



Long Distance Commuting: Quality of Life and Journey Experience

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Abstract

Continued growth in long distance commuting has significant implications for future transport and land use planning in Australian cities. Not the least being the capacity of transport infrastructure to meet these growing demands, and the impact of a long distance commute on the quality of life of workers.

This paper is based on a study of long distance commuters jointly funded by NRMA and the NSW Department of Urban Affairs & Planning. The study explores the impact of long distance commuting on the quality of life of workers living in the fast growing region of the Central Coast, north of Sydney. Here over 33% of all residents in the workforce are travelling to work outside the region. On average these workers spend 3 hours each day commuting to and from work.

Findings indicate that far from being a temporary measure, many residents have been long distance commuting for an extended period and see themselves continuing to do so. Furthermore, many are generally satisfied with the trade off they have had to make - that is, having to make a long distance commute in order to live in an area they perceive offers a high quality of life and housing they can afford.

Given that the long distance commute is here to stay, policy decisions are required regarding management of inter-regional transport demand. Opportunities to address growing pressures on sensitive road and rail systems linking the Central Coast to Sydney and Newcastle and to enhance the quality of the journey experience will be discussed.

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Introduction

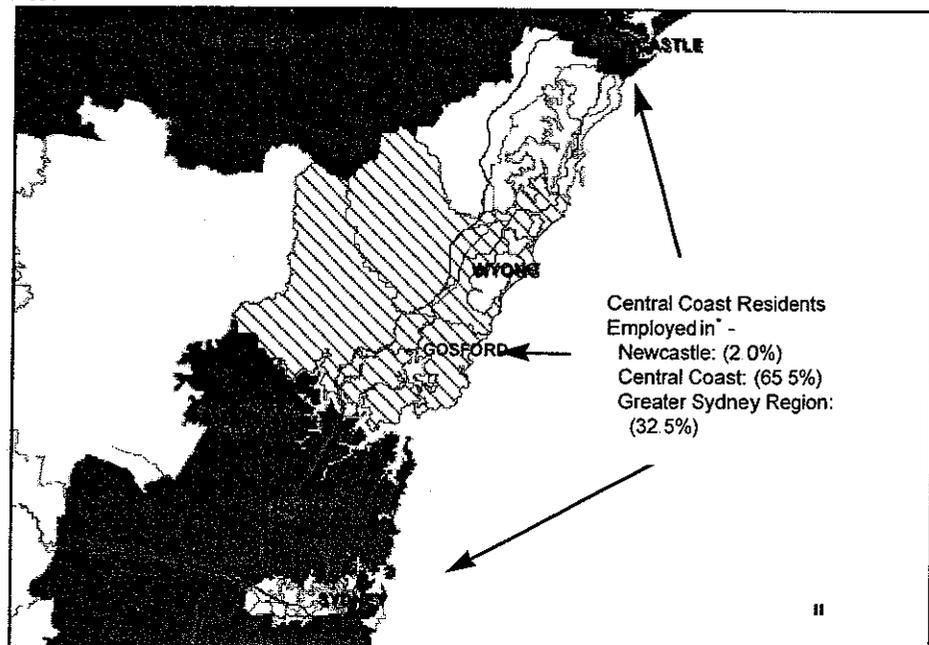
In large urbanised cities throughout the world, the impact of outward migration away from the city centre to rapidly growing residential areas on the metropolitan fringe has intensified transport demand and placed additional burdens on 'receiver communities' without the benefits of corresponding growth in employment

Continued growth in long-distance commuting has important implications for planning transport infrastructure and services and land use in Australian cities, as well as having significant quality of life impacts on the commuters themselves.

The Central Coast region, one of the fastest growing areas in New South Wales, is located on the northern urban fringe of the greater Sydney metropolitan area (Figure 1). The Central Coast is comprised of Gosford City and Wyong Shire local government areas.

Certain industries dominate employment on the Central Coast. In particular, employment in the sectors of retail and wholesale trade and construction are notably above the New South Wales state average. The Central Coast Regional Development Organisation notes that the region has less managers/administrators and professionals than the State average, necessitating a commute outside the region to these jobs.

