



Employment in selected commercial centres in the Greater Sydney Metropolitan Region, 1996

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Abstract:

In 1995 the New South Wales Government introduced the joint metropolitan strategies "Cities for the 21st Century" and the "Integrated Transport Strategy" (ITS). Together these strategies sought to integrate economic development, environmental management, and transport and land use planning in the Greater Sydney Metropolitan Region.

One of the main aims of these strategies was to improve the balance between the use of private vehicles and public transport by encouraging the containment of economic activity and new employment development in fifteen key commercial centres throughout the region. The centres were selected because of their size, potential for growth, and accessibility to public transport.

Using the Transport Data Centre's 1996 Employment and Journey to Work data set, derived from the 1996 Census of Population and Housing, this paper examines the employment characteristics of fifteen commercial centres. It discusses the relationship between the characteristics of workers, where they lived and the modes of transport they used to travel to work.

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Introduction

This paper presents an analysis of employment in fifteen commercial centres in the Greater Sydney Metropolitan Region (GSMR) using 1996 Employment and Journey to Work (JTW) data collected as part of the Census of Population and Housing by the Australian Bureau of Statistics. It focuses on the characteristics of workers, where they lived and the modes of transport they used to travel to work on Census Day 1996. In addition, the importance of these commercial centres for non-work activities is highlighted with data from the 1991-92 Home Interview Survey.

The centres analysed in this paper are those nominated in the New South Wales Government's joint metropolitan strategies of 1995 "Cities for the 21st Century" and the "Integrated Transport Strategy" (ITS). The strategies proposed to focus the GSMR's future economic activity in key centres as part of the integration economic development, environmental management, and transport and land use planning, to achieve broader environmental, economic, social and financial outcomes. The centres were selected because of their size, potential for growth and accessibility to public transport.

The centres were classified into three types, "primary", "secondary" and "other", based on the role they play in the region. The central business districts (CBD) of Sydney, Parramatta, Newcastle and Wollongong were nominated as primary centres and identified as priority areas for the growth of commercial, retail and service employment. Nine secondary centres were identified at Bankstown, Blacktown, Campbelltown, Chatswood, Hornsby, Liverpool, North Sydney/Milsons Point, Penrith, and St. Leonards/Crows Nest. These secondary centres were considered to be important because of their ability to support the role of the Sydney CBD in providing office employment and services of strategic significance to the GSMR.

The ITS also recognised that there were other employment concentrations of substantial importance in the region, although not having the characteristics of traditional commercial centres. These were identified as the Central Industrial Area/Airport and the Macquarie/North Ryde area.

Figure 1 illustrates the location of each commercial centre

Workforce characteristics of commercial centres

Employment

The fifteen commercial centres employed approximately 457,000 workers, or about 23% of the total GSMR workforce of 1.96 million in 1996. The other 77% of employed persons worked at locations spread throughout the region. The distribution of employment in 1996 by type of centre is presented in Table 1.

