as the Business Register and Dun and Bradstreet. Starting with 1967, census data were used as well as the large-firm data. The census data available for 1967 were those for electrical contractors. Starting with 1975 the census covered all parts of the construction industry. Also starting in that year census procedures changed. Firms with revenue over \$500,000 in 1975 reported on the census long form. Financial data for all firms between \$50,000 and \$500,000 and for a sample of firms under \$50,000 were obtained from Revenue Canada. Non-financial data for a subsample of this group (numbering 10,000 in 1975) were obtained by a short-form survey. The sample results were appropriately weighted to obtain the universe estimates.

Non-residential Construction (Series S65-166)

Note: see the general note to the previous section.

S65-71. New construction in primary industries, 1946 to 1976

SOURCE: for 1946 to 1955, PPI, 1946 to 1957; for 1956 to 1976, CANSIM Matrix No. 001190 and 001194.

Agriculture and fishing are not included in the capital expenditure survey, essentially because both industries contain many small establishments which are difficult to survey. The agriculture estimation uses a benchmark obtained from a 1958 sample survey; this benchmark is then projected on the basis of farm income and sales of building materials. The fishing estimates are obtained from the Department of Fisheries and are estimated from their regional contacts. Construction in fishing industries includes items like docks, but boats are classified as machines. Fishing is dwarfed in importance by agriculture. For instance, in 1976 agriculture was \$520.5 million while fishing was just \$6.5 million. As described here, the agriculture and fishing series is probably of lower quality than the estimates based on direct surveys.

The forestry estimates are obtained by the capital expenditure survey. All establishments with sales over \$500,000 are covered; in some provinces the cut-off is lower than this. It is likely that some forestry construction is incorrectly included in manufacturing with sawmills and with pulp and paper mills.

The mining and petroleum and gas estimates are probably of very high quality starting in 1967 (mining) and 1965 (petroleum and gas). These are the first years reflecting the use of a questionnaire especially designed for the industry. The mining survey is a census, i.e. there is no cut-off point - and indeed some exploration establishments which are captured do not report in the Census of Primary Industry. The petroleum and gas survey is also a census and uses the MAPID (Manufacturing and Primary Industries Division) form. The results of the survey are reviewed with industry representatives before publication.

Starting at the break-point, 1965, petroleum and gas includes exploratory and development drilling, including contract drilling. It also includes extraction from oil sands. Geological and geophysical exploration is excluded. Before 1965 the items included had varied to an unknown extent from establishment to establishment, depending on the establishment's interpretation of the definition of capital expenditure on the survey form. In 1960 also there was a conceptual change so that from 1960 gas processing plants are included; before this year gas processing is classified as manufacturing.

Starting at the break-point, 1967, mining includes on-property exploration and development but excludes outside and general exploration. As with petroleum and gas, the mining series before its break year contains some inconsistencies.

Estimates for the construction industry since 1975 are obtained using data from the Census of Construction (see notes to series S60-64). Prior to 1975, the data were obtained from both the partial census and the large-firm sample survey. The grossing variable was sales, with universe sales taken as total contract construction reported in the capital expenditure survey of all industries.

S72-93. New construction in manufacturing by major groups, 1926 to 1976

SOURCE: for 1926 to 1955, previous edition of *Historical Statistics of Canada*; for 1956 to 1976, CANSIM Matrix No. 001198; for 1946 to 1976, the estimates are taken from the capital expenditure survey. The estimate has two components, as indicated in the general note to this section. 'Net additions' is partly expenditure creating new establishments. New enterprises are identified by regularly searching trade papers and through personal contacts in industry and government. Net additions also includes expenditure by ongoing establishments when that expenditure is judged to be irregular.

For the second component, the expenditure of ongoing establishments, the expenditure of the sample is blown up by the ratio of universe to sample shipments. Where expenditure by a sample establishment is regarded as irregular it is removed and placed instead in the 'net additions' component. For the 'final' expenditure estimate for year t , the blow-up or 'grossing' ratio uses shipments for year $(t-2)$. Normally (for 1973) sample establishments include all those with \$500,000 or more of shipments; where industries or provinces have relatively few establishments of this size, the cut-off is lowered to \$200,000.

As can be seen, failure to discover all new projects which should be included in net additions is an important source of possible error. Problems in editing may also create errors. The activity of an establishment may change, indicating its industry classification should change. Ancillary activities of some organizations may be inadequately covered.

Respondents may find it difficult to separate machinery from construction and new from repair.

For the period 1926 to 1945, the estimates are based on the tax records of 358 corporations engaged in manufacturing throughout the entire 20-year period. The sales of these corporations amounted in 1946 to 38 per cent of the manufacturing industry total. The sample was stratified by industrial classification and size group. Sample investment in each year was blown up by the 1945 or 1946 ratio of universe to sample sales within each stratum (Buckley, 1957, p. 111).

It is not clear how much the estimates are distorted by the choice of sample or the use of a constant blow-up factor. The selection criterion for the sample ensures that it excludes both companies which did not weather the depression of the thirties, and companies which were started to take advantage of opportunities in the late thirties and during World War II. A comparison of contracts awarded data for business and industrial building (series R170, R171, previous edition of *Historical Statistics of Canada*) with total non-residential building (series S14-S9) suggests that the estimation procedure has resulted in a level of the non-residential building estimates which is possibly too low for this whole period; and estimates for 1929 to 1939 may be too high relative to 1926 and 1946.

S94. New construction in manufacturing, 1871 to 1925

S95-106. New construction in manufacturing, by major groups, 1918 to 1925

SOURCE: *Fixed Capital Flows and Stocks in Manufacturing, 1926-1960*.

These series were estimated by Professor T.K. Rymes not for use as a stand-alone series, but for use as components in the estimation of capital stocks and flows for later years. As a consequence he regards them as more appropriate as indicators of trends than as indicators of turning points.

The basic source data used for these series are the data on the value of capital invested, given in the first five decennial censuses of Canada, the two postal censuses of manufactures (reporting data for 1905 and 1906) and the DBS *Annual Census of Industry*, 1917 to 1943. Rymes' estimation assumes that the 'value of capital invested' is in fact the book value of fixed assets, i.e. the original cost minus accumulated depreciation. For an instructive and detailed account of problems encountered in the estimation, and their solutions, see *Fixed Capital Flows and Stocks*, pp. 64-71.

The construction expenditure series estimated by Rymes was used to extrapolate back the existing PPI series (S72). Thus series S94 reflects any defects in the level of that series. Rymes' raw gross fixed capital formation was estimated to 1943 and it is interesting to note that the differences between that series and the PPI series in the case of the example displayed (food and beverages) are akin to the differences between the contracts awarded series and the PPI series for total manufacturing. It is quite possible that Rymes' series is much more accurate than the official PPI series for the period 1926 to 1943. This would not be surprising in view of the fact that Rymes used universe data while the PPI estimates used data from an unrepresentative sample. Unfortunately, *Fixed Capital Flows and Stocks* does not display any of the original gross fixed capital formation series except that for food and beverages.

Prior to 1918, decennial rather than annual data for the book value of capital invested are available. Annual estimates for machinery and equipment by major groups were obtained by using an interpolator based on the estimated annual aggregate flow (domestic appearance) of industrial and electrical machinery and equipment. The same interpolator was used for all major groups. This series was then used to produce a construction series by using ratios of construction to machinery and equipment expenditure for 1926 to 1930. The resulting series were checked against buildings and fixtures data in the 1890 and 1900 censuses (the earliest censuses giving these components of capital invested separately). In some instances, as a result of this check, the series was adjusted. Further details of the estimation are given in *Fixed Capital Flows and Stocks*, 1926-60, esp. pp. 70, 71, 75).

S107-121. New construction in transportation, communication, electric power, gas and water utilities, 1956 to 1976

SOURCE: for 1926 to 1955, previous edition of *Historical Statistics of Canada*; for 1956 to 1976, CANSIM Matrix No. 001202.

Details of the estimation of these series for the period 1926 to 1941 are given in PICF and in PPI, with a summary in the previous edition of *Historical Statistics of Canada*. Estimation procedures in recent years are generally similar to those used earlier. One difference is the usual current practice—as for manufacturing—of dividing the estimate into two components: 'net additions' and expenditure by ongoing establishments. It is convenient to give details of current estimation procedures by separate categories. It is worth noting that each transportation category includes relevant services to transport but coverage of these services is spotty.

For air transport, the expenditure of dominant airlines is included in net additions. The sample of ongoing establishments includes all those with revenue of \$100,000 or more, with revenue the grossing variable. Coverage is good.

A sample is not used for rail transport because of the ease of covering the universe, which consists mainly of the Canadian National Railways and the Canadian Pacific Railways. The series includes actual annual outlays of the CNR for the whole period, but for 1941 and earlier CPR actual outlays are used only for 1926, 1929, 1930, 1933, 1937, 1941, with other years interpolated using related series.

The water transport sample currently (1973) includes all firms with revenues of \$100,000 or more. Revenue is the grossing variable. Services to water transport does not use the two-component estimation procedure; instead all expenditures are classed as net additions. Two major service organizations are the St. Lawrence Seaway and the National Harbours Board.

The motor transport sector sample currently includes all establishments with over \$100,000 revenue in smaller provinces, and \$400,000 of revenue in larger provinces, with revenue the grossing variable. Included in this sector are interurban trucking and bussing. Where a trucking and warehousing operation has less than half its revenue attributable to warehousing, the whole operation is classified as motor transport. Surveying this sector is difficult because of instability of ownership (especially in trucking) and because of the methods used to finance fixed assets, as well as because of other practices.

The urban transport sector follows the same estimation procedure as the transport sector. Included are the two subway systems. Not included is taxicab service.

For the pipeline sector, data are obtained from all units in the universe. This is possible because of the financial census carried out by the National Energy Board and by the Energy Statistics section of MAPID. There is some problem in converting reported figures to the required conceptual basis because of industry accounting practice. Included under pipelines are transmission and gathering lines; excluded are field lines which are included elsewhere (under petroleum and gas, series S70).

The telephone sample currently includes all firms with \$100,000 or more revenue, except that some large corporations are included in net additions. Because of the dominance of the industry by large enterprises, the sample expenditure plus net additions accounts for almost all the total. A problem in this sector is the frequent use of used materials.

All telegraph expenditure is included in net additions. Included in this sector are railway telegraphs, microwave systems, cable companies and Canadian Overseas Telecommunications Corporation.

All terminal grain elevators are surveyed, but for country grain elevators only firms operating 10 or more are surveyed. The grossing variable for the latter group is number of elevators.

The electric power sector includes both establishments generating power for sale to the public and the small number of establishments whose major activity is distributing power. The large provincial utilities are included in net additions, while other enterprises with \$100,000 or more of revenue make up the sample. Revenue is the grossing variable. The amount added by grossing is only about 3 per cent of the total. A special questionnaire has been used for this sector in the 1970s because of various reporting problems for this industry. One relates to own account construction. Another problem is the distinction between construction and machinery. The wording of the question on hydraulic production plant expenditure conveys the nature of the problem. Under this heading, the description of the construction element is 'water conveying, control and other hydraulic structures'; the description of the machinery element is 'turbines and generators and other installations consisting predominantly of recognizable machine components'. For nuclear plants the machinery item is just 'other installations consisting predominantly of recognizable machinery components'.

In the gas distribution sector all firms are surveyed, with estimation required only to account for the few non-respondents.

Starting in 1969 water systems was divided into two parts. The first, represented by private or provincially owned operations, was grouped as a separate category and placed in 'other utilities'. The second category, represented by municipal systems, was added to municipal government expenditure.

For broadcasting, the CBC is included in net additions and all units in the television and cable sector are surveyed. The radio sample currently includes all stations with revenue of \$100,000 or more and the grossing variable is revenue.

Other utilities currently include warehousing, some water systems (see above), toll highways and bridges and taxicab service. For 1955 and earlier, also included are air, motor and water transport and services pipelines, grain elevators and broadcasting.

S122. Net capital formation in railway transport and telegraphs, 1850 to 1930

SOURCE: previous edition of *Historical Statistics of Canada*.

As indicated by the title, this series is conceptually different from preceding series because it excludes that new construction and equipment expenditure which the railway companies regarded as replacement. This series was estimated by Kenneth Buckley using annual reports of both private and government-owned railways. He used information on a sample of roads to estimate both new construction and improvements. Details of his estimation are given in the previous edition of *Historical Statistics of Canada* and in the original source.

S123-127. New construction and repair, non-railway transport structures, 1901 to 1930

SOURCE: previous edition of *Historical Statistics of Canada*.

These series include only government expenditures. Currently these types of expenditures are classified as government department expenditures. These series were estimated by Kenneth Buckley using the federal Auditor General's Reports and the Public Accounts of the provinces. Details are available in his *Capital Formation in Canada, 1896-1930*.

S128-140. New construction in trade, finance and commercial services, 1946 to 1976

The trade series are of lower quality than most others. Trade, especially retail trade, is characterized by many small units and large numbers of firms entering and leaving the industry each year. In addition, much of the construction for retail trade is classified under 'other financial' because real estate developers are the enterprises owning and building shopping plazas and office developments. Stores built under leaseback arrangements, especially common among some food chains, are included here rather than in the owner's industry group. This is one of the rare instances where expenditure is assigned to the user where the user is not the owner.

In all but the independent group, all existing establishments above about \$1,000,000 in sales are included in the sample, with grossing by sales. New stores are included in net additions. Until 1976, the independent group was estimated using a benchmark obtained in the 1950s and the department and chain series as projector. Starting in 1976 the independents were sampled. The sample was 1,300 in 1976. Automotive trade includes service stations, garages and car dealers.

In the banking sector, all units in the universe are surveyed. The universe includes the Bank of Canada, but not the caisses populaires (which are not covered anywhere). Credit unions are included although the sample was not updated until 1978; most credit union expenditure, however, is in the net additions category. Currently (1973) insurance companies with fixed assets over \$200,000 are sampled, with fixed assets the grossing variable. The sample is chosen from information in the *Annual Report of the Superintendent of Insurance*. Trust and loan companies are covered in the same fashion, with the sample chosen using data from the Financial Corporations Section of the Business Finance Division of Statistics Canada.

The 'other financial' sector includes land developers, building lessors, real estate firms and insurance agents. From some points of view the 'other financial' series represents a serious conceptual problem. It includes commercial and, in a few cases, industrial buildings built for rent, or speculatively built for sale by developers and others. Users of these buildings may be in many different industries. As can be seen this series has become of increasingly great importance in recent years, representing 20 per cent or more of non-residential building (and a much higher proportion of private sector non-residential building), as compared with less than 5 per cent in 1956. The shopping centres, multi-purpose projects such as the Manulife Centre and Toronto Dominion Centre in Toronto, and other construction included in this series represent a very substantial part of all new

construction intended for use by commercial and financial industries. Some of the new head office space rented by various industries is therefore included in this series. It is noteworthy that the conceptual basis of much of these items is inconsistent with that of housing. In this latter case, construction is classified as housing whether it is owned by occupiers or by real estate developers or other landlords.

Estimation of the 'other financial' series is difficult. It is not possible to identify all units in this universe and the series is thus of somewhat questionable quality. The series is derived by first attempting to discover as many medium- and large-sized projects and operations as possible; the reported data are then adjusted using building permit and contract award data for the current and preceding years.

Commercial services includes laundries and dry cleaners, theatres, hotels, restaurants, racetracks, ski developments, lessors of machinery and equipment, and any other organization providing services to persons or business, where that organization is not elsewhere classified. Hotels, the largest single component, is estimated partly by using a sample consisting currently of all those with rental revenue over \$200,000, with rental revenue used as the grossing variable. The larger part of the hotel total, however, is net additions, i.e. construction of new hotels and motels. It is likely that many new motels are missed because their small size and remote location make them unlikely to be reported in trade journals or picked up by the Building Permits Section. Part of the expenditure in covered projects may be missed because the leaseholder may make the expenditure, not the owner. A laundries and dry cleaners series and a theatres series are also available separately; the amounts are very small. For other commercial, the universe is not easily identified. All expenditure is placed in the net additions category and information is gathered by a continuing search of trade publications and by other intelligence operations. Estimates for the non-covered portions are added, using information on motor vehicles, scientific and professional equipment and on building permits. The resulting series by its nature is downward biased and of lower quality than most other series.

S141-147. New construction in institutions and government departments, 1926 to 1976

SOURCE: for 1926 to 1960, previous edition of *Historical Statistics of Canada*; for 1961 to 1976, CANSIM Matrix Nos. 001218, 001222.

Churches include all dioceses of the Anglican and Roman Catholic churches, and some parishes of the United Church. The grossing variable for the United Church sample is its membership, as indicated in its annual reports. New construction by other denominations is placed in net additions. The coverage for the various denominations could be low, to the extent that new construction is not covered by building permits. For 1934 to 1946, the 1947 estimate was projected back according to an index based on church construction as reported in the construction censuses; for 1926 to 1933 the projector was based on reported church contracts awarded.

For universities, all degree-granting institutions are surveyed, with enrolment the grossing variable (necessary only for non-response). Some new construction may be missed because university accounting systems classify it as current, rather than capital, as a consequence of government funding procedures. Before 1947, the estimate was projected back using an index based on the net change in the value of university plant and equipment and an estimated annual depreciation rate.

Local schools, provincial schools and private schools are each dealt with separately. Estimates for local schools are from the survey of school boards by the Public Finance Division, Statistics Canada. A problem is the possibility that some new construction is missed because school accounting classifies it as repair. Estimates for provincial schools (including community colleges and other non-degree-granting provincially supported post-secondary institutions) are from the survey of provincial departments by the Census of Construction Section. Accounting is also a problem here. For private schools, a universe became available recently for direct surveys with enrolment as a basis for imputations for non-response and non-coverage. For 1926 to 1946, the 1947 estimate was projected back using public finance data of varying coverage.

Estimates for provincial hospitals are from the survey of provincial departments by the Census of Construction Section. Estimation for municipal and private hospitals (including religious hospitals) uses a sample of all hospitals above a certain number of beds (the cut off varying by province), with this also the grossing variable. Accounting is a problem. For 1926 to 1946, the 1947 estimate was projected back using data on outlays on new construction of municipal hospitals in 1933, 1937, 1941, 1943, and data on total municipal new construction in these and the remaining years of the period.

Other institutions are surveyed directly with grossing by beds, where applicable. This group does not include government-owned institutions. It does include profit-making and non-profit homes for the aged, homes for the blind and deaf, orphanages, day nurseries and non-profit recreational organizations such as YM-YWCA's.

Government departments include departmental Crown corporations (for example, the Agricultural Stabilization Board) and part or all of a few agency Crown corporations. (The remaining agency Crown corporations, and all proprietary Crown corporations, are classified with the relevant industry group.) The Post Office is included here. Federal government new construction currently consists largely of passenger terminals, landing fields, docks, highways and other transportation-related construction and office and educational buildings. Estimates of expenditure are obtained from the Census of Construction. Before 1949, estimates for selected years (1926, 1929, 1930, 1933, 1937 and 1941 to 1948) were obtained by classifying individual items of expenditure as given in various government accounts into new and repair categories. The remaining years plus 1933 were interpolated using a variety of data; the likely error is indicated to be less than 10 per cent. Buckley's correction (previous edition of *Historical Statistics of Canada*, p. 495) for 1946 to 1949 is retained.

Provincial government new construction currently consists largely of highway, street and associated construction, with these items overshadowing the next largest items, sewage systems, disposal plants, water mains and office and other institutional buildings. Estimates are obtained from the survey by the Census of Construction. Before 1947, estimates were obtained in a similar fashion to the federal early estimates. The likely error for interpolated years in this early period is indicated to be less than 4 per cent.

Municipal government new construction currently consists mostly of waterworks and sewage systems, and road and other transportation construction. Estimates are from the Public Finance Division which surveys all provinces except Quebec. In some cases the data are actually collected by the department of municipal affairs. Quebec data are from a survey carried out by that province. Before 1947, estimates were obtained in a fashion similar to the early federal estimates. Data from 16 municipalities were important in the construction of the interpolation index used for various years prior to 1940. For later interpolations data on municipal expenditure from the Bank of Canada were used.

S148-160. New construction by governments and government enterprises, by level of government and by category, 1946 to 1976

SOURCE: for 1946 to 1955, PPI, 1946-57 and previous edition of *Historical Statistics of Canada*, (series R16); for 1956 to 1976, CANSIM Matrix No. 001230.

The estimation procedures for government departments and for institutions are described in the previous section. The only government institutions included in the 'institutions' category are provincial hospitals, schools and universities and municipal hospitals and schools. All other government-owned institutions, for example homes for the aged and federal hospitals, are included under government departments.

Government business enterprises are generally government enterprises whose principal source of revenue is derived from the provision of goods and services to the public. They include all proprietary Crown corporations as well as an occasional agency Crown corporation in whole or part, and some other corporations. Departmental Crown corporations are classified with government departments. Part of the agency Crown corporation Atomic Energy of Canada Limited is included here. Examples of federal Crown corporations included are Air Canada, the Bank of Canada, the Canadian Broadcasting Corporation, Eldorado Nuclear Ltd., Canadian Wheat Board. Among the provincial corporations included are the liquor commissions and electric power companies. Among the municipal corporations included are electric power distributing companies, transit authorities, parking authorities. A complete list of federal and provincial corporations and a partial list of municipal corporations included are available from the Construction Division; also the *Canada Year Book* lists all federal corporations, by type (departmental, agency, Crown, other).

Under federal housing is included housing expenditure by federal government departments (expenditure for non-rental government-owned housing built for federal employees) and expenditure by federal government enterprises. The latter is generally rental housing and its inclusion is regarded by the Construction Division as a mistake so that this series may be revised to eliminate it. For 1960, federal government department expenditure is: Department of National Defence, \$7.7 million; other, \$5.4 million. For 1960, government enterprise expenditure is: federal-provincial agreements, \$14.3 million; other, \$0.8 million. All other housing, including housing expenditure by provincial authorities such as the Ontario Housing Corporation, is excluded from aggregate new construction built by governments and government departments. It can thus be seen that the treatment here of housing is different from the treatment of non-residential construction.

S161-166. New construction, federal government 1868 to 1930, provincial governments 1901 to 1930

SOURCE: previous edition of *Historical Statistics of Canada*, series R120-125.

These series were estimated by Kenneth Buckley using the federal Auditor General's reports and the public accounts of the provinces. The railway series includes rolling stock purchased for federally owned railways. The provincial series in the 1920s is predominantly highway expenditure. Details of the estimation are given in Buckley's *Capital Formation in Canada, 1896-1930*.

Residential Construction (Series S167-219)

S167. Value of residential construction, constant (1971) dollars, 1926 to 1976

The price index used to deflate residential construction 1926 to 1950 is a weighted average of indexes of construction material prices and wage rates. The price index used for 1951 to 1970 is substantially changed from the one used before the revision of the National Accounts published in 1975. Like the previous index, it is an input index. Starting with 1957, however, instead of union wage rates it uses average hourly earnings and in addition to the indexes of the 'price' of labour and the price of materials, it incorporates an index of the 'price' of gross profit. The latter is the ratio of gross profit to the total value of new residential construction. For 1951 to 1956, because of data unavailability, the index uses union wage rates and excludes the gross profit component.

The most important aspect of the index used for 1951 to 1970 is the productivity adjustment it incorporates. This productivity adjustment is based on the assumption that real residential construction is proxied by the volume of materials used. Specifically, the labour weight is deflated by the ratio of an index of the real value of materials to an index of labour input. Because of erratic year-to-year movements in this ratio, for each of the 1951 to 1960 and 1961 to 1970 periods a ratio assuming a constant annual increase is used. This constant annual increase is 2.9 per cent for 1961 to 1970. It will be seen that the effect of this is to reduce the size of the labour weight by 1/1.029 each year, and the sum of the weights becomes increasingly below one.

