Response to NELP Tech Note (Additional)

19. NELP Tech Note 55

The S.M.A.R.T. Taxpayer Design Layout for the Lower Plenty Road Interchange results from active Community consultation and is designed to determine the minimal workable surface footprint that may be required, using bored & mined tunnel construction, if a current or future inclusion of this interchange in the project is pursued.

As I have argued, the deletion of this interchange from the project would:

- not affect the functionality of a North East Link as it relies on the unlikely alteration of long established traffic patterns to access the M3 & M80 from Eltham, Diamond Creek, Rosanna, Heidelberg and Preston. Hence, this interchange would be redundant if the more effective M80, Grimshaw St & Bulleen interchanges are included;
- improve the project’s business case by substantially reducing the project’s capital costs, while maximising revenues & profits for the operator by compelling motorist to use a longer length of tunnel and avoid the surface road network. This reduced capital cost deleting this interchange and the simplified M80 interchange I detailed in my presentation could nullify any increased costs of extending the bored tunnels and could even be reflected in lower toll prices to travel longer distances along the North East Link;
- remove the only interchange in the Melbourne Free/Toll Way Network without an effective buffer to the adjacent Residences that would surround it. This is particularly problematic here the area was established with no provision for such a large roadway;
- remove an unnecessarily awkward road layout to navigate, which would discourage use by potential NEL users;
- reduce current surface road traffic volumes in the area by 35% in 2036, as I detailed in my submission and presentation of 14th August;
- preserve the natural amenity of the area, which the Community values pre-eminently, and would reduce the Greenshouse Gas footprint of the project by retaining established Woodlands and avoiding unnecessary land clearing and reinstatement;
- preserve established Community Links across Greensborough Road; and
- minimise social & economic disruption and nuisance during Construction.
The mechanics of the interchange layout detailed on Drawings MP 09e & MP 10e of the SMART Taxpayer Design would be as follows:

- Vehicles exiting the NEL North Bound Tunnel would:
  - Turn south at any time when safe to do so
  - Turn north through a controlled intersection

- Vehicles exiting the NEL South Bound Tunnel would:
  - Turn north & south through a controlled intersection

- Vehicles entering the NEL North Bound Tunnel from the North would:
  - Enter the intersection any time when safe to do so

- Vehicles entering the NEL South Bound Tunnel from the North would:
  - Enter the intersection through a controlled intersection

- Vehicles entering the either NEL Tunnel from the South would:
  - Enter the intersection through a controlled intersection

Traffic through the Controlled intersection would have 4 cycles:

1. North Bound Traffic in Greensborough Road
   → Greensborough Rd (North)
   → North Bound NEL Tunnel
   → South Bound NEL Tunnel

2. South Bound Traffic in Greensborough Road
   → Greensborough Rd (South)
   → South Bound NEL Tunnel

3.Exiting Traffic from North Bound NEL Tunnel
   → Greensborough Rd (North)
   → Greensborough Rd (South)

4. Exiting Traffic from South Bound NEL Tunnel
   → Greensborough Rd (North)

All standard ‘Diamond’ interchanges have 4 traffic cycles:

e.g. North Bound Entry & Local Through Traffic
     North Bound Exit
     South Bound Entry & Local Through Traffic
     South Bound Exit
All turning circles documented in the SMART Taxpayer Design comfortably exceed standards for B-double trucks.

While a standard ‘Diamond’ interchange may have a more efficient configuration with minimal travelling distances, the number of traffic cycles would be the same. It has always been acknowledged that a standard ‘Diamond’ interchange would not be appropriate here, and that any Lower Plenty Road interchange would be located in a physically restricted area within an established residential area.

The resulting awkward & inefficient configuration of any Lower Plenty interchange would discourage its use by motorists and intrude into the Community and natural open spaces both during construction and on-going operation. The SMART Taxpayer design layout aims to at least minimise such intrusions.

Please note that the SMART Taxpayer layout for the Lower Plenty Road interchange was developed prior to the issuing of Technical Note 33 in which NELP claims this interchange would attract 65,000 vehicles/day and was based on SMEDtech’s forecast of around 9,500 vehicles/day or around 400 vehicles/hour.

*(NELP’s current traffic volume claims are not only inconsistent with SMEDtech’s forecasts, but contradict their previous advice to Community members that the original Reference Design layout would attract 35,000 vehicles/day and that restricting access from Greensborough Road only as has now been proposed by NELP, would reduce the forecast volumes to under 10,000 vehicles/day.)*

If SMEDtech’s (& NELP’s originally advised) traffic volume forecasts are valid, the suggested layout for a Lower Plenty Road interchange in the SMART Taxpayer Design would:

- Minimise the surface impact to the Simpson Barracks Woodlands, the Banyule Creek, local wildlife. Local Community amenity, and Army operations;
- Not compromise the safety and performance of both the North East Link and the local surface road network.

However, at these volumes, the Business Case for including an expensive Lower Plenty Road Interchange would be questionable at best.
If NELP’s latest traffic volume projections are valid, then the SMART Taxpayer Design Interchange Concept could be refined if necessary to be as functional as the Reference Design Layout detailed in Technical Note 33, but neither could avoid creating traffic congestion at the southern end of Greensborough Road by attracting an additional 56-60,000 vehicles/day, nor discourage ‘Rat Running’ through the back streets of Macleod & Viewbank to avoid this congestion, thereby contradicting the Government’s claim that a North East Link would ‘dramatically’ reduce traffic volumes on local Banyule Roads.

Finally, I remind the panel that I did state that despite not being able to secure funding to formally engage engineering or other consultants, I was able to obtain some informal voluntary advice from appropriate consultants I have previously worked with in my professional life, which I supplemented with my own research in the preparation of the SMART Taxpayer Design. It has even been an enjoyable experience.

I reiterate that the substance of this project is primarily as a ‘People Project’, not a ‘Road Project’, and finer technical details are marginal to getting the broader conceptual design correct, for which I am more than qualified and recognised.

The Banyule Community is supportive of having a North East Link, and is prepared to accept the chosen alignment, but cannot accept an imposed Reference Design Concept that not only fails to deliver on their aspirations, but would actually degrade their Community and psychological wellbeing, unlike the Community driven SMART Taxpayer Design.

Is this the Legacy this Government wishes to leave people of Banyule? And if so, why?

Fred Buono
Community Member,