

Pupuke Road, Ocean View Road and Raleigh Road intersection upgrades

Community feedback summary

Executive summary



Awareness for the project was high:

- 1.8K people were classified as 'aware' of the project (e.g., they visited project page)
- 482 people were classified as 'informed' (e.g., they interacted with the page)
- 245 people were classified as 'engaged' (e.g., they submitted feedback)

The figures show that many people wanted to learn about the proposed upgrades. Yet only a couple of hundred (13% of visitors to the consultation page) decided to go ahead and give feedback.

Key findings:

- People who gave feedback were familiar with the intersection, as the majority either drive through the intersection once a week or live near the intersection.
- Safety and congestion are the biggest concerns for the intersection today, although there was a small group who told us they do not believe the intersection has a problem.
- 41% believed that the upgrades would improve the intersection. When asked why, respondents indicated they felt the upgrades would improve overall safety, navigation and reduce unsafe driving behaviour.
- 59% did not believe that the upgrades would improve the intersection. When asked why,
 respondents said they believed the upgrades would increase congestion, are not needed, we
 should consider other designs like a roundabout, or that we should remove the pedestrian
 crossing elements.



Who did we hear from?

Most respondents were familiar with the intersection:

- 42% drive through the intersection at least once a week
- 32% live near the intersection
- 10% walk the intersection at least once a week
- 7% take a bus near the intersection
- 7% ride a bike

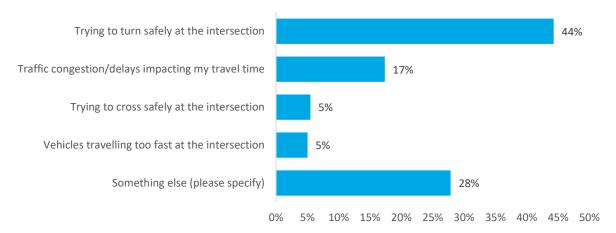
We also know that:

- 42% of respondents have children or dependents
- 58% of respondents do not have children or dependents

The intersection today – main concerns

Safety and congestion are the top two concerns for the intersection today:

What has been your biggest concern about the intersection?



28% of comments told us about "something else". These comments told us that:

- Upgrades are not needed because there is not a problem with the intersection (n=34).
- There are concerns about unsafe driving behaviour (n=19).
- The intersection gets congested, and it is difficult to navigate it as it sits on a slope (n=7).



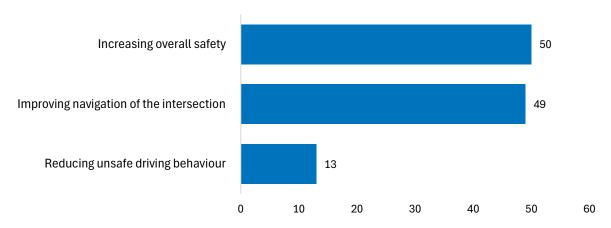
Common sentiments in the feedback

We asked people to tell us whether they thought that our proposed upgrades would achieve the goals of increasing safety and traffic management at the intersection:

Yes - I agree

41% (n=90) believed that the upgrades would achieve the intended goals of increasing safety and improving traffic management. The main reasons were:

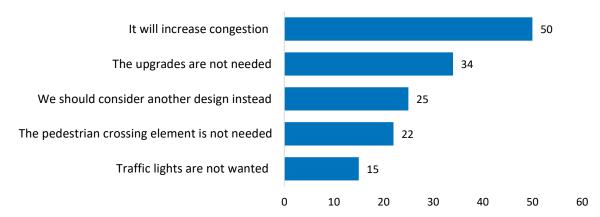
Do you think the upgrades accomplish the goal to improve safety and traffic management - Yes



No – I disagree

59% (n=129) believed that the upgrades would **not** achieve the intended goals of increasing safety and improving traffic management. The main reasons were:

Do you think the upgrades accomplish the goal to improve safety and traffic management - No





Feeback on individual elements of the design plan

We asked people whether they would like to ask a question, comment, or suggest something about a specific design element. 60% of respondents wanted to make further comments from the 245 respondents who took the survey.

