North East Link Technical Summary

City of Banyule – Submission to the North East Link Authority

Executive Summary

Banyule City Council (Council) has prepared this submission in response to the North East Link Technical Summary (August 2017) issued by the North East Link Authority (the Authority). As outlined in this submission, **Corridor Option C** is the correct choice to best meet the transport needs now and into the future and meet the objectives of the project set out by the Authority.

It is clear that benefits, particularly freight, can be derived from the North East Link, however it is critical that the correct corridor option is chosen. The Victorian Transport Association has confirmed in a letter to Council dated 19 September 2017 that its favoured option is Corridor Option C as it directly connects with Eastlink and will be the most attractive route for heavy vehicles.

Our Key Message for Government – The Freight Industry supports Corridor "C"

Significant freight and industry benefits can be derived from the North East Link, however it is critical that the correct corridor option is chosen.

The Victorian Transport Association has confirmed that its favoured option is Corridor Option C as it directly connects with Eastlink and will be the most attractive route for heavy vehicles.

Council is in no doubt that an improved transport network is essential to make travel in the region easier, more reliable and is necessary to cater for current and future growth. However, Council is concerned that the needs assessment in the Technical Summary starts with an assumption that a new road is required to meet future needs rather than considering the potential benefits of providing public and sustainable transport improvements.

In preparing this submission, Council has considered the response to a survey of its residents and undertaken a technical assessment of the limited information available in the Technical Summary and other information made publicly available by the Authority. There are concerns that the lack of more detailed information has compromised the community and other stakeholders' ability to carry out a rigorous assessment of the options presented.

Our Key Message for Government – What our Community is Saying – Corridor "C"

Council has provided the opportunity for all residents in Banyule to participate in a survey on the four route options proposed by the Authority. Council has been overwhelmed by the response from our community with close to 8,000 residents responding to the survey. This is a record for Banyule. We have never before had this level of engagement from the community on an issue in our 24 year history as a local government authority.

Of the nearly 8,000 responses 68% of residents do not support Corridor Option A with the strongest preference being for Corridor Option C. We urge Government to mindful of this response from the community in the selection of a preferred corridor and in its design and construction.

Technical Summary Gaps

The analysis presented to date is incomplete and potentially misleading. Corridor Option A requires significant improvements to the Eastern Freeway, however their extent does not appear in either the corridor definition, total route length or the costings. Council notes that there is much work to do, in particular in understanding impacts on the local community, environment and economic prosperity, as well as the benefits to freight traffic. Robust information and analysis is required,

and placed in the public domain, to facilitate a detailed assessment of the merits of each of the corridors prior to the recommended corridor being selected.

Additional Information Required

Council seeks the release of technical information and reports on, but not limited to, the traffic data collection and analysis; details of truck and private car volumes, geotechnical information; environmental, cultural and heritage impacts; connectivity and severance assessment; land acquisition; and costings of the total works associated with each corridor option.

Significant additional information needs to be provided regarding a suite of transport network improvements to allow a robust assessment of the likely benefits of each corridor. Alternative transport options which would help solve congestion problems include heavy rail, new light rail corridors and an enhanced bus network better catering for regional travel needs (particularly travel to the National Employment and Innovation Clusters which include tertiary education and medical/employment facilities).

Other Issues of Concern

Issues of community severance and arterial road traffic creating poor pedestrian and bicycle rider environments are barely addressed in the Technical Summary. Any corridor option chosen will need to include arterial road upgrades, yet both the corridor alignment and the surrounding upgrades will need to include improvement of active transport connections both along and across the corridors. It is not sufficient to minimise negative impacts on pedestrians and bicycle riders, as encouraging use of active modes is key to reducing congestion in the first place.

Public transport improvements can be implemented in a short timeframe and have already been identified and are in the public domain. Council calls on the Authority and State Government to fund an immediate package of public transport improvements including duplication of the Hurstbridge Rail line from Greensborough to Eltham, a Transport Interchange at Greensborough and bus network improvements, while deliberations on the North East Link continue. Council notes the Technical Summary states that the Authority has had regard to the Transport Integration Act, but evidence of this is limited.

Council's assessment of corridors

Option A is forecast to carry a high volume of traffic at both the southern and northern ends. Corridor Option A does not provide a true orbital function and is merely adding to inner urban road capacity and will require significant additional lane capacity to be built on the Eastern Freeway to convey the existing and future traffic to EastLink and Melbourne CBD. It is not significantly adding to the strategic arterial road network capacity as it replaces an existing route whereas all other options provide an additional arterial road connection in the north east of Melbourne. Corridor Option A is limited by the steep gradients in the Mullum Mullum and Melba Tunnels making it unattractive to freight vehicles and increasing congestion. Furthermore, a focus on inner urban road capacity will result in mode shift away from public transport in inner urban areas and exacerbate congestion on the connecting arterial road networks. Corridor Option A will sever suburbs in Banyule, impacting those communities and affecting the community spirit, health and wellbeing of local residents.

Option B would separate the Greensborough and Watsonia North communities, potentially with large noise walls on each side of the new road, further segregating the communities. This option would however, provide an alignment which meets the needs of the freight sector in moving goods from the south-east to the north and north-west of Metropolitan Melbourne.

Option C provides the best opportunity to improve road connections for surrounding communities and provides access to the largest number of jobs. It provides freeway services to a wide catchment in a manner that has the potential to improve economic prospects of a very large area by providing a new connection in the arterial road network. This option also better serves the freight industry

(as confirmed by the Victorian Transport Association) and best meets the Authority's stated Objectives. Corridor Option C provides the best interface between urban and non-urban areas, as it lies close to the Urban Growth Boundary and would reinforce this boundary. It has the potential to provide an additional firebreak for local communities during bushfire events. Corridor Option C provides a decongestion benefit to a much greater proportion of overall journeys. Corridor Option C also shows a significant proportion of origins and destinations are more directly served by the alignment, with a significant difference between traffic volumes at the north and south of the proposed link.

Option D is significantly longer than the other routes and serves a much larger catchment to meet the regional task. It would not solve any of the existing problems that have been identified in the Technical Summary.

Our Key Message for Government – The correct choice is Corridor "C"

Council has carefully considered the information provided in the North East Link Technical Summary and all publicly available information in assessing its preferred corridor option.

Council considers that Corridor Option C is the correct choice to best meet the transport needs now and into the future and meet the Project Objectives set out by the Authority.

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1. Our position

On Monday 7 August 2017, the State Government announced four preferred corridor and route options for the North East Link (NEL) and released the North East Link Technical Summary (Technical Summary) for comment. The City of Banyule (Banyule) has assessed the Technical Summary as set out below.

All four options will have a significant impact on, and provide significant opportunities for Banyule. While Corridor Option A cuts directly north/south through the built-up heart of Banyule, Corridor Option B also segregates the Greensborough and Watsonia North suburbs before cutting diagonally across the municipality. Corridor Options C and D skirts our northern boundary. Whichever option is chosen, Banyule is in the unique position of being impacted by all options to varying degrees. Banyule supports the construction of the NEL and welcomes the opportunities that it will bring. Banyule has a significant responsibility to its community to ensure that the best option is chosen and designed appropriately.

Banyule has had a long held view the North East Link should complete the Metropolitan Ring Road, providing a direct connection between the eastern end of the Ring Road at Greensborough and Eastlink, connecting east of the Mullum Mullum / Melba tunnels.

Based on the information provided by the North East Link Authority (NELA), Banyule's position is that the evidence clearly shows that Corridor Option C best meets the stated objectives and is the best solution. Corridor Option C best provides for the long-term growth of Melbourne and is consistent with what our community is telling us. Further, it is considered that Corridor Option C best meets the NELA Objective 3 in relation to moving freight more efficiently. This is supported by the Victorian Transport Association which has confirmed in a letter to Council dated 19 September 2017 that its favoured option is Corridor Option C as it is the most attractive route for heavy vehicles.

2. Option C Meeting Objectives

The government and NELA have clearly stated the four main objectives that any option needs to achieve in order to improve existing conditions in Melbourne's north, east and southeast. These are examined in turn below, alongside our explanation of why we believe that Corridor Option C is the best fit for the NEL objectives.

