



Melbourne City User Estimates and Forecasts, 2004-2020

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City Research

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Acknowledgements

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Executive Summary

This report updates Melbourne City User Estimates and Forecasts published in 2005 and revised in 2006.

City users are defined as anyone aged 15 years and over who uses the City of Melbourne for any reason. City users are grouped into four main categories: resident; worker; student; and visitor.

Having high standard services and facilities that serve the working, visiting, studying and resident population, Melbourne has become busier than ever before. There has been a significant growth in the number of people using the city on a daily basis in recent years. It is estimated that approximately 771,000 people used the city (resided in the city or commuted to the city) on a daily basis in 2008. This represents a 13 per cent growth between 2004 and 2008 (or 3 per cent annually). In other words, there were 92,000 more people using the city on a daily basis in 2008 than there were in 2004. All city user categories, except regional Victoria visitors, experienced positive growth.

Melbourne, with a net increase of 163,000m² of office floor space per annum since 2004 and low vacancy rates, has enjoyed a rapid growth in daily city workers. It is estimated that the number of daily city workers grew by 18 per cent to 380,000 (fastest among city user groups) between 2004 and 2008. Other city user groups grew at a slower rate, approximately 10 per cent, during the same period.

Major events such as the XVIII Commonwealth Games, held in 2006, had a significant impact on daily city user numbers. It is estimated that Melbourne received 765,000 daily city users in 2006, increasing by 10 per cent (from 2005) compared to an average growth rate of 3 per cent during the overall 2004–2008 period.

During the current economic downturn, which has affected most developed countries including Australia, Melbourne is forecast to experience a slight decrease in daily users in 2009 but is expected to recover in 2010, and continue to grow from 2011. Interestingly, only resident and student categories are expected to experience positive growth through the current economic downturn. This underpins and reinforces Melbourne's reputation as one of the most liveable cities and as a place to study. After 2011, total city user numbers are set to grow at approximately 1.8 per cent annually, reaching 926,000 by 2020.

It should be noted that the impact of current swine flu on city visitation remains unknown at the time of preparing this report and, hence, is not considered in the forecasts.

1. Background

The City of Melbourne's vision is to be a bold, inspirational and sustainable city. Part of the city's mission is to make Melbourne a city for people, where all are welcome. Having promoted its advantages and encouraged and facilitated sustainable social, economic and environmental development and prosperity, this vision is being realised, evidenced by the international recognition of Melbourne as one of the most liveable cities in the world.¹ Melbourne also has the reputation as Victoria's focus and meeting place for finance, retail, commerce, tourism, culture and entertainment.

It is known that there is substantial growth in the level of daily visitation to the city. People travel to the city to work, to study, to conduct business or to socialise. However, the many critical questions that are valuable for planning purposes, including for emergency preparedness and the management and provision of services, remain unanswered. Who are those who come to the city? How many of them are there? Why do they come to the city? Where are they from? Absolute and complete counts of the number of City of Melbourne users do not exist.

The cost and logistical difficulty in determining absolute counts of city users make such counts impossible to achieve in any city. However, various valuable data sets and information sources that provide partial answers about the number of people who work, live, study and visit the Central Business District (CBD), the City of Melbourne, Victoria and Australia do exist. Having access to that data and information, City Research has developed a City User Estimates and Forecasts Model. It is a mathematical model that maximises the value of existing data and information to derive estimates of the number of city users and to produce forecasts of future city users.

The model was first published in 2005 and significantly revised in 2006. This is the third report, which has benefited from advances in information sources and an incrementally improved and enhanced model.

2. Objectives

The intention of this report is to improve the estimates and forecasts model by using the latest available information and incorporating all foreseeable factors contributing to the future usage of the city. The aim of this report is to:

- a) explain the broad principles of the methodology used in determining the estimates 2004–2008 of city users

¹ Economist Intelligence Unit, 2002-2007

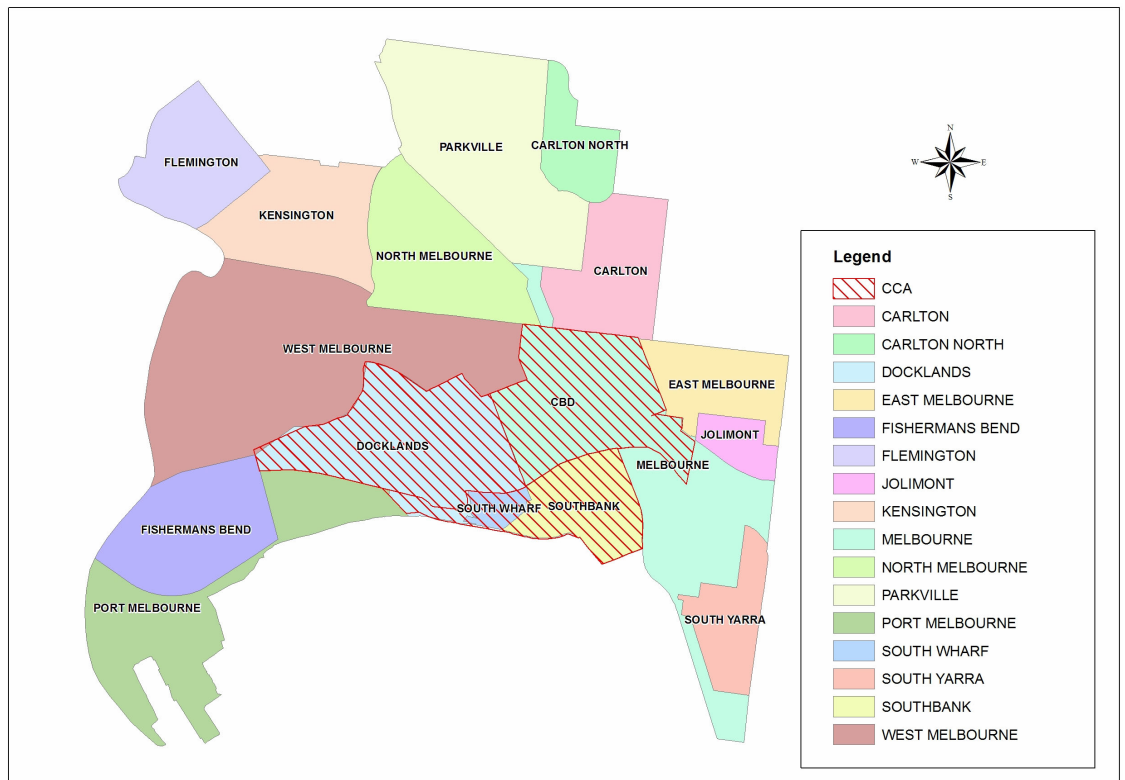
- b) provide users of the data with updated estimates of previous years including how these have changed – with newly available data, more complete data, enhancements of the model, and the wisdom of hindsight
- c) explain how previous and current years estimates are used to create forecasts for future years and
- d) provide city user forecasts for the period 2009–2020.

3. Terms Used and Context

For the purpose of this study the term “city users” has been adopted rather than “city visitors”. The term “users” is more comprehensive because it includes all purposes of travelling to or being in the city, whereas the term “visitors” tends to imply solely that the purpose of travel is for tourism, social or recreational purposes.

The term “city” in this report refers to the City of Melbourne municipal boundary, unless otherwise stated. The term “Central City Area” (CCA) refers to the area covered by the Hoddle grid, including the area south of Victoria Street, which forms the Central Business District (CBD), Southbank and Docklands (see Figure 1).

