



10 Construction

INTRODUCTION

In 1990-91 the Construction industry sector contributed 7.4 per cent of the total Victorian Gross Domestic Product (GDP) at Factor cost.

In 1990-91, Victoria's percentage share of the national GDP at factor cost for the Construction industry sector was at 24.3 per cent, the lowest since 1984-85.

Building construction

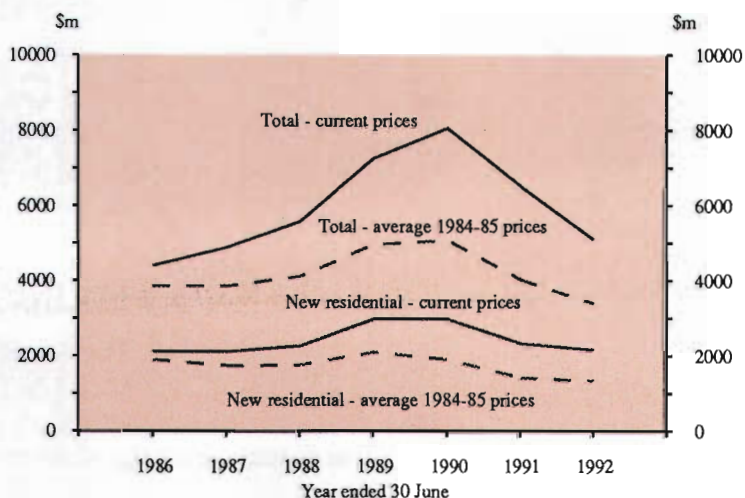
At current prices the value of building work done in Victoria during 1991-92 was \$5,114.9m. The value of building work done represented a 21.9 per cent decrease over the previous year, and constituted 22.0 per cent of the total value of building work done in Australia during 1991-92. Between 1985-86 and 1991-92, Victoria's share of the value of building work done in Australia decreased from 26.3 per cent to 22.0 per cent.

Non-residential building

The commercial sector of non-residential building (i.e. hotels, shops, factories, offices, and other business premises) accounted for 39.3 per cent (\$2,271.6m) of the value of all building work completed in Victoria during 1991-92, with office construction being the largest component of this commercial sector activity. Building for community purposes accounted for 10.6 per cent of the value of building construction, with the largest component being building for education purposes.

TABLE 10.1 CONSTRUCTION INDUSTRY - GROSS DOMESTIC PRODUCT AT FACTOR COST

	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91
Australia (\$m)	16,296	18,213	19,867	24,058	27,148	26,719
Victoria (\$m)	4,108	4,591	4,880	5,873	6,891	6,495
Victoria as a percentage of Australia	25.2	25.2	24.6	24.4	25.4	24.3

VALUE OF BUILDING WORK DONE, VICTORIA

In the commercial sector, the value of shops completed decreased by 65.1 per cent between 1990-91 and 1991-92 (from \$560.2m to \$195.3m) while the value of factories completed increased by 2.2 per cent (from \$380.7m to \$389.1m). The value of other business premises completed decreased by 69.6 per cent, while the value of offices completed decreased by 16.5 per cent. The value of hotels completed decreased by 21.3 per cent, from \$210.8m to \$165.8m.

In the community sector, the value of buildings completed for entertainment and recreation purposes increased by 16.5 per cent while the value of buildings completed for educational purposes decreased by 21.0 per cent. The value of buildings completed for religious purposes and for health purposes decreased by 7.7 per cent and 14.9 per cent respectively.

These changes in value of work done reflect not only changes in building activity but also increases in the cost of building due to inflation. It should also be noted that appreciable increases or decreases in the value of buildings completed for industrial, commercial, business, health, etc. purposes may be attributed, to some extent, to the completion of large-scale projects.

Residential building

Residential building (including alterations and additions) accounted for 48.0 per cent of the value of all building construction during 1991-92. Residential building's share of the value of all building work done varied widely between 1985-86 and 1990-91, with a peak of 58.5 per cent in 1985-86 and a low of 44.5 per cent in 1990-91.

New house completions accounted for 72.7 per cent of the value of residential building work completed during 1991-92 while new 'other residential building' completions and 'alterations and additions' accounted for 7.8 per cent and 19.5 per cent respectively.

