



Background

Auckland Transport has installed speed-calming measures to selected residential streets in the Manurewa area. These measures included:

Speed humps and speed cushions



Raised table pedestrian crossings





These measures have been implemented in an attempt to reduce the speed of vehicles on the road and make the streets a safer place for walking, cycling, children, the elderly and the differently abled.

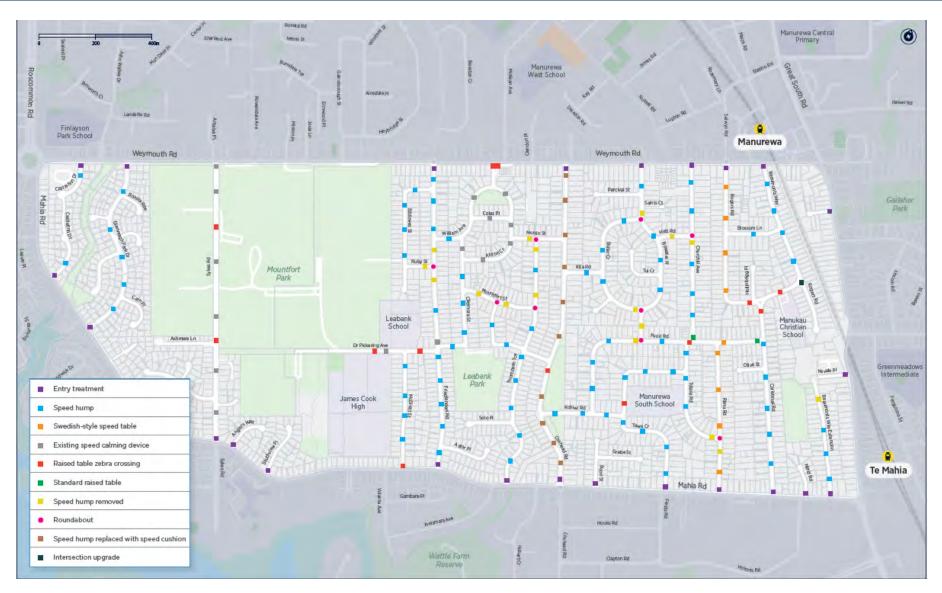
In 2021, GravitasOPG conducted research on Area 1, a residential area in Manurewa. In 2022, Auckland Transport commissioned GravitasOPG to conduct research for Area 2. The Area 2 location, and the location of road safety improvements, are shown on the following slide.

Area 2 research will help to understand:

- Awareness of the measures and the impact the measures have had
- **Public perceptions**
- Potential changes to travel mode used.



Manurewa (Area 2): Locations of Road Safety Improvements







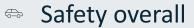
Research Objectives

To understand...

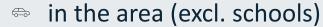


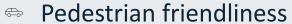
Awareness of speed calming measures

Impact of speed calming measures on:









Cyclist friendliness

Drivers driving below the speed limit

Active mode use

Current travel mode used to and from:



- School
- ♠ Local shops



Methodology





All residential properties in the Manurewa area of interest (Area 2) were sent a letter outlining the research and the road safety measures that have been undertaken in the area.

The letter included a paper copy of the questionnaire (with return postage included) as well as instructions on how to complete the survey online if they preferred.

A copy of the questionnaire is appended



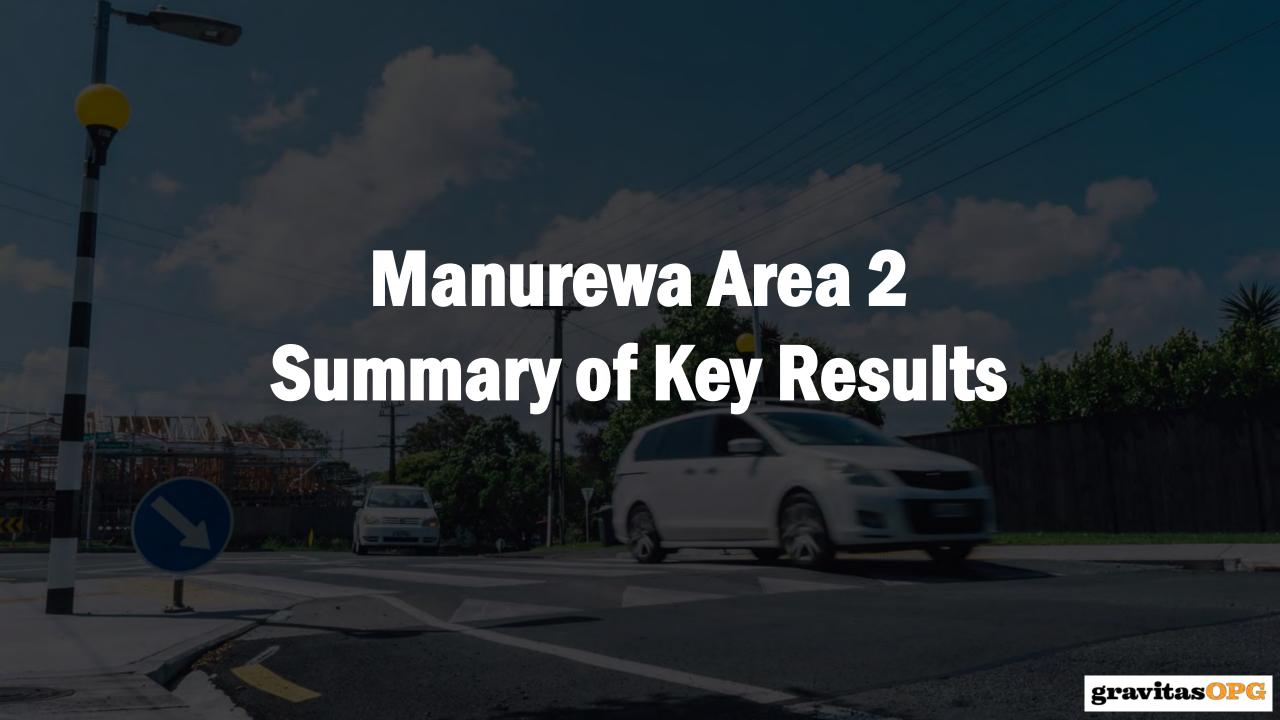
Response

n=130 surveys were completed between mid-October and mid-November 2022. Overall, a 5% raw response rate was achieved*

*This is based on the total number of invites sent out, excluding any "returned to sender" or questionnaires received after the report was written.