Traffic Lights

109 people made additional comments about the traffic lights element. Four people showed support for having traffic lights while these were the main concerns:

Feedback	Auckland Transport response
Lights will negatively impact traffic flow (41%, n=59) 59 respondents believed that the traffic lights would increase congestion. They would like us to consider placing a roundabout instead. Some have asked that traffic lights are triggered based on traffic volume to reduce congestion.	A traffic modelling assessment was conducted for the proposed signalisation at the intersection of Pupuke Road, Ocean View Road and Raleigh Road. The upgraded intersection is designed to significantly improve traffic flow and reduce waiting times during busy hours. Currently, without signals, the intersection sees severe delays. The delays are worst at morning peak times, where wait times can be as high as 147 seconds (just under 2.5 minutes).
	As new developments come and more vehicles travel the intersection, delays at all peak travel times will significantly worsen. Without any changes to the intersection, morning peak delays could rise to over 26 minutes. Afternoon peak delays could nearly double to 224 seconds (3:44 minutes).
	With new traffic lights, the wait times at all approaches to the intersection at all peak travel times are expected to reduce dramatically to between 28 and 40 seconds. This will greatly enhance the overall efficiency of the intersection and minimise congestion as well as improve safety by reducing driver frustration. The layout will also lead to better bus travel times, ensuring buses can move through the area quickly and with fewer stops. The project will also assist buses in and out of Ocean View Road.
	Additionally, the inclusion of traffic-light controlled pedestrian crossings will make it safer and quicker for people to cross without significantly disrupting traffic flow. This upgrade will benefit drivers, bus patrons and people walking by making travel smoother and more reliable at all peak times.
	A roundabout would not be suitable to cater for the projected growth in the area as well as provide safe pedestrian access. The intersection area is too small and the



	road slope too steep to meet the size and visibility requirements necessary for a roundabout to work effectively.
Lights will negatively impact turning lanes (14%, n=20) There was a belief from 20 respondents that the design is missing a right turn from Pupuke Road to Raleigh Road. Also, from Raleigh Road to Ocean View Road and vice versa. Finally, a left turn from Pupuke Road to Ocean View Road. Some would like a double lane on Ocean View Road so traffic turning right isn't affected.	Currently, the intersection without traffic lights has severe delays. The delays are worst at morning peak times, where wait times can be as high as 147 seconds (just under 2.5 minutes). As new developments come and more vehicles travel the intersection, delays at all peak travel times will significantly worsen. Without any changes to the intersection, morning peak delays could rise to over 26 minutes. Afternoon peak delays could nearly double to 224 seconds (3:44 minutes). With new traffic lights, the wait times at all approaches to the intersection at all peak travel times are expected to reduce dramatically to between 28 and 40 seconds. This huge improvement means a second lane will not be needed on Ocean View Road to turn onto Pupuke Road. The queue of waiting cars will be greatly reduced. Additionally, the carriageway on Ocean View Road is too constrained to allow for a second turn lane with wider turning space allowed for from Raleigh Road into Ocean View Road. The signal phases of the new lights will be coordinated and thoroughly monitored to ensure turning traffic from all sides of the intersection, including Ocean View Road, is smooth and efficient without the need of the second turning lane. There is no right turn lane from Pupuke Road to Raleigh Road. Pupuke Road leads straight into Raleigh Road and does not require a right turn. There is a right turn in the design from Raleigh Road to Ocean View Road.
Lights will pollute the area (12%, n=17) 17 respondents already think there are too many traffic lights, especially on Raleigh Road and the surrounding area. A small number said it would pollute the environment to install anymore.	The traffic lights are not bright enough to cause light pollution. Traffic lights are designed to be highly directional, focusing light straight at drivers to ensure the light is prominently visible for them. This focused design reduces the amount of stray light that contributes to light pollution to almost nothing.
Would like more information on the reasons behind implementing traffic lights (11%, n=16)	With projected development in the Northcote area expected to increase the number of vehicles by approximately 22% to 26% over the next five years, this increase in traffic volume will inevitably lead to heightened delays and reduced traffic efficiency at this intersection.



Further information and clarification about this design element would help some respondents understand why we are taking this approach. Some want to know how we are going to ensure that the lights won't make the traffic worse. We did a study of a priority-controlled T-shaped intersection in Northcote to assess the impact of potential traffic growth from nearby developments. The focus was on the signal performance at the intersection of Pupuke Road, Raleigh Road and Ocean View Road, alongside a proposed signalised midblock crossing situated 70 meters to the east. The study aimed to ensure that the future commissioning of bus services is not adversely affected by major delays.

Currently, the intersection without traffic lights has severe delays. The delays are worst at morning peak times, where wait times can be as high as 147 seconds (about 2 and a half minutes). As new developments come and more vehicles travel the intersection, delays at all peak travel times will significantly worsen. Without any changes to the intersection, morning peak delays could be as high as 25 minutes. Afternoon peak delays could nearly double to 224 seconds (3:44 minutes).