The number of new residential buildings completed during 1991-92 was 25,141, a decrease of 10.6 per cent over the previous year. Of these 25,141 buildings, 88.6 per cent were houses.

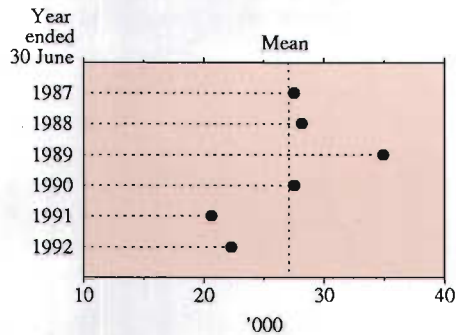
Private sector activity accounted for at least 90 per cent of the number of new residential buildings completed each year from 1986-87 to 1991-92. This proportion ranged from a high of 95.4 per cent in 1989-90 to a low of 93.6 per cent in 1986-87. During 1991-92, private sector activity accounted for 93.8 per cent of all new residential buildings completed.

**House
commencements and
housing loans**

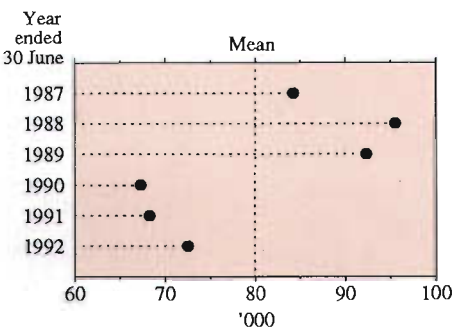
During 1991-92 there were 22,268 houses commenced in Victoria, which represented an increase of 8.1 per cent over the previous year. The number of houses commenced each year between 1986-87 and 1991-92 followed a similar pattern to the number of housing loans approved.

At current prices the value of housing loans approved during 1991-92 was \$6,598m. This was a 33.1 per cent increase over the 1990-91 level and represented a 65.7 per cent increase over 1986-87, when the value of loans approved was \$3,982m.

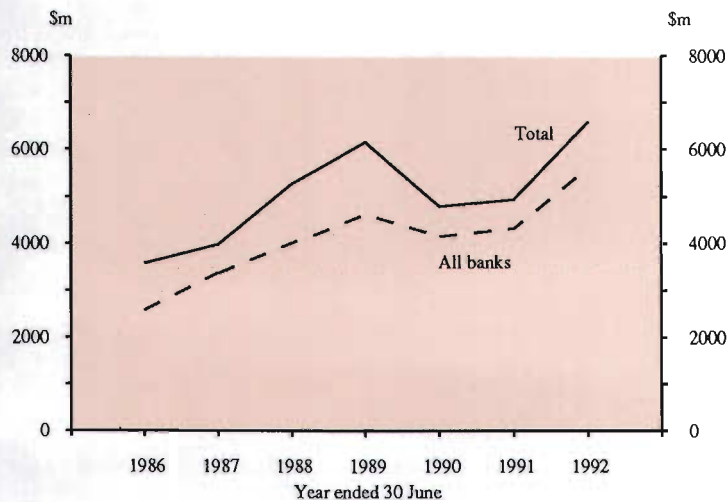
NUMBER OF NEW HOUSES
COMMENCED, VICTORIA



NUMBER OF LOANS (a) APPROVED,
VICTORIA



VALUE OF HOUSING LOANS (OF ALL TYPES) APPROVED, VICTORIA



Regions

Commencements of new residential buildings in the Melbourne Statistical Division (MSD) accounted for 65.9 per cent of Victoria's commencements during 1991-92. Although this proportion was relatively stable between 1982-83 and 1991-92, it represented a substantial decline from 1970-71 and 1971-72 when MSD commencements accounted for 80.7 per cent of Victoria's commencements.

All regions within the MSD except North Eastern Melbourne recorded increased commencements in 1991-92. Western Melbourne and the Mornington Peninsula continued to account for the largest proportions of commencements, with 32.7 per cent and 30.1 per cent respectively.

