## **Cost Benefit Disclosure Statements**

Cost Benefit Disclosure Statements describe the anticipated impacts for changes to speed limits. For each proposed speed limit change the Rule requires estimates to be made for impacts to safety, travel time and implementation cost. The methods used for the estimations and the underlying assumptions are show in the table below.

Required content	Method and assumptions
<ul> <li>Estimated safety impacts:</li> <li>Number and severity of crashes on the affected road over the previous five years.</li> <li>Estimated impact of the proposed speed limit change on the number and severity of crashes on the road in the next five years, expressed as an annual rate averaged over those five years.</li> </ul>	<ul> <li>The crash record is used for the roads where crashes have occurred. For the majority of roads in the district there have been zero crashes in the 5 year period. This is typical for roads with low traffic volume. Therefore the safety impacts cannot be estimated by considering potential changes to crashes. The safety impacts are estimated more generally by acknowledging that crash frequency is expected to decrease with decreases in vehicle speed. Research suggests that a 5 km/h decrease in speed results in 15% decrease in all injury crashes, 26% decrease in serious crashes, and 28% decrease in fatal crashes.<sup>1</sup></li> <li>NZTA's "Cost Impact Analysis Tool" has been used to identify the expected reduction in mean operating speed which is in turn used to estimate a potential safety impact, expressed as a percentage.</li> <li>Assumptions:</li> <li>3% traffic growth per year.</li> <li>Rural roads are those with existing speed limits of 80 km/h or higher.</li> <li>Average Daily Traffic is taken as an average for long road sections and sourced from MobileRoads.org and RAMM database.</li> <li>Mean travel speed is sourced from NZTA's MegaMaps application.</li> <li>Crash history is over the 5-year period, 2019-2023 as reported in NZTA's MegaMaps application. Crashes occurring at intersections with main roads are not included in the side road crash history (they are included in the main road crash history). Crashes occurring at intersections with main road crash history.</li> </ul>

<sup>&</sup>lt;sup>1</sup> https://media.nrspp.org.au/wp-content/uploads/2018/04/06015935/speed-crash-risk.pdf

Required content	Method and assumptions
<ul> <li>Estimated travel time impacts: <ul> <li>Current mean operating speed on the road.</li> <li>Estimated mean operating speed on the road once the proposed speed limit change is in effect.</li> <li>Estimated impact of the proposed speed limit change on: <ul> <li>individual vehicle journey time on the road</li> <li>collective vehicle journey times on the road, accounting for average annual daily traffic volumes.</li> </ul> </li> </ul></li></ul>	<ul> <li>NZTA's Megamaps application and "Cost Impact Analysis Tool" have been used to identify these features.</li> <li>Where the existing operating speed is lower than the proposed speed limit, it is expected that the operating speed will not change if the limit decreases. For these cases it is not expected that there will not be any changes to travel times. For example, if the mean operating speed is 60 km/h or lower on a road with an existing limit of 100 km/h, and the proposed limit is 80 km/h, it is not expected that the mean operating speed will decrease. The variation in speed may reduce, i.e., lower speeds may increase toward the mean, and higher speeds reduce towards the mean which provides a safety benefit due to less driver frustration, however these safety benefits are not measured. Also there is a safety benefit associated with having a speed limit that better matches the operating speed.</li> </ul>
Implementation costs	<ul> <li>The costs included are the typical local costs to purchase and install signage and other infrastructure.</li> <li>Threshold treatments are included as stated in Table 3 "Safety Infrastructure Changes" of the Speed Management Plan.</li> <li>NZTA guidance has been used to identify the number of signs required. For example, for speed limits of 60 km/h; the maximum sign spacing is 2km. For speed limits of 80 km/h; the maximum sign spacing is 2.7 km. And for average daily traffic volumes greater than 500, signs are installed on both sides. Also practical considerations have been made such as where two or more roads connect and have the same proposed limit and on parts of the network that have only one road providing access.</li> </ul>

Note the following regarding the estimate of impacts:

- The impacts stated above do not include impacts such as changes to vehicle operating costs, greenhouse gas emissions, and/or harmful emissions.
- The impacts are not monetised and therefore cannot be used in a cost-benefit analysis.

Statements for each road are included in the following table.