Figure 1 Commercial Centres in the Greater Sydney Metropolitan Region

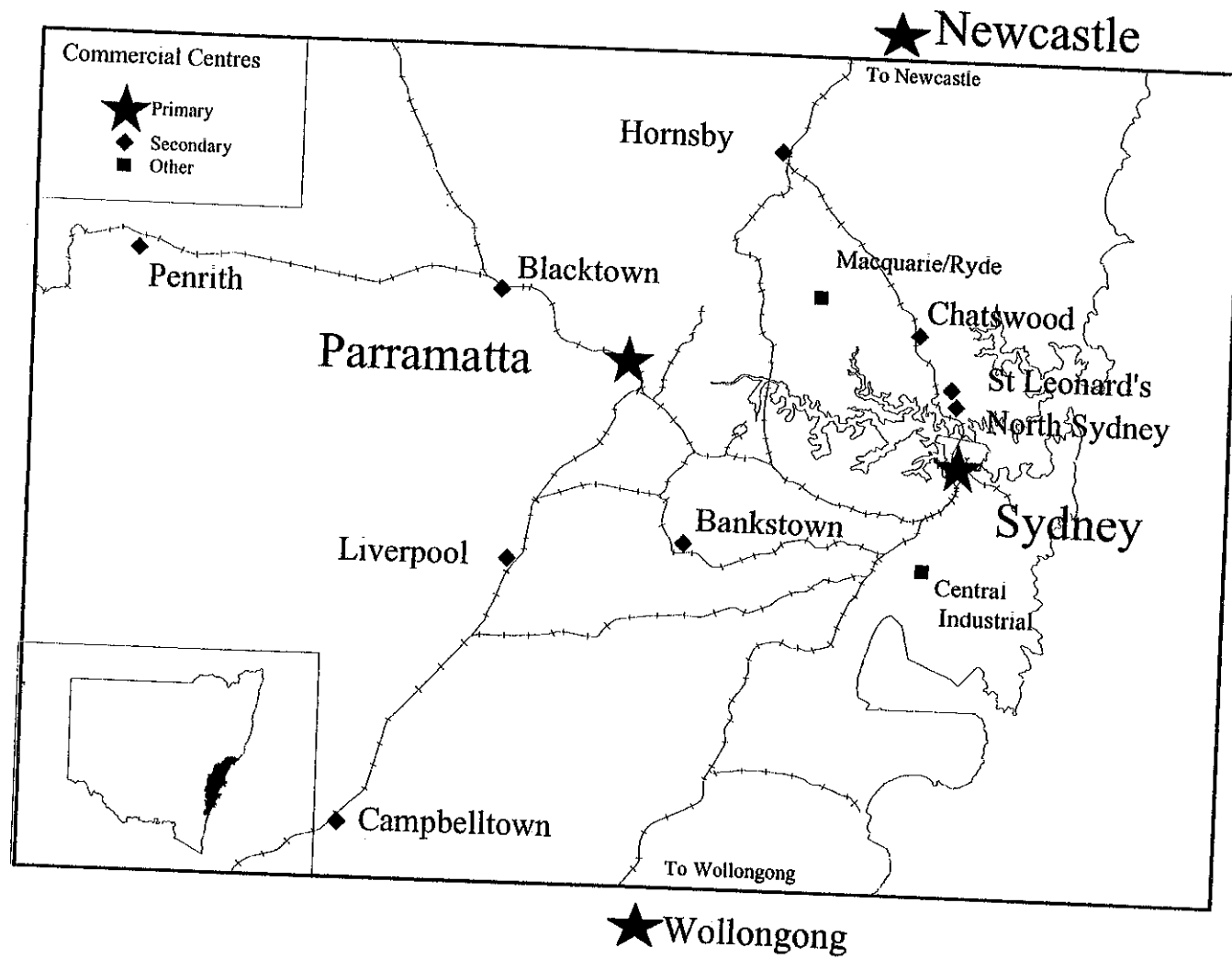


Table 1 Residents of the Greater Sydney Metropolitan Region employed¹ in Commercial Centres, 1996

Centre type	Centre name	Number	Per cent (%)
Primary	Sydney CBD	192,826	9.8
	Parramatta	33,066	1.7
	Newcastle CBD	14,274	0.7
	Wollongong CBD	8,912	0.5
	Total Primary	249,078	12.7
Secondary	Bankstown	10,241	0.5
	Blacktown	7,439	0.4
	Campbelltown	6,642	0.3
	Chatswood	17,771	0.9
	Hornsby	6,197	0.3
	Liverpool	9,951	0.5
	North Sydney/Milsons Point	33,282	1.7
	Penrith	10,488	0.5
	St Leonards/Crows Nest	24,867	1.3
	Total Secondary	126,878	6.5
Other	Macquarie/Nth Ryde	18,071	0.9
	Central Industrial Area/Airport	63,075	3.2
	Total Other	81,146	4.1
Total Centres Employment		457,102	23.3
Other GSMR		1,502,948	76.7
Total GSMR Employment		1,960,050	100.0

1 Total employment includes people enumerated in Greater Sydney Metropolitan Region on Census night, 1996

Source: 1996 JTW Table 4

In 1996 the primary centres employed 13% of the workforce in the GSMR. The Sydney CBD was the main employment centre, with around 10% of the region's employment. Parramatta, the focus of business and other services for Sydney's West, employed almost 2% of the region's workforce, with Newcastle CBD and Wollongong CBD together employing just over 1%.

The secondary centres in total employed 6.5% of the 1996 workforce. The other centres (Central Industrial Area/Airport and Macquarie/North Ryde) together employed 4% of the total GSMR workforce.

Changes in Employment 1981 to 1996

Between 1981 and 1996 the proportion of the GSMR's workforce employed in the 15 centres decreased slightly from 28.5% to 27.2%. The share of the GSMR's total employment in primary centres fell from 16.0% in 1981 to 14.1% in 1996. A larger proportion of the GSMR workforce was employed in secondary centres in 1996 (8.3%) than in 1981 (7.5%).

Although there was no significant change between 1981 and 1996 in the share of people employed in the centres compared to the GSMR as a whole, there were significant increases in the number of people employed in the centres. Using data from the 1981, 1991 and 1996 JTW data sets, Table 2 presents the number of people employed in each centre and the GSMR in 1981, 1991 and 1996, as well as the percentage change in employment over time.

Table 2 Residents of Greater Sydney Metropolitan Region employed¹ in Commercial Centres, 1981, 1991 and 1996, and percentage change over time²

Centre	Year			% change		
	1981	1991	1996*	1981-1991	1991-1996	1981-1996
Sydney CBD	183,297	164,503	192,413	-10.3%	17.0%	5.0%
Parramatta	19,807	28,786	33,040	45.3%	14.8%	66.8%
Newcastle CBD	15,761	13,917	14,271	-11.7%	2.5%	-9.5%
Wollongong CBD	9,261	7,168	8,741	-22.6%	21.9%	-5.6%
Total Primary	228,126	214,374	248,465	-6.0%	15.9%	8.9%
Bankstown	8,586	10,205	11,285	18.9%	10.6%	31.4%
Blacktown	6,317	6,382	7,433	1.0%	16.5%	17.7%
Campbelltown	4,553	5,918	7,682	30.0%	29.8%	68.7%
Chatswood	11,107	16,467	20,185	48.3%	22.6%	81.7%
Hornsby	9,935	12,378	13,408	24.6%	8.3%	35.0%
Liverpool	8,622	13,173	13,304	52.8%	1.0%	54.3%
North Sydney/Milsons Pt	27,528	28,276	33,243	2.7%	17.6%	20.8%
Penrith	6,763	8,967	10,479	32.6%	16.9%	54.9%
St Leonards/Crows Nest	24,209	27,400	30,500	13.2%	11.3%	26.0%
Total Secondary	107,620	129,166	147,519	20.0%	14.2%	37.1%
Macquarie/Nth Ryde	10,846	18,656	22,545	72.0%	20.8%	107.9%
Central Industrial Area	60,249	57,637	62,925	-4.3%	9.2%	4.4%
Total Other	71,095	76,293	85,470	7.3%	12.0%	20.2%
Total Centres Employment	406,841	419,833	481,454	3.2%	14.7%	18.3%
Other GSMR	1,020,002	1,167,502	1,286,636	14.5%	10.2%	26.1%
Total GSMR* Employment	1,426,843	1,587,335	1,768,090	11.2%	11.4%	23.9%

1 Total employment includes people enumerated in Greater Sydney Metropolitan Region on Census night 1981, 1991 and 1996.

2 For comparative purposes data excludes destination unknown, outside GSMR and no fixed place of work as well as the Statistical Local Areas of Shoalhaven and Wingecaribee. Therefore total employment in 1996 in this table is not the same as in Table 1.