This productivity improvement adjustment implies that when productivity improves, the same materials but less labour are used. The productivity adjustment thus overstates actual productivity if the real value of materials increases as a ratio of (on-site) labour merely because of the use of off-site labour to produce prefabricated components. The productivity adjustment is also upward biased if the residential construction mix shifts toward types of structures which are less labour intensive. In fact, in 1974 the price index used here for 1951 to 1970 broke down. That is, the increase it showed was absurdly small. As a consequence the GNP Division shifted to a different and clearly better index, which is used for 1971 to date. This index is the outcome of the assumption that the real value per dwelling unit for each of four types of structure (single detached, duplex and double, row, apartment) is constant. The evidence shows that this is a somewhat faulty assumption; for instance it is likely that the real value of the average single detached dwelling fell in 1974. The GNP Division is now in the process of producing an index which allows for varying real value per dwelling unit.

S168-180. New residential construction, by component, 1926 to 1976

SOURCE: files of the Gross National Product Division

Residential construction is not easy to estimate and is subject to substantial error because of the large number of builders at scattered locations and because of the vast number of owners. In fact neither sellers nor purchasers of residential construction are the prime source of information for estimation. Rather, the fundamental source is municipal building permits. Since the late forties this has been importantly supplemented by National Housing Act data. Central Mortgage and Housing Corporation field offices have recorded the progress of construction of non-NHA as well as NHA houses for many years. An additional important source, especially for 1951 and earlier, is the census.

The estimates given here represent very substantial revisions from the estimates given in the previous edition of *Historical Statistics of Canada*. The revisions for 1926 to 1968 are part of the major revision of the National Accounts, published in 1975. These estimates are unlikely to be revised again soon. By the time this is published, however, the estimates for 1970 to 1976 will almost certainly have been further revised, especially the alterations and additions series. It is unlikely, however, that the estimators will have changed in any fundamental way from those used for 1970 to 1976. In the following it will be noted that the estimation is quite distinctly different for each of the periods 1926 to 1940, 1941 to 1950, 1951 to 1968 and 1969 to 1976. The estimates for the last two periods are discussed first and then the estimates for 1926 to 1950.

The discussion below draws heavily on information from the unpublished notes of Mr. J.P. Delisle of the Construction Division, including his *Appendix D: Gross Capital Formation in Residential Construction, Quarterly Methodology* (written about 1972); of Mr. D.H. Jones of the Input-Output Division (dated 25 January 1972, 23 March 1972, 12 January 1973 and 14 March 1977 respectively); and information from Mr. Hans Messenger and Miss Ellen Buckley of Gross National Product Division. The responsibility for opinions and errors remains with the author of this section.

For 1951 and later the major components of residential construction, work put in place in new buildings, by type (series S168, S169, S170 and S171) are estimated using three elements: data on dwelling unit starts, completions and units under construction; an estimator converting these data into dwelling units put in place; and unit values converting dwelling units put in place into values put in place. The starts survey is the source of the dwelling unit data and is discussed in the note to series S181-194.

For 1951 to 1968, units put in place are estimated for year t by province, by type, as

$$C(t) - k_1 U(t-1, t) + k_2 U(t)$$

where C(t) is the number of dwellings started and completed during year t, U(t-1, t) is the number under construction at the end of (t-1) and completed during t, and U(t) is the number under construction at the end of t. On the basis of work put in place in NHA houses, 1964-70, and the distribution of construction times of all houses, 1951-64, k1 and k2 are both taken as about .5. The parameters of this estimator are the same for all types of dwelling, despite the fact that large apartment buildings take much longer to complete than single detached dwellings. The understatement of the lag from start to expenditure because of this is probably not great, especially before the mid-sixties, because during this period few apartment buildings were large and apartments did not make up a large proportion of total starts.

It is worth noting that this work-put-in-place estimator is the equivalent of one-half starts plus one-half completions. The formula previously used was one-third starts plus two-thirds completions.

For 1969 to 1976, the estimator explicitly incorporates estimates of the lagged effect of starts on the value of work put in place. More precisely, the estimator for month t is

$$\sum_{i=t}^{t-20} a v_i \quad \sum_{j=i}^{i+20} w_{ijt} s_{ij}$$

where $a v_i$ is the estimated unit value of dwellings started in month i, s_{ij} is the number of dwellings started in i and completed in j (except that $s_{i, i+20}$ includes all dwellings completed in month i + 20 or later) and w_{ijt} is for a sample of NHA dwellings a three-year average proportion of work in dwellings started in month i and completed in month j which is put in place in month t. The annual estimate cumulates the monthly totals.

For 1951 to 1968 the estimated unit value for each type of dwelling and province is the average construction cost of relevant NHA dwellings as of the date of loan approval. (Prior to the 1975 revision, the 1951 to 1959 unit values, disaggregated by type but not by province were estimated using the relevant NHA construction costs and for 1960 and later years the 1959 values were extrapolated on the basis of the residential construction input price index.) Unfortunately, data from contract awards, building permits and conventional loan approvals show that NHA singles, doubles and duplexes were much higher in value than all houses before about 1954 (perhaps more than 25 per cent higher in 1959), of roughly the same value 1955-58, and of substantially lower value after this date, with the differential narrowing markedly after 1963. Thus the NHA series very much understates the rise in the unit value of houses 1951-63, with the distortion of change especially severe 1958-61. The same kind of evidence suggests, however, that NHA unit costs are not so seriously flawed as estimators of universe values in the case of apartment and row dwellings. NHA costs are apparently substantially greater than universe costs over the period 1951 to 1968 but the differential is generally not far from 10 per cent. The evidence for these statements is given in Steele, M., *The Current Dollar Average Unit Cost of New Dwelling Units by Type, 1947-1966* (Ottawa; processed, Statistics Canada, 1968).

For 1969 to 1976, the estimated unit value for each type of dwelling is the building permit value, adjusted for undervaluation. No adjustment is made to link these estimates to the ones for 1951 to 1968 because the unlinked estimates yield little break between 1968 and 1969 in the aggregate, residential construction. This arises because while for singles the permit-based value is substantially above the NHA-based value, offsetting this is the fact that for apartments it is substantially below. The undervaluation adjustment to permit values is estimated by comparing the permit value with the estimated construction cost for a sample of NHA dwellings. For recent years the upward adjustment is 15 per cent for singles and 25 per cent for multiples.

Conceptually, part of the work put in place on new dwellings but given as a separate series, S174, is supplementary costs. This includes legal fees, architects' fees, surveyors' fees and interest charges during construction, NHA mortgage insurance fees. The mortgage insurance fees of private insurers such as the Mortgage Insurance Corporation of Canada are not included. The supplementary costs estimator is the ratio of supplementary costs to construction costs of NHA dwellings times the construction costs of dwellings completed.

The estimator for conversions is the number of conversions reported in the building permit survey, adjusted for missing municipalities, times the value per conversion, adjusted for understatement. The missing municipalities factor (about 1.11 in 1971) is the ratio of total population to the population in reporting municipalities. The value adjustment factor (about 1.22 in 1971) is the ratio of the average value per start to the average permit value. The resulting estimates probably represent only a small proportion of the actual value of conversions, because they do not account for conversions done illegally and because the value of work is probably much more understated for conversions than for new buildings. Among the evidence on the first point are the results of the Census of the Prairie Census, 1946 as given in Statistics Canada, *Supplementary Report on Housing Characteristics in Urban Centres of 5,000 and over* (mimeographed, probably written in the late forties by Mabel Waddell). Far more conversions were reported than had been indicated by building permits. See also the discussion by Kenneth Buckley in the previous edition of *Historical Statistics of Canada*, p. 500.

The estimator for alterations and additions, 1951 to 1970 is the ratio of the value of alterations, improvements and repair reported in the permit survey to the value of new dwellings from that survey times the value of starts. This estimator thus does not account for improvements effected without a permit. In about 1973 the accounts for 1946 and later were revised to partially remove this deficiency. 'Hardware', an item included in personal expenditure on consumer goods and services, was redefined to include building materials, supplies and miscellaneous hardware not accounted for in the rent and capital formation components of GNE. The adjustment was made to hardware, rather than to residential construction, for two reasons. First, it was a less disruptive change. Secondly, the amounts included repair as well as improvements. If the adjustment had not been made to hardware, the amount accounted for by repairs would have had to have been split off and added to the existing residential repair estimate. This would not have affected GNE, because repairs are only implicitly included (in gross rents). It would have affected the GNP side of the accounts, however, via a reduction in net paid and, especially, imputed rent. Yet imputed rent was regarded as too low already.

The hardware adjustment is estimated as follows. First benchmarks for 1961 and 1969 are estimated as: repairs and improvements by homeowners and tenants as conservatively estimated using Family Expenditure survey data (\$1.3 billion in 1969) minus residential repair and improvement already included in the accounts (\$1.1 billion in 1969), itself reduced by an amount attributable to landlord repairs (conservatively estimated as \$.3 billion in 1969). The resulting benchmark (\$.5 billion in 1969) is regarded as an understatement both because of the conservative nature of the component estimates and because improvements made by landlords are omitted. Coincidentally, the benchmark in 1961 is almost identical to retail sales of hardware and building materials given by the 1961 Census of Merchandising. The benchmarks are interpolated and projected to other years on the basis of indexes of sales of retail hardware stores and retail building material outlets.

In 1976 the upward adjustment for improvements included in hardware was judged much too low and alterations and additions for 1971 to 1976 were revised as: (a) permit-based alterations and additions (see the description above for 1951 to 1970) plus (b) the sales of wholesale building material outlets to householders, adjusted by deducting from (b) (i) 10 per cent of (a), (ii) do-it-yourself repairs as estimated for the purpose of computing net rents, (iii) tool sales, (iv) materials for hobby use, (v) materials for owner-builders of new dwellings. The new total for alterations and additions plus hardware (adjusted to remove tools) equals about 140 per cent of improvements estimated using FAMEX data, unadjusted for understatement by respondents. S.A. Goldberg in 'Non-sampling Error in Household Surveys', *International Statistical Institute Bulletin*, vol. 36, part 2 cites evidence suggesting that for repair, respondents reported \$65 per family in an annual survey while the cumulated annual total from monthly surveys was \$171. This writer, assuming no under-reporting by FAMEX respondents and assuming landlords spend only 10 per cent per dwelling unit of the amount owner-occupiers spend, estimated improvements at \$1.4 billion for 1974, 21 per cent of which was cottage improvements. See *A Report on Estimation of Residential Construction* (processed, Statistics Canada, Gross National Product Division, 1976, p. 38).

Mobiles, even those on footings, in practise apparently are not regarded as dwelling starts in the starts survey although the printed instructions for starts survey reporters exclude a mobile only when it is 'towable on its own chassis'. The estimator is domestic shipments (number) times the average value of mobiles reported in building permits, plus the value of imported mobiles. About 15 per cent of mobiles are reported in building permits. There is no deduction for mobile homes used as offices, on the grounds that this use is unlikely to be important in view of the fact that a criterion for inclusion in the shipments series is the existence of a kitchen.

Cottages are seasonal dwellings. They are estimated as the value in building permits times the undervaluation adjustment used for singles. To help ensure that dwellings labelled 'cottages' in permit reports are seasonal dwellings, all high-valued 'cottages' are excluded.

Prior to the revision of the National Accounts published in 1975 residential construction did not include real estate commissions on existing property. It is not clear what the basis of the estimates for early years is. For the later sixties the estimates assume that real estate commissions on (existing) residential property is a constant proportion of new construction. For 1971 and later the estimate is projected by using real estate commissions paid under the Multiple Listing Service system. Probably MLS sales are a higher proportion of sales in slow markets than in hot markets, so that the error in this series is variable.

Series S180, defence housing, is expenditure on non-rental housing such as military barracks built by the Department of National Defence for its employees. This housing is not conceptually part of capital formation and so it is deducted from the total of series S172 to S178 to arrive at series S180, residential construction, National Accounts basis.

The estimates for real estate commissions and defence are described above in the note for 1951 to 1968. The remaining series were estimated by the author of this section. The description below is relatively terse; for a detailed rationale and for component series, see the sources listed for series S198-202.

For 1926 to 1950, work put in place in new buildings is estimated as a linear function of the current and lagged value of starts. The value of starts for each type of dwelling is estimated as the value per unit times the number of starts, plus supplementary costs. The estimation of the number of starts is described in the note to series S198-202.

For 1926 to 1942, the value per unit for urban dwelling units in one-to-three-unit buildings is the average value of units in the McLean (later Southam) contract award series labelled 'residences' times 1.05. The 1.05 factor is the ratio for 1959-62 of the adjusted average permit value of singles, doubles plus duplexes to the average value of 'residences'. The adjustment to permit values assumes they understate actual values by 10 per cent; this compares with the estimate given above of understatement in the 1970s of 15 per cent. The average value of residences is calculated after making an adjustment for 1921 to 1928 to the number of residences reported for Quebec, because of evidence that in those years the Quebec count referred to buildings not dwelling units.

This estimation yields a current dollar value of \$4,205 in 1926, rising to \$4,724 in 1928, a peak not attained again until the late 1940s. In constant dollars, the unit value is 38 per cent less in 1938 than it is at the 1928 peak. The pattern shown by this series is roughly corroborated by data from the 1941 Census on value of dwelling by length of occupancy (see Steele, 1972, table 7.2). It is strongly at variance with the assumption of O.J. Firestone, *Residential Real Estate in Canada*, (Toronto: University of Toronto Press, 1951, p. 422), that constant dollar unit values of non-farm singles did not vary over this period. This assumption - made also for apartments and farm singles - underlies the residential construction series appearing in the previous edition of *Historical Statistics of Canada*.

For 1943 to 1950, in order to link these estimates to the 1951 to 1968 estimates, the value per unit for one-and two-unit buildings is 1.27 times the value given by the estimator just described. As is pointed out in the note to the 1951 to 1968 estimates, the 1951 value on which this link is based is quite clearly much too high, so that the linking process yields a too-high level for the whole period 1943 to 1950 and later. The initial year of the linking series, 1943, was chosen because of the very low level of residential construction in that year.

For the whole period 1926 to 1950 the value per unit for rural dwelling units in one-to-three-unit (for 1943 to 1950, one-and-two-unit) buildings is taken as .531, the comparable urban value. This ratio is based on evidence from the 1941 and 1931 censuses.

For 1926 to 1942, the value per unit of 'other' dwellings is the average permit value of Montreal apartments times .91, the ratio of Canada to Montreal apartment values in 1946. The 1946 Canada value is .865, the average value of NHA apartments. This estimator is not as unsatisfactory as it might appear at first sight: in this period a substantial proportion of all new apartments in Canada were built in Toronto and Montreal - in many years over one-third - and the pattern of Toronto unit value for years it is available is consistent with the Montreal pattern (see Steele, 1972, tables 7.5, 7.6). In addition, because apartment starts are derived using this unit value (see note to series S201), problems in this estimator affect the starts series, but not the value of work put in place.

This estimation yields a pattern quite like the pattern for the values of one-to-three-unit buildings. The peak value is in 1929, at \$4,164; and while the constant dollar value is 32 per cent less in 1938 than in 1929, it is substantially below the 1938 value both in 1933-34 and in the early war years.

For 1943 to 1950, in order to link these estimates to the 1951 to 1968 estimates (see the discussion for units in smaller buildings), the value per unit is 1.16 times the estimator just described.

To the above-described structure value per unit is added an estimate of supplementary costs (the costs of land improvements, and of architectural, legal and financial services). This is taken as 3.11 per cent of structure value for small buildings and 2.81 per cent for other dwellings. These ratios are from data on NHA loans approved in 1948 (O.J. Firestone, 1951, table XXII, p. 419).

The value of starts is converted into work put in place by assuming that 15 per cent of work started in any year is put in place in the following year; except that the carryover from both 1943 and 1944 is assumed at 20 per cent, from 1945 and 1946, 25 per cent, and 1947, 1948, 1949, 20 per cent. The higher ratios for 1943 to 1949 are used because of the long completion times (Central Mortgage and Housing Corporation, *Housing in Canada*, January, 1949) observed during this period of material and labour shortages.

The estimator for alterations and additions is the value of starts times the estimated ratio of alterations and additions to starts. For 1940, 1944 to 1950 the ratio is just the ratio of alterations, additions and repairs to new, from residential permit reports of 204 municipalities. Because the presumed effect of war restrictions on new building was greater in these municipalities than elsewhere, the 1941 to 1943 ratio is estimated from Census of Construction data, except that the census of construction-based ratio is reduced by 25 per cent in order to link it with the permit-based ratio. The census of construction-based ratio is also used for 1934 to 1939, because permit alterations and additions are not available for those years. For 1926 to 1933, the ratio is estimated using parameters obtained by regressing the census of construction-based ratio on the value of starts (see Steele, 1972, p. 170 for details).

As can be seen, the estimator for additions and alterations 1926 to 1950 is essentially the same as the estimator used for 1951 to 1970. And as noted above the latter is clearly seriously downward biased. It may therefore be concluded that the estimator for 1926 to 1950 is also downward biased. It is worth noting, however, that the ratio of alterations and additions to work in new buildings 1926 to 1929 is over 12 per cent while the analogous ratio (alterations, additions and conversions to work in new buildings plus supplementary cost) in the late 1960s is only about 8 per cent. In view of the much greater average age of the stock in the late 1960s than in the earlier period, this suggests that alterations are much less understated in the earlier period than later.

S181-189. Dwelling starts by region, 1948 to 1976

S190-194. Dwelling starts by type, 1949 to 1976

SOURCE: Central Mortgage and Housing Corporation, *Canadian Housing Statistics*.

The precursor of the starts and completions survey was a survey of completions partially based on a sample designed by the young Nathan Keyfitz at Statistics Canada. This survey used reports from municipalities to estimate completions; it was carried out for 1945, 1946, 1947. In 1948 the starts survey was initiated. It was carried out by Statistics Canada with the help of CMHC, and was a complete survey of metropolitan and urban areas of 5,000 population and over. Outside these areas, about 400 sample areas were enumerated. Starting in 1963, the population cut-off for the complete survey was raised to 10,000 from 5,000. Some time before that date complete responsibility for the starts and completions survey was transferred to CMHC.

In late 1954 a redesigned sample was implemented; this indicated that the previous sample had deteriorated badly (CMHC, *Canadian Housing Statistics*, 1955, 4th Quarter, p. 5n) so that starts of singles in 1954 was understated by perhaps as much as 20 per cent. In view of this, a plausible adjustment to the published single starts series would add 14,000 units to the 1954 figure, 12,000 to 1953 and 7,000 to 1952. It seems reasonable to suppose that since 1954 there have not been substantial sampling problems. There has, however, certainly been at least one occasion when the starts have been substantially understated: in early 1959, 8,000 starts were missed. Because it is CMHC policy never to revise its published starts estimates, neither the estimates for 1949 to 1954 nor the estimate for 1959 were ever changed to correct the indicated errors. Series S181-194 are thus unrevised series.

In recent years, at least, and probably from the start of the survey, the major sources of information for starts survey enumerators have been CMHC inspection reports, in the case of NHA dwellings, and building permits, in the case of non-NHA dwellings. Because of the ease of discovering NHA starts as compared with the difficulties for non-NHA, especially in areas with lax or nonexistent permit systems, the starts survey is apt to be more accurate when NHA building is relatively important. Missed starts, when they do occur, are likely to be singles, doubles or duplexes in rural (sample) areas, because such areas are relatively time-consuming for CMHC field office staff to survey. More than likely missed starts are mistimed starts. Starts are attributed to the month they are reported, not the month the start actually occurred. A problem for enumerators is the fact that occasionally the type of dwelling, or the number of dwellings in a building, changes after the building has been started.

The completions series analogous to series S190-193 are not used in the estimation of residential construction 1951 to 1960. Instead revised series are used. These revised series are estimated assuming that the completions undercount between the 1951 and 1956 censuses and between the 1956 and 1961 censuses is given in each case by the change in census dwellings (occupied plus vacant) plus estimated demolitions minus mobiles minus reported completions. The undercount is distributed within each five-year period assuming that the pattern of actual completions is the same as the pattern of reported completions. The revised series and the amounts of the revision are given below:

**Completions estimates underlying residential construction estimates,
1951 to 1960**

Year	Singles		Multiples	
	Revised completions	Revised minus reported completions ¹	Revised completions	Revised minus reported completions ¹
1951 ²	39,148	1,969	18,642	6,596
1952	58,939	2,972	26,509	9,389
1953	72,564	3,648	43,287	15,364
1954	75,563	3,803	46,810	16,605
1955	95,359	4,806	57,861	20,485
1956	99,471	3,815	54,909	14,865
1957	83,590	2,494	44,990	8,803
1958	99,816	2,986	61,968	12,112
1959	98,387	2,932	62,436	12,220
1960	80,514	2,401	56,742	11,098
1961 ³	24,727	743	17,460	3,415

¹ Reported completions are from CMHC, **Canadian Housing Statistics, 1968, table 7.**

² 1 June to 31 December 1951.

³ 1 January to 1 June 1961.

It is apparent that the revised series presented here are probably greatly in error. The very small upward revision of singles is inconsistent with the evidence of understatement in the starts survey in the early 1950s. The very large upward revision of multiples is likely the outcome of the assumption that conversions net of mergers were zero. This assumption is prima facie implausible, especially for the early 1950s when there was still excess demand for housing. If indeed there were a substantial number of net conversions this would tend to increase the stock of multiple units and reduce the stock of single units, because conversion often is associated with the transformation of a single house into two or three apartments. It seems fair to conclude then that the large upward revision of multiples shown here is mainly the result of attributing to new building the increase in multiples brought about by conversion.

The net effect on the residential construction estimates of the error in these completions series and the error in the unit value series (see the note on series S168-180) is likely not very great. This is the fortunate outcome for the early 1950s of the fact that the overstatement of the volume of multiples (which are low in true unit value) and the understatement of the volume of singles (which are substantially higher in true unit value) tend to be offset by the overall overstatement of unit values.

S195-197. Mobile home shipments, 1967 to 1976

SOURCE: Statistics Canada, *Truck Body and Trailer Manufacturers*, (Catalogue 42-217); Statistics Canada, *Merchandise Trade*, (Catalogue 65-203).

These series are included because the starts and completions surveys do not include mobile homes. An unknown number of mobile homes are in fact used as offices.

S198-202. Dwelling starts by type, 1921 to 1950

SOURCE: Steele, M. L., *Dwelling Starts in Canada, 1921 to 1940*, (Toronto: unpublished Ph.D dissertation, University of Toronto); Steele, M. L., *Estimates of New Residential Construction, 1941-1950*, (Ottawa: processed, Statistics Canada, 1969).

These series are used to estimate residential construction, 1926 to 1950 (S179). They replace the completions series, R138, in the previous edition of *Historical Statistics of Canada* for 1921 to 1944. Series R138 was estimated by O.J. Firestone (1951). It should be noted that the completions underlying the residential construction estimates in the previous volume, for the years 1941 to 1950, are substantial upward revisions of this Firestone series (previous edition of *Historical Statistics of Canada*, p. 499).

O.J. Firestone completions 1921 to 1940 are estimated in two stages. First, completions for each decade 1921 to 1931 and 1931 to 1941 are estimated as equal to the increase in stock as given by census data plus demolitions and other dwelling losses minus dwellings added by conversion of existing buildings. Secondly, decade completions are allocated to years using a building materials index.