Road	Safety	Travel Time	Implementation	Summary
Lincoln Road between 185m southwest of Victoria Street and Dalefield Road	The mean operating speed is expected to decrease by 5 km/h, resulting in a potential to reduce all injury crashes by around 15%.	The mean operating speed is 57 km/h. It is expected that the mean operating speed will reduce slightly to around 52 km/h. This will result in a 13 second increase in travel time for each vehicle and an estimated increase of 1,568 hours for all traffic over a year.	\$1200	The costs of implementation and the slightly slower travel time are outweighed by the safety benefits.
Dalefield Road between SH2 and 75m northwest of Lincoln Road	The historic average number of crashes per year is 0.2 minor injury crashes. This is expected to remain unchanged. The mean operating speed is expected to decrease by 5 km/h, resulting in a potential to reduce all injury crashes by around 15%.	The mean operating speed is 57 km/h. It is expected that the mean operating speed will reduce slightly to around 52 km/h. This will result in a 6 second increase in travel time for each vehicle and an estimated increase of 707 hours for all traffic over a year.	\$800	The costs of implementation and the slightly slower travel time are outweighed by the safety benefits.
Dalefield Road between 75m northwest of Lincoln Road and road end	The historic average number of crashes per year is 0.2 fatal injury crashes. This is expected to reduce by 50%. The mean operating speed is expected to decrease by 8 km/h, resulting in a potential to reduce all injury crashes by around 24%.	The mean operating speed is 60 km/h. It is expected that the mean operating speed will reduce slightly to around 52 km/h. This will result in a 1 minute 8 second increase in travel time for each vehicle and an estimated increase of 2,833 hours for all traffic over a year.	\$1,600	The costs of implementation and the slower travel time are outweighed by the safety benefits.
Watersons Line between Dalefield Road and 250m southwest of Dalefield Road	The mean operating speed is 59 km/h. It is not expected that this will change with a 60 km/h limit over the short section. There are safety benefits for having a speed limit closer to the operating speed.	There will be a slight increase in travel time of 6 seconds for each vehicle and an estimated increase of 114 hours for all traffic over a year.	\$400	The costs of implementation and the slightly slower travel time are outweighed by the safety benefits of having a speed limit

Road	Safety	Travel Time	Implementation	Summary
				closer to the operating speed.
Thomas Road between Dalefield Road and 250m northeast of Dalefield Road	The mean operating speed is 53 km/h. It is not expected that this will change with a 60 km/h limit over the short section. There are safety benefits for having a speed limit closer to the operating speed.	There will be a slight increase in travel time of 7 seconds for each vehicle and an estimated increase of 255 hours for all traffic over a year.	\$400	The costs of implementation and the slightly slower travel time are outweighed by the safety benefits of having a speed limit closer to the operating speed.
Belvedere Road between Lincoln Road and the bridge	The mean operating speed is expected to decrease by 5 km/h, resulting in a potential to reduce all injury crashes by around 15%.	The mean operating speed is 65 km/h. It is expected that the mean operating speed will reduce slightly to around 60 km/h. This will result in a 5 second increase in travel time for each vehicle and an estimated increase of 589 hours for all traffic over a year.	\$800	The costs of implementation and the slower travel time are outweighed by the safety benefits.
Belvedere Road between the bridge and Mannings Road	The mean operating speed is expected to decrease by 8 km/h, resulting in a potential to reduce all injury crashes by around 24%.	The mean operating speed is 72 km/h. It is expected that the mean operating speed will reduce to around 64 km/h. This will result in a 4 second increase in travel time for each vehicle and an estimated increase of 229 hours for all traffic over a year.	\$400	The costs of implementation and the slower travel time are outweighed by the safety benefits.
Hodders Road	The mean operating speed is 34 km/h. It is not expected that this will change with a 80 km/h limit. The change is proposed to be consistent with Dalefield Road as	It is not expected that there will any changes in travel time based on the existing operating speed.	\$400	The costs of implementation are outweighed by the safety benefits of

