

Monday, 10 August 2015 Enquiries: Mick McCarthy – (08) 9364 0631 Our Reference: WA Tomorrow 2015

Mr Eric Lumsden PSM FIPAA Chair Western Australian Planning Commission Locked bag 2506 PERTH WA 6001

Dear Eric

## WA TOMORROW POPULATION PROJECTIONS

The members of the South West Group are concerned that the WA Tomorrow population projections understate the growth of the South West Metropolitan Region (SWMR) as well as providing a misleading distribution of population growth.

The model used by the Western Australian Planning Commission (WAPC) has produced counter intuitive results. For example, in the 2012 version of WA Tomorrow, the Town of East Fremantle was shown as growing when its growth prospects were limited. Now that it is undertaking infill development and redevelopment, it is shown as declining in the 2015 version of WA Tomorrow.

Furthermore, it is understood that the WA Tomorrow model is not calibrated against other population projections (i.e. ABS) nor does it reconcile with infill targets contained in Directions 2031 and Perth and Peel @ 3.5 million.

It was also noted that the publicly released version of WA Tomorrow 2015 contains an error in that a Statistical Area Level 2 (SA2) population projection of 19,900 persons was double counted, thereby over-estimating the City of Kwinana population projections.

It is understood that Department of Planning staff will correct this error for the City of Kwinana, however this error of 19,900 persons will still be included in the overall WA population projections leaving a residual error.

A simple way to resolve this is to leave the 2026 population for the SWMR at 548,640 and adjust Cockburn, Fremantle, East Fremantle and Melville population as shown in Table 1 overleaf. The WA Tomorrow (WAT) 2015 error represent projections contained in the WA Tomorrow 2015 report, with the "adjusted" representing those recommended by the South West Group.

LGA	WAT 2016 (2015) with error	WAT 2016 (2015) adjusted	WAT 2021 (2015) with error	WAT 2021 (2015) adjusted	WAT 2026 (2015) with error	WAT 2026 (2015) adjusted	South West Group 2026
Cockburn	110 750	112 942	126 950	132 950	143 550	153 000	152 101
East Fremantle	8 020	8 020	7 490	8 300	6 890	8 700	8 668
Fremantle	31 310	32 100	32 460	33 460	33 560	34 600	34 453
Kwinana	55 980	38 660	70 560	51 790	84 250	64 350	62 695
Melville	106 930	108 975	110 290	115 000	112 870	120 470	120 916
Rockingham	131 930	131 930	154 060	154 060	167 520	167 520	165 811
SWMR	444 920	432 627	501 990	495 560	548 640	548 640	544 644

Table 1: Recommended adjustments to WA Tomorrow 2015 (2016, 2021 and 2026)

The attached paper gives more background on the South West Group assessment of the WA Tomorrow figures and recommended actions.

The South West Group population estimates are in broad agreement with Directions 2031 infill targets but are more conservative than Infrastructure Australia population growth projections contained in the recently released Australian Infrastructure Audit Report.

There are some areas of fine tuning within WA Tomorrow that should be pursued:

- The Kwinana Industrial Area has been linked to Rockingham in the list of SA2's. It
  is thought that this is how the double counting error arose. It is preferable to link
  low population SA2's to SA2's in the same local government area. The Kwinana
  Industrial Area SA2 should be linked with the Hope Valley Postans SA2 as both
  are in the City of Kwinana.
- Kwinana is now designated a City and should have (C) as an abbreviation throughout the documents and the related spreadsheets.

Local governments in the SWMR spend significant resources in estimating population growth and cooperating with the Department of Planning to ensure that projections are accurate and reflect current and future trends.

Discussions with departmental staff indicate that the WA Tomorrow population projections are not matched to population projections for infill targets. This is considered problematic and represents ongoing inconsistency that will limit the applicability of the WA Tomorrow data, particularly for its validity of use in integrated transport and land use planning directly relevant to Directions 2031 and Perth and Peel @ 3.5 million.

This matter is very important for the credibility of planning in Western Australia and we ask that you seek to have the adjustments made to WA Tomorrow as recommended above.