TABLE 10.2 COMMENCEMENTS OF NEW RESIDENTIAL BUILDINGS, VICTORIA

<i>Statistical division</i>	<i>1986-87</i>	<i>1987-88</i>	<i>1988-89</i>	<i>1989-90</i>	<i>1990-91</i>	<i>1991-92(a)</i>
NUMBER						
Melbourne (a)	20,551	21,074	25,085	18,152	13,987	16,461
Barwon	2,234	2,016	2,397	2,339	1,547	1,640
Western District (a)	622	622	643	560	459	460
Central Highlands	1,211	1,268	1,353	1,345	929	885
Wimmera	233	243	251	237	182	190
Mallee (a)	653	683	734	515	450	413
Loddon Campaspe (a)	1,702	1,741	1,974	1,742	1,369	1,307
Goulburn	1,394	1,356	1,659	1,482	1,175	1,075
Ovens-Murray (a)	788	832	1,021	863	692	766
East Gippsland	675	654	736	659	519	592
Gippsland (a)	1,206	1,120	1,275	1,183	1,043	1,174
Total Victoria	32,280	32,545	38,374	29,994	23,024	24,963
PERCENTAGE OF TOTAL VICTORIA						
Melbourne (a)	63.7	64.8	65.4	60.5	60.7	65.9
Barwon	6.9	6.2	6.2	7.8	6.7	6.6
Western District (a)	1.9	1.9	1.7	1.9	2.0	1.9
Central Highlands	3.8	3.9	3.5	4.5	4.0	3.5
Wimmera	0.7	0.7	0.7	0.8	0.8	0.8
Mallee (a)	2.0	2.1	1.9	1.7	2.0	1.6
Loddon Campaspe (a)	5.3	5.3	5.1	5.8	5.9	5.2
Goulburn	4.3	4.2	4.3	4.9	5.1	4.3
Ovens-Murray (a)	2.4	2.6	2.7	2.9	3.0	3.1
East Gippsland	2.1	2.0	1.9	2.2	2.3	2.4
Gippsland (a)	3.7	3.4	3.3	3.9	4.5	4.7
Total Victoria	100.0	100.0	100.0	100.0	100.0	100.0

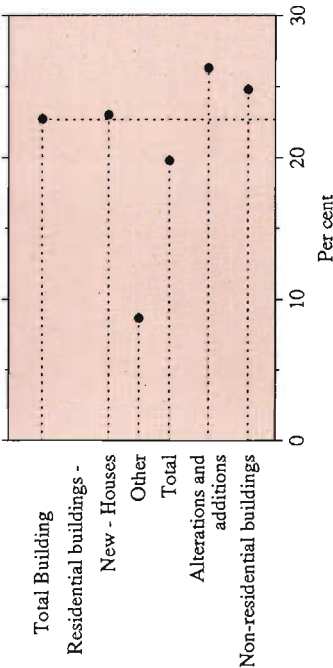
(a) Victorian Statistical Division boundaries were reviewed during 1990 and changes were implemented on 1 July 1991. Previous years' aggregates reflect the former boundaries.

TABLE 10.3 VALUE OF BUILDING ACTIVITY COMPLETED - SUMMARY
(\$m)

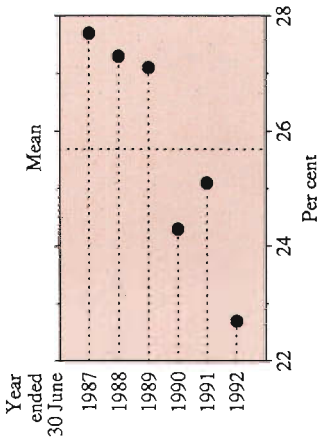
	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	Victoria as a percentage of Australia
New residential buildings -							
Houses	1,790.5	1,979.1	2,421.7	2,758.2	r 2,394.2	2,016.2	8,767.9
Other	292.9	253.7	297.9	179.6	r 206.4	215.3	2,486.2
Total	2,083.5	2,232.8	2,719.6	2,937.8	r 2,600.6	2,231.6	11,254.1
Alterations and additions to residential buildings							
Non-residential building	354.8	393.9	483.7	612.6	r 601.2	541.4	2,059.7
Total all building -	4,326.0	5,019.9	6,604.3	7,065.7	r 7,199.5	5,774.1	..
Victoria	15,612.6	18,362.7	24,396.4	29,023.8	r 28,717.2	25,409.3	26.3
Australia	27.7	27.3	27.1	24.3	25.1	..	24.8
Victoria as a percentage of Australia							22.7

Source: ABS Building Activity, Australia (Catalogue 8752.0).