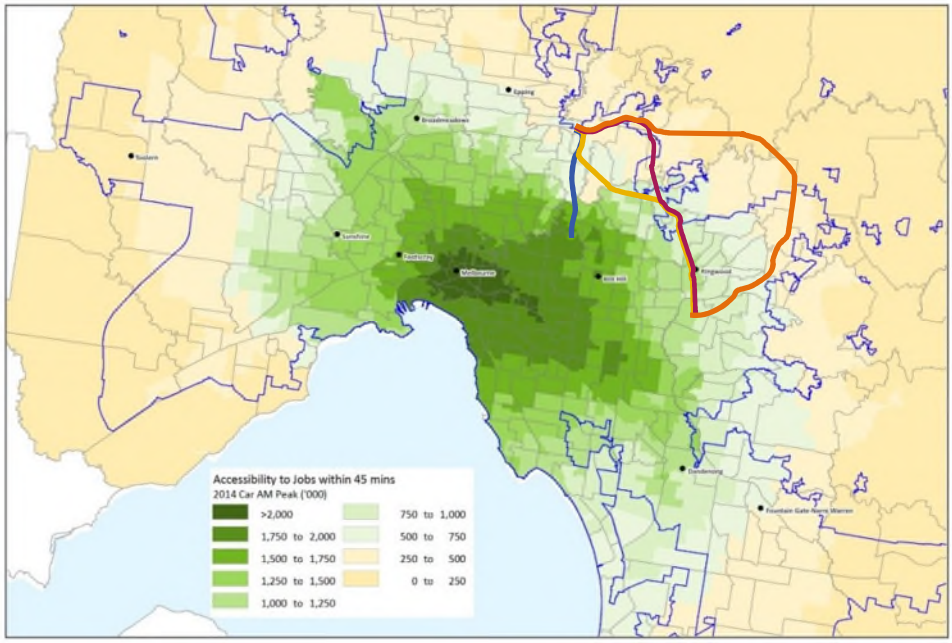
2.1. Objective 1 - Connect more businesses to customers, workers and other businesses

Connectivity in the north-east is a vital issue for the NEL to address. Banyule is firmly of the opinion that any solution needs to balance the need of providing freight efficiency (see also Objective 2) and connecting people with jobs, rather than simply meeting the ***current*** connectivity needs of private vehicle demand.

The Technical Summary rightly states that key benefits of the project should include "improved competitiveness of the State of Victoria – with more efficient connections, less congestion and fewer delays reducing costs to businesses and improving the productivity and competitiveness of Melbourne and Victoria". Banyule believes that these benefits can be maximised through the choice of Corridor Option C which best improves connectivity between businesses in the north and south-east of Melbourne with workers living in the growing residential areas to the north of Banyule and south-east Melbourne.

The Technical Summary states that "*worsening **orbital** connectivity*" will continue to exacerbate the disadvantage of those in the outer north and eastern areas, making it even harder for households in the north, north-east and south-east to access economic opportunities. Figure 18 of the Technical Summary (reproduced below) demonstrates this lack of accessibility. However, once the proposed route options are considered, it becomes clear that some of the corridor options better meet this need than others. In particular, the routes which perform the better **orbital** function will clearly provide the best consolidation of labour markets, improved business to business and improved levels of employment access.

Figure 1 - Corridor Options B, C and D provide better accessibility to jobs around key employment locations



The Technical Summary also highlights how "*business-to-business travel between key economic and employment locations in the north, east and south-east is compromised by poor **orbital** mobility*". This is supported by Table 4 of the Summary which demonstrates the lengthy trip times currently experienced between several key National Employment and Innovation Clusters (NEIC) and Major Activity Centres. Banyule notes that a comparison of current journey times and future journey times - under each of the Corridor Options A, B, C and D - was not produced in the Technical Summary. Without such detailed modelling it would appear that choosing any particular route as best improving business-to-business connectivity is unduly hasty; however the 'North East Link Community Update 2' (August 2017) makes clear NELA's view is that Option A will perform best for "*connecting more people to jobs and education*" and "*connecting businesses*" by rating it as "*performs very well*". Banyule's view, without access to the NELA supporting data, is that a cursory examination of Table 4 would suggest that the majority of the highlighted flows would be far superior under Corridor Option B or C, than under Corridor Option A. Flows in this category would reasonably be expected to include trips between Monash / Ringwood / Dandenong / Narre Warren and Broadmeadows / Epping / Latrobe. Such trips from the south-west to the north-east are most directly made under Corridor Options B and C rather than under Corridor Option A.

Connectivity is also influenced by natural barriers such as the Yarra River - at present Burke Road, Chandler Hwy, Manningham Road / Banksia Street and Fitzsimons Lane are particular bottlenecks due to the lack of additional river crossings further east. As such, a NEL option to the west (ie Option A) would result in continued pressure on these roads and squeeze orbital trips into the inner areas (which are themselves intensifying in terms of land use).

2.2. Objective 2 - Make freight move more efficiently

Key freight locations in the Melbourne metropolitan area include the areas of industrial concentration at Bayswater, Rowville and Dandenong in Melbourne's south east and Somerton and Campbellfield in the North. In assessing the best way to meet the future needs of freight, Banyule would expect that detailed modelling involving these facilities would be carried out; we note that "*truck surveys to better understand truck origin-destination movements and volumes throughout the north-east*" are yet to be completed.

As such, the Technical Summary appears to rely on the fact that the largest number of truck crossings over the Yarra River are at Banksia Street (35%, see Figure 29 of Technical Summary) in making the later statement that Corridor Option A "*best aligns with existing truck patterns in the north-east*" (Table 7 of Technical Summary). This is a somewhat concerning statement insofar as trucks currently use the Corridor A alignment because it is the quickest option - based on the current network - as there is a lack of alternative south-east to north routes. With the likely higher traffic volumes and resulting congestion on Corridor Option A and the Eastern Freeway, the quickest route from south-east to north for the movement of freight would be Corridor Options B or C.

The Technical Summary position relating to freight appears to be (at least partly) based on Table 13 of the report, which estimates travel time savings between the M1 and M80. The apparent attractiveness of Corridor Option A shown in the table is critically dependent on the assumptions made about the Eastern Freeway. Given the report states on page 54 that the Eastern Freeway is used in deriving the estimated travel time saving for Corridor Option A, Banyule has concern about the validity of the statement as:

- The Eastern Freeway is already massively congested at peak time and the Technical Summary document is unclear on whether it will be upgraded [1], especially when the

[1] Page 54 states that "*Corridor A can provide an upgraded Eastern Freeway*" whilst page 71 states that "*Corridor A will potentially require the upgrade of the Eastern Freeway*"

Technical Summary implies other space demand on it[2]. Use of the current Eastern Freeway will not deliver such large journey time savings if significant widening is not provided

- A significant upgrade to the Eastern Freeway has been assumed to underpin Table 13, however corridor A is described as being 11km (when it is in fact closer to 26km from the M80 to Ringwood) and the cost to upgrade the Freeway has presumably not been included

The case for Corridor Option A being the best solution for freight is further diminished when consideration is given to its likely usage as a private commuter vehicle route, in direct contravention of NELA's stated goal to act in favour of commercial vehicle movement. It is also noted that the Technical Summary is unclear on the projected level of freight traffic which each of the corridor options would attract; Banyule would have expected - given the importance of freight traffic in the choice of the NEL route - that modelling to support the route corridor should address this issue.

Banyule notes that the grades in the Mullum Mullum and Melba tunnels are an ongoing issue facing freight operators. Corridor Option C would avoid this grade. Under Option A, the existing grades in the tunnels will be an ongoing issue for freight vehicles. Technical Summary makes reference to the grades along the proposed routes and indicates for Corridor Option A "*the potential grades within tunnels is the most suited to trucks*", however, it does not take into account the existing steep grades in the EastLink tunnels.

Corridor Option D is significantly longer than the other routes and is not considered to provide a suitable alternative for the efficient movement of freight. Also, due to the greater time and distance required to travel between the major freight centres, it is considered that this option would result in freight vehicles continuing to use arterial roads through Banyule.

The Freight Industry supports Corridor "C"

Significant freight and industry benefits can be derived from the North East Link, however it is critical that the correct corridor option is chosen.

The Victorian Transport Association has confirmed that its favoured option is Corridor Option C as it directly connects with Eastlink and will be the most attractive route for heavy vehicles.

2.3. Objective 3 - Connect more people to jobs and education

The size and shape of Melbourne has changed significantly over the past 15 years, with marked growth in the four growth corridors. Whilst the Technical Summary acknowledges that this change will continue, there is a lack of detail on how and where the future change in population growth will take place. This is critical to an informed debate on how well the chosen route option addresses Melbourne's future needs. It is noted that the 'NEL Fact Sheet - Where is Melbourne Growing' uses VPA plans from 2012 as the source of population growth.

The preferred option should improve connections and access for residents by providing new connection opportunities onto the freeway network. Corridor Option A provides minimal benefit in this regard, with the smallest amount of **new** freeway of any of the four options. Corridor Option D also performs relatively poorly given the low-density population across the route as a whole.