Figure 1: One-third of employed Central Coast residents commute to Sydney to work



Source: Transport Data Centre 1996 Journey to Work Summary Tables: Home SLA, NSW Department of Transport

Urban development on the Central Coast to date has resulted in high travel demand to the Sydney area, an over-reliance on the private motor vehicle and high associated social, financial, and environmental costs.

Key issues include:

- concern about the number of people needing to travel to jobs outside the region and the time spent commuting. Some 33% of all employed residents spend an average of three hours each day commuting to and from work in Sydney (Transport Data Centre, 1996);
- concern about an imbalance in managerial, administration and professional employment opportunities; and
- concern about the capacity of existing infrastructure to meet transport demands, particularly the railway and freeway connections to the Greater Metropolitan Region (Sydney, Newcastle, and Wollongong).

Until now little has been known about the commuting experience of employed residents who work outside the Central Coast, an important element in effectively studying the human dimension of planning for the region.

This paper is based on a study of long distance commuters jointly funded by NRMA and the NSW Department of Urban Affairs and Planning. The study was conducted by The People for Places and Spaces, in order to better understand the motivations behind undertaking a long distance commute, and commuters' attitudes towards their journey to work. The study was driven by the belief that a greater understanding of commuter travel behaviour will assist policy decisions regarding strategic urban planning issues in the region.

Study Objectives

The specific study objectives were to identify:

- the characteristics of the commuters
- reasons for choosing the Central Coast as a place of residence: the push and the pull
- the reasons for commuting and level of satisfaction
- the nature of employment and job satisfaction
- patterns and characteristics of the journey to work
- the likely future travel patterns of workers from Gosford–Wyong to the Greater Sydney Region and Gosford–Wyong to Newcastle
- impact of long-distance commuting on commuters' quality of life: a gap between the dream and reality?
- ways to reduce dependency on the Gosford–Wyong to Sydney transport infrastructure.

Study Methodology

To gain a detailed insight into the commuting experience and priorities of Central Coast residents, questionnaires were distributed to a sample of car and train commuters. The target population for the study was the 35 per cent of employed residents of Gosford-Wyong who commuted to work in either Newcastle or Sydney.

A self-completing questionnaire was mailed in February 1998 to 1500 car drivers likely to be working in Sydney, with 248 valid responses received in April 1998. An additional 63 surveys were completed on a Sydney to Gosford train. The total valid sample of 311 was therefore obtained by convenience rather than at random.

Given that the population sample is not known inferences cannot be reliably made about the total target population. What the data provides is an indicative insight into the motivations, preferences, opinions, intentions about travel patterns, work patterns, and lifestyle considerations.

Composition of the Sample

With a convenience sample one would expect a variation between the composition of the sample and that of the target population in the key sub-samples identified. It is therefore not surprising that comparisons between the sample and the Transport Data Centres (IDC) 1996 Journey to Work data illustrate an over-sampling of train commuters (Table 1).

The sampling variation is controlled by presenting tables by mode and expressing modal totals by percentages, making comparison between modes.

Table 1: Composition of survey sample by mode of transport compared with the IDC 1996 Journey to Work study*

Mode of Transport	Frequency 1996 TDC JTW**	Per cent 1996 TDC JTW	Frequency Central Coast commuter survey sample	Per cent Central Coast commuter survey sample
Vehicle driver	11 217	53	105	38
Train	8 335	39	166	59
Vehicle passenger	1 514	7	5	2
Bus	294	1	4	1
Total	21 360	100	280	100

*Given the minor nature of the disparity between 'to' and 'from' work figures the 'two work figures' from a Monday have been used to produce this table

** Transport Data Centre Journey to Work

The Central Coast: A region of rapid growth

The Local Government Areas (LGAs) of Gosford City and Wyong Shire make up the region known as the Central Coast. The region comprises 1854 square kilometres and is located between Sydney and Newcastle. It is connected to these two centres by the four to six-lane Sydney–Newcastle Freeway (F3) and good rail services.

The Central Coast is one of the fastest growing regions in NSW. Between 1991 and 1996, for example, the Central Coast had a growth rate of 2 per cent, whereas the average growth for New South Wales was only 1 per cent (ABS 1996). It is estimated that between 1996 and 2021 the Central Coast population is predicted to increase by 98 000, with 70 400 in Wyong Shire and 27 600 in Gosford (NSW Department of Urban Affairs and Planning 1999). Much of this growth has been achieved through migration from within New South Wales, mostly from within the Greater Metropolitan Region of Sydney.

