



Transport for NSW

Bulli Community Feedback

Feedback Summary Report



Contents

Part 1 – Background and engagement	3
Project overview	3
Consultation overview	5
Submissions overview	7
Part 2 – Feedback analysis	9
Overarching feedback	9
Proposed extended clearway hours	13
Proposed parking changes	16
Proposed prohibited right turn at Station Street	19
Proposed dedicated right turn arrow at Park Road	22
Proposed Memorial Drive roundabout upgrades	25
Proposed Grevillea Park Road and Point Street right turn lanes	28
Miscellaneous feedback	31
Next steps	32

Part 1 – Background and engagement

Bulli has experienced a decline in traffic conditions during peak times with an increase in vehicle numbers and demand for access to the local centre and services. This has impacted traffic flow and raised community concerns about the existing road network and its future capacity.

The Princes Highway plays an important role in the Wollongong transport network, providing a key north-south suburban route, linking Wollongong Central Business District to its northern suburbs and Sydney.

Project overview

In 2019, Transport for NSW consulted with the community to better understand the community's experiences living and travelling around Bulli.

Following the consultation, we developed a proposal to improve the traffic efficiency and reliability of the Princes Highway at Bulli.

An overview of the proposed improvements is provided in Figure 1.

In June and July 2021, we placed the proposal on public display and asked for feedback.

A large amount of feedback was received. We engaged an independent consultant to analyse the feedback and prepare this Feedback Summary Report.

This Feedback Summary Report provides an overview of the feedback received on the proposed traffic improvements along the Princes Highway and surrounding local roads in Bulli.

The feedback presented in this report will be used to inform the finalisation of the proposed traffic improvements.



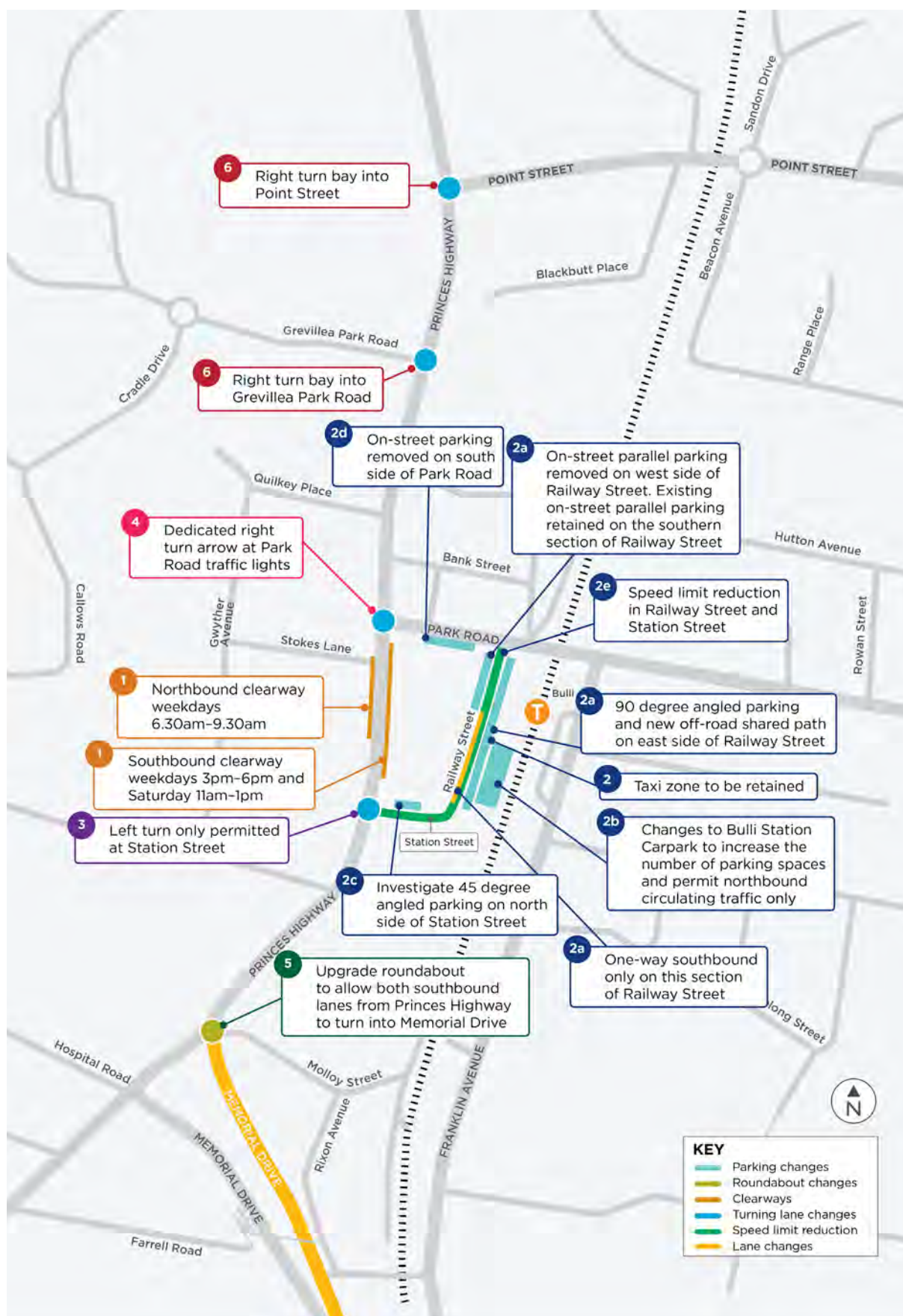


Figure 1 Proposed traffic improvements in the Bulli town centre

Consultation overview

The aim of the consultation carried out from 7 June to 30 July 2021 was to seek feedback on the proposed traffic improvement measures to improve traffic efficiency, safety and reliability of the Princes Highway at Bulli. The objectives of consultation were to:

- ensure a strong and targeted consultation reach to maximise potential for feedback
- use engagement tools that effectively capture location-specific feedback
- use engagement methods that help build relationships and create opportunities for effective feedback from stakeholders and the local community.

We provided a range of opportunities for customers to engage with the proposal. A range of consultation tools and activities were implemented to encourage participation from a range of customers.

Due to COVID-19 public health regulations, not all of the planned face-to-face engagement activities were able to be carried out. To allow the community to engage with the project team and allow questions to be answered the consultation period was extended by four weeks and Q and A sessions were held online.

A summary of the consultation activities is provided in Figure 2.

The following consultation activities were carried out as part of this consultation:

- social media campaign via the NSW Roads Facebook account which included explainer videos
- community group and stakeholder meetings
- placement of project consultation signage at key locations in Bulli including shops and the train station
- distribution of community updates to all residents and businesses in Woonona, Bulli, Thirroul and Austinmer with an invitation to have their say
- radio, online and newspaper advertisements with a call to action for people to have their say
- webpage with project information including FAQs and link to online engagement room and surveys
- community information line number and email address
- online Q and A sessions.

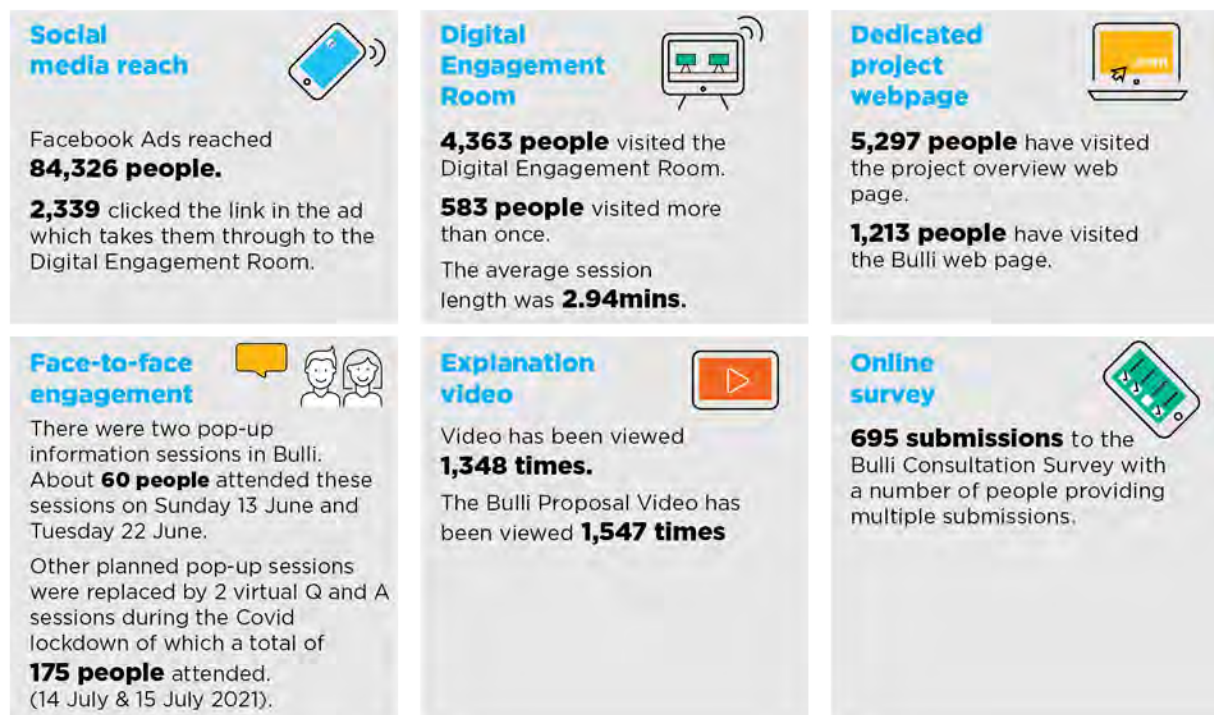
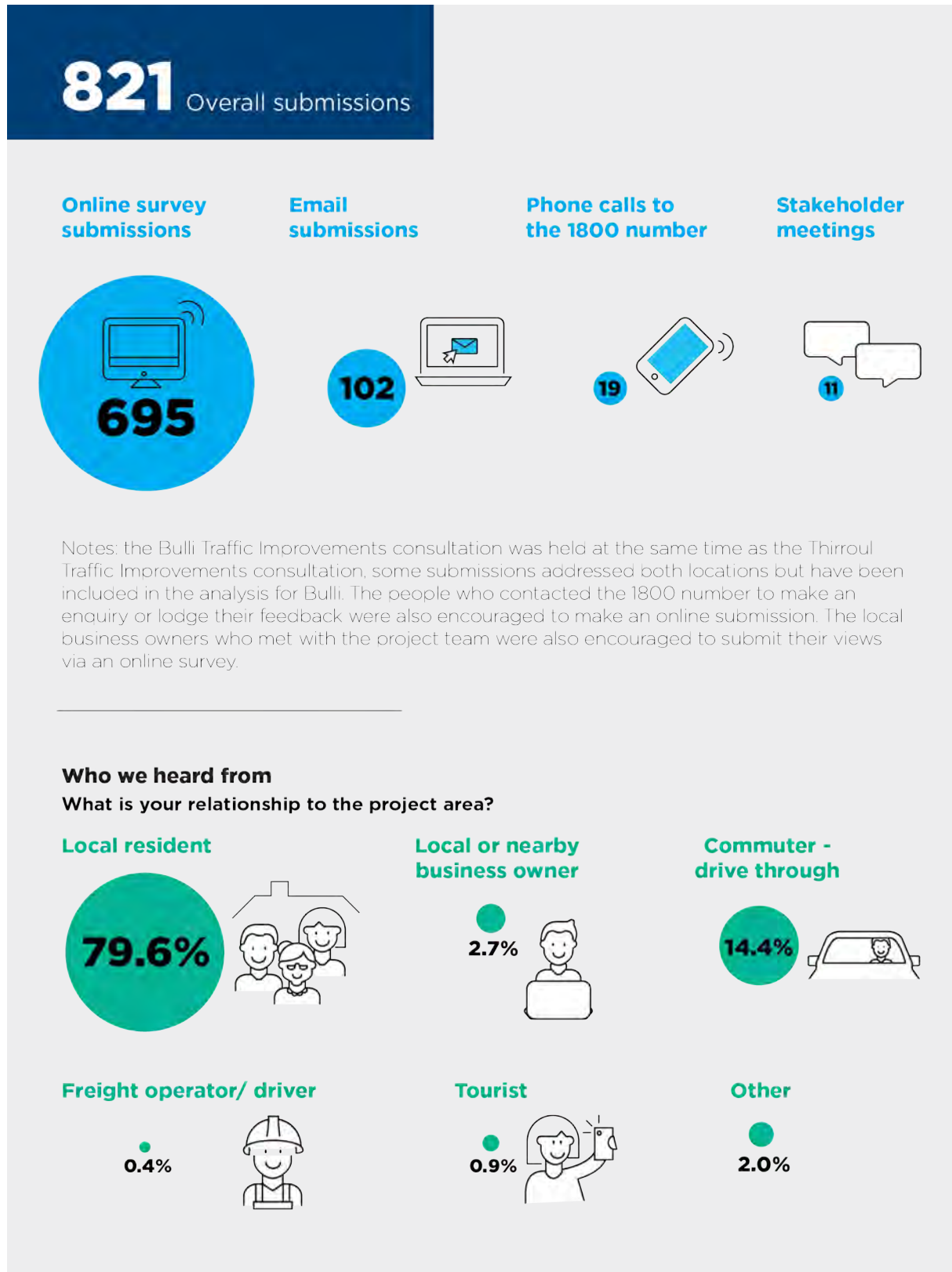


