



Travel Zone Employment Forecasts

About the employment forecasts

Employment forecasts at travel zone level are estimated using the Transport Data Centre (TDC) Small Area Employment Forecasting Model (SAEFM). Forecasts to 2031 at five-yearly intervals (corresponding to Census years) from the 2001 base year are available for each travel zone (TZ) in the Greater Metropolitan Area (GMA, Figure 1). These future year small area employment estimates are designed to be used as an input to the TDC Strategic Travel Model (STM) and other strategic modelling processes.



Figure 1
Greater Metropolitan Area

Methodology

The November 2006 employment forecasts are based on revised inputs and a number of methodological enhancements to the forecasting process used in the previously released September 2004 TZ Employment Forecasts. Revised inputs are:

- 2005 Official Population Projections for NSW¹
- 2004 Metropolitan Development Program
- TDC's 2006 Small Area (TZ) Population Forecasts
- 2001 JTW data
- updated labour force participation and unemployment rate projections²
- updated industry trend curves

The official NSW Population Projections are used as the basis for estimating the future workforce by applying projected labour force participation and unemployment rates to the projected population. The resulting projections of the workforce within the GMA are used as control totals for subsequent forecasts of employment at lower geographical levels.

Total forecast GMA employment for each year is disaggregated by industry and small area using three review modules which focus on industry of employment, broad sub-regions within the GMA and then specific job nodes.

The Industry Review module distributes GMA employment at each five-yearly period by 27 Industry categories using trend curves derived from a study of economic and industry trends and forecasts.

The Regional Review module specifies the share that each sub-region has of the total number of jobs in each industry at each five-yearly period. There are 20 Sub-regions used in the 2006 SAEFM which are listed in *Table 1* over the page.

The Job Node Review module forecasts the share each job node has of total jobs in each Industry by Sub-region at each five-yearly period. There were 94 Job Nodes specified in the 2006 SAEFM.

Trend forecasts may not adequately capture the employment impact of planned developments. Adjustments to historical trends for areas thought likely to be affected are made in the 'New Developments' module based on a detailed analysis of the most current information available at the time. *Table 2* (over) lists the locations considered and the final decision.

As total jobs for each year is always kept constant, any change in employment in one location requires redistribution from elsewhere.

CAUTION

Forecasts are only as good as the assumptions and inputs used.

TDC makes these forecasts available to those wishing to undertake similar strategic modelling exercises, on the understanding that users will test the validity of the TZ forecasts against the most current local knowledge.

This is even more essential if the forecasts are used for less strategic analysis at finer geographic levels.

Control totals must be kept constant if any adjustments are made.

¹ see http://www.planning.nsw.gov.au/programservices/population_projections.asp#local

² TDC commissioned the National Institute of Labour Studies (NILS) to provide updated projections of GMA labour force participation and unemployment rates up to 2031.

Note: SAEFM employment estimates are often different from Journey to Work (JTW) employment counts for the equivalent Census year. The Census undercounts the population (and therefore workers) and gives less accurate counts of labour force participation than the official estimates derived from the ABS Labour Force Survey (LFS). SAEFM uses JTW employment distribution at the TZ level, but total employment is factored up to match total Labour Force. For an explanation of the difference between Census and LFS estimates follow this link to the ABS website:

<http://www.abs.gov.au/Ausstats/ABS@.nsf/Latestproducts/00D58320BB5387A4CA25729E0008A884?opendocument>

Table 1: Sub-regions

Sub-regions		
CBD	Central North West	Central Coast
CBD North	Central South West	Newcastle & Lake Macquarie
Inner West	Central West	Other Lower Hunter
Inner East	Outer North	Outer South
Inner North	Outer North West	Wollongong
Inner South	Outer South West	Illawarra South
Inner South West	Outer West	

Table 2: New Development Areas

New Development Areas			
TZ	Locality	TZ	Locality
4	Millers Point	416	Huntingwood
6	Sydney - King St Wharf	424	Seven Hills North
28	Sydney Art Gallery/Motor Museum	534	Frenchs Forest South
29	Pymont	584	Smeaton Grange
79	Green Square	626	Nelson
85	Redfern West - Redfern Station	627	Box Hill
86	Eveleigh	664	Catherine Field
137	Port Botany	666	Leppington
139	Banksmeadow	667	Leppington West
140	Botany	670	Prestons
146	Domestic Terminal	672	Cecil Park South
147	International Terminal	679	Willmot
210	Rhodes	680	Marsden Park South
252	Arncliffe	682	Llandilo
326	Homebush Bay	714	Liverpool
335	Greystanes	716	Newington
346	Smithfield	717	Oran Park
347	Wetherill Park	720	Macarthur Square
358	Wattle Grove	739	Eastern Creek
366	Edmondson Park	741	Erskine Park South
367	Cecil Hills	743	Schofields South
378	Bow Bowing	746	Schofields East
379	Ingleburn	751	Rouse Hill South
383	Mount Vernon	753	Castle Hill Showground
405	Marayong	754	Norwest Business Park
408	Whalan	784	Macquarie Park North
		821	Horsley Park North

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