

Warrandyte Bridge upgrade

Community feedback report

October 2016

Project background

In March 2016 the Victorian State Government announced \$5.1 million funding for a much needed upgrade to the Warrandyte Bridge. The upgrade will allow the bridge to carry more traffic, particularly during an emergency event like a bushfire, over the Yarra River between Warrandyte and North Warrandyte.

During an emergency evacuation in the town of Warrandyte, approximately 2500 vehicles per hour would attempt to cross the bridge southbound from North Warrandyte compared to the 1100 vehicles per hour during a typical morning peak.

The Warrandyte Bridge upgrade will reduce evacuation times for people travelling across the bridge during emergencies, particularly from the North Warrandyte area, by up to 90 minutes; while also providing significant improvements to relieve daily congestion issues.

The bridge upgrade will include widening of the Warrandyte Bridge, an extra lane in the southern direction, an intersection upgrade north of the bridge, an upgrade to the roundabout at the Yarra Street/Research-Warrandyte Road intersection and improved facilities for pedestrians and cyclists across the bridge.

Community consultation

In November 2015 we attended a Warrandyte community event regarding emergency preparedness. At this event, we presented a number of options that could improve evacuation times in the event of an emergency. We presented four options, including an alternative crossing, a temporary structure for emergency evacuations, a bridge upgrade and the status quo. We advised that the bridge upgrade best met the project objectives, although committed to further community engagement.

In December 2015 we attended the Warrandyte Bridge 60th Anniversary event to discuss the bridge upgrade and gather community feedback about how people use and travel around the bridge.

On Saturday March 19 we attended the Warrandyte Festival to discuss the bridge upgrade and gather insight into the community sentiment regarding the project.

On Thursday July 14 we held a community session at the Warrandyte Community Church. This provided an opportunity for community members to speak with the project team about our proposed upgrade to the bridge. This also provided an opportunity to discuss the broader traffic network in the surrounding area.

From Thursday July 14 to Sunday July 31, we ran an online consultation on our engagement platform, engage.vicroads.vic.gov.au, which allowed the local and wider community to ask questions and register comments on an interactive map.

Following this, we ran a survey from Monday September 19 to Tuesday October 4, to help gain further feedback and more understanding of the community sentiment towards the bridge upgrade.

Objectives of our community consultation:

- To acknowledge community thoughts and concerns regarding traffic flow, accessibility and safety throughout Warrandyte.
- To keep the community and stakeholders informed about the progress of the project.
- To proactively engage with the community to understand their views and obtain feedback on the proposed option for the Warrandyte Bridge upgrade.

What we heard (key themes)

The community expressed a number of thoughts, concerns and suggestions which are summarised in the below points:

- Major queuing and traffic flow issues along Yarra Street and Research-Warrandyte Road during peak times.
- The desire for the introduction of a North East link to better connect the freeways of Melbourne.
- Congestion and traffic flow issues caused by outside traffic driving through the area.
- Pedestrian and cyclist access and how this will be affected by the upgrade.
- Protecting the rural feel (amenity) of the community while also minimising any environmental impacts.
- A slightly higher level of support for a roundabout as opposed to traffic lights at the T intersection north of the bridge at Research-Warrandyte Road/Kangaroo Ground-Warrandyte Road.

The key issues

Below is a summary of the major areas of interest the community raised throughout the feedback process.

What we heard (comments from the community):

Roundabout at Research-Warrandyte Road/Kangaroo Ground-Warrandyte Road intersection

- A roundabout would cause increased congestion with vehicles giving way to the right during peak times.
- Pedestrian safety would be compromised when compared with a pedestrian friendly traffic light option.
- A roundabout would only assist during peak hours, otherwise causing delays throughout the day.
- How will traffic on local roads be affected, in particular those crossing from Kangaroo Ground to Warrandyte-Research Road?
- Roundabout on KG/Research Road needs to be two lanes heading onto the bridge otherwise it will create a bottleneck.
- Pedestrians will have to negotiate traffic when crossing the bridge to the shared user path if a roundabout is installed with no adequate pedestrian crossing.
- If a roundabout is installed, it must also have controlling traffic signals at the morning peak time so that traffic from Kangaroo Ground can readily access the roundabout.
- Install a roundabout with metered signals that will only be activated if the queues on KG Road extend to a certain point.
- A smaller roundabout will not work with a larger traffic flow in peak times.

