**SUBMISSION 746 - PRESENTATION TO THE NORTH EAST LINK PANEL**

**Introduction**

I fully agree with the proponent that congestion is a huge problem in the North East.

This is not surprising given the higher reliance on car travel than the rest of Melbourne.

The proponent’s solution is to use land acquisition powers to build the second widest freeway in the world.

The alternative design achieves the same increase in freeway capacity with:

- 90 percent less land acquisition
- Only 10 percent of costly environmental effects mitigation

**Recommendation**

*Implementation of the design alternative (as per EES Scoping Requirements, section 1.3)*

This involves a better use of the existing freeway through adopting strategies for a multi-modal transport system.

**Key Strategies:**

1. North East Rail Link
2. Bus Improvements
3. Car Travel Initiatives
4. Truck Improvements

The project identified that the lowest average car speed of all Melbourne’s freeways is the Eastern Freeway before Hoddle Street.

It is crucial to focus on this section of the freeway.

We are lucky that this section of the freeway contains a strategic Centre Reserve, which was put there to install train lines and finally provide full multi-modal transport.

Trains need to be included in the Reference Design.
**Recommend North East Rail Link**

A train line would substantially increase both capacity and travel speed.

- One train line can carry up to 6,000 people per hour
- One freeway lane can only manage up to 1,800 cars each hour, travelling at 100km per hour

A train line can do the work of multiple freeway lanes to increase capacity.

This means a reduction in land acquisition and the environmental footprint.

**The Proposal:**

Connect elevated train lines on the Centre Reserve from Bulleen Road to the already elevated train lines at Victoria Park Station near Hoddle Street.

The Northern suburbs are service by trains along the Hurstbridge line.

The Eastern suburbs are not serviced by trains.

A new train line linking the Northern and Eastern suburbs can be seamlessly connected at Victoria Park Station.

Train commuters would also avoid the nightmare congestion hotspots along Hoddle Street and Victoria Parade on the way to the CBD.

There are 22 sets of traffic lights that are avoided which gives train commuters enormous savings in travel times as well as increasing freeway capacity.

**Other benefits:**

- Train passengers can easily connect with buses servicing the new Bulleen park and ride at the Bulleen road end of the train line.

- Trains provide a convenient and inexpensive alternative for the one in five people who are not licenced drivers or do not own a car.

**Engineering Challenge**

Of course, elevated train lines present an engineering challenge.

Elevated train lines would be supported by pylons built on the extra wide sides of the Centre Reserve.

Pylon heights will encounter engineering difficulties navigating the bridge height overhead clearances between Bulleen Road and Victoria Park Station platform.
The bridge height clearances pose the same problem engineers have had for the fifty railway crossing removals being conducted across Melbourne.

Sometimes the solution is road under or road over, sometimes it is rail over or rail under.

The elevated train engineering problem is for experts to decide which is the best solution.

Compared to the Reference Design’s challenge of an Australian record 24-lane interchange at Bulleen Road, navigating bridge height clearances for elevated rail should be a breeze.

Apart from the exclusion of trains, another big deficiency in the Reference Design is that despite the Busway, a fall in bus trips is forecast by 2036.

**Recommend Bus Improvements**

Buses clearly need to be more flexible, frequent and reliable to attract more passengers.

For example, the North East Link offers a free regular bus service from train stations to the Veneto Club during panel hearings.

All freeway buses could adopt flexible Uber style booking technology, which picks up and drops off passengers from their homes to park and rides.

Bus routes would be reconfigured automatically to provide the shortest routes possible.

New bus technology is achievable in the 7-year project timeline.

This would attract more bus passengers and reduce the need for parking at freeway park and rides.

Bus passengers will also now be finally able to connect to trains at Bulleen Road using the new Bulleen Park n’ Ride.

This connection will especially suit time poor commuters who do not want travel speeds to slow down for merging traffic at freeway exits and entrances.

To encourage people to switch from cars to buses and trains, free public transport should be offered in the first year of freeway operation along the freeway.

These bus and train recommendations deliver huge savings in travel times and increased capacity without any new freeway vehicle lanes at all.

This reduces land acquisition and the environmental footprint.
**Recommend Car Travel Initiatives**

The freeway Centre Reserve can further increase capacity and flexibility.

This is through reversible lanes placed underneath the elevated train lines.

**Recommend Reversible Lanes:**

A reversible lane is a lane in which traffic may travel in either direction.

In turn, this adds capacity and gives faster travel times.

An example of a reversible lane is in Johnston Street Collingwood

The Centre Reserve can easily accommodate two reversible lanes separated from conventional lanes:

- In the morning peak, both reversible lanes are city inbound
- In the afternoon peak, both reversible lanes become city outbound lanes.

In peak periods, reversible lanes can do the work of up to four conventional lanes in the project

In off peak periods, inbuilt retractable safety separation barriers would allow the two reversible lanes to function as single conventional lanes.

Retractable separation barrier technology already exists but if the cost is deemed ‘too prohibitive’ then the two reversible lanes could at all times operate together in the same direction.

Either way, reversible lanes would mean a further reduction in land acquisition and the environmental footprint.

