Submission Cover Sheet

North East Link Project EES IAC

114

Request to be heard?: Yes

Full Name: ROBERT ALLEN SLATER

Organisation: APPLEWOOD RETIREMENT VILLAGE

Affected property: ALL PROPERTIES WITHIN APPLEWOOD RETIREMENT VILLAGE (480 RESIDENTS)

Attachment 1:

Attachment 2:

Attachment 3:

Comments: See attachment

APPLEWOOD RESIDENTS' COMMITTEE

5 Grand Boulevard, Doncaster, Victoria 3108

Email: [redacted]

25th May 2019

NORTH EAST LINK PROJECT
SUBMISSION TO PLANNING PANELS VICTORIA
FROM
APPLEWOOD RETIREMENT VILLAGE RESIDENTS COMMITTEE

PREAMBLE

The purpose of this submission is in response to the Environment Effects Statement issued by the North East Link Authority, to comment on the merits of the project as a whole and on specific aspects which affect the 480 or so residents of the Applewood Retirement Village located in Tram Road Doncaster adjacent to the Eastern Freeway.

The EES is a massively bureaucratic document of over 10,000 pages covering technical studies in 18 specialist disciplines dealing with multiple guidelines, standards, strategies, framework, policies, design elements, management plans plus extensive maps. This makes the EES hugely complex and difficult to read and understand.

Although the EES document is extensive, there is an absence of hard data which would permit the reader to form a clear view on the extent of impact. There are comments on environmental effects at considerable length, but with no substantiation with specific information. For example there is no detailing of the encroachment of the freeway onto parkland, the areas where trees are to be removed, or the coverage of the Koonung Creek. Before and after location plans would have been particularly helpful in understanding impacts and it is a serious omission that this feature has not been included. It would have saved a vast amount of text.

1. COMMENT ON THE PROJECT AS A WHOLE.

1.1 Selection Process

The process of selection of the most appropriate option was severely flawed.

- The costs used in defining the cases were entirely superficial, without any depth or substance.
- Option A was selected as the lowest cost without any consideration of upgrade of the Eastern Freeway and the major disruption that would entail. This realisation has caused a massive increase in costs and removed the large initial cost advantage.
- The consultation process was invalid in that many opinions were sought after the decision had already been made.

The present EES review process does provide an opportunity for input, but it should also recognise the need to totally reassess the best option and value for money for provision of the missing North East Link.

1.2 Traffic Flow

The "Missing Link" intended to complete the connection of East Link to the M80 to take orbital traffic away from radial commuter traffic. It had the intention to relieve the Monash and Eastern Freeways as well as suburban feeder roads.

There are two transport connections to be considered: – firstly orbital connections representing in part freight movement between the North and South East such as interstate connections, distribution centres and airport connections; and secondly radial connections largely covering commuter traffic. The aim of the Metropolitan Ring Road is to service orbital connections and separate peripheral and heavy freight in particular from radial commuter traffic.

An analysis of traffic movements shows that Option A fails to separate these two modes and in fact combines them with a massive expansion of the Eastern freeway, mixing heavy freight with commuter traffic to the maximum extent and creating great potential for future disruption of major traffic flows.

All orbital traffic connections presently find their way to the Eastern Freeway which is essentially a radial connection, and this component will grow substantially and at a significantly higher rate than commuter traffic. Separation of the orbital flow by completing the original planned link as in Option C would immediately reduce traffic flow on the Eastern Freeway and it is estimated that traffic flows up to 2036 would not be substantially higher than at present, limiting any need for significant expansion.

The other issue in this regard is the capacity of the East link Mullum Mullum tunnels which are already stretched to capacity at peak times and will represent a major bottleneck for any additional traffic load from Option A. Any solution to such a constraint would be enormously expensive. The EES report is silent on this aspect, but it will incur major costs if the tunnels are to be duplicated and is another major cost consequence of Option A which the public would bear in some way. As with the Eastern Freeway, traffic flows will actually be reduced under Option C, and by 2036 will only be marginally above present-day traffic volumes, eliminating any need for near term expansion.

Hence from a traffic viewpoint Option A makes little sense and completion of the link outside of existing radial freeway traffic will provide the best long-term outcome.

It may be that growth in commuter traffic from the North East will in future require an additional Yarra River crossing in the east. However, that situation will be relieved for a considerable time by removing orbital traffic and particularly heavy vehicles from present cross traffic flow to the Eastern Freeway. It is also suggested that this need could be accommodated by upgrading existing roads with only minor new road and bridge construction, but at some time in the future.