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Our response:

We've heard the concerns with the roundabout option and how traffic will flow along Kangaroo Ground-Warrandyte Road. The modelling shown by our consultant, TrafficWorks has indicated the roundabout option will provide a significant reduction in traffic delays on both roads leading into the intersection. Installing traffic signals to meter the flow at a roundabout was an option that was investigated as part of the traffic analysis; although a roundabout on its own would have adequate capacity to allow traffic to flow without adding signals.

Following extensive investigation, the roundabout option is not preferred by VicRoads. A roundabout will require a more substantial "footprint" and therefore would result in increased environmental impact and require land acquisition, as well as significant additional funding. Survey respondents indicated a slightly higher level of support for the roundabout as opposed to traffic signal options.

We investigated a smaller roundabout as an option, however this was determined unsuitable at this location as it would not sufficiently reduce the speed of approaching vehicles, creating a potentially dangerous intersection.

Traffic lights at Research-Warrandyte Road-Kangaroo Ground-Warrandyte Road intersection

- Traffic lights will ruin the local aesthetic and the village feel of the Warrandyte community.
- Warrandyte does not want to be urbanised with the installation of traffic lights.
- Peak hour does not take long and giving way is part of the local culture and improves road etiquette.
- Would lights at Fitzsimmons Lane make a difference?
- Could there be lights that only operate during peak times?
- Lights are undesirable as they slow up traffic.
- Traffic lights will improve pedestrian and cyclist safety.
- Traffic lights will only benefit traffic flows during peaks.
- Ideally a traffic light system would be able to detect the volume of traffic and use the information to time the length of green for each road.
- Traffic lights should only operate during the morning peak, operating in the afternoon peak will cause traffic to queue across the bridge and block Yarra Street traffic.

Our response:

We've heard concerns about a signalised intersection from some of the Warrandyte community as they feel it will "urbanise" the area and damage the local aesthetics of the Warrandyte town. We have conducted extensive investigations into this option; however we feel that the signalised intersection option provides the best benefit to all due to reduced environmental impact, less disruption during construction and significant safety benefits for pedestrians, as there will be dedicated crossings.

We explored leaving the intersection unchanged (i.e. no roundabout or traffic lights), however traffic modelling shows this would make it extremely difficult for road users to turn out of Research-Warrandyte Road. In the current peak hour traffic, queuing on Kangaroo Ground-Warrandyte Road can reach up to 1.5km. Once the bridge is widened, modelling indicates improved traffic flow and reduced congestion along Kangaroo Ground-Warrandyte Road. As a result, the current 'give way' or "courtesy" system will no longer be functional.

You gave us feedback that the installation of traffic lights would slow down traffic in non-peak hours and that the lights should be switched off during these times. Traffic lights are a road safety measure designed to regulate traffic flow and provide safe movement for vehicles through intersections. These lights are sequenced in accordance with traffic volumes to allow road users to move across the network efficiently during peak and non-peak times.

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Pedestrian and cyclist access

- There needs to be a shared user path on both sides to ensure pedestrian safety
- Please have a pedestrian crossing under the south of the bridge for those wanting to access the south east bus stop from the west side crossing.
- Need a pedestrian overpass on north east side of Yarra Street.
- Can there be a zebra crossing on the south side of the bridge?
- If there is a roundabout, please have lights for pedestrians.
- Pedestrians need to be able to get to the Ringwood bound bus stop from where the bridge intersects with Yarra Street.
- Install removable bollards for pedestrian safety that can be quickly and easily repositioned by emergency services.
- A pedestrian crossing to one side will create a safety issue for school children crossing during peak times.
- There are too many cars, VicRoads needs to promote cycling and walking as an alternative.
- Cyclists won't use the shared user path as it doesn't go far enough up both Research Rd and KG Road. Research shared path needs to go to at least Bradleys Lane.
- Need a dedicated cycling lane, a multidimensional solution is required.

Our response:

We heard that once the pedestrian footpath is removed from one side of the bridge, it will impact pedestrian safety around the area as additional road crossings will be required.

To improve this, we investigated options to maintain pedestrian access on the eastern side of the bridge and have come up with a solution to retain the existing footpath width. Detailed designs are not yet finalised; however the intention is that this will result in a 1.8 metre footpath on the eastern side of the bridge, and a 3 metre shared user path on the western side. The signalised intersection will also allow for a safer pedestrian crossing.

No additional bicycle paths have been proposed under the current scope of the project, although we have decided to retain paths on both sides of the bridge which will cater for future bicycle developments and projects in the area.

