



MINUTES

Blackheath Co-design Committee

Date	20 June 2020
Time	12:30pm / 9:00am
Venue	Blackheath route options site inspection tour
Chairperson	Alistair Lunn
Attendees	Alistair Lunn Kirstin Fischer Iain Macleod Paul Peters Kate Walsh Adam Hillard Eva Johnston Adele Coleman Greg Nankervis George Vergotis Sally-Anne Hollis Ally Drinkwater Juliet Bourke Gary McKew Gary Moore

Blackheath Co-Design Committee

Site inspection tours 19 & 20 June 2020

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Introduction

The majority of the notes are not verbatim, considering the following constraints

- Nine hours of recorded conversations.
- Repeated conversations both within tours and between days.
- Sections of conversations drowned out by traffic noise, overlapping conversations, other environmental noise and interference.
- Sections of conversations referring to physical indications being given by the speaker: eg – the road would go down here....
- Sections of conversation that would give strong indication of property acquisitions related to un-endorsed route options.
- Notes are instead grouped under general themes / key questions / key statements.

Two questions have been transcribed as close to verbatim as possible, as committee members indicated a preference that they be recorded:

- Funding allocation
- Taking options off the table.

Benefit Cost Ratio

Committee members comments/questions

- Have the Benefits Cost ratios for the different choices been completed?
- If the tunnels come out to have a terrible BCR then that's back to the drawing board?

TfNSW response

- That's a later process
- That's not the only consideration in making the [final] decision.
- This project isn't reliant purely on a BCR. It can still be assessed as nation-building.
- The limitation of a BCR, it doesn't capture social impact. It's very much on economic growth.

Outer Western Bypass option

Committee members comments/questions

- Spectacular for drivers, but that would be the only benefit. Property owners would have to look at it.
- High wind load area, this is a very windy spot, particularly in August.
- Sensitive ecological / vegetation s down in Centennial Glen you wouldn't find anywhere else.
- Need to look carefully at the aquifers so as to not change the water flow.
- This option has the highest environmental impacts of all the designs.
- This whole option is very expensive, not terribly attractive, very clumsy.
- It does affect a lot of people's lives.
- There are some walking trails at the end of Bundarra St.

About 20-30 metres below where we are standing at the end of Ada Rd? Yes.

- Nothing to commend impacts on Vipassana.
- On paper you can see why you do it.
- There are a huge amount of people that come to Vipassana. It is one of the most popular meditation centres near Sydney. Massive economic impact on the town. People spend time meditating but before or after they spend time in Blackheath, it is important for our economy.
- Blackheath is the only village on the mountain where the average age is decreasing. Reason is we're getting rock climbing families coming to live here.
- [This option would] take a road into a region of the environment and landscape which doesn't need to have a road there.
- People come here to look out over the valley.
- All the bushwalking is being done on the western side, due to bushfire impacts.
- So a service road – is kind of a double destruction?
- There's aboriginal heritage [here] as well, [including] song lines.
- You must have to have massive pylons (12 metres)?
- Would you lose this structure? (ie the lookout at Stavely Pd) (TfNSW: yes, but we would look to relocate the structure).
- Wind is huge up here, it can get to 100kms/hr.

TfNSW comments/response

- The Tunnel portal comes out from Mermaid's Cove, below the existing road. Then touches down on the end of Stavely Street.
- The bridge is a fair way down the existing road way.
- Property owners would look across over the [new] roadway. Houses with view across the Glen would have visual and noise impacts.
- We would need to get down to the bottom of the valley to construct and maintain the piers. And would need service roads.
- Wind loading is a consideration in design. Need to examine the aerodynamics.
- We know there are hanging swamps and endangered ecological communities. We would carry out an environmental assessment, and [depending on the results] sometimes either have to do something different or put in strong mitigation measures.

- Highest wind impacts, but fire and fog [impacts are] similar to other options.
- Regarding property impacts, there are properties which would need to be acquired.
- [The current] walking trails would cross under the bridges for this option.
- [Regarding noise impacts] We would do an acoustic assessment that looks 10 years into the future and likely changes to traffic. If there is increase in noise more than 2-3 decibels, we would have to do things like mitigation measures – like treat the road with a less noisy surface (needs to be replaced more often) – we can put up noise walls, noise mounds, architectural treatments like double glazing and stronger doors. Depends on the job/project which is the best way to go.
- Regarding the crossing near Vipassana – it is the easiest spot from an engineering point of view to cross the railway.
- Service roads are what we call temporary works. There would be some reinstatement, but we would need some sort of road to remain so that we can service the road. You would probably have to go down from bottom of Bundarra.
- We are working with the aboriginal land councils and community groups – through our processes they walk the routes with us, tell us about the issues, song lines, places of significance. Those consultations have started. We're working with about six aboriginal groups on their specific areas.
- Bridges would have as large a span as possible to reduce pylons
- If retaining walls are greater than 10m, then Bridges are more viable.
- Pylons have less impact than embankments and retaining walls.
- We can go with really big spans – 60m spans – to minimise how many pylons you need.
- Design codes have wind codes that you have to apply to the designer.