The use of a building materials index to yield the year-to-year pattern of new residential building is obviously objectionable. Because building materials are used for non-residential building, for repair work and for non-building purposes, it cannot be assumed that the pattern of their use will follow closely the pattern of new residential building. A second, less obvious problem in O.J. Firestone's estimation is his very low estimate of conversions. Essentially only those conversions authorized by municipal authorities are covered, yielding an estimate of 47,600 for 1921 to 1940 (previous edition of *Historical Statistics of Canada*, S139). Among the evidence that this estimate is a gross understatement is the fact that in the

1961 Census respondents reported 585,000 multiple dwellings built before 1920 (1961 Census, vol. II, 2, table 78) while the stock standing in 1921 was only about 335,000 (Steele, 1972, table 6.8), implying at least 250,000 conversions. (For Buckley's comments on O.J. Firestone's conversion estimates, and on the use of the building materials index, see previous edition of *Historical Statistics of Canada*, p. 500). Because the conversion process typically results in a loss to single detached stock and an addition to multiple stock, as a single house is converted into two or three apartments, an understatement of conversions implies an estimate of single completions which is somewhat too low and an estimate of multiples completions which is much too high. Thus it is not surprising that O.J. Firestone's estimates for urban areas in the 1930s show multiple completions nearly three times as great as singles completions despite the evidence of building permits, contract awards and the census of construction that apartment building was much weaker than other residential building in this period.

Like the O.J. Firestone estimates, series S198-202 have as their underpinning decade estimates derived using census and other data. The major difference from the O.J. Firestone results is the much lower estimate for the decade between the 1931 and 1941 censuses. The source of this difference is the much higher estimate of conversions. This is derived as an implication of the low ratio of multiple to single new construction as indicated by contract awards, censuses of construction and other data, at the same time as the much higher ratio of multiple to single gross flow given by the census reconciliations. (For details of the derivation see Steele, 1972, pp. 134-5 and Appendix VI).

Instead of the building materials index distributor used by O.J. Firestone to get annual estimates, series S198-202 essentially use the volume of residential building indicated by contract awards. This is accomplished as follows. First, the estimator for starts in urban one-to-three unit buildings is the number of contract awards 'residences' (corrected for a building-dwelling unit anomaly in Quebec, 1921 to 1928). The estimator for starts in other types of residential building is the value of apartment contract awards divided by the estimate of apartment unit value described in the note to series S168-180. The estimator for starts in commercial buildings is the ratio of such starts to all other starts in Montreal, times all other units in Canada. This ratio is 6 to slightly under 9 per cent in the early years of the period and well under 4 per cent in the last five years.

The remaining starts, those in one-to-three-unit buildings in rural areas, are estimated under two assumptions. First, it is assumed that the ratio of these starts to urban starts in one-to-three-unit buildings is the same in all years. Secondly, the difference in two-decade totals between the census-based estimate of all starts and the three components estimated as indicated above is assumed to equal rural starts in one-to-three-unit buildings. It will be noted that this estimating procedure means that while annual starts estimates summed over the two decades equal the sum of the census-based decade estimates, annual starts summed over a single decade are not constrained to equal the census-based decade estimate. This two-decade rather than one-decade constraint is used because (a) many of the component estimates used to derive the census-based decade estimates are subject to rather large error and the use of two-decade totals reduces the sensitivity to this error, and (b) there is evidence from the Quebec *Municipal Statistics* series, 'dwelling houses built', that the contract awards coverage of units in one-to-three-unit buildings did not change appreciably over 1921 to 1940.

For 1941 to 1950, the estimating procedure differs substantially from that used for earlier years, partly because the contract awards coverage changed substantially and partly because of the increased availability of alternative indicators. The estimating procedure is patchy, reflecting the varying quality of these indicators. Much of this variability is the result of disruptions caused by World War II and its aftermath. The estimation was carried out using two constraints. First, the decade total of starts had to be within the range 641,000 to 738,000, a range indicated as plausible by census-based decade estimates. In fact the total is 716,000. This compares with 594,000 completions for 1941 to 1950 shown by the unrevised series, (R-138) in the previous edition of *Historical Statistics of Canada*; and with 761,000 completions for June 1941 to June 1951 estimated for the purpose of preparing the residential construction estimates given in the previous edition of *Historical Statistics of Canada*. The second constraint is the requirement that the estimation procedure carried forward to 1951 had to yield an estimate of starts greater than the number yielded by the starts survey, but not more than 20 per cent greater.

For starts in one-and-two-unit buildings, the estimator for 1941 to 1945 is the 1940 estimate for units in one-to-three-unit buildings extrapolated on the basis of an index of starts of such units derived from Census of Construction data. This index is used because on the one hand, the coverage of this census appears stable for this period, and because permit and contract awards data both appear substantially affected by wartime regulations. For 1946 to 1950 the 1945 estimate is extrapolated using an index weighting equally data for this type of dwelling from the starts survey, from building permits; the Census of Construction data are not used because of evidence that its coverage of owner-builders increased and its editing practices changed. The ratio of rural to urban units is assumed to be .6.

For starts in apartment and other buildings, the 1941 estimate uses the 1921 to 1940 estimator. For 1942 to 1944, the 1941 estimate is extrapolated on the basis of an index in which Census of Construction data are weighted heavily. The 1945 to 1950 estimates are those given by the starts survey, and by starts derived from the predecessor completions survey.

The resulting estimates are much higher for the war years, especially 1942 and 1945, than the previous estimates (Canadian Housing Statistics, 1968, table 1). Evidently while war regulation dampened building considerably in urban areas, it was not so strong an influence in rural areas. The estimates show little change from 1945 to 1947 and then a very large increase in 1948 followed by additional growth albeit at a lower rate in 1949 and 1950. The previous estimates show a much smaller rise in 1948 and then virtually no growth in 1949 and 1950.

S203-205. Dwelling starts by area, 1868 to 1920

SOURCE: Steele, M., *Housing Starts in Canada, 1868-1920*, (Guelph: processed, University of Guelph, 1977).

The estimation procedure used for these series is an adaptation of that used for later years. It has two major elements. First, decade starts are estimated using the identity that decade starts equals the change in occupied plus vacant permanent dwelling stock as given by the census, plus demolitions and other losses occurring during the decade minus dwellings added by conversions. This estimation is done for farm and non-farm components; farm units are defined for this purpose as dwellings on farms of 11 acres or more. The second element of the estimation is the construction of several annual distributor series. The Buckley urban distributor is Helen and Kenneth Buckley's index of urban building activity (1955, Appendix, table 0). The residential distributor incorporates data on residential building. It is essentially the same as the Buckley urban distributor, reflecting only Montreal residential building, until 1883. Starting in 1915 it reflects rural plus urban Quebec building. The urban mortgage distributor is based on the change in mortgage assets of insurance companies. The Pickett glass distributor is essentially James Pickett's window glass index.

Four separate non-farm series are produced using these distributor series as follows: the annual percentage change in the ratio of starts to the distributor is assumed to change smoothly; the estimation using this assumption is iterated until the decade sum of the results is within 5 per cent of the census-based estimate of decade starts. The non-farm estimates, S204, are weighted averages of the four series produced in this way, with the weights varying according to the quality of the basic distributor series. Specifically, for 1868 to 1870, S204 is simply the residential distributor-based estimates; for 1871 to 1877, these estimates and the estimates produced using the Pickett glass index are averaged; for 1878 to 1882, the mortgage distributor estimate replaces the Pickett glass estimate; for 1883 to 1900 the mortgage distributor estimates are weighted .25, the residential distributor estimates .75; for 1901 to 1914 these each have a weight of .25 and the Buckley urban estimates .5; for 1915 to 1920 the Buckley urban and the residential each have a weight of .5.

The farm estimates are produced using as distributor a series for 1868 to 1891 based on the change in mortgage assets of building societies and loan companies, and for 1892 to 1920, Buckley's annual farm series.

The results of this estimation are clearly subject to quite substantial error, especially in the case of the farm series, and especially for the period prior to 1883. At census years, however, the estimates are nicely consistent with the under construction counts and scattered other data support them. The estimates are strikingly different from those of Pickett (previous edition of *Historical Statistics of Canada*, R149), especially for the early 1870s, when the high level shown by the Pickett series is essentially just the result of an arithmetic error, exacerbated by the annual distributor procedure used; and for 1915 to 1920, when wartime events damaged the usefulness of the glass index.

S206-219. Dwelling starts by principal source of financing and structural type, 1960 to 1976

SOURCE: Central Mortgage and Housing Corporation, *Canadian Housing Statistics*.

The number of starts under the NHA in any year is not the same as the number of loans in that year because of the typical lag of about a month between approval and start. NHA loans under sections 58 and 59 (numbered sections 40 and 40A before July 1971) include loans made to borrowers 'unable to obtain insured loans from private lenders'. These are almost all home-ownership loans. Loans made by CMHC under the Assisted Home Ownership Plan and the Assisted Rental Plan are included under 'Federal funds, other'. Also included in this category are: other CMHC loans under NHA, including those loans under sections 58 and 59 which are for low income housing; loans under the Veterans' Land Act, the Farm Credit Act, loans for Urban Military Housing; government expenditure for housing built for federal government employees. Under 'institutional funds' are included loans made by life insurance companies, loan and trust companies, chartered banks, Quebec savings banks, mutual benefit and fraternal societies. Under 'other' are starts of dwellings financed from sources such as provincial governments, caisses populaires, credit unions, guarantees under the Farm Improvement Loans Act and individual lenders, as well as starts of dwellings financed without mortgage loans.

S220-224. Housing stock at census dates, 1871 to 1951

SOURCE: 1871 to 1921: Steele, M., *Housing Starts in Canada, 1868-1920*, (Guelph: processed, University of Guelph, 1977); 1931, 1941: Steele, M., *Dwelling Starts in Canada, 1921-1940*, (Toronto: unpublished Ph.D dissertation, University of Toronto, 1972); 1951: 1951 Census vol. III, tables 2, 3.

The occupied figures for 1881, 1891, 1901, 1931, 1941, 1951 are taken directly from the census volumes. For 1871, the occupied total is that given in the census, vol. I plus the estimate for Prince Edward Island and the West by James Pickett *Residential Capital Formation in Canada, 1871-1921*, (Glasgow: processed, Royal College of Science and Technology, 1961, Appendix, table 1). For 1911 and 1921 the census dwelling count is not used because of confusion between building and dwelling unit in the instructions; the estimate here is the number of dwellings in the Yukon Territories and the Northwest Territories (plus the number of households elsewhere divided by the assumed ratio of households to dwelling units). This ratio is assumed 1.041 for 1911 and 1.054 for 1921. These numbers, and the assumed vacancy rate in 1921, were chosen after examination of contemporary data on crowding and vacancies. They yield a substantially smaller size of stock in 1921 and a slightly smaller stock in 1911 than Pickett's estimates, which are based largely on linear interpolation between census years.

Vacancies for 1871 to 1911 exclude prairies. For 1871 to 1901, the source is the same as for occupied dwellings. For 1911 the source is Pickett (1961, Appendix, table 1). For 1921, vacancies are assumed 2.24 per cent of stock. For 1931, urban vacancies are assumed 3.96 per cent of urban stock; this is the average rate observed in several cities in 1931 (O.J. Firestone, 1951, pp. 380, 381). In 1941 and 1951 vacancy data were once more collected in the census, and so figures for these years are from census volumes.

Temporary units, called 'vessels and shanties', are taken directly from census volumes for 1871 to 1891; for 1901 to 1921 temporary units are estimated using information on the number of prairie units of 'other' material of construction and the decline in the number of one-and-two-room dwellings. For 1931, the source is 1931 Census, V, table 85; for 1941 the source is a letter dated 1953 from F.G. Boardman of the Census Division, Statistics Canada.

S225-231. Dwelling units completed, urban structural conversions, urban demolitions and stock of dwellings at year end occupied by tenure, and vacant, 1956 to 1976

SOURCE: Mr. Paul Delisle, Construction Division, Statistics Canada.

The number of completions is taken from the starts and completions survey of CMHC. The number of structural conversions is the number for which building permits are issued inflated by the ratio of the population in all areas to the population in reporting municipalities; the number of demolitions is estimated in the same fashion. The number of vacant dwellings at census dates (1 June 1956 and every five years after that) is taken from the census; the number of vacancies in intervening years is estimated assuming the compound growth rate is constant. The tenure of the stock at census dates is taken from the census; the tenure in other years is estimated by linear interpolation.

The change in stock from one census to the next is identically equal to completions minus all conversions (structural and nonstructural) plus all losses from stock. Thus

$$(S231_t - S231_{t-5}) = \sum_{i=t-4}^t (S225_5 + S226_i - S227_i)$$

measures the net effect of errors and omissions in estimates of components of the change in stock, as long as the census stock count is correct. The residual is positive for each of the three earlier quinquennia (62,000 for 1956 to 1961, 16,000 for 1961 to 1966, 90,000 for 1966 to 1971) with Quebec and, to a lesser extent, Ontario accounting for most of these amounts; this pattern is consistent with the evidence of some under-reporting of completions in the late fifties and with the suspicion that unreported conversions were substantial in the late sixties. The residual is -31,000 for 1971 to 1976, suggesting there may have been a substantial number of two and three apartment houses changed back into single family use especially in Ontario and the western provinces.

S232-245. Apartment vacancy rates, by area and newly completed but unoccupied dwellings by type, 1957 to 1976

SOURCE: CMHC, *Canadian Housing Statistics* and CMHC files.

The vacancy rates are derived from a sample survey. The universe excludes apartment buildings financed by CMHC and buildings completed within six months of the survey date. It also excludes condominium buildings, even when many more than six units in such a building are occupied under rental tenure. The information is obtained by interviews with building owners and superintendents.

The count of newly completed but unoccupied dwellings is obtained by a survey of all units completed within six months of the survey; unoccupied units are dropped from the survey after six months. An NHA house or duplex is called occupied if it is either occupied or sold. Other units are called unoccupied even if they are already sold or rented. An apartment building is not called completed until 90 per cent of all units are completed, so that completed but unoccupied units in an apartment building called incomplete by this criterion will not be counted. If the practice of leaving some floors of an apartment building incomplete until other units are completed is widespread, the CMHC completion criterion implies that it substantially understates the completed but unoccupied count.

S246. Non-farm vacancy rates, 1921 to 1949

SOURCE: O.J. Firestone, *Residential Real Estate*, (Toronto: University of Toronto Press, 1951), table 69.

For 1921 to 1939, urban vacancies are estimated assuming the rate is the same as the geometric average of rates given in municipal reports of Toronto, Montreal, Winnipeg, Ottawa. Rural non-farm vacancies are estimated by extrapolating the 1941 Census vacancy rate using the urban vacancy rate series. For 1941 urban vacancies are estimated using the census urban rate; for 1940 and 1942 to 1946, urban vacancies are estimated for small cities using the 1941 Census rate, and for larger cities are estimated 'using the sample trend available for larger cities', (O.J. Firestone, 1951, p. 396). For 1947 to 1949, the rate used is extrapolated on the basis of data from 21 cities. For rural non-farm vacancies, the estimation is similar and uses the 1941 Census rate and 'the urban trend'.

S247-253. Net mortgage loans approved for new housing under the Dominion Housing Act and the National Housing Acts, by lender and type of loan, 1935 to 1976

S254-259. Net mortgage loans approved for existing housing under the NHA (1954), 1961-64 to 1976

SOURCE: CMHC, *Canadian Housing Statistics*.

Net mortgage loans approved take into account cancellations and alterations (such as a change in the number of dwelling units in an apartment building). Sections 58 and 59 loans include loans made to borrowers 'unable to obtain insured loans from private lenders'. Section 34.15 loans are Assisted Home Ownership Loans; AHOP loans not made by CMHC are made under a different section. Section 15 loans include loans made to entrepreneurs for low-rental housing projects. Approved lenders are lenders approved on an individual company basis for the purpose of making NHA loans. The majority of these are chartered banks and life, loan or trust companies; some pension funds are also approved lenders.

The source publication gives dollar values for these loans.

S260-271. Mortgage loans on new residential property approved by lending institutions, by type of lender, by type of loan, 1948 to 1976

S272-283. Mortgage loans on existing residential property approved, by type of lender, by type of loan, 1948 to 1976

S284-289. Mortgage loans on non-residential property approved, by type of lender, 1948 to 1976

SOURCE: CMHC, *Canadian Housing Statistics*.

Mortgage loans reported here are gross of cancellations and alterations; for NHA loans these are probably usually much less than 3 or 4 per cent. The possibility exists that they are occasionally much higher than this (see the comments above in the discussion of permit data). The data for these series are collected by a CMHC monthly survey; the life companies and the chartered banks report in summary form via their respective national organizations. The survey covers about 95 per cent of the universe. An NHA loan is called residential if at least 80 per cent of building it finances is for residential use.

The source publication gives S260-283 in terms of dwelling units and by structural type of dwelling unit as well as in millions of dollars.

S290-297. National Housing Act Mortgage Insurance Fund, 1955 to 1976

SOURCE: CMHC, *Canadian Housing Statistics*.

Starting in June, 1969, the mortgage insurance fee is, if insured progress instalments are made, one per cent for home-ownership loans and one and one-quarter per cent for rental loans. Prior to that the fee was double these amounts. The application fee is \$35. If default occurs, the lender receives the principal amount owing on the mortgage; approved borrowers' charges; interest on the principal owing at the mortgage interest rate for the period during which the loan was in default, or for 12 months, whichever is shorter; interest at the mortgage rate less 2 per cent for a maximum of six months, in addition to the 12-month period; any reasonable amount (effective June 1973) approved by CMHC for the legal costs of acquisition when making a claim.

S298-310. Sales and purchases of insured National Housing Act mortgages, 1957 to 1976

SOURCE: CMHC, 1957 to 1976 *Canadian Housing Statistics*.

NHA-approved lenders must retain the servicing of mortgages they sell. Hatch has commented on S298-310 as follows: "The data in these tables must be interpreted with caution. They are intended to identify arms-length trading between non-affiliated firms; however, in some cases parent-subsidiary trades have been included in the data. There is also reason to believe that the data are incomplete due to a failure to report transactions properly." (Hatch, J.E., *The Canadian Mortgage Market*, (Toronto: Queen's Printer for Ontario, 1975.)

S311-322. Selected housing unit cost series, 1951 to 1976

SOURCE: CMHC, *Canadian Housing Statistics*, (S312, S317, S320); Section C of CMHC book of tables (S311, S313, S314, S315); The Canadian Real Estate Association, *Annual Report 1977* and *The Canadian Realtor* (S319); Smith, L.B., *The Postwar Canadian Housing and Residential Mortgage Markets and the Role of Government*, (Toronto: University of Toronto Press, 1974), table V, p. 23 (S322).

The average cost of dwelling units by type is the average value from building permits times an inflation factor. This factor is 1.15 for singles and duplexes, for 1957 to 1971; 1.17 for 1972 to 1976. The factors for apartments and rows are 1.25 and 1.28 for 1957 to 1971 and 1972 to 1976 respectively. These factors are the ratio of actual to permit value estimated for a sample of NHA dwellings. It is possible that there is some non-trivial overstatement of costs per unit of singles in the early period here because of the deficient coverage in these years of building in smaller centres where, there is reason to believe (see discussion of S168-180), new houses may be of relatively low quality.

The average cost of NHA dwellings is the average of costs as estimated by loan applicants at the time of approval. Average estimated (total) cost differs little from the average selling price of the same units. The average land cost varies with the proportion of fully serviced, partially serviced and unserviced lots. NHA houses use a variety of construction materials and are built under a variety of programs (e.g. AHOP). NHA apartments include highrises and walkups, buildings of wood and of steel, and are built under low income and other programs. The difference between the average costs of all dwellings and NHA dwellings is affected by NHA loan maximum. This maximum changes over time; e.g. it was \$25,000 for home-ownership loans in early 1972, \$30,000 for these loans in late 1972 and varied on a regional basis starting in June 1974. Changes in the maximum affect the geographic composition of NHA houses. None of the NHA series (S312, S316, S320, S321 and S326) are reweighted in order to eliminate

distortions caused by the changing geographic condition. This point is especially important for the interpretation of the cost-per-square-foot index as a price index.

Multiple Listing Service properties in the MLS average include single detached and condominium dwellings, and probably some small apartment buildings. The average is computed as the total value of sales for Canada divided by the total number of sales. Thus the average in any year is affected by the geographic composition of sales. In 1961, Ontario accounted for 60 per cent of the number of all sales. British Columbia for 16 per cent, Manitoba for 8 per cent, Alberta for 8 per cent, Saskatchewan for 4 per cent, the Atlantic provinces for only 0.3 per cent and Quebec for 5 per cent; the respective numbers for 1977 are 49, 15, 5, 13, 4, 3 and 11. Weighting the provincial averages in 1976 by their 1961 weights, however, yields an average value of \$51,847, almost precisely the same as the current weighted average value. It is possible that year-to-year changes are distorted by the practice of increasing the use of 'exclusive' listings in hot markets. The remarkable similarity of the movement of this series and the average of S329-334 suggests that this is not a problem of consequence.

Average urban cash rent is for 1961 and 1971 average urban cash rent as reported in the census. The estimates for other years are extrapolations based on the percentage changes computed by Lawrence Smith (1974, p. 23) using average rents reported in the Labour Force Survey. It is worth noting that average gross rent (which includes an allowance for utilities where these are not included in cash rent) increased by just 53.8 per cent between the censuses of 1961 and 1971, as compared with 63.2 per cent for cash rent. Rent increases by quarter, computed from the Labour Force Survey data, are shown in Loynes, R.M.A., *An Examination of the Consumer Price Index and Implicit Price Index as Measures of Recent Price Change in the Canadian Economy*, (Ottawa: Prices and Incomes Commission, 1972), p. 65. Average rents are currently computed quarterly by the Prices Division for use in GNP estimation, but are not available for publication.

S323-325. Average construction cost of new dwelling units, by type of dwelling, 1921 to 1950

SOURCE: See source for S168-180.

For description of estimation see the note to S168-180.

S326-335. Selected housing price series (1971 = 100), 1952 to 1976

SOURCE: CMHC, *Canadian Housing Statistics*, (S326); Statistics Canada, *Prices and Price Indexes*, (Catalogue 62-010), (S327, S335); CANSIM, Matrix No. D40680, (S328); Statistics Canada, *Construction Price Statistics*, Monthly Bulletin, (Catalogue 62-007), (S329-334).

For comment on S326, see the note to S311-322. The residential construction input price index starting in 1971 weights wages .359 and materials .641. For comments on S328 see the note to S167.

The new housing price indexes (S329-334) are based on prices provided by builders of single family housing who build 100 or more housing units a year. Smaller builders are included if they are able to provide prices for comparable models over a period of time. The price index is corrected for quality change in two ways. First, a cost-based correction is made where the change is a minor one; for example, if the quality of carpets installed in a given model is improved, the contractor is asked to estimate the cost change and this amount is removed from the amount of the price change. Secondly, a market-price-based correction is made when the quality change arises because of the introduction of a new model; that is, the relative prices of the new model and an existing model are taken to represent their relative quality. It can be seen that if builders are in the habit of pricing new models high relative to their equilibrium market value, and then letting the differential decline over the time the model remains on the market, the new model correction will overstate quality improvement and lead to a downward bias in the index. There is no sign that this is a problem of importance here, however.

These price indexes are for the value of the house and its associated lot. Separate price indexes are also calculated for lots and for house value excluding lot. These indexes are not published because of some doubts about the validity of the split.