With new traffic lights, the wait times at all approaches to the intersection at all peak travel times are expected to reduce dramatically to between 28 and 40 seconds. The bus travel times are also expected to be more efficient, with delays of less than 28 seconds. The study's final recommendations suggest that installing traffic lights at the intersection would not only alleviate delays but also enhance safety and manage increasing traffic volumes efficiently.

Furthermore, to ensure the traffic lights operate effectively, we will apply strategic signal coordination during peak times to streamline bus movements, significantly reduce stop/start occurrences, and ensure total bus/traffic delays remain minimal. This holistic approach will address both current and future traffic demands, ensuring smoother flow and improved safety at this critical intersection.

At the intersection of Pupuke Road, Ocean View Road and Raleigh Road, significant traffic congestion is currently experienced and is expected to worsen due to population growth and nearby development. We assessed the safety and efficiency of this intersection under two scenarios:

Scenario 1: This scenario assessed the current traffic situation with the existing road configuration. The right-turn from Ocean View Road, particularly during the morning peak hours, is already problematic, with an average delay of 147 seconds (about 2.5 minutes) due to heavy eastbound traffic from Pupuke Road. The morning peak fares little better, with wait times currently averaging 123 seconds (just over 2 minutes). This level of delay signifies a highly congested and inefficient intersection.

Traffic lights are not needed (9%, n=13)

13 respondents are unsure that traffic lights will solve the congestion problem while others simply don't think there is a congestion problem in the first place.



Suggested changes to the proposed pedestrian crossing elements (8%, n=12)

These suggestions included not going ahead with the pedestrian crossings or moving them to another location.

Scenario 2: This scenario assessed future outlook, assuming the intersection layout remains unchanged despite expected increases in traffic. With the upcoming development on Raleigh Road, over the next five years, the morning peak delays are projected to increase from 147 seconds to 224 seconds (almost 4 minutes), and evening peak delays from 123 seconds to 1,568 seconds (a little over 26 minutes). Such excessive wait times could prompt drivers to engage in unsafe manoeuvres to avoid long waits.

These scenarios clearly demonstrate the need for updating and improving the traffic control at this intersection to accommodate the anticipated increase in vehicle flow, reduce congestion, and enhance overall safety and efficiency for all road users. Including traffic light-controlled pedestrian crossings at the intersection is essential due to the expected increase in traffic. A busier intersection with more traffic can make crossing the street riskier for people walking.

The pedestrian crossings provide a safe path for people to cross at the intersection, significantly lowering the risk of crashes between drivers and pedestrians. These crossings also help organise the movement of both people walking and driving, making it safer and more orderly for everyone. As the area gets busier, having these designated crossing spots becomes crucial to ensure everyone's safety.

Traffic light-controlled crossings

95 people made additional comments about the traffic light-controlled crossing elements. Eight people showed support for having traffic light-controlled crossings, while these were the main concerns:

Feedback Already have pedestrian crossings close by (42%, n=40)

40 commenters said that we already have crossings near the intersection (further up Raleigh Road and up Pupuke Road), so the proposed traffic light-controlled crossings at the intersection are not necessary.

Auckland Transport response

Traffic light-controlled pedestrian crossings at the intersection are essential. Despite the presence of other crossings nearby, those existing crossings are too far away for many pedestrians. The distances can discourage pedestrians from walking the extra length to a safer crossing, increasing the likelihood of jaywalking.

Jaywalking, or crossing at undesignated spots, greatly raises the risk of crashes involving pedestrians, as drivers do not expect pedestrian movement outside of established crossing areas. Driver-pedestrian crashes are among the highest-risk crashes for death and serious injury.



Wanting to add new crossings or remove existing crossings (22%, n=21)

Some people would like us to install a crossing down Ocean View Road. Others would like us to remove the raised crossing further up Pupuke Road (near Lydia Ave) for better traffic flow if we go ahead with the proposed crossing design at the intersection. Some suggested only having raised crossings or zebra crossings at the intersection instead of traffic lights and traffic light-controlled crossings.

Additionally, pedestrians tend to stick with their desired crossing location once set on it. A recent assessment of walking patterns at the intersection during the morning peak recorded 20 pedestrians crossing there. In the afternoon peak, 7 pedestrians were recorded crossing at the intersection. This shows many pedestrians currently prefer to cross at the intersection and do so despite the lack of crossings there and others further along Pupuke Road and Raleigh Road.

By installing traffic light-controlled pedestrian crossings directly at this busy intersection, we can provide a safer, more convenient option for people to cross the road. This not only ensures the safety of people walking in the area but also helps maintain smooth and orderly traffic flow, reducing the risk for everyone.