Figure 1. City of Melbourne Suburb Boundaries and Central City Area



Melbourne City User Estimates and Forecasts, 2004–2020

City users are defined as people aged 15 years and over who use the City of Melbourne for any reason. The estimates and forecasts of city users are grouped into four main categories based on the purpose of their travel to or being in the city and their origin of residence. The fourth category is further broken down into four subgroups. The categories are:

- a) residents – all City of Melbourne residents aged 15 years and over including workers and students
- b) workers – all people aged 15 years and over from any origin who travel to the city for work purposes
- c) students – all people aged 15 years and over who travel to the city for study purposes and
- d) visitors – all people aged 15 years and over who travel to the city for non-work and non-study purposes, divided into four subgroups based on their residence location:
 - i) international visitors – overseas residents aged 15 years and over who travel to the city for non-work or non-study purposes
 - ii) interstate visitors – interstate residents aged 15 years and over who travel to the city for non-work and non-study purposes
 - iii) metropolitan visitors – residents of metropolitan Melbourne suburbs aged 15 years and over who travel to the city for non-work and non-study purposes and
 - iv) regional visitors – regional Victorian residents aged 15 years and over who travel to the city for non-work and non-study purposes.

4. Methodology and Data

The City User Estimates and Forecasts Model has been developed using a wide range of sources.

One of the most important data sources is the Central City User Survey. This is a biennial survey conducted in 2004, 2006 and 2008. The survey is designed to measure trends, the volume and patterns of city users to the CCA and to collect key information over a two to three week period in May. More specifically, the survey aims to understand all key aspects of city users by attempting to answer the following specific questions:

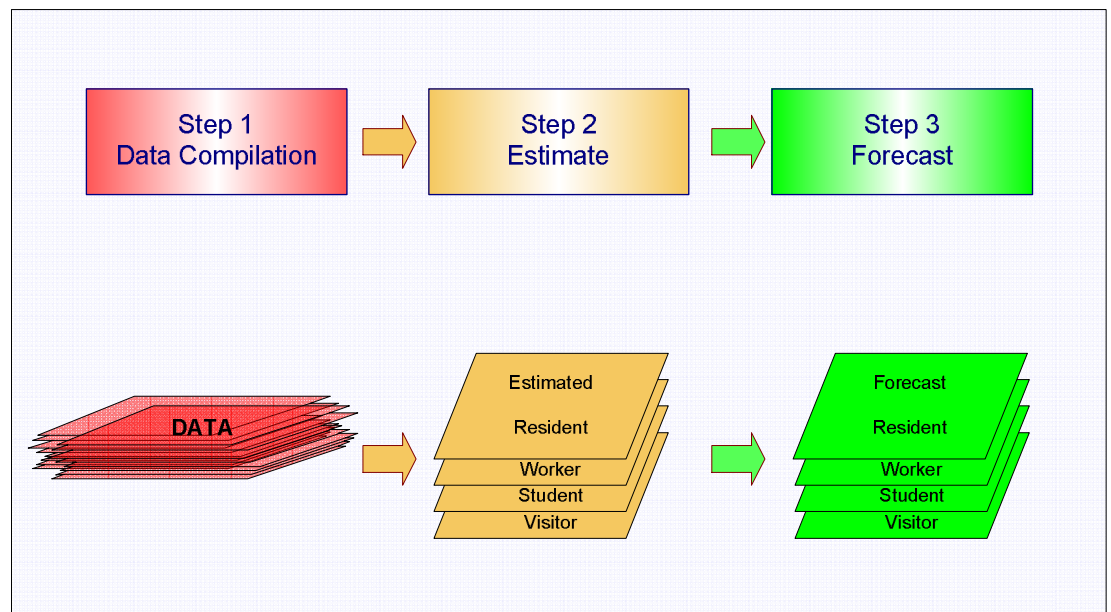
- a) How many people use the city on a typical weekday and weekend day?
- b) How many people use the city during the day time and at night?
- c) Who are the people defined as city users and where do they come from?
- d) Why do they come to the city?

Other aspects, such as demographic characteristics of city users, spending patterns, transport mode use and activities undertaken, are also surveyed.

The information collected from the Central City User Survey determines the estimates of city usage on a daily basis by different groups. The information produced from the survey is vital input for both parts of the City User Estimates and Forecasts Model (see Figure 2). It is extensively used in conjunction with the following data sources to derive estimation of city user numbers:

- City of Melbourne Census of Land Use and Employment (CLUE) 2002–2008: a biennial census, since 2002, of all buildings and businesses in the City of Melbourne.
- Tourism Australia’s National Visitors Survey (NVS) and International Visitors Survey (IVS) 1999–2008 year ending December: an ongoing survey of Australian residents and overseas visitors to discover recent travel patterns, including day and overnight trips, inbound and outbound trips.
- Australian Bureau of Statistics’ Population Census and Estimated Residential Population (ERP).
- Department of Education, Employment and Workplace Relations’ (DEEWR) Higher Education Student Statistics.

Figure 2. City User Estimates and Forecasts Model



The Central City Users Survey is also used in conjunction with the following data sources to derive forecasts of city user numbers:

- Tourism Forecasting Committee’s Forecast: a research study to predict future visitation of overseas and domestic visitors to Australia and states and territories.

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- Tourism Victoria’s Forecasts Visitation to Victoria: a research study to predict future visitation of overseas and domestic visitors to Victoria.
- City of Melbourne Small Area Population Forecasts produced by .id Consulting: a study to predict the number of residents in the municipality.

The City User Estimates and Forecasts Model has been developed on the basis of assumptions regarding factors contributing to the changing size and composition of city users. See Appendix A and B for an explanation of assumptions made and how the estimates and forecasts have been derived.

5. Results and Discussion

5.1. Average Daytime City User Estimates 2004–2008

This section updates daily city user estimates between 2004 and 2008 and identifies discrepancies between the previous estimates, released in 2006,² and the current estimates.

5.1.1. The Previous and Current Estimates Comparison

In 2008, it is estimated that approximately 771,000 people used the city (resided in the city or commuted to the city) on a daily basis. This represents a 3 per cent yearly growth of total daily city users between 2004 and 2008. There were approximately 92,000 more people in the city on an average day in 2008 than there were in 2004.

Figure 3 compares the previous and current estimates of average daily city user numbers to the City of Melbourne between 2004 and 2008. Both the previous and current estimates provide consistent results, showing that Melbourne has experienced gradual growth in daily city user numbers.

Despite the similarity of the two series, the current estimates are considered to be more accurate than the previous estimates – 2006 in particular. This is mainly due to fact that the data used (except the Central City Users Survey 2006) in the previous estimates and forecasts report were pre-2006 and the estimates and forecasts were entirely based on forward projection of 2002–2004 trends.³