Source: 1981 JTW Table 7, 1991 JTW Table 3, 1996 JTW Table 4

From 1981 to 1996 the number of people employed in the GSMR increased from 1.4 million to almost 1.8 million, an increase of 23.9%. Employment in the region's fifteen centres grew by 18.3%, from 406,841 to 481,454.

Employment in the primary centres increased by 8.9% from 1981 to 1996. The number of people employed in the Sydney CBD increased by 5.0% over this period. Employment levels in the Newcastle CBD decreased by -9.5% and by -5.6% in Wollongong CBD. The workforce in Parramatta CBD increased between 1981 and 1996 by almost 70%, from 19,807 to 33,040.

All secondary centres experienced an increase in employment from 1981 to 1996, with an overall increase of 37.1%. The centres with the greatest employment growth were Campbelltown, Chatswood, Liverpool and Penrith.

The number of people employed in the other centres increased by 20.2% in total from 1981 to 1996. Employment in Macquarie/North Ryde more than doubled, whilst employment in the Central Industrial Area/Airport increased by only 4.4%.

A more detailed discussion of employment trends in Sydney can be found in Milthorpe and Raimond (1998).

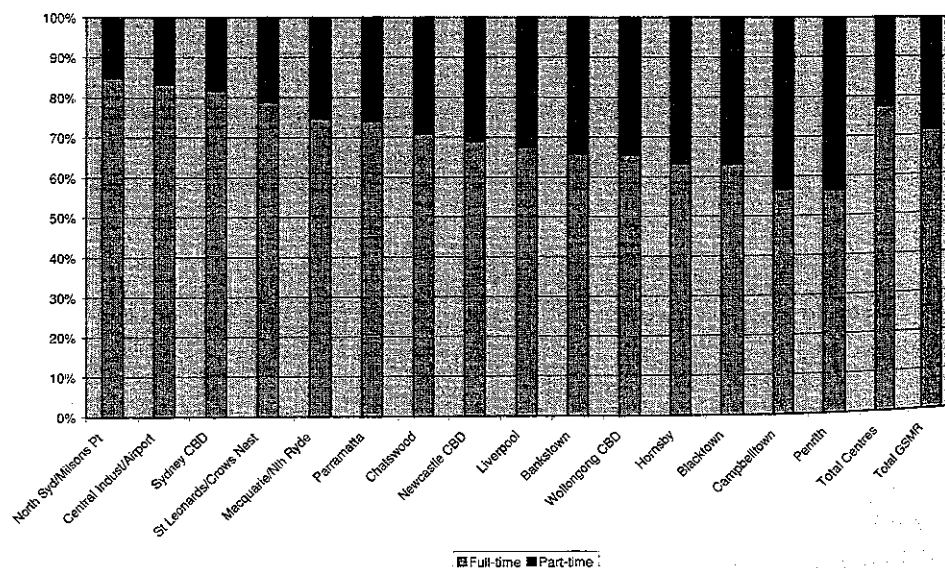
Full-Time/Part-Time Employment

Figure 2 presents a breakdown of employment by full-time and part-time employment status for each centre in the GSMR, and for the whole of the GSMR. Overall, the commercial centres employed a higher proportion of full-time workers than the GSMR as a whole. Full-time workers comprised 77% of the workforce in all commercial centres, compared to 71% for the region.

The commercial centres located closest to the Sydney CBD had the highest proportion of full time workers, while the outlying centres generally had a higher concentration of part-time workers. North Sydney/Milsons Point had the highest proportion of full-time workers (85%), followed by the Central Industrial Area/Airport (83%), the Sydney CBD (82%) and St Leonards/Crows Nest (79%). Penrith, Campbelltown, Blacktown and Hornsby all had less than 65% of their workforce employed on a full-time basis.

Part-time employment has been increasing over time, particularly for females, but also for males in recent years. A breakdown of employment in centres by gender is included in the following section. There has also been an increase in employment outside core hours across the whole day and throughout the week (Toon, Glazebrook and Searle 1994). These trends are expected to continue as employment in the service industries continues to grow (Australian Bureau of Statistics 1994). A discussion of the industry profile of commercial centres is provided later in this paper.

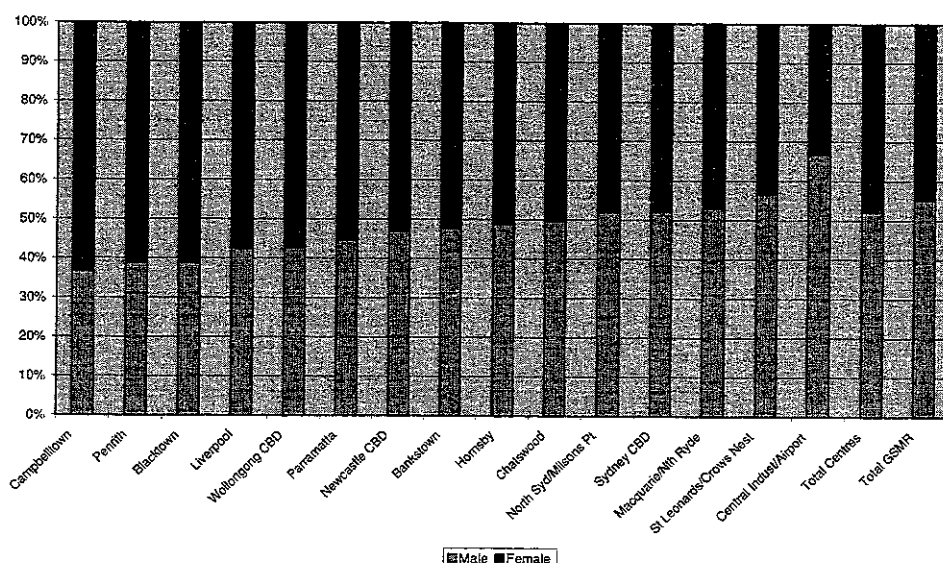
Figure 2 Proportion of workforce employed full-time and part-time¹ in Commercial Centres and the GSMR, 1996



¹ People who worked 35 hours or more per week are classified as 'full-time' and people who work less than 35 hours per week are classified as 'part-time'.