Road	Safety	Travel Time	Implementation	Summary
	Hodders Road is a side road off Dalefield Road with a closed end.			having consistent speed limits.
Moreton Road between 150m northwest of Rutland Road (at the existing 50/100 km/h speed limit change) and 50 m southeast of Rutland Road	The historic average number of crashes per year is 0.2 serious injury crashes and 0.2 minor injury crashes. These are expected to reduce by 50%. The mean operating speed is expected to decrease by 16 km/h, resulting in a potential to reduce all injury crashes by around 48%.	The mean operating speed is 77 km/h. It is expected that the mean operating speed will reduce to around 61 km/h. This will result in a 2 second increase in travel time for each vehicle and an estimated increase of 233 hours for all traffic over a year.	\$800	The costs of implementation and the slower travel time are outweighed by the safety benefits.
Moreton Road between 50m southeast of Rutland Road and Carters Line	The mean operating speed is expected to decrease by 8 km/h, resulting in a potential to reduce all injury crashes by around 24%.	The mean operating speed is 85 km/h. It is expected that the mean operating speed will reduce to around 77 km/h. This will result in a 13 second increase in travel time for each vehicle and an estimated increase of 1,096 hours for all traffic over a year.	\$3,600	The costs of implementation and the slower travel time are outweighed by the safety benefits.
Rutland Road between Hilton Road and Park Road	The historic average number of crashes per year is 0.2 minor injury crashes. This is expected to reduce by 50%. The mean operating speed is 57 km/h. It is not expected that this will change much with a 60 km/h limit. The change is proposed to provide consistent speed limits on the peri-urban roads on the east side of Carterton.	It is not expected that there will any changes in travel time based on the existing operating speed.	\$1,200	The costs of implementation and the slightly slower travel time are outweighed by the safety benefits.

Road	Safety	Travel Time	Implementation	Summary
Park Road between 205m southeast of Dixon Street (at the existing 50/100 km/h speed limit change) and 50m southeast of Rutland Road	The mean operating speed is expected to decrease by 16 km/h, resulting in a potential to reduce all injury crashes by around 48%. The change is proposed to provide consistent speed limits on the peri-urban roads on the east side of Carterton.	The mean operating speed is 80 km/h. It is expected that the mean operating speed will reduce to around 64 km/h. This will result in a 5 second increase in travel time for each vehicle and an estimated increase of 728 hours for all traffic over a year.	\$800	The costs of implementation and the slightly slower travel time are outweighed by the safety benefits.
Park Road between 50m southeast of Rutland Road and Carters Line	The historic average number of crashes is 0.2 serious injury crashes per year. This is expected to reduce by 50%. The mean operating speed is expected to decrease by 8 km/h, resulting in a potential to reduce all injury crashes by around 24%.	The mean operating speed is 80 km/h. It is expected that the mean operating speed will reduce to around 72 km/h. This will result in a 17 second increase in travel time for each vehicle and an estimated increase of 2,362 hours for all traffic over a year.	\$3,600	The costs of implementation and the slightly slower travel time are outweighed by the safety benefits.
Richmond Road between 50m southeast of Deller Drive (at existing 50/70 km/h speed limit change) and Rutland Road	The mean operating speed is expected to decrease by 2.5 km/h, resulting in a potential to reduce all injury crashes by around 7.5%. The change is proposed to provide consistent speed limits on the peri-urban roads on the east side of Carterton.	The mean operating speed is 41 km/h. It is expected that the mean operating speed will reduce to around 39 km/h. This will result in a 3 second increase in travel time for each vehicle and an estimated increase of 66 hours for all traffic over a year.	\$400	The costs of implementation and the slightly slower travel time are outweighed by the safety benefits.
Hilton Road between 25m southeast of Madison Street (at the existing 50/100	The mean operating speed is 30 km/h. It is not expected that this will change with a 60 km/h limit. The change is proposed to provide consistent speed limits on the peri-urban roads on the east side of	It is not expected that there will any changes in travel time based on the existing operating speed.	\$400	The costs of implementation and the slightly slower travel time are outweighed by the

Road	Safety	Travel Time	Implementation	Summary
km/h speed limit change) and Rutland Road	Carterton.			safety benefits.
Johnsons Road	The mean operating speed is 39 km/h. It is not expected that this will change with a 80 km/h limit. The change is proposed to be consistent with Moreton Road as Johnsons Road is a side road off Moreton Road with a closed end.	It is not expected that there will any changes in travel time based on the existing operating speed.	\$400	The costs of implementation and the slightly slower travel time are outweighed by the safety benefits.
Waitangi Road	The mean operating speed is 57 km/h. It is not expected that this will change with a 80 km/h limit. The change is proposed to be consistent with Moreton Road as Johnsons Road is a side road off Moreton Road with a closed end.	It is not expected that there will any changes in travel time based on the existing operating speed.	\$400	The costs of implementation and the slightly slower travel time are outweighed by the safety benefits.
Baylys Road	The mean operating speed is 63 km/h. It is not expected that this will change with a 80 km/h limit. The change is proposed to be consistent with Moreton Road as Johnsons Road is a side road off Moreton Road with a closed end.	It is not expected that there will any changes in travel time based on the existing operating speed.	\$400	The costs of implementation and the slightly slower travel time are outweighed by the safety benefits.
Hughes Line between SH2 and end of road	The historic average number of crashes is 0.2 serious injury crashes and 0.4 minor injury crashes per year. This is expected to reduce by 0.1 serious injury crashes and by 0.1 minor injury crashes per year.	It is not expected that there will any changes in travel time based on the existing operating speed.	\$2,000	The costs of implementation are outweighed by the safety benefits.
	The mean operating speed is 63 km/h. It			

