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ARUP

Alan Bright
Manager Strategic Planning
Randwick City Council
02 9093 6895
Alan.Bright@randwick.nsw.gov.au

Level 5
151 Clarence Street
Sydney NSW 2000
Australia
t +61 2 9320 9320
d +61 2 9320 9431
f +61 2 9320 9321
andrew.hulse@arup.com
www.arup.com

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Dear Alan

Kensington and Kingsford Planning Strategy – Transport Modelling and Assessment Statement of Currency

Randwick City Council appointed Conybeare Morrison International to advise on new planning controls for the Kensington and Kingsford town centres. The new planning controls will comprise a key aspect of a Planning Strategy to guide the coordinated growth and renewal of these town centres into the future.

Arup provided transport consultancy services during preparation of the new planning controls in 2017. A Stage 1 Transport Assessment report was issued on 20 January 2017 to inform the development of the planning controls and public realm improvements. The Stage 2 Transport Modelling report was issued on 18 May 2017 to specifically account for the proposed dwelling growth and a number of road closures within each of the town centres, along with the addition of the CBD South East Light Rail through the area expected after 2019.

This Statement of Currency assesses whether the base data and assumptions used for the 2017 transport assessment and modelling remain valid.

Future Journey to Work

At the time of the transport assessment undertaken in 2017 only the 2011 journey to work census data was available. The 2016 journey to work is now available for use and a comparison between these two data sets for current travel is provided in Table 1.

A comparison between the data sets shows that there has been a decrease in car mode for both residents leaving the area and employees travelling into the area over the 5 year period. This aligns with the proposed future trend.

The future mode of travel that was adopted for the uplift development in the Kensington and Kingsford corridor recognised the transit oriented development with transfer of mode from both car and bus expected to light rail transit (LRT). Train travellers will also use the LRT for transfer to the area.

For employees, a significant drop in car use is forecast given the constrained car parking provision and the predicted increase in employment.

For residents, a lesser drop in car use was forecast for the future, however the 2016 census data is indicating that car usage has gone down significantly with public transport and walking going up correspondingly. This means that the traffic assessment undertaken for the future uplift is likely to be conservative.

This comparison between the 2011 and 2016 census data for journey to work has indicated that the trend towards greater public transport and active transport modes is occurring and hence the future mode of travel used for the assessment is considered to remain valid.

Table 1: Anticipated future mode of travel

Future Mode	**Employees**			**Residents**		
	2011	2016	Future*	2011	2016	Future*
Car driver	60%	50%	35%	44%	33%	40%
Car passenger	6%	4%	5%	5%	2%	3%
Train/Bus/LRT	18%	27%	39%	37%	49%	42%
Walk	11%	16%	15%	9%	14%	10%
Other	6%	3%	6%	5%	2%	5%
Total	100%	100%	100%	100%	100%	100%

Source: Journey to Work Survey, 2011 and 2016.

** The future mode targets in Table 1 were adopted in the 2017 transport assessment based on the information available at that time.*

Transport modelling

A variety of public domain changes were proposed by the Planning Strategy considered in the Stage 1 assessment that are likely to impact road network operation. Increases in residential dwellings and commercial floorspace are also proposed by the Planning Strategy, generating vehicle trips to be accommodated by the local road network. In summary, the proposed changes with bearing on traffic matters include:

- The closure of Meeks Street between Anzac Parade and Middle Lane;
- The closure of Duke St between Anzac Parade and Boronia Street;
- The closure of Bowral Street at Anzac Parade; and
- The addition of 2772 dwellings and 36,000m2 commercial floorspace in Kingsford, expected to generate approximately 1022 trips in peak periods; and
- The addition of 1855 dwellings and 18,000m2 commercial floor space in Kensington, expected to generate approximately 609 trips in peak periods.

The Meeks Street closure had already occurred however the Duke Street and Bowral Street closures are future initiatives.

These changes were imposed onto an appropriate existing future year model, namely the Sydney Light Rail SCATSIM Aimsun model (SLR model). Since the proposed changes are not large in scale, a subnetwork (known as the Kensington / Kingsford Subnetwork) was created within the SLR Aimsun model to more accurately investigate the impacts on the local area.

The road network performance under simulation with and without the above changes was then compared to infer the traffic impacts of the changes.

The trips were distributed to six major road routes from their expected origin based on the *Journey to Work 2011* (JTW 2011) and expected routing to-and-from the S3 Statistical Area listed in the *JTW*. The Place of Work and Place of Residence distributions for both 2011 and 2016 are shown in Table 2 and Table 3 for comparison purposes.

Table 2: Place of Work of people living in study area. *Source: Journey to Work Survey, 2011 and 2016.*

S3 Statistical Area	**2011**		**2016**	
Place of Work	**Trips**	**%**	**Trips**	**%**
Eastern Suburbs – South	1207	58%	841	63%
Botany	226	11%	159	12%
Sydney Inner City	177	8%	82	6%
Kogarah - Rockdale	116	6%	62	5%
Eastern Suburbs – North	104	5%	47	4%
Hurstville	80	4%	35	3%
Canterbury	63	3%	38	3%
Strathfield – Burwood – Ashfield	46	2%	46	3%
Sutherland – Menai – Heathcote	39	2%	15	1%
North Sydney – Mosman	33	2%	10	1%

Table 3: Place of Residence of people working in study area. *Source: Journey to Work Survey, 2011 and 2016.*

S3 Statistical Area	**2011**		**2016**	
Place of residence	**Trips**	**%**	**Trips**	**%**
Sydney Inner	2338	43%	2510	53%
Eastern Suburbs – South	1574	29%	1282	27%
Eastern Suburbs – North	481	9%	330	7%
Botany	465	9%	164	3%
North Sydney – Mosman	204	4%	88	2%
Chatswood – Lane Cove	143	3%	76	2%
Ryde – Hunters Hill	94	2%	36	1%
Marrickville – Sydenham – Petersham	62	1%	50	1%
Strathfield – Burwood – Ashfield	62	1%	156	3%

It is clear that the trip patterns have remained relatively unchanged and are therefore considered appropriate for distributing the new trips onto the road network.

Conclusion

The new 2016 census data for journey to work has been compared with the 2011 data set used at the time for the transport assessment. For mode of travel there has been trend towards greater public transport and active transport modes supporting the prediction that the future car usage will reduce.

With the opening on the Light Rail to Kensington and Kingsford in early 2020, this is when further mode change towards public transport could be expected. The extent of mode change will depend on the extent of growth in residents and employment in the corridor in coming years.

On this basis, the transport assessment and transport modelling undertaken in 2017 is considered to remain valid for the future assessment year.

Yours sincerely

Andrew Hulse
Associate Principal