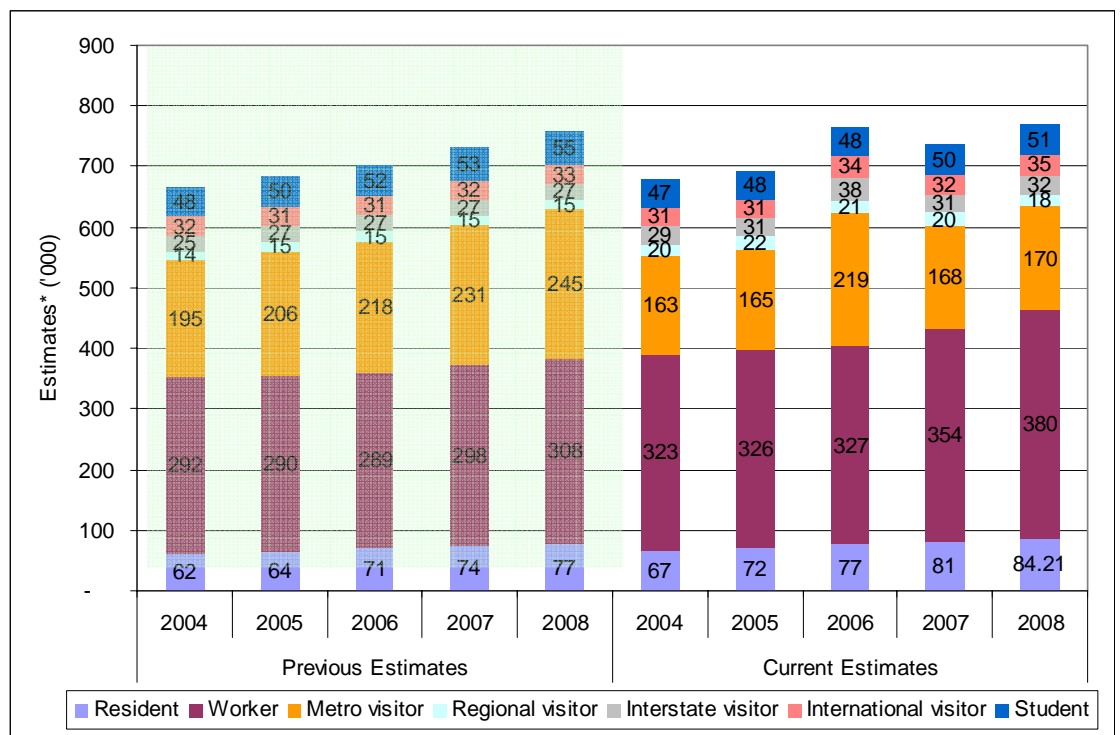
² City User Estimates and Forecasts Model 2004–2020.

³ The estimated number of workers and metropolitan visitors was mainly derived from the CLUE 2002–2004 and the Central City Users Survey 2004–2006.

Moreover, the model did not take into account the significant impacts on city visitation of the XVIII Commonwealth Games, held in Melbourne in March 2006. Without relevant data on visitation during and after the Games, it was assumed that past trends for many user groups would continue.

In fact, the Commonwealth Games had a significant impact on city visitation throughout 2006. This is illustrated by surprisingly strong growth in total daily city users in 2006. It is estimated that more than 765,000 people used the city on a daily basis in 2006 (compared to the previous estimates of 711,000). This represents a 10 per cent growth from 2005, which is much higher than the average annual growth of 3 per cent during the reporting period, 2004–2008.

Figure 3. Previous and Current Estimates of City Users, 2004–2008 ('000)*



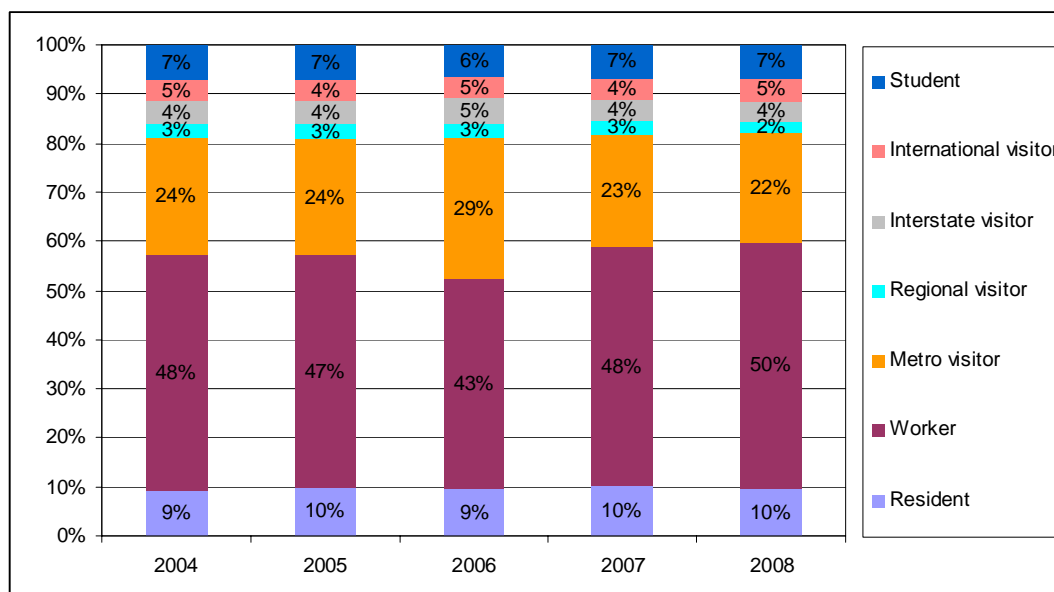
* aged 15 years and over

The Games also affected the composition of the city users group significantly. Figure 4 shows the share of all visitor groups, including metropolitan, regional, interstate and international in 2006. These groups combined, accounted for 41 per cent in 2006 compared to approximately 35 per cent in a normal year. As one would expect, the share of metropolitan visitors experienced the greatest increase to 29 per cent compared to 22–24 per cent in a “normal” year suggesting that

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many metropolitan Melburnians travelled to the city to enjoy the Games and other activities.

Figure 4. Current Estimates by Category



5.1.2. Average Weekday City User Estimates 2004–2008

Residents

It is estimated that more than 84,000 people aged 15 years and over resided in the city in 2008.

Melbourne has experienced remarkable growth in its residential population over the past couple of years. Significant residential growth has occurred in most suburbs. The CBD, Docklands and Southbank have experienced the fastest growth since the introduction of the Postcode 3000 coincided with the redevelopment of Docklands. In the CBD alone, more than 3,800 residential dwellings have been constructed between 2004 and 2008 and another 3,500 apartments have been built in Docklands and Southbank between 2004 and 2008. As a result, more than 17,000 additional people have called the city home, representing a 25 per cent growth between 2004 and 2008.

Workers

It is estimated that in 2008 approximately 380,000 people⁴ commuted to work in the city on a daily basis.

Daily city workers are an integral part of the city's vitality. Melbourne, with a net increase of 163,000m² of office floor space per annum since 2004 and low vacancy rates, has enjoyed a rapid growth in daily city workers. Based on the Central City Users Survey and CLUE data, it is estimated that the number of daily workers to the City of Melbourne increased at 4 per cent annually between 2004 and 2008. It should be noted that the growth rate is much higher than originally estimated (1 per cent). (This was due mainly to the fact that the previous forecasts were based on the growth rate of employment, estimated from CLUE, between 2002 and 2004 while the analysis in this report is based on CLUE actual employment for 2004, 2006 and 2008 and Central City Users Survey 2008.)

City workers are young – according the Central City Users Survey 2008, almost 41 per cent of the workers are aged less than 30 years.

International visitors

It is estimated that 35,000 international visitors came to the city on a daily basis in 2008.

As a hub of international arts, entertainment, shopping and sporting activities, Melbourne draws numerous visitors from overseas. The analysis of Tourism Australia's NVS and IVS data and Central City Users Survey suggests that average daily international visitors grew by 13 per cent between 2004 and 2008, underpinning Melbourne's strength as one of the most popular tourist destinations.

The United Kingdom (UK) and New Zealand (NZ) remained the main source of daily international visitors to the City of Melbourne. In 2008, daily visitors from both countries accounted for almost half (49 per cent) of total daily international visitors.

Shopping was the most popular activity undertaken by international visitors. In 2008, more than one in three (34 per cent) of international visitors reported shopping in the city. Dining at a restaurant or café was the second most popular activity (32 per cent), followed by sightseeing (9 per cent) and socialising, including meeting friends and relatives (5 per cent).

⁴ Based on CLUE 2008 employment (413,281) and a daily rate of commuting to work derived from the Central City User Survey 2008.

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In 2008, it is estimated that total international visitors contributed approximately \$4.8 million per day to the city economy (each international visitor spent, on average, \$135 per day).

Interstate Visitors

It is estimated that 32,000 interstate visitors came to the city on a daily basis in 2008.