The rental component of the Consumer Price Index is computed from rent changes reported for units in the Labour Force Survey in the preceding as well as current month. It is widely agreed that this index is severely downward biased. Some evidence on this is provided by the fact it shows an increase of only 21.4 per cent between 1961 and 1971 while the Canada average gross rent as reported by the censuses increased by 55.8 per cent for the same period, and the urban Canada average gross rent by 53.8 per cent. Only a quality improvement in the stock of about 2.5 per cent per year would explain the difference. It has been plausible to suppose (e.g. see Loynes, 1972) that the apparent bias in the rental component of the CPI is the result of the 'new unit' problem discussed above in connection with the new housing price indexes. Evidence from a recent CMHC survey, however, suggests that this may be just a minor part of the problem. In 1975 CMHC did a special follow-up of its 1974 Survey of Housing Units. The average increase in gross rent of the same units, November 1974 to November 1975, it found, with the percentage increase shown by the CPI rental component shown in brackets were: St. John's, 12.8 (5.4); Halifax, 11.2 (2.6); Saint John, 15.8 (8.0); Montreal, 8.7 (5.2); Ottawa, 10.0 (4.4); Toronto, 13.2 (6.8); Winnipeg, 15.1 (9.8); Edmonton, 18.6 (10.6); Vancouver, 10.3 (7.6) (CMHC, *Analysis of Rental Market Focusing on the Impact of Removing Controls in 1977*; Ottawa: processed, 1976). It is important to emphasize that the CMHC estimates are not estimates of the change in average universe rents, but rather are estimates of the price change using basically the same procedure as used in computation of the CPI rental component. The differences in results has yet to be explained.

Series S1-7. New and repair construction expenditures, in current and constant dollars, 1926 to 1976

(millions of dollars)

Year	Current dollar estimates			Constant dollar estimates			Implicit deflator for new construction 1971=100
	New construction	Repair construction	New and repair construction	New construction	Repair construction	New and repair construction	
	1	2	3	4	5	6	7
1976	27,914	4,985	32,899	16,236	2,899	19,135	171.9
1975	24,757	4,320	29,077	16,008	2,793	18,801	154.7
1974	21,519	3,919	25,438	15,584	2,838	18,422	138.1
1973	17,598	3,217	20,815	14,952	2,733	17,685	117.7
1972	14,923	2,818	17,741	14,053	2,654	16,707	106.2
1971	13,600	2,588	16,188	13,600	2,588	16,188	100.0
1970	11,319	2,461	13,780	12,019	2,613	14,632	94.2
1969	10,824	2,380	13,204	11,978	2,634	14,612	90.4
1968	9,909	2,305	12,214	11,559	2,689	14,248	85.7
1967	9,474	2,145	11,619	11,171	2,529	13,700	84.8
1966	9,282	1,954	11,236	11,442	2,409	13,851	81.1
1965	8,174	1,755	9,929	10,689	2,295	12,984	76.5
1964	7,032	1,629	8,661	9,709	2,249	11,958	72.4
1963	6,156	1,559	7,715	8,763	2,219	10,982	70.2
1962	5,834	1,508	7,343	8,523	2,203	10,726	68.5
1961	5,630	1,455	7,085	8,245	2,131	10,376	68.3
1960	5,579	1,419	6,998	8,172	2,078	10,250	68.3
1959	5,849	1,353	7,202	8,672	2,006	10,678	67.4
1958	6,002	1,247	7,249	8,931	1,856	10,787	67.2
1957	5,921	1,223	7,144	8,772	1,812	10,584	67.5
1956	5,484	1,068	6,552	8,193	1,596	9,789	66.9
1955	4,352	1,141	5,493	6,762	1,773	8,535	64.4
1954	3,878	1,105	4,983	6,159	1,755	7,914	63.0
1953	3,853	1,070	4,923	6,049	1,679	7,728	63.7
1952	3,512	1,010	4,522	5,559	1,599	7,158	63.2
1951	2,859	987	3,846	4,739	1,636	6,375	60.3
1950	2,450	827	3,277	4,608	1,555	6,163	53.2
1949	2,110	765	2,875	4,116	1,492	5,608	51.3
1948	1,823	714	2,537	3,684	1,442	5,126	49.5
1947	1,311	613	1,924	3,007	1,407	4,414	43.6
1946	1,043	555	1,598	2,688	1,430	4,118	38.8
1945	752	513	1,265	2,072	1,414	3,486	36.3
1944	697	474	1,171	1,916	1,302	3,218	36.4
1943	931	397	1,328	2,573	1,097	3,670	36.2
1942	841	357	1,198	2,441	1,036	3,477	34.5
1941	711	330	1,041	2,232	1,036	3,268	31.9
1940	490	293	783	1,645	983	2,628	29.8
1939	405	283	688	1,426	997	2,423	28.4
1938	406	277	683	1,411	962	2,373	28.8
1937	439	269	708	1,489	913	2,402	29.5
1936	320	251	571	1,172	919	2,091	27.3
1935	287	238	525	1,075	891	1,966	26.7
1934	242	233	475	922	888	1,810	26.2
1933	197	215	412	758	827	1,585	26.0
1932	295	241	536	1,104	902	2,006	26.7
1931	567	287	854	2,017	1,021	3,038	28.1
1930	752	305	1,057	2,465	1,000	3,465	30.5
1929	868	328	1,196	2,755	1,041	3,796	31.5
1928	771	319	1,090	2,552	1,055	3,607	30.2
1927	621	296	917	2,120	1,011	3,131	29.3
1926	516	272	788	1,773	935	2,708	29.1

Series S8. Estimates of total new and repair construction, 1896 to 1930*(millions of dollars)*

Year	Total construction	Year	Total construction	Year	Total construction
	8		8		8
1930	928	1915	341	1900	119
1929	1,046	1914	480	1899	87
1928	940	1913	583	1898	75
1927	783	1912	597	1897	67
1926	703	1911	535	1896	78
1925	697	1910	453		
1924	692	1909	396		
1923	697	1908	322		
1922	624	1907	360		
1921	631	1906	316		
1920	986	1905	253		
1919	618	1904	220		
1918	558	1903	194		
1917	464	1902	150		
1916	336	1901	118		

Series S9-22. Total value of new construction work performed, by principal type of construction, 1926 to 1976

(millions of dollars)

Year	Building						Engineering							Total building and engineering
	Residential ¹	Industrial	Commercial	Institutional	Other building construction	Total ²	Road, highway and aerodrome construction	Water works and sewage systems	Electric power construction	Railway, telephone and telegraph construction	Gas and oil facilities	Other engineering construction ³	Total	
	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1976	10,853	1,042	3,182	1,379	991	17,347	1,966	1,344	2,694	859	1,753	2,183	10,799	28,145
1975	7,114	1,146	3,379	1,376	909	13,924	1,964	1,123	2,640	740	1,529	2,137	10,132	24,056
1974	7,010	1,201	2,612	1,199	704	12,726	1,789	974	1,693	720	1,451	1,418	8,045	20,771
1973	5,977	888	1,947	1,035	521	10,369	1,521	700	1,385	555	1,275	1,150	6,585	16,954
1972	4,820	706	1,467	1,094	437	8,524	1,410	625	1,123	446	1,209	1,133	5,945	14,469
1971	4,025	831	1,187	1,317	398	7,757	1,316	514	1,093	415	1,128	1,051	5,518	13,275
1970	3,138	804	1,066	1,205	362	6,575	1,012	412	1,125	376	939	882	4,745	11,320
1969	3,384	680	954	1,212	361	6,592	972	329	910	345	822	856	4,234	10,826
1968	2,806	549	961	1,274	303	5,894	854	325	747	338	774	976	4,015	9,909
1967	2,378	685	1,036	1,160	310	5,569	955	314	790	336	654	858	3,906	9,475
1966	2,180	830	1,089	1,080	297	5,476	946	339	675	315	615	915	3,805	9,281
1965	2,218	625	876	941	255	4,915	840	306	515	247	541	811	3,259	8,174
1964	1,990	522	716	693	212	4,133	770	235	482	254	544	615	2,900	7,033
1963	1,652	399	617	780	225	3,673	647	219	431	254	503	430	2,482	6,155
1962	1,555	364	603	753	309	3,584	603	187	396	223	442	400	2,250	5,834
1961	1,467	294	637	570	289	3,258	557	186	354	232	472	459	2,261	5,519
1960	1,456	331	621	543	234	3,185	631	193	299	299	409	437	2,268	5,453
1959	1,752	297	640	511	214	3,414	611	195	346	299	414	431	2,297	5,711
1958	1,782	287	589	493	186	3,336	543	170	457	250	611	463	2,494	5,830
1957	1,430	494	560	465	203	3,150	550	172	463	245	700	503	2,634	5,784
1956	1,575	487	480	396	265	3,204	458	159	415	215	499	350	2,096	5,300
1955	1,499	293	427	408	183	2,811	359	127	301	144	311	215	1,458	4,269
1954	1,178	262	463	331	144	2,378	309	158	290	119	245	201	1,322	3,700
1953	1,084	294	421	297	189	2,285	339	116	303	134	235	253	1,381	3,666
1952	826	389	337	273	93	1,919	432	116	357	114	199	144	1,363	3,282
1951	821	351	283	243	72	1,769	311	65	318	98	88	86	965	2,734
1950	923		770			1,693	..	..	..	..	..	..	760	2,453
1940	822		703			1,525	..	..	..	..	..	..	641	2,166
1948	635		612			1,247	..	..	..	..	..	..	577	1,824
1947	526		469			995	..	..	..	..	..	..	402	1,397
1946	407		332			739	..	..	..	..	..	..	305	1,044
1945	330		246			576	..	..	..	..	..	..	169	745
1944	279		251			530	..	..	..	..	..	..	215	745
1943	250		405			655	..	..	..	..	..	..	366	1,021
1942	244		471			715	..	..	..	..	..	..	228	943
1941	251		357			608	..	..	..	..	..	..	201	809
1940	186		232			418	..	..	..	..	..	..	145	563
1939	174		130			304	..	..	..	..	..	..	163	467
1938	148		128			276	..	..	..	..	..	..	179	455
1937	164		140			304	..	..	..	..	..	..	201	505
1936	131		103			234	..	..	..	..	..	..	143	377
1935	107		72			179	..	..	..	..	..	..	149	328
1934	92		65			159	..	..	..	..	..	..	118	275
1933	72		57			129	..	..	..	..	..	..	95	224
1932	90		87			177	..	..	..	..	..	..	143	320
1931	158		169			327	..	..	..	..	..	..	256	583
1930	191		260			451	..	..	..	..	..	..	324	775
1929	230		342			572	..	..	..	..	..	..	308	880
1928	220		295			515	..	..	..	..	..	..	254	769
1927	204		220			424	..	..	..	..	..	..	196	620
1926	201		165			366	..	..	..	..	..	..	167	533

¹ Unrevised; not consistent with National Accounts estimates before 1962 and 1971-1976.

² Estimates for types of structure in agriculture have been compiled for 1963 to 1968 on the basis of more recent related information and are therefore not comparable with data for types of structure in the years prior to 1963.

³ Includes marine, and dams and irrigation.

Series S23-28. Total value of new construction work performed, by region and by major type, 1951 to 1976

(millions of dollars)

Year		Atlantic provinces	Quebec	Ontario	Prairie provinces	British Columbia ¹	Canada
		23	24	25	26	27	28
1976	Residential	703	2,220	3,189	2,221	1,431	9,764
	Non-residential	460	1,789	1,962	1,316	766	6,293
	Engineering	919	2,375	2,999	3,141	1,570	11,004
1975	Residential	574	1,574	2,553	1,300	1,112	7,113
	Non-residential	508	2,207	2,151	1,167	778	6,811
	Engineering	893	2,339	2,789	2,675	1,437	10,133
1974	Residential	566	1,470	2,872	1,068	1,034	7,010
	Non-residential	455	1,642	2,027	918	674	5,716
	Engineering	820	1,635	2,188	2,009	1,393	8,045
1973	Residential	493	1,169	2,577	850	889	5,977
	Non-residential	319	1,138	1,646	734	554	4,391
	Engineering	673	1,407	1,759	1,617	1,130	6,585
1972	Residential	343	969	2,037	737	734	4,820
	Non-residential	238	912	1,480	607	467	3,704
	Engineering	581	1,260	1,736	1,370	997	5,945
1971	Residential	299	861	1,642	635	588	4,025
	Non-residential	320	854	1,459	557	542	3,732
	Engineering	597	1,121	1,561	1,287	952	5,518
1970	Residential	229	678	1,287	470	474	3,138
	Non-residential	255	722	1,539	558	363	3,437
	Engineering	595	793	1,300	1,324	732	4,745
1969	Residential	226	677	1,425	579	476	3,384
	Non-residential	233	696	1,244	608	426	3,208
	Engineering	479	709	1,156	1,260	630	4,234
1968	Residential	173	597	1,184	453	399	2,806
	Non-residential	229	688	1,248	582	339	3,087
	Engineering	413	682	1,052	1,261	606	4,015
1967	Residential	130	559	981	362	346	2,378
	Non-residential	246	695	1,294	608	348	3,190
	Engineering	388	725	957	1,142	694	3,906
1966	Residential	125	541	903	313	298	2,180
	Non-residential	280	809	1,265	606	336	3,297
	Engineering	337	831	947	1,080	610	3,805
1965	Residential	133	581	884	330	291	2,218
	Non-residential	204	742	1,008	444	300	2,697
	Engineering	258	892	720	894	495	3,259
1964	Residential	123	560	760	311	237	1,990
	Non-residential	173	603	778	387	203	2,143
	Engineering	209	834	697	794	365	2,900
1963	Residential	101	476	600	276	200	1,652
	Non-residential	174	516	796	363	172	2,021
	Engineering	181	572	695	746	289	2,482
1962	Residential	103	445	540	297	170	1,555
	Non-residential	201	538	738	387	165	2,029
	Engineering	174	522	637	631	286	2,250
1961	Residential	116	379	577	279	146	1,497
	Non-residential	158	511	629	346	146	1,791
	Engineering	169	490	623	750	310	2,342
1960	Residential	122	377	573	266	184	1,522
	Non-residential	132	441	649	356	151	1,729
	Engineering	179	539	627	639	284	2,268
1959	Residential	112	463	689	342	229	1,835
	Non-residential	108	463	605	325	161	1,662
	Engineering	192	572	637	607	288	2,297
1958	Residential	99	498	748	335	226	1,906
	Non-residential	103	400	599	313	141	1,556
	Engineering	157	589	827	610	311	2,494
1957	Housing	96	402	590	245	193	1,526
	Non-residential	98	412	695	297	218	1,721
	Engineering	131	576	812	599	515	2,634
1956	Housing	106	490	638	274	201	1,709
	Non-residential	102	360	637	318	213	1,630
	Engineering	155	429	550	600	362	2,096
1955	Housing	95	475	660	258	196	1,684
	Non-residential	92	319	507	266	129	1,312
	Engineering	127	345	375	440	172	1,458
1954	Housing	71	347	533	244	124	1,319
	Non-residential	76	298	478	239	109	1,200
	Engineering	99	350	355	385	134	1,322
1953	Housing	68	346	437	232	98	1,181
	Non-residential	85	284	469	244	119	1,201
	Engineering	82	294	399	372	234	1,381
1952	Housing	59	280	328	157	80	904
	Non-residential	81	259	422	220	110	1,093
	Engineering	72	341	405	318	228	1,363
1951	Housing	53	249	318	125	65	809
	Non-residential	67	213	383	169	115	948
	Engineering	63	234	307	218	144	965

¹ Includes the Yukon Territory and the Northwest Territories.

Series S29-58. Building permits issued, by region and major type, 1951 to 1976¹

(millions of dollars)

Year	Residential						Industrial					
	Canada	Atlantic provinces	Quebec	Ontario	Prairie provinces	British Columbia ²	Canada	Atlantic provinces	Quebec	Ontario	Prairie provinces	British Columbia ²
	29	30	31	32	33	34	35	36	37	38	39	40
1976	7,476	433	1,565	2,563	1,791	1,123	1,010	57	218	473	128	134
1975	6,129	377	1,129	2,462	1,180	981	876	41	208	435	114	78
1974	4,576	283	805	2,002	720	766	1,316	58	396	534	239	89
1973	4,763	215	815	2,366	628	740	854	31	208	428	103	85
1972	3,638	171	676	1,714	546	531	520	13	116	279	54	58
1971	3,203	126	686	1,456	480	455	461	48	133	197	38	45
1970	2,312	98	468	1,079	329	338	498	20	113	231	45	89
1969	2,434	106	423	1,119	401	384	569	16	129	299	61	63
1968	2,412	88	467	1,130	388	339	531	15	214	183	60	59
1967	1,927	63	412	892	276	284	400	10	89	201	61	39
1966	1,592	55	379	728	215	215	474	15	80	282	54	43
1965	1,757	66	444	773	248	226	430	46	77	212	41	54
1964	1,615	59	400	707	244	206	381	31	76	183	56	35
1963	1,462	54	391	608	239	170	281	23	50	152	41	15
1962	1,209	39	331	475	228	137	218	8	62	109	25	14
1961	1,176	37	293	495	236	115	198	7	34	96	42	19
1960	944	21	205	439	181	99	184	3	35	107	25	14
1959	1,255	32	251	552	262	158	193	4	48	94	32	15
1958	1,381	27	281	649	247	178	180	3	32	90	44	11
1957	952	18	198	445	160	132	219	5	62	96	24	32
1956	974	25	204	455	161	129	222	5	53	101	27	36
1955	1,030	22	207	499	171	131	196	4	38	79	44	31
1954	884	19	178	443	142	101	176	4	32	94	30	16
1953	810	23	173	375	155	84	201	7	42	112	26	14
1952	610	18	134	285	111	61	101	1	19	70	6	5
1951	445	13	93	226	67	45	114	1	20	82	6	6
Year	Commercial						Institutional and government					
	Canada	Atlantic provinces	Quebec	Ontario	Prairie provinces	British Columbia ²	Canada	Atlantic provinces	Quebec	Ontario	Prairie provinces	British Columbia ²
	41	42	43	44	45	46	47	48	49	50	51	52
1976	2,546	133	703	686	618	406	1,168	94	318	352	243	162
1975	2,251	152	432	919	436	313	1,342	138	262	493	262	186
1974	2,293	108	532	905	448	299	1,096	130	288	385	174	118
1973	1,970	115	380	849	328	297	972	69	295	378	112	118
1972	1,412	101	305	564	235	205	893	54	188	431	132	88
1971	1,070	44	184	489	162	191	996	30	220	459	192	94
1970	807	40	130	415	110	113	1,084	27	218	578	196	64
1969	839	37	148	383	167	104	1,066	106	222	513	128	97
1968	696	40	121	294	154	87	1,144	76	265	552	189	63
1967	702	55	129	281	134	103	1,046	80	145	519	209	93
1966	737	40	177	330	114	75	913	56	105	453	214	85
1965	783	32	250	276	148	77	840	62	128	401	182	67
1964	598	31	157	240	108	62	674	43	156	304	114	57
1963	460	21	116	183	92	48	620	34	166	264	115	41
1962	469	20	137	177	91	45	620	27	118	304	131	40
1961	439	27	104	197	72	38	431	31	89	200	76	34
1960	436	15	116	173	84	48	460	31	109	187	99	34
1959	512	18	164	189	85	57	419	21	84	186	102	26
1958	370	13	87	155	82	33	425	24	91	203	64	43
1957	347	11	54	162	70	51	309	17	77	126	59	30
1956	336	12	71	126	71	55	296	13	71	128	58	27
1955	267	10	51	126	49	32	311	18	88	96	72	37
1954	197	9	30	93	44	20	265	11	62	101	63	28
1953	199	7	32	101	32	26	213	11	54	81	42	26
1952	188	8	29	87	47	18	164	8	61	61	23	11
1951	154	7	23	75	31	17	148	11	35	61	22	19
Year	Total											
	Canada	Atlantic provinces	Quebec	Ontario	Prairie provinces	British Columbia ²						
	53	54	55	56	57	58						
1976	12,199	716	2,803	4,074	2,780	1,825						
1975	10,598	708	2,031	4,309	1,993	1,557						
1974	9,280	579	2,021	3,827	1,582	1,273						
1973	8,559	429	1,699	4,021	1,171	1,239						
1972	6,464	340	1,287	2,988	967	882						
1971	5,730	248	1,224	2,600	872	786						
1970	4,700	185	929	2,302	680	604						
1969	4,907	266	921	2,314	756	650						
1968	4,783	219	1,067	2,159	791	548						
1967	4,074	208	774	1,892	681	518						
1966	3,715	166	742	1,793	596	418						
1965	3,810	206	899	1,661	620	423						
1964	3,268	163	788	1,434	523	359						
1963	2,823	132	722	1,207	488	274						
1962	2,517	93	647	1,065	474	237						
1961	2,244	102	521	988	426	207						
1960	2,025	71	465	906	389	194						
1959	2,379	75	547	1,021	482	255						
1958	2,357	67	491	1,098	437	264						
1957	1,827	50	391	829	313	245						
1956	1,828	55	398	810	317	247						
1955	1,805	54	384	801	335	231						
1954	1,521	43	302	731	279	165						
1953	1,422	48	301	668	256	150						
1952	1,062	35	243	503	187	94						
1951	861	32	171	444	125	87						

¹ The number of municipalities reporting increases over time.

² Starting in 1972 includes the Yukon Territory and the Northwest Territories.