Road Safety Perceptions - Summary

- Overall, the majority of respondents (76%) feel that the speed calming measures have made the area safer.
- Respondents also gave significantly higher ratings following the introduction of the speed calming measures across a range of specific aspects of safety:

Refore

| | | DCIOIC | AILCI |
|----------|--------------------------------------|-------------------------|-------------------------|
| _ ^ | | (Positive ratings; 3-5) | (Positive ratings, 3-5) |
| ** | Safety around schools | 61% | 86% |
| <u> </u> | Pedestrian friendliness | 64% | 85% |
| ← | Safety around the area (ex. schools) | 53% | 81% |
| 50 | People driving under the speed limit | 40% | 72 % |
| 50 | Cyclist friendliness | 45% | 68% |

- Following the speed calming measures, 38% of respondents are cycling more often around their local area and 29% are scootering more often. A quarter are walking more since the road safety measures were installed.
- Overall, 28% of respondents state they are now participating in at least one active mode activity more often now that they measures have been installed.





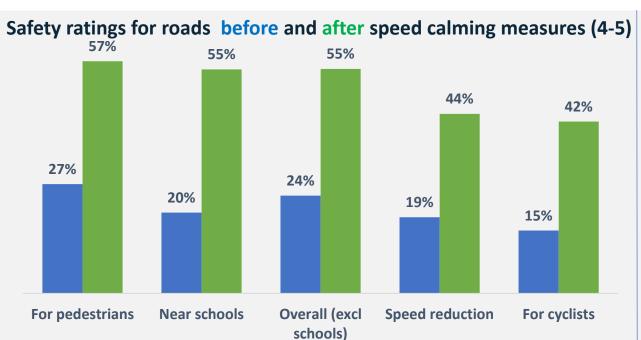


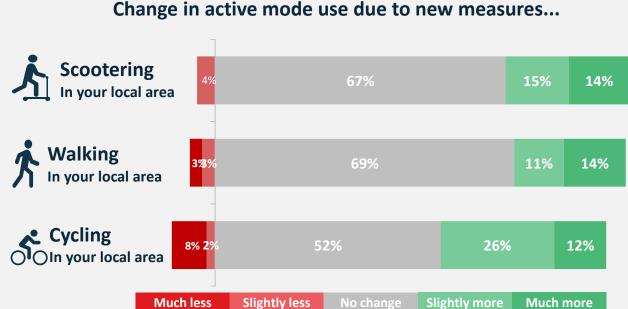
Road Safety Perceptions - Summary 97% +75%

Are aware of the speed calming measures introduced

Felt the measures resulted in a net increase in road safety

Now use <u>at least</u> <u>one</u> active mode more.











Road Safety Perceptions - Summary

- Overall, the speeding calming measures have had the biggest impact on how often people are cycling in their local area, with 38% of respondents saying they are cycling slightly (26%) or much (12%) more than they did before. Adjusting for the small group who say they are now cycling less (10%), the result is a net gain of 28%.
- Overall, 28% of respondents state they are now participating in at least one active mode activity more often now that the measures have been installed.
- Whilst private vehicles are still by far the most common travel mode used to access school, work and local shopping, the installation of the road safety measures have had a most positive impact on local shopping trips in particular, the share using active modes to access the shops post-installation having increased from 13% to 16% for trips to the shops and from 11% to 16% for trips back.





Behaviour changes due to speed calming measures

Overall Awareness

Overall 97% were aware that speed calming measures were introduced in their area.

Impact on Safety Overall

Three quarters of respondents (76%) felt that the speed humps and tables have made the area safer overall, including 40% saying it is <u>much safer</u> than before.

Impact on Individual Aspects

Respondents gave significantly higher safety ratings across all five individual aspects of road safety following the introduction of the speed calming measures



Safety around schools



Safety around the area (excluding schools)