**Recommend Carpooling Initiatives:**

Carpooling can deliver an enormous increase in capacity.

This is because driver-only cars require a lot of freeway space, getting worse because of longer and wider cars as well as increasing numbers of cars.

In the 7 year window, carpool apps would match drivers with the pickup times of nearby drivers to alternate driving and share the same freeway commute.

The resultant increase in freeway capacity further reduces land acquisition and the environmental footprint.
To increase carpooling, it needs to be made more attractive through rewards:

- Exclusive use of a freeway lane in peak periods
- Half price toll charges

This is fair as each carpool vehicle increases freeway capacity by an extra vehicle.

Carpool toll incentives would dovetail nicely with the project’s toll incentives.

The project itself advocates reduced toll charges in off peak periods to ease congestion.

More good news is that reduced toll charges for carpool vehicles have already proved successful congestion busters in other cities.

It is interesting to compare driver uptake of carpool technology with the proponent’s expectations for driver uptake of electronic car technology.

The proponent expects an uptake of new electronic car technology despite the absence of any incentives to make it a more attractive option.

The corollary of this expectation is that the proponent should also agree that carpool ‘driver match’ technology will also experience a higher uptake, even without the incentives recommended.

**Recommend Truck Improvements**

Install ramp metering to facilitate trucks sharing freeway shoulders with buses.

Each of the freeway shoulders would need to be strengthened and widened by one lane to safely accommodate travel for both trucks and buses on the three kilometres between Hoddle Street and Chandler Highway.

This distance is consistent with NEL community consultations two years ago when residents were advised there would be no more than a two-lane increase to the three-kilometre section of the Eastern Freeway between Bulleen road and Doncaster Road.

Each truck removed from conventional lanes increases freeway capacity for two cars on average.

This means further reduced land acquisition and a further reduced environmental footprint.
Advantages Using Alternative Design:

1. Delivers same capacity and more flexibility and a vital North East Rail Link
2. 90% less land acquisition
3. Smaller environmental footprint

Why is a North East Rail Link Not In Reference Design?

At a NEL EES information session I attended, I asked why trains are not in the Reference Design given its superior capacity and speed to buses and cars.

I was told that the gradient of the Eastern Freeway means it is not possible.

This answer only added to confusion as the EES itself states that the Reference Design does not preclude trains post-project.

Post-project train installation unnecessarily adds to costs and is even more of a financial burden on taxpayers.

The cost of a North East Rail Link can easily be funded in the $16billion budget.

A good ballpark figure for the likely costs (excluding elevation) of a North East Rail Link is the costs is the Perth Joondalup railway line extension of 7.5 kilometres of rail (NEL Project is 9.4 kilometres of rail) which cost $241million and was completed in three years time in 2014. The cost included three road-over-rail bridges and railway alignment.

To understand why North East Rail Link is not in the Reference Design we need to understand the choice to instead build the second widest freeway in the world.

Why did the proponent choose the environmentally destructive, sprawling 24-lane freeway instead of a North East Rail Link and a modest 2 lane widening (in parts of the freeway) as promised in community consultations two years ago?

The answer is in the incentives:

1. Land Acquisition Act

The proponent can conduct massive large-scale land clearing because of its powers under the Land Acquisition Act.

If a family was given land acquisition powers, they could demolish surrounding homes and a park, bringing pain and suffering to residents.
2. Record $16 billion Budget

The proponent has as much free land as it wants and a record $16 billion budget.

If the Government gave the family a $16billion budget, it could afford to rebuild a dream ‘Buckingham Palace’ home.

The family would not bother to consider a modest environmentally friendly renovation that gives the needed increase in living space.

3. Toll Income Generation

On top of this, the proponent can charge tolls to get an income.

Absence of Modelling for Design Alternatives

The absence of modelling for any alternative designs directly contravenes the EES Scoping Requirements 1.3.

As we know, all model comparisons are made with a ‘do nothing’ scenario.

Smaller scale freeway upgrades like the design proposed in this presentation were never destined to be considered at all.

This is because of the three gifts of free land, a huge budget and toll income.

This is another reason why a North East Rail Link is absent from the Reference Design.

Trains substantially reduce car travel trips, which substantially reduce the project’s toll income.

Absence of Modelling for Environmental Effects

Unfortunately, the NEL EES is largely a tokenistic gesture concerned mostly with using the term ‘minimisation of environmental effects’.

Minimisation is rarely quantified and too subjective for proper assessment. The Environmental Auditor will have an impossible job assessing the performance of the project when most of the environmental strategies use only the term ‘minimisation’ for the purposes of benchmark measurement.

Let us now compare which design is most compatible with State Government transport and environment policies
Policy Compatibility - Alternative versus NEL Project Reference Design

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<tr>
<th>Policy</th>
<th>Alternative</th>
<th>NEL Project</th>
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<td>Victoria's Climate Change Act 2017</td>
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<td>Yarra River Protection Act 2017</td>
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<td>Melbourne is a Sustainable and Resilient City (2017)</td>
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Clearly the design alternative is more compatible with transport and environment policies than the reference design.