Adding raised pedestrian crossings or standard crossings at the intersection without traffic lights cannot adequately address the operational efficiency problems, particularly given the anticipated future congestion.

Even with raised crossings, the delays could still reach above 26 minutes in future scenarios if the intersection layout remains unchanged, without the support of traffic lights. Raised or at-grade zebra crossings might slow down vehicles to enhance pedestrian safety, but they do not effectively manage the high volume and complex flows of traffic expected at this busy intersection.

Only pedestrian crossings integrated into the traffic light system can effectively synchronize both pedestrian and vehicular movement, addressing both safety concerns and the need for efficient traffic flow. Under the proposed design, the pedestrian crossings would be controlled by the traffic light phases to ensure that pedestrian movement is safely integrated with vehicular traffic, promoting smoother and safer travel for all.



There is no demand for the crossings (18%, n=17)

17 respondents said that there is no demand for any pedestrian crossings because they have never seen people cross the intersection before. For this reason, they would like to see evidence showing that there is in fact a demand for them.

According to the pedestrian surveys conducted during AM and PM peak traffic times on 8 March 2023, there were 20 pedestrians crossing the intersection between 8am to 9am in the morning, and 7 pedestrians crossing the intersection between 3pm to 4pm in the afternoon. The pedestrians crossed this intersection without any appropriate crossing facilities.

This indicates many pedestrians currently do cross at the intersection despite the lack of crossings there. By installing traffic light-controlled pedestrian crossings directly at the intersection, we can provide safer, more convenient options for people to cross there.

Concerns for the road layout (5%, n=5)

5 respondents would like us to consider that with the road being on a slope, it is not safe for wheelchairs and mobility scooters to cross.

Move the crossing somewhere else (3%, n=3)

3 respondents suggested that we move the crossings further away from the proposed area, believing that the crossings as currently proposed would sit too close to the intersection.

The road layout in the design has been modified to make it more accessible for mobility scooters and wheelchairs. The traffic light-controlled pedestrian crossings will play a big role, as they will make the intersection safer for wheelchair and mobility scooter users to cross.

It is safer to keep the pedestrian crossings where they are currently proposed at the intersection, where there is higher awareness from drivers of vulnerable users and speeds are relatively slower, reducing the risk of death and serious injury of pedestrians.

Traffic island

72 people made additional comments about the traffic island element. It is important to note that most comments on this question were **not** related to the traffic island. Nine people showed support for the traffic island element while these were the main concerns:

Feedback	Auckland Transport response
Traffic lights and traffic island will create congestion (27%, n=20)	Installing traffic islands and lights at busy intersections like Pupuke Road / Ocean View Road / Raleigh Road can actually help prevent congestion, not cause it. Traffic islands make it easier for drivers to see where they should be going and help organise turning
20 respondents suggested we install a roundabout instead of traffic lights to increase flow. Some commented that the island and the	movements, making traffic flow smoother and reducing the risk of crashes.
traffic lights will only obstruct traffic further. A couple of people oppose the expansion of the island because they believe it will contribute to more traffic.	Traffic lights control the timing of when cars and pedestrians can move, so there's a clear order and less stopping and starting. By setting up traffic lights to match the flow of vehicles, they keep traffic moving steadily instead of bunching up. Together, traffic



Other suggestions for the pedestrian crossings (16%, n=12)

These include requests to not include the traffic light-controlled crossings as crossings already exist close by, that we should only install raised crossings or zebra crossings instead of traffic lights at the intersection, or that the pedestrian crossings should be moved further away from the proposed area.

Creating more space for moving vehicles (13%, n=10)

10 respondents think that making the yellow lines go further back on Pupuke Road to avoid parked cars, removing the traffic island altogether or making the island smaller than it is being proposed will create more space for vehicles. islands and lights make intersections more organised and help everyone get through more quickly and safely.

Eliminating pedestrian crossings from the proposed design would be impractical because it would reduce safety and convenience for pedestrians. Despite the presence of other crossings nearby, those existing crossings are too far away for many pedestrians, and our recent surveys of pedestrian movements at the intersection during peak hours show people are still crossing at the intersection even without any current crossing facilities for them.

The distances of the existing crossings could discourage pedestrians from walking the extra length to use them, increasing the likelihood of jaywalking and the overall risk for driver-pedestrian crashes. Driver-pedestrian crashes are among the highest risk for death and serious injury. Including crossings right at the intersection ensures that pedestrian movement is safely integrated with vehicular traffic, promoting smoother and safer movement for all.