Cut and cover tunnels

TfNSW

- We have to get to a certain depth before we can use a tunnel boring machine. This proposed portal location [ie long tunnel south end] uses the natural gradient of the ground – it is going up and we are going down – so we achieve that depth over a shorter distance.

Dangerous Goods

TfNSW

- Dangerous goods trucks currently can't go into tunnels [according to government policy], but there will possibly be a change in policy to allow them to do so.
- There have been lots of improvements in safety – retardants etc.
- [There are a] lot of fuel tankers that come through the mountains
- Roughly 20% or less [trucks] are dangerous goods – mainly fuel tankers.

Different options

TfNSW

- There are all sorts of hybrid tunnels you could do, eg mix and match entry points.
- For a tunnel option, you could mix and match the portals or we could investigate new portal locations.

Eastern side – why didn't TfNSW look at it

TfNSW

- There are a lot of impacts on national parks and world heritage area on the eastern side. Larger proportion of people and residences, equally large topographical issues.
- Will look at the path of 132 road.

Initial design process

TfNSW

- First draft design looks at ideal alignment for horizontal and vertical alignments, safer gradients and curves. Then we can adjust – for example to slow traffic down, tighten curves, minimise impacts and property acquisitions. It's an iterative process.

- Have to put enough work in to know that it could work, but it's by no means optimised [or the final solution].
- [One of] the constraints with tunnels – we have to ensure a sight distance around tunnels – so you have to keep pretty big curves.

Rail Level crossing

Committee members' comments

- The level crossing has already been identified as one of the most complex level crossings in Australia. You can't funnel more traffic through there.
- Instead of just working on these two crossings [options], could you look at Kanimbla?
- We just need another access point [across the rail line].
- Ten years ago it wasn't a problem. If we get rid of some of the traffic...

TfNSW response/comments

- There's also the issue of how to integrate the level crossing and the three [road] approaches to the crossing.
- We've thought about options, getting rid of the level crossing, but crossings have impacts, and additional footprints (ie property).
- Can't just get rid of the crossing either, because of connectivity.

Long tunnel - portal Northern Blackheath

Committee members' comments

- What happens to the aboriginal tree?
- Could you move the heavy vehicle station down where the old road used to go – down to Soldier's Pinch?
- Possibly put a checking station at Brown Town?
- One of the concerns is the large number of springs and aquifers. What impact would the tunnel have on these?
- What about an underpass under the road to get vehicles across to the checking station? Would that exclude dangerous goods (TfNSW: No).
- Could you fund long tunnel with \$2.5 billion (Yes, based on current estimates)
- This option impacts on no one in town.
- No property acquisitions, but we don't know about the springs and aquifers.
- Sewage tunnel has been built.
- As a longwall miner, it was hard to get through the springs, pumping a lot out, plenty of water down there.

TfNSW comments/responses

- The portal is near Mt Boyce heavy vehicle checking station.
- [This option has] some unresolved issues – the heavy vehicle checking station would have to be moved, and we will probably need checking stations on both sides of the road.
- We would have to relocate the aboriginal tree, but it has been relocated a couple of times already, it is mounted on a steel plinth.
- We have a full aboriginal consultation process for impacts on aboriginal cultural heritage.
- Our tunnel experts can address tunnel questions like water flows at 1 July meeting.
- Still have to deal with ventilation towers.
- Every option has impacts, we look at what do we have to do to mitigate those impacts and can make any option acceptable.
- We started working on these plans last year.

Long tunnel portal southern Blackheath

Committee members comments/questions

- What's the minimum and maximum depth?
- So there's no property loss?

- How long is this option?
- What is your view on dangerous goods in this tunnel?
- For vented purposes, instead of coming through densely populated area, you could go through less populated areas, so less issues when a vent comes up.
- How big and how often are they [ie how many along the length]?
- It's not just where you put the vents, it's what sort of ventilation.
- I don't want to put my stamp on something that has a giant building in the middle of town.
- Do we know much about the foundations of the properties through town? [ie impact of tunnelling under properties]
- Between the bridge and Medlow, what are you doing there (TfNSW: basically widening).