I am now going to look at the impact on Recreational Value of Open Space (as per EES Scoping Requirements)

Recreational Value of Open Space

It is difficult for anyone to visualise the devastating loss to the community from land acquisition when it is completely unnecessary.

I was only able to help friends understand the enormity of this recreational land loss by showing them using Melbourne City Landmarks.

Melbourne City Landmarks:

- Royal Botanic Gardens: 38 hectares
- Shrine of Remembrance Memorial Gardens: 13 hectares
- Birrarung Marr: 8 hectares
- Yarra River (between Princes Bridge and Punt Road): 3 hectares
- Alexandra Gardens: 5 hectares
- Myer Music Bowl lawn: 3 hectares
- MCG: 2 hectares

**TOTAL** 72 hectares
Imagine if the project location cut through the City of Melbourne.

All of the 6000 trees, 45000 plants and open space in the Botanic Gardens alone would be bulldozed, just like the actual project.

Once the maximum 24-lane freeway is constructed, the Botanic Gardens are reduced permanently to half their original size, just like the beautiful reserves along the project corridor.

The 6000 trees destroyed cannot possibly be replanted in the shrunken space so seedlings are planted in outer suburbs. Again this is like the project.

City pollution worsens and temperatures soar in summer because of reduced green space. Again, this is just like the actual project.

The Yarra River between Princes Bridge and Punt Road would be buried in an underwater pipe and topped with freeway lanes.

This is exactly the project plans for the Koonung Creek, just 10 kilometres from the Botanic Gardens itself.

I walk along the The Koonung Creek wetland every day. I still can’t believe that 83 percent of this precious 45-acre suburban oasis will be sacrificed to the project’s enormous appetite for land.

I say sacrifice because all that was needed was to reengineer the existing freeway to achieve the same vehicle capacity and speed.

Each day, I see different groups enjoying recreational activities such as walking dogs, jogging, picnics, bird-watching, reading books, playing sport and learning how to ride bikes.

**Recommend:**

*No-Go Zone for both the Koonung Creek Reserve and the Banyule Creek Reserve*

Effects on cultural heritage values including Aboriginal cultural heritage (EES Scoping requirements)

Returning to the Melbourne landmark illustration, the proponent would seek to knockdown the National Trust heritage listed Shrine of Remembrance.

The Shrine is in the direct path of the freeway expansion.

The proponent would offer to take photographs of the Shrine as a permanent archival record.
This is exactly what the proponent wants to do with the National Trust Heritage listed 2019 Victorian Tree of the Year, an irreplaceable 300 year old River Red Gum in Bulleen that predates white settlement.

No tree in the Botanic gardens is older than this Bulleen tree.

Even reconfiguring freeway lanes to circle around the 300 year old tree or the Shrine would mean these heritage wonders would no longer be accessible to the public.

Please note I am not using this comparison to disrespect the shrine.

My intention is to show the proponents lack of understanding of our heritage.

And what would an EES conclude if it concerned the project located at Melbourne Landmarks?

Well, just like the NEL EES, it would conclude a near zero impact on the environment.

How can this be so, you might rightly ask.

The answer lies in the NEL EES:

- Valuing a mature tree in the Botanic gardens exactly the same as a seedling planted suburbs away. In other words, trees are just tree

- Each hectare of land taken from the Botanic Gardens is no more valuable than each hectare of treeless wasteland on the fringes of Melbourne. In other words, land is just land.

The freeway gets the go-ahead to destroy Melbourne’s landmarks. Locals are unhappy, visitors are unhappy just like the project.

The comparison to the city gardens is incredibly useful as it shows us all how our community will suffer when public parks and facilities are destroyed unnecessarily.

**Rail or Snail**

The design choice comes down to rail or snail.

For 40 years, eastern suburbs residents have been waiting patiently for a North East Rail Link.

The Reference Design does not contain trains.

The lack of trains as a transport option sadly means that building bigger roads is fated to build bigger traffic congestion problems in a short time after completion.
This is a missed opportunity to avoid the ‘snail’ fate of every other major freeway widening in the world, including in Victoria.

**Conclusion**

For 40 years, eastern suburbs residents have also been patiently re-vitalising the local parks, waterways and green spaces with native vegetation to create a healthy and liveable community to facilitate enjoyment of the many recreation uses.

It is so distressing that all these labours will be in vain if the Reference Design went ahead.

It makes no sense at all to unnecessarily lose vast amounts of community land to create freeway capacity that could easily be matched by an alternative design without such an enormous loss of land.

The alternative design finally gives the community the truly integrated multimodal transport system it has been waiting 40 years for.

The alternative design achieves this well within the project time frame.

The smaller-scale footprint gives enormous cost savings in environmental effects mitigation as a lot less needs to be done.

These project savings can be used to fund other vital infrastructure such as the urgent need for new recycling facilities and school upgrades.

It is a win-win situation for the alternative design instead of a lose-lose situation with the Reference Design.

*Please also note: Should the reference design go ahead, please adopt recommendations from Wildlife Victoria Submission which gives the only detail for timetabling construction schedules to prevent disturbing wildlife breeding cycles.*