Figure 2 Engagement activities undertaken between 7 June 2021 and 30 July 2021



Submissions overview

Overall submissions





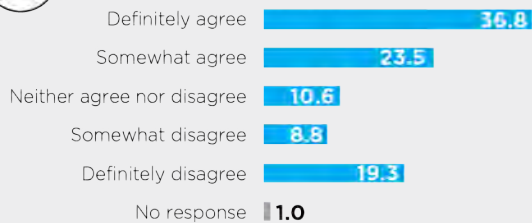
Frequency of travel (%)



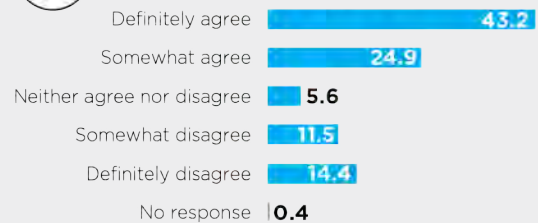
Frequently parking (%)



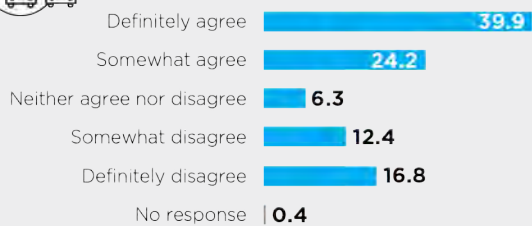
Improves safety (%)



Improves traffic flow (%)



Eases congestion (%)



Overall feeling towards the proposed (%)



"The work proposed is amazing and will definitely improve traffic congestion in the area, the addition of the turning lane on Point St and addition of the clearway southbound on the highway of an afternoon will help the flow of traffic significantly, the ability to access Memorial Dr from both southbound lanes will improve the flow through the roundabout and further up towards station street. This is incredible, thank you." - Online survey submission

Part 2 – Feedback analysis

Overarching feedback

Comments and questions

Two online Q and A sessions were held, of which 131 and 44 people attended respectively. During these online sessions 139 questions were raised in the chat function that related to the proposed traffic improvements for Bulli.

As shown in Figure 3, the most common theme raised was regarding the 'Evidence base' (43.2 per cent) supporting the proposed traffic improvement proposal. This included questions relating to the impact COVID-19 had on traffic modelling, policy alignment, background studies, traffic

modelling and data and project benefits and costs.

The second most common theme raised was regarding 'Consultation' (18 per cent) including the engagement process and the weight engagement outcomes would have on the decision-making process. Another overarching theme raised was around the 'Collaboration' (2.9 per cent) between Transport and other government departments, Wollongong City Council and local police. Clarifications and responses to the questions raised are provided in Table 1.

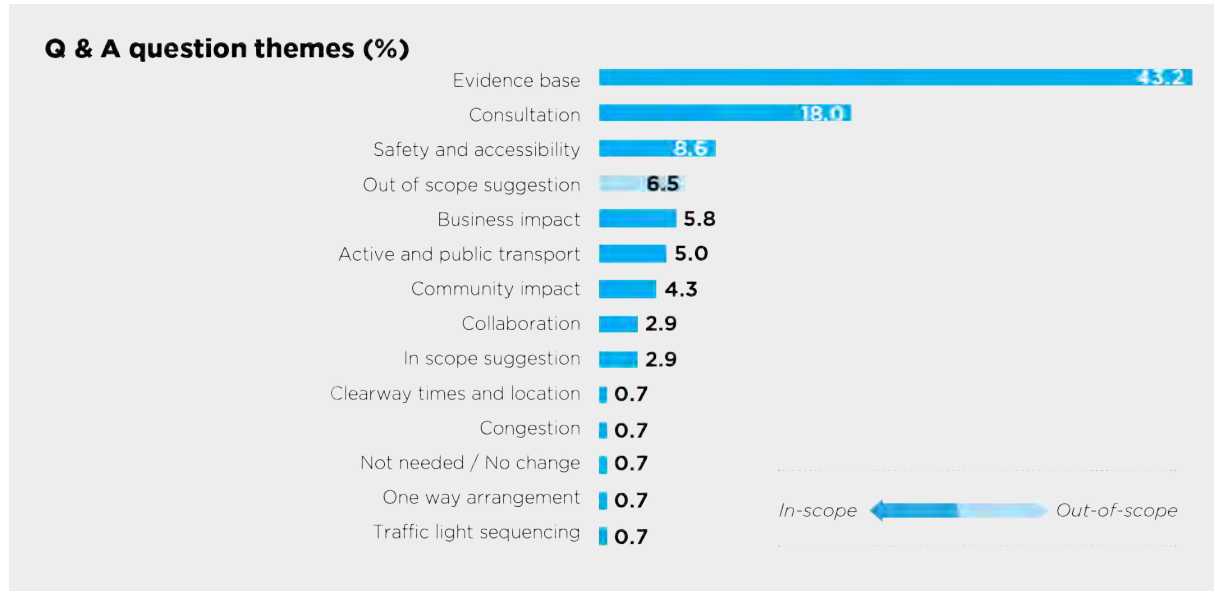


Figure 3 Q & A question themes

"Considering the community consultation took place in 2019, pre Covid, has any consideration been placed on the fact that this data may be invalid considering the changed community? More people are working from home and spending time in their local area and need access to local amenities? The Bulli Village is thriving and creating clearways and taking away shopfront parking will be so destructive to our community." – Online survey submission

Suggestions

Of the 1057 suggestions received, 500 were consistently received across all of the proposed traffic improvement measures and/or were relevant to the whole Bulli town centre rather than just one of the proposed traffic improvement measures. This included six in-scope suggestions and five out-of-scope suggestions¹.

As shown in Figure 3, the most common suggestion was to implement a 'Bulli bypass' between the Memorial Drive roundabout and Bulli Pass. Other out-of-scope suggestions included 'Limit development' to minimise increasing pressure on Bulli's infrastructure, and providing an 'Alternative route' between Bulli and Thirroul.

Overarching in-scope suggestions included:

- 'Traffic light phasing' to review and integrate the sequencing of all traffic light intersections in Bulli and improve traffic flow.

- 'Active & public' transport improvements through existing network and infrastructure upgrades and improvements as well as new connections to minimise private vehicle use in Bulli.
- 'Clear signage' and wayfinding to support awareness for all proposed traffic improvement measures once implemented, particularly in regards to the carparking options in Railway Street and Station Street.
- 'Reduce speed limits' throughout the Bulli town centre to maintain the 'village feel' and improve 'Safety & accessibility'.
- Enforcing 'Compliance' with the proposed traffic improvements once implemented to increase 'Safety & accessibility', particularly with regards to speeding, illegal right turns and illegal street parking.

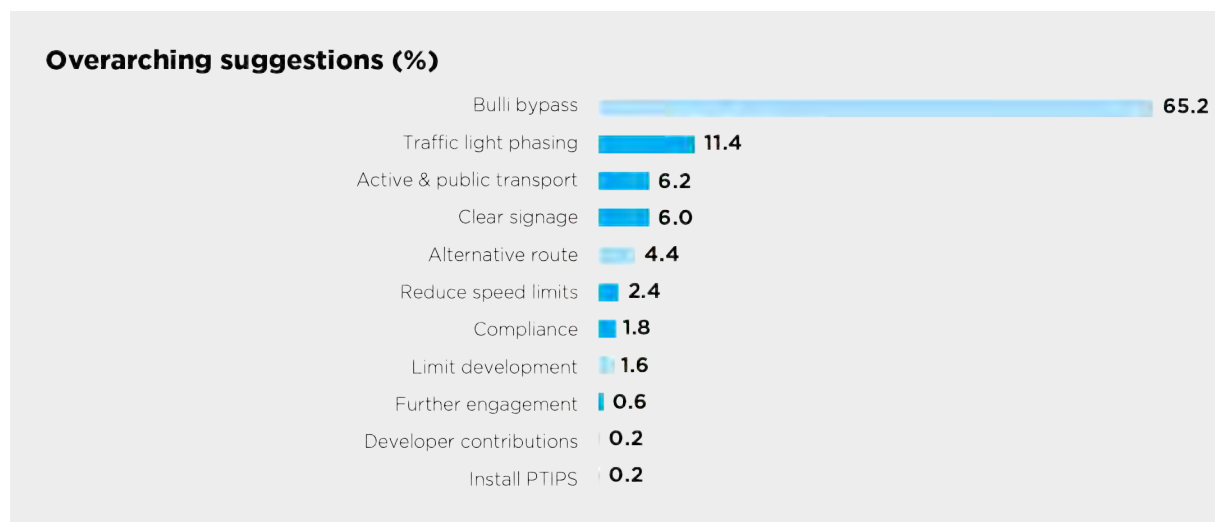


Figure 4 Overarching suggestions

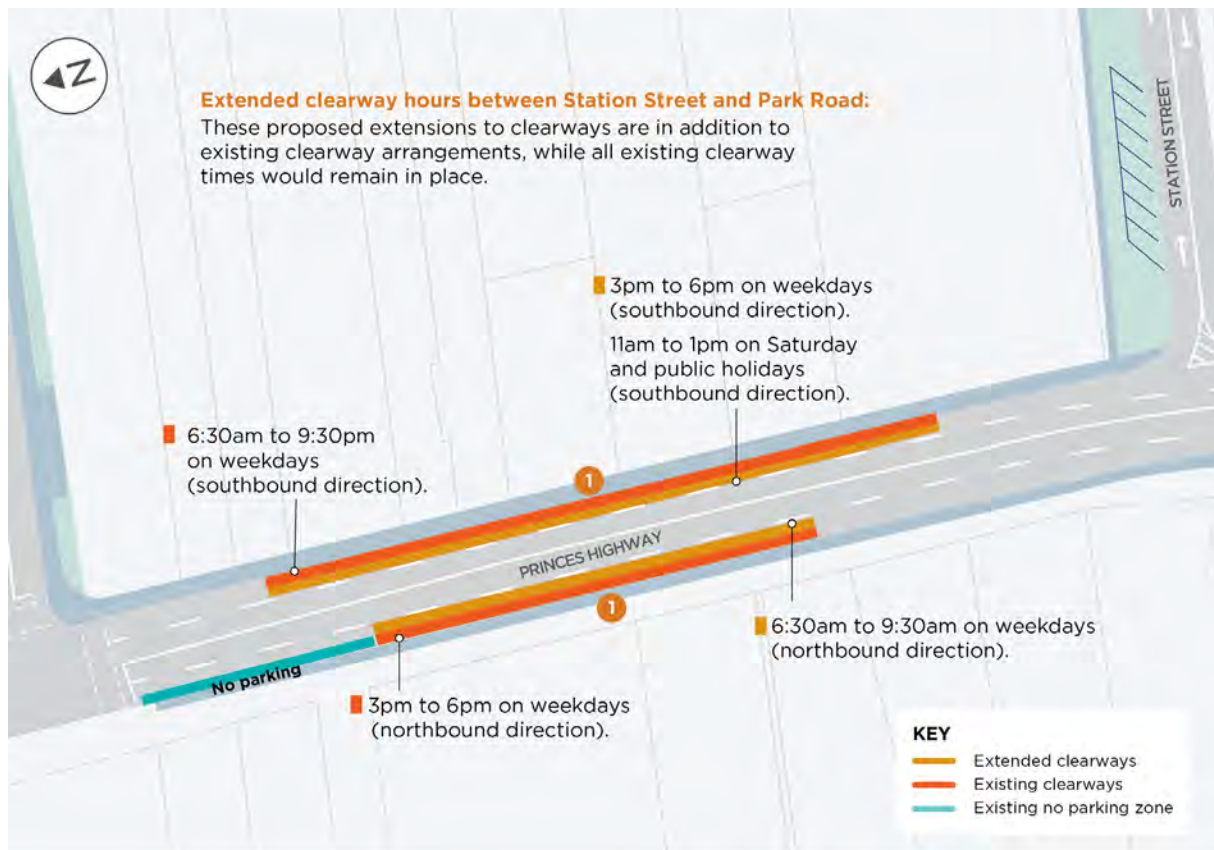
"In my opinion, bypassing Bulli by completing the Memorial Drive extension to Bulli Pass will have more of an impact on safety (number one priority) as well as traffic flow. This would take a huge percentage of through-traffic out of Bulli and make it safer for everyone." – **Online survey submission**

¹ In-scope suggestions include all suggestions that are open for consideration under the scope of this project while out-of-scope suggestions include all suggestions that are out-of-scope of this project and/or out of Transport's control however, these suggestions will still be taken onboard by Transport and some may be investigated for potential future projects.