[2] Table 16 states there is "*high potential for public transport priority on the Eastern Freeway*" and Table 20 states that Option A could deliver a "*widening and upgrade of the Koonung Creek Trail (Eastern Freeway)*"

Option C is considered to provide the best opportunity to improve road connections for surrounding communities. It provides freeway services to a significantly wider catchment – in a manner that has the potential to improve economic prospects in St Helena, Eltham North, Diamond Creek, Warrandyte, Park Orchards, Donvale, Templestowe, Doncaster East, Mitcham and areas along EastLink to Dandenong. While Corridor Option A passes through existing densely populated areas, it does not provide significantly improved connectivity to employment areas, other than Melbourne CBD.

What is particularly puzzling in this regard is that the better performance of Corridor Option C is explicitly recognised in Table 9 of the Technical Summary (reproduced below), with 91,000 additional jobs and education places that are accessible, this represents a figure which is 20% higher than the 76,000 which is attributed to Corridor Option A. Yet this difference is not reflected in the 'North East Link Community Update 2' (August 2017). In that document - with a much wider readership given its distribution to local residents - it is suggested, based on the metric of "*connecting more people to jobs and education*", that Corridor Option C and Corridor Option A are identical. The reader is in fact left with the impression that somehow Corridor Option C is inferior, given its spartan description of "*deliver better access to jobs and education*" compared to the description for Corridor Option A "*connect people to jobs and education in the north and east, including the LaTrobe University and West Heidelberg industrial hub, Box Hill and Ringwood*". Again, this assumes that access to many of these jobs requires use of the Eastern Freeway. Further, many of the additional jobs accessed by Corridor Option A would be in the Melbourne CBD which should be accessed by public transport rather than single occupant vehicles.

Table 1 - Accessibility to jobs and education resulting from the NEL

	Option A	Option B	Option C	Option D
Additional jobs accessible in key residential locations	65,000 – 75,000	65,000 – 80,000	85,000 – 100,000	45,000 – 55,000
Additional education places accessible in key residential locations	11,000 – 13,000	3,000 – 4,000	6,000 – 7,000	<2,000
Total additional jobs plus education	76,000 - 88,000	68,000 - 84,000	91,000 - 107,000	47,000 - 57,000

The Technical Summary lacks detail on the nature of the jobs that will be supported by the chosen NEL route. 'White collar' employment and student travel, will have quite different dynamics to 'blue collar' employment. To the extent that 'white collar' jobs will disproportionately be based in the CBD, the presence of the (upgraded) Hurstbridge line through the heart of Banyule also means that a high quality public transport solution is already in place to meet many of the needs of 'white collar' jobs. Those 'blue collar' jobs which are based in the areas of industrial concentration are best connected to the north-east through an orbital solution (that is, Corridor Option C).

The clear superiority of Corridor Option C, and inferiority of Corridor Option A, in providing access to jobs should be recognised in any decision made about the appropriate route alignment.

2.4. Objective 4 - Make neighbourhoods in the north-east safer and easier to travel in

Safer neighbourhoods

Banyule believes that well connected, permeable neighbourhoods are inherently safe neighbourhoods. Corridor Option A has a destructive impact on neighbourhoods in the north-east, and will form a clear divide between communities along its route (including Watsonia, Macleod and Rosanna). It traverses a much larger proportion of highly populated areas than any of the other corridor options and therefore has a more significant impact on the safety and ease of travel through

the denser communities along its route. Connectedness is an important feature of any community. Severance caused by infrastructure being located through the middle of communities affects the community spirit, health and wellbeing of residents. Corridor Option A therefore has the biggest impact on the safety and ease of travel in neighbourhoods impacted by any of the corridor options. This is not reflected in the assessment made in the Technical Summary.

Corridor Option A is also likely to perform worse than the other corridor options with regard to both noise levels and air quality / pollution impacts as a larger proportion of Corridor Option A is above ground, and traverses through more populated areas.

Corridor Options B, C and D all provide incremental community safety benefits (compared to Corridor Option A) through providing a potential firebreak and additional exits from areas of high risk such as Warrandyte in the event of major bushfire. Similarly, the Reynolds Road extension included as a potential associated project with Corridor Options B and C would provide an additional bushfire escape routes for communities such as Warrandyte South, Warranwood and Wonga Park.

Local congestion

We have fundamental concerns about the way the analysis of congestion has been undertaken. There is no evidence that any scenario testing has been used to assess different levels of rail and public transport investment and service enhancement. While it is understood that the VITM includes public transport, enhancement of different public transport improvements which could be associated with each of the corridor options potentially lessens the growth in problematic single occupancy private vehicle commuter traffic. The provision of appropriate public transport projects would free up road space for commercial traffic and as such we would expect this to be included.

It is unclear how Corridor Option A will reduce traffic on local roads such as Rosanna Road, Bulleen Road (north of Eastern Freeway) and Lower Plenty Road (west of Rosanna Road) as shown in Table 6. If the Eastern Freeway upgrade works are not included in the project there will be increased congestion due to more traffic using the facility to access Central Melbourne which will cause traffic to seek alternative options using these roads. Similarly, is it not clear how Greensborough Highway and Bulleen Road (north of Eastern Freeway) will be constructed when the NEL is shown on a consistent alignment. It is important that these roads continue to provide connectivity along and across the NEL for local traffic. Similarly, it is unclear why it is predicted that there will be an increase in traffic along Grimshaw Street (west of Watsonia Road) under all corridor options (as suggested in Table 6 of the Technical Summary).

It is also unclear how the introduction of an interchange at Manningham Road will address local congestion. Banyule believes this will instead create additional traffic chaos on Manningham Rd / Banksia Street / Bell Street. In addition, the interchange would require considerable land acquisition.

Notwithstanding the absence of scenario analysis, Banyule believes that the reporting of the traffic modelling does not provide a clear indication of issues. Banyule considers reporting of the actual levels of congestion, in addition to traffic volumes would be the best measure of the impact on local congestion. Similarly, the reporting of total traffic volumes does not assist in assessing the outcomes of the Corridor Option in relation to Objective 3 relating to the efficient movement of freight. The traffic volumes need to be expressed as cars (commuter) and trucks rather than total vehicles.

Banyule also has fundamental concerns in relation to the statement that Corridor Options A and B both have relatively reliable, higher capacity arterial road networks. These corridors are performing poorly because they are currently being affected by longer distance travel (private vehicles and freight) that originate further afield, as indicated in the NEL modelling.

The problems experienced in Melbourne's outer north east resulting from the lack of a high speed freeway network will only be solved by Corridor Option C. Corridor Options A and B do not

connect to the right places to resolve these issues. Roads that would otherwise gain from Corridor Option C would remain a problem and cause additional congestion on the Eastern Freeway if any of the other options are chosen.

This becomes clear when the modelling results in the Technical Summary are examined. For Corridor Option A, total traffic will vary between 100,000 and 120,000 vehicles per day 10 years after opening. This implies a relatively constant level of traffic across the whole route, and that distribution of traffic to surrounding areas is very limited. Conversely, traffic on Corridor Option C will vary between 110,000 vehicles per day in the northern sections and 50,000 vehicles per day in the southern sections. This implies that 60,000 vehicles per day (the difference between the northern and southern sections) are being distributed to / drawn from the surrounding areas and that Corridor Option C performs excellently at achieving journey connections. Corridor Option C produces a better outcome for the north-east population than Corridor Option A. Corridor Option A would also act as a barrier to increased patronage on the Hurstbridge line once this has been fully enhanced and upgraded.

The level of traffic on Corridor Option A - across all parts of the route - indicates that within 10 years of opening it is likely to be at capacity and congested, such that further action is required to provide future capacity.

3. The North East Link Technical Summary

Comments are made below on the contents of the Technical Summary, structured under the following headings:

- Public Transport
- Sustainable Transport
- Environmental Factors
- Land Use
- Route Option Issues
- Residual Arterial Road Issues
- Connected Community / Severance
- Meeting the needs of NEIC
- Transport Integration Act

3.1. Public Transport

The importance of improving public transport connections and travel times is highly prominent across policy statements made in 'Plan Melbourne' (Victorian Government 2017) and in foundation documents such as the Transport Integration Act (Victorian Government 2010) that reinforce the importance of a holistic and balanced approach to transport infrastructure planning.

Improving the quality and connectivity of public transport in the north-east is an issue of high importance. Banyule notes the need for addressing public transport improvements as a matter of urgency, regardless of the NEL or indeed the corridor chosen. Improving public transport can provide relief to some of the areas of high congestion highlighted in the Technical Summary. This is especially relevant in the context of the 10-year timeline for the opening of the NEL.