The region has extensive new urban development and is characterised by low density suburbs dominated by free-standing, single family houses, as is the case in other regions on Sydney's outer fringe (Burnley and Murphy, 1995).

The Daily Commute: 2 Hours More than the Commuters' Ideal

Approximately 30 000 people commute daily from the Central Coast to Sydney by road or rail. More than half (53 per cent) of all Gosford–Wyong commuters travel to work by car, somewhat less than in the Sydney Greater Metropolitan Region (69 per cent) (IDC 1996) and possibly reflecting the frequent and reliable train service to Sydney CBD and North Shore centres in the morning peak.

The typical daily commute from the Central Coast takes three hours, with the average journey time to and from work taking approximately 86 minutes. On average the commuters had been travelling for more than 2.5 hours a day to and from work for some eight years. When asked how long the journey to work would take in their ideal lifestyle, 65 per cent stated that the trip to work would take between 11 and 30 minutes, compared with their current reality of an average of 90 minutes each way.

In general, the Central Coast commuters were very family-oriented. Importance of family was clearly illustrated by the 32 per cent who said that they would spend more time at home or with family if they did not have to undertake a long journey to work. 'A good family life/spending time with family' was cited by commuters as the top ranking factor contributing to a high quality of life. Some 67 per cent of respondents have their parents, or their partners' parents living in the Gosford–Wyong area. This may suggest the existence of the chain migration process, in which people move to an area to join earlier family immigrants.

An Affordable Home, a Good Lifestyle and a Long-Distance Commute to a Rewarding Job

Only 6 per cent of the survey respondents had lived on the Central Coast all of their lives. On average respondents had lived on the Central Coast for 10 years, and had been in their current home for 6.4 years. Most respondents who had moved to the Central Coast came from areas within Sydney.

'Pull' factors dominate the choice of the Central Coast as the place of residence among Central Coast commuters. The main reasons for choosing to live on the Central Coast were affordable housing and lifestyle — which included beaches, peace and quiet, relaxation, and fresh air.

Burnley, Murphy and Jenner (1997) note that those people who choose to live in the outer fringe suburbs do so at the cost of significantly longer journey-to-work trips than those who live in the inner or middle suburbs of Sydney. Indeed, 83 per cent of the survey respondents had made the decision to live in Gosford–Wyong with the knowledge that they would have to commute for long distances; with 72 per cent of commuters taking their current job in Sydney knowing that they would have to long-distance commute.

Commuters were predominantly employed in managerial, administration and professional occupations in the finance, community services and public administration industry sectors. Most (91 per cent) worked full-time, while the majority (61 per cent) were employed in the private sector.

Table 2: Factors that attracted commuters to their current job

Factor	Per cent
Nature of the job/ duties aligned with skills or interest area	34
Money/remuneration	21
Career advancement/training	13
Job security	11
Working conditions/location	10
Needed a job	7
Other	4

Most commuters (86 per cent) were either satisfied or very satisfied with their current job. As Table 2 shows, a number of factors attracted workers to their current job, including the nature of the work, remuneration and career opportunities.

Significantly, around half of respondents did not think it was important to get a job in Gosford-Wyong. Some 79 per cent were not looking for local employment. Commuters gave various reasons for not seeking work on the Central Coast, the most popular reason being that the type of work sought was not available in the region. Similarly, other respondents mentioned that jobs were hard to find in Gosford, or there was no opportunity for job advancement.

The results show that to attract workers to Gosford-Wyong, the wages would also need to be competitive with Sydney. Indeed, 27 per cent of respondents stated that they were not seeking jobs in the local region because the wages were higher in Sydney. Money or remuneration was clearly important, having attracted 21 per cent of workers to their current job (Table 2).

Over Half Of the Commuters Plan to Long-Distance Commute for the Rest of Their Working Life

Travelling and commuting to work was the feature just above half of respondents (56 per cent) enjoyed least about their job. Some 54 per cent of commuters also stated that travelling to work, commuting time, and distance to work was the feature of the region they enjoyed the least about the Central Coast.

Nevertheless, some 55 per cent of commuters see themselves continuing to be long-distance commuters throughout their working life, despite 39 per cent of commuters stating that they had been commuting for longer than they initially thought they would. Significantly, 55 per cent of respondents said overall that they were satisfied with having to commute and furthermore, about half said they could see themselves commuting for the rest of their working life, despite a lower satisfaction with their journey time.