Option A will -

- Increase the mix of orbital and radial commuter traffic and the potential for major traffic disruption.
- Increase the flow through the East Link tunnels.
- Increase vehicle numbers at already heavily congested Hoddle Street (which should have been solved by building East West Link)

- Increase traffic in feeder roads to the Eastern Freeway such as Springvale Road, Blackburn Road, Middleborough Road and Station Street, which are already heavily congested during peaks.
- Increase the concentration of air pollution in a highly populated area.
- Impact significant areas of linear parks along the borders of the freeway.

Option C will provide this link as originally intended, and will remove orbital traffic presently using the Eastern Freeway, removing any need to upgrade beyond Bulleen Road and reducing present congestion. It will provide an alternative route in the event of major traffic disruption.

Option A is quite contrary to sound traffic planning in comparison with alternative direct connections to Eastlink.

It should be noted that had the incoming Victorian Labour Government proceeded with the contract to build the East West Link, this key infrastructure project would have been nearing completion to ease the horrendous traffic snarls at Hoddle Street, but the decision was taken on idealogical grounds to tear up $1.3 billion of public money which was a massive waste.

1.3 General Unit Costs

From an analysis of past major freeway projects in Australia (See Appendix 2), the unit costs of construction have been estimated as follows-

	Roadway	Elevated Road	Tunnel
Average cost $ million per lane kilometre	15	35	160
6 Lane freeway cost $mill. Per km	**90**	**210**	**960**
Maximum cost $ million per lane km	22	50	207
Max. 6 lane freeway cost $ mill. Per km	**132**	**300**	**1,242**

The costs used in the Options selection process were $300 million per km for roads ($50 m per lane km), and $1,000 million per km for tunnels ($167 per lane km).

Australian costs are substantially higher than the rest of the developed world and are around 50% higher than similar construction costs in the USA which already has higher labour costs. This discrepancy has been raised many times, but never satisfactorily explained.

1.3.1 Option A Costs

Using this data the cost of the Option A link from the M80 to the Eastern Freeway including the interconnection plus the Eastern Freeway upgrade has been estimated as –

Item	**Best Estimate cost $m**	**Maximum estimate cost $m**
Link from M80 to Freeway	5,611	7,379
Eastern Freeway upgrade	1,952	2,854
Total Project Cost	**$7,563 million**	**$10,233 million**

(See Appendix 1)

This cost includes 150 lane kilometres of roadway, 4.6 km of tunnels, 12 road bridges and 6 foot bridges.

This compares with the latest budgeted cost provided by the Victorian State Government of $15,800 million – more than 100% above the cost based on average construction costs and 50% above the maximum. In relation to comparable costs in the rest of the world these figures are extraordinary. No details have been provided to justify the budget costs.

It is worth noting the comparison with East Link – 35 km, 6 lanes (or 210 lane kilometres), 1.6 km of tunnels, 17 interchanges and 88 bridges, which cost $2.5 billion ($3.9 billion in updated 2019 dollars or $19 million per lane km overall). Even the best estimated cost for Option A is double the cost of East Link for a shorter length of roadway and yet the Government figure is double that again.

1.3.2 Option C Costs

The details given for Option C allowed for extensive tunnelling to cross the Yarra River. In terms of environmental protection this is grossly excessive and an unnecessary cost in terms of total public benefit. An elevated roadway would satisfy most of the protection requirements and would allow for future expansion. On this basis and using the above cost data the cost of Option C is estimated as follows-

Item	**Length km**	**Best estimate**	**Max. estimate**
Surface roadway	9	$810 m	$1,198 m
Elevated roadway	7	$1,470 m	$2,100 m
Tunnel (Mullum Mullum Reserve only)	4.5	$5,062 m	$5,062 m
Power line relocation	17	$50 m	$50 m
Total	**20.5**	**$7,422 million**	**$8,410 million**

There would appear to be opportunities for reducing the length of the tunnels through the Mullum Mullum reserve in this case which would further reduce costs.

Option C is a lower cost than Option A and is far more satisfactory in terms of traffic flow, potential for future upgrades, minimal disruption to existing infrastructure, and to maintaining the present amenity surrounding the Eastern Freeway.

2. IMPACT ON BUSINESSES.

The Bulleen business precinct contains some 96 businesses which will be eliminated. This involves well established services area and will be a significant loss of amenity to the surrounding area. The cost implications are not just the compensation for the land on which those businesses are located, but the loss of business income, loss of local employment and the increased costs of alternatives to be sourced by many of the customers. There are few such precincts within the Manningham Municipality which means that many businesses will need to relocate well away from the area and this is completely unnecessary if alternative routes had been selected. These aspects were never considered in evaluating the associated cost for each of the alternative options but can be of considerable significance to the overall community cost.