Series S59. Value of building permits issued, 1910 to 1960*(millions of dollars)*

Year	Building permits issued	Year	Building permits issued	Year	Building permits issued
	59		59		59
	204 cities		58 cities		35 cities
1960	1,382	1940	80	1920	106
1959	1,637	1939	60	1919	77
1958	1,622	1938	61	1918	37
1957	1,307	1937	56	1917	34
1956	1,319	1936	41	1916	40
1955	1,309	1935	47	1915	34
1954	1,151	1934	27	1914	97
1953	1,089	1933	22	1913	154
1952	803	1932	42	1912	185
1951	681	1931	112	1911	138
1950	802	1930	166	1910	100
1949	616	1929	235		
1948	536	1928	219		
1947	373	1927	185		
1946	384	1926	156		
1945	197	1925	125		
1944	129	1924	127		
1943	80	1923	134		
1942	104	1922	148		
1941	135	1921	117		
1940	133	1920	117		

Series S60-64. Principal statistics of the construction industry (construction contractors), 1934 to 1976

(values in millions of dollars)

Year	Number of employees	Salaries and wages	Cost of materials	Value of work	Value added
	60	61	62	63	64
1976	580,049	9,493	9,831	27,101	17,270
1975	525,722	7,979	8,874	22,592	13,718
1974	530,593	6,899	7,768	19,618	11,850
1973	514,587	5,847	6,209	15,904	9,695
1972	440,161	4,824	5,500	13,744	8,244
1971	461,979	4,528	5,122	12,703	7,581
1970	437,155	3,814	4,684	10,827	6,143
1969	458,112	3,605	4,727	10,521	5,794
1968	456,121	3,296	4,666	9,935	5,269
1967	433,374	2,974	4,108	9,271	5,163
1966	449,785	2,837	4,279	9,121	4,843
1965	430,930	2,430	3,912	7,930	4,018
1964	398,928	2,083	3,456	6,862	3,406
1963	376,953	1,876	2,967	6,032	3,065
1962	384,670	1,818	2,833	5,757	2,924
1961	365,564	1,690	2,606	5,459	2,853
1960	364,276	1,632	2,535	5,249	2,713
1959	389,897	1,676	2,571	5,353	2,782
1958	402,798	1,693	2,665	5,565	2,900
1957	404,771	1,664	2,569	5,417	2,848
1956	406,048	1,540	2,432	4,973	2,541
1955	359,661	1,271	1,956	4,060	2,104
1954	334,923	1,147	1,666	3,523	1,856
1953	332,233	1,143	1,634	3,456	1,822
1952	303,598	994	1,659	3,105	1,446
1951	279,691	767	1,279	2,479	1,200
1950	213,078	523	809	1,619	811
1949	210,568	489	669	1,348	679
1948	284,000	605	836	1,666	830
1947	204,954	403	599	1,097	498
1946	165,518	295	427	775	349
1945	110,405	185	249	459	210
1944	92,912	158	181	381	200
1943	121,482	215	262	511	249
1942	141,234	227	308	575	267
1941	139,587	195	342	564	222
1940	103,898	131	227	380	152
1939	91,147	104	161	287	126
1938	96,010	107	153	281	129
1937	96,865	107	152	278	126
1936	76,834	75	105	197	92
1935	63,349	59	76	148	71
1934	46,479	39	52	99	48

Series S65-71. New construction in primary industries, 1946 to 1976

(millions of dollars)

Year	Agriculture and fishing ¹	Forestry	Total mining, quarrying and oil wells	Total metal mines	Total non-metal mines	Petroleum and gas ²	Construction industry
	65	66	67	68	69	70	71
1976	527.0	89.0	2,356.9	597.6	161.3	1,598.0	121.3
1975	479.6	90.9	1,968.1	499.6	112.8	1,355.7	80.2
1974	433.1	98.2	1,586.5	409.6	116.0	1,060.9	66.0
1973	346.3	76.4	1,276.3	357.1	67.5	851.7	57.1
1972	292.0	52.0	1,105.4	345.7	50.5	709.2	49.0
1971	228.0	45.0	1,314.8	590.8	84.6	639.4	17.0
1970	225.0	48.0	996.1	335.6	107.9	552.6	15.0
1969	249.0	52.0	888.5	295.1	128.1	465.3	14.0
1968	253.0	37.0	782.4	264.8	110.2	407.4	14.0
1967	255.0	38.0	762.2	238.1	121.1	403.0	14.0
1966	243.0	43.0	766.6	209.9	107.3	449.4	13.0
1965	210.0	43.0	573.7	121.5	58.9	393.3	17.0
1964	195.0	39.0	520.6	147.0	40.6	333.0	14.0
1963	189.0	28.0	431.5	118.3	19.1	294.1	11.0
1962	185.0	29.0	418.7	137.8	25.2	255.7	14.0
1961	168.0	28.0	443.5	107.6	16.4	319.5	14.0
1960	167.3	27.0	303.2	88.8	14.8	199.6	14.0
1959	165.5	21.0	249.7	71.1	11.7	166.9	16.0
1958	148.5	19.0	241.5	62.5	18.8	160.2	16.0
1957	134.0	28.0	406.6	187.0	24.9	194.8	16.0
1956	148.3	41.0	378.2	144.8	20.2	213.2	16.0
1955	134.6	36.0	248.0	..	..	..	16.0
1954	140.8	26.0	184.0	..	..	..	9.0
1953	154.2	19.0	162.0	..	..	..	10.0
1952	130.3	19.0	133.0	..	..	..	5.0
1951	134.1	22.0	101.0	..	..	..	7.0
1950	74.0	17.0	68.0	..	..	..	14.0
1949	74.0	16.0	57.0	..	..	..	12.0
1948	58.0	14.0	47.0	..	..	..	8.0
1947	46.0	15.0	23.0	..	..	..	3.0
1946	39.0	6.0	13.0	..	..	..	5.0

¹ The estimation procedure used for agriculture, 1951 and later is different from that used for earlier years.

² Gas processing plants are included with manufacturing prior to 1960.

Series S72-93. New construction in manufacturing by major groups, 1926 to 1976
(millions of dollars)

Year	Total manufacturing			Food and beverages	Tobacco	Rubber	Leather	Textiles	Knitting mills	Clothing	Wood	Furniture and fixtures
	New	Repair	New plus repair									
	72	73	74									
1976	1,439.7	438.2	1,877.9	110.4	1.1	16.9	3.4	19.1	1.5	3.7	61.2	8.0
1975	1,568.5	381.0	1,949.5	118.2	5.7	23.0	2.7	31.6	0.3	8.5	73.6	9.2
1974	1,425.3	344.4	1,769.7	139.3	7.1	36.1	3.3	38.6	1.2	5.5	85.5	17.1
1973	985.8	275.8	1,261.6	113.1	1.1	28.0	2.6	26.0	3.3	9.6	76.3	11.5
1972	829.0	252.0	1,081.0	82.2	1.8	23.0	6.0	20.7	1.1	5.2	41.0	5.3
1971	873.0	207.0	1,080.0	95.1	2.9	23.8	2.8	14.0	1.5	2.0	37.2	3.9
1970	997.0	213.0	1,210.0	96.8	2.9	22.3	1.3	20.3	2.1	1.1	42.4	7.1
1969	772.0	205.0	977.0	87.9	1.1	11.3	2.3	20.5	2.9	3.8	42.5	2.9
1968	657.0	193.0	850.0	77.2	3.8	9.3	2.2	11.7	2.2	2.4	18.4	8.4
1967	677.0	180.0	857.0	73.7	4.1	5.5	1.8	17.8	0.8	2.0	15.6	10.2
1966	788.0	167.0	955.0	79.3	5.4	14.9	2.6	35.1	2.8	2.2	23.5	10.5
1965	604.0	151.0	755.0	60.0	2.3	6.1	1.0	32.8	1.3	2.6	22.9	6.7
1964	443.0	147.0	590.0	53.6	2.4	5.7	1.4	23.7	1.3	1.7	15.5	4.4
1963	355.0	140.0	495.0	52.9	1.5	3.0	1.7	10.9	0.9	1.4	12.5	4.7
1962	353.0	133.0	386.0	57.3	0.9	2.9	0.9	6.8	0.8	0.6	11.8	2.4
1961	279.0	124.0	403.0	58.1	1.7	2.6	0.6	5.5	1.1	1.9	13.6	1.2
1960	335.0	124.0	459.0	52.7	1.7	6.9	1.3	6.0	—	2.3	12.6	3.0
1959	374.0	125.0	499.0	45.4	3.3	3.5	0.8	4.7	—	1.6	15.3	—
1958	398.0	110.0	508.0	40.5	4.1	2.0	0.5	2.6	—	0.7	8.8	—
1957	520.0	115.0	635.0	36.3	1.9	6.1	1.3	7.9	—	1.2	10.3	—
1956	488.0	112.0	600.0	32.6	3.5	2.9	1.8	10.3	—	1.3	14.0	—
1956 ¹	493.3	—	—	32.6	—	8.2	—	10.3	—	1.3	14.0	—
1955	344.7	—	—	38.5	—	5.1	—	7.0	—	1.4	12.1	—
1954	287.6	—	—	38.6	—	5.7	—	7.5	—	2.2	8.4	—
1953	349.3	—	—	26.0	—	6.0	—	7.9	—	3.8	10.4	—
1952	343.6	—	—	26.6	—	3.8	—	7.0	—	1.6	9.3	—
1951	268.5	—	—	28.0	—	3.4	—	9.9	—	4.1	11.2	—
1950	135.4	—	—	26.0	—	2.3	—	6.6	—	2.5	8.1	—
1949	156.6	—	—	27.7	—	2.6	—	7.0	—	3.0	7.5	—
1948	180.8	—	—	31.9	—	3.5	—	6.5	—	2.1	7.9	—
1947	184.8	—	—	33.0	—	4.6	—	10.9	—	3.7	11.4	—
1946	132.2	—	—	24.7	—	6.7	—	8.4	—	2.6	10.9	—
1945	75.9	—	—	18.2	—	5.9	—	1.3	—	9.2	1.6	—
1944	61.3	—	—	10.7	—	2.3	—	1.8	—	2.8	2.9	—
1943	84.6	—	—	6.1	—	2.2	—	0.8	—	1.6	16.8	—
1942	137.3	—	—	8.5	—	2.4	—	1.5	—	3.0	11.3	—
1941	95.2	—	—	9.7	—	2.4	—	3.1	—	10.9	10.8	—
1940	66.7	—	—	10.7	—	2.7	—	3.4	—	2.4	8.0	—
1939	33.4	—	—	7.5	—	1.1	—	0.6	—	1.4	4.9	—
1938	44.8	—	—	7.8	—	0.8	—	1.4	—	0.4	1.2	—
1937	64.1	—	—	8.5	—	1.8	—	2.6	—	1.8	14.1	—
1936	37.6	—	—	5.3	—	16.4	—	1.3	—	0.8	2.8	—
1935	21.1	—	—	3.5	—	0.1	—	2.8	—	0.1	1.0	—
1934	19.5	—	—	1.6	—	0.4	—	0.6	—	0.4	4.4	—
1933	17.8	—	—	0.8	—	2.9	—	0.9	—	1.1	7.0	—
1932	19.3	—	—	4.9	—	0.4	—	1.0	—	1.3	4.4	—
1931	40.9	—	—	7.2	—	0.9	—	1.7	—	1.6	1.0	—
1930	75.5	—	—	7.4	—	2.1	—	6.8	—	0.8	5.9	—
1929	131.0	—	—	13.5	—	2.5	—	1.4	—	13.3	10.2	—
1928	124.7	—	—	9.6	—	2.9	—	0.6	—	10.8	7.4	—
1927	86.9	—	—	4.4	—	1.1	—	6.2	—	7.5	21.5	—
1926	55.7	—	—	2.7	—	0.8	—	4.7	—	2.0	3.3	—

Series S72-93. New construction in manufacturing by major groups, 1926 to 1976 (concluded)

(millions of dollars)

Year	Paper and allied	Printing and publishing	Primary metals	Metal fabrication	Machinery	Transportation equipment	Electrical products	Non-metallic mineral products	Petroleum and coal products	Chemical	Miscellaneous
	83	84	85	86	87	88	89	90	91	92	93
1976	128.6	15.0	144.8	43.1	36.9	63.7	35.6	46.6	255.9	430.7	13.5
1975	110.1	18.4	200.5	50.3	49.1	76.5	28.3	41.1	337.5	374.7	9.2
1974	120.5	16.7	148.0	59.7	42.8	102.4	31.0	29.5	321.7	198.7	20.6
1973	89.4	15.0	75.8	43.4	30.3	47.7	32.2	37.6	229.7	100.7	12.5
1972	116.5	15.3	95.3	20.4	14.6	30.2	18.6	30.7	214.0	78.1	9.1
1971	133.6	15.6	91.1	20.4	13.1	30.2	28.6	22.5	211.3	107.6	16.1
1970	132.6	13.8	118.2	32.5	26.1	49.6	26.7	32.7	213.7	132.2	22.7
1969	109.9	12.5	71.5	29.0	17.1	43.6	22.4	37.1	116.9	119.4	17.8
1968	70.3	10.4	81.3	21.7	11.8	37.6	17.1	19.9	98.9	134.1	18.2
1967	111.2	9.9	82.0	28.2	18.9	56.4	26.4	40.9	78.8	78.7	14.1
1966	137.1	12.6	85.3	36.8	23.6	87.8	30.7	51.0	55.5	76.0	15.4
1965	111.5	17.6	61.7	32.9	13.8	64.5	17.6	30.0	30.3	76.2	12.4
1964	69.4	17.1	58.3	17.9	19.2	44.4	12.0	20.2	20.2	42.9	11.4
1963	40.3	15.5	44.4	14.6	14.2	27.1	9.5	13.7	37.9	39.5	8.5
1962	40.5	10.8	58.4	12.4	5.4	11.6	10.9	13.7	56.8	40.1	8.2
1961	37.1	6.4	32.9	8.4	5.5	13.9	7.8	11.9	27.9	35.4	5.6
1960	35.1	7.4	51.3	12.2	8.4	16.5	7.6	15.7	51.9	34.9	7.2
1959	24.2	11.8		40.9		20.5	8.5	25.9	109.2	24.5	6.0
1958	25.5	13.4		35.7		16.6	7.3	14.4	136.0	43.1	2.7
1957	66.3	17.3		54.5		18.1	13.8	29.4	113.4	65.6	6.6
1956	85.1	5.3		40.3		16.7	14.7	51.4	83.9	57.9	3.6
1956 ¹	85.1	5.3		40.3		16.7		218.0		57.9	3.6
1955	33.1	6.4		27.0		20.2		168.0		21.6	3.7
1954	21.6	11.7		22.0		20.9		131.2		15.1	2.7
1953	22.5	3.8		35.6		46.9		120.5		32.0	3.7
1952	33.6	3.3		46.2		37.1		109.2		61.2	4.7
1951	41.9	6.3		47.1		21.8		71.9		19.2	3.7
1950	21.1	5.0		13.5		9.9		30.7		7.3	2.4
1949	26.8	6.3		14.6		6.7		40.2		11.9	2.3
1948	29.1	7.0		19.6		5.4		50.1		15.0	2.7
1947	31.2	5.4		16.0		5.2		46.7		14.4	2.3
1946	27.2	2.9		14.9		5.4		14.0		11.6	2.9
1945	5.8	3.9		12.8		2.2		9.3		4.0	1.7
1944	8.0	0.2		10.1		1.6		18.2		1.4	1.3
1943	1.7	0.2		4.3		6.6		39.9		2.5	1.9
1942	3.8	0.3		7.2		27.9		63.1		5.3	3.0
1941	8.8	-		9.9		3.0		31.3		3.2	2.1
1940	5.1	0.6		4.9		3.4		22.1		1.9	1.5
1939	3.9	0.3		4.3		2.9		4.8		1.0	0.7
1938	2.6	0.6		5.0		14.5		6.6		2.9	1.0
1937	4.2	1.2		10.0		5.2		7.8		5.5	1.4
1936	1.5	-		3.1		0.9		4.3		0.4	0.8
1935	2.2	0.6		2.4		2.4		4.4		1.1	0.5
1934	0.8	-		2.5		2.1		3.9		2.4	0.4
1933	0.1	0.3		0.6		0.6		2.4		1.0	0.4
1932	2.1	0.7		0.5		0.2		2.7		0.7	0.4
1931	11.3	0.3		4.7		0.3		9.2		1.8	0.9
1930	4.4	0.2		12.5		1.8		29.0		2.9	1.7
1929	16.0	7.5		8.3		8.3		36.2		10.9	2.9
1928	34.8	9.4		4.8		7.0		33.5		1.2	2.7
1927	23.7	0.5		5.0		4.8		7.9		2.4	1.9
1926	21.4	0.8		4.3		0.8		9.3		4.4	1.2

¹ 1956 and prior years on basis of 1948 Standard Industrial Classification, breakdown of repair and new plus repair not available.

Series S94. New construction in manufacturing, 1871 to 1925*(millions of dollars)*

<u>Year</u>	<u>Total</u>	<u>Year</u>	<u>Total</u>	<u>Year</u>	<u>Total</u>
	<u>manufacturing</u>		<u>manufacturing</u>		<u>manufacturing</u>
	<u>94</u>		<u>94</u>		<u>94</u>
1925	49.0	1905	25.3	1885	4.8
1924	55.4	1904	24.7	1884	5.5
1923	58.7	1903	24.1	1883	7.3
1922	37.4	1902	18.6	1882	7.6
1921	37.2	1901	15.0	1881	5.7
1920	62.4	1900	11.8	1880	3.6
1919	45.8	1899	9.4	1879	2.3
1918	43.1	1898	7.3	1878	2.2
1917	62.8	1897	5.6	1877	2.3
1916	60.5	1896	5.3	1876	2.4
1915	39.9	1895	4.1	1875	2.6
1914	53.3	1894	4.1	1874	2.6
1913	79.5	1893	4.4	1873	2.6
1912	77.4	1892	4.6	1872	2.4
1911	58.9	1891	4.7	1871	2.0
1910	45.6	1890	5.4		
1909	33.3	1889	5.6		
1908	32.1	1888	5.5		
1907	31.3	1887	5.3		
1906	27.2	1886	4.9		

Series S95-106. New construction in manufacturing, by major groups, 1918 to 1925
(millions of dollars)

Year	Food and beverages	Tobacco, rubber and leather products	Textile products	Clothing	Wood products	Paper products	Printing, publishing and allied industries	Iron and steel products	Transpor- tation equipment	Non- ferrous metal products and electrical apparatus and supplies	Non- metallic mineral products and products of petroleum and coal	Chemical products
	95	96	97	98	99	100	101	102	103	104	105	106
1925	3.5	0.6	2.9	1.2	5.0	22.4	2.1	2.4	4.1	0.4	1.8	2.0
1924	6.0	0.4	3.6	1.3	9.9	20.3	1.5	1.6	2.5	1.2	5.3	0.8
1923	8.6	0.8	2.5	1.4	1.7	17.2	4.3	1.5	1.9	1.2	12.4	4.4
1922	7.8	0.6	2.8	1.9	1.8	13.1	2.4	2.0	1.4	0.4	0.3	2.1
1921	10.9	0.8	1.6	1.4	3.8	7.8	1.0	2.3	0.7	2.4	1.2	2.8
1920	9.9	1.0	3.7	2.1	1.7	25.3	2.6	3.3	3.9	2.0	3.8	2.9
1919	3.4	0.8	2.7	0.8	2.6	12.8	1.5	1.6	0.9	1.8	3.8	12.5
1918	4.5	0.9	1.2	1.1	2.3	3.0	1.0	3.4	8.9	1.5	3.7	11.3

Series S107-121. New construction in transportation, communication, electric power, gas and water utilities, 1956 to 1976

(millions of dollars)

Year	Total transportation	Air	Railway transportation	Water transportation and services	Motor	Urban transit	Pipe-lines	Total communication, electric power, gas and water utilities	Telephone and telegraph	Grain elevators	Electric power	Gas distribution	Water systems	Broadcasting	Other utilities
	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121
1976	920.3	26.1	370.2	25.9	31.2	177.3	289.6	3,505.5	598.3	20.2	2,654.2	141.1	¹	62.4	29.3
1975	966.9	29.8	370.9	59.0	25.5	160.5	321.2	3,436.0	533.9	18.2	2,660.8	150.2	¹	51.4	21.5
1974	714.2	20.7	284.6	67.7	31.6	73.2	236.4	2,439.6	508.7	10.4	1,699.5	147.9	¹	51.7	21.4
1973	702.9	16.1	228.4	47.2	17.9	54.0	339.3	1,969.7	371.0	10.6	1,416.7	108.4	¹	39.2	23.8
1972	758.9	19.3	191.3	73.3	15.8	49.8	409.4	1,598.1	308.8	6.8	1,135.2	107.5	¹	26.5	13.3
1971	674.7	33.2	187.7	76.8	14.9	23.9	338.2	1,553.1	285.5	3.2	1,079.1	86.4	¹	32.7	66.2
1970	560.1	59.1	185.5	73.2	13.5	23.3	205.5	1,484.4	254.4	4.4	1,057.4	70.9	¹	42.1	55.2
1969	470.2	21.0	167.5	62.0	10.8	19.1	189.8	1,249.0	233.0	17.6	856.1	85.4	¹	29.9	27.0
1968	441.2	22.1	146.7	40.4	11.3	16.0	204.7	1,332.6	222.6	19.0	888.6	87.0	91.0	5.1	19.3
1967	433.9	4.8	181.9	43.2	8.9	44.4	150.7	1,313.8	194.2	34.9	875.3	58.5	100.4	7.1	43.4
1966	405.2	1.4	145.7	50.4	7.4	61.3	139.0	1,260.4	196.0	23.4	786.5	72.7	113.4	7.6	60.8
1965	319.0	1.0	107.5	35.6	5.9	72.7	96.3	1,124.4	158.6	9.8	727.3	54.2	109.9	7.5	57.1
1964	410.1	0.7	162.6	15.0	7.0	78.4	146.4	922.1	146.0	8.8	588.0	54.5	64.6	5.4	54.8
1963	326.7	0.6	173.3	15.6	7.3	30.6	99.3	783.9	148.3	10.3	459.1	70.4	59.8	5.3	30.7
1962	250.4	2.3	139.4	26.2	4.5	17.1	60.9	731.6	135.7	16.7	440.7	60.0	61.3	3.9	13.3
1961	380.5	4.2	161.5	42.5	6.6	18.1	147.6	707.9	122.7	17.3	413.0	52.0	71.2	4.8	26.9
1960	365.0	6.4	202.7	38.4	6.3	19.8	91.4	..	161.3	12.9	371.5	56.5	79.1	7.9	20.0
1959	364.0	17.3	225.6	56.0	4.8	4.9	55.4	..	136.1	17.2	387.3	77.0	87.4	4.0	45.4
1958	556.8	2.4	182.4	132.5	1.9	3.4	234.2	..	126.9	10.0	496.3	74.1	75.9	2.2	62.5
1957	626.2	3.5	188.2	114.4	6.8	9.3	304.0	..	112.9	7.0	559.8	64.8	62.2	4.6	37.9
1956	398.6	2.0	153.0	60.2	3.1	7.4	172.9	..	100.9	10.7	450.9	42.0	66.4	3.9	12.5

¹ Included in government departments from 1969 to 1976.

Series S122. Net capital formation in railway transport and telegraphs, 1850 to 1930*(millions of dollars)*

Year	Net capital formation	Year	Net capital formation	Year	Net capital formation
	122		122		122
1930	93.6	1900	18.4	1870	9.1
1929	143.4	1899	15.0	1869	5.0
1928	71.7	1898	17.9	1868	5.3
1927	75.4	1897	9.9	1867	3.7
1926	49.3	1896	5.5	1866	2.0
1925	31.0	1895	7.5	1865	1.5
1924	58.7	1894	10.5	1864	1.9
1923	73.6	1893	14.2	1863	0.9
1922	25.7	1892	12.9	1862	1.5
1921	75.3	1891	20.6	1861	1.8
1920	86.1	1890	23.7	1860	5.2
1919	66.1	1889	25.9	1859	4.5
1918	66.1	1888	20.4	1858	10.3
1917	60.5	1887	19.8	1857	7.3
1916	42.0	1886	22.6	1856	9.2
1915	91.1	1885	32.6	1855	16.7
1914	126.5	1884	40.2	1854	13.3
1913	176.6	1883	35.6	1853	13.7
1912	153.5	1882	29.8	1852	6.2
1911	121.7	1881	13.4	1851	2.5
1910	105.1	1880	13.0	1850	1.3
1909	89.3	1879	12.2		
1908	97.2	1878	12.7		
1907	103.6	1877	14.8		
1906	57.6	1876	18.0		
1905	43.9	1875	13.2		
1904	33.8	1874	14.4		
1903	32.0	1873	23.7		
1902	20.7	1872	21.0		
1901	19.0	1871	15.8		

Series S123-127. New construction and repair, non-railway transport structures, 1901 to 1930

(millions of dollars)

Year	Gross investment			Repair	Gross investment and repair
	Provincial highways and bridges	Canals	Harbour and river work		
	123	124	125	126	127
1930	54.3	—	51.7 ¹	—	106.0
1929	40.8	—	56.5 ¹	—	97.3
1928	—	—	—	—	—
1927	—	—	—	—	—
1926	19.1	13.5	9.3	13.8	55.7
1925	18.7	12.3	14.6	14.0	59.6
1924	15.6	10.2	15.9	12.8	54.5
1923	24.6	8.0	14.9	12.3	59.8
1922	21.2	7.2	10.7	10.1	49.2
1921	20.3	6.2	9.8	8.9	45.2
1920	16.5	6.1	9.8	8.7	41.1
1919	10.0	4.9	6.9	6.8	28.6
1918	4.5	2.4	4.4	4.9	16.2
1917	4.2	1.9	8.3	4.4	18.8
1916	4.2	4.5	10.5	4.7	23.9
1915	6.9	6.2	13.7	4.9	31.7
1914	8.8	5.4	18.6	6.3	39.1
1913	9.9	2.6	18.2	6.7	37.4
1912	8.1	2.4	12.7	5.3	28.5
1911	4.8	2.7	11.2	4.9	23.6
1910	3.8	2.4	9.2	4.4	19.8
1909	2.7	1.8	7.6	3.8	15.9
1908	2.6	2.1	9.1	4.5	18.3
1907	1.8	1.9	8.1	3.7	15.5
1906	0.8	1.0	4.8	2.6	9.2
1905	0.4	1.7	6.1	2.6	10.8
1904	0.4	2.2	5.3	2.3	10.2
1903	0.9	2.0	4.6	2.0	9.5
1902	1.0	2.0	3.5	1.8	8.3
1901	0.6	2.2	2.5	1.6	6.9

¹ These totals include canals, harbour and river work, new and repair, and highway repair.