The Journey to Work Experience

The journey to work was dominated by two transport modes:

- 38% travelled by car as their major mode of transport to work; and
- 59% travelled by train as their major mode of transport to work

Some 63 per cent of the commuters used more than one mode of transport to get to and from work, some using up to four different modes of transport in their journey. If only one mode of transport is used it is most frequently a car. The train is used either in combination with other modes or solely by more than half of the commuters (61 per cent).

Most of the Central Coast commuters travel in peak periods. In the morning some 74 per cent of commuters leave for work in the peak period between 6-9am and similarly, 70 per cent of commuters leave work for home in the peak period of 5-7pm. This trend has important implications for the future capacity of infrastructure and services to meet a growing demand.

As Table 3 shows, convenience and door-to-door travel time were considered the two most important issues in the current commute to work by those travelling by car. While door-to-door travelling time was also important to train travellers, comfort was also ranked as one of the two most important issues. Price or costs was ranked fifth by both groups of commuters, despite car drivers spending on average \$57 per week for the weekly commute.

Table 3: Important issues in the current commute to work

Issues	Car (ranking)	Train (ranking)
Door-to-door travel times	2	1
Convenience (transport is available when you need it)	1	3
Comfort	3	2
Safety and security	4	4
Price/costs	5	5
Flexibility (transport allows you to make multiple stops when needed)	6	6

Over Half of the Commuters Were Satisfied with their Commuting Experience

Table 4 shows that commuters who travel by both car and train enjoyed having the time to relax and unwind and watch the scenery, while train commuters also enjoyed the opportunity to read and sleep during their journey.

Table 4: Factors that are enjoyed the most in the journey to work

	Train (n = 155)	Car* (n = 88)
	Rank order	Rank order
Time to read	1	4
Time to sleep	2	-
Time to relax/unwind	3	2
Scenery/views	4	1
Airconditioned trains	5	-
Don't need to drive	6	-
Nothing	7	4
Time to do some work	7	-
Lack of traffic	9	-
Time to think	10	2
Doesn't take too long	11	4

* Includes car passengers. Multiple responses allowed

The train was used by 61 per cent of respondents in this study. Train commuters highlighted the potential to improve train services and rated 'accuracy of timetables/reliability of trains arriving on time' as the most important factor (42 per cent) contributing to a stress-free journey.

Frequency of trains in the morning peak was rated 'very good' or 'good' by 57 per cent of respondents. Conversely, 47 per cent said that service frequency was 'poor' or 'very poor' out of peak times. Other recent research by NRMA (1996, 1998) has also highlighted a need for out of peak Central Coast suburban and inter-regional public transport services. The issue receiving a 'poor' or 'very poor' rating by most train commuters (72 per cent) was the lack of information provided to commuters when delays in train services arise, as to the cause and time of repair.

The findings indicate that improved service levels are a key to achieving passenger retention on the Central Coast. Indeed, on a broader scale, improved rail patronage and passenger retention are major issues of significance for sustainable transport management across the Greater Metropolitan Region (Sydney, Newcastle, and Wollongong).

The Almost Impossible Task: Reducing Car Dependency

Central Coast commuters use their cars because:

- it is convenient,
- it is required or is necessary for the job, or
- to get to the station.

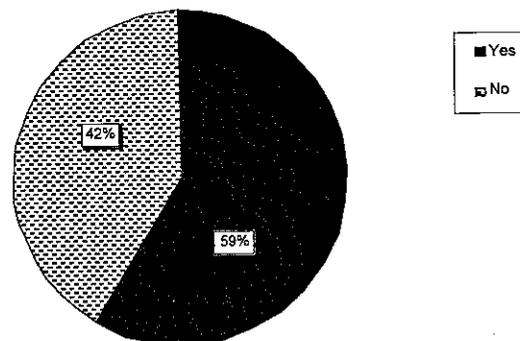
Respondents overwhelmingly said that the car would be the ideal way to travel between home and work. Furthermore, Figure 2 shows that over half of the train travellers would change mode if their employers provided them with a car.