Source: 1996 JTW Table 22

Figure 3 Proportion of workforce in Commercial Centres and the GSMR by gender, 1996



Source: 1996 JTW Table 22

Gender Distribution

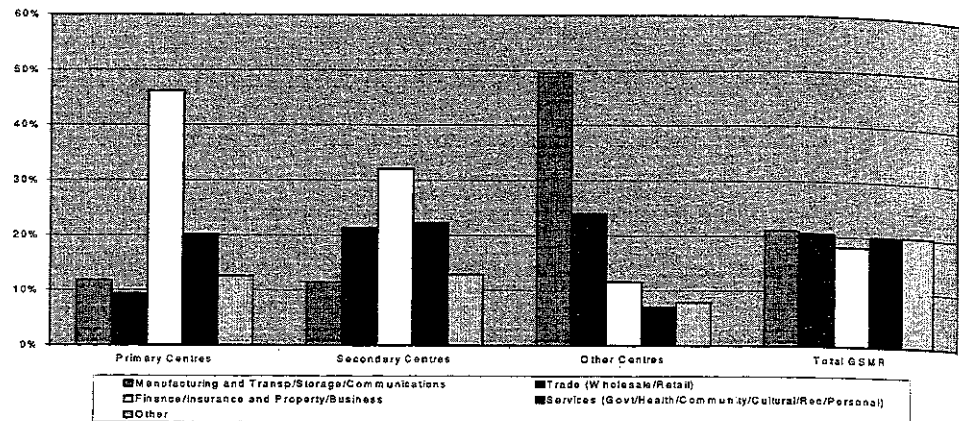
Employment in the commercial centres by gender is presented above in Figure 3. In general, the outer centres employed a higher proportion of females than males. The opposite pattern occurred in the centrally located centres. Overall, the commercial centres employed a higher proportion of females (48%) than the total GSMR (45%)

Campbelltown employed the highest proportion of females (63%), followed by Penrith (61%) and Blacktown (61%). These centres also had a high concentration of part-time jobs. While this may be partly due to the industry profile of these centres, it may also reflect the choice of some women to work shorter hours, at locations close to home. Employment industry and home location of workers are discussed later in this paper.

The centre with the greatest proportion of male employees was the Central Industrial Area/Airport, with males comprising 67% of the workforce. The other centres which had a high proportion of male workers were St. Leonards/Crows Nest (57%), Macquarie/North Ryde (53%), Sydney CBD (52%), and North Sydney/Milsons Point (52%).

There has been a trend towards increasing labour force participation by females, increasing from 41% in 1973 to 51% in 1993. Over 90% of this increase was in part-time employment. At the same time the rate of male labour force participation has been declining (Australian Bureau of Statistics 1994). Given these factors, combined with the rising importance of part-time employment, it could be expected that employment levels in the outer secondary centres will continue to grow at faster rates than in the primary and inner secondary centres.

Figure 4 Proportion of workforce by industry for Primary, Secondary and Other Commercial Centres and the GSMR, 1996



Source: 1996 JTW Table 12

Industry Profile

The industry profile of primary, secondary and other centres differs significantly. Figure 4 above presents the proportion of the workforce by industry of employment for each centre type and the total GSMR. Overall, the industry profile in the primary and other centres appears more specialised than for the secondary centres and the GSMR as a whole.

Employment in the primary centres was dominated by the industry group Finance/Insurance and Property/Business Services (46%). This industry group was also the major employer in the secondary centres (32%), followed by the combined Services industry group (22%) and Trade (21%). All of these industry groups have been experiencing a growth in their share of employment (Australian Bureau of Statistics 1997).

The major employment industry group in Macquarie/North Ryde and the Central Industrial Area/Airport was the Manufacturing and Transport/Storage/Communications, accounting for half of all jobs (50%). Although employment in manufacturing has been declining in recent years, there has been a growth in the Transport/Storage/Communications industry group (Australian Bureau of Statistics 1997).

Employment for the total GSMR workforce was spread fairly evenly across the five industry groups.

Travel to work in commercial centres

Modes used

The mode of travel used for work trips to commercial centres is shown in Figure 5. The "car" category includes trips by both car drivers and car passengers, and the category

"other" includes all other modes of travel (such as walking, taxis, motorbikes, and bicycles). It should be noted that on Census day in 1996 just over 14% of workers in the GSMR did not make a trip to work. Of these 4% "worked at home" and 10% "did not go to work". This section only relates to those people who made a trip to work on Census day.