Yours sincerely

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Mayor Jim O'Neill
Chair South West Group

Enc: South West Metropolitan Region Growth to 2026

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A Co-operative venture of the municipalities of: Cockburn, East Fremantle, Fremantle, Kwinana, Melville & Rockingham

# ATTACHMENT

#### SOUTH WEST METROPOLITAN REGION GROWTH TO 2026 AND THE WA TOMORROW PROJECTIONS

#### Introduction

Population growth is a key determinant of the priority for infrastructure investment for all spheres of government. Many local governments undertake sophisticated assessment of future growth to support their own investment decisions.

Population projections are complex involving assessment of development patterns, migration, fertility and death rates.

All Western Australian Government agencies are required to use the WA Planning Commission population estimates. The public version is known as WA Tomorrow. The most recent version of WA Tomorrow was released in May 2015.

#### Past Performance of WA Tomorrow Forecasts

The South West Group has a long history of disputing the WA Tomorrow figures due to the wide disparity between their own estimates and the WA Government figures. The ABS has also produced a set of population estimates (ABS 3222.0) in November 2013. The recently released Australian Infrastructure Audit Report population figures are based on the ABS 3222.0 projections.

Table 1 below shows a comparison in population projections from these sources

LGA	ABS ERP 2014	WA Tomorrow 2014 (2012)	WA Tomorrow 2016 (2012)	WA Tomorrow 2026 (2012)	South West Group 2026
Cockburn	106 540	102 700	107 300	131 000	152 101
East Fremantle	7 831	7 800	8 000	8 600	8 668
Fremantle	30 883	29 900	30 600	33 700	34 453
Kwinana	36 145	35 600	38 300	51 900	62 695
Melville	107 239	103 000	103 300	104 500	120 916
Rockingham	125 889	122 600	130 800	172 900	165 811
SWMR	414 527	401 600	418 300	502 600	544 644

#### Table 1: WA Tomorrow comparison of forecasts issued in 2012 with current ABS ERP

WA Tomorrow (2012) released January 2012(WAT)

South West Group from Forecast ID and capacity forecasts

Sources: ABS 3218.0 released March 31, 2015

The 2012 WA Tomorrow projections only forecast 96.9% of the estimated SWMR resident population reported by ABS in 2014 and were 7.8% lower than the South West Group 2026 population estimate for the region.

#### **Current release of WA Tomorrow**

The May 2015 WA Tomorrow release contained an error in that the Rockingham SA2 was included in both Kwinana and Rockingham. The WAPC intend to correct this double counting and the figures shown in Table 2 have the error removed.

The May 2015 release is significantly different than the January 2012 release in that it:

- Lifts the 2026 population forecast for the City of Cockburn by 12,550 persons
- Shows the population of the Town of East Fremantle declining dramatically
- Lifts the 2026 population forecast for City of Kwinana by 12,450
- Lifts the 2026 population forecast for City of Melville by 8,370
- Reduces the population forecast for City of Rockingham by 5,650
- Increases the 2026 SWMR total forecast population by 26,140

#### Table 2: Comparison between ABS, South West Group and WA Tomorrow

LGA	ABS ERP 2014	ABS ERP Projected to 2016#	WA Tomorrow 2016 (2015)	WA Tomorrow 2021 (2015)	WA Tomorrow 2026 (2015)	South West Group 2026
Cockburn	106 540	112 942	110 750	126 950	143 550	152 101
East Fremantle	7 831	8 023	8 020	7 490	6 890	8 668
Fremantle	30 883	32 015	31 310	32 460	33 560	34 453
Kwinana	36 145	39 615	38 660	51 790	64 350	62 695
Melville	107 239	108 975	106 930	110 290	112 870	120 916
Rockingham	125 889	135 621	131 930	154 060	167 520	165 811
SWMR	414 527	437 191	427 600	483 040	528 740	544 644

Sources: ABS 3218.0 released March 31, 2015

# Estimated from projecting two years of 2013-14 growth as reported in ABS 3218.0

By 2026 projected population figures for Melville, East Fremantle, Fremantle and Cockburn are significantly different between WA Tomorrow and South West Group (see Table 2). The overall total for the South West Metropolitan Region is 15,904 less for 2026.

The differences in population forecasts for WA Tomorrow and the South West Group are still significant despite the gap closing between the 2012 release and the 2015 release.