VALUE OF BUILDING ACTIVITY COMPLETED, 1991-91:
VICTORIA AS A PERCENTAGE OF AUSTRALIA

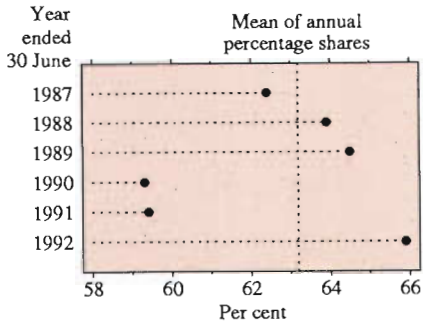


VALUE OF BUILDING ACTIVITY COMPLETED: VICTORIA AS A PERCENTAGE OF AUSTRALIA

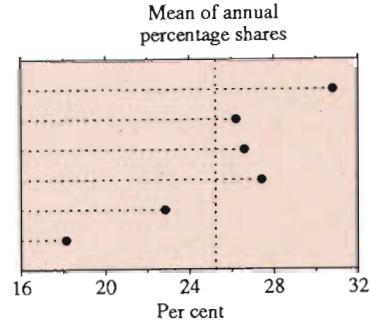


COMMENCEMENTS OF NEW RESIDENTIAL BUILDINGS

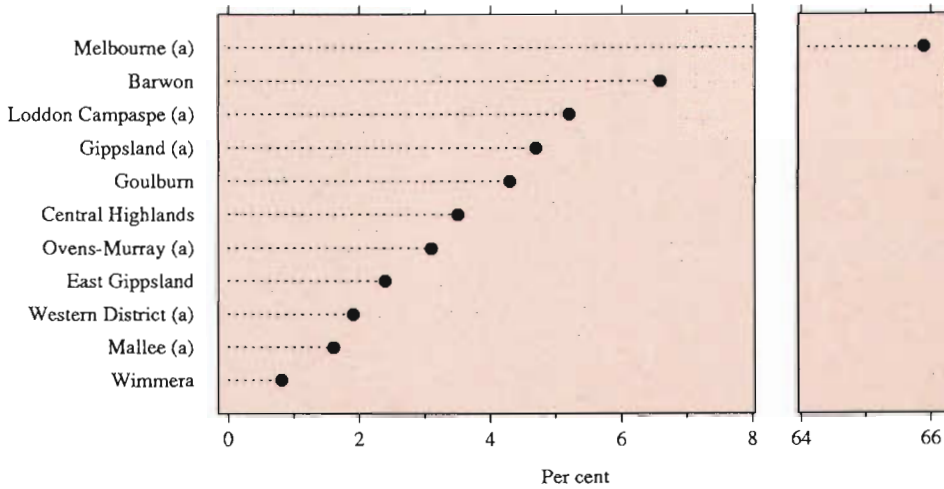
MSD AS A PERCENTAGE OF VICTORIA



VICTORIA AS A PERCENTAGE OF AUSTRALIA



PERCENTAGE CONTRIBUTION OF STATISTICAL DIVISIONS TO TOTAL VICTORIAN NEW RESIDENTIAL BUILDING COMMENCEMENTS, 1991-92



(a) Victorian Statistical Division boundaries were reviewed during 1990 and changes were implemented on 1 July 1991. Previous years' aggregates reflect the former boundaries.

TABLE 10.4 VALUE OF BUILDINGS COMPLETED, CLASSIFIED BY TYPE, VICTORIA (\$m)