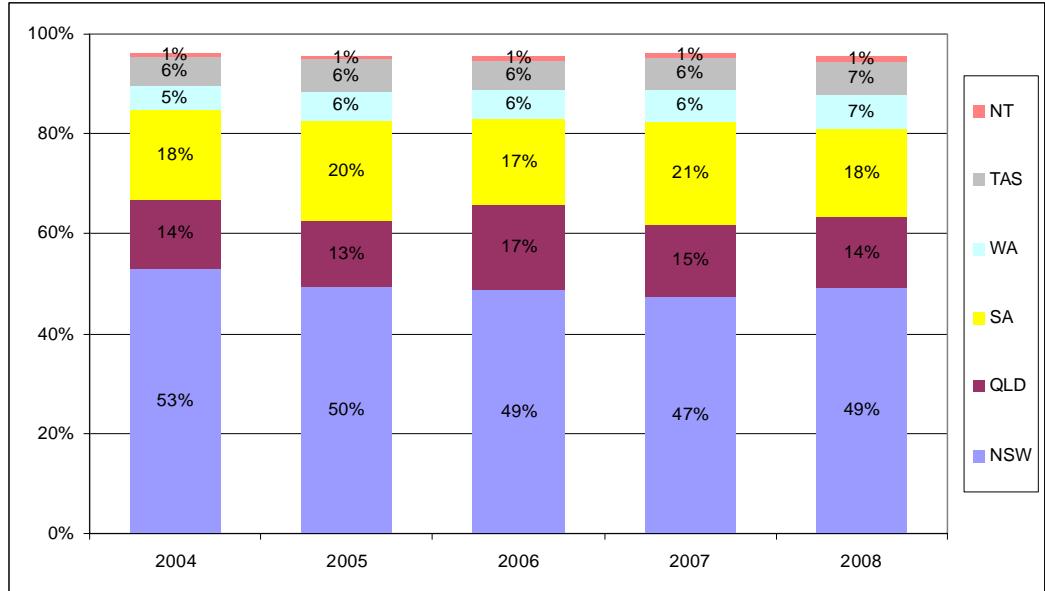
Melbourne is an ideal shopping and leisure destination for interstate visitors. In 2008, it is estimated that total interstate visitors contributed approximately \$4.7 million⁵ per day to the city economy. Holiday, leisure and relaxation were the primary reasons for 42 per cent of the interstate visitors who travelled to the city. The number of daily interstate, including daytrip and overnight trip, visitors travelling to the City of Melbourne for non-work and non-study purposes grew by 9 per cent between 2004 and 2008.

New South Wales (NSW) remained Victoria's largest individual source market for interstate visitors and accounted for 49 per cent of the total interstate visitors to the state in 2008. However, its share has decreased gradually from 53 per cent in 1999 to 49 per cent in 2008 offset by the increase in visitation from other markets such as Tasmania (Tas) and Western Australia (WA) (see Figure 5). In 2008, South Australia (SA) was the second largest market sharing 18 per cent of the total visitors to the state, followed by Queensland (Qld) – 14 per cent.

Interstate visitation to Victoria is significantly influenced by major sport events. Figure 6 illustrates the effects of Rugby World Cup, held in 2003, and the XVIII Commonwealth Games, held in March 2006, on interstate visitation to Victoria. Victoria received a peak of interstate visitor numbers (even though Melbourne hosted only seven rugby matches) during the World Cup. The Commonwealth Games, which was one of the largest international sporting events ever held in Melbourne, also created a record number of interstate visitors to Melbourne. It should be noted that the graph shows an average daily number of interstate visitors for the entire year. This underestimates the number of interstate visitors to the state during these events but reflects their short-term impact on visitation throughout 2003 and 2006.

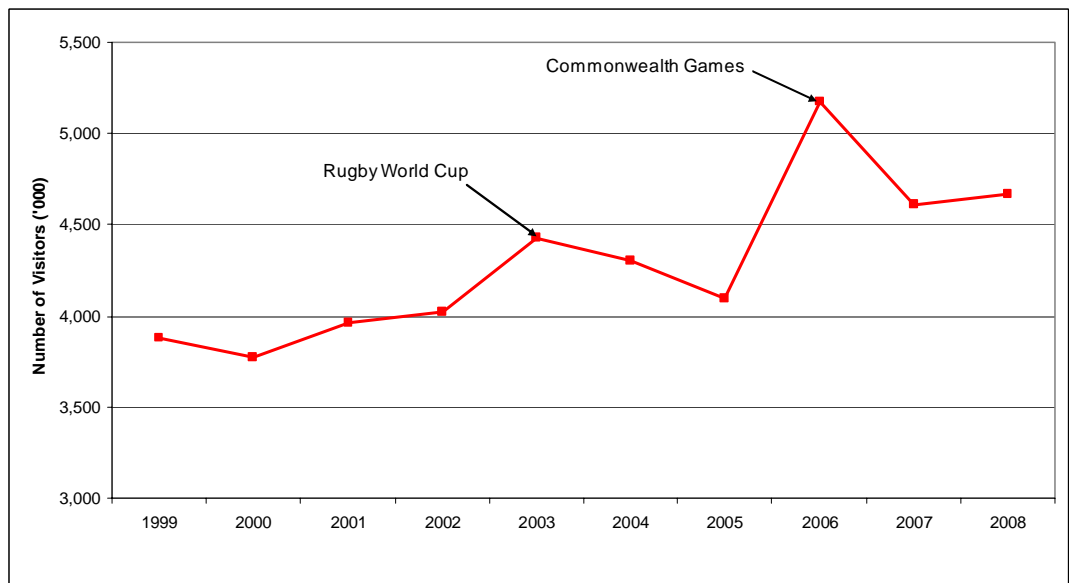
⁵ Based on Central City Users Survey 2008, an interstate visitor spent \$150 per day on average.

Figure 5. Interstate Visitors to Victoria by Origin



Source: Australia Tourism NVS and IVS Data Year Ending December

Figure 6. Total Interstate Residents (including visitors, students workers) Visited Victoria



Source: Tourism Australia NVS Data.

Intrastate Visitors

It is estimated that 188,000 Victorian residents travelled to the city for non-work and non-study purposes on a daily basis in 2008.

Apart from work and study, Victorian residents choose Melbourne as a place for socialising, entertaining, celebrating, shopping and enjoying other activities. It is estimated that the number of daily visitors (travelling to the City of Melbourne for non-work and non-study purposes) from metropolitan Melbourne and regional Victoria, increased by 3 per cent, from 182,000 in 2004.

Given that nearly three-quarters of Victorian residents live in the metropolitan area, metropolitan Melburnians represented the vast majority of daily intrastate visitors to the city. It is estimated that 170,000 metropolitan Melburnians travelled to the city on a daily basis in 2008, representing a 4.5 per cent growth (or 1.1 per cent annual growth) between 2004 and 2008.

As would be expected, shopping and enjoying cafés and restaurants are the main reasons for commuting to the city. According to the Central City Users Survey 2008, two in five (40 per cent) of Victorian respondents travelled to the city for shopping and/or enjoying cafés and restaurants. Other main reasons included going to the cinema/theatre, attending a concert, sightseeing, and visiting friends and relatives.

It is also estimated that in 2008, 18,000 of the daily visitors were from regional Victoria. It is important to note that the estimated number of daily regional Victorian visitors to the City of Melbourne in this report is lower than in the Central City Users Survey 2008 report due mainly to the different methods used.⁶

Higher Education Students

It is estimated that more than 51,000 higher education students travelled to the city on a daily basis in 2008.