TfNSW comments/responses

- Small national park impact, some water catchment land – revocation process we have to go through, but it can be done.
- About 300m from Evans Lookout Road.
- Underground by the time it gets to Evans Lookout Road before then we would be in cut and cover as we get sufficient depth for the tunnel boring machine
- Coming from Blackheath the traffic would split just after Evans Lookout Road to merge into the portal.
- Approx. 60m width portal.
- No property impacts/acquisitions
- Lowest point is about 19 metres [underneath], largest is close to 60metres. Under the rail line is 25m. Under housing is about 40 metres – approx. 11 storeys down.
- We don't know the ventilation arrangement yet.
- Long tunnel is 4.5kms
- A lot of dangerous goods vehicles are fuel tankers, and they would likely do deliveries in town.
- This [tunnel] will be built to state of the art, but there's no guarantees that standards would change.
- Vents don't need to be above the tunnel, they can be piped to other locations.
- The tunnel expert will be able to give you examples of how other tunnels have been vented.
- We haven't studied foundations yet, but we'll be 11 storey's down.
- Topography not as good here, so takes longer to get depth to start tunnel boring machine. The steeper the gradient, the more trouble you get with trucks breaking and pushing out a load of emissions.

Long tunnel under the mountain

- The problem is you're making a decision there not to connect the towns, which is a large proportion of the traffic.

Moving the railway line

- Can be really difficult. In this location the main constraint is the really steep ground.
-

Portal Width

- Including tunnel, lane between and access roads, likely to be approximately 60 metres across.

Process

- It's important to note that you [TfNSW] get to make the decision, so you need to have some appreciation of what is important to us - sustainability, environment, and heritage and how you phrase things. .
- It's going to be important in how you right the [BCC] report, and your messaging, it's highly sensitive. To hear back from you that that's important and you appreciate it is important to us.

TfNSW response

- We certainly do feel that way. We are talking to the Minister and others. We all care, we've all walked out the back of the school grounds and down into the Glen.
- We're not presenting any of these as preferred options. We're giving you all the information so that you can understand what could happen, and you can also come up with options that could be hybrids or totally different.
- If we were doing this job 10 years ago, BCC would not have even crossed our minds. But now we are out early days – it's still not perfect and it's very hard - opening up a lot of ideas to try to get that community feedback early in the piece. As consequence we have a grey swathe that scares people. Instead of one that just impacts one group, we're impacting a lot of people in the conversation.
- It is important. We have to look at all the options because they all have different impacts and we do try to understand them all – we get feedback from you. We have to be a little bit objective in the presentation of them, but that definitely doesn't mean that we don't understand we don't feel the impacts – obviously not as closely as you do because you live here.
- We are listening to the community, and we are trying to be genuine and authentic. We don't have every answer, but if we don't we will go away and find out. We have changed our tack with introducing the BCC. We want to get out to the community and get rid of the grey swathe and bring it down to something more refined that needs work but will give surety. And then we can hone in on those issues.

Property acquisitions

Committee members' comments

- [Regarding acquisition along the existing Highway] People love being in Blackheath and not everyone has a huge amount of money some people need a house of a certain size but can't afford it in a place that they love. That's why the highway is actually very good. Because it gives people an option to have an option that's big enough to suit their needs.
- It's not the people that you are buying out that is the problem. It's the people that are left. They're on the new highway frontage. They didn't buy on the highway frontage.
- People who purchased there never expected to front onto a highway.
- People with a view across the valley would now be looking at a road.

TfNSW response/comments

- Short tunnel portal would need some property acquisitions.
- If the proposed project/option affects *some* of the property, we would likely acquire all of the property.
- We recognise the impacts on the people that are left.
- This is the real challenge that we have on all jobs [projects].
- It's an issue with constructing any town bypass.
- There is a lot of work to be done to identify impacts and put mitigation measures in place.
- Unfortunately under current legislation there is no compensation for the people now fronting the highway beyond noise and visual impact treatments

Question: Taking options off the table

Committee members (italicised)

TfNSW response

If people were to say to you, take these two options off the table (Centennial Glen and Station St) – what would be the option if the committee were saying to you at this early stage – not talking about a preferred option as yet – that these two options just don't cut it in any way, shape or form.

- We have to go through the process, so that we've got a belt and braces process to get to the answer. And that is why we offered to speed up the process to have another meeting every fortnight. And we understand that there were those that didn't want that because they wanted us in a room and it is easier to look at these maps than to look at a screen at home.
The covid situation has really made it hard, but some people are also saying put the whole thing on

pause until Covid's cleared up, and we were adamant that we didn't want to do that because we've heard from over 300 people in a community meeting, loud and clear, that we need to get to a line and keep the process moving because we have this shadow of an uncertainty over so many [houses]..

What's the soonest that the grey strategic corridor could be lifted?

- We're expecting that with the current staging of meetings, that in October we'll be in the community with one or two lines on a map

Those two lines could be two tunnels?

- Two could be two tunnel lines, in early October. We've got to wrap this process up, write a report, brief government and get ready to go out to the community. That's the timeline, and that's the timeline that we outlined in Nov-Dec of being out in the second half of the year.

Does this decision solely go to the Minister, or is it a cabinet decision?