Road	Safety	Travel Time	Implementation	Summary
	is not expected that this will change with a 80 km/h limit.			
Cornwall Road between SH2 and Hughes line	The mean operating speed is 61 km/h. It is not expected that this will change with a 80 km/h limit.	It is not expected that there will any changes in travel time based on the existing operating speed.	\$400	The costs of implementation are outweighed by the safety benefits.
East Taratahi Road between SH2 and Hughes Line	The mean operating speed is expected to decrease by 8 km/h, resulting in a potential to reduce all injury crashes by around 24%.	The mean operating speed is 81 km/h. It is expected that the mean operating speed will reduce to around 73 km/h. This will result in a 5 second increase in travel time for each vehicle and an estimated increase of 744 hours for all traffic over a year.	\$800	The costs of implementation and the slightly slower travel time are outweighed by the safety benefits.
Chester Road between SH2 and 1.7 km north of SH2	The mean operating speed is expected to decrease by 16 km/h, resulting in a potential to reduce all injury crashes by around 48%.	The mean operating speed is 68 km/h. It is expected that the mean operating speed will reduce to around 52 km/h. This will result in a 28 second increase in travel time for each vehicle and an estimated increase of 3,775 hours for all traffic over a year.	\$2,800	The costs of implementation and the slightly slower travel time are outweighed by the safety benefits.
Norfolk Road between SH2 and 800m northwest of SH2	The historic average number of crashes is 0.2 serious injury crashes per year. This is expected to reduce by 50%. The mean operating speed is expected to decrease by 16 km/h, resulting in a potential to reduce all injury crashes by around 48%.	The mean operating speed is 75 km/h. It is expected that the mean operating speed will reduce to around 61 km/h. This will result in a 10 second increase in travel time for each vehicle and an estimated increase of 6,022 hours for all traffic over a year.	\$800	The costs of implementation and the slightly slower travel time are outweighed by the safety benefits.

Road	Safety	Travel Time	Implementation	Summary
Waingawa Road	The mean operating speed is 49 km/h. It is not expected that this will change with a 60 km/h limit.	It is not expected that there will any changes in travel time based on the existing operating speed.	\$2,800	The costs of implementation are outweighed by the safety benefits.
Norman Avenue	The mean operating speed is 28 km/h. It is not expected that this will change with a 60 km/h limit.	It is not expected that there will any changes in travel time based on the existing operating speed.	\$800	The costs of implementation are outweighed by the safety benefits.
Ahumahi Road	The mean operating speed is 35 km/h. It is not expected that this will change with a 60 km/h limit.	It is not expected that there will any changes in travel time based on the existing operating speed.	\$800	The costs of implementation are outweighed by the safety benefits.
Pakihi Road	The mean operating speed is 26 km/h. It is not expected that this will change with a 60 km/h limit.	It is not expected that there will any changes in travel time based on the existing operating speed.	\$800	The costs of implementation are outweighed by the safety benefits.
Gladstone Road between Te Whiti Road and 3.6km northwest of Te Whiti Road	The historic average number of crashes is 0.4 minor injury crashes per year. This is expected to reduce by 0.1 minor injury crashes per year. The mean operating speed is expected to decrease by 8 km/h, resulting in a potential to reduce all injury crashes by around 24%.	The mean operating speed is 82 km/h. It is expected that the mean operating speed will reduce to around 74 km/h. This will result in a 17 second increase in travel time for each vehicle and an estimated increase of 1,394 hours for all traffic over a year.	\$1,600	The costs of implementation and the slightly slower travel time are outweighed by the safety benefits.
Te Whiti Road between 50m south of Gladstone	The historic average number of crashes is 0.2 fatal injury crashes, 0.4 serious injury crashes and 1 minor injury crash	The mean operating speed is 82 km/h. It is expected that the mean operating speed will reduce to around 74 km/h. This	\$5,600	The costs of implementation and the slightly slower