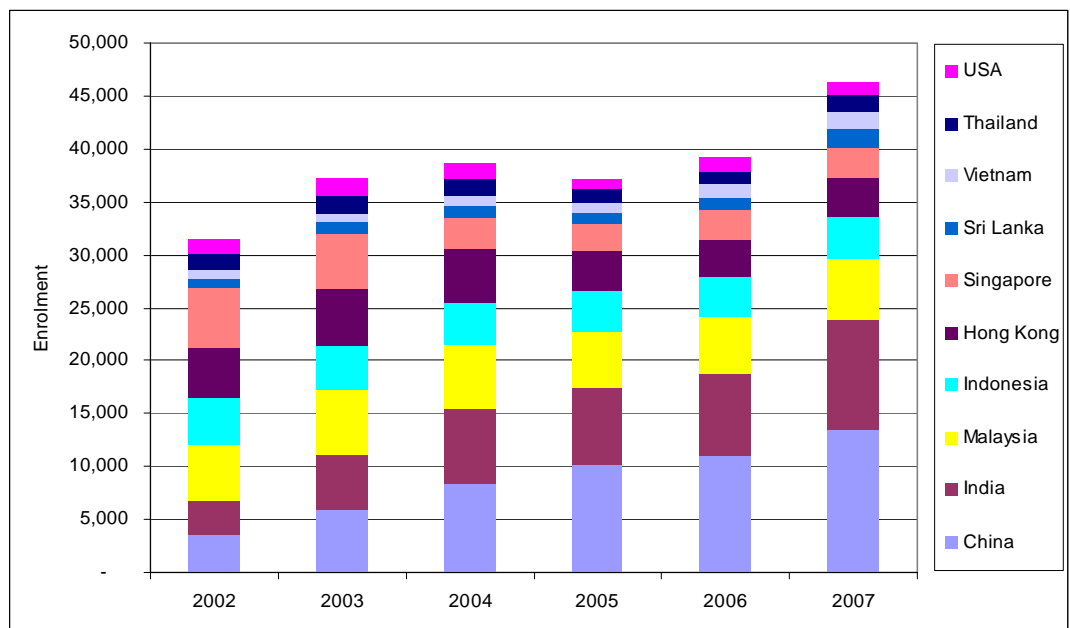
Having several world renowned higher education institutions, Melbourne is an ideal study destination for both domestic and international students. The number of higher education student enrolments in the City of Melbourne has grown significantly over the past couple of years. According to the DEEWR higher education statistics, there were 77,000 student enrolments (including those who resided within and outside the municipal area) in higher education institutions in the city in 2007. This represents an 18 per cent growth from 2002.

⁶ While the number of regional Victorian visitors in this report is derived from the NVS data and other sources, the Central City Users Survey 2008 result is derived from Computer-Assisted Telephone Interview (CATI).

The growth in this category has been primarily driven by overseas student enrolments. While domestic student enrolments in the City of Melbourne grew gradually (2 per cent per annum), overseas student enrolments jumped by 8 per cent annually. It is estimated that nearly 21,000 overseas higher education students enrolled at campuses in the City of Melbourne in 2007.

Asian nations continued to be an important source of overseas students. Of the top 10 source countries for higher education, nine were Asian: China, India, Malaysia, Indonesia, Hong Kong, Singapore, Sri Lanka, Vietnam and Thailand (see Figure 7). In 2007, these countries contributed 71 per cent of the total overseas student enrolments in institutions within the City of Melbourne. This reflects Melbourne’s strength as a liveable city in which to study. It also reflects an awareness that Melbourne offers quality education.

Figure 7. Overseas Student Enrolments in Victoria from Top Ten Countries of Origin



Source: DEEWR, Higher Education Student Statistics

5.2. Average Night Time City User Estimates 2004–2008

It is estimated that approximately 305,000 people used the city on a daily basis between 6pm and 6am in 2008.

Melbourne is becoming a 24-hour city where people can enjoy entertainment, socialising and spending time. It has experienced a significant growth in the number of night time city users.

Melbourne City User Estimates and Forecasts, 2004–2020

Figure 8 shows the estimated number of City of Melbourne night time users for the period between 2004 and 2008. The total night time city user number increased markedly, by 15 per cent (or 4 per cent annually), between 2004 and 2008. The growth is driven by worker and resident groups. The night time city worker group has experienced the highest growth, 4 per cent annually, during the estimating period. This is likely to suggest an increase in non-full time employment arrangement in the city.

International and interstate visitor categories had slightly lower annual growth rates, 3 per cent and 2 per cent respectively, during the same period. It is interesting to note that only the regional Victoria visitor category experienced a marginal decline.

Not surprisingly, eating out at restaurants and cafés was the most popular “other activity” undertaken by night time city users. According to the Central City Users Survey 2008, 33 per cent of night time city users dined out at restaurants and cafés. Other important activities included drinking (11 per cent), and socialising and meeting friends (10 per cent).

Figure 8. Average Night Melbourne City Users Estimates 2004–2008 ('000)*

	2004	2005	2006	2007	2008
Resident	67	72	77	81	84
Worker	100	101	101	110	118
Student	5	5	5	5	5
Metropolitan visitor	65	66	88	67	68
Regional visitor	3	4	4	3	3
Interstate visitor	13	14	17	14	14
International visitor	11	10	12	11	12
Total**	264	272	304	291	305

* aged 15 years and over

** slight variations in total figures are due to rounding

5.3. Overnight City User Estimates 2004–2008

Overnight city users are defined as those who stay overnight in the City of Melbourne. We understand that some of the CoM residents may stay outside the municipality on any given night. Because we do not know how many residents this involves we have assumed all residents remain in the city overnight.

The number of overnight city users has varied significantly in an upward direction over the past couple of years. It is estimated that approximately 143,000 people stayed overnight in the City of Melbourne in 2008, growing by 4 per cent annually since 2004. Figure 9 shows average overnight city user estimates between 2004 and 2008 and it reveals that

the Commonwealth Games boosted overnight city user numbers in all categories, except residents, to a record high of 147,000 in 2006.

Apart from residents (who represented over half of overnight city users) international and interstate visitors were the predominant groups. Combined, they represented nearly one in three overnight users in 2008, or 41,000 visitors.

Figure 9. Average Overnight City User Estimates 2004–2008 ('000)*

	2004	2005	2006	2007	2008
Metropolitan resident	12	13	15	13	13
Regional Victoria resident	5	6	6	5	4
International visitor	21	22	24	21	23
Interstate visitor	16	18	24	18	18
Resident	67	72	77	81	84
Total**	122	131	147	137	143

* aged 15 years and over

** slight variations in total figures are due to rounding

5.4. Average Daily City User Forecasts 2009–2020

This section updates the average weekday Melbourne city user forecasts between 2009 and 2020 by taking into account foreseeable factors that might contribute to the size and composition of daily city users.

Unlike the previous forecasts, which predicted that the city user number would grow at 3.4 per cent annually, the current forecasts suggest a slower annual growth rate of 1.8 per cent between 2009 and 2020. This is due partly to the current global economic downturn and different assumptions made. The current economic downturn has had an impact on most categories of daily city users. It is forecast that all city user categories, except students and residents, will experience a negative growth in 2009 before recovering in 2010 (see Figure 10). Consequently, the total number of daily city users is forecast to reach 926,000 by 2020 but is now unlikely to reach the one million mark during the forecast period.

It is worth mentioning that the current swine flu pandemic (spread between countries and/or across continents), is likely to have a negative impact on travelling behaviour, particularly for international visitors as a whole and city visitation in particular. Nevertheless, the magnitude of the impact remains to be seen and, hence, it has not been taken into account in this study.