- Well funding is always a cabinet decision but the route is more a ministerial decision. So we could pick a long tunnel and the minister could say that's what we're going to do based on the team's advice, but the funding of that is a cabinet decision.

What if they say no?

- Well we don't do anything

But you would keep a preserved corridor for when you've got the money

- Well we would argue that we would take the job through to concept design, do the environmental assessment, that's valid for 5 years from date of sign off, which is still a year or two away, and then it could be extended again for justification and updating of legislation. And we would then say this is the corridor. We would get it to like you've seen in the valley, where we've got an LEP, so that if someone wants to buy or sell a home where a portal might be, people are aware that they are buying a home where the portal will be eventually, and the person who is where the portal might be, for eg where the short entrance near the park is, that would open us up to be able buy those properties if they wanted to sell. Even if we haven't got funding to build the job, if they came to us and said that we want to move we would be able to buy that property under legislation

What you were saying about taking the net off here – if you said, god forbid, let's go down station street for whatever reason or Centennial Glen and then you went to cabinet and cabinet said no we've got no money, as you've said you've still got that corridor there, and that would be indefinite, until you've got the money. I saw that happen in where the new airport is going to happen

- Well that's what happened in Hartley Valley. It's in Blue Mountains and Lithgow City Council's LEP, and land holders know that they're on the route, know that one day we'll come and start negotiations to buy those properties. They've known that for five years. They've got our contact details and we touch base with them regularly, and if for some reason they decide they want to move, they ring us and say.

So how do we mitigate that risk, cause that's really where we're going to now, so if we're trying to shrink down the options, and if you're saying – tell us how we mitigate that risk of having that strategic corridor there forever, for a long time?

- Ironically, we get you to lobby for it to happen, which is counter-intuitive because a lot of you don't want anything to happen.

Who would lobby?

- Well we would lobby. But all of these things also happen with community pressure. I'm not saying it would be down to you guys. As soon as we have a corridor, we'd be advocating for this project. The Government's committed to this project. We've got the \$2.5 b at the moment, we're talking to the Federal Government already in the early days about the project, and our aim is to get these things to a stage where we could say to a Government it's ready to be built. *Like the tunnel that was made in the last election?*

- Like the tunnel. And they've put the money on the table to develop it. So that's what we're aiming to do, and that's what we're moving as quickly as we can towards.

What would it take to get Station St and Centennial Glen off the table earlier than October – to do it in a two stage process?

- We would have to be careful not to be seen to be pre-empting the process and pushing something through, so that's my concern. By the time we've finished the fourth or fifth meeting, there is still a lot of discussion to be had with the whole group
But if we were able to put a motion to you that had unanimity in the group, to say take these off the table early?
- I think the quickest way we could work towards it would be to not need a fifth meeting, so my aim would be to answer as many questions as we can in the next meeting and then get to that decision from you guys in the fourth meeting, which is the first week in August, then all of a sudden that report writing moves forward a month and the finalisation, so we wipe a month from the process. Not that I want to rush the process, but there is scope to do that. But at the same time the Government isn't going to allow us to just withdraw options and we don't support that either. The whole aim of the report is to help with justification, so the quicker we can get to the report the better.
There lots of houses and business that could be lost on the other side with option three, and with option four there are lots of issues that we've already started to allude to that have to be met. It would be terrible if we ended up with everything that's flammable driving down the main street of Blackheath because we haven't paid attention to the whole thing about what a long and short tunnel mixed option is, and what all the caveats are. That's my fear – that we can take this off the table, that's absolutely fine, but the race to get the corridor lifted here, but none of the work done on what the caveats might be to make it a safe option. And that's the real fear of what we're talking about at the moment.
- I don't want to make the meetings shorter, I want a complete meeting on the preferred option to get the detail
- That process takes us two years
- *We need a degree of certainty about what a long tunnel built at best practice standards might actually look like. We can't kick this off the table without doing all the work on what the caveats might be. [Gary]*
- *I want this side off the table, I'm committed to this side of the town. My concern, is that if we do take these off early, which I would love, but I've done a lot of work with process and if we disturb the process.....The process should show, from the people on the committee, the process should show that these two options are not negotiable, and the process should show that, so therefore you've got that legitimate paper trail to take to the Minister to say that we've don't the full process, we've looked at all the options in depth, and it shows that these two should be taken off asap.*
- *It also needs to show, that if there's a least worst option, that these are all the caveats that have to be dealt with.*
- We need to have strong justification to take things off the table we don't want to rush it so that we don't pick something that isn't the right option.
- We can speed up meetings, which just means we do things quicker, because there's not a lot of activity between meetings for you, but at the same time we can't just take them off without due process

Questions: Funding re Herald article

Committee (italicised)

TfNSW response

- *Question re herald article re black hole for NSW State Government which impacts highway construction. In particular not sufficient funding for GWH duplication.*
The Government has committed \$2.5 billion for the project and we've been very open that we'll need extra money. That may come from State depending on how they reprioritise the whole portfolio of work including transport. May also come from the Federal Government and we are talking to them about this project. It's on Infrastructure Australia's listing
- *It wasn't prioritised though?*
It's very early days and really the Feds get more excited once we get into next year and we know where we're putting the road and we have a bit more of a concept and an environmental

assessment and we're closer to putting shovels in the ground. And a business case. It's the natural process we go through. We need to be closer and more advanced. We've been open from the start that we don't have enough to build this. The balance is all committed money, it's just that the budget papers work on a 3 year cycle and that's what the \$268 million reflects

As you can imagine with all of these options it's a few years until we get into serious expenditure.