Pedestrian friendliness



Cyclist friendliness

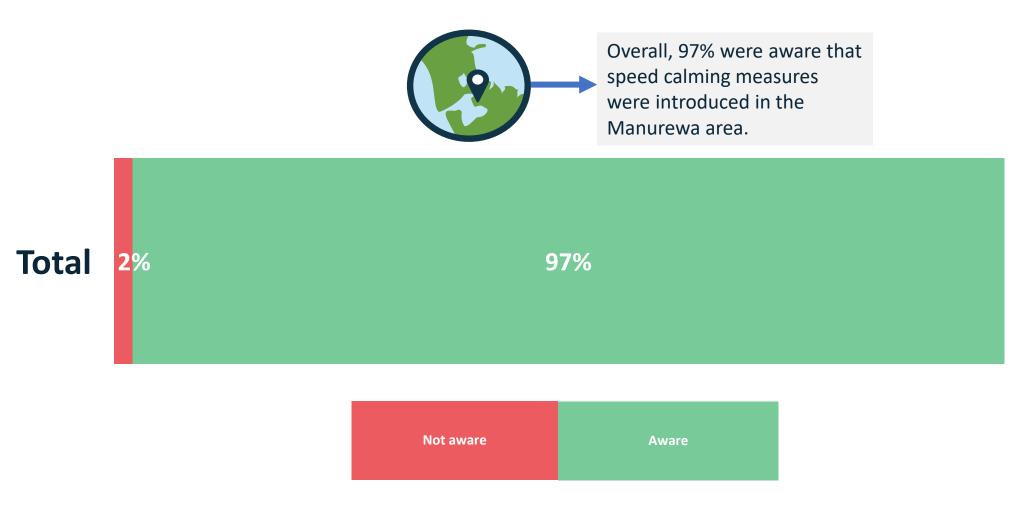


People driving under the speed limit





Awareness of Speed Calming Measures



Were not living in the area before this time & don't know

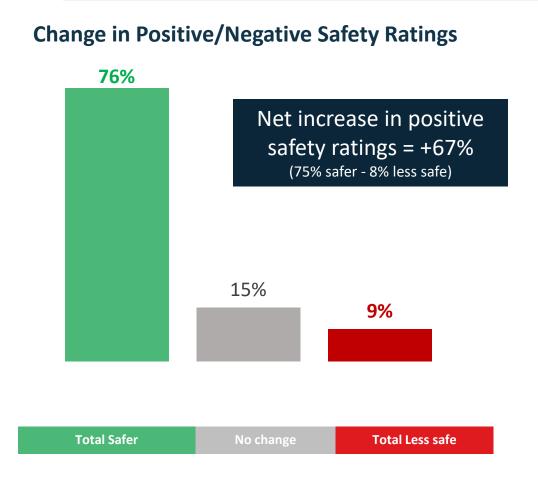
1%





Safety as a Result of Speed Calming Measures

Overall 76% of respondents felt that the speed humps and tables have made the area safer, including 40% saying it is much safer than before. Only 9% feel the changes have made the area less safe, giving an overall net increase in positive perceptions of +67%.









Changes Due to Speed Calming Measures

Respondents were asked to rate a number of aspects of road and traffic safety in their area both before the speed humps and speed tables were installed in mid 2020 and since they have been installed.



Safety around schools



Safety around the area (excluding schools)



Pedestrian friendliness



Cyclist friendliness



People driving under the speed limit

Respondents gave <u>significantly higher safety ratings</u> across **all five individual aspects** of road safety following the introduction of the speed calming measures in both areas.

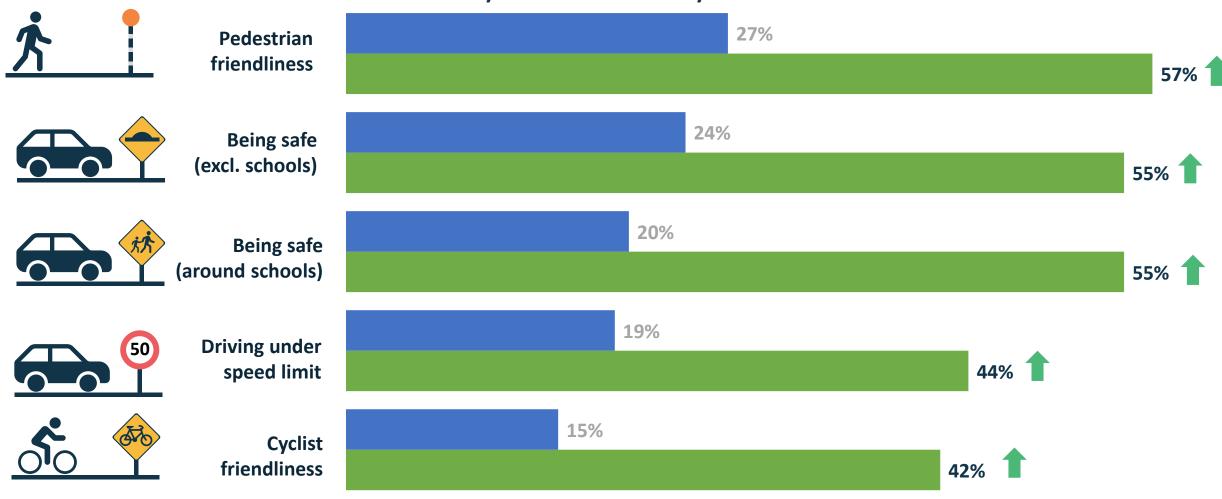




Changes Due to Speed Calming Measures

Showing <u>ratings of 4 and 5</u> (where 5 is excellent) before and after the introduction of speed calming measures.

How would you rate the roads in your area for...