Table 1 Overarching clarification and responses

Key concerns & suggestions	Clarification and/or response to key issues and suggestions
Evidence Base	
COVID impact	<p>Transport acknowledges the community's concerns regarding the relevance of traffic modelling, data and background studies undertaken prior to the COVID pandemic in relation to the proposed traffic improvement measures.</p> <p>Transport is taking this into consideration and has been monitoring traffic volume data. This data has shown quick returns to traffic volumes that were seen prior to COVID lockdowns and still considers the traffic modelling to be relevant.</p>
Policy alignment	<p>It has been noted a number of people have questioned the proposed traffic improvement measures alignment with key policies including:</p> <ul style="list-style-type: none"> • Government Architect NSW, Transport for NSW and the NSW Department of Planning, Industry, and Environment's <i>Movement and Place Framework</i> • Transport for NSW's <i>Road User Space Allocation Policy</i> • Wollongong City Council's <i>Cycling Strategy</i> <p>Transport is working with Wollongong City Council to provide for all transport users within the transport network, to ensure alignment with all relevant policies and frameworks and meet the needs of the local community.</p> <p>Transport understands that our network of roads and streets are a major part of the system of public space that helps connect our places. Public space is where people can socialise and add vitality to their neighbourhoods, and streets and roads have an important role in that vitality. Aligning movement functions with the places they serve can make our transport networks and public spaces better and contribute to the liveability of communities and productivity of NSW.</p>
Background studies	<p>Various background studies, including a Socio-economic Effects Assessment and Cost-Benefit Analysis (CBA), have been undertaken. These documents have not been released to the public as their purpose has been to inform traffic modelling and the proposed traffic improvements.</p> <p>Community and business consultation was undertaken in late 2019 and informed the Consultation Summary Report that was released to the public in June 2020 and is still available on Transport's website.</p>
Traffic modelling and data/ time savings	<p>Generally it is only major projects with large environmental impacts that require the preparation & exhibition of a Review of Environmental Factors (REF) or Environmental Impact Statement (EIS). This would include the exhibition of any traffic modelling and economic assessments prepared as part of the environmental assessment process. The majority of the proposed works would be constructed within the existing road reserve (e.g. signage and line marking) and would not require an REF or EIS to be carried out.</p> <p>Transport can however answer questions about what the modelling tells us and provide summaries of the data. Traffic modelling shows peak period clearways on the Princes Highway between Park Road and Station Street would ease traffic congestion and improve traffic efficiency between now, 2026 and 2036.</p> <p>In addition, the implementation of a no right turn from the Princes Highway to Station Street, a dedicated right turn signal phase at the Princes Highway and Park Road intersection, improvements to the Memorial Drive roundabout and dedicated right turn bays at Point Street and Grevillea Park Road would also effectively ease traffic congestion and improve traffic efficiency.</p> <p>The combination of all the proposed improvements have been shown to provide the following travel time savings for each vehicle that travels through Bulli:</p> <ul style="list-style-type: none"> • Northbound travel time is improved by 20% (approximately 35 seconds), 19% (35 seconds) and 6% (10 seconds) in respective morning, evening and Saturday peak hours. • Southbound travel time is improved by 49% (approximately 3 minutes and 30 seconds), 19% (3 minutes and 40 seconds) and 10% (20 seconds) in respective morning, evening and Saturday peak hours. <p>Traffic modelling helped us to reach the proposed options, but it is only one factor we use during the development of answers to transport issues. Projects are developed based on several factors including safety data, environmental constraints, impact on heritage features, property impacts, socio-economic factors and community feedback.</p>
Benefits/ Project costs	<p>As part of the traffic modelling options assessment report an economic assessment was completed for all the options tested in Bulli. All the options returned strong Benefit Cost Ratios between 11.9 and 18.2. This corresponds to an economic benefit of between 11.9 and 18.2 times the cost of the project, depending on which aspects of the proposal are implemented.</p> <p>The economic assessment considered elements such as travel time benefit, vehicle operating cost savings, emissions savings, crash cost savings and a clearway disbenefit.</p>
Consultation	
COVID impact/ further engagement suggestion	<p>Transport acknowledges the community's concerns regarding the impact the COVID pandemic and associated lockdowns have had on their capacity to participate in the engagement process. Transport has been undertaking an extensive engagement program which began in 2019 prior to the COVID pandemic. During the recent consultation on the proposed traffic improvement measures Transport responded to requests and extended the consultation window by 4 weeks for a total of 8 weeks and moved engagement forums online.</p> <p>During the recent consultation Transport engaged directly with around 235 customers through phone calls to the 1800 number, meetings, the pop up sessions and the Q&A sessions. Thousands more customers have engaged with the project through social media, and other digital platforms including the online survey.</p>
Decision making process	<p>Transport have heard the community's feedback and have taken the comments, questions and suggestions on board. Transport is considering this feedback carefully and will use it to inform the next steps of the project which includes opportunities to refine the proposal and inform future investigations for transport improvement measures.</p> <p>Your feedback is valued and is being used to inform the finalisation of the traffic improvement measures for Bulli.</p>

Key concerns & suggestions	Clarification and/or response to key issues and suggestions
Collaboration	
Wollongong City Council	Transport is continuing to actively work with Wollongong City Council including their traffic & transport and planning teams to improve the safety, traffic flow and community experience when travelling to and through Bulli.
Local police	Transport is committed to working with local police and other emergency services to ensure all transport projects are appropriate for the local area. Transport regularly works with local police through the local traffic committee and directly as appropriate to inform enforcement concerns and project requirements.
Overarching suggestions	
Bulli Bypass	<p>Transport acknowledges the community's suggestions regarding an extension of Memorial Drive to connect to Bulli Pass.</p> <p>There is an indicative transport corridor identified on the Wollongong City Council Local Environment Plan (LEP) within Bulli. Identifying potential corridors on LEP's is often used to help plan and guide new developments and land use changes.</p> <p>TfNSW is not currently planning any extension of Memorial Drive however, land has been reserved should the need for this extension be required in the future.</p> <p>The current focus is to provide a more integrated transport solution by improving the existing road network, improving bus and train services as well as working with Wollongong City Council to enhance walking and cycling infrastructure. This aligns with Future Transport 2056, the Illawarra Shoalhaven Regional Transport Plan and our vision to provide more sustainable transport solutions while providing the community with more transport choices.</p> <p>As the integrated solutions are delivered over the short and medium term, TfNSW, will continue to monitor the performance and changes on the transport network, seek feedback from the community and if required, determine the need, timing and feasibility of an extension to Memorial Drive.</p>
Traffic light phasing	<p>Traffic signals in NSW are controlled by a system called Sydney Coordinated Adaptive Traffic System (SCATS). SCATS is a traffic control system designed to optimise traffic flow. Intelligent algorithms process real-time data to adapt traffic signal timings that respond to unexpected conditions, predict traffic patterns and keep traffic moving.</p> <p>Transport regularly monitors signalised intersections and updates the signal phasing based on traffic modelling assessments to cater for changing traffic patterns to ensure the SCATS control system is able to keep traffic flowing efficiently.</p>
Active & public transport	<p>The NSW Government has invested more than \$5.3 billion in the More Trains More Services (MTMS) program, which includes delivering improvements for the T4 Eastern Suburbs & Illawarra Line, South Coast Line and T8 Airport & South Line. The MTMS program will simplify and modernise the rail network creating high capacity, turn up and go services for many customers. It means customers can expect more frequent train services, with less wait times, less crowding on a simpler and more reliable network. Customers using the South Coast rail line services between Wollongong and Sydney as well as express services at Wollongong, North Wollongong, Thirroul and Helensburgh can expect future service improvements as the MTMS Program is rolled out. As the program progresses, customers will be kept informed and have an opportunity to provide feedback on any proposed changes.</p> <p>Transport is also continuing to work closely with Wollongong City Council to explore opportunities to improve the active transport network in Bulli including pedestrian and cycling paths and connections.</p>
Clear signage	Transport acknowledges the community's concerns and suggestions around the provision of clear signage and wayfinding to support resident, visitor and commuter awareness of the changed road conditions post implementation of any proposed traffic improvement measures. As part of the detailed design of the improvement measures Transport will ensure all standards are met with regards to road markings and signage and investigate other opportunities to increase customer readability and experience when travelling in and through Bulli.
Reduce speed limits	Transport acknowledges the community's concerns regarding traffic flow and safety in the Bulli town centre. The proposed improvement measures include reducing the speed limit on Railway Street and Station Street to an appropriate speed to improve the safety of pedestrians and motorists in this section of the Bulli town centre. Transport has taken on board suggestions to further reduce speed limits in other various sections of the Bulli town centre including the Bulli Station Carpark, Park Road and the Princes Highway and will investigate these suggestions to ensure they meet the needs of all people who travel to or through Bulli.
Compliance	<p>Transport acknowledges the community's concerns regarding compliance with the proposed traffic improvements if implemented, and the potential safety issues caused by users who chose to ignore signage and road rules. Transport is considering appropriate measures to encourage compliance with the proposed traffic improvement measures if implemented.</p> <p>Transport will also continue to work with local police and Wollongong City Council to encourage compliance with the proposed traffic improvements and increase the safety of Bulli town centre for all users.</p>
Limit development/ Developer contributions	Transport acknowledges community's concerns regarding continued residential development in and around Bulli and how this is contributing to the increased traffic congestion on the Princes Highway and around the town centre. Transport will continue to work with Wollongong City Council and other government departments to ensure the needs of the community are appropriately provided for with infrastructure to support population growth.
Install PTIPS	<p>Public Transport Information and Priority System (PTIPS) is an innovative system used to track, predict and prioritise public transport and emergency vehicles by collecting and analysing on-board data, communicate with the Sydney Coordinated Adaptive Traffic System (SCATS) controlled traffic signals to prioritise late-running vehicles, and providing real-time data to customers via travel apps.</p> <p>PTIPS is actively used for Public Transport services in Wollongong and the real time data is available to all customers via travel apps.</p>



Proposed extended clearway hours

A total of 728 submissions were received in response to the proposed extended clearway hours.

Comments

Of the 728 submissions 494 provided open-ended comments that contained one or more comments or suggestions. Figure 5 outlines the distribution of sentiment from the comments and themes related to the proposed extended clearway hours.

Key concerns and issues raised under these themes included the appropriateness of the proposed clearway times, business viability, deliveries, village feel and pedestrian safety and connectivity.

Suggestions

Of the 1057 suggestions 224 provided suggestions relevant to the proposed extended clearway hours. Figure 5 outlines suggestions provided.

Table 2 provides clarifications and responses to the key issues and suggestions raised in relation to the proposed extended clearway hours.

"It will be an improvement but not a solution. The clearways only work if they are enforced. Very often there are vehicles parked outside the Bulli Hotel at 3.45pm, causing major traffic congestion. I believe that this portion of the Princes highway should be a NO STOPPING zone 24/7 PERMANENTLY. Especially if extra parking will be provided on Railway St. Let's not forget that this is a HIGHWAY, not just a local road." - Online survey submission