Given the independence between the ability to implement a large number of public transport options in the very short term, and the choice of an NEL corridor, Banyule contests the view presented in the 'North East Link Community Update 2' that the public transport, walking and cycling project criteria all perform best under Corridor Option A.

Rail network

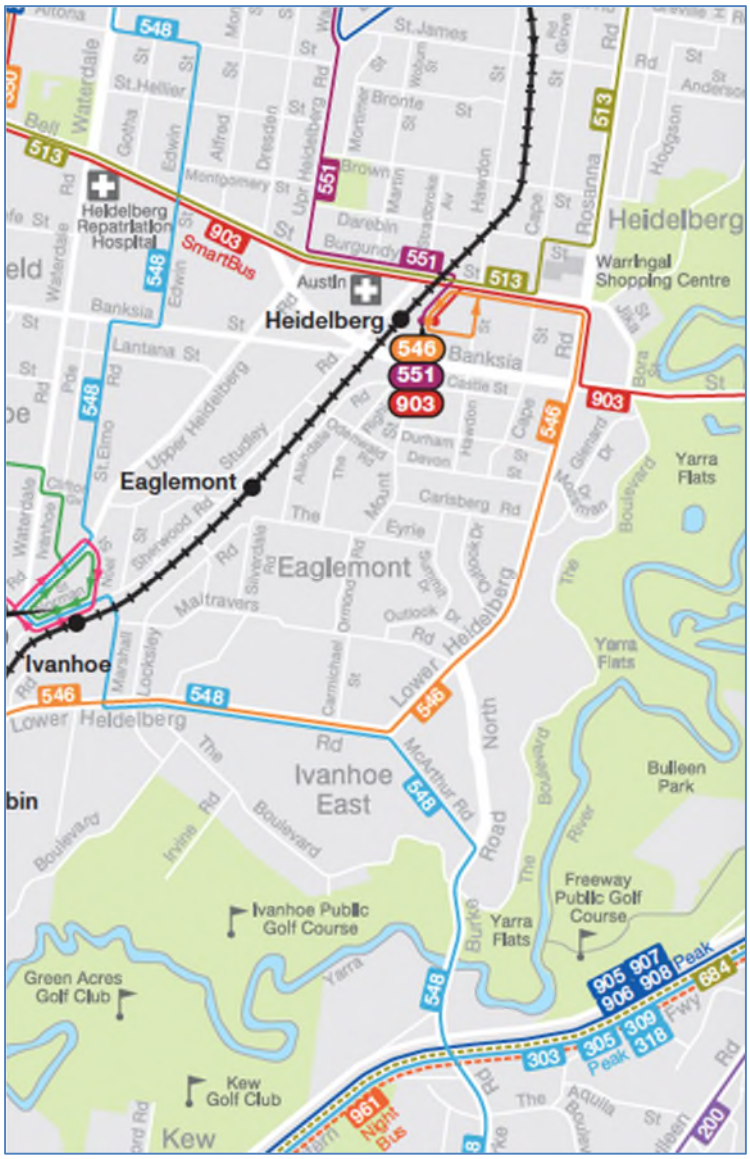
The north-east region is served by the South Morang and Hurstbridge lines, with Banyule's focus being principally on the latter, given that it services the needs of a number of our residents. A significant programme of improvements is currently underway on the Hurstbridge line to simplify the rail timetable, provide a more frequent and reliable service, improved road safety, and align trains and buses to provide easier transfers. This will be delivered through duplication of the Heidelberg to Rosanna section of track, removal of the Grange Road and Lower Plenty Road level crossings, and re-designed train timetables.

The net effect will be to make the Hurstbridge Line an even more competitive option when compared to car. In this context, Banyule is opposed to Corridor Option A given its inability to complement the rail corridor. Instead the Corridor Option A will compete with the upgraded Hurstbridge Line and will act as a barrier to patronage growth. Banyule does not believe that this represents an efficient use of state resources, especially given the ongoing discussions which are taking place on the possibility of further duplication of the Hurstbridge line between Greensborough and Eltham and the potential development of a keynote transport interchange at Greensborough.

Bus network

Congestion along key north-south routes such as Rosanna Road is exacerbated by the current lack of meaningful public transport alternatives along this corridor. Figure 2 below demonstrates how Route 903 is the only bus service to cross the Yarra at Banksia Street, performing a localised east-west in this area rather than north-south connection. Similarly, Route 548 is the only bus service crossing the Yarra at Burke Road; this service meanders significantly and acts as a deeply penetrating local service rather than a meaningful north-south connection.

Figure 2 - Lack of north-south bus connections across the Yarra River



Source: PTV

Improved north-south connectivity could be achieved through the introduction of strategic new routes to alleviate pressure on the current road network and to add additional attractive public transport options. There is currently a failure in the region to utilise key arterial roads such as Chandler Highway, Burke Road and Bulleen Road. None of these have long-distance buses operating on them, instead a series of local connecting services operate over very short sections.

Some long-distance buses do operate over arterial roads, such as SmartBus Routes 901 and 902 which utilise Fitzsimmons Lane. However even these routes offer limited availability to some of the key nodes in the north-east. In common with the rest of the SmartBus network (shown in

Figure 3 below), Routes 901 and 902 fail to connect to La Trove University. In addition, Deakin and Swinburne Universities are not connected to the SmartBus network. Whilst Monash does have some SmartBus connections, they do not aid students who reside in the north-east. As such, students either travelling to the north-east (La Trobe) or outwards to other educational facilities have limited public transport options.

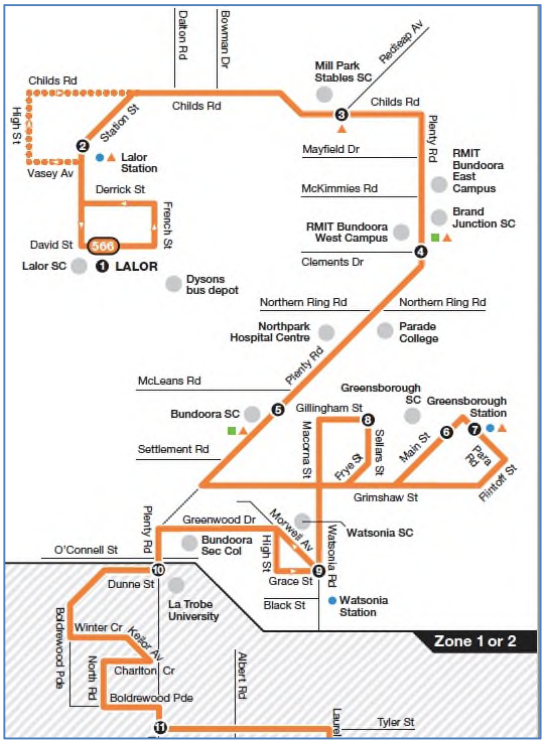
Figure 3 - Lack of SmartBus connectivity to La Trobe and other educational institutions

These limited public transport options will lead to many students driving as an alternative to using public transport. Addressing this issue would lead to a switch from car to public transport, with associated improvements in congestion in the north-east. Similarly, providing express bus services along the NEL would provide an alternative means of transport for people travelling to work locations along the route.

Banyule also notes that there are number of public transport improvements that were suggested in the Melbourne Metropolitan Bus review (2007-08) which are yet to be implemented, despite being both cost effective and easy to introduce. These include, but are not limited to, improvements such as cleaning up Route 566 to enable more direct trips on public transport. Figure 4 below demonstrates the meandering nature of the current route, with associated impact on journey times and low attractiveness to potential users.

Overall, the bus network in the north-east is generally convoluted, slow and unreliable, not least due to a lack of priority through traffic and at traffic signals.

Figure 4 - Inefficient bus routes in the North East - Route 566



3.2. Sustainable Transport

There are a number of ways in which the Transport Integration Act defines how sustainable transport should be supported and delivered. These include:

- *promoting forms of transport and the use of forms of energy and transport technologies which have the least impact on the natural environment.*
- *seeking to continually improve the safety performance of the transport system through safe forms of transport.*
- *promoting forms of transport and the use of forms of energy which have the greatest benefit for, and least negative impact on, health and wellbeing.*

Section 4.7 of the Technical Summary recognises that "*roads are typically seen as severing communities and being barriers to movement*". Banyule agrees that this is the case, and whilst the NEL offers the opportunity to avoid severance where tunnelling forms a significant proportion of the route (Corridor Options B, C and D), it is clear that Corridor Option A would have the highest negative impact on communities (discussed further in Section 3.7).It is considered that Corridor Option A acts as the largest barrier to achieving the sustainable transport goals set in the Transport Integration Act.