North East link and outside traffic

- Until North East Link is put in nothing will change, the money would be better spent investigating this.
- Need to look at the long term solution which will divert traffic from the green wedge, not bring more traffic to the area.
- Installing the missing link will benefit the entire road network.
- Congestion is caused by people coming from the outer suburbs cutting through to EastLink, widening roads and bridge will only encourage more to follow.
- The problem is traffic coming from Eltham, Doreen, Diamond Creek and St Andrews and going through Warrandyte.
- Increase in traffic is all from outside Warrandyte as population and school levels have stayed similar.
- A survey should be done to quantify how much traffic comes from outside Warrandyte.
- Any improvements will see people from the north of Melbourne use the bridge to get to Ringwood and beyond.

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Our response:

On 3 September 2015, the Victorian Parliament passed legislation creating Infrastructure Victoria, delivering a key election commitment from the Andrews Labor Government and giving certainty for Victoria's infrastructure pipeline. The new independent body was tasked with ensuring Victoria's immediate and long-term infrastructure needs are identified and prioritised based on objective, transparent analysis and evidence. Infrastructure Victoria considers the needs of the whole state and prioritises projects that deliver the best results.

The Victorian State Government is committed to helping ease the congestion problems faced by residents, traders and industry in Melbourne's north-east.

As part of any future planning for the North East Link, careful consideration would be given to local transport, environmental, heritage and social issues. Opportunities to improve land use, amenity and the broader transport network would also be explored as part of any planning process.

Second bridge needed

- A permanent second bridge is needed over the Yarra connecting Blackburn Road to Reynolds Road in Research.
- Widening the bridge will result in a second bridge been pushed back by years.
- A second bridge for Warrandyte-Research Rd traffic could parallel the bridge for Warrandyte Kangaroo Ground traffic. It would only need to be single lane and switch directions based on peak flow.

Our response:

The investigation determined that the best outcome for this project would be to widen the existing bridge. The second bridge option was considered in the initial investigation and would result in major environmental impacts as well as significantly more funding. Investigations have indicated that the bridge upgrade will deliver the objectives of the project to improve traffic flow in the event of an emergency and during daily congestion.

Emergency management

- Will encourage people from larger catchment areas to use the river crossing in an emergency.
- There may be less traffic to worry about in an emergency as residents may be reluctant to use the bridge.
- Can clearway signs be active for fire risk days?

Our response:

Despite the improvements which the project will offer, we continue to encourage all road users to be prepared and leave early in the event of a fire emergency. This project will assist evacuation for anyone who decides to use the bridge in an emergency situation and our advice is to always follow emergency services traffic management and instructions during an evacuation.

In addition to improving evacuation times in the event of an emergency, traffic modelling indicates that this \$5.1 million upgrade will deliver much needed improvements to traffic flow based on current traffic conditions. Irrespective of other potential infrastructure projects, such as North East Link, this upgrade is still an important infrastructure project that will deliver significant benefits to the community.

Other issues around the Warrandyte Bridge upgrade:

- Why is the environment being impacted to accommodate outside traffic?
- The bridge needs to offer two lanes in both directions.
- The bridge needs to be more visually attractive.
- Needs an indented bus stop so that the bus stopping doesn't cause traffic to build up behind it.
- There has been an increase in the amount of trucks using roads through Warrandyte.

Our response:

The primary driver for this project is emergency management and evacuation. However, there will also be the additional benefit of improving traffic flow in the area.

Having two lanes in both directions will provide little benefit to the peak traffic flow. The afternoon peak bottleneck is currently at the roundabout on Yarra Street. We are investigating funding opportunities to add an additional left turning lane on Yarra Street which will reduce afternoon peak traffic.

To ensure the bridge remains visually attractive, we have engaged an architect to provide advice around the aesthetic of the bridge within the context of the structural changes.

All the bus stops within the project area are currently indented. The bus stop on Kangaroo Ground-Warrandyte Road will be relocated from the intersection as part of this project.

We are currently monitoring traffic movements as a result of the North East truck curfew trial. Findings from this study will be reported at a later date.