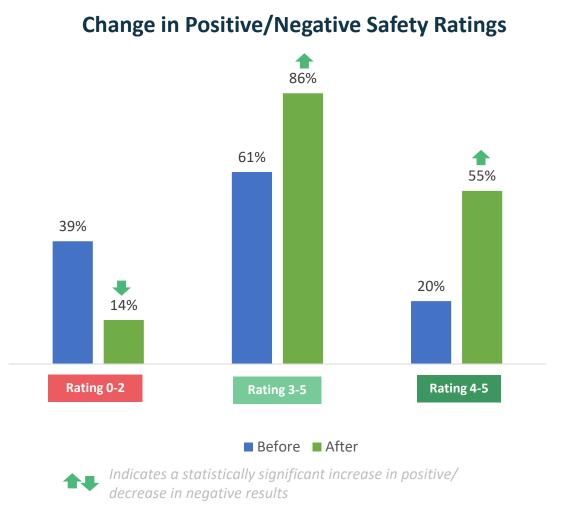




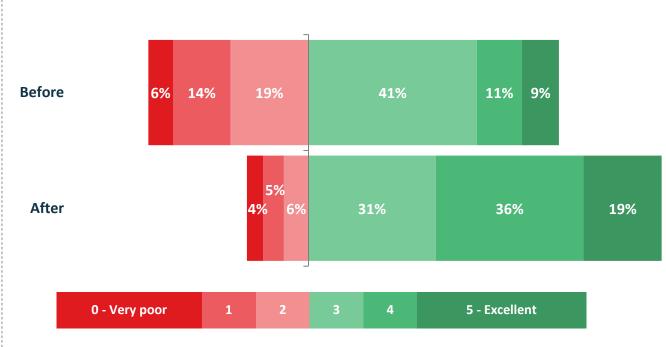




Road Safety Around Schools



Change in Safety Ratings – Full Scale



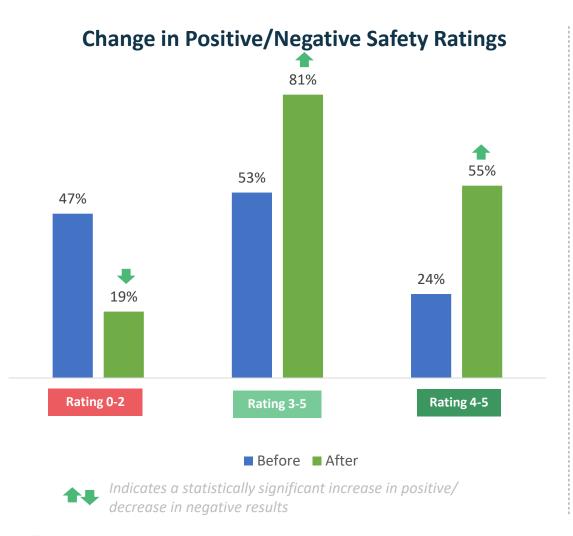






Road Safety in the Area (excluding schools)

0 - Very poor



Change in Safety Ratings – Full Scale Before 6% 13% 28% 29% 13% 11% After 3% 10% 26% 36% 19%

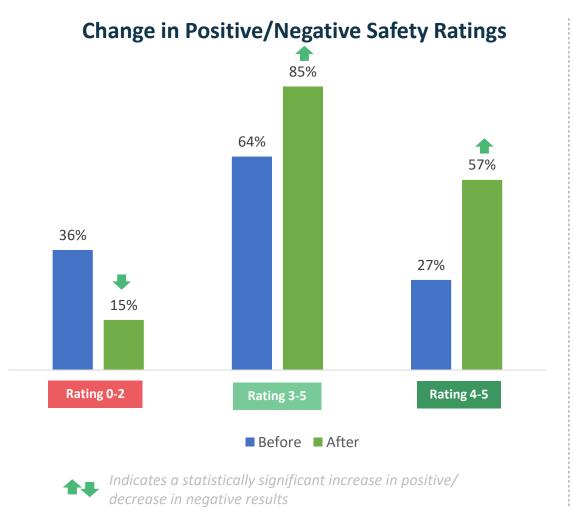


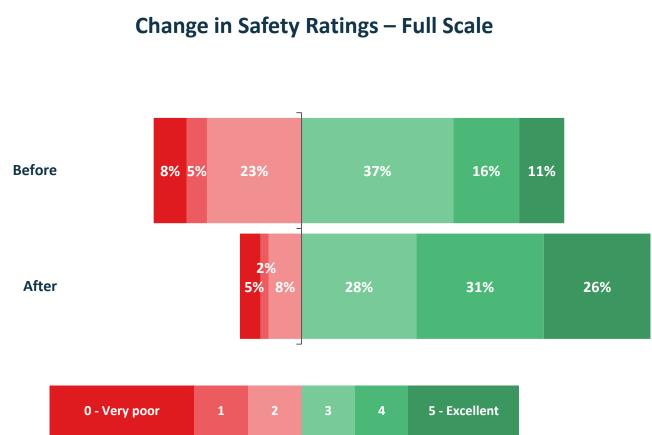


5 - Excellent



Safety for Pedestrians











Safety for Cyclists

Change in Positive/Negative Safety Ratings 68% 55% 45% 42% 32% 15% Rating 0-2 Rating 3-5 Rating 4-5 ■ Before ■ After Indicates a statistically significant increase in positive/

decrease in negative results

Change in Safety Ratings – Full Scale







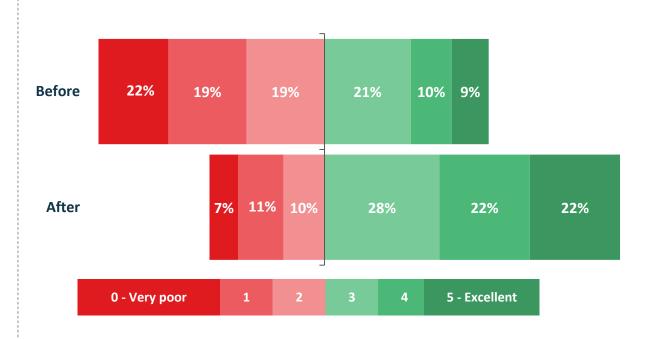


Driving Below the Speed Limit

Change in Positive/Negative Safety Ratings 72% 60% 44% 40% 28% 19% Rating 0-2 Rating 3-5 Rating 4-5 ■ Before ■ After Indicates a statistically significant increase in positive/

decrease in negative results

Change in Safety Ratings – Full Scale





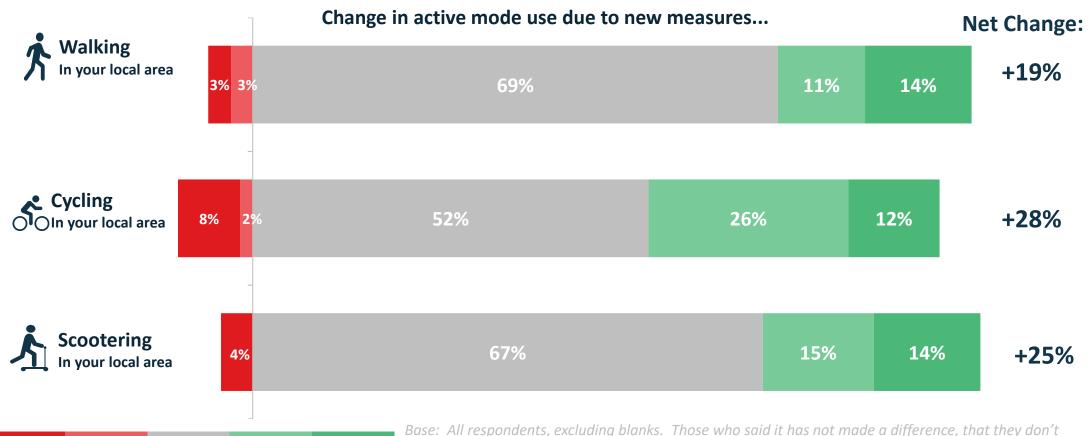




Change in Active Mode use due to Speed Calming Measures

There has been a net increase in use of all three active modes since the installation of the speed calming measures, with this increase most notable among those cycling and scootering in their local area. Thirty-seven percent report cycling more, with a net increase of +28%. Similarly, 29% are scootering more – with a net increase of +25%.