Road	Safety	Travel Time	Implementation	Summary
Road and northern end of Tauweru River Bridge	per year. The expected fatal and serious injury crashes are expected to reduce by 50%, and the expected minor injury crashes are expected to reduce by 70%. The mean operating speed is expected to decrease by 8 km/h, resulting in a potential to reduce all injury crashes by around 24%.	will result in a 17 second increase in travel time for each vehicle and an estimated increase of 2,001 hours for all traffic over a year.		travel time are outweighed by the significant safety benefits.
Kokotau Road	The historic average number of crashes is 0.2 fatal injury crashes and 0.4 minor injury crash per year. The expected fatal injury crashes are expected to reduce by 50%, and the expected minor injury crashes are expected to reduce by 25%. The mean operating speed is expected to decrease by 8 km/h, resulting in a potential to reduce all injury crashes by around 24%.	The mean operating speed is 86 km/h. It is expected that the mean operating speed will reduce to around 78 km/h. This will result in a 26 second increase in travel time for each vehicle and an estimated increase of 6,296 hours for all traffic over a year.	\$2,000	The costs of implementation and the slightly slower travel time are outweighed by the significant safety benefits.
Millars Road	The historic average number of crashes is 0.2 fatal injury crashes and 0.8 minor injury crash per year. The expected fatal injury crashes are expected to reduce by 50%, and the expected minor injury crashes are expected to reduce by 38%. The mean operating speed is expected to decrease by 8 km/h, resulting in a potential to reduce all injury crashes by around 24%.	The mean operating speed is 83 km/h. It is expected that the mean operating speed will reduce to around 75 km/h. This will result in a 27 second increase in travel time for each vehicle and an estimated increase of 1,281 hours for all traffic over a year.	\$1,600	The costs of implementation and the slightly slower travel time are outweighed by the significant safety benefits.

Road	Safety	Travel Time	Implementation	Summary
Mount Holdsworth Road	The mean operating speed is 59 km/h. It is not expected that this will change with a 80 km/h limit.	It is not expected that there will any changes in travel time based on the existing operating speed.	\$1,200	The costs of implementation are outweighed by the safety benefits.
Waiohine Gorge Road	The mean operating speed is 45 km/h. It is not expected that this will change with a 80 km/h limit. There are safety benefits for having a speed limit closer to the operating speed.	It is not expected that there will any changes in travel time based on the existing operating speed.	\$1,600	The costs of implementation are outweighed by the safety benefits.
Matarawa Road between SH2 and end of road	The mean operating speed is 61 km/h. It is not expected that this will change with a 80 km/h limit. There are safety benefits for having a speed limit closer to the operating speed.	It is not expected that there will any changes in travel time based on the existing operating speed.	\$1,600	The costs of implementation are outweighed by the safety benefits.
Moffats Road between Matarawa Road and Jervois Road	The mean operating speed is 58 km/h. It is not expected that this will change with a 80 km/h limit. There are safety benefits for having a speed limit closer to the operating speed.	It is not expected that there will any changes in travel time based on the existing operating speed.	\$1,200	The costs of implementation are outweighed by the safety benefits.
Beef Creek Road	The change is proposed to be consistent with Jervios Road and Moffats Road.	It is not expected that there will any changes in travel time based on the existing operating speed.	\$800	The costs of implementation are outweighed by the safety benefits.

Road	Safety	Travel Time	Implementation	Summary
Jervois Road	The mean operating speed is 60 km/h. It is not expected that this will change with a 80 km/h limit. There are safety benefits for having a speed limit closer to the operating speed.	It is not expected that there will any changes in travel time based on the existing operating speed.	\$400	The costs of implementation are outweighed by the safety benefits.
Watersons Line between Matarawa Road and 250m southwest of Dalefield Road (start of 60 km/h)	The mean operating speed is 59 km/h. It is not expected that this will change with a 80 km/h limit. There are safety benefits for having a speed limit closer to the operating speed.	It is not expected that there will any changes in travel time based on the existing operating speed.	\$1,200	The costs of implementation are outweighed by the safety benefits.