Engage VicRoads survey

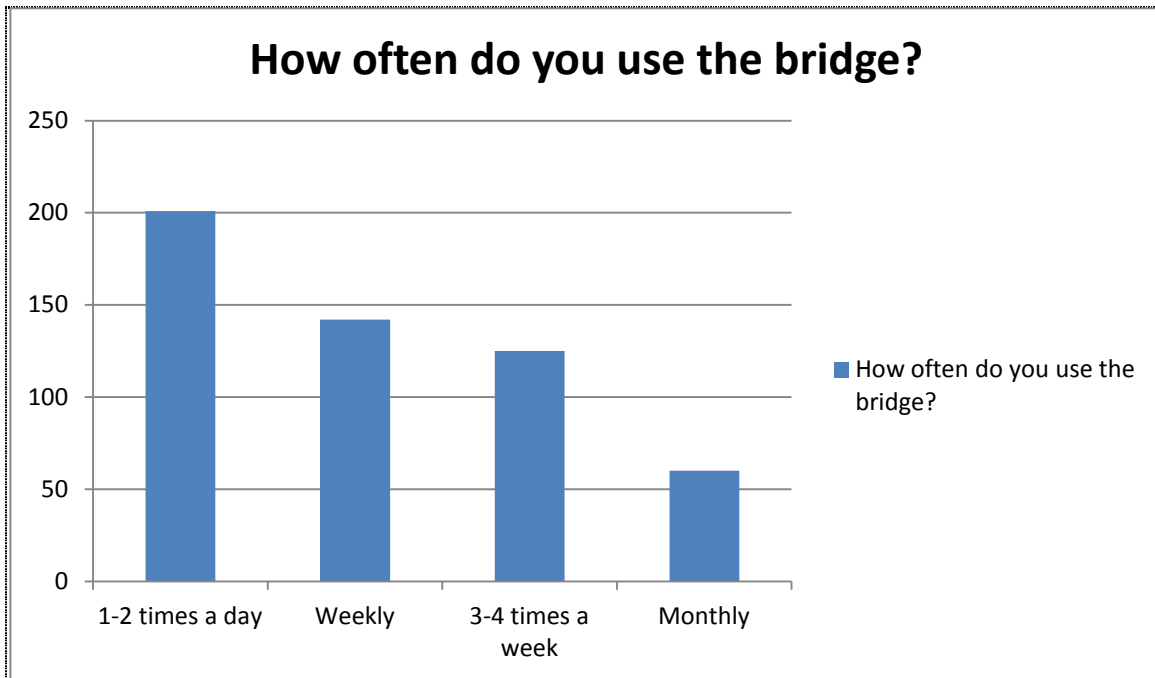
Following on from the first round of community engagement, we ran a survey on our online engagement platform Engage VicRoads to gain additional feedback on the bridge upgrade. The survey asked participants about their preferences regarding certain aspects of the bridge design, in particular the T intersection north of the bridge.

There were 528 responses to the survey. The majority of respondents who completed the survey were from the suburbs of Warrandyte, Eltham, Mernda, Diamond Creek and St Helena.

Below are statistical representations from the questions asked in the survey;
(Note: the calculations may include multiple selections and partial completions of the survey)

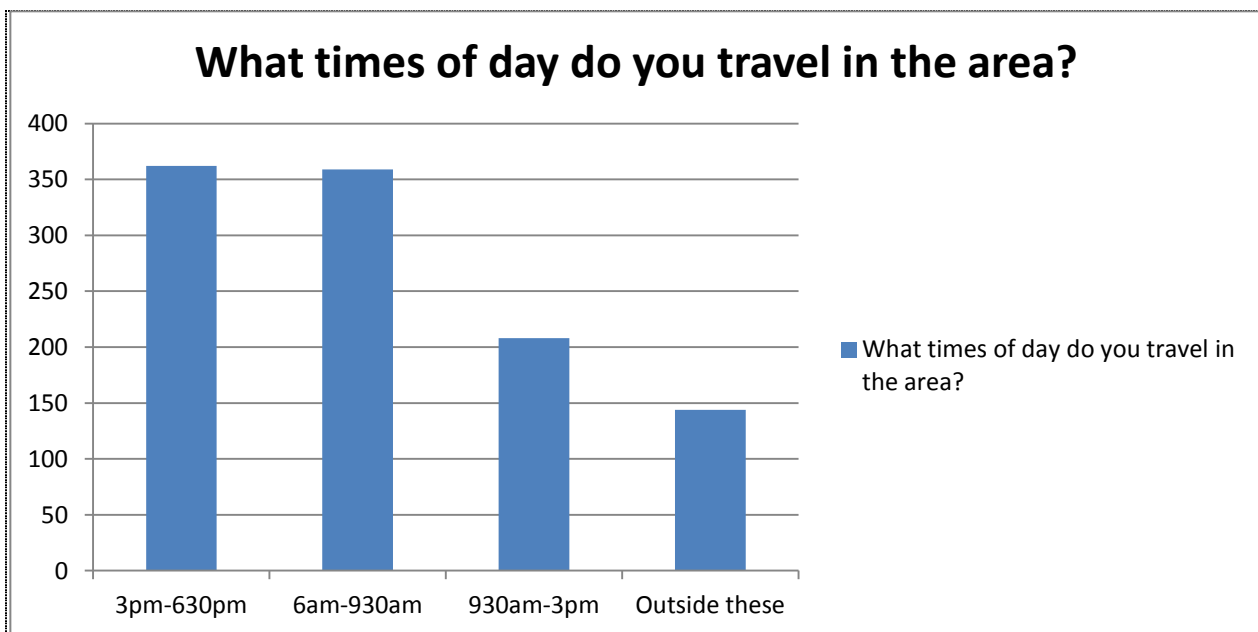
How often do you use the bridge?