3. ENVIRONMENTAL IMPACTS.

The environmental impacts of the total project as outlined in the EES affect a large number of people and impose major disruption to general amenity and daily life for an extended period of time – up to seven years of construction. This impact for the alternative route (Option C) would be a fraction of this impact on people, businesses, public parks and normal commuter traffic flow, and with much greater facility for future growth without even more disruption.

The proposed intersections to handle the increased traffic flow are complex and occupy large areas of land. Without doubt this complexity will confuse many motorists, particularly those who are not frequent travelers on the system.

Specific impacts to the Eastern Freeway between Doncaster Road and Middleborough Road which affect Applewood residents are provided below:-

3.1 Construction Phase Land Use.

Clearly the construction phase will impact on access to parklands and walking tracks on either side of the freeway and in some cases will block normal through routes. This will have a particular impact on village residents who make wide use of these facilities. Occupation of the Frank Sedgman Reserve and Eram Park for construction purposes is unclear. It is shown in the plans as within the project area, but clearly the main construction compound adjacent to the village will be Elgar Park and Katrina Street Reserve. It is taken that the walking tracks in these areas and in construction areas will be blocked.

There will also be the impact of noise, odours, dust and air pollution from construction activities. In assessing the impact of this it is important to recognise that a construction time of 7 years will be a large part of the remaining lifetime of many retirement village residents and they will have to endure this disruption for much of the rest of their lives. This applies to over 480 residents.

3.2 Freeway Expansion.

The freeway will expand by 7 new lanes to 13 from Doncaster to Elgar Road, by 6 new lanes to 12 from Elgar to Tram Road, and by 4 new lanes to 12 from Tram to Middleborough Road plus an additional 8 lanes of ramps taking the total width to over 20 lanes in places in the latter case.

Only the Doncaster Road bridge will be reconstructed, meaning that 12 lanes will have to pass beneath Elgar Road and Tram Road bridges, where there are now 6 lanes. A rough assessment indicates the width beneath the bridges could be around 46 metres. 12 lanes occupy 42 metres leaving only 4 metres for three median barriers and no emergency lanes. The absence of emergency lanes implies the risk of much greater traffic disruption in the event of even minor breakdowns or accidents, and reduced safety.

3.3 Resumption of Parkland

There are two aspects of the subjugation of parkland. First by its temporary use for construction facilities as discussed above and second by permanent expansion of the freeway. Since there are no clear before and after plans it is difficult to assess the impact. It would appear that the park walking tracks will eventually be restored within a reduced area, but the Koonung Creek will be underground for significantly greater sections, given as 1.6 km in total. With the clear silting of present covered section and accumulation of debris and vegetation, there must in time be a significantly increased risk of flooding.

It is difficult to assess the extent of resumption of parkland without specific before and after plans.

The Doncaster Park and Ride will be temporarily moved for up to three years to Koonung Creek Reserve on the opposite side of the freeway and some 400 metres from the present site. This will certainly inconvenience many commuters using bus services and may well impact adversely on the use of that service and shift some parking to suburban streets closer to Doncaster Road bus stops.

3.4 Air Pollution.

The increased traffic flow on this section of freeway will lead to an increase in air pollution and in fact the potential to more than double the mass of pollutants to which all residents along the freeway are already exposed. This may be reasonable at present, but is noticeable at times (particularly on still days) and will therefore deteriorate substantially, particularly as more heavy diesel truck traffic will be using this section of the freeway, which raises health concerns. There is nothing that can be done to alleviate this impact other than avoidance, and this is best achieved by greater distribution of the pollution load, such as by use of the alternative outer eastern route.

3.5 Noise.

The other aspect of increased traffic flow is the increased noise level. Theoretically a doubling of traffic should double the noise level or result in an increase of 3 dBA. However there will be a much greater increase in heavy truck traffic which contributes disproportionately to the noise level and the final indicative level is somewhat unknown. Projections given in the report suggest an increase of only 2 dBA in the higher values, which is questioned. Between Elgar Road and Tram Road there is some replacement of lower level noise walls on the north side, but almost entirely new walls are planned on the southern side. A high noise wall on the southern boundary of the freeway will greatly change the visual outlook from the Applewood village from a wide green canopy vista of trees to an ugly harsh bare concrete wall and will be a major degradation to residents. There will also be the risk of reflection of noise from the wall, particularly to positions at higher levels in the village and will possibly accentuate the noise level increase. Plans indicate that the southern boundary noise wall is constructed on the edge of the freeway. This does not allow for the screen planting of trees in front of the wall to at least soften the view and potential for sound reflection.