- *The balance hasn't been allocated yet, it's a future allocation?*

It hasn't been put into their forecast, but it's in their long term plan. They forecast three years in granular form, and a big chunk that sits at the end.

It is allocated, but it is not forecast out. The money is there.

- *Can you point me to where I can go in and it says it's been allocated.*

Press releases, the rest is confidential treasury docs.

- *We also face the situation where if you happen to see the Sydney Morning Herald article, the highway's budget is non-existent, seven and a half billion that they don't have. And let's say that you do come up with some money and you do Medlow and you do here, and then the money's gone, and Mt Vic can't be done, we could end up with some monstrous project here that doesn't solve anything, other than tear the town apart, so that's a real possibility, there are some extreme budget issues going on in the state right now.*
- We're familiar with the article, there are budget pressures at the moment, post covid, the economy's changed, you don't have to be an economist to know that, but at the same time there are priorities and there are lesser priorities and if you're in the city, like I was this week, the amount of people using transport in the city has dropped off, a more people are working from home, so do we need to do a project that is earmarked in the city as soon, because there's less on the road or less people using public transport? If everyone in the city worked one day a week at home, that's 20% reduction overnight in the amount of traffic, so all of a sudden a project worth billions of dollars could be pushed out. There is no talk of delaying this project at this stage.
- *Cause if you look at what's happened out west from the drought – all the towns Bathurst, Orange, Dubbo were in a serious water situation. That's going to happen again. It's been relieved right now, so there's going to be very little growth in the west – who's going to want to go out there?*
- I think in fairness – I live in the Central West – there's been a lot of government infrastructure put in place to drought-proof Orange and places like that with more water pipelines and funding. And unfortunately the nature of a lot of places out there is boom and bust, but there's a lot of other industry out there that doesn't need the water. But certainly there's no talk of this project being curtailed.

Safety

Committee member

- Safety should be number one priority.
- Safety is above all with me. That is my number one priority.
- Worst accidents are with trucks, that's why we don't want bigger trucks.

TfNSW

- Problem with road safety – people don't think they will die on the road until they are touched personally.

Short Tunnel portal northern Blackheath

Committee members

- Would people feel the vibration?
- The roundabout is just for local traffic isn't it?
- How big are ventilation towers
- How long has the plan been in place?
- House marked as affected 5 years ago? (Not this project)
- Long tunnel option doesn't affect anyone, but this tunnel affects people's homes.

- Difference between short and long tunnel portal is not that great.

TfNSW

- We are working to minimise the length of the tunnel, we have to work regarding the clearance of the rail.
- There are two critical low points to get past. About 14-15 metres deep.
- We don't believe anyone would feel the vibration.
- It's about 5 storeys – it's a long way down
- The (teardrop) roundabout is a connection in for the local streets. We still haven't completely resolved access for all the streets.
- [The teardrop] It's a bypass lane and you can use it as a u-turn to double back.
- We acknowledge that this option has property impacts.
- The roundabout is to allow access to streets there, and to allow people to turn around.
- We started developing these options last year.

Short tunnel portal southern Blackheath

Committee members

- Important we get some information on best practice and minimum practice standards for tunnels and level of ventilation – that's been really contentious in Sydney.
- For the next meeting are you able to say how many houses would be lost with this option?
- Is it possible to keep it closer to the current alignment?
- We've got bush on each end, it seems silly to bring it shorter and demolish people's houses.
- Can you tell us which houses are at risk?
- Given there's been a number of issues with Westconnex, with terms of cracking in houses and much publicised compensation claims. It would be important at the third meeting to get an idea of the minimum vs best practice that you would actually do. And if cost is not an issue, why wouldn't you bypass worrying about getting deep enough early enough under the houses. The press has not been great in terms of householders living above tunnels.
- Have you learned lessons? And how would that transpose itself onto this project? Is it in terms of depth?