Walking in the local area has also seen a net increase (+19%).

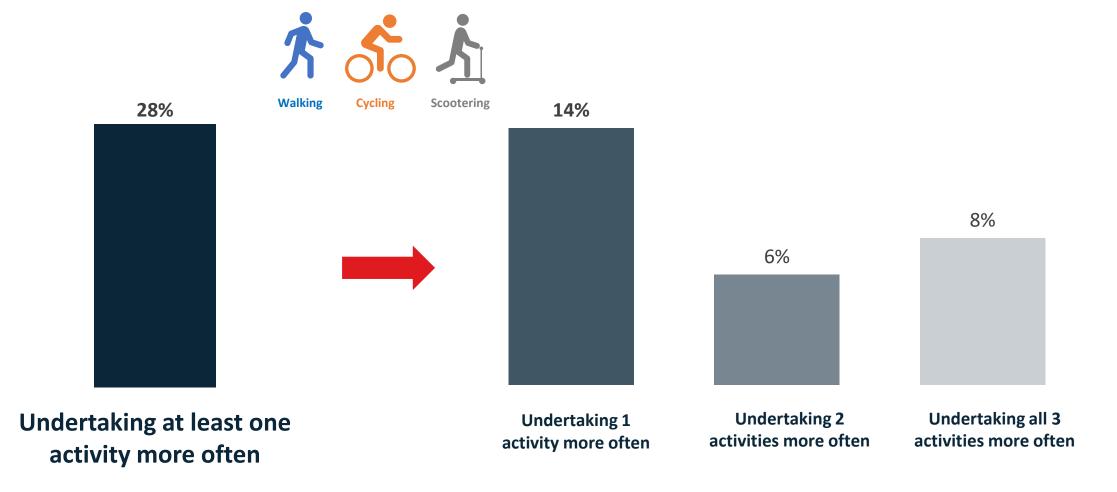




Slightly more Much more

Change in Active Mode use due to Speed Calming Measures

Overall, 28% of respondents said they are now taking part in at least one active mode more often, including 14% undertaking one activity more often, 6% undertaking two activities more often and 8% partaking in all three active modes more often.



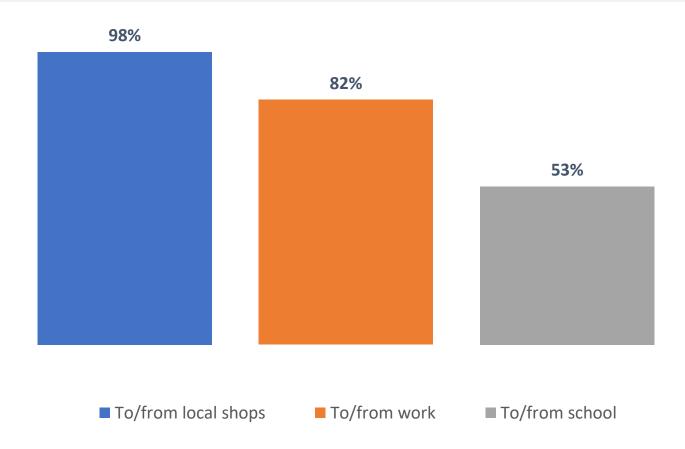




Types of Trips Made

When asked what type of trips the household makes generally, 98% of respondents say they travel to/from local shops. Around four in five (82%) travel to/from places of work, while 53% make trips to/from school(s).

The shares making each type of trip are similar both before and after the changes were made.







Mode Used by Types of Trips Made



The following slides show the share of respondents making each type of trip by each mode of transport. Slides show the main mode used by participants both before and after the changes were made. Note: Slides for all modes used by participants can be found in Appendix 3.

Main mode used has been grouped to show the share mainly using public transport, private vehicle and active modes both before and after road safety measure installation. Note: Slides for the main mode split by individual mode types can be found in Appendix 3







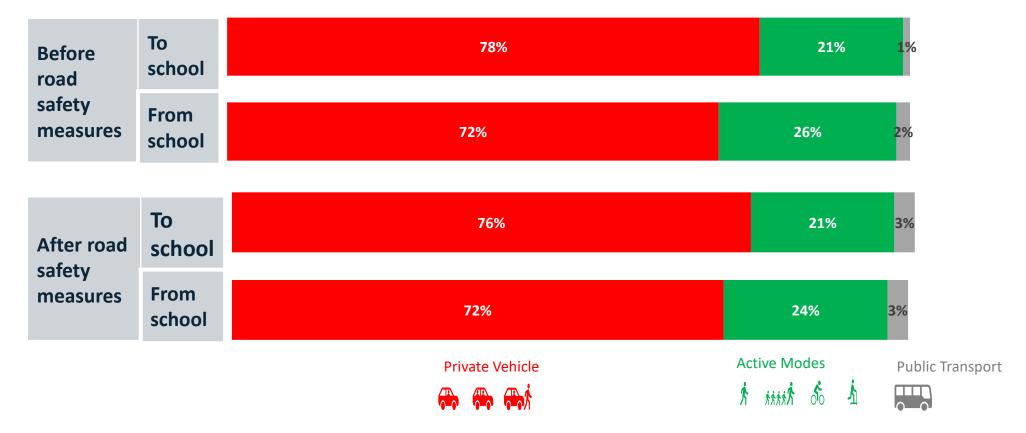
School Trips: Main Travel Mode Used

By Mode Groupings

Prior to the installation of the road safety measures, whilst private vehicles were by far the most common mode used to travel to/from school, mode use was more mixed for school trips than for trips to work and the local shops, with around a quarter using an active mode. Public transport use for school trips was low.