Type of building	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92
Houses	1,790.5	1,979.1	2,421.7	2,758.2	r2,394.2	2,016.2
Other residential buildings	92.9	253.7	297.9	179.6	r206.4	215.3
Alterations and additions to residential buildings	354.8	393.9	483.7	612.6	r601.2	541.4
Hotels, guest houses, etc.	92.2	79.4	241.5	165.2	r210.8	165.8
Shops	317.9	360.9	403.8	530.7	r560.2	195.3
Factories	247.7	406.9	816.3	548.4	r380.7	389.1
Offices	528.0	757.9	1,048.2	1,174.7	r1,655.7	1,382.7
Other business premises	188.5	222.8	348.5	426.1	r456.9	138.7
Education	208.5	225.8	296.8	176.4	266.8	210.7
Religious	14.2	13.0	14.4	15.3	23.5	21.7
Health	130.0	124.9	88.4	261.6	r195.2	166.1
Entertainment and recreation	80.7	143.1	61.6	100.6	181.4	211.4
Miscellaneous	80.0	58.3	81.6	116.3	66.6	119.7
Total	4,326.0	5,019.9	6,604.3	7,065.7	r7,199.5	5,774.1

Source: ABS Building Activity, Victoria (Catalogue 8752.2).

TABLE 10.5 NUMBER OF NEW RESIDENTIAL BUILDINGS COMPLETED BY OWNERSHIP, VICTORIA

Year	Private sector (a)			Public sector			Total Number	Private sector as a percentage of total
	Houses	Other	Total	Houses	Other	Total		
1986-87	26,100	5,436	31,540	1,607	563	2,170	33,710	93.6
1987-88	26,170	4,398	30,570	1,499	415	1,914	32,490	94.1
1988-89	29,630	3,579	33,210	906	798	1,704	34,910	95.1
1989-90	30,740	2,059	32,800	1,003	570	1,573	34,380	95.4
1990-91	r24,010	2,318	r26,330	r1,206	580	r1,786	r28,110	93.7
1991-92	21,591	1,992	23,583	691	867	1,558	25,141	93.8

(a) Prior to 1991-92 Houses and Total Residential Buildings for the Private Sector were rounded to the nearest 10 units.

TABLE 10.6 NUMBER OF NEW HOUSES COMMENCED, CLASSIFIED BY MATERIAL OF OUTER WALLS, VICTORIA

Year	Brick, concrete, and stone	Brick veneer	Timber	Fibro cement	Not stated and other	Total
1986-87	593	18,151	2,208	984	5,542	27,481
1987-88	567	17,856	1,916	838	6,879	28,103
1988-89	402	22,012	1,815	797	9,875	34,901
1989-90	389	17,375	1,761	564	7,411	27,500
1990-91	220	12,573	1,340	359	6,086	20,578
1991-92	258	13,446	1,496	211	6,856	22,267

Source: ABS unpublished data from the collection, Dwelling Unit Commencements Reported by Approving Authorities.

TABLE 10.7 NUMBER OF COMMENCEMENTS OF NEW RESIDENTIAL BUILDINGS BY TYPE OF BUILDING

Year	Melbourne Statistical Division (MSD) (a) (b)	Victoria (b)	MSD as a percentage of Victoria (a) (b)	Victoria as a percentage of Australia (c)
HOUSES				
1986-87	17,144	27,482	62.4	30.8
1987-88	17,968	28,103	63.9	26.2
1988-89	22,516	34,901	64.5	26.6
1989-90	16,315	27,500	59.3	27.4
1990-91	12,235	20,591	59.4	r23.3
1991-92	14,474	22,268	65.0	21.5
OTHER RESIDENTIAL BUILDING				
1986-87	3,407	4,798	71.0	18.3
1987-88	3,106	4,442	69.9	14.3
1988-89	2,569	3,473	74.0	8.1
1989-90	1,837	2,494	73.7	6.6
1990-91	1,752	2,433	72.0	r8.0
1991-92	1,987	2,695	73.7	8.4
TOTAL				
1986-87	20,551	32,280	63.7	28.0
1987-88	21,074	32,545	64.8	23.5
1988-89	25,085	38,374	65.4	22.1
1989-90	18,152	29,994	60.5	21.8
1990-91	13,987	23,024	60.7	r19.4
1991-92	16,461	24,963	65.9	18.1

(a) Victorian Statistical Division boundaries were reviewed during 1990 and changes were implemented on 1 July 1991. Previous years' aggregates reflect the former boundaries.