TfNSW

- People coming west would go around on existing road. People coming east out of Blackheath would go over tunnel – pretty much at current ground level – and merge over into the road.
- We might be able to do something with the highway and bring it over the railway and back, but a reverse curve like that is really undesirable.
- We want to make sure that we have plenty of information for you on ventilation stacks.
- The Computer [design software] works out the ideal alignment and automatically puts in embankment. We would look to minimise impacts and we could use a retaining wall instead.
- Again there is scope to tighten things up and minimise impacts
- There are constraints we are working with – the railway line. We would look at it, as we progress through any design, how to optimise.
- Houses in Hargraves should be ok [ie re: vibration] – we're 16 metres underground.
- There are no houses we see at risk being over the tunnel, it is substantially underground.
- The way to get deeper is to go longer.
- Lessons learnt – a lot of things. Depth, the type of rock – sandstone is much lower risk. We have a mix of good solid stuff – where the canyons are is where the softer stuff is, and where we have the ridges is where we have the solid stuff.

Social Impact assessment

Committee members

- A point has been made of requesting an independent social impact assessment.

- The problem is that the social impact assessment doesn't have as much weight as the environmental assessment.

TfNSW

The environmental impact assessment is all independent.

- What typically happens is we put out an EIS, an independent person is brought into to aboriginal, social, environment sections. Those reports make up the overarching report.

Station St / Centennial Glen portal southern Blackheath

Committee members

- The right hand turn isn't going to work into Blackheath. We're going to have all those trucks and people trying find gaps in the traffic.
- People may not want to be in this huge thing to come into town, which would affect tourism.
- If there was a dangerous fuel tanker and someone bashed it, it could go into the tunnel.
- If you've got a lot of traffic coming up on a long weekend, the queue would be longer than on the map.
- Different to Govett's Leap road – trucks not allowed in the tunnel will be trying to turn in, everyone wanting to come to Blackheath will be trying to turn in. Road behind will be faster (Good point).
- Why didn't you look at coming up the other side of the rail line where you wouldn't impact people's homes?
- You have to build tunnels – anything longer than 4km will not see dangerous goods, but shorter have to be built to state of art now to allow dangerous goods later. Making it state of art would make it more expensive.

TfNSW

- This has got signals on it – this is an early drawing, a lot could change.
- On all our projects we make sure we have catch basins for any fuel spills.
- We make sure that bays are sized to accommodate whatever queue lengths are needed.
- Early on the project was looking at coming up the other side of the rail – ruled out because of hanging swamps and endangered species. Also very steep.
- Policies are being reviewed about dangerous goods. Don't think we'll ever allow dangerous goods through a long or short tunnel option. But this option is shorter and there could be scope for dangerous goods to go through this length of tunnel.
- These tunnels will be built state of art – crash risk ratings, fire protection and retardant systems.

Station Street Option

Committee members

- Can't it be done without cut and cover?
- Where it comes out through the valley could you cover (put a lid on the road) to maintain a tunnel?
- Noise impacts for surrounding residents.
- How often do you require ventilation towers?
- Massive impacts for economy of town – knock out 20% of population – no land left to build on. Lose critical mass for existing businesses to survive.
- This option and Centennial Glen options are appalling.
- This is the worst option
- There's Mitre 10, shops, community groups, RSL that would be gone – there's nowhere for them to go.
- Not the zoning to re-create some of those businesses.
- If it was all underground would it be preferential to other tunnel options.
- We appreciate TfNSW coming early in the process
- Anything that comes in at Hill 33 would have huge impacts.
- Is it a billion dollars a kilometre for tunnelling (TfNSW: No.)
- We're talking about different traffic and a lot more of it. Moving the road a little bit towards the railway line won't cut it for the impact it will have on houses in that section.

- By blocking off Kubya, the only way people are going to get up to the Bundarra from Megalong valley and Shipley and the tourists is by Station St. That doesn't happen right now – the locals go down here. The long weekend the traffic jam started here (top of Kubya).
- Could you drop Kubya Street section down low enough to do a cut and cover tunnel there, protect residents from noise and pollution? Why is it open at this point?
- This option takes all the connectivity out of Blackheath. The only point of connection would be Bundarra, which is already unacceptable.
- We would lose our biggest business in town – Mitre 10 and the Timber Yard. People walk across from the other side of town to go to these businesses.
- In this area we have a lot of people who have built studios and Air BnBs. Our economy is a destination, tourists come and stay in our Air BnBs. They're not going to want to come and stay in an Air BnB with a highway beside them.
- I don't have much to say about the Station St option because it just seems so ridiculous. Don't take silence as consent.
- Questions have to be asked, otherwise TfNSW can't go back to the Minister and say that these people have valid questions
- The representation for Station Street didn't show the devastation as much as the Centennial Glen option did. That could be more spectacular so that we can see the impact of a main road right through the centre of town. There was a comment that the town was cut in half. It's not, it's a significant corner that's cut off. Re a report on building roads through the centre of town, you can build two towns – you can't do that here. Station St is a very important corner.
- It's really important that direct and indirect impacts are considered. Those things both have to be discussed.
- When homes are resumed, the value they are given is below the true property value and you wouldn't be able to re-buy.
- There's a brand new building for people with disabilities and it's not just accommodation, it's a whole centre for support. We have quite a lot of people who have moved here because there's a lot of support for people with disabilities.