It would appear that the present noise limit for the Eastern Freeway is 68 dBA and this will be reduced to a new standard of 63 dBA. Most areas fall within this limit at present with Applewood Village given as a maximum of 64 dBA. With increased traffic this must mean extensive replacement of noise walls with increased height, which is not only unnecessary in most instances without this expansion, but seriously reduces the visual amenity of surrounding residents. Applewood residents will be concerned over the construction materials, design and location of any new noise walls close to the village and the capacity to perform to the stated noise standard. Walls up to 10 metres high are mentioned which in many cases probably exceeds local building height regulations.

It is noted that the curved glass noise barriers on the south eastern side of Doncaster Road intersection are being fully replaced. This is an example of scrapping and replacing relatively effective and expensive infrastructure.

3.6 Treescape.
The Manningham municipality and surrounding suburbs are known for its trees and green canopy which is highly regarded by residents and any proposed reduction will be viewed by them with great concern.

This appears to be impacted by both freeway expansion and by construction activities. The number of trees to be removed in total is mentioned (707 trees between Doncaster Road and Tram Road and 1,570 trees from Tram Road to Springvale Road), but no information appears to be provided on specifically where those trees will be removed and the adverse impact on visual amenity until replacement trees mature. Although 880 and 2,380 replacement trees are planned they will take another 20 years to mature.

The Eastern Freeway tree coverage is now reaching reasonable maturity after many years of growth and provides a well-developed and pleasant landscape. To start again is a travesty and will require at least two decades for reasonable restoration. This will be a significant loss affecting many people, including Applewood residents, which could largely be avoided by selecting the alternative eastern route for the North East Link, which indeed can follow a largely cleared power line reserve for most of its length.

4. **Local Traffic Movement and Safety**
The EES makes no mention of expected higher traffic flows along arterial roads, Elgar Road, Tram Road, Middleborough Road, Blackburn Road, Springvale Road from increased local traffic and toll avoiders not wanting to use NEL.

Traffic movements along Tram Road are heavy especially at peak periods and continue to increase from residents of new apartment blocks at Doncaster Hill and development of Tullamore Estate. Council has placed concrete islands in all side streets on the east side of Tram Road and with right hand turns banned on the west, all traffic remains in Tram Road.

Applewood residents are increasingly concerned over safety and the difficulty and danger associated with entering and leaving the village on Tram Road with peak periods becoming increasingly hazardous. This serious safety concern is exacerbated by the ever-rising number of illegal u-turns conducted by motorists at the village entrance. An added problem is that bus passengers (including school children) alight at the bus stop & cross busy Tram Road rather than walk down to the pedestrian operated traffic lights at the freeway entrance.

4.1 Pedestrian Safety
Manningham City Council produced a report titled "North East Link – Preliminary Issues and Opportunities" containing 19 recommendations for consideration by the North East Link Authority.
Under Walking and Cycling Opportunities at 5.2.4 (c) Safe Crossing Points it recommended:

> Tram Road, Doncaster: Pedestrian Operated Signals should be provided at Grand Boulevard (with vehicle detector loops in Grand Boulevard), to improve pedestrian and vehicle access to the Applewood Retirement Village.

In discussions with NELA Representatives Applewood residents were encouraged to believe that consideration would be given to incorporating the construction of pedestrian operated traffic lights (POS) at this location, with vehicle activation in the village, as part of preliminary works by NELA associated with expected future changes to traffic movements resulting from NEL.

EES does not include any comment on this important issue for Applewood residents which is very disappointing, so **we urge the North East Link Project to now consider including POS with vehicle activation as part of NEL preliminary works program.**

5. Conclusion

Implementation of the project will create major disruption to many communities along its path for a period of up to 7 years and is considered to be an unacceptable consequence. It will destroy much of the good work from the previous freeway project in developing adjacent parklands, vegetation and community infrastructure. It will adversely impact an established and highly populated urban environment in many ways which can be completely avoided with adherence to the original plans for the North East Link using such as Option C. There will be impacts from that route, but it will be far less than the present plans. It will avoid potential future traffic bottlenecks such as the Eastlink tunnels, it will largely separate radial commuter traffic from orbital traffic flow and if constructed sensibly using elevated roadways in the place of extensive tunneling for the Yarra River crossing will cost less in direct capital expenditure, let alone overall cost to the community. That should free resources for alternative uses such as improved public transport for the north east of Melbourne to in fact reduce car use and the need for any increase in load on the Eastern Freeway. This project is indeed symptomatic of the short-sighted view of the future transport needs of this region.