Road	Safety	Travel Time	Implementation	Summary
Admiral Station Road between Admiral Road and end of road	The mean operating speed is expected to decrease by 8 km/h, resulting in a potential to reduce all injury crashes by around 24%.	It is expected that the mean operating speed will reduce by 8 km/h, and there will be an increase in travel time of 22 seconds for each vehicle and an estimated increase of 47 hours for all traffic over a year.	\$1,200	The costs of implementation and the slightly slower travel time are outweighed by the safety benefits.
Arcus Road between Dalefield Road and end of	The mean operating speed is expected to decrease by 8 km/h, resulting in a potential to reduce all injury crashes by	It is not expected that there will be any material changes in travel time based on the short length of changed speed limit.	\$400	The costs of implementation are outweighed by the

Road	Safety	Travel Time	Implementation	Summary
road	around 24%.			safety benefits.
Barley Flat Road between Te Wharau Road to end of road	The mean operating speed is expected to decrease by 8 km/h, resulting in a potential to reduce all injury crashes by around 24%.	It is expected that the mean operating speed will reduce by 8 km/h, and there will be an increase in travel time of 6 seconds for each vehicle and an estimated increase of 13 hours for all traffic over a year.	\$400	The costs of implementation and the slightly slower travel time are outweighed by the safety benefits.
Belvedere Road between 430m north of Hoeke Road to Cobden Road	The mean operating speed is expected to decrease by 8 km/h, resulting in a potential to reduce all injury crashes by around 24%.	It is expected that the mean operating speed will reduce by 8 km/h, and there will be an increase in travel time of 5 seconds for each vehicle and an estimated increase of 16 hours for all traffic over a year.	\$400	The costs of implementation and the slightly slower travel time are outweighed by the safety benefits.
Bismark Road between Kaiwhata Road and end of road	The mean operating speed is expected to decrease by 8 km/h, resulting in a potential to reduce all injury crashes by around 24%.	It is expected that the mean operating speed will reduce by 8 km/h, and there will be an increase in travel time of 7 seconds for each vehicle and an estimated increase of 15 hours for all traffic over a year.	\$400	The costs of implementation and the slightly slower travel time are outweighed by the safety benefits.
Blakes Road between Norfolk Road and end of road	The mean operating speed is expected to decrease by 8 km/h, resulting in a potential to reduce all injury crashes by around 24%.	It is expected that the mean operating speed will reduce by 8 km/h, and there will be an increase in travel time of 7 seconds for each vehicle and an estimated increase of 26 hours for all traffic over a year.	\$400	The costs of implementation and the slightly slower travel time are outweighed by the safety benefits.
Buchanan Road between Te Kopi Road and end of	The mean operating speed is expected to decrease by 8 km/h, resulting in a potential to reduce all injury crashes by	It is expected that the mean operating speed will reduce by 8 km/h, and there will be an increase in travel time of 4	\$400	The costs of implementation and the slightly slower

Road	Safety	Travel Time	Implementation	Summary
road	around 24%.	seconds for each vehicle and an estimated increase of 16 hours for all traffic over a year.		travel time are outweighed by the safety benefits.
Camerons Road between Te Wharau Road and Glenburn Road	The mean operating speed is expected to decrease by 8 km/h, resulting in a potential to reduce all injury crashes by around 24%.	It is expected that the mean operating speed will reduce by 8 km/h, and there will be an increase in travel time of 11 seconds for each vehicle and an estimated increase of 23 hours for all traffic over a year.	\$400	The costs of implementation and the slightly slower travel time are outweighed by the safety benefits.
Clifton Grove Road between Admiral Road and Wainuioru Road	The mean operating speed is expected to decrease by 8 km/h, resulting in a potential to reduce all injury crashes by around 24%.	It is expected that the mean operating speed will reduce by 8 km/h, and there will be an increase in travel time of 39 seconds for each vehicle and an estimated increase of 146 hours for all traffic over a year.	\$2,000	The costs of implementation and the slightly slower travel time are outweighed by the safety benefits.
Craigie Lea Road between Te Wharau Road and end of road	The mean operating speed is expected to decrease by 8 km/h, resulting in a potential to reduce all injury crashes by around 24%.	It is expected that the mean operating speed will reduce by 8 km/h, and there will be an increase in travel time of 30 seconds for each vehicle and an estimated increase of 138 hours for all traffic over a year.	\$1,600	The costs of implementation and the slightly slower travel time are outweighed by the safety benefits.
Dakins Road between 1.93km south of East Taratahi Road to end of road	The mean operating speed is expected to decrease by 8 km/h, resulting in a potential to reduce all injury crashes by around 24%.	It is expected that the mean operating speed will reduce by 8 km/h, and there will be an increase in travel time of 7 seconds for each vehicle and an estimated increase of 85 hours for all traffic over a year.	\$400	The costs of implementation and the slightly slower travel time are outweighed by the safety benefits.
Driscoll Road	The mean operating speed is expected	It is expected that the mean operating	\$1,200	The costs of