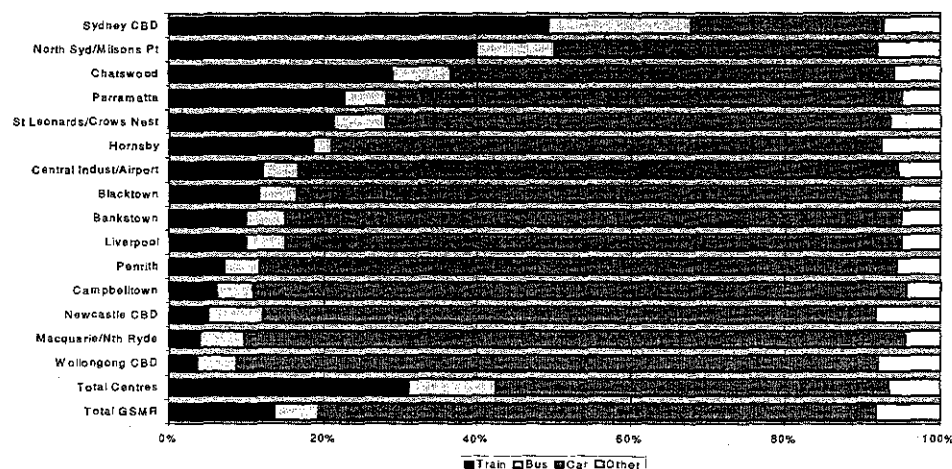
One of the criteria for the selection of centres was their accessibility to public transport. There was more than twice the proportion of trips to work by public transport (train and bus) to the centres (42%) than for the total GSMR (19%).

The vast majority of trips to the region's most accessible centre, the Sydney CBD, were by public transport (68%), with only 25% by private vehicle. The secondary centres close to the Sydney CBD also had higher than average public transport access rates. The proportion of work trips by public transport to North Sydney/Milsons Point was 50%, 36% for Chatswood, 28% for Parramatta, and 28% St Leonards/Crows Nest.

A large proportion of work trips to the outer commercial centres were by private vehicle. More than 80% of work trips to the commercial centres of Bankstown, Campbelltown, Liverpool, Penrith, and Wollongong CBD were by private vehicle. This may relate to the ease of road accessibility and the availability of car parking in these centres, compared to the availability of public transport, as well as the types of people they employ. The outer centres tend to employ a higher proportion of women and part-time workers, to whom the car may provide greater flexibility for the hours they work as well as the additional trips many women make before and after work, particularly in relation to child care (Gee, Hay and Bell, 1996; Transport Data Centre 1996).

The high proportion of private vehicle trips to Macquarie/North Ryde (86%) can be accounted for by the fact that, unlike most other centres, it is not located near a rail line.

Figure 5 Proportion of trips to work in Commercial Centres and the GSMR by mode, 1996



Train includes train and bus trips. Bus excludes bus and train trips.
Source: 1996 JTW Table 4

Changes in mode use 1981 to 1996

Table 3 presents a summary of mode share to the commercial centres in 1981, 1991 and 1996, as well as the percentage change in mode share between the years

Between 1981 and 1996 there was an increase of 2.6% in the proportion of trips to work by car for the total GSMR. Trips by car to the centres in total increased by 3.1%. The increase in car use corresponded with a decrease in public transport to the centres overall. For the total GSMR there were decreases in the proportion of trips to work by bus and other modes, whilst train use increased slightly overall.

There were a number of significant changes in journey to work mode share to individual centres between 1981 and 1996. The proportion of trips by car decreased to North Sydney/Milsons Point and Chatswood by -8.8%. Smaller decreases also occurred for St. Leonards/Crows Nest (-2.8%), Parramatta (-2.6%) and Macquarie/North Ryde (-0.5%).

The proportion of trips by car to all other centres increased, with the largest increases for Bankstown (8.4%), Liverpool (7.9%), the Central Industrial Area/Airport (7.6%), Hornsby (6.5%) and Blacktown (6.4%). Therefore the greatest increases in car use between 1981 and 1996 occurred in the outer centres, whilst decreases were experienced for the inner centres.

There were no significant decreases in train's mode share to the centres between 1981 and 1996. However, there were large increases in work trips by train to Chatswood (13.2%), North Sydney/Milsons Point (10.1%), Parramatta (8.4%) and St. Leonards/Crows Nest (7.9%). These centres also experienced a decline in trips by car.

There was a decrease in the proportion of trips by bus to all centres, except the Sydney CBD, Macquarie/North Ryde and Penrith. The increase in bus patronage to the Sydney CBD coincides with the improvement of bus services from northern Sydney and the implementation of the dedicated bus lane on the Sydney Harbour Bridge (Transport Data Centre, 1998).

There was a significant decrease in the proportion of bus trips to Newcastle (-7.0%), Bankstown (-6.5%), and Liverpool (-5.1%). Each of these centres also experienced an increase in car use.

Where Workers Live

The home location of the workers employed in each commercial centre varied by type of centre (primary, secondary, other) and location of centre (central or outer GSMR).

Overall, the centralised commercial centres with good public transport access, North Sydney/Milsons Point, St. Leonards/Crows Nest and Sydney CBD, employed people living throughout the whole GSMR.

Table 3 Proportion of work trips to Commercial Centres by mode 1981, 1991 and 1996, and percentage change 1981 to 1996¹