Reducing the size of the traffic island at the intersection could lead to other issues. Smaller islands provide less clear guidance for turning movements and can make intersections more confusing for drivers. This lack of clarity can increase the likelihood of crashes as drivers navigate the reduced space, potentially causing more congestion as incidents are dealt with.

Furthermore, smaller islands reduce the safety buffer for pedestrians crossing the road, making the intersection less safe for walkers. Therefore, minimising the size of the traffic island may compromise safety and efficiency of the intersection, rather than enhancing vehicular movement.



Traffic island is not needed (11%, n=8)

8 respondents told us they do not think the traffic island is needed.

Traffic islands are crucial at the intersection for several reasons. First, they provide a physical barrier that helps organise traffic flow, directing vehicles into proper lanes and guiding turning movements, which reduces confusion and potential collisions.

Second, they offer safe refuges for pedestrians, allowing them to cross busy roads in stages rather than navigating multiple lanes of traffic at once.

Third, traffic islands enhance overall visibility of the intersection, making it easier for drivers and pedestrians to see each other.

People want clarification on what is exactly happening with the traffic island (9%, n=7)

7 respondents would like further information on why we are doing these upgrades. 2 people noticed that on the drawings we talk about 'cutting back' the island while in the question we say, 'build on the existing island,' creating confusion. They would like clarification on this.

These islands help in calming traffic by naturally slowing down vehicles as they manoeuvre around the island, promoting a safer driving environment for everyone. To clarify our proposed plan, the existing traffic island will be fully removed, and a new traffic island built out from the original traffic island's footprint that extends more towards the northwestern direction. The rebuilt, bigger traffic island will have designated paths for pedestrians to walk on and provide ramps for the traffic light-controlled pedestrian crossings at the intersection.

Concerns around safety and accessibility (9%, n=7)

7 respondents expressed concerns over the topography of the road being on a slope, meaning that the intersection will not be safe and accessible to everyone.

Negative impact on pedestrians and cyclists (3%, n=2)

2 respondents don't believe the design considers cyclists and think that the traffic island poses a safety risk to pedestrians, as they may now be tempted to cross the road illegally using the island.

All appropriate sight distance requirements, including those for Approach Sight Distance, have been meticulously checked to ensure that everything is visible when approaching from Ocean View Road. This careful verification guarantees that drivers will have clear visibility of the intersection and of any potential hazards well in advance, greatly reducing the likelihood of crashes. The comprehensive review and update of sight distances as part of the intersection's redesign are key to ensuring a safe environment for all road users.

The inclusion of traffic light-controlled pedestrian crossings is a critical feature that benefits both cyclists and pedestrians, ensuring they can cross the intersection safely and legally. The new traffic island is designed with accessibility in mind, featuring kerb ramps and tactile pavers that aid not just pedestrians but also mobility-impaired users and cyclists. These features make it easier and safer for all users to navigate the intersection, reducing the incentive for jaywalking or unsafe crossing practices.



High-friction road surfacing (on the left turn lane from Pupuke Road onto Ocean View road)

61 people made additional comments about the high-friction road elements. 15 people showed support for the high-friction road element while these were the main concerns:

Feedback	Auckland Transport response
High-friction road surfacing is not needed (28%, n=16) 16 respondents believe the high-friction road surfacing is not necessary and that it is too costly.	Installing high-friction surfacing on the left turn from Pupuke Road into Ocean View Road is a crucial safety enhancement, particularly given the downward slope from Pupuke to Ocean View Road. This surfacing is specifically designed to prevent vehicles from speeding down the hill, significantly reducing the risk of crashes at this intersection.
	intersection.
	The cost of implementing this high-friction surfacing is justified by the considerable reduction in crash risk it brings, ensuring safer turning manoeuvres for downhill traffic. Additionally, this surfacing helps slow down vehicles as they approach the turn, providing an added layer of safety for pedestrians crossing. The combination of improved vehicle control and enhanced pedestrian safety underscores the value of this investment in maintaining a secure and efficient traffic environment.
	Based on the information from the NZTA Monetised Benefits and Costs Manual, high-friction surfacing is expected to provide crash reduction rates of around 20% to 50% for general crashes and 50% to 80% for skid-related or wet-weather crashes. These values depend on the specific site conditions and crash history.
Suggestions for the high-friction road element (25%, n=14) Suggestions included having speed reduction on the road, installing giveaways, raised crossings or speed bumps instead of high-friction road surfacing. A couple suggested putting the high-friction surfacing somewhere else, as vehicles driving on it will create more noise for households close by.	Employing raised pedestrian crossings or speed bumps at the intersection instead of high-friction surfacing could inadvertently increase noise levels. These features, while effective for reducing vehicle speeds, create a physical disruption that can cause significant noise as vehicles pass over them. This noise is produced by the impact of vehicles slowing down and then accelerating again, as well as the vibration caused by the interaction of tyres with the raised surfaces.
	In contrast, high-friction road surfacing provides a smoother transition without the abrupt elevation changes of bumps or raised crossings. This not only aids in noise reduction but also maintains a quieter environment for nearby residential and



