NE Link EES IAC: Expert Witness Statement (additional material)

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Numbers of cars on the road for work trips

Mees & Groenhart 2012
ABS Census data for 2016
VicRoads’ Traffic Monitor is a collection of observations that measure efficiency across Melbourne’s freeway and arterial road network. The Traffic Monitor contains indicators including Vehicle kilometres travelled (VKT), Average travel speed, Occupancy, Travel time etc. on freeways and arterial roads, for peak & offpeak travel period duration.

Indicators have been reported on an annual basis (Financial or Calendar year) since 1994 and this report covers the last 10 years. In the last 10 years, other influencing factors such as Melbourne’s population and Victoria’s gross product have increased respectively by approximately 20% and 30%.

A new data collection methodology was introduced in Financial year 2013-14, for calculating Average Travel Speed and Travel time, which is more accurate and efficient. As a result, old and new methodology data should not be compared.

### Financial Years Key Observations

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Last 10 years up to 2014-15</th>
<th>2014-15</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Occupancy</strong> - Average No. of people per car</td>
<td>Decreased from 1.21 to 1.19</td>
<td>Remained consistent</td>
</tr>
<tr>
<td><strong>Bicycle traffic volume</strong></td>
<td>Increased by 38% over 8 years</td>
<td>Increased by 0.3%</td>
</tr>
</tbody>
</table>

### Historical 10 years up to 2013-14

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2014-15</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Average travel speed (AM Peak)</strong> - Entire metro network</td>
<td>Decreased by 3.8 km/hr</td>
</tr>
<tr>
<td><strong>Average travel time (AM Peak)</strong></td>
<td>Increased by 84 seconds per 10 km</td>
</tr>
</tbody>
</table>

### Calendar Years Key Observations

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Last 10 years up to 2015</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vehicle Kilometres Travelled (VKT)</strong> - Total kilometres travelled by vehicles on Melbourne’s freeway and arterial road network</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entire metro network</td>
<td>Increased by 16%</td>
<td>Increased by 0.9%</td>
</tr>
<tr>
<td>Freeways</td>
<td>Increased by 49%</td>
<td>Increased by 1.5%</td>
</tr>
<tr>
<td>Arterial Roads</td>
<td>Increased by 2%</td>
<td>Increased by 0.5%</td>
</tr>
</tbody>
</table>

For further information and interpretation, please contact the VicRoads Media Unit: vicroadsmedia@roads.vic.gov.au
The ‘Downs-Thomson’ Effect

Traffic volumes have a direct relationship to the relative travel time by public transport, so investment in roads at the expense of public transport will make congestion worse …
The need for a Suburban Rail Loop

Planning for Melbourne’s economic and population growth

Melbourne is Australia’s fastest growing city, with population projected to reach almost 8 million people by 2051. This growth will require some 1.6 million additional dwellings and 1.5 million jobs to be created, as well as significant investments in infrastructure, health, education and transport.

- 3.5 million more people
- 1.5 million more jobs
- 1.6 million more houses
- 10 million more trips/day
- Need to protect community liveability

Potential station
Potential interchange station
Suburban Rail Loop

Not to scale, for illustrative purposes only
Forecasting: Advocacy cloaked in the guise of rationality

Professor Martin Wachs (Senior urban planner at UCLA) said 30 years ago:

Forecasts are used to "cloak advocacy in the guise of scientific or technical rationality".

In jurisdictions across the world, researchers have consistently observed **forecasting inaccuracies** in both road and rail project assessments (including misleading analyses of the ‘no build’ case).

Forecasts are typically more favourable to the project than later reality: in both under-estimate of costs and over-estimates of benefits.

Samples of extensive literature include:


Explanations suggested in the literature:

- Unexpected events
- Technical problems with models
- Optimism bias (innocent enthusiasm)
- Strategic misrepresentation (deliberate distortion)

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Figure 1. Explanatory power of optimism bias and strategic misrepresentation, respectively, in accounting for forecasting inaccuracy as a function of political and organizational pressure.
All new transport investment must improve transit competitiveness

- State strategic planning objectives increasingly recognise imperatives of climate change, rising inequality, and the burden of disease exacerbated by physical inactivity.

- Meeting these objectives means improving the competitiveness of active and public transport in relation to passenger car travel.

- The EES process is fundamentally flawed in its failure to assess the project against these objectives,
Net CO₂ emissions
Gigatonnes per year

“Business as usual”

1.5°C warming scenario

1980  2000  20  40  60

The Economist; IPCC (2018)