Table 19 of the Technical Summary presents a high-level appraisal of the relative merits of each route option in terms of crucial issues of active mode movement, permeability and severance. The assertion made that Corridor Option A would be superior to the other options on grounds related to active mode movement enhancement are unsupported by any clear evidence or analysis provided by NELA in the Technical Summary. To the contrary, at face value - Corridor Option A, in a heavily urbanised setting, seems to hold greatest challenges for permeability and cross-corridor movement for pedestrians and cyclists. The lack of recognition of these issues is considered a serious flaw in the appraisal performed by NELA.

Table 20 of the Technical Summary provides a listing of 13 specific cycling or pedestrian connection issues which could potentially be addressed by the NEL. Whilst these may well be robust projects, Table 20 should not be confused with an overarching appraisal of active mode issues, infrastructure, base connectivity, future needs, nor prospective impacts from new road infrastructure through the entirety of an urbanised region with hundreds of thousands of residents.

In the absence of a supporting rationale for the improvements or a link to a holistic strategy, the manner in which the table appears to support the case for Corridor Option A is arbitrary at best. The delivery of sustainable transport improvements identified along Corridor Option A should be considered as beneficial improvements, irrespective of the corridor option selected. As discussed in Section 3.4, a key factor which Banyule would expected to see addressed is how the corridor option selected links with and supports future land use as Melbourne continues to grow.

Significant improvements can arise from behaviour change that would be relatively easy for the State government to implement as NEL 'early works'. These include:

- Duplication of the Hurstbridge Rail line form Greensborough to Eltham.
- Improved transport interchange at Greensborough.
- Additional high frequency bus services and routes.
- Multi-deck car park at Watsonia Railway Station.
- Walking to schools initiatives.
- Bicycle infrastructure from inner Melbourne to improve all north-south road corridors within the region (with improved off-road paths and separated lanes). Key destinations would include Kew schools, La Trobe University, Heidelberg Health Hub, Doncaster Westfield, Box Hill and Ringwood.

3.3. Environmental Factors

The process adopted by NELA in advocating for the NEL is to work (via this consultation process) towards a preferred road corridor. By definition, no road reservation currently exists.

Typically, a major project of this type would have a road reservation; this would then allow an Environmental Effects Statement (EES) to be completed. However, it is still possible for an EES to be conducted for the four corridor options provided by NELA prior to a corridor decision being made. Whilst recognising that this would involve additional cost to the State Government, Banyule believes that it is critical that the north-east community is meaningfully engaged, and all environmental concerns addressed. The choice of corridor is too important to be made on the current level and quality of environmental analysis presented in the Technical Summary.

Corridor Option A is shown to be in tunnel under the Warringal Parklands and Banyule Flats. This area supports wetlands with endangered vegetation communities which have extremely limited representation within the Yarra floodplain and associated Greater Melbourne area. It provides important habitat for a great diversity of flora and fauna. One hundred and twenty-six indigenous flora have been recorded at the site and, of these, four are of State significance. Forty fauna species of state or national significance are considered to utilise the area; many of these are wetland bird species, including Latham's Snipe, Australasian Bittern and Baillon's Crake. The area has state significance for:

- Ecological Integrity: due to the presence of intact and extensive stands of wetland vegetation and important waterbird populations.
- Richness and Diversity: due to the presence of wetland vegetation communities and fauna including waterbirds.
- Rarity and Conservation: due to the presence of endangered wetland communities and rare or threatened waterbird species including the Australasian Bittern, Baillon's Crake, Brown Quail, Grey Goshawk, Hardhead and Painted Snipe.
- Representation of Type: due to its importance in demonstrating typical examples of endangered/uncommon wetland vegetation communities.

The Technical Summary (Table 21) states that the impact of Corridor Option A is lower than any of Corridor Options B, C, or D. The 'neutral' score assigned to Corridor Option A appears to be based on the fact that there are '*opportunities to protect*' the areas of significance along the corridor (namely Banyule Flats and the Yarra River), as the road will be in tunnel under the area. It is further noted that there is limited understanding of the environmental impacts of Corridor Option A on the Simpson Army Barracks (Federal Government land).

Figure 33 of the Technical Summary demonstrates the areas of Strategic Biodiversity Value across the region. Banyule notes that Corridor Options A, B and C are all quite similar, insofar as the sections of the routes which are of high biodiversity value along all three corridor options, are tunnelled. To that end, Banyule believes that Corridor Options A, B and C should be scored similarly.

Banyule notes that tunnelling will have impacts which the '*neutral*' scoring of Corridor Option A currently fails to address. These include:

- Vibrations associated with tunnelling works.
- Surface impacts associated with the placement of ventilation stacks.

3.4. Land Use

Current regional congestion issues have a relationship with the manner in which growth has occurred in a relatively scattered manner. This will continue to be an issue in the north-east unless and until land use is consolidated.

Land use in the north-east of Melbourne can be expected to intensify around public transport hubs and corridors. As such, land and dwellings in transport rich corridors will continue to be highly sought after. A focus on strengthening these corridors - rather than allowing scattered growth - will bring substantial agglomeration benefits.

Whilst the Technical Summary does not explicitly state the number of lanes on the NEL, it is our assumption that it would have a capacity for around 10,000 vehicles in the peak hour (based on the maximum stated capacity in the Technical Summary of 120,000 vehicles per day). High capacity vehicles will need to be accommodated to meet the longer term growth needs, irrespective of the corridor selected.

Plan Melbourne assumes that there is the potential for substantial growth within the La Trobe NEIC. However, unless there are appropriate transport solutions in place for the cluster, this has the potential to contribute to congestion in the north-east (and to see the cluster fail to maximise its potential). Transport solutions should also seek to divert away traffic that is not starting / ending within the area. As discussed in Section 3.5, Corridor Option A does little to meet this need as it fails to distribute traffic along its corridor (unlike Corridor Option C). Corridor Option A would funnel orbital traffic through the developed corridor, weaken the long-term performance of the Eastern Freeway and continue the existing travel behaviour patterns on all approach roads.

It is noted that Corridor Option C skirts the Urban Growth Boundary more effectively than any other corridor option. Its alignment from St Helena through Diamond Creek, Eltham North, Templestowe, Donvale and Mitcham therefore provides the best alignment to strengthen (and sustainably support) population growth within the current Urban Growth Boundary. This enables growth to be maximised without the need for changes to the Urban Growth Boundary.

3.5. Route Options

The correct choice to best meet transport needs is Corridor "C"

Council has carefully considered the information provided in the North East Link Technical Summary and all publicly available information in assessing its preferred corridor option.

Council considers that Corridor Option C is the correct choice to best meet the transport needs now and into the future and meet the Project Objectives set out by the Authority.

Option A

Banyule understands that Corridor Option A connects the M80 to the Eastern Freeway near Bulleen Road. The NEL is likely to involve approximately 3km of tunnel structure along what is stated to be an 11km corridor. However, this figure is misleading once the orbital distance (M80 to the EastLink near Canterbury Road) is calculated (approximately 26km). Corridor Option A is therefore directly comparable in length to Corridor Options B and C.

Whilst there is an absence of specific information in the public domain, NELA maps appear to indicate that the tunnel element will connect from an interchange at Lower Plenty Road to Manningham Road and travel under the environmentally sensitive areas of the Yarra River and Banyule Flats.

Corridor Option A provides interchanges at the M80, Grimshaw Street, Lower Plenty Road, Manningham Road and the Eastern Freeway near Bulleen Road. It is noted that the interchange of NEL, the Eastern Freeway and Bulleen Road will be complex and large, with a significant impact on the surrounding area to the north and south of the freeway. It is unclear how Greensborough Highway and Bulleen Road (north of Eastern Freeway) will be constructed when the NEL is shown to be along their current alignment. Given the amount of congestion which already occurs at the Bulleen Road interchange in the evening peak, Banyule is particularly interested to see the supporting detail of how this would be implemented.

As noted above, Corridor Option A appears to provide for widening of the Eastern Freeway between Springvale Road and Chandler Highway. Banyule understands that all widening of the Eastern Freeway will be fully accommodated within the existing road reserve; however, the existing road reserve also extends into reserves and parkland, with a critical loss of habitat and amenity in what are relatively dense urban areas. No mention of this environmental impact appears to be made in the Technical Summary. In addition, it appears that the cost of any Eastern Freeway widening has not been included in the cost of Corridor Option A. In the interests of transparency, the cost of all options (including the cost of ancillary works) should be made public immediately.