1-2 times a day	201
Weekly	142
3-4 times a day	125
Monthly	60



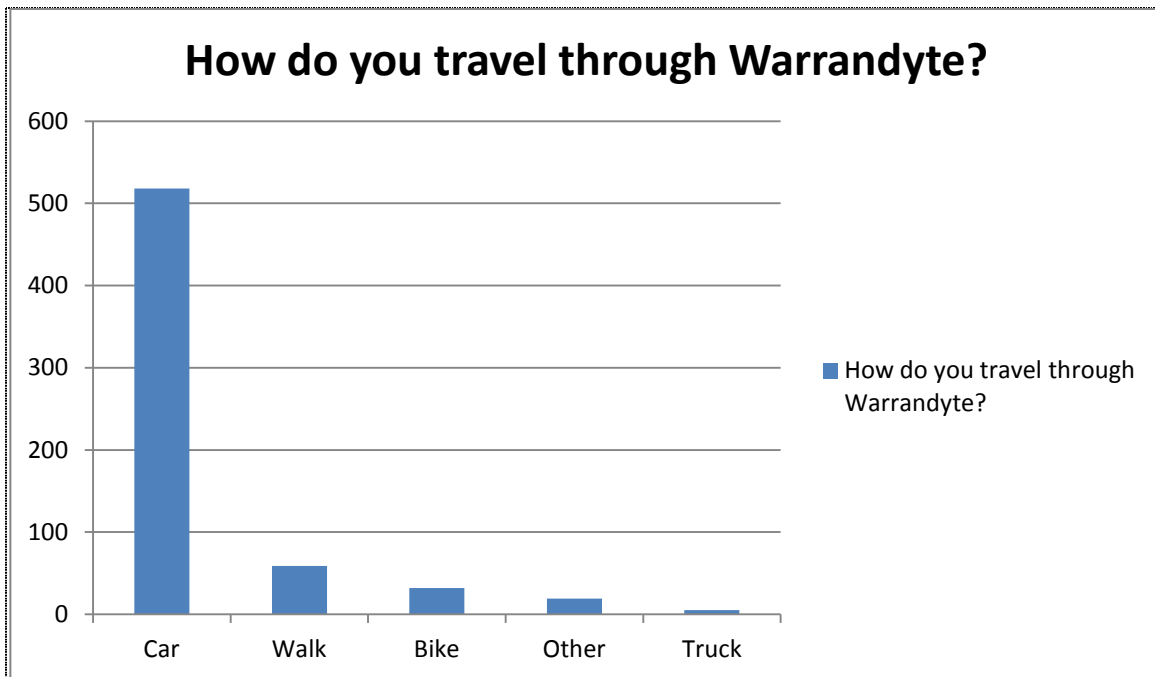
What time of day do you travel in the area?

3pm-6:30pm	362
6am-9:30am	359
9:30am-3pm	208
Outside these	144



How do you travel through Warrandyte?