Road	Safety	Travel Time	Implementation	Summary
between Te Wharau Road and Forest Glen Road	to decrease by 8 km/h, resulting in a potential to reduce all injury crashes by around 24%.	speed will reduce by 8 km/h, and there will be an increase in travel time of 18 seconds for each vehicle and an estimated increase of 39 hours for all traffic over a year.		implementation and the slightly slower travel time are outweighed by the safety benefits.
Eringa Road between Longbush Road and end of road	The mean operating speed is expected to decrease by 8 km/h, resulting in a potential to reduce all injury crashes by around 24%.	It is expected that the mean operating speed will reduce by 8 km/h, and there will be an increase in travel time of 12 seconds for each vehicle and an estimated increase of 26 hours for all traffic over a year.	\$1,200	The costs of implementation and the slightly slower travel time are outweighed by the safety benefits.
Flat Point Road between Te Wharau Road and end of road	The mean operating speed is expected to decrease by 8 km/h, resulting in a potential to reduce all injury crashes by around 24%.	It is expected that the mean operating speed will reduce by 8 km/h, and there will be an increase in travel time of 16 seconds for each vehicle and an estimated increase of 127 hours for all traffic over a year.	\$1,200	The costs of implementation and the slightly slower travel time are outweighed by the safety benefits.
Foreman Jury Road between Ponatahi Road and end of road	The mean operating speed is expected to decrease by 8 km/h, resulting in a potential to reduce all injury crashes by around 24%.	It is expected that the mean operating speed will reduce by 8 km/h, and there will be an increase in travel time of 10 seconds for each vehicle and an estimated increase of 30 hours for all traffic over a year.	\$400	The costs of implementation and the slightly slower travel time are outweighed by the safety benefits.
Forest Glen Road between Driscoll Road and end of road	The mean operating speed is expected to decrease by 8 km/h, resulting in a potential to reduce all injury crashes by around 24%.	It is expected that the mean operating speed will reduce by 8 km/h, and there will be an increase in travel time of 5 seconds for each vehicle and an estimated increase of 10 hours for all traffic over a year.	\$400	The costs of implementation and the slightly slower travel time are outweighed by the safety benefits.

Road	Safety	Travel Time	Implementation	Summary
Glenburn Road between Te Wharau Road and end of road	The mean operating speed is expected to decrease by 8 km/h, resulting in a potential to reduce all injury crashes by around 24%.	It is expected that the mean operating speed will reduce by 8 km/h, and there will be an increase in travel time of 39 seconds for each vehicle and an estimated increase of 85 hours for all traffic over a year.	\$2,000	The costs of implementation and the slightly slower travel time are outweighed by the safety benefits.
Hilton Road between Rutland Road and Marshall Road	The mean operating speed is expected to decrease by 8 km/h, resulting in a potential to reduce all injury crashes by around 24%.	It is expected that the mean operating speed will reduce by 8 km/h, and there will be an increase in travel time of 3 seconds for each vehicle and an estimated increase of 27 hours for all traffic over a year.	\$400	The costs of implementation and the slightly slower travel time are outweighed by the safety benefits.
Hinau Gully Road between Cobden Road and end of road	The mean operating speed is expected to decrease by 8 km/h, resulting in a potential to reduce all injury crashes by around 24%.	It is expected that the mean operating speed will reduce by 8 km/h, and there will be an increase in travel time of 5 seconds for each vehicle and an estimated increase of 28 hours for all traffic over a year.	\$400	The costs of implementation and the slightly slower travel time are outweighed by the safety benefits.
Hughes Line between Cornwall Road and Waingawa River (end of road)	The mean operating speed is expected to decrease by 8 km/h, resulting in a potential to reduce all injury crashes by around 24%.	It is expected that the mean operating speed will reduce by 8 km/h, and there will be an increase in travel time of 4 seconds for each vehicle and an estimated increase of 18 hours for all traffic over a year.	\$400	The costs of implementation and the slightly slower travel time are outweighed by the safety benefits.
Kaiwhata Road between Te Wharau Road and Kaihoata River (CDC/MDC	The mean operating speed is expected to decrease by 8 km/h, resulting in a potential to reduce all injury crashes by around 24%.	It is expected that the mean operating speed will reduce by 8 km/h, and there will be an increase in travel time of 52 seconds for each vehicle and an estimated increase of 219 hours for all	\$2,400	The costs of implementation and the slightly slower travel time are outweighed by the