Series S128-140. New construction in trade, finance and commercial services, 1946 to 1976
(millions of dollars)

Year	Total trade	Wholesale	Chain	Independent	Department	Automotive	Total finance	Banks	Insurance trust and loan	Other	Total commercial services	Hotels	Other
	128	129	130	131	132	133	134	135	136	137	138	139	140
1976	385.9	109.0	70.4	36.0	77.0	93.5	1,734.3	127.2	60.0	1,547.1	604.1	129.1	475.0
1975	350.9	109.0	70.4	29.0	76.8	83.3	1,559.9	97.0	49.0	1,413.9	857.2	162.9	694.3
1974	391.6	99.4	91.2	43.5	73.1	84.4	1,337.0	82.3	45.6	1,209.1	455.4	225.3	230.1
1973	286.7	79.7	50.9	34.4	44.7	77.0	1,093.5	48.9	30.8	1,013.8	305.0	175.5	129.5
1972	203.8	38.9	45.5	26.3	24.3	68.8	776.9	33.1	34.0	709.8	231.0	125.9	105.1
1971	181.2	31.3	45.2	23.9	20.8	60.0	498.5	26.1	25.0	447.4	220.7	131.3	89.4
1970	210.0	36.5	43.5	28.7	36.1	65.2	418.9	28.0	40.0	350.9	130.5	63.3	67.2
1969	196.9	44.5	37.5	35.2	11.7	68.0	403.6	28.0	25.7	349.9	103.6	40.5	63.1
1968	198.5	50.3	44.4	33.0	15.2	55.6	399.2	25.7	16.8	356.7	111.6	37.9	73.7
1967	205.5	49.6	30.8	46.3	22.2	56.6	416.8	22.9	36.2	357.7	142.1	37.3	104.8
1966	196.2	43.5	29.9	46.0	36.6	40.2	406.0	21.6	18.1	366.3	258.0	63.2	194.8
1965	153.5	29.3	26.9	41.0	19.3	37.0	367.4	26.8	14.8	325.8	183.7	57.9	125.8
1964	146.2	36.3	25.3	38.5	17.5	28.6	289.5	30.3	16.8	242.4	112.3	41.3	71.0
1963	135.9	28.0	22.9	35.9	15.9	33.2	230.6	24.2	15.5	190.9	101.4	35.3	66.1
1962	120.4	21.2	18.7	30.6	20.4	29.5	248.8	28.6	25.4	194.8	69.0	24.0	45.0
1961	127.2	27.7	18.5	29.6	16.4	35.0	268.0	32.1	24.2	211.7	56.1	22.4	33.7
1960	164.9	34.0	29.4	43.2	16.2	42.1	243.0	32.5	21.4	189.1	58.3	24.2	34.1
1959	166.8	24.8	33.0	46.1	13.9	49.0	224.8	25.1	19.7	180.0	69.5	26.6	42.9
1958	194.9	23.4	43.1	75.4	13.2	39.8	150.3	20.0	16.3	114.0	51.3	22.8	28.5
1957	205.2	30.2	39.2	68.5	14.7	52.6	109.6	19.9	14.1	75.6	67.5	34.3	33.2
1956	177.2	35.5	26.4	53.0	13.0	49.3	99.3	16.9	9.4	73.0	51.1	22.8	28.3
1955	181.3	21.3	30.2	72.7	19.4	37.7	82.0	15.3	9.3	57.4	33.4	11.9	21.5
1954	204.1	33.4	32.3	79.1	27.9	31.4	90.4	14.4	18.0	58.0	25.3	9.3	16.0
1953	191.3	38.0	28.0	77.7	21.9	25.7	63.1	9.8	15.0	38.3	29.2	12.3	16.9
1952	95.4	20.0	17.1	38.8	3.9	15.6	36.5	9.3	8.9	18.3	28.7	11.8	16.9
1951	109.4	15.5	24.0	52.5	5.1	12.3	52.4	18.0	7.1	27.3	39.7	17.0	22.7
1950	121.7	15.3	31.0	63.6	2.6	9.2	48.6	15.1	4.1	29.4	35.5	11.1	24.4
1949	102.8	10.8	19.1	56.5	9.1	7.3	23.5	10.0	2.5	11.0	14.8	4.6	10.2
1948	95.1	12.4	16.1	45.8	5.6	15.2	26.1	7.9	1.5	16.7	37.9	9.4	28.5
1947	67.8	8.9	11.3	30.0	5.0	12.6	15.5	6.1	0.4	9.0	28.5	11.2	17.3
1946	47.3	5.9	7.9	20.7	3.9	8.9	11.2	4.3	0.7	6.2	18.0	7.2	10.8

Series S141-147. New construction in institutions and government departments, 1926 to 1976

(millions of dollars)

Year	Total institutions	Churches	Universities	Schools	Hospitals	Other	Total government departments
	141	142	143	144	145	146	147
1976	1,167.8	44.6	131.0	585.4	328.3	78.5	4,440
1975	1,190.6	36.2	124.8	649.0	311.5	69.2	4,392
1974	1,063.5	18.2	102.9	591.2	302.1	49.1	3,751
1973	913.6	12.8	119.8	498.0	239.2	43.8	2,962
1972	993.2	14.1	193.7	544.7	201.2	39.5	2,731
1971	1,199.3	13.2	276.9	625.4	228.2	55.6	2,443
1970	1,094.8	22.1	241.6	606.1	186.4	38.6	2,001
1969	1,134.2	23.3	290.0	606.3	188.3	26.3	1,908
1968	1,196.8	35.7	288.5	653.9	196.4	22.3	1,679
1967	1,107.1	42.1	259.3	607.1	179.5	19.1	1,732
1966	1,020.5	46.8	253.6	515.6	180.1	24.4	1,703
1965	867.4	45.4	222.5	423.4	152.5	23.6	1,494
1964	648.3	40.4	150.2	289.3	145.0	23.4	1,303
1963	756.9	46.8	117.8	425.1	148.8	18.4	1,154
1962	729.4	52.8	97.0	402.4	165.0	12.2	1,130
1961	535.8	58.6	97.2	223.1	146.6	10.3	1,125
1960	500.1	59.3	74.7	229.6	125.2	11.3	1,171
1959	478.9	54.6	73.2	213.5	128.1	9.5	1,128
1958	457.3	55.0	55.7	201.9	136.1	8.6	1,014
1957	407.4	52.8	38.0	197.6	111.7	7.3	1,025
1956	358.8	43.8	22.3	173.1	110.0	9.6	932
1955	366.9	33.9	22.0	171.4	130.0	9.6	728
1954	297.3	30.6	16.6	136.1	106.4	7.6	676
1953	269.6	24.8	14.5	122.2	103.1	5.0	710
1952	251.8	25.2	9.4	130.7	81.4	5.1	758
1951	211.7	28.3	11.5	102.3	65.5	4.1	534
1950	187.2	28.0	12.4	80.6	62.3	3.9	391
1949	172.4	30.2	9.8	67.2	61.3	3.9	344
1948	126.4	21.0	11.0	47.6	44.0	2.8	320
1947	78.0	9.8	11.9	27.6	27.0	1.7	240
1946	66.2	5.6	10.8	24.5	23.8	1.5	173
1945	40.1	2.2	6.1	12.9	18.9	—	146
1944	24.5	1.6	1.4	7.3	14.2	—	177
1943	16.7	1.0	1.8	6.9	7.0	—	312
1942	13.9	1.3	0.9	5.6	6.1	—	342
1941	14.8	1.9	2.8	5.0	5.1	—	300
1940	15.9	2.1	2.0	6.4	5.4	—	179
1939	26.3	2.6	4.2	11.2	8.3	—	114
1938	23.6	3.2	1.4	7.2	11.8	—	123
1937	19.4	2.7	2.6	7.4	6.7	—	142
1936	16.5	1.8	1.4	8.4	4.9	—	89
1935	12.2	1.5	0.9	6.0	3.8	—	98
1934	11.0	1.6	1.2	5.2	3.0	—	87
1933	12.9	2.0	0.9	6.7	3.3	—	65
1932	28.4	4.4	1.8	15.8	6.4	—	91
1931	45.5	6.3	7.4	21.5	10.3	—	134
1930	56.1	6.8	8.2	31.3	9.8	—	164
1929	47.7	7.2	3.9	26.4	10.2	—	128
1928	41.8	8.6	1.8	24.8	6.6	—	109
1927	40.1	9.3	3.0	22.7	5.1	—	93
1926	33.3	7.9	3.1	17.6	4.7	—	73

Series S148-160. New construction by governments and government enterprises, by level of government and by category, 1946 to 1976

(millions of dollars)

Year	Federal government				Provincial governments				Municipal governments				Total new
	Enter-prises	Housing	Govern-ment depart-ments	Total	Enter-prises	Insti-tutions	Govern-ment depart-ments	Total	Enter-prises	Insti-tutions	Govern-ment depart-ments	Total	
	148	149	150	151	152	153	154	155	156	157	158	159	160
1976	421.4	100.9	655.4	1,177.7	3,223.3	282.5	1,826.2	5,332.0	313.3	479.5	1,958.1	2,750.9	9,260.6
1975	442.0	80.9	649.7	1,172.6	3,043.0	339.8	1,954.7	5,337.5	636.7	496.5	1,787.4	2,920.6	9,430.7
1974	348.3	56.6	602.1	1,007.0	1,915.1	271.8	1,654.8	3,841.7	301.9	473.6	1,493.7	2,269.2	7,117.9
1973	247.6	49.9	452.5	750.0	1,375.5	206.1	1,381.0	2,962.6	171.8	418.1	1,128.3	1,718.2	5,430.8
1972	218.0	46.4	400.1	664.5	1,085.7	255.4	1,319.0	2,660.1	123.7	439.0	1,011.9	1,574.6	4,899.2
1971	285.4	43.5	359.1	688.0	965.7	286.0	1,187.2	2,438.9	99.7	547.6	896.5	1,543.8	4,670.7
1970	321.9	40.6	323.3	685.8	908.5	173.8	920.8	2,003.1	97.8	566.9	757.1	1,421.8	4,110.7
1969	198.7	35.3	364.2	598.2	750.3	200.3	875.2	1,825.8	86.0	577.6	668.4	1,332.0	3,756.0
1968	135.2	32.9	339.3	507.4	827.2	220.7	784.5	1,832.4	155.0	623.7	555.3	1,334.0	3,673.9
1967	168.6	25.6	331.9	525.7	915.7	243.9	864.8	2,024.4	185.5	551.6	534.9	1,272.0	3,822.1
1966	254.5	31.8	311.9	598.5	859.2	200.1	826.7	1,885.3	223.6	475.5	563.9	1,263.0	3,746.8
1965	150.3	13.3	267.1	431.3	770.7	177.2	725.2	1,673.2	231.3	363.8	501.5	1,096.6	3,201.1
1964	173.1	15.3	204.4	387.9	619.3	123.9	657.8	1,401.0	191.5	254.9	441.0	887.4	2,676.3
1963	170.1	19.5	197.3	387.3	454.4	115.3	532.5	1,102.2	126.8	394.1	424.1	945.0	2,434.5
1962	138.2	20.9	264.3	423.4	387.1	130.0	478.4	995.5	110.3	350.2	386.8	847.3	2,226.2
1961	159.6	19.7	308.3	487.6	384.0	67.8	463.0	914.8	113.0	220.2	353.7	686.9	2,089.3
1960	188.3	28.2	303.0	519.5	330.9	78.4	530.2	939.5	121.3	218.5	337.5	677.3	2,136.3
1959	226.6	31.9	330.3	588.8	318.3	81.3	485.6	885.2	119.2	201.8	312.5	633.5	2,107.5
1958	317.6	40.0	289.2	646.8	433.3	68.3	437.7	939.3	117.0	185.9	287.4	590.3	2,176.4
1957	282.8	39.1	305.6	627.5	459.0	58.8	460.6	978.4	98.5	184.5	258.4	541.4	2,147.3
1956	163.2	27.6	319.9	510.7	369.8	47.3	391.4	808.5	99.2	170.6	220.6	490.4	1,809.6
1955	89.0	24.0	243.0	356.0	244.0	44.0	289.0	577.0	76.0	168.0	196.0	440.0	1,373.0
1954	52.0	18.0	236.0	306.0	226.0	28.0	258.0	512.0	87.0	141.0	182.0	410.0	1,228.0
1953	50.0	40.0	315.0	405.0	228.0	25.0	228.0	481.0	74.0	133.0	167.0	374.0	1,260.0
1952	52.0	52.0	335.0	439.0	189.0	26.0	252.0	467.0	63.0	134.0	171.0	368.0	1,274.0
1951	31.0	57.0	204.0	292.0	166.0	26.0	189.0	381.0	50.0	105.0	141.0	296.0	969.0
1950	21.0	56.0	111.0	188.0	192.0	25.0	160.0	377.0	40.0	84.0	120.0	244.0	809.0
1949	41.0	71.0	118.0	224.0	159.0	15.0	141.0	315.0	38.0	73.0	85.0	196.0	735.0
1948	31.0	67.0	76.0	168.0	93.0	5.0	171.0	269.0	30.0	51.0	73.0	154.0	591.0
1947	25.0	32.0	39.0	91.0	50.0	3.0	134.0	187.0	17.0	32.0	67.0	116.0	394.0
1946	22.0	39.0	28.0	83.0	29.0	2.0	81.0	112.0	13.0	30.0	64.0	107.0	302.0

Series S161-166. New construction, federal government, 1868 to 1930, provincial governments, 1901 to 1930
(millions of dollars)

Year ¹	Federal government				Pro- vincial govern- ment	Total federal and pro- vincial
	Railway	Other trans- portation	Buildings and other	Total		
	161	162	163	164	165	166
1930	–	–	–	63.2	67.7	130.9
1929	–	–	–	45.9	51.5	97.4
1928	–	–	–	40.2	41.2	81.4
1927	–	–	–	36.9	31.6	68.5
1926	2.7	22.8	3.1	28.6	24.1	52.7
1925	–	26.9	4.9	31.7	26.6	58.3
1924	–	26.1	5.0	31.1	24.8	55.9
1923	–	22.9	2.5	25.4	34.8	60.2
1922	1.0	17.9	2.0	20.8	30.2	51.0
1921	1.5	16.0	3.8	21.3	32.3	53.6
1920	1.7	15.9	5.4	23.0	25.0	48.0
1919	3.8	11.8	9.6	25.3	15.8	41.1
1918	6.4	6.8	8.1	21.3	8.6	29.9
1917	9.1	10.2	3.4	22.7	6.9	29.6
1916	15.3	15.0	3.8	34.1	9.4	43.5
1915	17.6	19.9	5.7	43.1	14.5	57.6
1914	19.6	24.0	10.4	54.0	17.3	71.3
1913	20.7	20.8	9.2	50.6	19.5	70.1
1912	17.6	15.1	4.8	37.5	15.7	53.2
1911	22.4	13.9	3.1	39.3	11.2	50.5
1910	23.6	11.6	2.1	37.3	9.1	46.4
1909	21.0	9.4	2.7	33.2	5.8	39.0
1908	27.5	11.2	4.6	43.3	5.0	48.3
1907	21.0	10.0	3.3	34.4	3.0	37.4
1906	6.2	5.8	2.1	14.1	1.3	15.4
1905	3.9	7.8	3.5	15.2	0.6	15.8
1904	3.6	7.5	2.5	13.6	0.7	14.3
1903	1.8	6.6	1.4	9.7	1.1	10.8
1902	2.7	5.5	1.3	9.4	1.2	10.6
1901	3.2	4.7	1.7	9.6	0.8	10.4
1900	–	–	–	–	–	–
1899	1.1	4.9	0.3	6.3	–	–
1898	0.3	4.1	0.4	4.8	–	–
1897	0.2	3.1	0.2	3.5	–	–
1896	0.3	2.9	0.2	3.3	–	–
1895	0.3	5.2	0.2	3.7	–	–
1894	0.5	3.7	0.4	4.6	–	–
1893	0.2	2.8	0.3	3.3	–	–
1892	0.4	2.2	0.2	2.8	–	–
1891	1.2	2.4	0.4	3.9	–	–
1890	2.1	2.2	0.5	4.8	–	–
1889	2.6	2.5	0.6	5.7	–	–
1888	1.8	1.8	0.6	4.1	–	–
1887	1.4	3.2	0.6	5.2	–	–
1886	1.4	2.7	0.6	4.7	–	–
1885	4.1	2.3	0.6	6.9	–	–
1884	5.0	2.8	0.7	8.4	–	–
1883	6.2	2.8	0.4	9.3	–	–
1882	4.0	2.2	0.3	6.6	–	–
1881	5.4	2.6	0.5	8.6	–	–
1880	4.0	2.7	0.3	7.0	–	–
1879	2.3	3.7	0.2	6.2	–	–
1878	2.6	4.3	0.3	7.2	–	–
1877	3.1	4.6	0.5	8.3	–	–
1876	4.8	3.2	0.8	8.8	–	–
1875	5.3	2.5	0.7	8.5	–	–
1874	4.4	2.7	0.8	7.9	–	–
1873	7.3	0.8	0.5	8.6	–	–
1872	6.6	0.5	0.7	7.8	–	–
1871	3.0	0.2	0.4	3.6	–	–
1870	0.8	0.1	0.2	1.1	–	–
1869	0.3	0.1	0.1	0.5	–	–
1868	0.4	0.1	0.1	0.7	–	–

¹ For 1901 to 1930, calendar years; for 1868 to 1899, fiscal year ending 30 June of year given.

Series S167. Value of residential construction, constant (1971) dollars, 1926 to 1976*(millions of dollars)*

<u>Year</u>	<u>Total</u>	<u>Year</u>	<u>Total</u>	<u>Year</u>	<u>Total</u>
	167		167		167
1976	6,537	1955	2,779	1935	320
		1954	2,240	1934	291
1975	5,562	1953	1,970	1933	237
1974	5,958	1952	1,502	1932	324
1973	5,986	1951	1,349	1931	627
1972	5,455				
1971	4,834	1950	1,776	1930	681
		1949	1,556	1929	868
1970	3,735	1948	1,345	1928	922
1969	4,189	1947	1,088	1927	873
1968	3,720	1946	1,121	1926	783
1967	3,243				
1966	3,184	1945	1,036		
		1944	716		
1965	3,424	1943	450		
1964	3,275	1942	416		
1963	2,805	1941	534		
1962	2,718				
1961	2,615	1940	463		
		1939	483		
1960	2,639	1938	442		
1959	3,199	1937	426		
1958	3,123	1936	361		
1957	2,488				
1956	2,797				

Series S168-180. New residential construction, by component, 1926 to 1976

(millions of dollars)

Year	Singles	Doubles and duplexes	Rows	Apart- ments	Sub- total	Supple- mentary costs	Cottages	Conver- sions	Additions and alter- ations	Mobile homes	Real estate com- missions	Total, national accounts basis ¹	Defence
	168	169	170	171	172	173	174	175	176	177	178	179	180
1976	4,986	474	862	1,902	8,224	345	60	15	1,620	358	1,661	12,283	-
1975	3,741	355	487	1,313	5,896	267	53	11	1,292	296	1,518	9,333	-
1974	3,610	268	350	1,631	5,859	227	54	13	1,261	344	1,041	8,799	-
1973	3,016	244	313	1,529	5,102	187	42	11	1,030	250	789	7,411	-
1972	2,330	233	258	1,389	4,210	165	-	9	764	125	572	5,844	1
1971	1,796	204	227	1,387	3,614	140	-	10	587	-	483	4,834	-
1970	1,367	141	164	1,088	2,760	116	-	11	251	-	377	3,515	-
1969	1,532	154	107	1,224	3,017	124	-	13	230	-	475	3,859	-
1968	1,337	130	93	937	2,497	103	-	13	193	-	465	3,268	3
1967	1,175	127	75	739	2,116	85	-	11	166	-	446	2,822	2
1966	1,095	99	57	676	1,927	90	-	11	151	-	440	2,618	1
1965	1,036	98	58	781	1,973	70	-	7	168	-	426	2,642	2
1964	988	91	36	672	1,787	62	-	9	132	-	401	2,389	2
1963	911	78	37	452	1,478	46	-	11	117	-	314	1,966	-
1962	921	116	23	327	1,387	47	-	11	110	-	311	1,863	3
1961	929	114	16	271	1,330	43	-	10	114	-	304	1,798	3
1960	909	92	347		1,348	49	-	9	116	-	285	1,799	8
1959	1,159	102	373		1,634	78	-	13	110	-	316	2,139	12
1958	1,211	100	375		1,686	100	-	16	104	-	202	2,091	17
1957	999	84	240		1,323	71	-	13	119	-	164	1,671	19
1956	1,092	105	289		1,486	89	-	10	124	-	137	1,827	19
1955	1,071	92	316		1,479	87	-	12	106	-	120	1,788	16
1954	826	61	277		2,952	61	-	12	82	-	104	1,414	9
1953	739	70	232		1,041	51	-	10	79	-	94	1,254	21
1952	595	52	141		788	32	-	9	75	-	80	948	36
1951	537	54	109		700	28	-	9	72	-	77	836	50
1950	-	-	-	-		843			77	-	73	955	38
1949	-	-	-	-		708			58	-	57	798	25
1948	-	-	-	-		581			53	-	51	661	24
1947	-	-	-	-		402			38	-	47	457	30
1946	-	-	-	-		369			37	-	49	418	37
1945	-	-	-	-		297			40	-	35	362	10
1944	-	-	-	-		195			36	-	27	248	10
1943	-	-	-	-		137			23	-	18	150	28
1942	-	-	-	-		126			16	-	13	127	28
1941	-	-	-	-		136			17	-	13	157	9
1940	-	-	-	-		99			15	-	10	123	-
1939	-	-	-	-		96			16	-	9	121	-
1938	-	-	-	-		83			16	-	11	110	-
1937	-	-	-	-		81			17	-	10	108	-
1936	-	-	-	-		63			12	-	11	85	-
1935	-	-	-	-		54			12	-	8	74	-
1934	-	-	-	-		46			13	-	8	67	-
1933	-	-	-	-		37			8	-	8	53	-
1932	-	-	-	-		56			9	-	11	76	-
1931	-	-	-	-		123			19	-	18	160	-
1930	-	-	-	-		146			22	-	19	187	-
1929	-	-	-	-		194			24	-	27	245	-
1928	-	-	-	-		199			23	-	26	248	-
1927	-	-	-	-		182			23	-	24	229	-
1926	-	-	-	-		162			22	-	21	205	-

¹ Excludes defence residential construction.