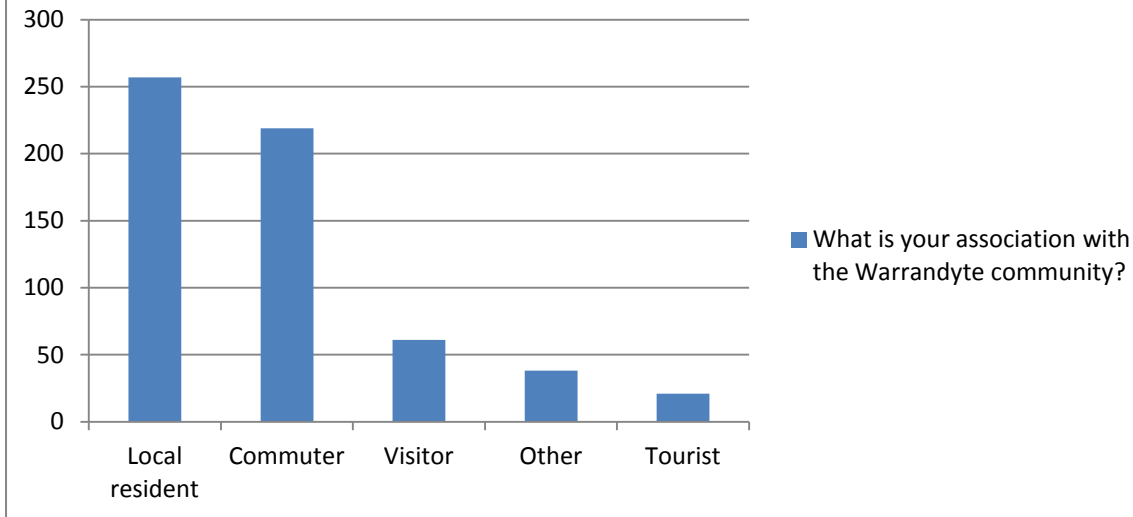
Car	518
Walk	59
Bike	32
Other	19
Truck	5



What is your association with the Warrandyte community?

Local resident	257
Commuter	219
Visitor	61
Tourist	21
Other	38

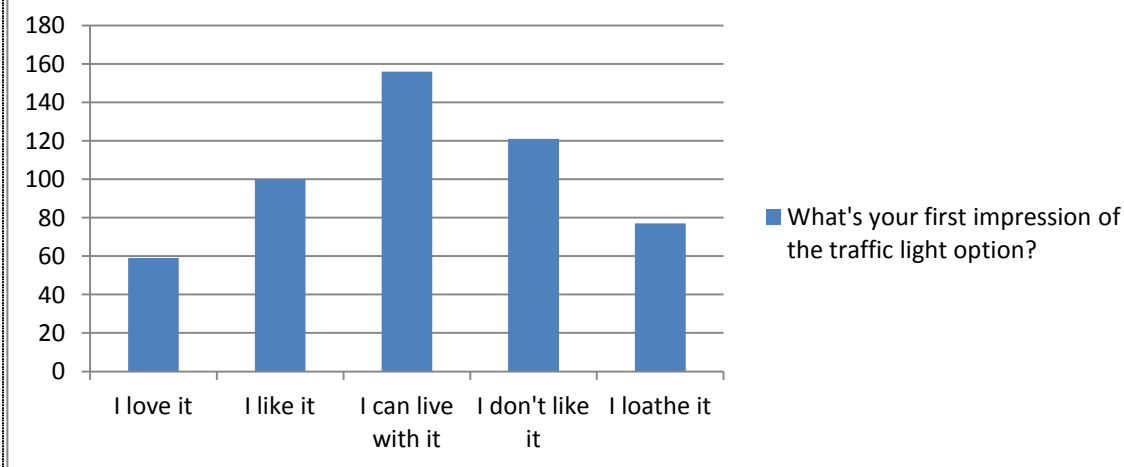
What is your association with the Warrandyte community?



What's your first impression of the traffic light option?

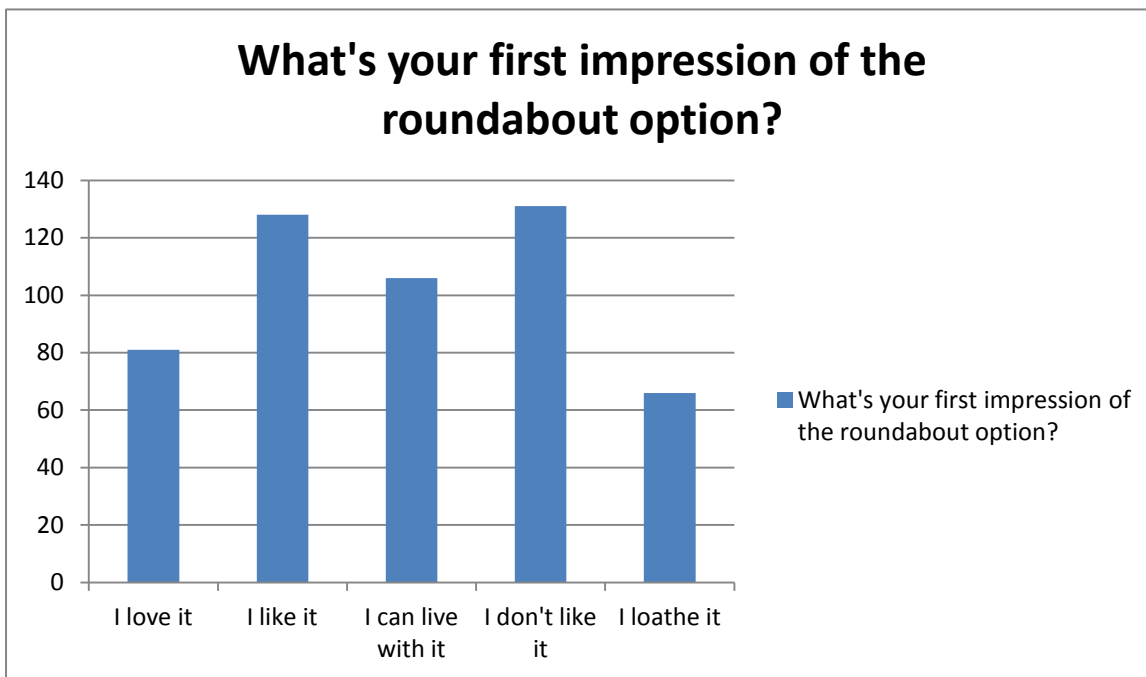
I love it	59
I like it	100
I can live with it	156
I don't like it	121
I loathe it	77