Centre	Car						Train ²						Bus ³						Other ⁴					
	Year			% change			Year			% change			Year			% change			Year			% change		
	81	91	96	81-91	91-96	81-96	81	91	96	81-91	91-96	81-96	81	91	96	81-91	91-96	81-96	81	91	96	81-91	91-96	81-96
Sydney CBD	24.5	24.8	25.0	0.3	0.2	0.5	51.4	51.3	49.3	-0.1	-2.0	-2.1	17.4	17.0	18.6	-0.4	-1.6	-1.2	6.7	6.9	7.3	0.2	0.4	0.6
Parramatta	69.5	66.4	66.9	-3.1	0.5	-2.6	14.2	21.4	22.6	7.2	1.2	8.4	9.1	6.9	5.5	-2.2	-1.4	-3.6	7.3	5.4	4.9	-1.9	-0.5	-2.4
Wollongong CBD	79.4	82.2	83.3	2.8	1.1	3.9	2.5	3.2	3.5	0.7	0.3	1.0	8.5	6.3	5.1	-2.2	-1.2	-3.4	9.6	8.3	8.0	-1.3	-0.3	-1.6
Newcastle CBD	72.5	76.4	79.7	3.9	3.3	7.2	4.3	4.8	4.9	0.5	0.1	0.6	14.0	9.1	7.0	-4.9	-2.1	-7.0	9.1	9.8	8.3	0.7	-1.5	-0.8
Bankstown	72.3	75.7	80.7	3.4	5.0	8.4	9.6	10.7	9.3	1.1	-1.4	-0.3	11.2	6.3	4.7	-4.9	-1.6	-6.5	6.9	7.3	5.3	0.4	-2.0	-1.6
Blacktown	72.3	76.5	78.7	4.2	2.2	6.4	11.2	12.3	11.4	1.1	-0.9	0.2	7.3	5.0	4.8	-2.3	-0.2	-2.5	9.2	6.2	5.1	-3.0	-1.1	-4.1
Campbelltown	80.2	84.1	85.5	3.9	1.4	5.3	3.8	5.0	5.7	1.2	0.7	1.9	5.7	5.0	4.3	-0.7	-0.7	-1.4	10.2	6.0	4.5	-4.2	-1.5	-5.7
Chatswood	68.0	61.0	59.2	-7.0	-1.8	-8.8	14.4	23.8	27.6	9.4	3.8	13.2	9.3	7.9	7.2	-1.4	-0.7	-2.1	8.3	7.3	6.0	-1.0	-1.3	-2.3
Hornsby	70.6	72.0	77.1	1.4	5.1	6.5	14.7	17.1	14.3	2.4	-2.8	-0.4	2.3	1.5	1.8	-0.8	0.3	-0.5	12.4	9.4	6.9	-3.0	-2.5	-5.5
Liverpool	73.9	79.1	81.8	5.2	2.7	7.9	7.4	8.5	8.3	1.1	-0.2	0.9	9.5	4.9	4.4	-4.6	-0.5	-5.1	9.2	7.4	5.4	-1.8	-2.0	-3.8
Nth Sydney/Milsons Pt	50.7	44.9	41.9	-5.8	-3.0	-8.8	29.9	37.6	40.0	7.7	2.4	10.1	10.8	9.8	10.1	-1.0	0.3	-0.7	8.6	7.6	8.0	-1.0	0.4	-0.6
Penrith	80.3	82.7	82.9	2.4	0.2	2.6	6.5	5.7	7.0	-0.8	1.3	0.5	3.6	4.1	4.5	0.5	0.4	0.9	9.6	7.5	5.6	-2.1	-1.9	-4.0
St Leonards/Crows Nest	70.2	66.8	67.4	-3.4	0.6	-2.8	11.9	19.4	19.8	7.5	0.4	7.9	8.3	6.9	6.2	-1.4	-0.7	-2.1	9.5	6.9	6.6	-2.6	-0.3	-2.9
Macquarie/Nth Ryde	86.0	85.1	85.5	-0.9	0.4	-0.5	2.7	3.8	4.0	1.1	0.2	1.3	4.2	5.0	5.4	0.8	0.4	1.2	7.0	6.2	5.0	-0.8	-1.2	-2.0
Central Industrial Area	70.4	74.6	78.0	4.2	3.4	7.6	14.8	13.5	12.0	-1.3	-1.5	-2.8	7.2	4.9	4.6	-2.3	-0.3	-2.6	7.5	7.0	5.4	-0.5	-1.6	-2.1
Total Centres	49.3	51.9	52.4	2.6	0.5	3.1	30.6	30.5	30.0	-0.1	-0.5	-0.6	12.5	10.6	11.0	-1.9	0.4	-1.5	7.7	7.0	6.6	-0.7	-0.4	-1.1
Total GSMR	69.7	70.5	72.3	0.8	1.8	2.6	11.7	14.0	13.7	2.3	0.3	2.0	8.2	5.9	5.8	-2.3	-0.1	-2.4	10.3	9.5	8.2	-0.8	-1.3	-2.1

Source: 1981 JTW Table 7, 1991 JTW Table 3 and 1996 JTW Table 4

¹ For comparative purposes data excludes destination unknown, outside GSMR and no fixed place of work, as well as the Statistical Local Areas of Shoalhaven and Wingecarribee.² Includes trips by train and bus.³ Includes trips by bus only.⁴ Other includes walk only, bicycle, ferry etc.

Work trips to commercial centres in the outer suburbs such as Bankstown, Blacktown, Campbelltown, Liverpool, and Penrith, were more localised, attracting a higher proportion of workers from around their immediate area.

To illustrate this point Figures 6 to 8 present a breakdown of the home location of workers employed in the centres of Sydney CBD, Parramatta CBD and Campbelltown, respectively. A comparison of modes used to access each of these centres by home location is also included. The home locations used are Statistical Subdivisions (SSDs), which are aggregations of Statistical Local Areas, and are listed in Appendix A.

Sydney CBD: Work trips to the Sydney CBD originated from widely dispersed areas throughout the GSMR. Figure 6 shows that the three SSDs closest to the Sydney CBD contributed the most trips, being Lower Northern Sydney (14%), Inner Sydney (14%) and the Eastern Suburbs (12%). In general, the proportion of trips from each of the regions declined with distance from the CBD.

Overall, 68% of all work trips to Sydney CBD were by public transport (bus and train). However, the level of public transport use varied according to where people lived. This reflects both the socio-economic characteristics of the population, as well as the level of accessibility to public transport services. Over 80% of trips from Outer South Western Sydney, Canterbury-Bankstown and Fairfield-Liverpool SSDs were by public transport, compared to less than 50% from the Northern Beaches SSD.