Wanting clarification on why we chose to include high-friction road surfacing (21%, n=12)

12 respondents sought clarification on the reasoning behind needing high-friction road surfacing and why it was chosen over other speed reduction measures.

commercial areas, making high-friction surfacing a preferable choice for managing speed while minimising noise pollution.

High-friction road surfacing was selected for the turn from Pupuke Road into Ocean View Road primarily due to its effectiveness in enhancing vehicle control and safety on the downward slope without the added noise and disruption of other speed reduction methods like speed bumps or raised crossings.

This type of surfacing significantly improves the grip of vehicle tyres on the road, especially in wet conditions, reducing the risk of skidding as drivers navigate the slope. Unlike physical speed reduction features that can cause noise and require vehicles to stop and start, high-friction surfacing provides a continuous, smooth surface that allows for a consistent flow of traffic. This not only maintains a quieter environment but also ensures that traffic does not back up at the intersection, creating a safer and more efficient traffic management system.

The decision to use high-friction surfacing reflects a balanced approach to achieving maximum safety benefits while minimising inconvenience and environmental impact.

Yellow guidance pavers and ramps

42 respondents made additional comments about the yellow guidance pavers and ramps elements. Six people showed support for the yellow guidance pavers and ramps, while these were the main concerns:

Feedback

Guidance pavers and ramps are not safe because they can be too slippery (44%, n=19)

19 respondents told us that yellow guidance pavers are known for being unsafe, as they can be slippery. It may be a detriment to the groups that they intend to help like people using walking sticks, walkers, or who have impaired vision. Some people gave us specific examples of when pedestrians have slipped over wet guidance pavers. They ask that pavers be of better quality to avoid injuries.

Auckland Transport response

The tactile and directional pavers being installed on the traffic islands and at the traffic light-controlled pedestrian crossings are of the highest quality, ensuring they remain securely in place under all weather conditions. These pavers are designed to provide additional grips, which is crucial for ensuring the safety of pedestrians, including those with mobility impairments. By using top-grade materials, the integrity and functionality of these installations are maintained, making the crossings safer and more accessible for everyone, regardless of the weather.



Guidance pavers and ramps are not needed (23%, n=10)

10 respondents don't believe guidance pavers and ramps are necessary. Reasons include that there are already too many on other roads nearby (e.g., top of Raleigh Road and near Pupuke Road) and that there isn't a demand for them because they haven't seen people with impaired mobility cross the intersection before.

In New Zealand, the standard for installing tactile pavers at pedestrian crossings is applied universally, regardless of the number of mobility-impaired people using the crossing. This approach ensures that every pedestrian crossing is equipped to assist those with visual impairments, reinforcing a commitment to accessibility and safety in all urban infrastructure.

By including tactile pavers in every new pedestrian crossing, New Zealand adheres to a high standard of inclusivity, guaranteeing that the needs of all users, including those who are mobility-impaired, are consistently met. This policy reflects a proactive stance on accessibility, ensuring that infrastructure is prepared to support every member of the community, whatever their ability.

Additional feedback

74 people made additional comments at the end of the survey. The following are common themes in the feedback that we did not already see in the feedback from sections above:

Feedback	Auckland Transport response
This project is not needed (18%, n=15)	Understanding the concerns of those who question the necessity of this project is important. However, extensive traffic analyses and projections underline the urgent
15 respondents did not believe the project is needed. The main reason being that they do not think there is a problem with	need for these upgrades.
congestion in the first place. Some asked why this project is being prioritised over other work that could potentially benefit more people living around the area.	While current congestion levels may not seem problematic to all observers, the anticipated population growth and associated increase in vehicle traffic will inevitably lead to significant delays and safety risks if no action is taken.
	Furthermore, the project isn't merely about alleviating traffic congestion; it also aims to enhance pedestrian safety and ensure efficient public transport, which are critical as the area develops.
	Prioritising this project is a proactive measure to prevent future congestion and crashes before they become unmanageable, ensuring that the infrastructure evolves in tandem with the community's growth and benefits the wider community in the long run.
We should prioritise certain groups in the plan (17%, n=14)	When planning the upgrades at this intersection, we had to prioritise the safety of all road users, but especially pedestrians, who are among the most vulnerable to death



14 respondents said that we should ensure some groups are prioritised in the plan. For instance, that there are solutions for buses who struggle to navigate the intersection safely, that we place a focus on pedestrians, that we consider the impact on nearby households, and that we offer a solution for cyclists.