What's your first impression of the traffic light option?



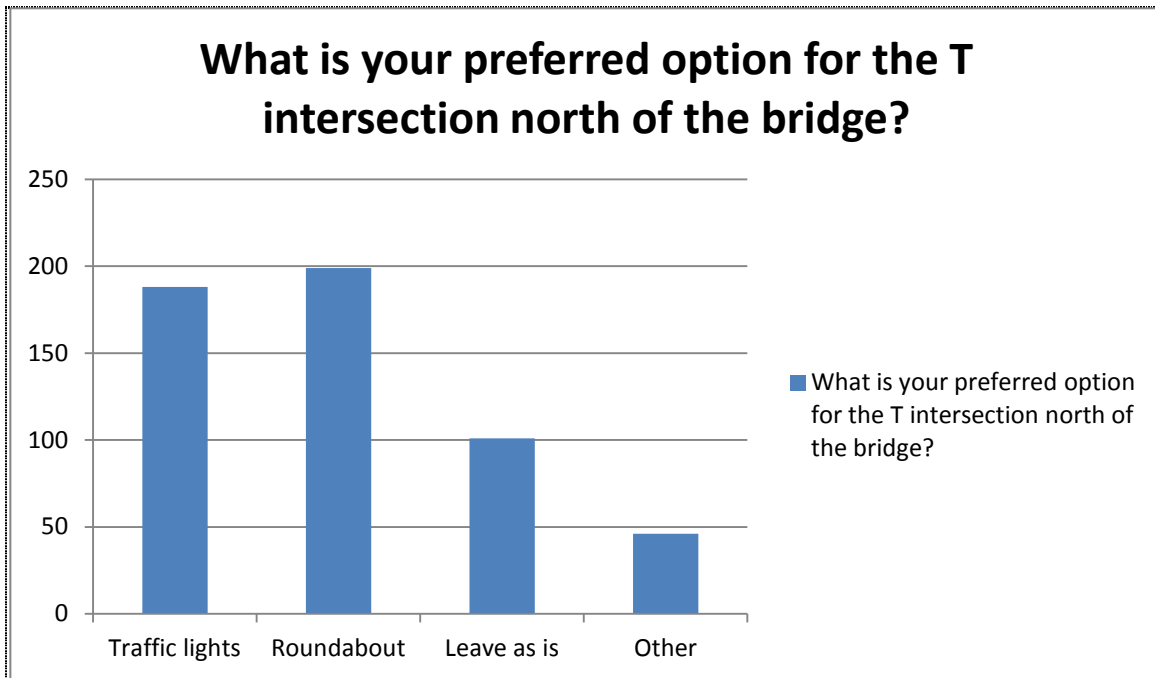
What's your first impression of the roundabout option?