Series S181-189. Dwelling¹ starts by region, 1948 to 1976
(in number)

Year	Atlantic provinces	Quebec	Ontario	Prairie provinces	British Columbia	Canada	Centres of 5,000 and over	Centres of 10,000 and over	Other areas
	181	182	183	184	185	186	187	188	189
1976 ²	20,793	68,748	84,682	61,253	37,727	273,203	–	209,762	63,441
1975	19,538	54,741	79,968	43,057	34,152	231,456	–	181,846	49,610
1974	18,114	51,642	85,503	35,444	31,420	222,123	–	169,437	52,686
1973	21,922	59,550	110,536	38,894	37,627	268,529	–	211,543	56,986
1972	16,502	55,746	102,933	39,416	35,317	249,914	–	206,954	42,960
1971	17,259	51,782	89,980	39,867	34,765	233,653	–	180,948	52,705
1970	12,480	47,118	76,675	26,939	27,316	190,528	–	150,999	39,529
1969	13,780	43,413	81,446	39,956	31,820	210,415	–	169,739	40,676
1968	11,039	46,477	80,375	32,792	26,195	196,878	–	162,267	34,611
1967	8,380	37,718	68,121	25,804	24,100	164,123	–	131,858	32,265
1966	8,016	35,911	52,355	20,439	17,753	134,474	–	108,329	26,145
1965	8,944	44,437	66,767	25,019	21,398	166,565	–	135,218	31,347
1964	9,387	43,194	65,617	25,795	21,665	165,658	–	133,562	32,096
1963	6,962	43,391	55,957	24,985	17,329	148,624	–	118,512	30,112
1962	7,443	40,152	44,306	24,302	13,892	130,095	96,598	102,008	28,087
1961	8,523	34,215	48,144	23,525	11,170	125,577	92,741	–	32,836
1960	8,125	28,589	42,282	17,858	12,004	108,858	76,687	–	32,171
1959	8,127	36,265	54,158	26,104	16,691	141,345	105,991	–	35,354
1958	7,000	46,324	63,753	28,256	19,299	164,632	121,695	–	42,937
1957	6,471	34,533	47,739	19,477	14,120	122,340	84,875	–	37,465
1956	8,018	35,999	48,712	19,645	14,937	127,311	87,309	–	40,002
1955	7,759	39,852	53,456	21,595	15,614	138,276	97,386	–	40,890
1954	6,082	29,958	46,382	21,502	9,603	113,527	89,755	–	23,772
1953	5,921	30,249	38,873	18,776	8,590	102,409	80,313	–	22,096
1952	4,720	26,355	30,016	15,044	7,111	83,246	63,443	–	19,803
1951	3,562	21,193	27,349	10,779	5,696	68,579	47,374	–	21,205
1950	7,451	28,515	33,430	15,599	7,536	92,531	68,599	–	23,932
1949	6,023	24,196	34,023	16,565	9,702	90,509	58,370	–	32,139
1948	5,712	24,192	29,976	17,891	11,633	90,194	57,671	–	32,523

¹ Excludes mobile homes.

² Unrevised.

Series S190-194. Dwelling starts^{1,2} by type, 1949 to 1976

Year	Single detached	Semi-detached	Row	Apartment and other	Total
	190	191	192	193	194
1976	134,313	15,890	33,676	89,324	273,203
1975	123,929	15,403	21,763	70,361	231,456
1974	122,143	11,023	14,932	74,025	222,123
1973	131,552	13,235	17,291	106,451	268,529
1972	115,570	13,649	16,980	103,715	249,914
1971	98,056	13,751	15,659	106,187	233,653
1970	70,749	10,826	17,055	91,898	190,528
1969	78,404	10,373	10,721	110,917	210,415
1968	75,339	10,114	8,042	103,383	196,878
1967	72,534	9,939	7,392	74,258	164,123
1966	70,642	7,281	5,000	51,551	134,474
1965	75,441	7,924	5,306	77,894	166,565
1964	77,079	8,706	4,755	75,118	165,658
1963	77,158	7,891	3,895	59,680	148,624
1962	74,443	10,975	3,742	40,935	130,095
1961	76,430	11,650	1,864	35,633	125,577
1960	67,171	9,699	2,301	29,687	108,858
1959	92,178	10,468	1,908	36,791	141,345
1958	104,508	10,713	2,457	46,954	164,632
1957	82,955	9,272	2,214	27,899	122,340
1956	90,620	9,441	2,263	24,987	127,311
1955	99,003	10,606	1,909	26,758	138,276
1954	78,574	6,498	1,000	27,455	113,527
1953	70,782	7,202	553	23,872	102,409
1952	60,696	5,360	299	16,891	83,246
1951	53,002	5,658	54	9,865	68,579
1950	68,675	8,664	631	14,561	92,531
1949	71,425	7,536	-	11,548	90,509

¹ Excludes mobile homes.

² Unrevised.

Series S195-197. Mobile home shipments, 1967 to 1976

(in units)

Year	Domestic production	Imports	Total units	Year	Domestic production	Imports	Total units
	195	196	197		195	196	197
1976	19,149	2,878	22,027				
1975	21,713	3,476	25,189	1970	9,239	2,948 ¹	12,187
1974	27,825	4,400	32,225	1969	9,151	3,602 ¹	12,753
1973	23,727	3,835	27,562	1968	6,302	2,848 ¹	9,150
1972	19,844	4,695	24,539	1967	4,362	2,284 ¹	6,646
1971	15,284	3,886	19,170				

¹ Estimated.

Series S198-202. Dwelling starts by type, 1921 to 1950

(thousands of units)

Year	Dwellings in one to three unit buildings ¹			Other	Total
	Urban	Rural	Total		
	198	199	200		
1950	–	–	91.6	15.2	106.8
1949	–	–	87.0	11.5	98.6
1948	–	–	86.4	9.3	95.7
1947	–	–	59.4	8.3	67.7
1946	–	–	60.5	6.4	66.9
1945	–	–	64.6	6.8	71.5
1944	–	–	42.2	7.6	49.8
1943	–	–	42.6	3.3	45.9
1942	–	–	51.4	3.2	54.6
1941	–	–	55.1	3.7	58.8
1940	20.5	15.0	35.5	4.4	39.9
1939	21.6	15.7	37.3	5.0	42.2
1938	18.3	13.3	31.7	5.0	36.6
1937	18.0	13.1	31.0	3.5	34.6
1936	13.4	9.8	23.2	2.5	25.7
1935	11.4	8.3	19.7	2.5	22.2
1934	10.0	7.3	17.2	2.1	19.4
1933	8.4	6.1	14.6	1.5	16.1
1932	8.8	6.4	15.1	1.7	16.8
1931	17.2	12.5	29.7	8.3	38.0
1930	20.1	14.6	34.7	6.6	41.3
1929	24.9	18.1	43.1	8.4	51.4
1928	22.8	16.6	39.3	14.9	54.2
1927	23.5	17.1	40.6	15.0	55.6
1926	22.1	16.1	38.2	11.1	49.4
1925	21.2	15.4	36.7	6.8	43.4
1924	21.2	15.4	36.6	5.6	42.3
1923	20.5	14.9	35.4	5.4	40.8
1922	22.6	16.5	39.1	4.3	43.5
1921	17.4	12.7	30.1	3.8	33.9

¹ For 1941 to 1950, dwellings in one and two unit buildings.

Series S203-205. Dwelling starts by area, 1868 to 1920*(thousands of dwelling units)*

Year	Farm	Non-farm	Total	Year	Farm	Non-farm	Total
	203	204	205		203	204	205
1920	7.9	23.2	31.1	1895	3.0	7.6	10.7
1919	7.7	22.8	30.6	1894	2.7	8.4	11.0
1918	11.3	12.3	23.6	1893	3.8	12.0	15.8
1917	10.5	13.0	23.5	1892	3.5	17.5	21.0
1916	8.0	14.8	22.8	1891	2.5	19.5	22.0
1915	5.6	15.6	21.3	1890	4.1	16.1	20.2
1914	6.2	37.7	44.0	1889	4.5	17.6	22.1
1913	6.7	57.1	63.7	1888	5.2	16.2	21.4
1912	7.7	68.6	76.3	1887	4.2	13.8	18.0
1911	13.8	57.7	71.5	1886	5.9	9.6	15.6
1910	30.9	48.9	79.8	1885	6.3	6.6	12.9
1909	23.6	37.4	61.0	1884	6.1	5.0	11.1
1908	17.0	25.9	42.9	1883	5.0	3.2	8.2
1907	19.3	32.0	51.3	1882	7.8	3.6	11.4
1906	18.0	33.7	51.7	1881	9.1	5.8	14.9
1905	24.4	27.7	52.2	1880	11.4	7.9	19.3
1904	19.7	21.3	40.9	1879	9.7	6.3	16.0
1903	15.9	17.1	33.0	1878	9.5	5.8	15.3
1902	11.9	13.2	25.1	1877	11.0	5.7	16.7
1901	7.7	11.8	19.4	1876	9.9	8.1	18.0
1900	6.2	10.1	16.4	1875	8.1	12.1	20.2
1899	6.6	13.0	19.7	1874	10.7	14.1	24.8
1898	4.9	13.1	18.0	1873	5.7	12.9	18.5
1897	3.4	11.8	15.2	1872	3.7	12.3	15.9
1896	2.7	9.0	11.7	1871	7.4	15.4	22.7
				1870	6.2	11.6	17.8
				1869	4.2	9.0	13.2
				1868	2.3	11.2	13.5

Series S206-219. Dwelling starts by principal source of financing and structural type, 1960 to 1976

(dwelling units)

Year	Single detached							Other structural types						
	Federal funds		Institutional funds			Other	Total	Federal funds		Institutional funds			Other	Total
	NHA	Other	Loans	Conven-	Total			NHA	Other	Loans	Conven-	Total		
	loans		under	tional		loans		under	tional					
under		NHA	loans		under		NHA	loans						
sections					sections									
58 and					58 and									
59 ¹					59 ¹									
	206	207	208	209	210	211	212	213	214	215	216	217	218	219
1976	145	6,202	29,008	50,523	79,531	48,435	134,313	122	20,793	64,875	21,253	86,128	31,847	138,890
1975	125	14,394	18,683	46,831	65,514	43,896	123,929	2	30,363	28,449	20,074	48,523	28,639	107,527
1974	662	12,129	10,903	49,900	60,803	48,549	122,143	91	20,806	20,143	25,100	45,243	33,840	99,980
1973	635	8,168	24,762	51,355	76,117	46,632	131,552	153	23,314	50,707	42,286	92,993	20,517	136,977
1972	1,964	10,355	39,022	30,339	69,361	33,890	115,570	1,461	26,430	57,011	33,911	90,922	15,531	134,344
1971	2,776	7,751	34,891	20,615	55,506	32,023	98,056	2,132	31,707	52,911	35,010	87,921	13,837	135,597
1970	6,423	5,588	20,570	14,786	35,356	23,382	70,749	3,499	44,141	29,042	25,469	54,511	17,628	119,779
1969	8,335	3,645	16,597	25,504	42,101	24,323	78,404	1,388	16,509	39,048	60,176	99,224	14,890	132,011
1968	9,231	3,015	14,013	21,668	35,681	27,412	75,339	2,076	12,379	34,529	59,258	93,787	13,297	121,539
1967	24,313	2,902	4,532	17,912	22,444	22,875	72,534	9,549	8,561	16,297	46,771	63,068	10,411	91,589
1966	27,839	2,409	4,195	16,392	20,587	19,807	70,642	5,488	5,213	8,243	38,816	47,059	6,072	63,832
1965	23,276	1,990	8,397	22,115	30,512	19,663	75,441	4,672	2,722	15,775	66,554	82,329	1,401	91,124
1964	22,234	1,672	11,954	18,597	30,551	22,622	77,079	4,485	2,893	14,164	66,493	80,657	544	88,579
1963	17,146	2,739	19,459	17,170	36,629	20,644	77,158	2,238	3,146	9,046	54,813	63,859	2,223	71,466
1962	12,590	2,772	22,074	13,892	35,966	23,115	74,443	1,100	3,366	9,716	40,322	..	1,148	55,652
1961	18,383	2,583	21,440	12,907	34,347	21,117	76,430	1,918	4,730	13,894	25,409	..	3,196	49,147
1960	11,685	1,250	13,150	13,344	26,494	27,742	67,171	723	3,066	5,773	26,772	..	5,353	41,687

¹ Excludes low income housing.

Series S220-224. Housing stock at census dates, 1871 to 1951
(thousands of dwelling units)

Year	Occupied dwelling units				Vacant
	Temporary	Institutions and hotels	Other	Total	
	220	221	222	223	224
1951 ¹	..	11.5 ²	3,409.3	3,420.8	112.9
1941 ³	23.7	8.9	2,565.4	2,598.0	62.0
1931 ³	11.9	8.8	2,206.3	2,227.0	50.0 ⁴
1921	23.7	3.8	1,777.8	1,805.3	40.9
1911	35.7	3.2	1,393.6	1,432.5	52.2 ⁵
1901	29.5	2.0	998.4	1,029.9	27.6 ⁵
1891	22.1	1.7	853.8	877.6	50.6 ⁵
1881	14.7	1.4	736.9	753.0	45.8 ⁵
1871	12.4	1.1	592.8	606.3	27.4 ⁵

¹ Includes Newfoundland but excludes the Yukon Territory and the Northwest Territories.

² Includes military and industrial camps.

³ Excludes the Yukon Territory and the Northwest Territories.

⁴ Urban only.

⁵ Excludes prairie vacancies.

Series S225-231. Dwelling units completed, urban structural conversions, urban demolitions and stock of dwellings at year end occupied by tenure, and vacant,¹ 1956 to 1976
(thousands of dwelling units)

Year	Completions	Structural conversions	Demolitions	Stock of dwellings at year end			
				Vacant	Owned	Rented	Total
	225	226	227	228	229	230	231
1976	236.2	1.9	11.9	400.3	4,361.8	2,749.5	7,488.6
1975	217.0	2.1	11.7	377.5	4,210.0	2,698.3	7,267.1
1974	257.2	3.4	14.6	356.0	4,063.6	2,659.9	7,065.0
1973	246.6	2.4	16.0	336.0	3,922.5	2,576.3	6,824.3
1972	232.2	2.3	15.3	317.3	3,786.4	2,499.4	6,596.8
1971	132.4	1.6	8.3	299.9	3,655.2	2,430.2	6,383.1
1970	175.8	2.6	11.8	283.6	3,552.5	2,352.6	6,188.7
1969	195.8	2.8	14.4	268.5	3,485.6	2,249.4	6,003.4
1968	171.0	2.9	14.7	254.3	3,418.6	2,127.5	5,800.5
1967	149.2	2.7	16.4	241.2	3,351.7	2,029.8	5,622.7
1966	91.4	1.5	9.4	228.9	3,284.8	1,955.0	5,468.7
1965	153.0	1.9	19.6	219.1	3,224.3	1,864.4	5,307.7
1964	151.0	2.4	19.7	212.2	3,172.6	1,784.1	5,168.9
1963	128.2	2.6	20.2	205.6	3,121.0	1,705.2	5,031.7
1962	126.6	3.0	15.0	199.4	3,069.3	1,649.0	4,917.6
1961	77.7	1.8	6.5	193.4	3,017.7	1,588.4	4,799.4
1960	123.8	2.5	8.7	184.4	2,969.8	1,521.7	4,676.0
1959	145.7	3.2	9.8	140.8	2,923.9	1,481.3	4,546.0
1958	146.7	4.5	10.6	138.2	2,833.4	1,423.0	4,394.6
1957	117.3	4.0	9.9	129.7	2,747.0	1,364.8	4,241.5
1956	91.3	2.1	5.8	121.1	2,267.7	1,319.9	4,117.8
1956 ²	—	—	—	116.8	2,615.3	1,290.9	4,023.0

¹ All series exclude mobile homes, and before 1961 exclude the Yukon Territory and the Northwest Territories.

² Stock at census date (June 1).

Series S232-245. Apartment vacancy rates, by area and newly completed but unoccupied dwellings by type, 1957 to 1977

Year	Vacancy rates in privately-initiated apartment buildings of six units and over by selected metropolitan area										Newly completed but unoccupied dwellings by type			
	Halifax	Quebec	Montreal	Ottawa- Hull	Toronto	Winnipeg	Calgary	Edmonton	Van- couver	Average ³	Single detached, semi-detached and duplex dwellings ¹		Apartment and row dwellings ²	
											Number ⁴	As per- centage of year's newly occupied	Number ⁴	As per centage of year's completions
	232	233	234	235	236	237	238	239	240	241	242	243	244	245
1977 ⁵	1.5	1.9	3.6	2.2	1.0	1.9	0.1	0.1	2.5	2.3	10,494	..	15,735	..
1976 ⁵	1.4	0.7	1.3	3.4	1.2	1.4	0.1	—	0.7	1.3	8,229 ⁶	10.4 ⁶	9,766 ⁶	14.4 ⁶
1975 ⁵	1.8	1.4	0.7	2.7	1.8	2.1	0.4	0.3	0.1	1.2	5,222 ⁶	6.1 ⁶	9,825 ⁶	14.1 ⁶
1974 ⁴	2.3	1.6	1.2	2.8	1.1	1.7	1.1	0.8	0.1	1.2	6,182 ⁶	8.1 ⁶	10,789 ⁶	11.6 ⁶
1974 ⁷	2.7	4.7	2.6	3.6	1.0	2.9	5.7	5.5	0.3	2.5	—	—	—	—
1973 ⁷	2.5	5.3	3.8	2.4	2.1	4.1	8.6	8.3	1.0	3.4	2,659 ⁶	3.2 ⁶	8,666 ⁶	9.5 ⁶
1972 ⁷	4.8	6.5	5.7	2.6	3.3	5.4	8.9	7.6	2.4	4.5	4,974 ⁶	6.8 ⁶	10,272 ⁶	10.9 ⁶
1971 ⁷	4.1	4.8	7.2	2.1	3.0	3.5	10.7	6.3	4.1	5.0	4,440 ⁸	8.2 ⁸	9,316 ⁸	11.2 ⁸
1970 ⁷	2.6	3.8	8.2	2.2	2.8	2.6	5.8	5.7	2.7	5.0	6,571 ⁸	17.0 ⁸	10,613 ⁸	12.8 ⁸
1969 ⁷	0.5	2.8	7.6	1.7	2.7	1.6	1.7	3.7	1.2	4.0	5,256 ⁸	10.4 ⁸	13,739 ⁸	15.0 ⁸
1968 ⁷	0.5	2.2	5.0	1.5	1.5	1.6	1.3	2.8	1.3	2.7	4,414 ⁸	9.0 ⁸	12,245 ⁸	16.6 ⁸
1967 ⁷	2.8	2.2	1.2	2.1	1.2	1.7	1.6	2.8	1.0	1.4	4,502 ⁸	9.1 ⁸	6,960 ⁸	12.2 ⁸
1966 ⁷	3.8	4.8	4.5	7.6	1.0	4.1	5.8	2.8	1.5	3.2	2,928 ⁹	5.9 ⁹	8,123 ⁹	11.5 ⁹
1965 ⁷	5.4	—	—	9.1	1.6	4.9	8.0	6.5	4.0	4.5	3,551 ⁹	7.0 ⁹	7,777 ⁹	13.9 ⁹
1964 ⁷	4.4	—	—	8.2	2.8	5.6	11.6	13.0	4.7	5.5	3,446 ⁹	6.7 ⁹	8,795 ⁹	15.3 ⁹
1963 ⁷	4.9	—	—	—	4.4	3.7	14.4	9.2	4.2	6.1	4,066 ⁹	8.5 ⁹	6,196 ⁹	14.6 ⁹
1962	—	—	—	—	—	—	—	—	—	—	5,330 ⁹	10.0 ⁹	—	—
1961	—	—	—	—	—	—	—	—	—	—	4,223	8.7	—	—
1960	—	—	—	—	—	—	—	—	—	—	4,473	9.1	—	—
1959	—	—	—	—	—	—	—	—	—	—	3,491	5.7	—	—
1958	—	—	—	—	—	—	—	—	—	—	3,213	5.1	—	—
1957	—	—	—	—	—	—	—	—	—	—	2,764	5.5	—	—

¹ Census metropolitan area rates weighted by units. Coverage increases over time.

² Census metropolitan areas.

³ Census metropolitan areas, large urban centres and census agglomerations of 50,000 and over.

⁴ Data relate to the month of December.

⁵ Apartment vacancy rate data relate to the month of October.

⁶ Data based on 1971 Census area definition.

⁷ Apartment vacancy rate data relate to the month of June.

⁸ Data based on 1966 Census area definition.

⁹ Data based on 1961 Census area definition.

Series S246. Non-farm vacancy rates, 1921 to 1949

Year	Vacancy rate	Year	Vacancy rate	Year	Vacancy rate
	246		246		246
1949	1.6	1940	1.8	1930	4.1
1948	1.6	1939	2.6	1929	4.4
1947	1.6	1938	2.6	1928	4.7
1946	1.6	1937	2.7	1927	5.1
		1936	3.3	1926	5.2
1945	1.6				
1944	1.6	1935	3.7	1925	5.7
1943	1.6	1934	4.9	1924	6.3
1942	1.7	1933	6.7	1923	5.6
1941	1.8	1932	6.7	1922	2.7
		1931	4.7	1921	2.7

Series S247-253. Net mortgage loans approved for new housing under the Dominion Housing Act and National Housing Acts, by lender and type of loan, 1935 to 1976

(series S247-252 in dwelling units; series S253 in number)

Year	Approved lenders	Central Mortgage and Housing Corporation			Total	Hostel beds	
		Market housing		Other			
		Sections	Section				
		34,155 and 59	15				
	247	248	249	250	251	252	253
1976	93,665	2,799	–	19,065	21,864	115,529	4,244
1975	74,937	16,717	10,150	16,841	43,708	118,645	6,836
1974	20,098	10,856	2,015	14,765	27,636	47,734	6,088
1973	68,530	6,342	4,311	12,035	22,688	91,218	5,142
1972	98,524	6,045	8,470	16,855	31,370	129,894	9,184
1971	97,647	13,261	11,059	23,075	47,395	145,042	11,700
1970	50,936	24,170	19,440	21,543	65,153	116,089	12,610
1969	45,581	7,795	7,364	19,128	34,287	79,868	17,235
1968	59,205	14,343	1,956	11,137	27,436	86,641	14,119
1967	25,913	33,132	–	9,912	43,044	68,957	12,628
1966	10,291	30,672	–	5,403	36,075	46,366	5,871
1965	24,936	29,793	70	2,451	32,314	57,250	6,965
1964	26,959	26,820	1,717	144	28,681	55,640	8,522
1963	30,085	22,515	2,094	–	24,609	54,694	5,197
1962	32,437	13,223	1,328	–	14,551	46,988	5,120
1961	36,810	20,302	3,326	–	23,628	60,438	2,231
1960	21,156	13,863	1,591	–	15,454	36,610	30
1959	25,082	27,792	4,518	-82	32,228	57,310	92
1958	45,716	30,246	6,282	-75	36,453	82,169	–
1957	23,987	20,409	4,124	416	24,949	48,936	464
1956	38,611	745	1,620	290	2,655	41,266	–
1955	63,238	721	1,423	56	2,200	65,438	–
1954	47,362	212	2,291	454	2,957	42,716	–
1953	30,873	3,373	1,295	3,073	7,741	38,614	–
1952	27,488	2,395	841	3,599	6,835	34,323	–
1951	17,742	376	174	991	1,541	19,283	–
1950	37,478	476	94	4,232	4,802	42,280	–
1949	19,847	289	144	4,886	5,319	25,166	–
1948	18,428	127	–	220	347	18,775	–
1947	10,681	72	–	180	252	10,933	–
1946	8,378	–	–	3,449	3,449	11,827	–
1945	4,980	–	–	–	–	5,387	–
1944	1,393	–	–	–	–	–	–
1943	1,721	–	–	–	–	–	–
1942	1,093	–	–	–	–	–	–
1941	4,323	–	–	–	–	–	–
1940	5,621	–	–	–	–	–	–
1939	5,973	–	–	–	–	–	–
1938	3,894	–	–	–	–	–	–
1937	1,817	–	–	–	–	–	–
1936	788	–	–	–	–	–	–
1935	97	–	–	–	–	–	–

Series S254-259. Net mortgage loans approved for existing housing under the National Housing Act (1954), 1961-64 to 1976
(dwelling units)

Year	Approved lenders	CMHC			Total	Hostel beds
		Sections 34.15, 58, 59	Other	Total		
	254	255	256	257	258	259
1976	35,454	194	1,464	1,658	37,112	773
1975	43,675	282	1,660	1,942	45,617	1,002
1974	23,803	9,101	1,735	10,836	34,639	1,112
1973	22,449	2,658	445	3,103	25,552	345
1972	20,874	1,694	866	2,560	23,434	729
1971	14,267	1,987	745	2,732	16,999	1,062
1970	5,344	2,049	544	2,593	7,937	329
1969	685	3,789	1,548	5,337	6,022	1,976
1968	5	3,660	634	4,294	4,299	1,802
1967	5	3,746	416	4,162	4,167	523
1966	–	8	1,337	1,345	1,345	369
1965	2	–	1,602	1,602	1,604	–
1964 ¹	–	–	154	154	154	220

¹ Covers period 1961 to 1964.