TfNSW

- This broad option stays underground and comes up at head of Station Street and becomes an open slot from Shipley through to Bundarra, goes under Bundarra, comes back out into open slot at Murray St.
- For this option [Station Street] Between Bundarra and Murray would be cut and cover tunnel.
- Under these current plans, station Street stays in the same location, except for the section near rail crossing. Local traffic would be on top of that.
- As it is a cut and cover tunnel you have to take property to achieve that.
- This option has a large level of property impacts. If we disturb access or create untenable living conditions, we could acquire the property.
- Could drop the tunnel further to avoid cut and cover.
- Once you start talking about tunnels, you're basically looking at another tunnel option then. The critical thing then is the entry and exit portals.
- Might struggle to get tunnel to go all the way as there is a low point we would have trouble getting under that.
- We could cover the section at the bottom.
- Challenge would be crossing the railway line (twice).
- Could take it down to the bottom of the valley and just stay there.
- Road as planned is some above ground level, some high, because the landscape falls away across the road.
- Ventilation towers – not a straightforward answer – changeable depending on length of tunnel, congestion.
- These are the possible options within the area we can go. What is viable

- You have to draw the options to see how bad they are, assess them.
- Adapting to tunnel would be a shorter tunnel issue.
- A portal to the eastern side of the highway near hill 33 could work.
- Very early days in co-design – come to talk with community for early designs. Would normally be a lot more refined.
- There's potential to put a bridge over the street and maintain Kubya. Not saying that's the solution, but that's the kind of thing we've done in the past.
- How we convey this back to government – the report will capture all of this that we are learning.

Station Street survey work

TfNSW:

- This is not being done by TfNSW. No contracts let, no aerial surveying being done, no core drilling planned. That kind of work won't be done until probably early next year.
- Our standard practice is to put out notifications, traffic alerts. We will let the community know if any work is going to be done.

Thank you

Committee:

- Thank you for the option of seeing the plans in the flesh
- Today has been very helpful, put context to it all and understand.
- Having all the experts here to answer our questions.

Traffic and trucks

Committee members

- On the long weekend there was traffic banked all the way from Glenbrook bends all the way through to Mt Vic. That's not going to change with a couple of kms of tunnels. Is it ok for hundreds of people to be stopped dead in a tunnel?
- As soon as we have the go-ahead that there are more trucks allowed on the road, that gets worse. Suddenly we're stuck in tunnels with trucks.
- The usual paradigm is the more roads you build the more people come – like the Harbour Bridge.
- That's a big issue for us, because one of the concerns is that you'll have these huge trucks with people in very small cars and it already feels risky now.
- Will this be built to cater for that kind of traffic?
- It's not like they're going to replace them all.

TfNSW

- There was certainly a lot of monitoring of the traffic over the long weekend.
- I dispute the more trucks, different mix of trucks may be the case, but more maybe not.
- Eventually there will be more – growth of the state, and more development in the west. But the day this starts you would expect less trucks on the road because, potentially if that policy changes, larger trucks, so for every B-Double, that takes the equivalent of one and a half semis. So two b-doubles is equivalent of three semis currently doing the journey.
- One of the things is you have local traffic moving at relatively low speed mixing with high speed traffic. One of the benefits of a bypass is that it separates local traffic and through traffic.
- This will be a state of the art tunnel. It will be to a higher standard than M5 east, because standards change all the time, and what we've learnt from previous tunnels all feeds into current tunnels.
- Standards on trucks have changed as well – lane assist and breaking assist, much better than trucks currently using this road.
- We would specify that they have to be performance standard to use that route, and we would do that here. They have far superior breaking, lane assist, auto cruise so they'll stop if someone else is in front, their emissions are a lot lower.
- The transition of trucking companies is astoundingly quick. Companies move to it quicker because it's one driver and similar fuel to move 30-40% more freight.

Tunnel depths

- Concerns about tunnels surfacing and going back underground. Lighting is programmed to minimise impacts. We could go down steeper – maximum grade of 6 per cent – but the steeper the grade the more use of breaks and resulting noise and emissions.

Tunnel Rail crossings

Committee members

- What is the problem with tunnelling under the railway?

TfNSW

- When a tunnel goes along the railway line it has to support the weight of the train line above.
- Crossing a rail line is preferably done at a right angle to minimise the length of tunnel that has to be supported.
- You have to go down a long way (tunnelling under railway) because the trains on top are very heavy, so when we cross we ideally cross at 90 degrees, the closer you get to being parallel the bigger problems you have in supporting the trains above.