The WA Tomorrow documentation for Statistical Areas includes the notes at Table 3 showing SA2s that have been aggregated.

Kwinana Industrial Area has been aggregated with an SA2 in the City of Rockingham. Whilst it makes no difference to the modelling, it should have been aggregated with an SA2 in the City of Kwinana such as the contiguous Hope Valley Postans SA2.

WA Tomorrow (2015) released May 2015

South West Group from Forecast ID and capacity forecasts

SA2	Host SA2
Bibra Industrial	South Lake - Cockburn Central
Canning Vale Commercial	Canning Vale - West
Davenport	College Grove - Carey Park
Henderson	Coogee
Kings Park (WA)	Perth City
Kwinana Industrial	Rockingham
Malaga	Ballajura
Malmalling - Reservoir	Mundaring
O'Connor (WA)	Fremantle - South
Osborne Park Industrial	Innaloo - Doubleview
Perth Airport	Rivervale - Kewdale - Cloverdale
Rockingham Lakes	Baldivis
Welshpool	Cannington - Queens Park

### Table 3: List of SA2s that have been aggregated by WA Tomorrow

Source: WA Tomorrow (2015) LGA Notes released May 2015

The WA Tomorrow spreadsheets show Kwinana as a (T) for Town. It should be (C) for City.

#### Australian Infrastructure Audit Report

The Australian Infrastructure Audit Report Supplementary Documents now provide local government level population projections for the SWMR, other than for Fremantle and East Fremantle which are combined.

A comparison can be made between WA Tomorrow and the Australian Infrastructure Audit Report for Western Australia and Greater Perth (see Table 4).

# Table 4: Comparison between WA Tomorrow and Australian Infrastructure Audit Report

Location	WAT 2016	AIAR 2016	WAT 2021	AIAR 2021	WAT 2026	AIAR 2026
Greater Perth	2 110 400	2 181 194	2 371 500	2 531 727	2 637 100	2 888 637
Western Australia	2 677 590	2 755 875	2 976 300	3 157 700	3 274 510	3 563 623
Greater Perth as a % of WA	78.82%	79.15%	79.68%	80.18%	80.53%	81.05%

Sources: ABS 3222.0 released November 26, 2013 WA Tomorrow (2015) released May 2015

The Australia Infrastructure Australia Audit, using ABS 3222.0, gives a 9.54% higher 2026 population figure for Greater Perth than WA Tomorrow (2015) and projects that Greater Perth will have a slightly higher proportion of Western Australian Growth.

This is equivalent to 9.22% higher growth for the South West Metropolitan Region than WA Tomorrow (2015).

 Table 5: South West Metropolitan Region Growth under the Australian Infrastructure Audit

 Report Population Projections

LGA	WAT 2026	South West Group 2026	AIAR Calculated 2026
Cockburn	143 550	152 101	150 732
East Fremantle	6 890	8 668	46 418
Fremantle	33 560	34 453	40 4 1 0
Kwinana	64 350	62 695	63 139
Melville	112 870	120 916	106 175
Rockingham	167 520	165 811	211 044
SWMR	528 740	544 644	577 508

Sources: WA Tomorrow (2015) released May 2015

Table 5 shows the calculated 2026 populations from the Veitch Lister Consulting Report that was issued as a supplementary report to the Australian Infrastructure Audit Report (May 2015).

It seems unlikely that the rate of population growth identified in the Australian Infrastructure Audit Report would be achieved in Greater Perth by 2026, resulting in an over-estimation in the impacts on infrastructure, such as congestion.

### RECOMMENDATIONS

- 1. That the WAPC correct the error for Kwinana's population forecast.
- 2. That the WAPC be requested to amend the notes relating to the Kwinana Industrial Area being aggregated with Rockingham SA2 to being aggregated with the contiguous SA2 of Hope Valley Postans.
- 3. That the WAPC be requested to amend the designation of data relating to Kwinana to reflect its status as a city.
- 4. That the South West Group advise the WAPC that it is not satisfied with the WA Tomorrow population forecasts for Cockburn, East Fremantle, Fremantle and Melville and that these should be reassessed when the error for Kwinana is resolved.

South West Group from Forecast ID and capacity forecasts Veitch Lister Consulting Greater Perth Traffic Modelling Report 2014