Clearways community feedback summary

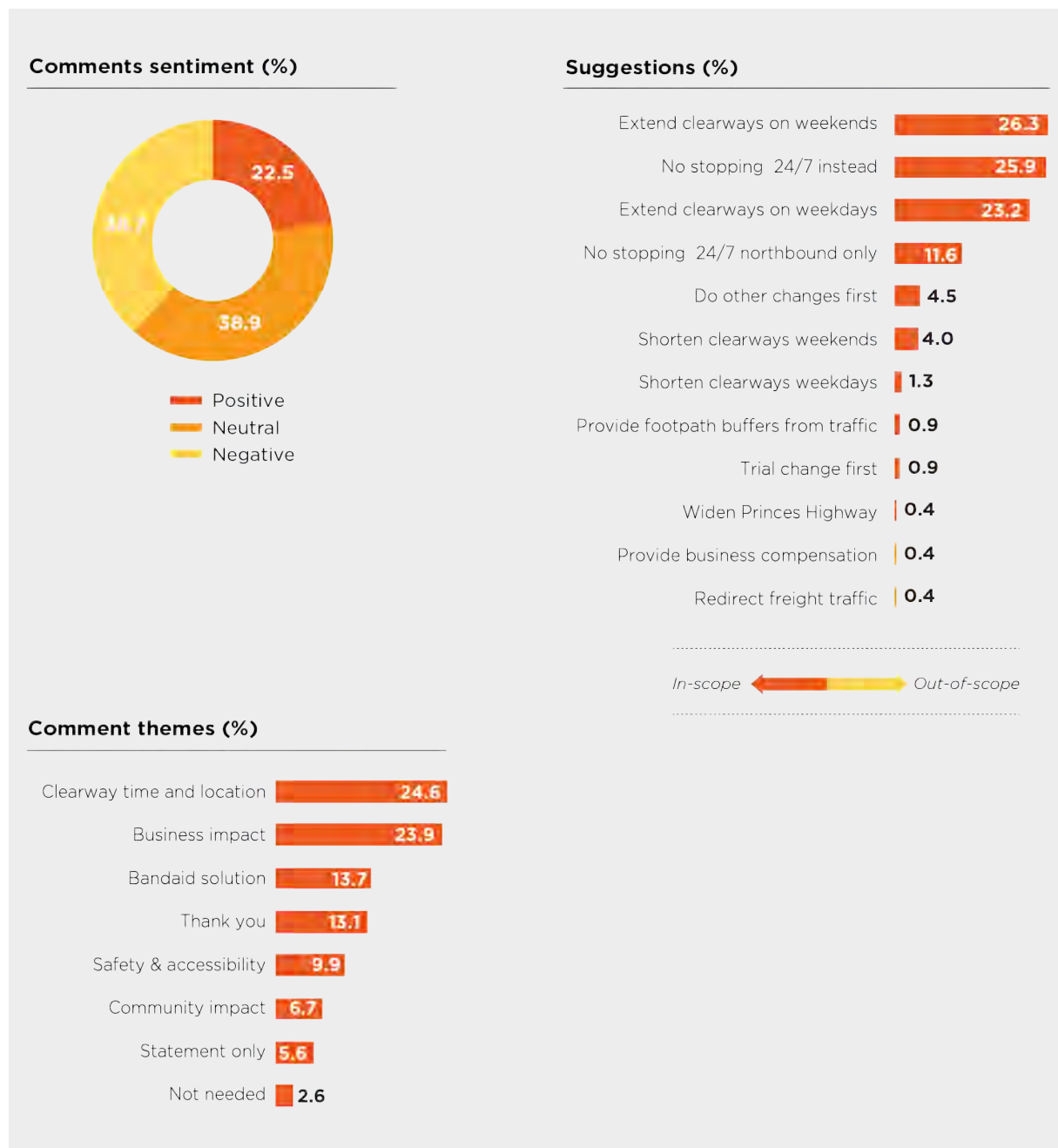


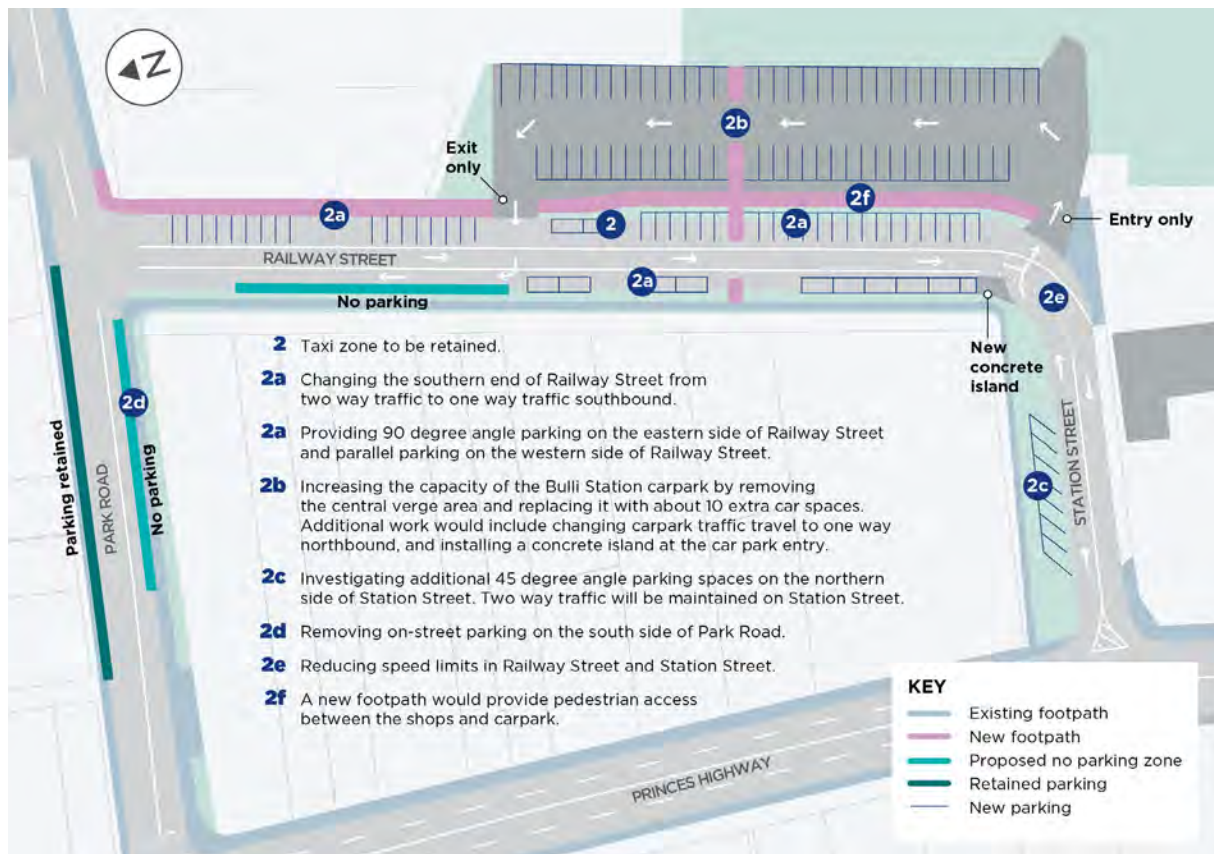
Figure 5 Clearways community feedback summary

"There would be nowhere to park going northbound to pick up a coffee from Stokes Lane Cafe as hundreds of drivers do of a morning." – **Online survey submission**

"I agree with the proposed clearways that it will help ease traffic congestion, especially in the afternoons coming southbound" – **Online survey submission**

Table 2 Clearways clarification and responses

Key concerns & suggestions	Clarification and/or response to key issues and suggestions
Clearway times and location	
Clearway time suggestions	The proposed extended clearways at Bulli have been identified to complement other clearways on the Princes Highway, improving travel times for public transport, private vehicles and freight. Transport is considering the specific clearway time suggestions and their impacts. The challenge is to balance the competing needs of local businesses and their customers, with those of the broader community using the road network for their daily trips in a car or bus, or for carrying freight.
Do other changes first / trial change first	<p>The implementation of all the proposed traffic improvements for the Bulli town centre (including clearways, car parking, prohibiting right turn at Station Street, implementing a green right turn arrow at Park Road, upgrading the Memorial Drive roundabout and implementing right turn lanes at Grevillea Park Road and Point Street) would be carried out in stages.</p> <p>Transport is considering the suggestion to implement other traffic improvements before extending the clearway hours in the staged implementation plan. The proposed extension of clearway hours have been designed as part of a package of proposed traffic improvements for the Bulli town centre. Each proposed traffic improvement builds on adjacent ones to provide benefits that are greater than the sum of each and improve the overall traffic flow and safety in the Bulli town centre.</p> <p>The proposed extension of clearway hours would not go through a trial period. Transport would monitor the impacts of the proposed extended clearway hours in improving traffic flow and balancing competing needs.</p>
Widen Princes Highway	The proposed traffic improvements for the Bulli town centre have been carefully considered as to balance benefits and impacts to local businesses and the surrounding community. Widening of the Princes Highway in Bulli town centre to incorporate additional lanes would require private property acquisition and have an adverse impact on local businesses and the surrounding community.
Business Impact	
Business viability/ compensation	<p>The proposed extension of clearway hours will only effect on-street parking on the Princes Highway during peak times. Outside of peak times customers and visitors will be able to park on-street on the Princes Highway to access local businesses as they do currently.</p> <p>The challenge is to balance the competing needs of these local businesses and their customers, with those of the broader community using the road network for their daily trips in a car or bus, or for carrying freight. In order to successfully balance these needs all on street car spaces that would be impacted by the extension of clearway hours would be offset by the provision of extra car parking spaces nearby on Railway Street.</p> <p>To further support local customers and businesses Transport is continuing to work with Wollongong City Council to improve active and public transport networks in the Bulli town centre.</p>
Deliveries	During clearway hours, tradespeople, delivery trucks and visitors are encouraged to park within properties wherever possible. If parking is not available on your property, tradespeople, delivery trucks and visitors will need to park in a local side street and walk to your property. This is similar to all other state roads where clearways and 'No Stopping' restrictions are in place. Deliveries that require vehicles to stop on the state road may be arranged outside the clearway hours.
Community impact	
Village feel	<p>Our network of roads and streets are a major part of the system of public space that helps connect our places. Public space is where people can socialise and add vitality to their neighbourhoods, and streets and roads have an important role in that vitality. Aligning movement functions with the places they serve can make our transport networks and public spaces better contribute to the liveability of communities and productivity of NSW.</p> <p>The proposed traffic improvements to Bulli have been designed to maintain the look and feel of the town centre while enhancing the Bulli township by increasing the connection and accessibility between existing car parks and shops. This would support the creation of place within the Bulli town centre (away from the Princes Highway) while enhancing the movement function of the Princes Highway during peak periods servicing both the local and broader community.</p>
Safety and accessibility	
Pedestrian safety/ footpath buffers	<p>As traffic volumes continue to grow, not only will travel times deteriorate, peak periods will also continue to spread across a longer time period. Significant queues and delays on the Princes Highway can lead to 'rat-running' through the adjacent local roads. Clearways would encourage greater use of the Princes Highway thereby reducing the level of 'rat-running' and improving safety on local roads.</p> <p>Transport acknowledges the community's concerns regarding the loss of a 'buffer' between traffic and pedestrians that parked cars can provide and will continue to work with Wollongong City Council to investigate opportunities for alternative 'buffers' such as planter boxes to maintain the overall feeling of safety in the Bulli town centre.</p>
Pedestrian connectivity	<p>The proposed extended clearway hours would remove on-street parking on the Princes Highway between Station Street and Park Road during peak times. These changes are proposed to be implemented in conjunction with upgrades to existing car parking, the provision of additional parking spaces and a new pedestrian footpath to maintain pedestrian connectivity around the Bulli town centre and to local businesses.</p> <p>Transport acknowledges the community's concerns that some community members and visitors may be unaware of the available car parking at the rear of the local shops and will continue to investigate opportunities to provide clear signage and wayfinding.</p>



Proposed parking changes

A total of 714 submissions were received in response to the proposed parking improvement measures.

Comments

Of the 714 submissions 506 provided open-ended comments that contained one or more comments or suggestions. Figure 6 outlines the distribution of sentiment from the comments received and comment themes.

Key concerns and issues raised under these themes included parking loss offsets, loss of passing trade, commuter parking, the confusion around the one way street configuration, location of the new footpath, village feel and pedestrian safety and connectivity.

Suggestions

Of the 1057 suggestions 126 provided suggestions relevant to the proposed parking improvement measures. Figure 6 outlines suggestions provided.

Table 3 provides clarifications and responses to the key issues and suggestions raised in relation to the proposed parking improvement measures.

"Park Road should be left as is. I think removing parking on the south side would affect the elderly wanting to visit the Drs. There's often no parking in their dedicated parking area." – Online survey submission