Given the assumed need for upgrade to a significant section of the Eastern Freeway, Corridor Option A has the major dis-benefit of interrupting service on the Eastern Freeway for a number of years during construction, and over a considerable distance. It will also significantly impact on Greensborough Highway during construction resulting in significant impacts on traffic using this route and causing diversion to local roads. Other corridor options will not impact existing routes to the same degree.

Corridor Option A would exacerbate the existing congestion in the Mullum Mullum / Tunnels and would continue to mix long distance traffic streams. Such mixing of traffic streams can generate unsafe (and capacity reducing) driving behaviour. Conversely, as Corridor Options B, C and D connect to EastLink south of Ringwood, long-distance orbital traffic would not be mixed with shorter distance inner metro traffic or traffic destined for the CBD.

Under current legislation, the NEL route would qualify for noise attenuation measures. It is critically important for NELA to clarify whether this would extend to the Eastern Freeway (assuming it is upgraded under Corridor Option A) and to structures such as on and off ramps.

Under all corridor options, Banyule would expect a series of Intelligent Transport System (ITS) measures to be adopted on new / upgraded freeway sections delivered, in order to ensure smooth traffic operations on the road and the wider freeway standard road network.

The Technical Summary indicates that Corridor Option A is expected to carry 100,000 - 120,000 vehicles per day. While the proportion of freight traffic is not stated, it is clear that freight will be in competition with a substantial number of commuter trips. As such, it is unclear whether major journey time benefits for freight will be achieved.

Banyule notes that the grades in the Mullum Mullum and Melba tunnels are an issue for freight operators. Under Corridor Option A, the existing grades in the tunnels will be an ongoing issue for freight vehicles.

Section 4.6 of the Technical Summary implies that improvements to the Doncaster Area Rapid Transit (DART) are potential inclusions under Corridor Option A. Banyule considers that preserving Doncaster rail corridor within the Eastern Freeway reservation is essential, irrespective of a Bus Rapid Transit system being implemented.

Option B

Banyule understands that Corridor Option B connects the M80 to EastLink south of Canterbury Road. Corridor Option B is likely to involve approximately 17km of tunnel structure along what is stated to be a 24km corridor. The total length is similar to both Corridor Option C (26km) and the true figure for Corridor Option A (26km).

NELA maps appear to indicate that there will be three tunnel elements. The first will extend from south of a new interchange at Grimshaw Street to north of Lower Plenty Road adjacent to the Plenty River bridge. The second tunnel will extend from south of that interchange to west of Heidelberg - Warrandyte Road. The third tunnel section would extend from north of Reynolds Road to north of the Ringwood Bypass.

Corridor Option B provides interchanges at the M80, Grimshaw Street / Greensborough Road, Lower Plenty Road, Reynolds Road and EastLink near Canterbury Road. Corridor Option C avoids the existing grade issues with the EastLink Mullum Mullum tunnels. Banyule has concern about the impact of the Lower Plenty Road/Main Road interchange on the Plenty River and residential and local recreational facilities.

Whilst less efficient than Corridor Option C in providing an orbital solution, Corridor Option B performs well in improving connectivity in the north-east. Table 9 of the Technical Summary shows that in terms of access to jobs, Corridor Option B performs at broadly the same level as Option A; however it is inferior to Corridor Option C in this regard.

Page 33 of the Technical Summary states that Corridor Option B is expected to carry approximately 60,000 - 110,000 vehicles per day. This implies that 50,000 vehicles per day (the difference between the northern and southern sections) are distributed to / drawn from the surrounding areas (that is, via the interchanges at Grimshaw Street / Greensborough Road, Lower Plenty Road, and Reynolds Road). As such, Corridor Option B performs excellently in achieving journey connections through the north-east region, and performs better in this regard than Corridor Option A.

Table 19 of the Technical Summary presents a high-level appraisal of the relative merits of each corridor option in terms of active mode movement. Corridor Option A is shown to perform better than Corridor Option B. Banyule disputes this relative assessment given the urban severance caused by Corridor Option A being a freeway through the heart of an urban area; which is not the case with Corridor Option B.

Banyule also contests the view presented in the 'North East Link Community Update 2' that the public transport performance criteria is better achieved under Corridor Option A than Corridor Option B. The ability to implement public transport improvements in the short term, and the choice

of the NEL corridor, are independent of each other. Further, Corridor Option B would provide an opportunity for additional public transport services rather than competing with existing train services under Corridor Option A.

Corridor Option B also includes the potential upgrade of the Northern Arterial (Reynolds Road extension). Banyule considers this a valuable extension of the arterial road network which should be included in the NEL irrespective of the Corridor Option selected.

Option C

Banyule understands that Corridor Option C connects the M80 to EastLink south of Canterbury Road. Corridor Option C is likely to involve approximately 14km of tunnel structure along what is stated to be a 26km corridor. This is similar to both Corridor Option B (24km) and the true figure for Corridor Option A (26km).

Whilst there is an absence of specific information in the public domain, NELA maps appear to indicate that there will be two tunnel elements. These would appear to be from east of Diamond Creek to near Heidelberg-Warrandyte Road (northern tunnel) and from north of Reynolds Road to north of the Ringwood Bypass (southern tunnel). The northern tunnel would appear to be approximately 9km in length, and the southern tunnel would appear to be approximately 5km in length.

Corridor Option C has the advantage of avoiding the existing grade issues with the EastLink Mullum Mullum tunnels.

Corridor Option C provides a true solution to the issue of completing Melbourne's orbital network. As such, it greatly improves connectivity, especially between the south-east and north/north-east. It is considered that Corridor Option C provides the greatest benefit of all four corridor options, in terms of improved access to jobs and education. Corridor Option C provides the best connection between NEIC, specifically Monash and La Trobe.

Page 35 of the Technical Summary states that Corridor Option C is expected to carry approximately 50,000 - 110,000 vehicles per day. This implies that 60,000 vehicles per day (the difference between the northern and southern sections) are distributed to / drawn from the surrounding areas (that is, via the interchanges at Diamond Creek Road, Ryans Road and Reynolds Road). As such, Corridor Option C performs excellently in achieving journey connections.

Table 19 of the Technical Summary presents a high-level appraisal of the relative merits of each route option in terms of active mode movement. Banyule disputes this relative assessment given the urban severance caused by Corridor Option A being a freeway through the heart of an urban area; which is not the case with Corridor Option C.

Banyule also contests the view presented in the 'North East Link Community Update 2' that the public transport criteria perform better under Corridor Option A than Corridor Option C. The ability to implement a large number of public transport options in the very short term, and the choice of an NEL corridor, are independent of each other. Further, Corridor Option C would provide an opportunity for additional public transport services rather than competing with existing train services under Corridor Option A.

In the same Community Update document, Corridor Option C is scored as performing better than Corridor Option A, with regard to protection of the environment. The negative impacts of Corridor Option C are described as being related to "surface works". Given that the assessment of Corridor Option A does not appear to include the extensive works associated with the widening of the Eastern Freeway, Banyule queries the validity of the relative scoring of the corridor options in this regard.

Corridor Option C also includes the potential upgrade of the Northern Arterial (Reynolds Road extension). Banyule considers this a valuable extension of the arterial road network which should be included in the NEL irrespective of the Corridor Option selected.

Option D

Banyule does not consider that Option D is a viable option due to its length (40km) and extensive impact on the Urban Growth Boundary.

3.6. Residual Arterial Road Issues

A detailed understanding of the likely impact of the NEL on surrounding arterial roads is critical. Communities in the north-east are keen to understand how additional traffic might use the arterial and local road networks and the impact on the amenity, liveability and accessibility of neighbourhoods. Equally, councils need to make appropriate plans for traffic management.

Despite several requests, no detailed information has been made available by NELA on how the impact of each corridor option on the arterial and local road has been analysed (Table 6 of the Technical Summary). Without access to input assumptions in the traffic modelling and the direct outputs, the impact of the projected traffic volumes on the arterial and local road network in Banyule is unclear. Page 42 of the Technical Summary states "*as we continue to develop our thinking and understanding of the range of issues in Melbourne's north-east, we will continue to refine the models and tools in our more detailed analysis*". Banyule remains extremely concerned that the north-east region is not fully understood at present, and the indication that a preferred corridor will be selected with this level of uncertainty.

Concerns about the modelling assumptions include:

- The Technical Summary makes no explicit statements about tolling on either NEL or the Eastern Freeway, in particular, whether a direct (user pays) or shadow (state pays) arrangement will be made. This distinction is critical, given that road users can be expected to act differently depending on whether or not they will be directly tolled.
- There is a cascading impact with traffic using local roads if the Eastern Freeway is tolled and drivers seek to avoid tolls.
- The Technical Summary is unclear on how the potential for mode shift (away from public transport towards private vehicles) is modelled, if road traffic conditions for trips bound for the CBD are improved.