Parramatta CBD: People employed in the Parramatta CBD lived more locally than people who worked in the Sydney CBD. Around 24% of work trips to Parramatta CBD originated in the immediate region (Central Western). Figure 7 shows that a slightly higher proportion lived in the neighbouring region of Blacktown-Baulkham Hills (26%).

Overall, 35% of all work trips to Parramatta were by public transport. This proportion varied by region, from a high of 66% (from the Outer Western SSD) to a low of 27% (from Lower Northern SSD). Over 65% of trips from Parramatta CBD's surrounding SSD of the Central West were by car.

Campbelltown: Most people employed in the commercial centre of Campbelltown lived locally. Around 80% of Campbelltown's workforce lived in the Outer South Western SSD. Another 11% lived in the adjoining regions of Illawarra and Fairfield-Liverpool.

The car was the most popular mode used to travel to work in Campbelltown, accounting for 86% of all trips whilst 10% of trips were by public transport (bus and train). There was little variation in mode share to Campbelltown between the SSDs.

Figure 6 **Origin of work trips to the Sydney CBD**

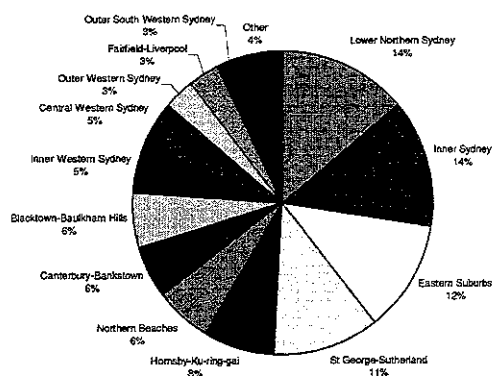


Figure 7 **Origin of work trips to Parramatta**

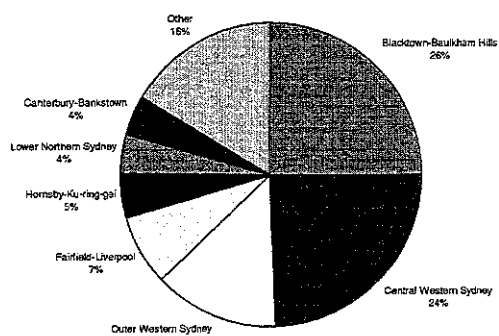
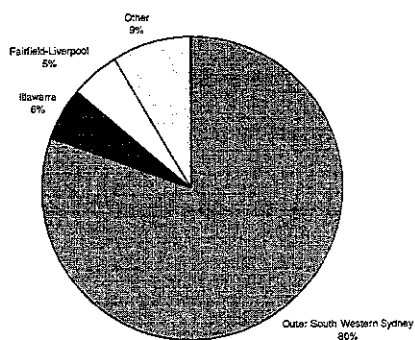


Figure 8 **Origin of work trips to Campbelltown**



Source: 1996 JTW Table 4

Non-work travel to Commercial Centres

While the main purpose of this paper has been to examine work trips to commercial centres, it is important to place these trips within the context of all trips made on an average weekday using data from the Transport Data Centre's (TDC) 1991-92 Home Interview Survey (HIS). The HIS was a large scale sample survey conducted in 1991-92 which captured detailed information through personal interview on the travel patterns of all members of selected households.

Why people travel to Commercial Centres

Figure 9 presents a comparison of trip purpose to commercial centres and the GSMR on an average weekday. Although work trips to commercial centres accounted for the greatest proportion of all trips to commercial centres (45%), the majority of trips were for non-work purposes (i.e. trips excluding work and work related business). Trips for work and work related purposes accounted for only 18% of all trips in the GSMR.

There was a higher proportion of shopping and personal business trips to commercial centres than to the whole GSMR. A similar proportion of serve passenger trips were made to the commercial centres and the total GSMR. The serve passenger purpose includes trips by adults to pick up and drop off children, as well as by children to accompany adults.

The return home category was the largest trip purpose for the total GSMR. This is due to the fact that the HIS is a household based survey, and people return home from many different activities. Since the commercial centres generally do not contain large residential areas, home trips form a much smaller proportion of all trip purposes to centres.

Figure 9 Purpose of trips to Commercial Centres and the GSMR on an average weekday, 1991-92