Suggestions for doing other road upgrades instead (10%, =8)

8 respondents would like us to consider doing other work in the area instead. Such as: fixing the Onewa and Lake Road connection, cutting back berms to make it easier for buses to do pickups and drop-offs, and to widen the intersection. Concerning the suggestions of cutting back berms and widening the intersection, respondents did not specify the areas where they wanted these done.

and serious injury crashes. This is why we included traffic light-controlled pedestrian crossings in the design. However, these crossings aren't just for pedestrians; they also make it safer for cyclists to cross the intersection. Cyclists can use these crossings to navigate through the area safely, alongside pedestrians.

The intersection of Pupuke Road, Ocean View Road and Raleigh Road has been prioritised for upgrades due to its critical role in the local transport network and the anticipated increase in traffic from nearby developments. This intersection is a key junction that affects many commuters, including pedestrians, cyclists, and vehicle drivers. Upgrading this intersection is essential to manage the expected growth in traffic and to enhance safety for all road users.

The improvements will not only alleviate current congestion but also prevent future traffic issues as the area continues to develop. By focusing on this intersection, we can ensure a smoother flow of traffic and a safer environment, providing immediate and long-term benefits to the community. We will consider the suggestions received for upgrades in other parts of the North Shore in our planning of future projects.



Next steps

We would like to thank the members of the community who participated in this consultation and gave their feedback.

Safety has been a concern at the Pupuke Road-Ocean View Road-Raleigh Road intersection for years. The intersection sits on a slope, which can hinder visibility for turning motorists, and the roads are angled in a way that can make it difficult to gauge safe gaps to turn between approaching traffic. Additionally, there are no designated pedestrian crossings at the intersection. This adds another layer of risk to both pedestrians trying to cross and drivers who may be too focused on watching out for other vehicles to see pedestrians in time to stop.

Trying to turn safely at the intersection was named as the top concern by those who participated in the consultation. During our engagement activities, many members of the community shared their experiences of witnessing crashes, near misses, trying to navigate turning at the intersection, or watching congestion build up at the intersection because of others having difficulty turning, particularly at peak traffic hours. Even before the consultation, feedback from those living in the area was raised to Kaipatiki Local Board about the safety issues at the intersection, which was a key reason why they prioritised it for improvements funded by their Local Transport Capital Fund.

In recent years, congestion has become an issue at the intersection as well. Northcote and the surrounding areas are experiencing population growth with new housing developments being built. These developments, along with long-term plans to upgrade Northcote's town centre (which sits less than a kilometre away from the intersection) with new community spaces, shops, apartments, and offices, are expected to the increase the number of vehicles by approximately 22% to 26% over the next five years.

The difficulty turning at the intersection is already contributing to traffic backups, particularly during peak travel times. Wait times to turn currently range between 57 to 147 seconds on average during morning, afternoon and Saturday noon peak hours. According to our modelling data based on traffic surveys taken in 2023, without any sort of improvements to the intersection, in five years, wait times to turn could range between 224 to 1,568 seconds. That's between 3:44 minutes and 26:08 minutes of average wait times to turn on any side of the intersection at peak times.

Given this data, the level of interest in improving the intersection by Kaipatiki Local Board and the community, and our own interest in improving safety and efficiency at the intersection due to the number of buses that currently travel through it, we worked to encourage as much public participation as possible in the community consultation for these improvements:

- We sent informational postcards about the consultation to 19,400 addresses in Northcote and the surrounding neighbourhoods (including Birkenhead, Hillcrest, Northcote Point, and parts of Takapuna) to ensure we reached both residents and people who might be travelling through the intersection regularly as part of their commute.
- We also ran social media ads on Facebook and Instagram geo-targeted to audiences in Northcote and the surrounding neighbourhoods during the consultation period (1 July – 29 July 2024), which reached more than 125,000 users.
- We posted street signs and dairy posters at nine key spots in the area known to have lots of foot traffic.
- Finally, we held two drop-in sessions at Northcote Library, inviting people to visit with our
 project team, ask questions, and give their feedback in person. Both drop-in sessions were
 well attended by AT representatives and Kaipatiki Local Board members.