As a point of principle, there are three key issues that Banyule wishes to see addressed for all current and future arterial roads, as detailed below:

- All arterial roads in the north-east region should have bus lanes and bus priority on them such that public transport options are made as attractive as possible.
- Consideration be given to the nature and form of all arterial roads, in particular, the extent to which adoption under the Movement and Place program is possible. Banyule considers it inappropriate that private vehicle movements are unnecessarily prioritised on arterial roads in the north-east.
- The balance between traffic flow and the impact on local communities should be examined for all arterial roads. A good example of this is the area surrounding Watsonia station (shown in Figure 6 below) where the neighbourhood is divided by six lanes of Greensborough Road (plus turning lanes). Changes to the environment that improve pedestrian access between the east and west sides of the road would reasonably be expected to reduce car demand, both at the railway station car park and on the surrounding road network. These issues are explored in more detail in Section 3.7 below

Figure 5 - Watsonia neighbourhood divided by Greensborough Road

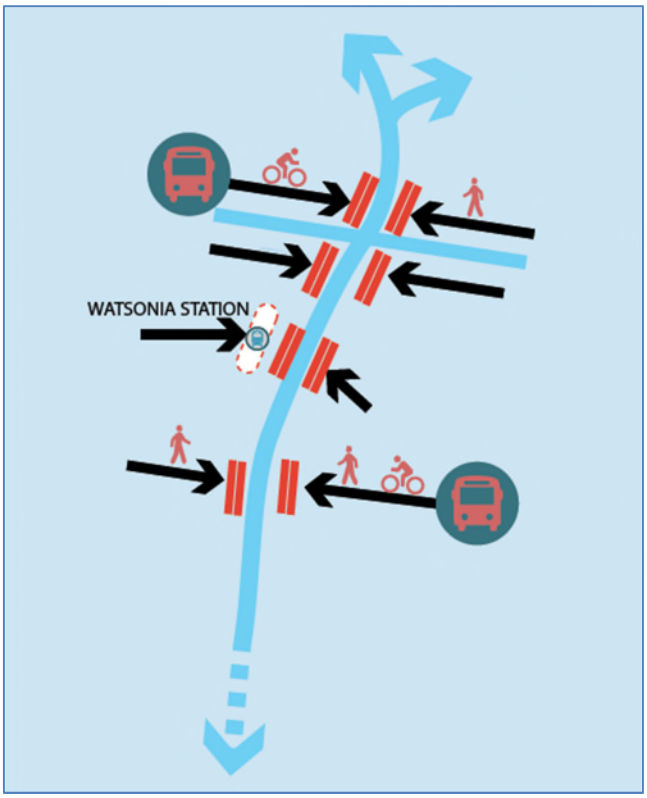
A critical issue that needs to be addressed to meet the requirements of the Transport Integration Act and the guidelines for Business Cases is the identification and consideration of alternative approaches that could help to solve the transport problems in the area (i.e., alternatives to all of Corridor Options A, B, C and D). Many of these alternatives should be investigated as short to medium term improvements that can mitigate the ongoing levels of congestion while the NEL is being developed and built. These include:

- Duplication of the Hurstbridge Rail line from Greensborough to Eltham an increase in service frequency to a minimum of 10 minutes throughout the day.
- Improved integration of train and bus services including a new transport interchange at Greensborough.
- New bus routes – particularly more direct connections across regional barriers.
- Improvements to existing bus routes – particularly to improve access to tertiary education and major activity centres.
- Strategic cycling corridors – particularly connecting major activity centres.
- Pedestrian improvements around local schools and to public transport services.

3.7. Connected Community / Severance

The question of community severance with regard to active modes and other cross-corridor movement aspects, is one of the most pressing and challenging concerns wherever urban freeways are contemplated or encountered. Corridor Option A, proposing just such an urban freeway, clearly needs to address these issues in a thorough manner. Figure 7 below illustrates some of the potential challenges (note that the railway line also acts as a physical barrier to make access doubly difficult).

Figure 6 - Illustrative Severance at Watsonia Station



Banyule considers that well connected, permeable neighbourhoods are inherently safer neighbourhoods. Corridor Option A has a much more destructive impact on neighbourhoods in the north-east than Corridor Options B, C and D. The only reference in the Technical Summary to severance is the misleading statement that minimising severance is an issue which is "*common to all corridors*". While we would agree that severance should be minimised for whichever of the corridor options is chosen, it is only Corridor Option A for which mitigating measures are substantially required. The more logical choice of Corridor Options B or C would need significantly less mitigation. The implication from the Technical Summary that severance is a common issue is a matter of some concern to Banyule, and implies that NELA has afforded insufficient attention and focus to the question of severance and permeability.

Notwithstanding the chosen route for the NEL, Greensborough Highway is already a barrier to communities in Banyule. We recognise the need for alterations to improve permeability, together with making it into a boulevard, with or without Corridor Option A.

The Hurstbridge and South Morang railway lines, Yarra River and the local topography combine to create community severance across the region. The chosen NEL option - and supporting arterial road improvements - need to be designed in such a manner that community severance is reduced (rather than further increased).

3.8. Meeting the Needs of National Employment and Innovation Clusters

The Technical Summary highlights the importance of the National Employment and Innovation Clusters (NEIC) in boosting employment and productivity growth, as referenced in Plan Melbourne. Banyule notes that in the committed and potential transport infrastructure for the La Trobe NEIC (Map 17 of Plan Melbourne), the Heidelberg - Rosanna rail duplication and M80 upgrade are identified, whilst there is no other reference made to transport infrastructure (including NEL) required to enable the NEIC to reach its full potential. Similarly, the Monash NEIC has an upgrade of the Monash Freeway committed, and no other potential projects listed.

Notwithstanding, Banyule agrees that access to NEIC (with a particularly focus on La Trobe) could be significantly improved. However, as discussed in Section 3.1, it is clear that significant improvements to public transport access could be made within the constraints of the current road network. Public transport is particularly important given the age and income profile of the majority of those who access the La Trobe NEIC, and for whom the current lack of quality public transport options enforces car dependency. Banyule is aware of the following options which could all deliver significant improvements to the quality of access and connectivity:

La Trobe NEIC

- The NEIC would benefit from new public transport connections to the east and north, such as light rail from Mill Park to South Morang, a review of bus route 566 and improved east west bus connections.
- The introduction of express bus services to Box Hill and Dandenong.

Monash NEIC

- The La Trobe NEIC would benefit greatly from new northern public transport connections to the City of Manningham and Nillumbik.
- Monash NEIC is in need of public transport corridors that cross the railway line.

The Technical Summary states on page 52 that "*corridor A is expected to provide the most significant gains in accessibility to the La Trobe NEIC*". Given the lack of transparency relating to the modelling of the corridor options within the Technical Summary, it is not clear what underpins this statement. No specific arterial link or improvements appear to be suggested in any of the corridor options to address access to the heart of the NEIC.

Adding private vehicle access to NEIC without improving alternative modes and local active transport options will only exacerbate traffic congestion in the NEIC. There is no plan for improving sustainable transport access to the NEIC, exacerbating local traffic congestion within the NEIC would make some critical activities within the NEIC less productive and sustainable.

Given that Corridor Option C removes up to 60,000 vehicles from the Greensborough Road corridor, this is arguably better than Corridor Option A for improving access to the La Trobe NEIC. Such access is currently severely hampered by traffic that is making much longer journeys to and from outside the region, using corridors adjacent to and through the La Trobe NEIC.

Whilst Banyule recognises the strategic importance of the NEIC, it is important to note that based on NELA modelling, Corridor Option C performs better than Corridor Option A for the **overall** improvement in access to jobs and education (as discussed in Section 2.2). Therefore, the preferred way to improve employment and productivity in the north-east should be to proceed with Corridor Option C.

3.9. Transport Integration Act

The Transport Integration Act (2010) (TIA) requires transport and land use to be considered holistically. Section 24(1) states that "*a transport body must have regard to transport system objectives when exercising powers… likely to have a significant impact on the transport system*". Banyule expects that the requirements of the TIA should be met by the NELA even though the project is essentially at the concept stage.

The TIA identifies seven principles to guide the process:

- Principle of integrated decision making.
- Principle of triple bottom line assessment.
- Principle of equity.
- Principle of the transport system user perspective.
- Precautionary principle.
- Principle of stakeholder engagement and community participation.
- Principle of transparency.