Melbourne City User Estimates and Forecasts, 2004–2020

Figure 10. Daily City User Estimates (2004–2008) and Forecasts (2009–2020), ('000)*

	Resident	Worker	Student	Metro. visitor	Regional visitor	Interstate visitor	Intern. visitor	Total**
2004 ^E	67	323	47	163	20	29	31	679
2005 ^E	72	326	48	165	22	31	31	694
2006 ^E	77	327	48	219	21	38	34	765
2007 ^E	81	354	50	168	20	31	32	736
2008 ^E	84	380	51	170	18	32	35	771
2009 ^F	85	377	52	168	18	31	34	765
2010 ^F	88	377	54	170	18	32	35	773
2011 ^F	90	383	55	172	18	32	36	787
2012 ^F	92	390	57	174	18	32	38	801
2013 ^F	94	397	58	176	18	32	39	815
2014 ^F	96	404	60	178	18	32	41	830
2015 ^F	99	412	61	180	18	32	42	845
2016 ^F	102	419	63	182	19	33	44	861
2017 ^F	104	427	65	184	19	33	45	877
2018 ^F	107	434	67	186	19	33	47	893
2019 ^F	110	442	68	188	19	33	49	909
2020 ^F	112	450	70	191	19	33	50	926

^E - estimates

^F - forecasts

* aged 15 years and over

** slight variations in total figures are due to rounding

Residents

It is forecast that more than 112,000 people aged 15 years and over will call Melbourne home by 2020.

The latest .id Consulting's City of Melbourne Small Area Population Forecasts suggest that the resident population of the City of Melbourne will grow at approximately 2.6 per cent per annum between 2009 and 2020. The growth will be driven by various factors, including residential markets, migration and changes in household characteristics.

Key point: In 2008, there were 44,838 residential apartments and houses in the City of Melbourne, which equates to 1.9 people (aged 15 years and over) per dwelling.

Implication: If this ratio were to remain the same, an additional 15,000 apartments/houses (or 27 Eureka Tower-size buildings) would have to be built by 2020.

Workers

It is forecast that by 2020 approximately 450,000 people aged 15 years and over will commute to work in the city on a daily basis.

Australia is not immune to the current global economic downturn – the national economy was in recession in April 2009.⁷ The downturn has taken its toll on overall employment, including those employed in the City of Melbourne. The latest ABS Labour Force⁸ survey reveals a significant decrease in full time employment in Melbourne, it dropped by 3 per cent between January and March 2009 compared to 0–2 per cent decline in other years (2004–2008).

This may be just the tip of the iceberg as companies are encouraged to manage the downturn by using a range of workforce initiatives, such as part time work and job sharing. There has been a 6 per cent increase in part time employment during the same period. If the economic crisis continues to the end of 2009, further decreases in employment will be inevitable. It is forecast that the number of daily workers travelling to the city will decrease by 1 per cent in 2009 and then plateau in 2010, as the economy stabilises.

It is expected that a combination of government stimulus packages (in Australia and overseas), substantial interest rate cuts and recovery of one of Australia's largest trading partners, China, will speed up the recovery process. Employment growth is likely to get back on track in 2011. If the employment growth, from 2011, keeps pace with past trends, the number of daily workers travelling to the city is forecast to grow at around 1.8 per cent annually.⁹

⁷ Acknowledged by the Reserve Bank of Australia Governor Glenn Stevens on 21 April 2009.

⁸ The Labour Force, Australia, Detailed – Electronic Delivery (cat. no. 6291.0.55.001)

⁹ It is the same rate as full time employment growth rate in the CBD between 1982 and 2008.

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Key point: In 2008, 5.1 million m² of floor space in the City of Melbourne was used for office purposes which equates to 20m² per office worker.

Implication: If the ratio of floor space per office worker remained the same, by 2020 an additional 0.9 million m² of floor space (or 18 per cent of current office floor space) would have to be built and/or allocated for office use.

International Visitors

It is forecast that more than 50,000 international visitors will visit the city on a daily basis in 2020.

Future growth of international tourism to Australia is significantly determined by a wide range of external factors. The current global economic downturn is probably the most important factor affecting short to medium term international visitation to Australia. The economic downturn is undermining both consumer and business confidence in those countries from which we have traditionally drawn visitors. Based on the United Nations World Tourism Organization, the tourism sector is not resistant to the crisis. Despite the overall 2 per cent growth in international tourism in 2008, which was influenced by the strong performance during the first six months (before the collapse of the financial markets) it was reported that in each of the last six months of 2008 the number of international tourist arrivals had stagnated or declined. This reveals the impact of the crisis on this sector. The trend is set to continue as the current crisis is expected to go beyond 2009.

Other interrelated factors influencing international visitation to Australia, and hence forecast results, include sharp exchange rate fluctuations (mainly resulting from the economic crisis), varying oil prices, strong competition from other countries and short-haul destinations (particularly intra-Asian and intra-European), changes in the propensity to travel and spend, and major world actions (such as war and terrorism).

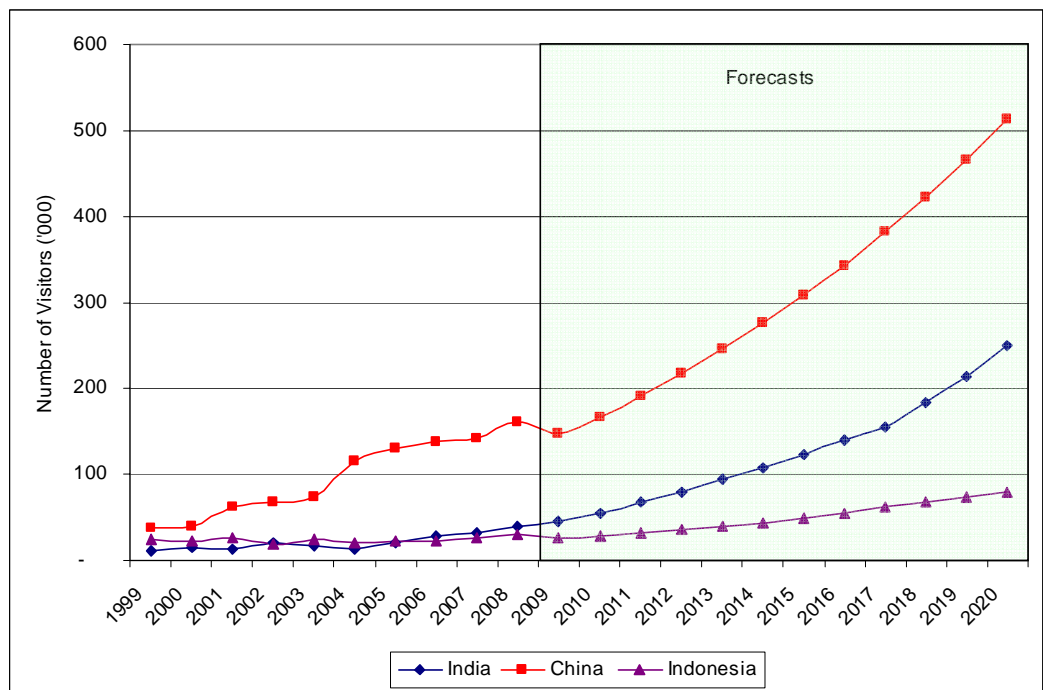
Based on the latest forecast reports published by Tourism Australia¹⁰ and Tourism Victoria¹¹ it is expected that international visitation to Australia as a whole, and Victoria in particular, will fall by around 4 per cent in 2009 and start to recover in 2010. It is also forecast that Victoria will experience an annual growth rate of 3.7 per cent in international visitors over the forecasting period, starting in 2010. International visitors to Victoria are expected to reach 2.1 million by 2017.