For the consultation, we invited the community to share their overall thoughts on whether they believed the proposed intersection improvements would help fulfil our goals of improving safety and



managing traffic congestion projected for the area, including why they did or did not think the improvements would work. Then, we invited them to comment on specific elements of the design.

Overall, there was a high level of awareness of this project by the community at large:

- 1,856 people visited the consultation page.
- 482 people interacted with the page by clicking a link or viewing media on the page.
- 245 people submitted feedback via our online survey.

Many in the community wanted to learn about the safety improvements, but of those who visited, only a fraction (13%) felt strongly enough to give feedback. The feedback we did receive was robust, detailed, and informative on why members of the community felt the way they did about the improvements. Of the 245 people who did submit feedback:

- 41% believed that the upgrades would improve the intersection by increasing overall safety, improving navigation and reducing unsafe driving behaviour.
- 59% did not believe that the upgrades would improve the intersection. Their main concerns
 were that upgrades would increase congestion, upgrades are not needed, we should consider
 other designs like a roundabout, and that we should remove the pedestrian crossing
 elements since other crossings already exist near the intersection.

The safety aspects of the project are not as much in question by participants as the traffic management aspects. Of those who were in favour of the improvements, most expressed they were in favour because they believed they would significantly improve safety for drivers and pedestrians. On the other hand, most of those who were *not* in favour of the improvements were not so because of concerns around the traffic lights' ability effectively mitigate congestion and manage traffic. The reception was very similar at the two drop-in sessions at Northcote Library.

When those who expressed their concerns around the traffic management aspects of the project were asked to elaborate on their opinions, many of them cited negative past experiences with other traffic lights at busy roadways/intersections in their area (at Lake Road and Onewa Road, for example) with issues around signal timings and phasing. They also said they themselves had not experienced any significant congestion issues at the intersection when they travelled through it.

We recognise those participants' experiences, as there are currently periods in the day where congestion is not an issue. However, our traffic models do show the added number of vehicles from planned developments nearby will create significant congestion issues in just a few years. Our models also show that in a scenario where the intersection is controlled by traffic lights, wait times to turn from any side of the intersection, particularly at peak times, will reduce to between 28-40 seconds on average. That's a significant improvement even for existing wait times to turn at the intersection.

Most of the suggestions for changes to the design revolved around putting in a roundabout instead of traffic lights or moving/removing the crossings at the intersection since others already exist further along Pupuke Road and Raleigh Road. We did examine the idea of putting in a roundabout instead of traffic lights. However, the road space is too small and the slope of the area too steep for an effective roundabout to be put in place.

We also re-examined the crossings and their placement. However, our surveys of pedestrian movements in the area indicate that people are still crossing at the intersection despite the existence of the other crossings. The other crossings (including the newest one at Raleigh Road near the improved bus stop) are still too far away to fully deter people from crossing at the intersection. As long as pedestrians are crossing there, safety will be an issue for them, which is why we have included traffic light-controlled crossings at the intersection in our design. For all the other concerns and suggestions noted by participants, we have provided direct, detailed responses in this report.

We have taken a good look at the community feedback and all the concerns and suggestions put forth by consultation participants. We believe the design as it currently stands remains the most cost-



effective way to achieve Kaipatiki Local Board's goals of improving safety and traffic management at the intersection now and in the future.

Further, in recognition of the concerns raised by the community, we are committed to thorough monitoring and review of the new traffic lights as soon as they're activated and continuous monitoring in the future to ensure they are performing effectively as the community grows. Strategic signal coordination will be applied during peak times to streamline bus movements, significantly reduce start/stop occurrences, and ensure total delays remain minimal. The signal timings and phases of the lights can also be tweaked to adapt to changing traffic patterns as they happen. And if these efforts still are not effective, the lights could be further optimised with smart traffic light technology, which we are already using at some key intersections of Auckland CBD with promising early results.

We recognise how important this intersection is for the Kaipatiki Local Board's long-term plans for the area, our own long-term plans in growing and optimising our transport network, and for the people of Northcote and beyond to get to work, shops, schools and more. It's in all our interest for it to be safe and efficient for people of all abilities to travel through however they choose to do so, especially as the area grows and more people flock to Northcote.

By applying these needed improvements and working together to ensure their effectiveness, the intersection of Pupuke Road, Ocean View Road, and Raleigh Road will stand as a key driver of people to places and opportunity for many years to come.