The road safety measures appear to have had little impact on increasing active mode use for school trips, the share using active modes to get to school remaining unchanged post-installation, and the share of trips using active modes to get from school actually declining slightly (from 26% to 24%).

53% of respondents make this type of trip









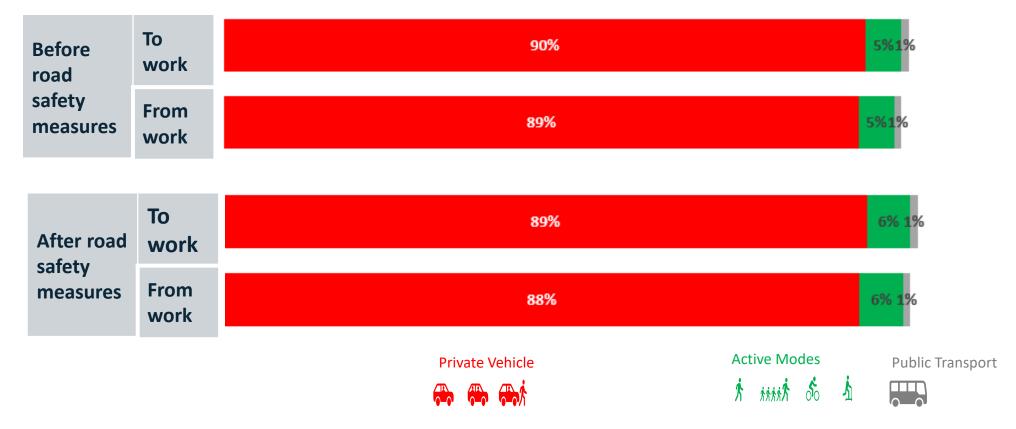
Work Trips: Main Travel Mode Used

By Mode Groupings

Prior to the installation of the road safety measures, almost all trips to (90%) and from (89%) work were made using a private vehicle. Only 5% of work trips were made using active modes.

The road safety installations have had minimal impact on main travel mode used, the share using active modes increasing by 1 percentage point, while the share using private vehicles has declined 1 percentage point.

82% of respondents make this type of trip







gravitasOPG



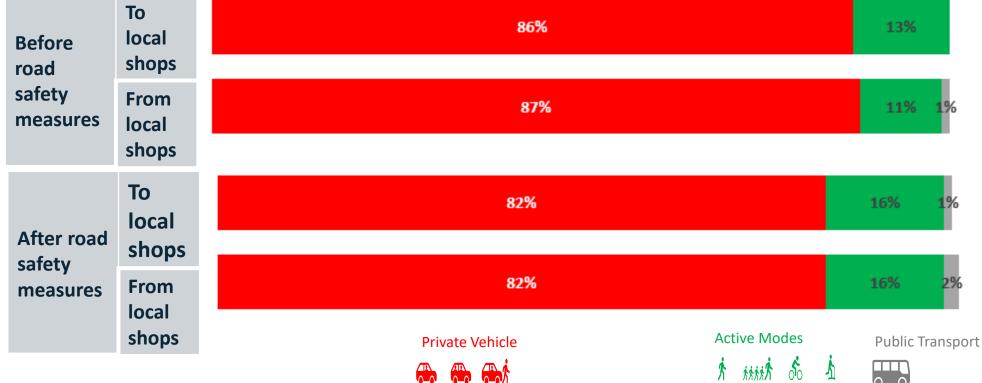
Local Shop Trips: Main Travel Mode Used

By Mode Groupings

Prior to the installation of the road safety measures, almost all trips to (86%) and from (87%) local shops were made using a private vehicle. Around one in ten trips were made using active modes.

Of the three trip types, the road safety measures have had the most positive impact on local shopping trips, the share using active modes to access the shops post-installation having increased from 13% to 16% for trips to the shops and from 11% to 16% for trips back. Local shopping trips by private vehicle have declined.

98%
of respondents
make this type of
trip





Base: All respondents who make each type of trip, excluding blanks and those who did not select a main mode. Note: Respondent's were asked for their main mode.



Appendix 1 - Questionnaire

Road Safety Perception Survey

| Auckland Transport wants to make streets safer places for walking and cycling, for |
|--|
| children, the elderly and the differently abled. As part of this commitment, Auckland |
| Transport has been installing speed calming measures to stop vehicles speeding through |
| streets in selected areas. |

We want to hear what you think about the speed calming measures – the speed humps, speed tables, <u>roundabouts</u> and speed cushions - that have been installed in your local area.

By completing the survey, you will go into a draw to win 1 of 30 \$100 supermarket vouchers.

Please answer each question by ticking (✓) in the appropriate box or writing your answer in the space provided.

Q1 Firstly, are you aware of the speed calming measures (speed humps, speed tables, roundabouts and speed cushions) that have been installed in your local area? (These were installed in 2022)

Please select (1) one option

| Yes - aware | No – not aware | Don't know | Was not living in this area before mid-2022 | |
|-------------|----------------|------------|--|--|
| | | | | |

Q2 Overall, do you think that the speed calming measures that have been installed have made your local area...

Please select (✓) one option

| Much safer than before | Slightly safer than before | Slightly <u>less safer</u> than before | Much <u>less safer</u> than before | Hasn't made a difference | Don't know | Not sure what it was like before |
|---------------------------|-------------------------------|---|---------------------------------------|-----------------------------|---------------|--|
| | | | | | | |

Q3. Using a scale where 0 is very poor and 5 is excellent, how would you have rated the following BEFORE the speed humps and speed tables were installed in mid-2020?