In addition, the TIA identifies six system objectives which must be considered by transport bodies:

- Social and economic inclusion.
- Economic prosperity.
- Environmental sustainability.
- Integration of transport and land use.
- Efficiency, coordination and reliability.
- Safety and health and wellbeing.

TIA Principles

Section 2 describes how Banyule has reviewed the NEL **project objectives and guiding principles**. It is clear that these have appropriately considered the TIA principles and objectives.

Banyule's detailed commentary on the NELA **process in relation to the TIA principles** is summarised in Table 2 below.

Table 2 - Assessment of NELA process against TIA Principles

Principle	TIA Detail	Banyule commentary
Integrated decision making	"seeking to achieve Government policy objectives through coordination between all levels of government and government agencies and with the private sector"	Government policy objectives have been unclear in relation to the NEL. Co-ordination between and across government has been hampered by the unwillingness of NELA to provide detail.
Triple bottom line assessment	"....an assessment of all the economic, social, and environmental costs and benefits taking into account externalities and value for money"	Unclear that all such costs have been considered by NELA in work to date, in particular, the social costs associated with urban severance
Equity	"equity between persons irrespective of personal attributes and location, and between generations by not compromising the ability of future generations to meet their needs"	The principle of the TIA has been followed.
Transport system user perspective	"understanding the requirements of transport users, including their information needs; enhancing the usability of the transport system and the quality of experiences of the system"	Does not appear to have been considered across all transport system modes.
Precaution	"if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation. This....includes... an assessment of the risk-weighted consequences of various options"	The assessment of the environmental impact of the corridor options is extremely high level at this stage and it is not apparent that any corridor risk weighting has been considered in the analysis. There appears a clear case for postponing the corridor decision until the danger of irreversible environmental damage is better understood.
Stakeholder engagement and community participation	"taking into account the interests of stakeholders, including transport users and members of the local community; adopting appropriate processes for stakeholder engagement"	NELA has facilitated engagement with transport users and members of the local community. The principle of the TIA has been followed.

Transparency	"members of the public should have access to reliable and relevant information in appropriate forms to facilitate a good understanding of transport issues and the process by which decisions are made"	We have highlighted throughout this submission the areas where information relating to the corridor options is either missing or misrepresented. The most serious of these relate to the cost and length of Corridor Option A.

Banyule's detailed commentary on the NELA **process in relation to the TIA objectives** is summarised in Table 3 below.

Table 3 - Assessment of NELA process against TIA Objectives

Objective	TIA Sub-Clause	Banyule commentary
Social and economic inclusion	• Minimise barriers to access so that so far as is possible the transport system is available to as many persons as wish to use it • Provide tailored infrastructure, services and support for persons who find it difficult to use the transport system	An assessment of changes in travel times has been produced for the corridor options, but this is based on only one specific journey and the underlying assumptions (particularly relating the Eastern Freeway) have not been disclosed.
Economic prosperity	• Enabling efficient and effective access for persons and goods to places of employment, markets and services • Increasing efficiency through reducing costs and improving timeliness • Fostering competition by providing access to markets • Facilitating investment in Victoria • Supporting financial sustainability	The Technical Summary makes a high-level assessment of the likely change in access to jobs and education. Section 2.1 of this document highlights how this assessment is not reflected in the scoring of the corridor options.
Environmental sustainability	• Protecting, conserving and improving the natural environment • Avoiding, minimising and offsetting harm to the local and global environment, including through transport-related emissions and pollutants and the loss of biodiversity • Promoting forms of transport and the use of forms of energy and transport technologies which have the least impact on the natural environment • Improving the environmental performance of all forms of transport and the forms of energy used in transport	The premise of the Technical Summary appears to be that a road-based solution is appropriate to the issues in the north-east, without proper consideration of alternatives. Public transport options are described in the context of supporting whichever corridor option is chosen, rather than being considered and potentially discounted from first principles.

Integration of transport and land use	• Facilitate access to social and economic opportunities • Maximising access to residences, employment, markets, services and recreation • Planning and developing the transport system more effectively • Reducing the need for private motor vehicles and the extent of travel • Facilitating better access to, and greater mobility within, local communities • Transport decisions are made having regard to the current and future impact on land use • Land use decisions are made having regard for the current and future development and operation of the transport system • Transport infrastructure and services are provided in a timely manner to support changing land use and associated transport demand • The transport system should improve the amenity of communities and minimise impacts of the transport system on adjacent land uses	Banyule believes that growth within the urban boundary can be maximised most efficiently by the adoption of Corridor Option C, and that this is not reflected in the assessment of the corridor options. In addition, Banyule believes insufficient consideration has been provided in the Technical Summary of the future growth and needs of Melbourne, and how well the NEL will align with these. Banyule believes that insufficient weight and consideration has been made of the degradation in the amenity of communities along Corridor Option A in the assessment and scoring of the corridor options.
Efficiency, coordination and reliability	• Balance efficiency across the network so as to optimise the network capacity of all modes of transport and reduce journey times • Maximise the efficient use of resources including infrastructure, land, services and energy • Facilitate integrated and seamless travel within and between different modes of transport • Provide predictable and reliable services and journey times and minimise inconvenience caused by disruptions to the transport system	It is not clear that a consideration of journey time reliability has been made, in particular, a detailed consideration of how the efficiency, coordination and reliability of the NEL (under Corridor Option A) will interact with the Eastern Freeway at peak times. Efficiency of the transport network as a whole (including the contribution of public transport) does not appear to have been evaluated.
Safety and health and wellbeing	• Seek to continually improve the safety of the transport system through safe infrastructure, safe forms of transport, safe transport system user behavior • Avoid and minimise the risk of harm to persons arising from the transport system • Promote forms of transport and the use of forms of energy which have the greatest benefit for, and least impact on, health and wellbeing	The safety, health and wellbeing of users of the NEL will be considered at detailed design. The benefit of alternative modes does not appear to have been considered.

In summary, Banyule is of the view that NELA may not have met the principles or objectives of the Transport Integration Act in relation to the NEL project at this stage.

4. Banyule Community View

An extensive process of engagement within the Banyule community has been carried out to support our submission. There have been two main strands to the consultation.

Direct consultation

A community consultation meeting was held on 6th September. In total, 400 Banyule residents attended this meeting. Residents were given a presentation and invited to ask questions to discover more about the corridor options, to provide a vote on their preferred route, and to provide additional comments if they wished.

Voting on the preferred route at the meeting showed a clear preference for Corridor Option C and a high level of dissatisfaction for Corridor Option A.

Indirect consultation

A pre-paid postcard was sent to 52,000 homes in the Banyule community. The card allowed residents to record which of the four options they were in favour of, as well as to record any comments if they so wished. Cards had to be posted by 27th September to be valid.

The cards were also distributed at community consultation meetings and via Council offices.

Members of the community were also invited to vote and provide comments via an online portal on the Shaping Banyule website which was accessible to all.

The community response was in favour of Corridor Option C (39%), the strongest comments made were against Corridor Option A. A summary of the indicated corridor option preferences is provided at Table 4.

Table 4 – Community Corridor Preference – Indirect Consultation (Based on valid responses only)

Response Type	Number Received	Corridor A	Corridor B	Corridor C	Corridor D
Shaping Banyule	1,277	33%	14%	45%	7%
Postcard	6,285	32%	22%	37%	8%
TOTAL	**7,474**	**32%**	**21%**	**39%**	**8%**

The Communities preference is Corridor "C"

Council has provided the opportunity for all residents in Banyule to participate in a survey on the four route options proposed by the Authority. Council has been overwhelmed by the response from our community with close to 8,000 residents responding to the survey. This is a record for Banyule. We have never before had this level of engagement from the community on an issue in our 24 year history as a local government authority.

Of the nearly 8,000 responses 68% of residents do not support Corridor Option A with the strongest preference being for Corridor Option C. We urge Government to mindful of this response from the community in the selection of a preferred corridor and in its design and construction.

5. Complementary Projects

Significant improvements can arise from behaviour change that would be relatively easy for the State government to implement as NEL 'early works'. These include:

- Duplication of the Hurstbridge Rail line from Greensborough to Eltham an increase in service frequency to a minimum of 10 minutes throughout the day.
- Improved integration of train and bus services including a new transport interchange at Greensborough.
- New bus routes – particularly more direct connections across regional barriers including the Eastern Freeway.
- Improvements to existing bus routes – particularly to improve access to tertiary education and major activity centres.
- Provide multi-deck car park at Watsonia Railway Station.
- Strategic cycling corridors – particularly connecting major activity centres and completion of the Northern Regional Trails Strategy.
- Pedestrian improvements around local schools and to public transport services.
- Public Open Space improvements.
- Address immediate safety issues on Rosanna Road.