Tunnels

Committee members

- How do you control the water flow in the tunnel?
- We need a degree of certainty about what a long tunnel built at best practice standards might actually look like.
- When you say two options, could it be a short tunnel and a long tunnel.
- Will the tunnels be lined, because you are going to have drainage problems?
- Short and long tunnel options still require dangerous goods to come through town.
- But if you have built them to modern safety standards, in the future they will be able to.

TfNSW

- Tunnel experts at the next meeting to answer detailed technical questions.
- You can't have sharp turns in the tunnel, have to maintain a sight distance of 90 metres.
- The process takes two years, to get that complete sort of detail.
- You could have long tunnel entrance at that end, and short tunnel exit at that end. There are a myriad of ways we can do this.
- All fluid will be captured. Tunnel expert at next meeting can answer in detail. Partially waterproofed tunnels (lined) have specifications on how much water can come into the tunnel. We will make note to make sure expert is ready to answer this.
- If we can build the tunnel to accommodate dangerous goods we will.
- The standards of tunnels we build in Australia are higher than those in Europe.

Ventilation towers

Committee members

- How many ventilation towers would be needed?

TfNSW

- There will likely be a need for some towers.
- A tunnel expert will be available at the next BCC meeting to answer questions in depth.
- Need for ventilation towers depends on the road, the length of the tunnel, levels of traffic, congestion.

Widening existing corridor

Committee members

- Big impact for Valley View Rd – the amount of people that come off that, when you try to turn right it's a nightmare. It does impact the local traffic.
- What's the feasibility of moving the railway underground through the centre of town?
- The problem is the railway station. One of the three buildings in town that is heritage.

- Part of the reason for doing this is to make some sort of time saving for people travelling from the west is my understanding. Where would the time saving be with this particular option? This option would be less palatable?
- The only thing that's different with this option – if it's all clearway and if you think about say Faulconbridge right now there's parking outside the shops and then there's a busy highway. You're proposing that there's not that buffer the traffics not that far away. You've got trucks coming through at 60km.
- If it had been easy, it would have been done long ago.
- The mistake here in Blackheath was the alignment was never corrected when it mattered, and now you've got that pinch point right there with nowhere to do anything. (And throw in a railway crossing).
- It would make the whole town look like a drive through, and there goes our economy.
- The skate park is gone
- Under risk management can you justify doing that at a level crossing and main road intersection that would never be built today.
- It doesn't solve the problem, still has traffic lights, kids crossing.
- The town is at capacity in terms of parking and amenity. The highway and the town have both grown.
- It's hard to find anyone who would support this option.

TfNSW (answering on widening current highway)

- The constraint is we don't want to come over the kerb, and definitely don't want to affect the shops.
- When you extend your cross section towards the other side of the road, it obviously involves taking out the parking
- Through there we can get four lanes, but they're not quite wide enough. We typically operate on a 3.5 metre laneway. If we do anything less we start to compromise on road design code. You can compromise, but that's not the first approach that you take.
- It impacts on the kerb, it impacts on these railway buildings here – very close, not sure how feasible that is.
- This option does remove the trees.
- This intersection is still a major constraint for traffic, and we haven't really solved that problem yet.
- We could move station St across, but that involves acquiring properties. We could block Station St and not allow traffic to turn right into or out of it and reconstruct Kubya St and divert traffic down there and down Warrigal St. It's local traffic, but may not be a palatable impact. Instead of coming along Station St and turning right, coming along Kubya St and turn right – getting you far enough away from the junction so that that movement can be undertaken safely. This is for safety and operational purposes.
- A couple of people have suggested moving the railway underground and we are going to look at. Have to put the station underground.
- RE time saving: you have to look at the whole 34 km. The time saving's over the full Lithgow to Katoomba. The time saving with something like this would be obviously less than the outer option or tunnel, you would be doing 60km hour (and stopping at traffic lights) and you wouldn't be able to overtake slow trucks, so the savings would be a lot smaller.
- It's one of the factors (time saving), but safety of pedestrians isn't as good with this option.
- We don't have to acquire a load of houses or environmental impacts.
- It would be like other villages that have been duplicated through the mountains – through Faulconbridge or Lawson or Blaxland.
- We could look at what other things we could do to provide parking.
- We don't want to divide a town in half, this would have that affect, but at the same time. But if there was only it and station St, you've got an issue with all the houses and Mitre 10. Luckily we've got other options. But it's not easy.

- The signals would work better, with two lanes not trying to merge. Through traffic would work better than now, but there would be knock on affects to the side roads.
- There are a couple of buildings that would be impacting near the station, and it does appear to impact the steps.
- We would have to move the stop line to the other side of the crossing.
- We encourage your thoughts on other locations where we could do something for a crossing of the rail line – say a tunnel under.
- Without a traffic jam, you've got traffic travelling at 60km an hour, and no buffer.
- We have to put this up as an option that has some technical feasibility, with issues that could be resolved.