Please select (√) one option in each row

| | Very po | or | | | E | cellent | Don't | Not |
|--|---------|----|---|---|---|---------|-------|------------|
| | 0 | 1 | 2 | 3 | 4 | 5 | know | applicable |
| Roads and traffic being safe around schools in this area? | | | | | | | | |
| Roads and traffic being safe in this area (excluding near schools)? | | | | | | | | |
| Your local area for being <u>pedestrian</u> <u>friendly</u> ? This includes it being safe and easy to cross the street. | | | | | | | | |
| Your local area for <u>being bicycle</u> <u>friendly</u> ? This means being safe and easy to cycle around the area | | | | | | | | |
| Drivers travelling below the speed limit? | | | | | | | | |

24. And how do you rate the same things **NOW** that the speed humps & speed tables have been installed?

Please select (√) one option in each row

| | Very po | or | | | E) | cellent | Don't | Not |
|--|---------|----|---|---|----|---------|-------|------------|
| | 0 | 1 | 2 | 3 | 4 | 5 | know | applicable |
| Roads and traffic being safe around schools in this area? | | | | | | | | |
| Roads and traffic being safe in this area (excluding near schools)? | | | | | | | | |
| Your local area for being <u>pedestrian</u> <u>friendly?</u> This includes it being safe and easy to cross the street. | | | | | | | | |
| Your local area for <u>being bicycle</u> <u>friendly</u> ? This means being safe and easy to cycle around the area | | | | | | | | |
| Drivers travelling below the speed limit? | | | | | | | | |

Appendix 1 – Questionnaire (Continued)

Q5. How **did** you and/or members of your household travel to and from each of the following places **BEFORE** the speed humps and speed tables were installed?

If you travel in different ways at different times of the year or on different days of the week, please select **all options** that apply, and then circle the <u>one</u> used <u>most</u> often. If you use more than one mode, please select the one used for the longest distance.

Please select (\checkmark) AS MANY as apply in each row. If multiple selected, please also circle the one used most (\bigcirc).

| | I/we didn't make this type of trip | Walk | Walking School Bus | Car/walk + | Bicycle | Scooter | Bus | Car – as a driver | Car – as a passenger | Other Please write in |
|------------------|---------------------------------------|------|-----------------------|---------------|---------|---------|-----|----------------------|-------------------------|--------------------------|
| To school (s) | | | | | | | | | | |
| From School (s) | | | | | | | | | | |
| To work | | | | | | | | | | |
| From work | | | | | | | | | | |
| To local shops | | | | | | | | | | |
| From local shops | | | | | | | | | | |

^{*}Car/walk means you travel by car then walk at least 400m to your location - about 5 minutes or more

Appendix 1 – Questionnaire (Continued)

| Q6. How do you installed? | and/or members o | f your ho | usehold trave | l to and fro | m each of | the followi | ng places | NOW the sp | eed humps | and speed table | s have been |
|----------------------------------|--|------------|--------------------------------------|---------------|-----------------------|--------------------|----------------------|----------------------|-------------------------|-------------------------|------------------------------------|
| | If you travel in different ways at different times of the year or on different days of the week, please select all options that apply, and then circle the <u>one</u> used <u>most</u> often. If you use more than one mode, please select the one used for the longest distance. | | | | | | | | | | |
| Please select | t (✔) AS MANY as app | ly in each | row. If multiple | selected, pl | lease also ci | rcle the one | used most | (⊘). | | | |
| | I/we don't make this type of trip | Walk | Walking School Bus | Car/walk * | Bicycle | Scooter | Bus | Car – as a driver | Car – as a passenger | | Other <i>e write in</i> |
| To school (s) | | | | | | | | | | | |
| From School (s) | | | | | | | | | | | |
| To work | | | | | | | | | | | |
| From work | | | | | | | | | | | |
| To local shops | | | | | | | | | | | |
| From local shops | | | | | | | | | | | |
| Q7. We'd like to | u travel by car then we have be know whether you speed tables being to t one option in each | or meml | pers of your h | ousehold a | re walking, | , cycling, o | r scooterin | _ | - | cal area because | of the speed |
| | Much more often (than before) | - | tly more often nan before) | | less often before) | Much le (than b | ess often pefore) | Hasn't i differ | | Don't know | Did not do this before or after |
| Walking in your local area | | | | | | | | | | | |
| Cycling in your local area | | | | | | | | | | | |
| Scootering in your local area | | | | | | | | | | | |

Appendix 1 – Questionnaire (Continued)

| Househo | ld Demographics | | | | | | | | |
|------------------------|---|-------------------------|---|--------------------------|---|-------------------------------|--|---|-----------|
| Finally, ju survey. | ist a few question | s about you. These ar | e just to make sure we have a go | ood mix of people in the | | Q12. How many year | ars have you been living in you one option | ır current house? | |
| | | | | | | Less than 1 year | | 10 to 15 years | |
| | /hich gender do yo ease select (√) or | | | | | 1 to 2 years | | More than 15 years | |
| | Male | Female | Gender Diverse/non binary | Prefer not to say | | 3 to 5 years | | Don't know | |
| | | | | | | 6 to 10 years | | I prefer not to say | |
| | /hich age group do lease select (√) on | | 50-59 years | | | | e to be entered into the surve v is to win one of twenty \$100 | | |
| 25-29 yea | ırs | | 60-69 years | | | Trease sereet (| Yes | No | |
| 30-39 yea | ırs | | 70-74 years | | | | | | |
| 40-49 yea | ırs | | 75+ years | | | | | | |
| I prefer n | ot to say | | ' | | _ | | | ertakes other research projects. Would you are interested in taking part in such researc | |
| | | o or groups do you ider | ntify with? | | | Transport? Please select (| √) one option | | |
| | ease select (√) AS | S MAINY as apply | _ | | | | Yes | No | |
| NZ Europ | ean/ Pākehā | | Tongan | | | | | | |
| Māori | | | Niuean | | | If you answered yes t | o either of the above (Q12 or | Q13), please enter your contact details. | |
| Samoan | | | Chinese | | | | - | etails separate from you <u>r</u> survey answers. | |
| Cook Islar | nd Māori | | Indian | | | Name | | | |
| Other | | Plea | se write in: | | 7 | | | | |
| | | | | | | Address | | | |
| I prefer n | ot to say | | | | | Phone number | | | |
| | | | | | | Email | | | |
| | | | children live in your household? te "0" if this does not apply to yo | ur household) | | Thank you for ta | aking part in the survey. | Your thoughts and feedback are app | reciated. |
| Adults (18 | 8 years or older) | Children 0-4 years | old Children 5-12 years old | Children 12-18 | | | | | |
| | | | | | | Please fold t | | n on the last page, tape it closed and p is needed). | l post |
| | | | | | | | (3.011) | .p. 12 11 = 2 = 2 1 | |