Parking community feedback summary

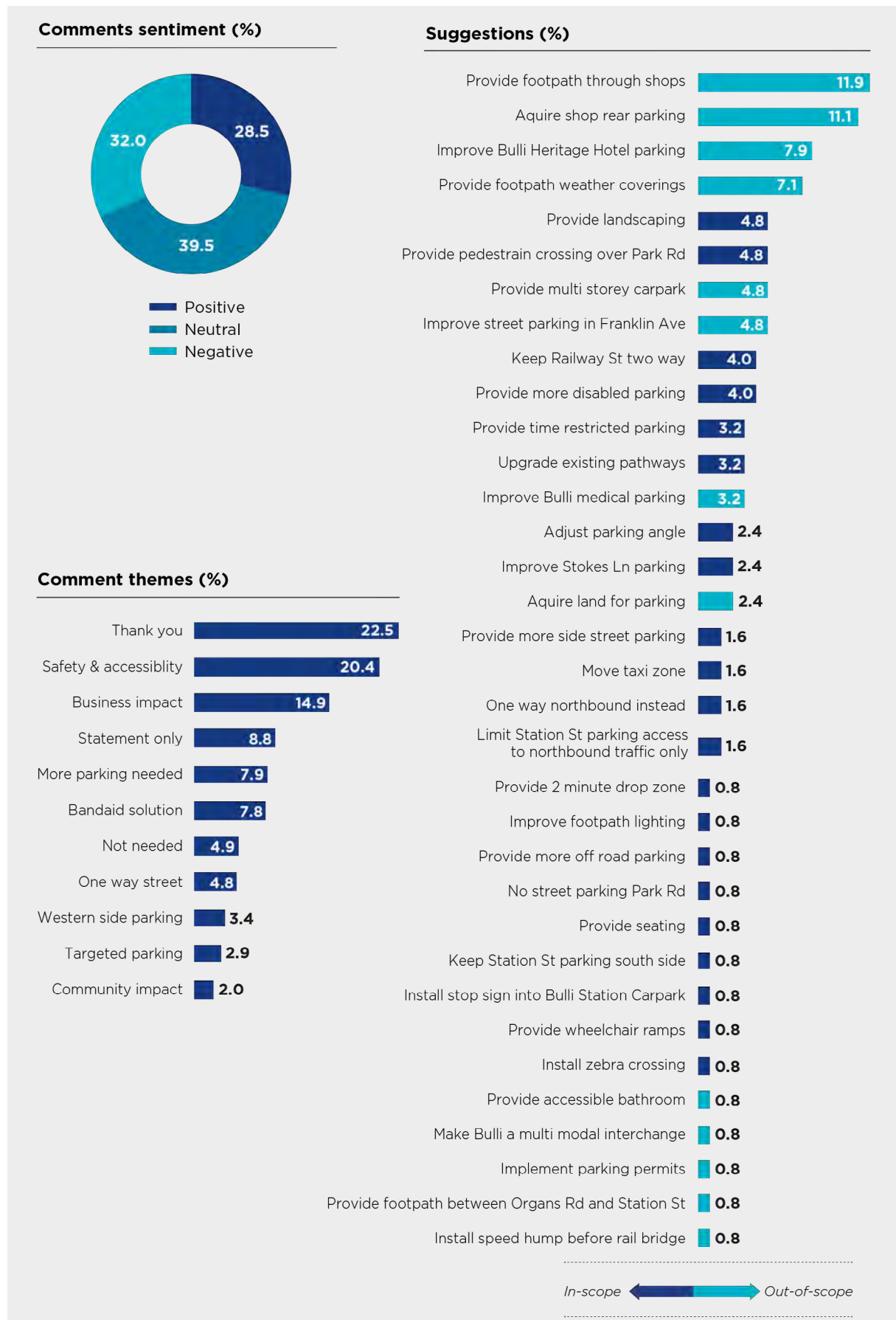
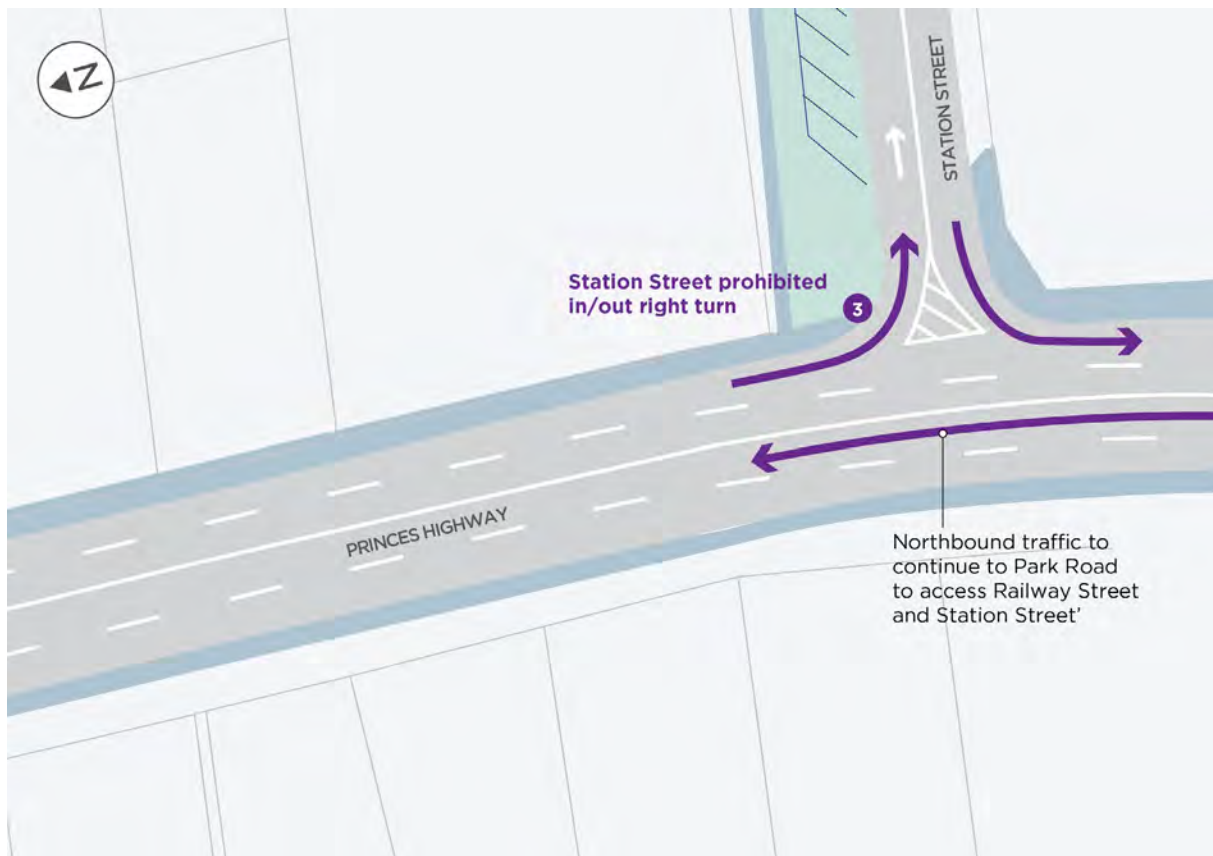


Figure 6 Parking community feedback summary

Table 3 Parking clarification and responses

Key concerns & suggestions	Clarification and/or response to key issues and suggestions
More parking needed	
Parking loss offset	<p>The proposed extension of clearway hours will only effect on-street parking on the Princes Highway during peak times. Outside of peak times customers and visitors will be able to park on-street on the Princes Highway to access local businesses as usual.</p> <p>A total of 6 on-street parking spaces will be removed from the south side of Park Road and 13 parking spots on the Princes Highway during clearway operation times. There will be no overall parking loss. The proposal would increase the car parking spaces by about 20, to a total of over 140 spaces on Station Street, Railway Street, Park Road and the Princes Highway. This will offset the parking spaces lost during peak hour clearways.</p> <p>Existing taxi zone spaces and the two existing disabled spaces at the Station Street carpark would be retained.</p>
Western side parking	
Stokes Lane	<p>The proposed traffic improvements for the Bulli town centre have been carefully considered to balance benefits and impacts to local businesses and the surrounding community. Widening of Stokes Lane in Bulli town centre to incorporate additional on-street parking would require private property acquisition and have an adverse impact on local businesses and the surrounding community.</p> <p>Transport acknowledges the community's concerns regarding limited parking options on the western side of the Princes Highway and will continue to work with Wollongong City Council to investigate opportunities for additional parking on the western side.</p>
Business impact	
Passing trade loss	<p>The proposed traffic improvements for the Bulli town centre have been carefully considered to balance benefits and impacts to local businesses and the surrounding community. The proposed extension of clearway hours will only effect on-street parking on the Princes Highway during peak times. Outside of peak times customers and visitors will be able to park on-street on the Princes Highway to access local businesses as usual. Please see above response to parking loss offset.</p>
Park Rd Parking – South Side	<p>The proposed access changes to Station Street will result in more vehicles using the Park Road intersection to access the Princes Highway. Vehicles queued on Park Road waiting to turn onto the Princes Highway would overlap parked vehicles on the south side of Park Road. If at the same time, vehicles are parked on the north side of Park Road, vehicles travelling westbound from the Princes Highway will be blocked and unable to travel along Park Road resulting in an unacceptable safety risk. Removal of this parking would mitigate this risk.</p> <p>Transport acknowledges the community's concern regarding the removal of parking on the south side of Park Road, particularly for the elderly and those with mobility issues who utilise this parking to access the Bulli Medical Centre and local businesses. Transport is considering the suggestion to implement dedicated disabled parking spots at an appropriate location, potentially at the northern end of Railway Street.</p>
Community impact	
Village feel	Refer to Table 2.
Targeted parking	
Commuter parking	<p>Transport acknowledges a range of users access the parking in Bulli town centre including, local residents, shoppers, visitors and commuters access the Bulli Train Station. Transport will work with Wollongong City Council to investigate opportunities to provide different types of targeted parking options, which may include a range of timed parking spaces, in order to find an appropriate solution that balances the needs of all the users who access parking in Bulli town centre.</p>
One way arrangement	
Configuration and traffic flow	<p>The change in travel configuration for Railway Street would be clearly delineated and signposted. The change to one way travel southbound at the southern end of Railway Street would be supported by upgrades to Bulli Station Carpark allowing vehicles to travel north through the carpark. Access to the station carpark will only be allowed from the southern entrance and exit only allowed from the northern exit.</p>
Safety and accessibility	
Pedestrian connectivity/ Location of new path/ Path through shops suggestion	<p>A new footpath would be implemented as part of the proposed traffic improvements along the eastern side of Railway Street connecting into the existing pedestrian network to provide access from the carparks in Railway Street and the Bulli Train Station to local businesses on Park Road and the Princes Highway.</p> <p>Transport acknowledges some people may experience inconvenience due to the increase in distance from parking spaces to access local businesses on the Princes Highway. A suggestion provided through submissions has been to provide a footpath through the shops between Railway Street and the Princes Highway. This would likely require private property acquisition and could have an adverse impact on some local businesses. However, Transport will investigate the suggestion to provide a pedestrian crossing at Park Road to connect to the shared pathway at Veigals Lane and will continue to work with Wollongong City Council to identify opportunities to improve pedestrian access and connectivity in and around the Bulli town centre.</p>
Access for those with mobility issues	<p>Transport acknowledges the community's concerns for people with accessibility and mobility issues in accessing local businesses on the Princes Highway from the proposed parking spots. Parking on the Princes Highway will only be impacted during peak hours so trips can be planned accordingly. Transport is considering the suggestion to implement dedicated disabled parking at an appropriate location, potentially at the northern end of Railway Street.</p>
Bulli Station carpark	<p>Transport acknowledges the community's concerns regarding safety in and around Bulli Station carpark, particularly for school aged children who utilise the train services. The one-way traffic flow arrangement in combination with reduced speed limits would improve safety as the area would have the look and feel of a low speed environment and pedestrians would only need to cross a single lane of slow moving traffic at a time. Transport will investigate further opportunities to increase safety in the area which may include further reducing speed limits and/or implementing wombat crossings.</p>



Proposed prohibited right turn at Station Street

A total of 711 submissions were received in response to the proposed prohibited right turn movements at Station Street.

Comments

Of the 711 submissions 633 provided open-ended comments that contained one or more comments or suggestions. Figure 7 outlines the distribution of sentiment from the comments received and comment themes.

Key concerns and issues raised under these themes included increased congestion at Park Road and Molloy Street, traffic flow impacts, compliance issues, safety concerns relating to increased traffic on Park Road, increased incident risk at the railway bridge and staff/customer access to local businesses on Railway and Station Streets.

Suggestions

Of the 1057 suggestions 32 provided suggestions relevant to the proposed prohibited right turn at Station Street. Figure 7 outlines the suggestions provided.

Table 4 provides clarifications and responses to the key issues and suggestions raised in relation to the proposed prohibited right turn movements at Station Street.

"This needs to happen it is such a dangerous bottleneck, again this will need enforcement for the initial changeover and I am concerned about people just turning anyway, if there could possibly be a physical barrier stopping these turns why not do this and leave the turning traffic to the traffic lights?" - Online survey submission

Station Street community feedback summary

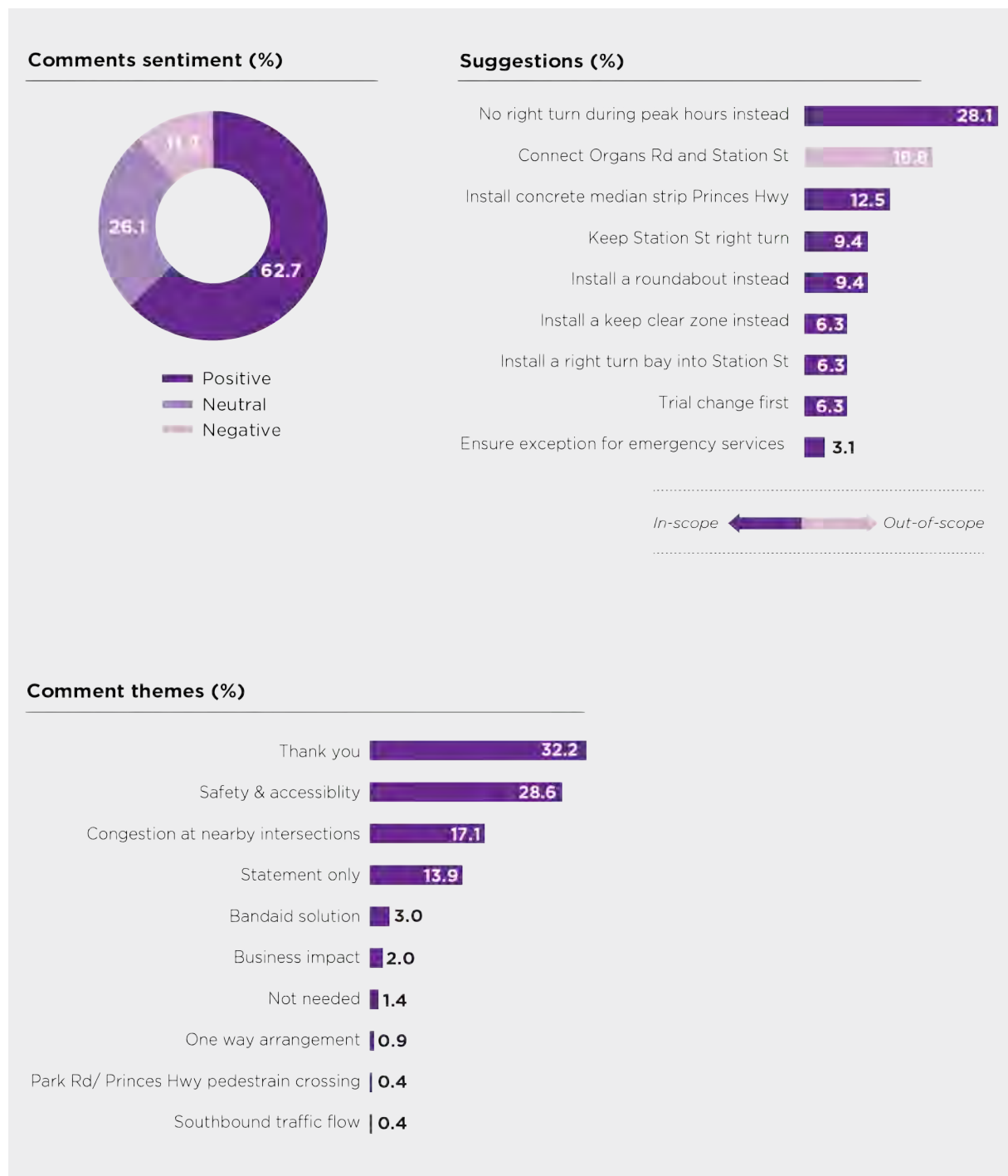


Figure 7 Station Street community feedback summary

"Outside of peak hour, I do not see any issues with right turn into Station St. Its my preferred spot to turn as opposed to Park Rd (due to no right arrow). I do support no right turn on to PH from Station St." – **Online survey submission**