I love it	81
I like it	128
I can live with it	106
I don't like it	131
I loathe it	66



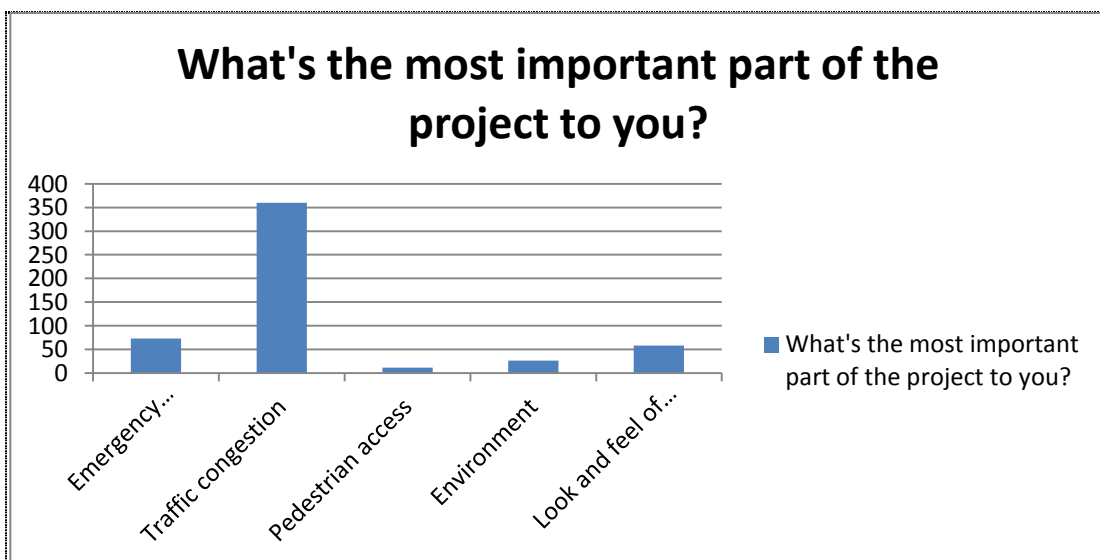
What is your preferred option for the T intersection north of the bridge at Research-Warrandyte Road and Kangaroo Ground-Warrandyte Road?

Roundabout	199
Traffic lights	188
Leave as is	101
Other	46



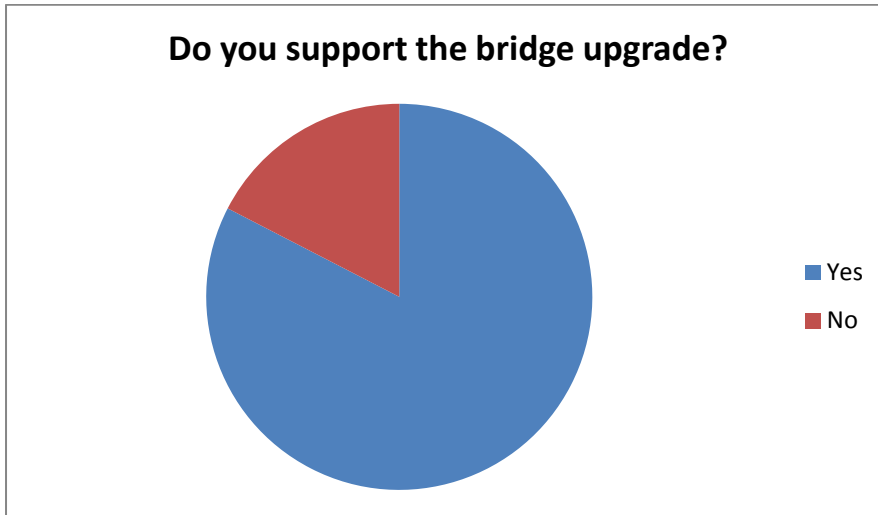
What is the most important part of the project to you?

Traffic congestion	360
Emergency management	73
Look and feel of the bridge and area	58
Environment	26
Pedestrian access	11



Do you support the bridge upgrade?

Yes 436
No 92



Summary

Overall, the feedback received from the community indicates a high level of interest in traffic congestion, pedestrian/cyclist access, emergency evacuation and the Research-Warrandyte Road-Kangaroo Ground-Warrandyte Road intersection.

There is a slightly higher level of support for a roundabout as opposed to traffic lights, although this option still raises concerns, mainly the impacts to traffic queues and pedestrian access.

Many respondents believe traffic signals would impact on the rural atmosphere of the Warrandyte community.

Many community members have queries and concerns regarding how pedestrian access would be impacted with a shared user path on one side of the bridge.

The other main talking point is congestion in the broader area. Many believe that outside traffic is the cause of congestion, while many would like a second bridge built to alleviate congestion. Furthermore, many would like to see North East Link built to lessen the impacts caused by outside traffic.

Acknowledgement

We would like to thank everyone who participated in the community consultation activities for this project and for sharing valuable feedback. The formal consultation period has now closed and the final design will be based on providing a balance between safety, environment and congestion improvements for the local and wider community. We will continue to engage around construction methodology and provide regular updates as the project progresses.