Most employers (83 per cent) however, do not subsidise travel to and from work. Where they do exist, employer contributions related mainly to vehicles, for example company cars (21 respondents), car leasing costs (19 respondents), fuel costs (19 respondents) or parking (17 respondents). Public transport costs were subsidised for only fourteen of the respondents, nine of whom were employed by public transport service providers.

Despite this preference for the car, respondents said they would be deterred from driving by traffic congestion; the cost and lack of accessible parking; and other road users or road works. Some 50 per cent of commuters stated that traffic congestion is important when making their choice of transport. Deterrents to driving have important implications on future infrastructure planning.

According to the NSW Roads and Traffic Authority (1999), the most critical weekday traffic on the F3 motorway is the southbound movement from Gosford to Sydney in the morning peak, where commuter traffic volumes on the remaining two-lane sections are very close to maximum capacity. The RIA report that as a consequence, even minor incidents can cause serious traffic congestion.

Figure 2: If a car was provided by an employer would it have any impact on the choice of travel?



Commuters Enthusiastic to Participate in Flexible Working Arrangements

At present only 14 per cent of respondents take the opportunity to work flexible hours. Over half (53 per cent) of commuters' employers did not offer, or encourage, any flexible workplace options. Yet most of the respondents indicated that they would be willing to participate in some form of flexible workplace option. There is, therefore, a potential to increase the spread in peak times for commuting by introducing flexible working options.

The most popular flexible work options were:

- combination of working at home and office (85 per cent);
- flexi-time (79 per cent); and
- working from home (76 per cent)

The option of job sharing was not as popular with Central Coast commuters with only 27 per cent stating they would be willing to participate in this option.

In the current survey most (74 per cent) of the Central Coast commuters rated the opportunity to car pool as either poor or very poor in the current Gosford–Wyong to Sydney commute. However, support for car pooling in the Central Coast region is apparent. In a 1998 NRMA survey, Central Coast residents were found to be slightly more in favour of ride-sharing than other residents of the Greater Metropolitan Region.

Indeed, some unofficial car pooling already takes place from the Central Coast region. For instance, currently within the boundaries of Wyong Shire three vacant blocks of land along the F3 Freeway are being used by commuters as parking lots, meeting places, and car-exchange sites. Some levels of government have acknowledged this demand for car pooling from the Central Coast. For instance, Wyong Shire Council adopted a Car Pooling Policy in October 1998. The policy seeks to encourage cost-effective, reliable, and environmentally friendly, car pooling as a means of improving the quality of life within the community (Wyong Shire Council, 1998).

Conclusions

Long distance commuting is an enduring feature of the Central Coast. As one of the fastest growing regions in NSW, an increasing number of people are travelling outside Gosford-Wyong to work, with approximately 30,000 people currently commuting daily from the region to Sydney by road or rail.

Far from being a temporary measure, respondents had experienced long distance commuting for an average of eight years. Furthermore, over half believed they would continue to do so - the majority not seeking work locally because employment opportunities could not compete with those in Sydney.

Continued growth in long distance commuting has significant implications for transport and land use planning. The capacity of road and rail infrastructure linking the region to Sydney and Newcastle, particularly in peak periods will clearly face increasing pressures. Road capacity on the F3 Freeway is a significant issue, however implications of choice of transport mode should be considered as part of general traffic congestion improvements.

The findings of this study point to implications for land use planning both with, and outside, the region. At a local level, greater accessibility between residential development and the inter-regional transport system should be accompanied by longer term promotion of local employment opportunities. Development of those sub-regional Sydney centres (for example Hornsby, Chatswood and Parramatta) with better public transport services would also reduce pressure on the transport system.

Particular issues regarding the daily commute for all respondents were convenience, travel time and comfort. The current price of parking did not appear to have a major impact on commuters' use of the car. Rail commuters felt that reliability of services was the critical element of a 'stress free' journey, and highlighted the potential to improve train services generally.

Given that long distance commuting is here to stay, a policy approach is required to effectively manage inter-regional transport demand. Opportunities to address growing

demands on sensitive road and rail systems linking the Central Coast to Newcastle and particularly Sydney include flexible work arrangements such as a compressed work week, telecommuting or alternative employer transport contributions to providing a car or parking spaces. A perimeter parking scheme may also reduce traffic congestion pressure closer to the Sydney Central Business District.

Acknowledgments

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