Appendix 2 – Respondent Profile



| Age | % |
|-------------------|-----|
| 15-24 | 3% |
| 25-29 | 3% |
| 30-39 | 18% |
| 40-49 | 23% |
| 50-59 | 18% |
| 60-69 | 13% |
| 70-74 | 7% |
| 75+ | 13% |
| Prefer not to say | 2% |



| Ethnicity | % |
|-------------------|-----|
| European | 49% |
| Māori | 21% |
| Pacific | 18% |
| Asian | 12% |
| Other | 11% |
| Prefer not to say | 8% |
| | |



| Household makeup | % |
|----------------------|-----|
| Adults >18 years | 94% |
| Children <5 years | 35% |
| Children 5-12 years | 45% |
| Children 12-18 years | 38% |



| Years lived in area | % |
|---------------------|-----|
| <1 year | 4% |
| 1-2 years | 19% |
| 3-5 years | 14% |
| 6-10 years | 13% |
| 10-15 years | 5% |
| >15 years | 45% |



| Gender | % |
|-------------------|-----|
| Male | 41% |
| Female | 56% |
| Prefer not to say | 3% |





Scooter



Appendix 3 – <u>All</u> Travel Modes for Trips to School

Car

Bus or

Car

| | | Train | (driver) | (passenger) | (then walk) | | School | | |
|--------------------------------------|------|-------|----------|-------------|-------------|-----|-------------|----|----|
| | | | | | | 广 | bus 济济济济 | 00 | 立 |
| Before road safety measures | То | 6% | 35% | 10% | 14% | 15% | 1% | 5% | 2% |
| | From | 5% | 31% | 8% | 12% | 15% | 1% | 5% | 2% |
| After road safety measures | То | 5% | 36% | 15% | 13% | 14% | - | 2% | 2% |
| | From | 5% | 35% | 14% | 9% | 14% | - | 2% | 2% |

Car

Walk

Walking

Cycle

53% of respondents make this type of trip







Appendix 3 – <u>All</u> Travel Modes for Trips to Work

Car

Bus or

Car

82% of respondents make this type of trip

| | | Train | (driver) | (passenger) | (then walk) | | School bus | | |
|--------------------------------------|------|-------|----------|-------------|-------------|----|---------------|----|----|
| | | | | | | 广 | <u> </u> | 00 | ሷ |
| Before road safety measures | То | 4% | 63% | 10% | 11% | 5% | 1% | 2% | - |
| | From | 3% | 62% | 8% | 11% | 4% | - | 2% | - |
| After road safety measures | То | 2% | 65% | 11% | 13% | 5% | - | 3% | 1% |
| | From | 2% | 64% | 10% | 12% | 5% | - | 2% | 1% |

Car

Walk

Walking

Cycle

Scooter







Appendix 3 – <u>All</u> Travel Modes for Trips to Local Shops

Car

Bus or

Car

| | | Train | (driver) | (passenger) | (then walk) | | School bus | 7,5 | |
|----------------------------|------|-------|----------|-------------|-------------|-----|---------------|-----|----|
| | | | | | | 广 | <u>ጵጵጵጵ</u> | 00 | 点 |
| Before road | То | 4% | 76% | 21% | 18% | 26% | - | 5% | 4% |
| safety measures | From | 4% | 75% | 21% | 18% | 23% | - | 5% | 5% |
| After road safety measures | То | 4% | 73% | 18% | 19% | 27% | - | 3% | 3% |
| | From | 5% | 72% | 18% | 19% | 25% | - | 3% | 3% |

Car

Walk

Walking

Cycle

Scooter

98% of respondents make this type of trip







Appendix 3 – Main Travel Mode for Trips to School

Car

Bus or

Car

(driver) (then walk) **Train** (passenger) **School** bus **Before** To 9% 2% 1% 33% 1% 10% 1% road safety **From** 1% 30% 1% 7% 10% 3% 1% measures To 2% 32% 1% 7% 8% 1% 2% After road safety measures **From** 2% 32% 1% 4% 10% 1% 2%

Car

Walk

Walking

Cycle

Scooter

53% of respondents make this type of trip







Appendix 3 – Main Travel Modes for Trips to Work

Car

Bus or

Car

(driver) (then walk) Train (passenger) **School** bus **Before** To 1% 63% 3% 7% 3% 2% road safety 3% 2% From 1% 63% 3% 6% measures 2% To 1% 63% 2% 7% 3% After road safety measures **From** 1% 63% 2% 6% 3% 2%

Car

Walk

Walking

Cycle

Scooter

82% of respondents make this type of trip







Appendix 3 – Main Travel Modes for Trips to Local Shops

Car

Bus or

Car

| | | Train | (driver) | (passenger) | (then walk) | vvaik | School bus | Сусіе | Scooter |
|--------------------------------------|------|-------|----------|-------------|-------------|-------|---------------|-------|---------|
| | | | | | | 序 | <i>☆☆☆☆</i> | 50 | Ţ |
| Before road safety measures | То | - | 70% | 3% | 11% | 12% | - | 1% | - |
| | From | 1% | 72% | 5% | 10% | 10% | - | 1% | - |
| After road safety measures | То | 1% | 68% | 3% | 10% | 14% | 1% | 1% | - |
| | From | 2% | 69% | 3% | 8% | 14% | 1% | 1% | - |

Car

Walk

Walking

Cycle

Scooter

98% of respondents make this type of trip



