

**WEST GATE TUNNEL PROJECT ENVIRONMENT EFFECTS STATEMENT**  
**INQUIRY AND ADVISORY COMMITTEE**

**MARCO LUCIONI**

**EXPERT WITNESS CALLED BY THE CITY OF MELBOURNE**

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**TECHNICAL NOTE** #3

**DATE:** 28 August 2017

**LOCATION:** **Port, CityLink and City Connections**

**EES/MAP BOOK REFERENCE:** Technical Report A - Transport

**SUBJECT:** Response to Project Note 40 – traffic and transport microsimulation modelling

**NOTE:**

1. This Technical Note has been prepared in response to Project Note 40 submitted by the Western Distributor Authority (the **WDA**) to the Inquiry and Advisory Committee on 16 August 2017.
2. Mr Lucioni has reviewed Project Note 40.
3. Mr Lucioni's opinion is summarised in the attached document.

**RESPONSE FROM MARCO LUCIONI** The attached paper sets out Mr Lucioni's opinion as to the WDA's Project Note 40.

**CORRESPONDENCE:** N/A

**ATTACHMENTS:** Further detailed analysis is attached.

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**DYNON ROAD / DRYBURGH STREET**

The extent of the road network covered in the microsimulation model is considered inadequate to form an opinion on the operational performance of the intersection of Dynon Road and Dryburgh Street.

From the footage provided by the WDA (Port CityLink city connections AM.mp4), the model suggests a maximum queue length in the order of 135m for eastbound traffic on the western leg of the intersection, with all vehicles clearing during each associated phase. Observations carried out at the intersection on different weekday mornings in July and August 2017 indicate that this movement currently experiences queue lengths of 380m with some vehicles not able to clear during the phase.

Queue length observations also reveal that eastbound queue length at the intersection of Abbotsford Street and Spencer Street extends back to the Dynon Road / Dryburgh Road intersection, influencing the capacity of the eastbound movement through the Dynon Road / Dryburgh Street intersection and contributing to the abovementioned 380m queue.

By excluding the immediate downstream intersections on Spencer Street (ie: Abbotsford Street & Hawke Street) the model ignores any influence on eastbound flow/capacity/queue length and delay.

In my view the following intersections should be included as a minimum, particularly given forecast volumes are available (ie Figure 161 Technical Report A). Including these intersections would be consistent with scope adopted by WDA for other on/off ramps (ie: Millers Road and Williamstown Road which consider at least 2 arterial intersections north/south of the Freeway).

- Spencer Street / Abbotsford Street
- Spencer Street / Hawke Street
- Dryburgh Street / Victoria Street