"Firstly I was wondering if this is an option or possible at all. A right turn at the Organs Rd Woolworths lights , that could link up with a new road built from Railway street , beside resin brewery. Preferably with a dedicated right turn lane at the lights (if there's room) to help flow (and left if possible for behind the pub parks and resident access)." – **Online survey submission**

Table 4 Station Street clarification and responses

Key concerns & suggestions	Clarification and/or response to key issues and suggestions
Increased congestion at nearby intersections	
Park Road / Princes Highway	The proposed traffic improvements for the Bulli town centre have been carefully considered as to balance benefits and impacts to local businesses and the surrounding community. Each proposed improvement has been identified as part of an integrated network of improvements throughout Bulli, each contributing to the overall improved traffic flow, safety and easing of congestion. Transport acknowledges the community's concerns that the prohibited right turn movements at Station Street may increase congestion at the Park Road intersection. The intention is to move the right turn from Station Street to Park Road and implement a dedicated right turn arrow at the existing traffic signals. The increase in right turning vehicles has been assessed using traffic modelling and shown to be managed by the dedicated right turn arrow, providing an overall improvement in traffic flow through Bulli.
Molloy Street	As above, all proposed changes have been assessed and identified based on their contribution to the integrated network of improvements. Traffic modelling has taken into consideration that more drivers may choose to use Molloy Street. The proposed improvements to the roundabout at Molloy Street will reduce congestion at the intersection and cater for the increased traffic using Molloy Street.
Traffic flow impacts	
East / west pedestrian movement	Transport acknowledges the community's concerns regarding traffic flow impacts caused by increased pedestrian movement across the Princes Highway at the Park Road intersection due to the reduced parking spaces on the western side of the Princes Highway during peak hours. Traffic modelling has taken into consideration the increase in pedestrian movements at the Park Road traffic signals along with the improvements gained through the extended clearway hours and shown that there would be an overall reduction in congestion at the intersection. Transport would continue to monitor the traffic in Bulli town centre and optimise traffic light phasing as necessary (as discussed in Table 1).
Safety and accessibility	
Compliance - illegal right turn movements	Refer to Table 1. Transport is considering measures such as a concrete island at the entrance to Station Street to prevent right turn movements.
Incident risk - Bulli rail bridge	Transport acknowledges community's concerns regarding safety due to poor visibility from the railway bridge on Park Road. Transport is investigating the suggestion to provide warning signs and traffic calming devices as appropriate to slow traffic down as it comes over the railway bridge.
Business impact	
Staff and customer access to Railway Street / Station Street businesses	The proposed traffic improvements for the Bulli town centre have been carefully considered to balance benefits and impacts to local businesses and the surrounding community. Transport has consulted with potentially impacted businesses along Railway Street and will continue to work with these businesses to minimise any access impacts for their staff and customers.

"As a person who often turns right into Station St, it is not unusual to queue behind 3-4 cars at any-one-time. Now all these vehicles will be forced to use Park Rd. This is ok during clear way periods for the Princes Hwy, but my concerns come outside the clear way periods. If all vehicles are now going to use Park Road, it may become the case that this could result in queuing of more than 5 or so vehicles on a regular basis. During periods when clear ways are not in force, the queuing of 5 or more vehicles in the right lane at Park Road (northbound) will likely bring the Princes Highway traffic to a dead stop, as northbound vehicles will not be able to shift across to the left lane to get around the queue (given the parked cars out the front of the Bulli Heritage Hotel)." - Online survey submission



Proposed dedicated right turn arrow at Park Road

A total of 704 submissions were received in response to the proposed dedicated right turn arrow at Park Road.

Comments

Of the 704 submissions 337 provided open-ended comments that contained one or more comments or suggestions. Figure 8 outlines the distribution of sentiment from the comments received and comment themes.

Key concerns and issues raised under these themes included clearway impacts, increased congestion on Park Road, light sequencing and need for dedicated right turn lane.

Suggestions

Of the 1057 suggestions 72 provided suggestions relevant to the proposed dedicated right turn arrow at Park Road. Figure 8 outlines the suggestions provided.

Table 5 provides clarifications and responses to the key issues and suggestions raised in relation to the proposed dedicated right turn arrow at Park Road.

"...my concerns come outside the clear way periods. If all vehicles are now going to use Park Road, it may become the case that this could result in queuing of more than 5 or so vehicles on a regular basis. During periods when clear ways are not in force, the queuing of 5 or more vehicles in the right lane at Park Road (northbound) will likely bring the Princes Highway traffic to a dead stop." – **Online survey submission**

Park Road community feedback summary

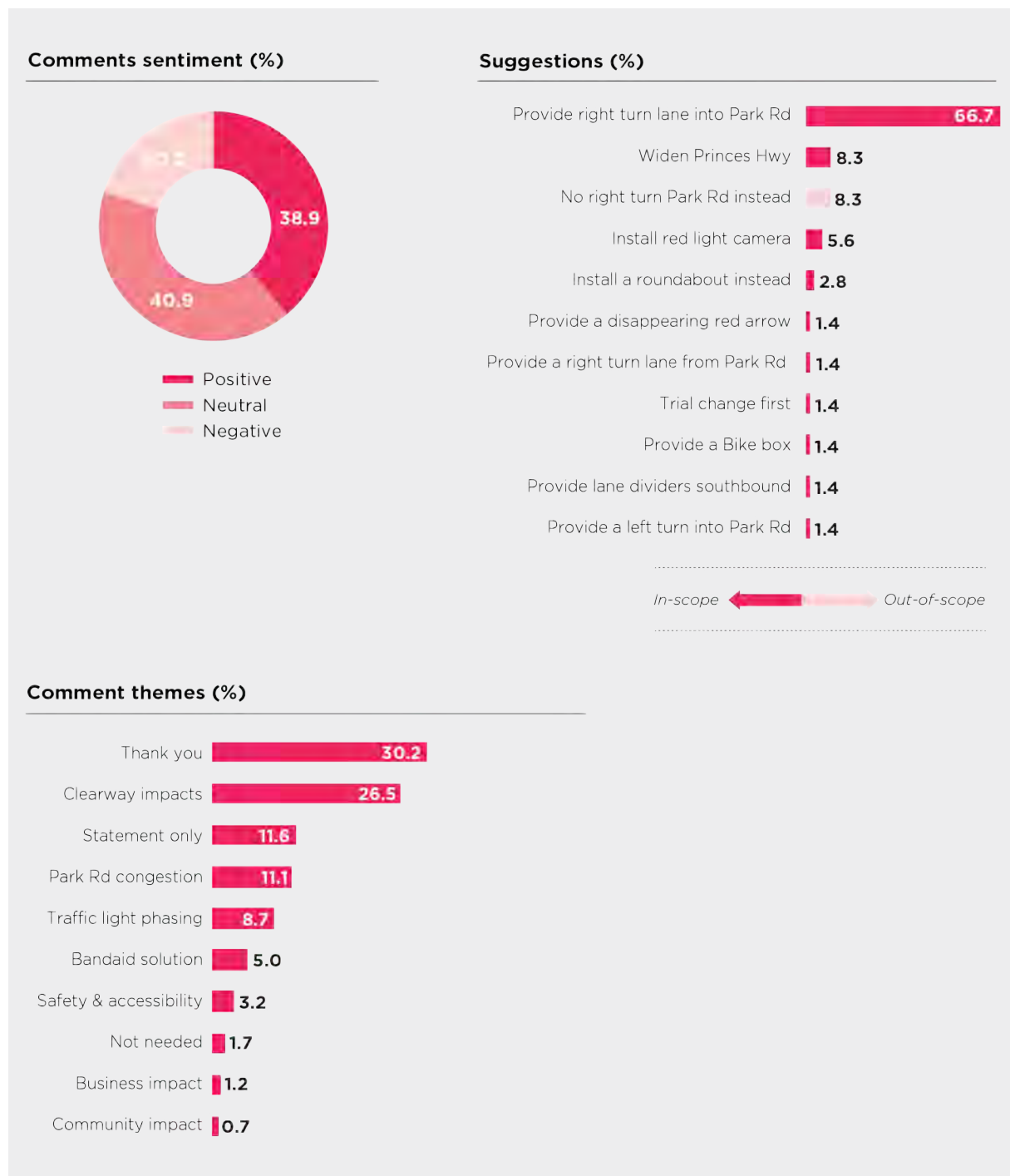
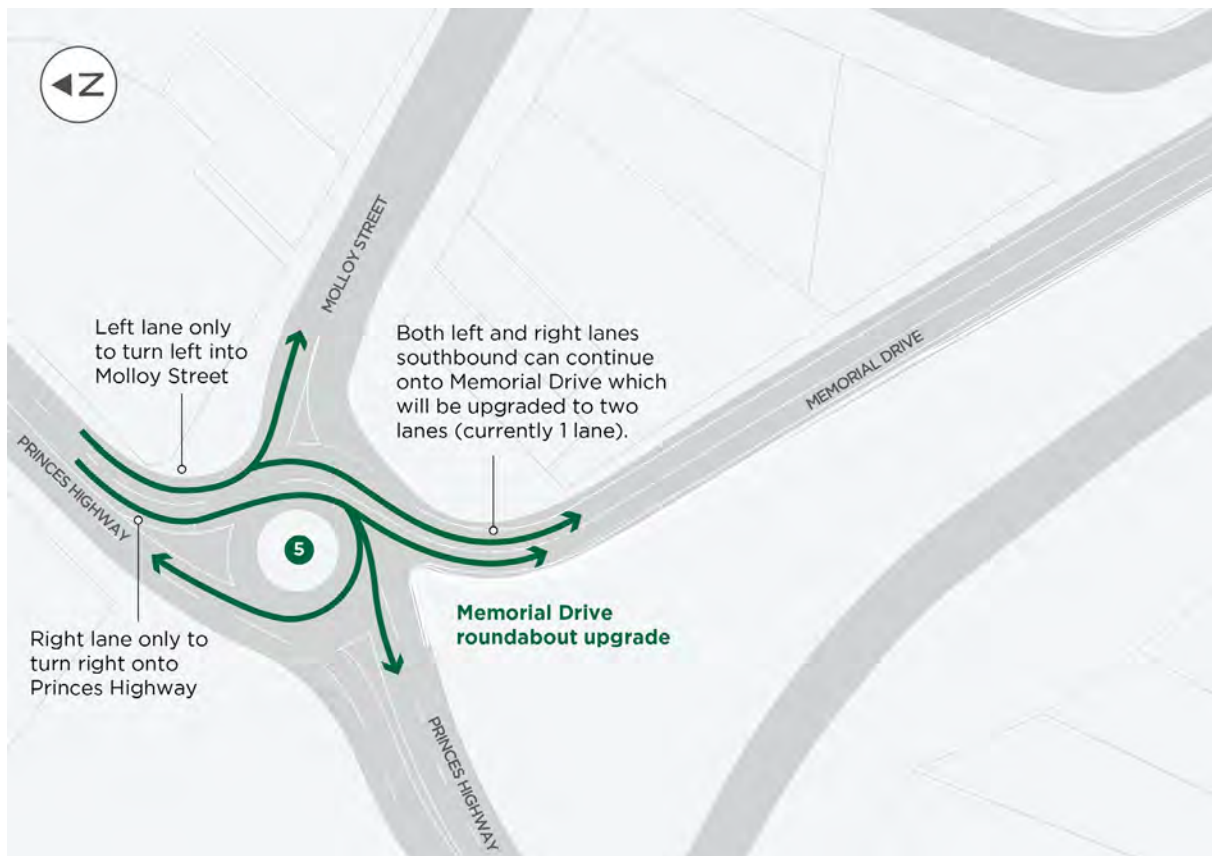


