Doncaster Busway

Delivering capacity and a gold standard facility

Victorian Transport Action Group
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Victorian Transport Action Group (VTAG)

• An independent transport discussion group.
• Made up of various professionals, who meet monthly to discuss transport issues and produce submissions.
• Members have expertise across transport, planning, State and Local Government, IT and the environment.
The North East Link EES process is strictly focused

• VTAG’s submission is framed to comply with the Panel’s guidelines, that will only consider submissions that are within the project proposed by Government.

• Whilst VTAG would recommend a light rail service from Doncaster to the city
  – VTAG noted that the published alignment removes the centre easement west of Bulleen Rd and involves curves and grades incompatible with rail.
  – The massive cost and disruption involved in a future conversion to light rail effectively also rules out this option.

• The Panel recognises that only the bus service is within scope, specifically along the Eastern Freeway.

• VTAG therefore focuses solely on the Doncaster Busway.
Key concerns about the proposed Busway

- The NELP proposed Busway design looks like an afterthought, with bus lanes stuck on the side, designed by freeway engineers.
- It is not a Bus Rapid Transit System and fails the international ITDP test. It runs half the distance, has too few stops and insufficient capacity.
- A proper BRT would have double the capacity (60,000 p/day) for future growth.
- The bus lane is not fully separated along its whole route.
- It lacks any additional bus stops to serve adjacent catchments.
- No capacity for increased services between freeway and CBD.
Modern buses can be a practical solution

• Melburnians have some prejudices against buses, built up over years of poor experiences.

• The critical factors for passengers are:
  ▪ capacity (which translates to overcrowding),
  ▪ frequency
  ▪ ease of access
  ▪ journey time
  ▪ Comfort

▪ All need to be addressed by the proposed service.
The Doncaster corridor has a complex network of existing bus routes

- A total of 13 bus routes use the freeway, with multiple exits
- NELP only considered the 4 DART routes
  - Bus stations need to provide for all destinations
  - Additional routes are required in the inner city to cope with the flow of buses coming off the freeway
- Extension of the 48 tram to Doncaster Hill is necessary
Choosing the right technology

• To reduce street side pollution heavy bus flows must be CNG or electric vehicles (already common in China)
• All vehicles fully accessible
• High capacity buses – (single level, articulated, multi door)
• Compatible with future “rubber wheel trams”
• Modern accessible bus stations
Its already happening...Brisbane Metro

- New double articulated vehicles ("rubber wheel trams")
- A length of 24-25 metres and capacity for 150 passengers
- High frequency – every 3 minutes in peak
- Separate bus stations and underground terminals in the CBD
- Two major routes with fully segregated freeway lanes
Benchmarking Bus Rapid Transit systems

The internationally recognised set of standards for Bus Rapid Transit (BRT) comes from the Institute for Transportation and Development Policy (ITDP) based in New York.

These standards are endorsed by the UN Habitat program, UNEP, several Foundations and transport expert bodies.

• It is based on a 100 point system that ranks systems as:
  ▪ Gold 85-100 points
  ▪ Silver 70-84 points
  ▪ Bronze 55-69 points
  ▪ Basic < 55 points

• A Busway or bus lane arrangement that fails to get at least 20 points across five core characteristics is not a BRT.
Doncaster Busway loses points in 18 categories

**BRT BASICS**
- Dedicated right of way
- Busway alignment
- Off-board fare collection
- Intersection treatment
- Platform level boarding

**INFRASTRUCTURE**
- Passing lanes at stations
- Bus emissions
- Stations set back
- Centre platforms
- Pavement quality

**STATIONS**
- Distances apart
- Safety and comfort
- Number of bus doors
- Sliding doors at stations

**SERVICE PLANNING**
- Multiple routes
- Express & local services
- Single control centre
- Serving top ten corridors
- Demand profile
- Hours of operation
- Multi corridor network

**ACCESS & INTEGRATION**
- Universal access
- Integration with PT
- Pedestrian safe access
- Secure bike parking
- Bicycle lanes
- Bicycle share scheme

**OPERATION DEDUCTIONS**
- Commercial speeds
- Peak passengers<1000
- Enforcement of ROW
- Gap -floor to platform
- Overcrowding
- Poor maintenance
- Low peak frequency
- Low off peak frequency
- Unsafe bike lane sharing
- Traffic safety data
- Buses running parallel
- Bus bunching

**COMMUNICATIONS**
- Branding
- Passenger Information

**STATIONS**
- Distances apart
- Safety and comfort
- Number of bus doors
- Sliding doors at stations
The scores show the current arrangement fails the test of being “Bus Rapid Transit”  

Doncaster Busway only ranks as a Bronze BRT

<table>
<thead>
<tr>
<th>Segment</th>
<th>Current</th>
<th>Post - NE Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doncaster P&amp;R to Victoria Park</td>
<td>26.3 Fails minimum</td>
<td>67.5 BRONZE</td>
</tr>
<tr>
<td>Victoria Park to City</td>
<td>Fails minimum</td>
<td>Fails minimum</td>
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</tbody>
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- The design needs fundamental improvements to score as GOLD
- More fundamentally, it is only “half a Busway”
- The inner section must be upgraded to enable full use of the freeway segment and delivery of adequate capacity
Key problem 1

... proposed at-grade intersection at Bulleen

- Alternative design provides for fully functional bus station
- Four platforms needed to serve merging routes
Key problem 2

...Lack of fully segregated lanes

- The NELP design lacks segregated lanes for last 2 kilometres.
- This avoids the cost of widening the Merri Creek Bridge but will mean delays for bus services.
- VTAG solution has separate lanes into Hoddle St bypassing traffic lights and giving direct access to Bus Station
- Small cost of a bus underpass of northern on-ramp
Key problem 3

... getting from Victoria Park to the city

• Current peak hour bus lanes along Hoddle St, Victoria Pde and Lonsdale St struggle with current bus volumes.
• Need to be full time, dedicated and enforced bus lanes.
• Key blockage at Victoria Pde turning right from Hoddle St> A short Bus tunnel could fix this.
• Proper bus stations needed in Lonsdale to speed boarding.

A second route along Alexandra Pde is also needed:
• This would service Fitzroy, Carlton, Melbourne Uni and new Parkville Station with some services going to West Melbourne.
• Could also interchange with proposed MM2 station at Fitzroy
Key problem 4

... lack of intermediate bus stops

• The bus routes can’t be effective unless there are multiple stops to get on and off over 11 kilometre length.

• VTAG is proposing additional bus stations at:
  ▪ Alfreda Crescent, Bulleen
  ▪ Bulleen Rd
  ▪ Belford Rd, North Kew
  ▪ Chandler Highway
  ▪ Victoria Park (Hoddle St option)

• Average gap between stops is 2.5 km – similar to rail network and gives approx. 800 m walk up catchment
What’s needed?

• A high standard busway can fulfil public demand in the corridor and deliver for local residents.
• But it must be built to carry higher capacity than planned.
• It must be a genuine express service from Doncaster to the city.
• Buses must appeal to patrons in respect of reliability, comfort and amenities.
• More stops to service future demand.