(b) Source: *Dwelling Unit Commencements reported by Approving Authorities, Victoria* (Catalogue 8741.2)

(c) Source: *Building Activity, Australia* (Catalogue 8752.0)

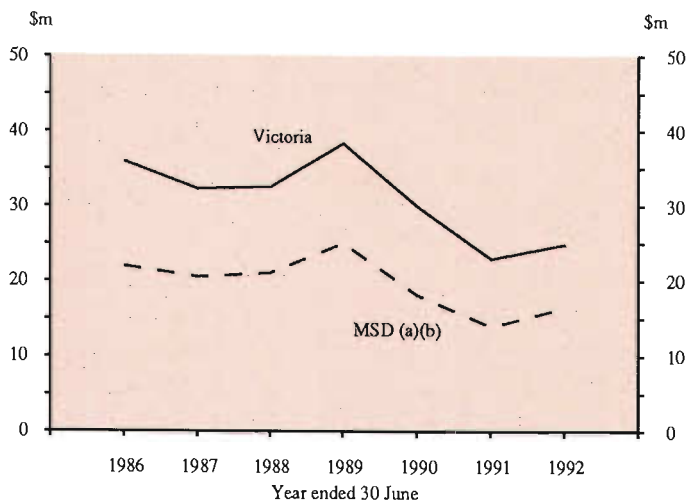
NUMBER OF NEW RESIDENTIAL BUILDINGS COMMENCED

TABLE 10.8 COMMENCEMENTS OF NEW RESIDENTIAL BUILDINGS, STATISTICAL REGIONS OF MELBOURNE STATISTICAL DIVISION

<i>Statistical region</i>	<i>1986-87</i>	<i>1987-88</i>	<i>1988-89</i>	<i>1989-90</i>	<i>1990-91</i>	<i>1991-92 (a)</i>
NUMBER						
Western Melbourne	4,756	4,580	5,811	5,164	4,156	4,940
Inner Melbourne	566	669	505	480	284	364
North Eastern Melbourne	2,307	2,560	3,261	1,906	1,621	1,496
Inner Eastern Melbourne	2,027	2,303	2,323	1,184	809	986
Southern Melbourne	1,022	1,086	1,268	1,122	718	935
Outer Eastern Melbourne	3,489	3,516	3,621	2,560	1,974	2,388
Mornington Peninsula	6,384	6,360	8,296	5,736	4,424	5,352
Total Melbourne Statistical Division	20,551	21,074	25,085	18,152	13,986	16,461
PERCENTAGE OF MELBOURNE STATISTICAL DIVISION						
Western Melbourne	23.1	21.7	23.2	28.4	29.7	30.1
Inner Melbourne	2.8	3.2	2.0	2.6	2.0	2.2
North Eastern Melbourne	11.2	12.1	13.0	10.5	11.6	9.1
Inner Eastern Melbourne	9.9	10.9	9.3	6.5	5.8	6.0
Southern Melbourne	5.0	5.2	5.1	6.2	5.1	5.7
Outer Eastern Melbourne	17.0	16.7	14.4	14.1	14.1	14.2
Mornington Peninsula	31.1	30.2	33.1	31.6	31.6	32.7
Total Melbourne Statistical Division	100.0	100.0	100.0	100.0	100.0	100.0

(a) Victorian Statistical Division boundaries were reviewed during 1990 and changes were implemented on 1 July 1991. Previous years' aggregates reflect the former boundaries.

TABLE 10.9 HOUSING LOANS APPROVED BY TYPE OF LENDER, VICTORIA

<i>Year</i>	<i>All banks</i>	<i>Permanent building societies</i>	<i>Other lenders</i>	<i>Total</i>
NUMBER				
1986-87 (a)	75,999	4,431	3,756	84,186
1987-88	79,548	10,882	5,081	95,511
1988-89	77,061	9,396	5,858	92,315
1989-90	58,189	3,409	5,749	67,347
1990-91	59,092	2,891	6,302	68,285
1991-92	72,493	6,196	7,210	85,899
VALUE (\$m)				
1986-87 (a)	3,376	230	174	3,982
1987-88	4,012	635	278	5,273
1988-89	4,625	646	409	6,166
1989-90	4,162	232	408	4,802
1990-91	4,332	203	421	4,956
1991-92	5,631	456	510	6,598

(a) Includes construction of new dwellings, purchase of newly erected dwellings, purchase of established dwellings, refinancing of existing home loans, and alterations and additions to dwellings.