Figure 8 Park Road community feedback summary

“Cancelling the Right turn INTO station St, means extra Northbound cars waiting to turn right off the HWY at Park Rd (your new dedicated Right turn arrow at Park won’t allow drivers to turn opportunistically). This now LONGER queue of extra northbound traffic waiting to turn right at Park, will block the right lane. When combined with cars parked in left lane on the Western side of the HWY (outside of clearway hours) results in a fully blocked HWY northbound! This proposal will not work unless you remove all HWY parking from the Western side, (or at least shorten the Western parking zone to compensate for longer right turn queue).” – Online survey submission

Table 5 Park Road clarification and responses

Key concerns & suggestions	Clarification and/or response to key issues and suggestions
Impacts relating to clearways	
Single lane outside of northbound clearway times	<p>The proposed extended clearways at Bulli have been identified to complement other clearways on the Princes Highway, improving travel times for public transport, private vehicles and freight. The proposed extension of clearway hours have been proposed in the same location as the existing clearway hours on both the northbound and southbound sides of the Princes Highway.</p> <p>There is an existing no parking zone that extends from the Bulli Heritage Hotel in front of the Stokes Lane café up to the Park Road intersection. Traffic modelling has indicated this no parking zone provides adequate space for through traffic to continue around anticipated vehicles queuing to turn right into Park Road, particularly outside of peak times when the clearways are not in operation.</p>
Business impact	
Extension of no stopping zone northbound	<p>There is an existing no parking zone that extends from the Bulli Heritage Hotel in front of the Stokes Lane café up to the Park Road intersection. This no parking zone is not proposed to be extended as part of the proposed traffic improvements.</p> <p>The lane used to turn right into Park Road is not proposed to be a dedicated right turn lane and will continue to allow vehicles to also travel north through the intersection.</p>
Community impact	
Concern for residences at 232-234 Princes Highway	The proposed dedicated right turn arrow at Park Road will not change the access arrangements for residents accessing this address.
Safety and accessibility	
Poor visibility at crest for motorists and pedestrians	Transport acknowledges the community's concerns around pedestrian and motorist visibility at the Park Road intersection. The proposed dedicated right turn arrow into Park Road will allow vehicles to turn right into Park Road without having to wait for and identify a gap in the southbound traffic. Pedestrians will continue to be provided dedicated and safe crossing opportunities at the traffic signals. Additionally, the proposed extended clearway times would provide greater visibility at this intersection during peak hours by removing parked vehicles that may block visibility and also remove the need for motorists to change lanes to avoid a parked vehicle.
Compliance – running red lights	Refer to Table 1. A red light camera would only be installed if it was identified as appropriate and necessary.
Increased congestion on Park Road	
Waiting for traffic to turn right into Railway Street	Transport recognises the community's concerns regarding increased congestion on Park Road due to vehicles turning into Railway Street. Traffic modelling shows this is unlikely to be an issue. Transport would monitor the traffic flow on Park Road and Railway Street and investigate measures, such as 'keep clear' at the Railway Street intersection, as appropriate to manage any congestion.
Traffic light sequencing	
Sequencing of right turn arrow	<p>Traffic signals in NSW are controlled by a system called Sydney Coordinated Adaptive Traffic System (SCATS). SCATS is a traffic control system designed to optimise traffic flow. Intelligent algorithms process real-time data to adapt traffic signal timings that respond to unexpected conditions, predict traffic patterns and keep traffic moving. The introduction of a dedicated right turn phase would generally work using the following principle: The right turn arrow would turn green at the same time as the northbound green light, allowing vehicles on the Princes Highway to travel north along the Princes Highway from either lane or turn right into Park Road from the right lane. All other conflicting movements remain red. After a period of time the green arrow would transition to red. Then southbound traffic on the Princes Highway would receive a green signal allowing them to travel through the intersection. The length of the green time is constantly adjusted by the SCATS control system to optimised traffic flow through the intersection.</p>
Southbound traffic	
Traffic flow impacts – increased travel time for southbound traffic	<p>Transport recognises that the community's concerns regarding impacts to southbound traffic that will be required to wait for northbound right turning traffic at the Park Road intersection.</p> <p>Traffic modelling was carried out to assess the impacts of the dedicated right turn phase along with the proposed clearways and improvements to the roundabout at Memorial Drive for southbound traffic. The traffic modelling has shown that these proposed changes complement each other to reduce congestion through the intersection and reduce overall travel times along the Princes Highway through Bulli.</p>
Suggestion	
Dedicated right turning lane	<p>The proposed change at the Princes Highway and Park Road intersection includes a dedicated right turn arrow at Park Road only, and the two lanes in their current configuration will remain.</p> <p>Transport acknowledges that some members of the community have suggested widening the Princes Highway to include a third, dedicated right turning lane at the Park Road intersection.</p> <p>Transport has determined that widening of the Princes Highway in Bulli town centre to provide a dedicated right turn lane would require private property acquisition and would result in unacceptable impacts to the adjacent businesses and the local community.</p>



Proposed Memorial Drive roundabout upgrades

A total of 703 submissions were received in response to the proposed Princes Highway and Memorial Drive roundabout upgrade.

Comments

Of the 703 submissions 326 provided open-ended comments that contained one or more comments or suggestions. Figure 9 outlines the distribution of sentiment from the comments received and comment themes.

Key concerns and issues raised under these themes included access issues regarding Molloy Street and Hospital Road intersections, pedestrian safety and connectivity and traffic flow.

Suggestions

Of the 1057 suggestions 37 provided suggestions relevant to the proposed Princes Highway and Memorial Drive roundabout upgrade. Figure 9 outlines the suggestions provided.

Table 6 provides clarifications and responses to the key issues and suggestions raised in relation to the proposed Princes Highway and Memorial Drive roundabout upgrade.

"Southbound congestion occurs primarily because of the single lane access to memorial drive. The proposal to increase this to two lanes will have significant effect and progress traffic through this bottleneck more efficiently." – Online survey submission

Memorial Drive roundabout community feedback summary

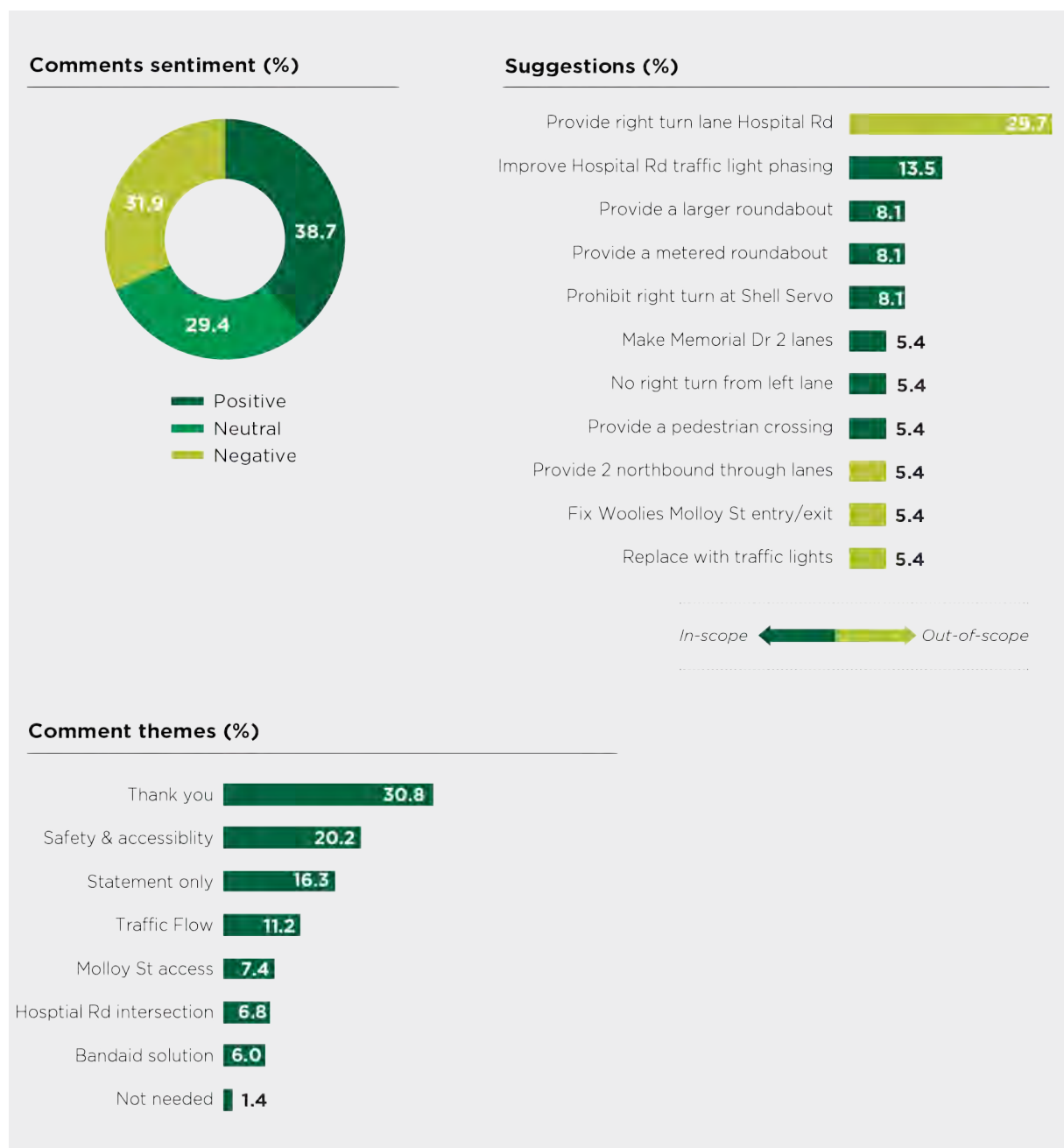


Figure 9 Memorial Drive roundabout community feedback summary

"Can be vehicles turning right into the petrol station from Princes Hwy heading north be stopped? A sign indicating " no entry " Or " no right turn " into the petrol station from the northbound lanes. Cars often stop to turn across double white lines into the petrol station significantly affecting flow through the roundabout." – **Online survey submission**

"Its a messy roundabout as people dont signal correctly. People heading south signal that they are turning left, when they are not - they are going straight (If they were turning left, they would be turning into Molloy St). I think the angles of the roundabout were not taken into consideration at the time of building the roundabout initially, and this has caused issues like this." – **Online survey submission**

Table 6 Memorial Drive roundabout clarification and responses

Key concerns & suggestions	Clarification and/or response to key issues and suggestions
Molloy Street access	
In / out Molloy Street competing with southbound traffic	<p>The proposed upgrade to the Memorial Drive roundabout involves widening Memorial Drive to provide two lanes southbound from the roundabout in addition to allowing both southbound lanes from the Princes Highway to access Memorial Drive.</p> <p>The improved traffic flow through the roundabout will create more gaps for vehicles to safely enter the roundabout from Molloy Street. The gaps in traffic are created by the adjacent traffic signals that work with the increased capacity through the roundabout to create natural breaks in the traffic, allowing vehicles to enter the roundabout from Molloy Street.</p> <p>Appropriate road markings and signage will be implemented to compliment the proposed changes and direct traffic in a safe and efficient manner (as described in Table 1).</p>
Traffic flow	
Two lanes southbound on Memorial Drive	<p>A number of submissions have raised the concern of southbound traffic needing to merge into one lane at Memorial Drive and multiple suggestions have been made to expand Memorial Drive to two lanes.</p> <p>The proposed upgrade to the Memorial Drive roundabout involves widening Memorial Drive to provide two lanes southbound from the roundabout in addition to allowing both southbound lanes from the Princes Highway to access Memorial Drive.</p>
Safety and accessibility	
Right turns in/ out of petrol station	Transport acknowledges community concerns regarding safety issues with right turning vehicles in and out of the Shell Petrol Station on the north-east side of the Memorial Drive roundabout. Transport will monitor this movement and work with Wollongong City Council and the business owner to appropriately address any identified safety issues.
Pedestrian connectivity	<p>Several submissions suggested pedestrian crossings and connections be provided across the Memorial Drive roundabout as part of the proposed improvements. Transport acknowledges that crossing at the roundabout may be more direct for some people, however it is not considered an appropriately safe location given the number of lanes and volume of traffic, especially during peak hours.</p> <p>Transport considers the existing signalised pedestrian crossings at Organs Road to the north and Hospital Road to the south to be safer and more appropriate locations to cross the Princes Highway.</p>
Lane changing	<p>Transport acknowledges the community concerns regarding unsafe use of the Memorial Drive roundabout by some road users, particularly around changing lanes on the roundabout.</p> <p>The proposed upgrade to the Memorial Drive roundabout involves widening Memorial Drive to provide two lanes southbound from the roundabout, this allows both southbound lanes from the Princes Highway to safely access Memorial Drive.</p> <p>Appropriate road markings and signage will be implemented to compliment the proposed changes and direct traffic in a safe and efficient manner (as described in Table 1).</p>
Hospital Road / Princes Highway intersection	
Congestion at Hospital Road impacts southbound traffic	A large number of submissions raised concerns regarding queued vehicles turning right at the Hospital Road intersection just south of Memorial Drive roundabout. Modifications to the Hospital Road intersection are out of scope of this project, however Transport are aware of these concerns and will monitor the intersection and investigate opportunities for future improvements as required.

