

**MELBOURNE METRO RAIL PROJECT ENVIRONMENT EFFECTS STATEMENT INQUIRY
AND ADVISORY COMMITTEE**

MMRA TECHNICAL NOTE

TECHNICAL NOTE NUMBER: 026
DATE: 11 August 2016
PRECINCT: Parkville, CBD North and Arden Station Precincts
EES/MAP BOOK REFERENCE: N/A

SUBJECT: Transport
Response to questions relating to Parkville, CBD North and Arden precincts.

NOTE:

1. This Technical Note has been prepared with input from AJM and responds to matters identified in a letter from Herbert Smith Freehills dated 3 August 2016.
2. For ease of reference, this Technical Note adopts the topic headings set out in the Request and reproduces the relevant 'references' and 'requests' prior to setting out MMRA's response.

(a) Grattan Street modelled traffic volumes

(i) Reference

- (a) The Transport Impact Assessment (TIA) exhibited with the EES includes tables 8-14 and 8-15, describing traffic on Grattan Street, east of Royal Parade. Please provide a description of the location of the traffic on Grattan Street, and clarify whether the volumes are meant to be the same during both the am and pm peaks.

(ii) Request

- *Clarification that the volumes in Table 8-14 and 8-15 are correct representations of the traffic modelling of the Grattan Street during the construction phase in that the volumes shown in those table are the same for the AM and PM peak periods*

- Clarification of the exact location of the reported Grattan Street model traffic volumes – principally as Grattan Street east of Royal Parade is closed during the construction phase.

Response:

3. The volumes reported in Table 8-14 and 8-15 of the TIA reflect the Aimsun modelling of the construction phase operations during the AM and PM peaks respectively.
4. Subsequent to the completion of the EES, the transport modelling team identified that the locations reported are actually on the western side of Royal Parade, as Grattan Street east of Royal Parade is closed during the construction phase.
5. The volumes are correct and have been confirmed by the modelling team, though they may appear otherwise. In the eastbound direction the 240 vehicles represent the capacity of this section of Grattan Street during the construction phase. The westbound direction is not as attractive to drivers due to the limited capacity of the right turn from Royal Parade into Grattan Street west, and carries only around 40 vehicles in both the morning and afternoon peak periods.
6. Updated versions of the relevant tables are provided below with the changes shown in red text.

Table 1: Network Volume AM Peak Summary - 2021 Construction Case compared to 2021 No Project Case (part only)

Network	2021 No Project Case	2021 Construction	Difference
Grattan Street, West of Royal Parade, EB	660	240	-420 (-64%)
Grattan Street, West of Royal Parade, WB	470	40	-430 (-91%)

Source: AIMSUN model

Table 2: Network Volume PM Peak Summary - 2021 Construction Case compared to 2021 No Project Case (part only)

Network	2021 No Project Case	2021 Construction	Difference
Grattan Street, West of Royal Parade, EB	700	240	-460 (+66%)
Grattan Street, West of Royal Parade, WB	670	40	-630 (-94%)

Source: AIMSUN model

(b) Franklin Street existing traffic volumes

(i) Reference

- (b) Please advise the current traffic volumes on Franklin Street, both daily and during the am and pm peaks.

(ii) Request

- Advice on the current daily and peak hour traffic volumes on Franklin Street

Response:

7. Traffic data has been sourced from VicRoads SCATS database to determine existing traffic volumes on Franklin Street at the intersections of Franklin Street with Victoria Street and Swanston Street.
8. The following traffic data shows the traffic volumes along Franklin Street. The eastbound volumes are on the approach to Victoria Street and the westbound volumes are on the approach to Swanston Street.

Table 3: Traffic volumes on Franklin Street on the eastbound and westbound approaches to Swanston Street

Intersection Leg	Vehicles by Time Period				
	7:00-8:00	8:00-9:00	17:00-18:00	18:00-19:00	24hrs
Franklin Street (Eastbound) at Victoria Street	133	136	331	316	2,974
Franklin Street (Westbound) at Swanston Street	243	307	174	147	2,958