¹⁰ Tourism Forecasting Committee, Forecast 2008 Issue 2

¹¹ Tourism Victoria, Forecast Visitation to Victoria, December 2008 Forecast

Visitors from Asian nations will be the driving force of the overall growth of international visitors (including those who come to work and study) to Victoria. It is expected that Victoria will experience exceptional growth in international visitor numbers from three markets, India, China and Indonesia, with an annual growth rate of 17.0 per cent, 10.3 per cent and 9.2 per cent respectively (see Figure 11). If this happens, Chinese visitors, including those who come to study and work, will surpass long-standing single source countries – NZ and the UK – by 2014, reaching the 0.5 million yearly mark in 2020.

Figure 11. Total* International Visitors from Selected Asian Countries to Victoria



* includes employment and education visitors.

Sources: Tourism Australia, Tourism Victoria and the City of Melbourne.

Based on this information, it is forecast that the average daily number of international visitors to the City of Melbourne will follow the same overall growth patterns as those for Victoria, decreasing by 4 per cent in 2009, recovering in 2010 and growing at an average annual rate of 3.7 per cent thereafter.

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Key point: In 2008, on average each international visitor spent \$135 per day in the city, contributing \$4.7 million to the city's economy every day.

Implication: If the level of spending remained the same, international visitors would contribute \$6.8 million each day to the city's economy in 2020.

Interstate Visitors

It is forecast that 33,000 interstate visitors will come to the City of Melbourne on a daily basis in 2020.

The growth of interstate visitors to Victoria is unlikely to continue in the short-term, at least in 2009, due mainly to the current economic downturn, as domestic consumer confidence is undermined. Despite government stimulus packages and promotion encouraging spending, anecdotal evidence suggests that people are cautious and are tending to save more. This potentially affects overall household expenditure, including travel and, hence, interstate visitation.

The outlook for this segment, from 2010 onwards, however, is strong, driven by government stimulus programs, including cash handouts and infrastructure investment. Household, as well as business, spending will regain momentum. Moreover, the recent sharp depreciation of the Australian dollar against the US dollar makes overseas travel more expensive, encouraging domestic travel.

It is therefore forecast that the daily number of interstate visitors to the City of Melbourne will decrease by 0.8 per cent in 2009, in line with Tourism Victoria Forecast,¹² but it will recover in 2010, with an annual growth rate of 0.5 per cent thereafter.

Key point: In 2008, on average each interstate visitor spent \$150 per day, contributing more than \$4.7 million the city's economy.

Implication: If the level of spending remained the same, interstate visitors would contribute nearly \$5 million dollars each day to the city's economy in 2020.

¹² Tourism Australia 2008, Forecasts, 2008 Issue 2.

Intrastate (Metropolitan and Regional) Visitors

It is forecast that more than 210,000 Victorian residents aged 15 years and over will travel to the City of Melbourne for non-work and non-study purposes on a daily basis in 2020.

Intrastate visitation is also affected by the current economic downturn. As unemployment is set to increase and people continue to save cautiously, consumer spending, including on travel, is being undermined. As a result, daily intrastate visitation is likely to decrease by around 1 per cent in 2009 and grow at 1.2 per cent for metropolitan Melbourne visitors and 0.6 per cent for regional Victorian visitors afterwards.

Key point: In 2008, 55 per cent (or 103,000) of Victorian residents aged 15 years and over who visited the city (for non-work or non-study purposes) used public transport on a daily basis.

Implication: If the rate remained the same, by 2020 there would be 12,000 additional Victorian residents aged 15 years and over using public transport to travel to the City of Melbourne for non-work or non-study purposes on a daily basis.

Higher Education Students

It is forecast that 70,000 higher education students will use the city on a daily basis in 2020.

In terms of the city user estimates and forecasts, higher education is probably the only sector that is immune to the current global economic downturn. In fact, it benefits from the downturn and anecdotal evidence¹³ suggests that demand for higher education will continue to grow. The following factors are likely to contribute to the growth:

- The planned reforms by the current federal government to overhaul the higher education sector – specifically moving to a more student-focused model of planning and funding will boost domestic student enrolments.
- Rather than seeking full time employment – which may be scarce – the current downturn is likely to force school leavers to consider further education, giving it a higher priority.

¹³ Australian Education International Research Snapshot reveals that despite the economic downturn the number of international students studying in Australia grew by 17.6 per cent between 2007 and 2008.

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- People from Asian countries continue to place a high priority on higher education and continue to give their children a university degree obtained in an English-speaking country. This presents a great opportunity for Australian higher education providers.
- The depreciation of the Australian dollar, which makes Australian higher education more affordable and competitive, was accompanied by the double digit growth in Asian student enrolments in 2008. This rapid growth has pushed total international student enrolments in Australia to exceed the 500,000 mark for the first time in a calendar year.¹⁴

In line with the overall higher education enrolment growth in Australia and Victoria, the City of Melbourne has also experienced positive growth in enrolment numbers. This eventually leads to an increase in the number of students who use the city on a daily basis. Therefore, it is forecast that the average daily number of higher education students using the city will continue to grow in 2009 at the same rate, 2.7 per cent per annum, as it did between 2002 and 2007.

This will bring the number of higher education students who use the city daily to 70,000 by 2020, which will generate demand for associated services such as accommodation, transport and Council services.

Key point: It is estimated that 89 per cent of higher education students commuted to study in the City of Melbourne by public transport in 2008.

Implication: If the rate remained the same, by 2020 an additional 62,000 students would use public transport to travel to the city.

6. Conclusion and Implications

Melbourne has experienced significant growth in recent years, 3 per cent annually in daily user numbers between 2004 and 2008. It is estimated that 92,000 more people aged 15 years and over used the city for different purpose on a daily basis, in 2008 than in 2004.

Major events such as the XVIII Commonwealth Games held in March 2006, had a significant impact on city visitation throughout 2006. In 2006, Melbourne received 765,000 daily users. If average annual growth (3.2 per cent during the estimated period) is removed, it is estimated that the Games attracted more than 53,000 additional users to the city on a daily basis throughout 2006.

¹⁴ Healy, G 2009

Unsurprisingly, the Commonwealth Games attracted the largest number of international and interstate visitors to Melbourne ever recorded since the NVS and IVS started in 1998.

The Melbourne's economy is not immune to the current economic downturn, which has taken its toll on daily city usage. It is expected that the total number of city users will decrease by approximately 3 per cent in 2009 and stabilise in 2010 before increasing again in 2011, at which time the growth rate is expected to fluctuate around 1.9 per cent per annum, resulting in total daily users of 926,000 by 2020.

The higher education student and resident categories are set to grow through the current challenging economic conditions. In fact, the higher education sector, which translates into number of daily students using the city, is benefiting from the crisis and will continue to grow at around 2.7 per cent. Meanwhile other city user categories are set to decrease by between 1 per cent and 3 per cent in 2009.

This estimates and forecasts study presents, rather than addresses, various challenges for planning and policy formulation to enable Melbourne to be a bold, inspirational and sustainable city. The growth in city usage is continuing and comes with a range of challenges to maintain and enhance Melbourne's reputation, such as increased:

- demand for open space/gardens/parks
- demand for public transport
- demand for entertainment, cultural and sporting activities, as well as opportunities to socialise
- demand for a safer place at night time and
- demand for more office, residential and retail floor space.

Moreover, an increase in higher education students from emerging Asian countries such as China, India, Vietnam, Sri Lanka among others presents others, such as those for more affordable accommodation and for increased public transport.

It should be noted that these estimates and forecasts are subject to data limitations and assumptions made to address a wide range of internal and external factors contributing to travelling behaviour. Therefore it is recommended that:

- the Central City Users Survey continues to be funded and conducted biennially
- the model is updated in 2011 when new relevant data become available and
- the findings are communicated widely to internal and external stakeholders.