Completion of the North East Link is certainly necessary, but along the line of the original concept at minimal cost to the community and with more far reaching solutions to the total transport problem. The selection of alternatives for this project was severely flawed as it completely ignored the need to expand the Eastern Freeway and the consequences. In the light of the revelations of the consequence of the project and its construction from this EES, it is essential that the whole selection process is revisited.

Any criticism contained in this submission is largely levelled at the flawed political process of option selection and not at the North East Link Authority which has worked within its political constraints. Clearly NELA have had no scope to evaluate alternative options in any depth, which should have been the proper way to proceed with a project of this magnitude and consequence.

Yours faithfully,

Bob Slater, AM
Chair
Applewood Residents' Committee
[redacted]

ARC Representative for interviews:

Roderick Sinclair
[redacted]

APPENDIX 1

Details of cost estimates for the M80 to Eastern Freeway link including the interconnection.

Item	Best Estimate $ m	Max. Estimate $m
Surface roadway – 6 lanes of 4.1 km.	369	541
Trenched surface roadway – 6 lanes of 2.7 km	405	518
Two 3 lane tunnels each of 4.6 km	4,416	5,713
Rebuild Greensborough Rd - 4.8 km of 4 lanes	144	211
Other road additions – 1.2 km of 2 lanes	18	26
Elevated overpasses – total 7.4 L.km	259	370
Total	**$5,611 million**	**$7,379 million**

Similarly details of the cost estimates of the Eastern Freeway upgrade are –

Item	Best estimate cost $m	Maximum estimate $m
New road construction	1,303	1,911
Upgrade of existing lanes	260	389
Bridges	135	182
Sub total	1698	2482
Additional items at 15%	254	372
TOTAL	**$1,952 million**	**$2,854 million**

APPENDIX 2 AUSTRALIAN FREEWAY CONSTRUCTION COSTS

Name	*Length km*	*No. Lanes*	*Date*	*Cost $m*		*2018 Cost*	*$m per km*	*$m/km/lane*
Peninsular link - all ground level	25	4	2013	759		890	35.6	8.9
East Link - 1.6km of twin 3 lane tunnels	35	6	2008	2,500		3669	104.8	17.5
- road only	33.4	6	2008	1,275		1871	56.0	9.3
- tunnel component	3.2	3	2008	1,225		1798	561.8	187.3
City Link - includes 5km of tunnel	22	6	1999	2,200		4488	204.0	34.0
- road component	18.7	6		1,110		2264	81.0	13.5
- tunnel component	5	3		1,090		2224	444.7	148.2
Pacific Highway - Ballina	12	4	2011	640		791	65.9	16.5
Sydney West Connex -19km tunnels	33	6	2023	18,600		18600	563.6	93.9
- road component	14	6		1260		1260	90	15
- tunnel	38	3		17340		17340	456.3	152.1
Sydney West Link M7 - ring road	41	4	2006	2,300		3609	88.0	22.0
Hunter Expressway to Newcastle	39.5	4	2013	1,700		1993	50.5	12.6
Sydney Airport West	55	4	2017	3,400		3539	64.3	16.1
Perth - Great Eastern Highway	4.2	6		350		364	86.7	14.5
Average Road								14.4
TUNNELS								
Brisbane Airport Link M7 - tunnel	14	3	2012	4,800		5935	423.9	141.3
Sydney Cove Cross Tunnel	2.1	4	2005	1,000		1714	816.3	204.1
Sydney North Connex - 9km tunnel	9	2		3,000		3060	340.0	170.0
Clem 7 Brisbane - cross river tunnel	4.8	4	2010	3,200		3980	829.3	207.3
Average tunnel								172.9
Average 3 lane tunnel								159.8

Costs have been inflated by the construction cost index for road, rail and bridge construction as shown below with projections
beyond current indices at 3.8% per annum.

Year ended June	Inflator
1999	100
2000	101.5
2001	102.7
2002	103.9
2003	105.8
2004	112.5
2005	118.8
2006	125.0
2007	131.9
2008	138.4
2009	147.4
2010	163.7
2011	162.6
2012	165.3
2013	173.5
2014	176.1
2015	182.8
2016	189.7
2017	196.9
2018	204.4
2019	212.2
2020	220.3
2021	228.6
2022	237.3
2023	246.3
2024	255.7
2025	265.4
2026	275.5
2027	286.0