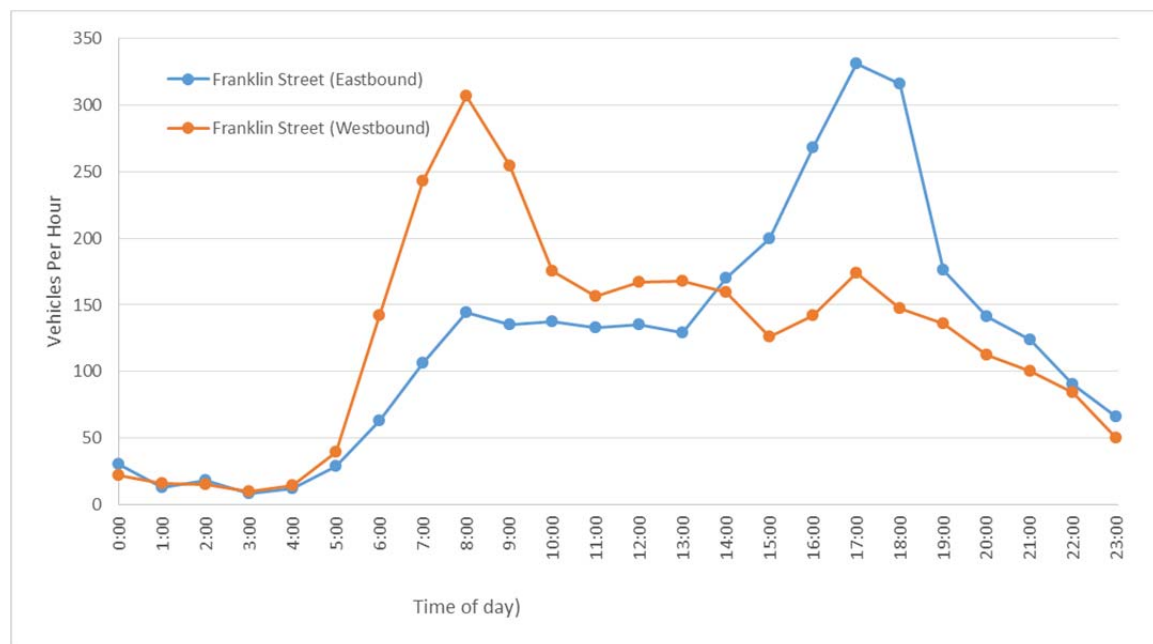


Figure 1: Traffic volumes on Franklin Street on the eastbound and westbound approaches to Swanston Street

(c) CBD North intersection reference in Table 8-24

(i) Reference

- (c) Please confirm whether the second intersection in table 8-24 should be labelled as Swanston Street/Franklin Street and whether the four approach rows should read Swanston Street (N), Franklin Street (E), Swanston Street (S) and Franklin Street (W).

(ii) Request

- Confirmation that the second intersection in Table 8-24 has been correctly referenced as Elizabeth Street / Victoria Street or whether it should have been referenced as Swanston Street / Franklin Street

Response:

- It is confirmed that the second intersection in Table 8-24 should refer to Swanston Street / Franklin Street. The tables in the Modelling report in Table 5-13 and 5-14 in Appendix B of the TIA confirm that the values reported are for the Swanston Street / Franklin Street intersection.
- A corrected version of the table is shown below with the changes highlighted in red.

Table 4: Intersection Performance – 2021 Construction Case (60% traffic via Swanston Street, 20% via La Trobe Street)

Intersection	Approach	AM Peak			PM Peak		
		Degree of saturation	Max Queue (veh)	Ave delay (sec)	Degree of saturation	Max Queue (veh)	Ave delay (sec)
Swanston Street / La Trobe Street	Swanston Street (N)	0.22	9 (bike)	20	0.21	5 (bike)	20
	La Trobe Street (E)	0.92	38	21	0.64	11	8
	Swanston Street (S)	0.24	2 (bike)	23	0.24	4 (bike)	22
	La Trobe Street (W)	0.67	12	8	0.89	32	17
	Overall	0.92	38	17	0.89	32	15
Swanston Street / Franklin Street	Swanston Street (N)	0.85	13	30	0.69	11	38
	Franklin Street (E)	Closed			Closed		
	Swanston Street (S)	0.20	3	34	0.45	10 (Bike)	37
	Franklin Street (W)	0.20	2	6	0.69	6	6
	Overall	0.85	13	30	0.69	11	24
Swanston Street / Victoria Street	Swanston Street (N)	0.89	12	37	0.81	7	55
	Victoria Street (E)	0.84	21	23	0.75	14	8
	Swanston Street (S)	1.01	9	50	0.75	12	30
	Victoria Street (W)	0.94	37	44	0.71	19	16
	Overall	1.01	37	34	0.81	19	18

Source: Sidra model outputs

(d) Arden truck volumes

(i) Reference

(d) Please provide any data on existing truck volumes in the Arden precinct.

(ii) Request

- *Data on existing truck volumes in the Arden precinct.*

Response:

11. Limited truck volume data for the Arden precinct is available. Truck data will be provided when it becomes available.

CORRESPONDENCE: No correspondence.

ATTACHMENTS: No attachments.