7. Appendices

Appendix A. Differences between the Current and Previous City User Estimates, 2004–2008

Due to significant differences in data collection methodology and data analysis used in the Central City User Surveys 2004, 2006 and 2008, some adjustments to 2004 and 2006 results were carried out to ensure comparability across these three surveys. The differences were as noted below:

- a) In 2004 respondents were asked about their visits to the CCA in the last seven days while in 2006 and 2008 respondents were asked about their visits “yesterday”. The 2004 data was re-analysed by applying 2006 and 2008 methodology (only visits to the city on the day before interview were calculated).
- b) Due to the lack of NVS and IVS data at SLA level prior to 2005, a less rigorous analysis of the NVS and IVS was possible in 2005. The 2004 figures did not include an extra day for visitors who stayed overnight in the City of Melbourne. In addition, the 2004 figures did not include international and interstate visitors who stayed outside the City of Melbourne.

The above issues have been properly addressed in this report.

Appendix B. City User Estimates and Forecasts Calculation

Measuring the number of users to the City of Melbourne is a complex process that requires reliable and accurate data. As more accurate, detailed data (from the NVS and IVS and Central City Users Survey) become available, the estimate and forecast model can be improved. These estimates and forecasts are based on the following assumptions and data sources.

Day – City User Estimates and Forecasts

Resident Population

- a) The data on resident population are based on ABS Estimated Resident Population (ERP).
- b) The 2009–2020 resident population figures are based on .id Consulting (2009) City of Melbourne Small Area Population Forecasts 2006 to 2031, Melbourne.

Students

- a) The data on daily students have been derived from the DEEWR higher education statistics.
- b) The DEEWR data set provides extensive information about the term residence of all students (overseas and domestic) who were enrolled in Victoria at postcode level. Postcode boundaries do not entirely match suburb and municipality boundaries, so for the purpose of this study any postcode that is partly or entirely within municipality boundary is considered as part of the City of Melbourne. As a result, postcodes 3000, 3001, 3002, 3003, 3004, 3006, 3008, 3010, 3011, 3031, 3032, 3051, 3053, 3054, 3141, 3181, 3205 and 3207 are included.
- c) It has been further assumed that on an average day, 100 per cent of full-time students and 50 per cent of part-time students who are enrolled in the City of Melbourne travelled to the City of Melbourne.
- d) The annual higher education enrolment rate of 2.7 per cent, between 2002 and 2007, is expected to continue and has been used to derive daily higher education student forecasts.

Workers

- a) The data on average daily workers between 2004 and 2008 have been derived from the Central City Users Surveys 2004–2008 and CLUE 2002–2008 data.
- b) Based on CLUE employment data for the CBD, the number of city workers in the City of Melbourne increased by about 1.8 per cent annually between 1982 and 2008. It is forecast that this trend will continue after falling by 3 per cent in 2009 and remaining stagnant in 2010.

International Visitors

- a) The data on average daily international visitors to the City of Melbourne between 2004 and 2008 have been derived from the Tourism Australia IVS database and the Central City Users Surveys 2006 and 2008.
- b) A “visitor night” to the City of Melbourne means being in the City of Melbourne for two days; thus an extra day is added to each overnight visitor to derive the number of visitor days.
- c) Responses to Questions 27–30 of the Central City Users Survey 2008 suggest that international visitors who stayed with friends or relatives in metropolitan Melbourne and regional Victoria (but outside the CCA) visited the CCA on 22 per cent and 14 per cent of their days respectively while staying in Victoria. These rates have been applied to the IVS data to derive daily international visitor numbers to the City of Melbourne.

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- d) It is expected that visitation of international visitors to the City of Melbourne will increase at the same rate as forecast by Tourism Victoria fact sheet [<http://www.tourism.vic.gov.au/images/stories/December%202008%20Forecast%20Factsheet.pdf>].

Interstate Visitors

- a) The data on average daily interstate visitors to the City of Melbourne between 2004 and 2008 have been derived from the Tourism Australia NVS database and the Central City Users Surveys 2006 and 2008.
- b) A “visitor night” to the City of Melbourne means being in the City of Melbourne for two days; thus an extra day is added to all overnight visitors to derive the number of visitor days.
- c) Responses to Questions 27–30 of the Central City Users Survey 2008 suggest that interstate visitors who stayed with friends or relatives in metropolitan Melbourne and regional Victoria (but outside the CCA) visited the CCA on 22 per cent and 14 per cent of their days respectively staying in Victoria. These rates have been applied to the IVS data to derive daily interstate visitor numbers to the City of Melbourne.
- d) It is expected that visitation of interstate visitors to the City of Melbourne will increase at the same rate as forecast by the Tourism Victoria fact sheet [<http://www.tourism.vic.gov.au/images/stories/December%202008%20Forecast%20Factsheet.pdf>].

Metropolitan Visitors

- a) The data on average daily metropolitan visitors to the City of Melbourne between 2004 and 2008 have been calculated from the Central City Users Survey 2006 and 2008.
- b) For the purposes of deriving metropolitan visitors to the City of Melbourne, the retired and unemployed Victorians who visited other suburbs of the City of Melbourne, apart from CCA, have been considered as metropolitan visitors to the City of Melbourne (see Question 7a and Question 12 of 2006 CATI survey and Question 33 of 2008 CATI survey for details).
- c) The forecasts of metropolitan visitors between 2008 and 2020 have been calculated based on maintaining the growth rate established between 2004 and 2008.
- d) It is forecast that metropolitan visitor numbers will decrease by 0.8 per cent in 2009 and the 2004–2008 trend (1.1 per cent) will continue between 2010 and 2020.

Regional Victorian Visitors

- a) The data on average daily regional Victorian visitors to the City of Melbourne between 2004 and 2008 have been derived from the Tourism Australia NVS database in aggregated form at the Statistical Local Area (the same as City of Melbourne) level.
- b) A “visitor night” to the City of Melbourne means being in the City of Melbourne for two days; thus an extra day is added to all overnight visitors to derive the number of visitor days.
- c) Tourism Victoria forecasts that national visitor nights and trips will grow at approximately 0.5 per cent annually between 2009 and 2010 after a slight decrease of 0.8 per cent in 2009. The annual growth rate is used to derive average daily regional visitor numbers to the City of Melbourne.

Night Time City Users Estimates

- a) *Workers, students, metropolitan visitors and regional visitors*: the data have been calculated by applying night time visitation rates from CATI Questions 3, 7, 11 and 14 of the Central City Users Survey 2008.
- b) *Interstate and international visitors*: the data have been calculated by applying night time visitation rates from Intercept Questions 33 of the Central City Users Survey 2008.

Overnight City Users Estimates

- a) *Residents*: the data on resident population have been derived from ABS ERP and .id Consulting (2009) City of Melbourne Small Area Population Forecasts 2006 to 2031 assuming all the City of Melbourne residents stayed overnight in the City of Melbourne.
- b) *International visitors*: the data on international visitors have been derived from Tourism Australia IVS database year ending December which provides an estimated number of international visitors who stayed overnight in the City of Melbourne for non-work and non-study purposes.
- c) *Interstate visitors*: the data on interstate visitors have been derived from Tourism Australia NVS database year ending December, which provides an estimated number of interstate visitors who stayed overnight in the City of Melbourne and travelled to the City of Melbourne for non-work and non-study purposes.
- d) *Regional visitors*: the data on regional visitors have been derived from Tourism Australia NVS database year ending December, which provides an estimated

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number of regional visitors who stayed overnight in the City of Melbourne and travelled to the City of Melbourne for non-work and non-study purposes.

- e) *Metropolitan visitors*: the data on metropolitan visitors have been derived from Central City Users Surveys 2006 and 2008, Question 13 of the CATI. The questions provide an estimated number of metropolitan residents who stayed overnight in the City of Melbourne in the surveyed years.

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