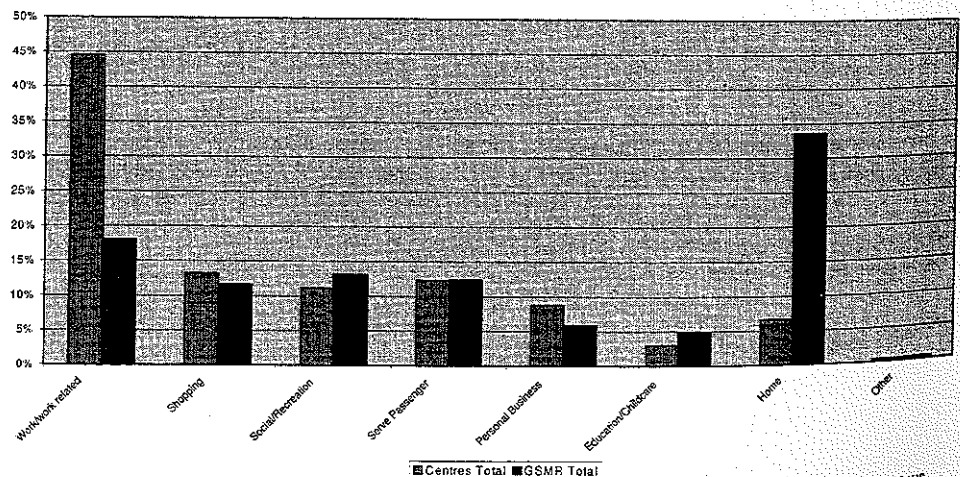
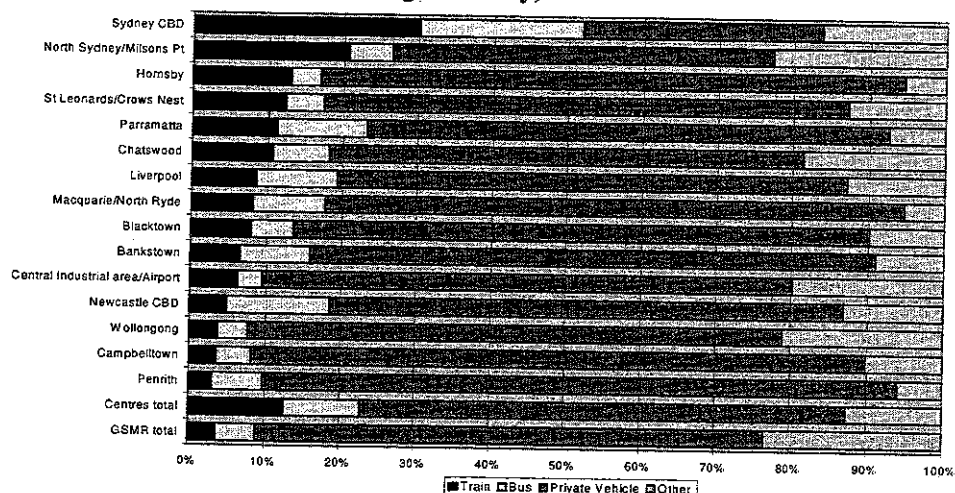


Figure 10 Proportion of non-work trips to Commercial Centres and the GSMR by mode on an average weekday, 1991-92



Source: 1991-92 HIS

Modes used for non-work trips

Overall there was a higher proportion of train and bus trips to the commercial centres (27%) than the whole GSMR (9%) for non-work travel. This trend was also evident for work trips (Figure 5), however the proportion of non-work trips to commercial centres by public transport was much lower than for work trips (42%).

Figure 10 shows that private vehicle was the dominant mode for non-work trips to all commercial centres, as well as the GSMR. In total, the private vehicle accounted for 76% of all trips to the commercial centres, compared with 72% for the whole GSMR. However, private vehicle trips accounted for almost 90% of all non-work trips to the commercial centres of Penrith and Hornsby.

Conclusion

Employment in commercial centres accounts for around 25% of all jobs in the GSMR. The proportion of jobs in commercial centres has remained fairly stable between 1981 and 1996, with the share of employment in primary centres decreasing with a corresponding increase in the share in secondary centres. During this period the number of people employed in centres has increased by 19%, whilst employment in the GSMR as a whole has grown by 24%. Again, there were differences between the types of centres, with the number of jobs increasing by 11% for primary centres, 37% for secondary centres and 20% for other centres.

The employment characteristics of centres are influenced by many factors, including whether they are located close to the Sydney CBD, and their industry profile. The analysis

of 1996 JTW data has shown that the centrally located centres employed a higher proportion of full-time and male workers, whilst the outer centres had a larger part-time workforce and more female employees.

The use of public transport to travel to work was much greater by people working in commercial centres (42%) compared to the GSMR as a whole (19%). Therefore, a concentration of employment combined with good public transport accessibility results in highest public transport use.

Public transport usage also differed by location of centre. The inner centres had higher rates of public transport use than the outer centres, reflecting the radial nature of Sydney's public transport system, the congested road network and parking restrictions. The inner centres also attracted workers from more geographically diverse locations than the outer centres. Since 1981 the proportion of work trips to the inner centres by public transport has increased, whilst it has decreased for the outer centres in favour of car use. Encouraging public transport use to the outer centres is difficult due to the greater part-time workforce and more female workers. Other factors include the greater availability of parking, less congested road access and the lack of well developed cross-regional public transport links.

The commercial centres are also important attractors of non-work trips, such as shopping and personal business. The availability of good public transport infrastructure to centres may encourage greater use for these purposes as well as for work trips, particularly if combined with the restriction of parking availability.

Acknowledgments

The travel zones that comprise each commercial centre were identified by the Transport Data Centre in consultation with the Department of Urban Affairs and Planning, based on commercial land use. Location maps are available from the TDC.

Appendix A - Definition of regions

The regions referred to in this paper are Statistical Subdivisions (SSD), which are combinations of ABS Statistical Local Areas (SLAs), which are equivalent to Local Government Areas:

Region	SLA
Inner Sydney	Botany, Liechhardt, Marrickville, South Sydney, Sydney
Eastern Suburbs	Randwick, Waverley, Woollahra
St George-Sutherland	Hurstville, Kogarah, Rockdale, Sutherland
Canterbury-Bankstown	Bankstown, Canterbury
Fairfield-Liverpool	Fairfield, Liverpool
Outer South Western	Camden, Campbelltown, Wollondilly
Inner West	Ashfield, Burwood, Concord, Drummoyne, Strathfield
Central Western	Auburn, Holroyd, Parramatta

Employment in selected Commercial Centres

Outer Western Sydney	Blue Mountains, Hawkesbury, Penrith
Blacktown-Baulkham Hills	Baulkham Hills, Blacktown
Lower Northern	Hunters Hill, Lane Cove, Mosman, Nth Sydney, Ryde, Willoughby
Hornsby/Ku-ring-gai	Hornsby, Ku-ring-gai
Northern Beaches	Manly, Pittwater, Warringah
Gosford/ Wyong	Gosford, Wyong
Illawarra	Kiama, Shellharbour, Shoalhaven, Wingecarribee, Wollongong
Newcastle	Cessnock, Lake Macquarie, Maitland, Newcastle, Port Stephens

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