Series S260-271. Mortgage loans on new residential property approved by lending institutions, by type of lender, by type of loan, 1948 to 1976

(millions of dollars)

Year	NHA financed						Conventionally financed					
	Chartered banks	Life insurance companies	Trust companies	Loan companies	Other companies	Total	Chartered banks	Life insurance companies	Trust companies	Loan companies	Other companies	Total
	260	261	262	263	264	265	266	267	268	269	270	271
1976	1,074.2	420.9	1,014.4	508.8	227.4	3,245.7	561.9	560.5	896.2	451.5	44.9	2,515.1
1975	772.9	270.5	749.3	402.1	102.7	2,297.6	799.3	291.9	737.2	501.0	54.1	2,383.5
1974	339.8	88.2	245.7	66.7	26.4	766.9	667.9	314.3	623.0	480.7	34.5	2,120.3
1973	573.0	216.3	520.8	123.3	67.4	1,500.8	650.5	372.0	723.8	432.7	33.5	2,212.5
1972	799.4	193.8	481.3	238.1	97.2	1,809.8	226.1	220.3	426.2	290.2	32.9	1,195.6
1971	696.5	185.8	429.6	245.7	88.4	1,646.1	154.6	166.7	312.4	156.2	34.5	824.4
1970	338.2	74.7	299.5	84.6	60.8	857.8	40.9	102.5	245.0	115.5	35.0	538.9
1969	234.2	118.2	236.4	66.7	45.2	700.6	50.2	260.3	413.9	200.8	64.2	989.5
1968	250.0	251.4	238.8	55.6	36.3	832.2	82.5	362.4	289.4	166.1	62.1	962.5
1967	85.0	88.1	161.7	6.1	14.9	355.8	42.5	405.5	140.8	131.1	25.2	745.1
1966	–	85.2	101.7	4.0	0.4	191.3	–	373.8	42.4	116.2	41.8	574.2
1965	6.2	113.5	194.3	6.0	0.2	320.2	–	576.8	121.4	150.4	53.5	902.1
1964	9.3	162.7	171.2	9.1	0.4	352.7	–	484.4	101.9	184.1	42.0	812.3
1963	–	217.9	145.3	21.2	0.8	385.2	–	398.4	104.3	130.2	19.3	652.2
1962	–	234.5	147.5	29.0	0.8	411.7	–	298.1	51.2	77.8	23.4	450.6
1961	0.2	257.5	175.3	19.9	0.3	453.2	–	237.5	15.0	62.5	17.6	332.6
1960	1.1	177.0	56.7	5.0	1.8	241.7	–	201.5	31.2	67.9	6.7	307.3
1959	175.4	113.1	11.9	6.8	0.7	307.8	–	238.8	52.5	46.0	5.7	343.0
1958	300.4	171.3	37.6	7.1	2.6	519.0	–	181.2	29.2	66.5	13.6	290.5
1957	173.4	95.8	4.8	3.0	1.0	278.0	–	155.3	32.5	40.8	10.8	239.3
1956	158.4	227.0	24.3	15.8		425.4	–	189.7		65.1		254.9
1955	326.2	271.1	28.4	13.6		639.4	–	157.2		77.8		235.0
1954	158.5	281.8	7.5	16.5		464.3	–	113.1		67.2		180.3
1953	–	246.7	–	9.1		255.7	–	73.1		45.8		118.8
1952	–	210.2	–	8.3		218.6	–	51.7		32.3		84.0
1951	–	134.6		6.4		141.0	–	..		..		95.3
1950	–	259.8		20.2		280.0	–	..		..		30.1
1949	–	115.4		7.3		122.7	–	..		..		89.6
1948	–	101.0		5.7		106.7	–	..		..		..

Series S272-283. Mortgage loans on existing residential property approved, by type of lender, by type of loan, 1948 to 1976

(millions of dollars)

Year	NHA financed						Conventionally financed					
	Chartered banks	Life insurance companies	Trust companies	Loan companies	Other companies	Total	Chartered banks	Life insurance companies	Trust companies	Loan companies	Other companies	Total
	272	273	274	275	276	277	278	279	280	281	282	283
1976	542.5	5.8	323.3	331.3	15.8	1,218.5	634.6	196.6	1,725.6	577.9	91.5	3,226.2
1975	543.6	6.5	289.5	417.0	26.6	1,283.3	672.5	183.6	1,518.3	605.5	66.2	3,046.0
1974	302.7	7.3	113.9	170.0	16.5	610.3	596.5	153.8	1,169.9	493.5	50.3	2,464.0
1973	166.6	5.7	122.8	111.0	24.6	430.7	798.9	148.5	1,382.2	455.7	42.6	2,827.9
1972	94.1	4.2	92.8	138.8	10.9	340.7	366.8	105.2	651.3	388.7	42.5	1,554.5
1971	23.1	2.6	59.2	130.3	5.1	220.3	229.8	71.1	552.5	254.5	30.7	1,138.6
1970	3.9	0.8	25.1	49.0	0.5	79.2	110.2	37.9	321.9	136.5	37.4	643.9
1969	0.9	0.1	3.5	5.9	-	10.4	80.1	54.0	350.7	147.0	30.2	662.0
1968	0.1	-	-	-	-	-	96.5	72.8	256.1	131.6	14.8	571.7
1967	-	-	-	-	-	-	101.6	134.9	250.6	150.7	17.0	654.9
1966	-	-	-	-	-	-	-	125.7	191.2	132.5	21.4	470.7
1965	-	-	-	-	-	-	-	198.1	295.6	210.7	44.6	749.0
1964	-	-	-	-	-	-	-	164.0	242.8	189.3	43.5	639.6
1963	-	-	-	-	-	-	-	126.5	155.6	122.8	25.1	430.0
1962	-	-	-	-	-	-	-	117.9	106.3	108.6	25.4	358.2
1961	-	-	-	-	-	-	-	103.4	85.5	88.7	22.6	300.2
1960	-	-	-	-	-	-	-	79.2	58.0	70.1	13.8	221.1
1959	-	-	-	-	-	-	-	95.2	55.4	56.9	8.8	216.3
1958	-	-	-	-	-	-	-	79.0	55.1	62.7	11.0	207.8
1957	-	-	-	-	-	-	-	56.6	37.4	46.0	9.5	149.5
1956	-	-	-	-	-	-	-	..	..	..	..	176.3
1955	-	-	-	-	-	-	-	..	..	..	..	182.4
1954	-	-	-	-	-	-	-	..	..	..	..	144.3
1953	-	-	-	-	-	-	-	..	..	..	..	116.8
1952	-	-	-	-	-	-	-	..	..	..	..	118.0
1951	-	-	-	-	-	-	-	..	..	..	..	114.2
1950	-	-	-	-	-	-	-	..	..	..	..	115.2
1949	-	-	-	-	-	-	-	..	..	..	..	97.1
1948	-	-	-	-	-	-	-	..	..	..	..	98.9

Series S284-289. Mortgage loans on non-residential property approved, by type of lender, 1948 to 1976

(millions of dollars)

Year	Chartered banks	Life insurance companies	Trust companies	Loan companies	Other companies	Total
	284	285	286	287	288	289
1976	34.5	984.6	204.7	209.6	–	1,433.5
1975	66.4	758.1	211.5	252.3	1.2	1,289.5
1974	131.3	610.6	251.0	177.6	0.5	1,171.0
1973	205.7	728.6	383.1	200.2	0.2	1,517.7
1972	148.0	519.4	213.7	222.8	0.2	1,104.2
1971	60.7	423.4	249.1	113.6	0.2	847.1
1970	16.5	240.0	188.8	62.3	0.3	507.9
1969	15.8	188.7	172.1	54.1	0.9	431.6
1968	17.4	158.2	114.3	43.9	0.9	334.7
1967	23.7	171.3	109.3	62.7	2.1	369.1
1966	–	219.2	87.7	74.5	0.7	382.1
1965	–	269.4	196.7	113.6	1.5	581.1
1964	–	200.0	180.1	124.4	2.5	507.1
1963	–	160.1	115.0	94.8	2.8	372.7
1962	–	135.0	97.7	76.9	1.1	310.8
1961	–	140.0	59.8	95.8	2.7	297.9
1960	–	130.8	46.2	84.7	1.7	263.3
1959	–	130.1	28.0	57.6	0.3	216.0
1958	–	98.6	20.1	55.1	0.7	174.5
1957	–	70.2	8.1	24.8	0.8	103.9
1956	–	–	–	–	–	141.1
1955	–	–	–	–	–	138.3
1954	–	–	–	–	–	114.9
1953	–	–	–	–	–	89.4
1952	–	–	–	–	–	82.5
1951	–	–	–	–	–	84.0
1950	–	–	–	–	–	98.0
1949	–	–	–	–	–	84.4
1948	–	–	–	–	–	87.6

Series S290-297. National Housing Act Mortgage Insurance Fund, 1955 to 1976

(millions of dollars)

Year	Fees and premiums received	Other income (net)	Total	Claims paid and legal expenses	Other expenses	Total	Total reserves	Insurance in force ¹
	290	291	292	293	294	295	296	297
1976	35.4	43.0	78.4	13.1	2.7	15.8	521.8	15,130
1975	26.6	36.8	63.4	16.9	2.8	19.7	459.3	13,864
1974	20.3	39.9	60.2	19.8	2.7	22.5	415.6	11,915
1973	20.4	57.2	77.5	40.0	1.9	41.9	377.9	11,089
1972	20.2	41.1	61.3	29.3	1.1	30.4	342.3	10,056
1971	16.4	24.1	40.5	7.4	0.6	8.0	311.4	9,225
1970	10.7	18.5	29.2	2.7	0.5	3.2	278.9	8,051
1969	15.0	16.4	31.3	2.4	0.5	2.9	252.8	7,412
1968	14.6	13.9	28.6	2.1	0.6	2.7	224.4	6,732
1967	16.5	14.8	31.3	4.6	0.7	5.3	198.5	6,311
1966	14.3	18.8	33.1	10.4	–	10.4	172.6	5,789
1965	13.5	21.1	34.6	15.4	–	15.4	149.8	5,321
1964	12.1	17.4	29.5	14.7	–	14.7	130.6	4,934
1963	9.9	17.9	27.8	13.9	–	13.9	115.9	4,499
1962	11.6	12.3	23.8	8.6	–	8.6	102.0	4,123
1961	11.0	13.0	24.0	9.8	–	9.8	86.8	3,640
1960	8.5	4.6	13.0	1.5	–	1.5	72.6	3,090
1959	13.1	2.5	15.7	0.3	–	0.3	61.1	2,733
1958	13.8	1.6	15.4	0.1	–	0.1	45.7	2,100
1957	7.3	1.0	8.3	–	–	–	30.4	1,425
1956	9.8	0.5	10.4	–	–	–	22.1	1,083
1955	9.2	0.2	9.4	–	–	–	11.8	529

¹ As at 31 December.

Series S298-310. Sales and purchases of insured National Housing Act mortgages,¹ 1957 to 1976

(millions of dollars)

Year	Chartered banks		Life insurance companies		Trust companies		Loan and other companies		CMHC		Pension funds	Other firms and institutions	
	Sales	Purchases	Sales	Purchases	Sales	Purchases	Sales	Purchases	Sales	Purchases	Purchases	Corporate purchases	Unincorporated purchases
	298	299	300	301	302	303	304	305	306	307	308	309	310
1976	347.0	59.0	0.2	128.5	389.0	62.2	101.2	38.1	–	–	319.5	151.6	78.5
1975	168.0	76.8	0.5	31.2	159.6	40.0	73.5	2.1	–	–	127.4	100.9	23.2
1974	180.2	253.7	1.0	55.4	146.5	33.6	261.7	6.2	–	–	101.1	125.1	14.3
1973	190.0	120.0	–	27.8	71.3	33.3	141.3	48.1	–	2.0	50.9	105.3	15.2
1972	182.7	427.2	–	11.2	38.7	20.2	422.0	14.8	–	–	48.7	115.1	6.2
1971	33.8	28.0	2.1	7.4	22.8	4.4	4.0	0.5	21.4	–	24.3	14.5	5.0
1970	47.9	0.2	4.3	66.3	74.9	1.1	2.8	0.8	–	–	30.5	30.9	0.1
1969	39.9	0.1	17.8	50.3	65.8	–	4.1	3.0	–	–	59.3	14.8	0.1
1968	16.8	2.2	2.9	9.9	23.3	4.3	–	2.0	–	–	8.5	16.0	0.1
1967	1.6	4.9	–	56.3	65.8	1.7	0.6	2.2	–	–	2.1	0.8	–
1966	15.1	19.7	–	33.2	70.0	3.1	3.2	7.7	–	–	23.6	0.2	0.8
1965	0.7	31.6	0.5	25.3	52.2	30.2	2.2	7.5	80.8	–	5.7	35.5	0.6
1964	3.1	46.8	5.0	21.4	58.2	25.8	8.4	10.9	75.3	3.1	17.1	24.9	–
1963	0.2	49.1	1.0	15.6	58.9	24.8	7.9	3.6	61.1	–	23.3	12.3	0.4
1962	0.7	30.6	–	22.1	47.1	21.4	5.9	–	47.9	–	19.6	7.8	0.1
1961	–	18.3	–	11.5	19.3	14.7	2.6	–	40.0	–	4.6	12.8	–
1960	6.3	–	9.0	0.4	4.3	0.8	7.3	6.5	0.4	–	12.9	6.7	–
1959	36.8	–	1.9	3.4	3.4	0.1	0.1	–	0.4	–	38.1	1.0	–
1958	32.5	–	7.8	4.6	4.4	2.3	1.5	–	1.5	–	31.2	9.6	–
1957	41.2	–	8.6	10.3	9.7	0.8	2.1	–	0.6	–	31.2	19.9	–

¹ Data for initial sales and purchases only.

Series S311-322. Selected housing unit cost series, 1951 to 1976

(dollars)

Year	Average cost of new housing excluding land						Average land cost per dwelling unit, NHA		Average value, MLS ¹	Construction cost per square foot, NHA		Average urban cash rent
	Single detached		Doubles	Row	Apartments		Single detached ²	Apartment ³		Bungalow ²	Apartment ³	
	All	NHA	All	All	All	NHA ²			319	320	321	
	311	312	313	314	315	316	317	318	319	320	321	322
1976	37,982	30,655	31,523	30,828	23,885	22,739	9,226	3,397	51,252	27.57	22.50	..
1975	33,691	28,246	27,278	27,808	21,770	20,955	7,246	2,464	45,886	25.37	21.62	..
1974	29,631	24,943	23,821	26,011	19,995	16,395	4,867	2,439	41,057	22.62	16.30	..
1973	24,630	20,844	19,922	20,246	16,240	14,752	4,673	2,403	32,306	18.64	14.21	..
1972	21,298	18,588	16,939	16,669	13,800	13,416	4,887	2,001	26,595	16.38	13.17	..
1971	19,700	17,506	15,360	13,140		12,237	4,588	2,000	24,581	15.30	11.28	111
1970	19,984	17,155	14,644	12,322		11,746	4,191	2,064	23,376	14.90	11.93	109
1969	19,357	17,659	14,230	11,368		11,847	4,201	2,466	23,234	14.62	11.65	102
1968	18,246	16,152	13,392	10,663		12,002	3,746	2,196	21,272	13.68	11.42	94
1967	17,475	16,031	12,871	10,188		11,670	3,580	1,853	19,111	13.04	12.09	90
1966	16,680	15,813	12,106	9,913		10,952	3,480	1,901	17,536	12.56	11.59	84
1965	15,477	14,307	11,184	9,115		11,149	3,095	1,590	15,918	11.62	10.71	79
1964	14,598	13,396	10,894	8,421		10,565	3,082	1,650	15,075	11.01	10.77	75
1963	14,131	12,709	10,111	8,528		8,794	2,973	1,277	14,427	10.68	9.33	72
1962	14,098	12,450	9,985	8,006		8,595	2,783	1,125	14,302	10.56	9.58	71
1961	13,615	12,286	9,938	8,286		8,511	2,602	1,259	14,203	10.61	9.44	68
1960	13,519	12,166	9,567	8,060		8,415	2,473	1,346	14,194	10.65	9.16	66
1959	13,002	12,196	9,621	7,503		8,356	2,533	990	14,208	10.78	9.58	65
1958	12,257	12,008	9,075	7,595		8,022	2,471	978	13,822	10.56	8.63	61
1957	12,018	12,018	8,648	7,595		7,501	2,260	992	12,781	10.41	8.43	58
1956	-	11,829	-	-	-	7,373	2,025	879	11,993	10.22	8.22	55
1955	-	11,022	-	-	-	7,591	1,819	793	-	9.81	8.07	53
1954	-	10,731	-	-	-	7,295	1,687	699	-	9.61	8.21	49
1953	-	10,541	-	-	-	-	1,197	-	-	-	-	45
1952	-	10,118	-	-	-	-	1,182	-	-	-	-	42
1951	-	-	-	-	-	-	-	-	-	-	-	37

¹ Average dollar value per multiple Listing Service Transaction.

² Includes loans approved on freehold tenure only. Costs are those estimated by owner and builder applicants at time of approval. Land costs reflect the prices paid for lots regardless of the extent of servicing or method of financing.

³ Subsequent to 1967 includes loans approved on freehold tenure only. Includes low income housing financed under sections 58 and 59. Costs are those estimated by loan applicants.

Series S323-325. Average construction cost of new dwelling units, by type of dwelling, 1921 to 1950

(dollars)

Year	Dwellings in one- and two-unit dwellings ¹		Dwellings in apartment and row buildings	Year	Dwellings in one- and two-unit dwellings ¹		Dwellings in apartment and row buildings
	Urban	All areas			Urban	All areas	
	323	324			323	324	
1950	–	6,464	5,356	1935	3,054	–	2,146
1949	–	5,734	5,420	1934	3,051	–	1,841
1948	–	5,072	5,086	1933	2,868	–	928
1947	–	4,358	4,648	1932	3,281	–	2,112
1946	–	4,421	3,783	1931	3,994	–	2,540
1945	–	3,680	3,623	1930	4,074	–	3,101
1944	–	3,323	2,687	1929	4,482	–	3,783
1943	–	2,393	2,204	1928	4,724	–	3,087
1942	–	2,197	1,954	1927	4,421	–	2,383
1941	3,107	2,359	2,282	1926	4,205	–	2,742
1940	3,023	–	2,232	1925	4,146	–	3,131
1939	2,806	–	2,231	1924	4,031	–	3,194
1938	2,705	–	2,290	1923	4,549	–	3,269
1937	2,946	–	2,355	1922	4,635	–	3,181
1936	3,046	–	2,093	1921	4,407	–	3,497

¹ One- to three-unit buildings, 1921 to 1940.

Series S326-335. Selected housing price series (1971=100), 1952 to 1976

Year	Average cost per square foot NHA single detached ¹	Residential building construction input price index ²	Implicit price index residential construction	New housing price indexes, selected cities ³						Rental component CPI
				Montreal	Toronto	Ottawa- Hull	Winnipeg	Calgary	Edmonton	
	326	327	328	329	330	331	332	333	334	335
1976	180.6	160.5	187.9	200.9	180.7	192.5	199.8	243.1	245.8	118.9
1975	167.1	144.0	167.7	190.3	171.0	178.3	177.5	195.0	205.3	111.1
1974	149.5	134.7	147.9	177.7	171.6	171.2	163.5	162.3	172.8	105.4
1973	122.2	123.2	123.8	125.8	137.6	138.2	128.4	126.4	132.6	102.6
1972	106.7	110.1	107.7	107.6	110.2	112.7	105.2	110.0	109.1	101.2
1971	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1970	97.4	91.1	94.1	..	98.2	94.7	98.4	93.2	95.8	98.4
1969	95.5	85.1	92.1	..	..	..	94.8	89.5	90.9	95.3
1968	89.1	79.8	87.9	..	..	..	..	..	..	91.7
1967	84.0	74.6	87.0	..	..	..	..	..	..	87.9
1966	80.4	70.0	82.2	..	..	..	..	..	..	85.1
1965	74.7	65.9	77.2	..	..	..	..	..	..	83.7
1964	70.4	62.6	73.0	..	..	..	..	..	..	83.2
1963	67.7	59.6	70.1	..	..	..	..	..	..	82.9
1962	67.1	57.6	68.6	..	..	..	..	..	..	82.6
1961	68.3	56.2	68.8	..	..	..	..	..	..	82.4
1960	69.4	55.9	68.2	..	..	..	..	..	..	82.1
1959	70.6	54.4	66.9	..	..	..	..	..	..	81.7
1958	68.9	52.5	67.0	..	..	..	..	..	..	80.8
1957	67.7	51.2	67.2	..	..	..	..	..	..	79.4
1956	66.6	49.8	65.3	..	..	..	..	..	..	78.0
1955	64.0	48.1	64.3	..	..	..	..	..	..	76.6
1954	62.2	46.8	63.1	..	..	..	..	..	..	74.6
1953	60.4	46.7	63.7	..	..	..	..	..	..	72.1
1952	59.5	45.9	63.1	..	..	..	..	..	..	69.5

¹ Costs are those estimated by loan applicants at time of approval. Includes only approvals for freehold tenure.

² Materials and equipment prices are manufacturers new order selling prices. Wage rates are basic rates taken from union contracts.

³ Selling prices of new houses built by large residential general contractors. Ottawa-Hull and Toronto series refers to single detached, semi-detached and row condominium houses. Other series refer to single detached only.