**Engineering
construction**

The Engineering Construction Survey was first conducted in respect of the September Quarter 1986, replacing the Construction (Other than Building) Survey as a medium for measuring the level of Non-Building (Engineering) Construction activity within the Construction sector.

During 1991-92, the value (at current prices) of engineering construction work done was \$1,908.8m, of which 56.3 per cent (\$1,075.2m) was done by the public sector. Construction of roads, highways, and subdivisions accounted for 19.7 per cent of the value of work done, telecommunications for 23.4 per cent, heavy industry for 12.2 per cent, and electricity generation, transmission, and distribution for 21.0 per cent.

TABLE 10.10 VALUE OF ENGINEERING CONSTRUCTION BY TYPE, 1991-92

<i>Type of construction</i>	<i>Commenced</i>	<i>Work done</i>			<i>Work yet to be done</i>
	<i>Victoria (\$m)</i>	<i>Victoria (\$m)</i>	<i>Australia (\$m)</i>	<i>Victoria as a percentage of Australia</i>	<i>Victoria (\$m)</i>
Roads, highways, and subdivisions	361.4	375.8	3,283.0	11.4	73.1
Bridges	43.3	68.8	257.3	26.7	16.5
Railways	42.7	66.8	474.5	14.1	16.8
Harbours	5.6	6.5	88.4	7.4	1.5
Water storage and supply	71.2	80.0	752.1	10.6	40.3
Sewerage and drainage	88.1	142.0	598.0	23.7	104.4
Electricity generation, transmission, and distribution	501.9	400.8	1,597.8	25.1	276.8
Pipelines	35.0	36.3	152.3	23.8	1.1
Recreation	31.8	34.1	337.0	10.1	5.5
Telecommunications	459.7	446.5	1,808.7	24.7	14.4
Heavy industry	196.6	233.2	1,651.2	14.1	84.7
Other	12.4	18.0	56.3	32.0	0.7
Total of all construction -					
By private sector	853.4	833.6	5,827.5	14.3	462.7
By public sector	996.2	1,075.2	5,229.1	20.6	172.8
Total	1,849.6	1,908.8	11,056.6	17.3	635.5

REFERENCES

Data sources

The Construction Industry Survey (CIS) consisted of separate collections for the private and public sectors. The private sector collection was conducted as a component of the ABS's integrated economic statistics program. This program has been developed so that data from each industry sector conform to the same basic conceptual standards, thereby allowing comparative analysis across different industry sectors. The results of this survey are therefore comparable with economic censuses undertaken annually for the mining and electricity and gas industries and periodically for the transport, manufacturing, wholesale, retail, and selected service industries. However, as the public sector collection used different concepts, the public sector results cannot validly be aggregated with those for the private sector.

The Building Activity Survey involves a sample survey of private sector house construction activity and complete enumeration of building jobs other than private sector house construction. From the September quarter in 1985, the scope of the Building Activity Survey changed in respect of non-residential building activity. Only non-residential building jobs (both new and alterations and additions) with an approval value of \$30,000 or more were included in the survey, whereas previously, jobs with an approval value of \$10,000 or more were included. From the September quarter 1990, this scope increased further to \$50,000 for non-residential and \$10,000 for residential building jobs (both new and alterations and additions). The building commencements collection is based on building permits issued by local government authorities, and contracts let by or day labour work authorised by Commonwealth, State, semi-government, and local government authorities.

The quarterly Engineering Construction Survey is based on a sample of all construction enterprises operating in Australia, in both private and public sectors. The survey aims to measure the value of all engineering construction work undertaken in Victoria. For the Engineering Construction Survey, all enterprises recorded on the ABS central register of economic units and classified to the construction industry, and all other units known to be undertaking engineering construction work (from trade journals, newspapers, etc.) are included in the survey framework.

ABS publications

Housing Finance for Owner Occupation, Australia (5609.0)
Building Approvals, Victoria (8731.2)
Dwelling Unit Commencements Reported by Approving Authorities, Victoria (8741.2)
Building Activity, Australia: Dwelling Unit Commencements, Preliminary (8750.0)
Building Activity, Australia (8752.0)
Building Activity, Victoria (8752.2)
Engineering Construction, Australia (8762.0)