"It's a good idea, however the traffic lights at Memorial Drive and Hospital Road sometimes prevents the smooth flow of southbound traffic along the Princess Hwy to Woonona. If the lights are red then the inside lane still banks up and especially if waiting for someone to turn right into Hospital Road." – Online survey submission



Proposed Grevillea Park Road and Point Street right turn lanes

A total of 703 submissions were received in response to the proposed additional right turn lanes at Grevillea Park Road and Point Street

Comments

Of the 703 submissions 290 provided open-ended comments that contained one or more comments or suggestions. Figure 10 outlines the distribution of sentiment from the comments received and comment themes.

Key concerns and issues raised under these themes included Princes Highway corridor expansion, safety and accessibility and congestion.

Suggestions

Of the 1057 suggestions 12 provided suggestions relevant to the proposed additional right turn lanes at Grevillea Park Road and Point Street. Figure 10 outlines the suggestions provided.

Table 7 provides clarifications and responses to the key issues and suggestions raised in relation to the proposed additional right turn lanes at Grevillea Park Road and Point Street.

"If they are additional right lanes and the 2 lanes heading North do not have to stop and wait for them to turn right this would be a great benefit, and could have the greatest impact on traffic flow through Bulli."

– Online survey submission

Grevillea Park Road and Point Street community feedback summary

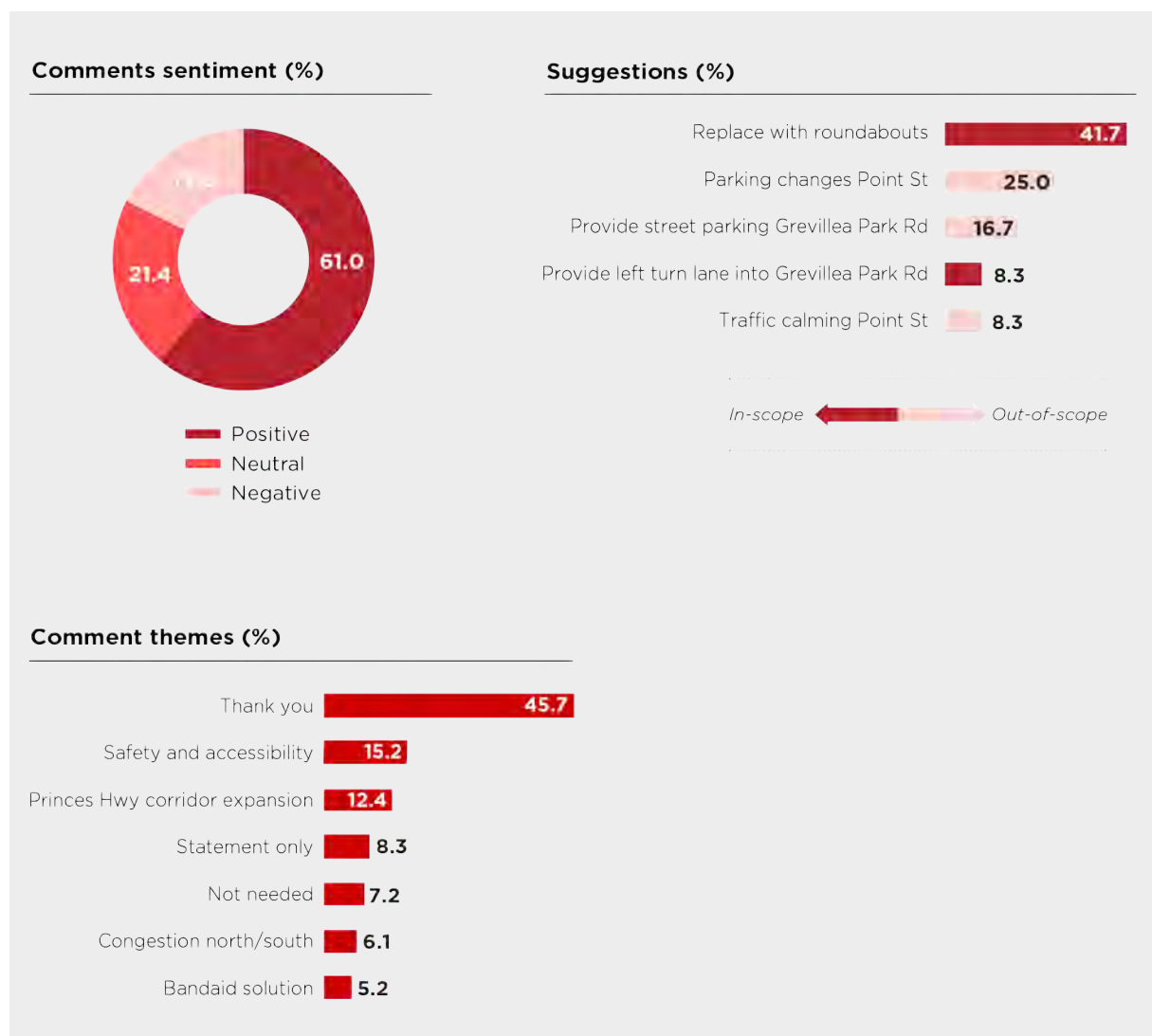


Figure 10 Grevillea Park Road and Point Street community feedback summary

"You should also consider opening up the carpark/lane way from Grevillea Park Road behind the F45/ Bowling Green to Quilkey Place or using the Memorial Drive extension land so that cars living in that area of Bulli turn right at Grevillea Park Road rather than Quilkey Place. This access was recently stopped by the placement of big concrete blocks." – **Online survey submission**

"Not sure how this could be achieved without either reducing the lane widths or reducing footpath widths, to the detriment of pedestrian safety and access to residences on the western side of the highway at the intersection." – **Online survey submission**

Table 7 Grevillea Park Road and Point Street clarification and responses

Key concerns & suggestions	Clarification and/or response to key issues and suggestions
Princes Highway corridor expansion	
Princes Highway widening	Transport has determined that widening of the Princes Highway within Bulli town centre would have unacceptable impacts to the community. Investigations have shown that widening of the Princes Highway between Grevillea Park Road and Point Street to the west will accommodate the proposed right turn lanes. This would have a minor impact on Slacky Flat Park.
Safety and accessibility	
Pedestrian connectivity	Transport acknowledges some customers have raised concerns regarding pedestrian connectivity if the proposed right turn lanes at Grevillea Park Road and Point Street are implemented. All existing pedestrian connectivity will be retained if the right turn lanes are implemented.
Quilkey Place right turn southbound	Transport acknowledges the community's safety concerns regarding right turn traffic movements southbound into Quilkey Place from the Princes Highway. This project did not propose improvements at this intersection. The suggestion to improve safety at this intersection will be investigated along with an appropriate treatment.
Congestion to the north and south	
Bottleneck at Park Road	It has been noted that a number of comments indicated that while the proposed right turn lanes at Grevillea Park Road and Point Street will enable two through lanes of southbound traffic, this may exacerbate an existing bottleneck at the Park Road intersection where there is poor visibility due to the natural topography and many customers prefer to travel in the right lane to avoid parked cars on the other side of the intersection. The proposed extension of clearway hours for southbound traffic in Bulli town centre combined with the dedicated right turn lane at Grevillea Park Road will work together to reduce the need for vehicles to change lanes to avoid vehicles that are parked or waiting to turn right. This will result in improved safety at the intersections to compliment the reduced congestion.



"It is great having an additional right turn lane into Grevillea Park Rd, however the next traffic congestion issue heading south after this intersection is turning right into Quilkey Place, which stops the flow of traffic. Currently cars get back into the right lane after going around the cars stopped to turn right into Grevillea Park Rd, only to be stopped by cars turning right into Quilkey Pl. This could be avoided by having a no right turn into Quilkey Pl if the dirt road off Grivellea Park Rd between the tennis courts and gym was through to Quilkey Pl." – Online survey submission

Miscellaneous feedback

Of the 1057 suggestions 54 suggestions were out-of-scope for this project. These suggestions have been noted by Transport and some may be investigated for potential future projects.

Figure 10 outlines the miscellaneous suggestions provided during the consultation. The most common suggestion received was to 'Prohibit the right turn at Quilkey PI'.

As discussed in Table 7, Transport acknowledges the community's safety concerns regarding right turn traffic movements southbound into Quilkey Place from the Princes Highway and will investigate opportunities to improve the safety of this intersection as part of future projects.

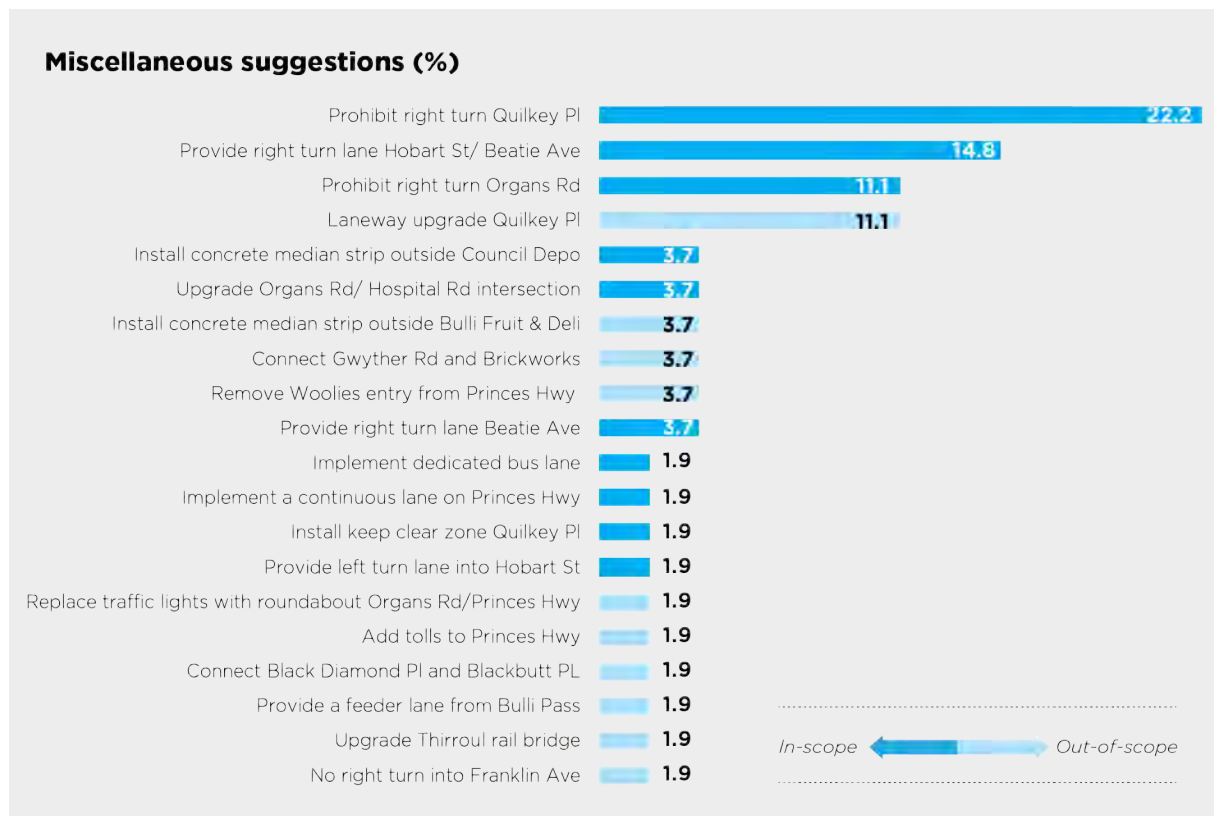


Figure 11 Miscellaneous suggestions

Next steps

This Feedback Summary Report has captured and responded to feedback on the proposed traffic improvement measures for Bulli. A number of opportunities for further investigation work have been identified including:

- improved traffic light phasing,
- improved active and public transport integration and connections,
- provision of clear signage and wayfinding,
- reduce speed limits through the Bulli town centre and,
- implementing other traffic improvements before extending the clearway hours
- along with many other refinements to the proposal.

We will continue work on these opportunities and refine the project as appropriate.

We are committed to keeping the community updated on the project and will inform the community of the outcomes of these investigations along with the timing and next steps in early 2022.



transport.nsw.gov.au

Disclaimer

While all care is taken in producing this work, no responsibility is taken or warranty made with respect to the accuracy of any information, data or representation. The authors (including copyright owners) expressly disclaim all liability in respect of anything done or omitted to be done and the consequences upon reliance of the contents of this information.

© Transport for New South Wales

Users are welcome to copy, reproduce and distribute the information contained in this report for non-commercial purposes only, provided acknowledgement is given to Transport for NSW as the source.

ISBN 978-1-922549-58-7
21.350