Road	Safety	Travel Time	Implementation	Summary
boundary)		traffic over a year.		safety benefits.
Mahupuku Road betweeon Longbush Road and end of road	The mean operating speed is expected to decrease by 8 km/h, resulting in a potential to reduce all injury crashes by around 24%.	It is expected that the mean operating speed will reduce by 8 km/h, and there will be an increase in travel time of 8 seconds for each vehicle and an estimated increase of 18 hours for all traffic over a year.	\$400	The costs of implementation and the slightly slower travel time are outweighed by the safety benefits.
Mangatarere Valley Road between 50m south of McLennans Road and end of road	The mean operating speed is expected to decrease by 8 km/h, resulting in a potential to reduce all injury crashes by around 24%.	It is expected that the mean operating speed will reduce by 8 km/h, and there will be an increase in travel time of 36 seconds for each vehicle and an estimated increase of 400 hours for all traffic over a year.	\$2,000	The costs of implementation and the slightly slower travel time are outweighed by the safety benefits.
Marshall Road between Park Road and Waihakeke Road	The mean operating speed is expected to decrease by 8 km/h, resulting in a potential to reduce all injury crashes by around 24%.	It is expected that the mean operating speed will reduce by 8 km/h, and there will be an increase in travel time of 17 seconds for each vehicle and an estimated increase of 91 hours for all traffic over a year.	\$1,200	The costs of implementation and the slightly slower travel time are outweighed by the safety benefits.
Mclennans Road between Mangatarere Valley Road and end of road	The mean operating speed is expected to decrease by 8 km/h, resulting in a potential to reduce all injury crashes by around 24%.	It is not expected that there will be any material changes in travel time based on the short length of changed speed limit.	\$400	The costs of implementation are outweighed by the safety benefits.
Perrys Road between 520m north of East Taratahi Road and	The mean operating speed is expected to decrease by 8 km/h, resulting in a potential to reduce all injury crashes by around 24%.	It is expected that the mean operating speed will reduce by 8 km/h, and there will be an increase in travel time of 6 seconds for each vehicle and an	\$400	The costs of implementation and the slightly slower travel time are

Road	Safety	Travel Time	Implementation	Summary
end of road		estimated increase of 58 hours for all traffic over a year.		outweighed by the safety benefits.
Perrys Road (Sth) between Francis Line and 630m south of East Taratahi Road	The mean operating speed is expected to decrease by 8 km/h, resulting in a potential to reduce all injury crashes by around 24%.	It is expected that the mean operating speed will reduce by 8 km/h, and there will be an increase in travel time of 12 seconds for each vehicle and an estimated increase of 75 hours for all traffic over a year.	\$1,200	The costs of implementation and the slightly slower travel time are outweighed by the safety benefits.
Portland Road between 150m south of SH2 (at the end of seal) to Marshall Road	The mean operating speed is expected to decrease by 8 km/h, resulting in a potential to reduce all injury crashes by around 24%.	It is expected that the mean operating speed will reduce by 8 km/h, and there will be an increase in travel time of 5 seconds for each vehicle and an estimated increase of 11 hours for all traffic over a year.	\$400	The costs of implementation and the slightly slower travel time are outweighed by the safety benefits.
Puketiro Road between Te Wharau Road and end of road	The mean operating speed is expected to decrease by 8 km/h, resulting in a potential to reduce all injury crashes by around 24%.	It is expected that the mean operating speed will reduce by 8 km/h, and there will be an increase in travel time of 16 seconds for each vehicle and an estimated increase of 34 hours for all traffic over a year.	\$1,200	The costs of implementation and the slightly slower travel time are outweighed by the safety benefits.
Rocky Hill Road between Te Wharau Road and end of road	The mean operating speed is expected to decrease by 8 km/h, resulting in a potential to reduce all injury crashes by around 24%.	It is expected that the mean operating speed will reduce by 8 km/h, and there will be an increase in travel time of 24 seconds for each vehicle and an estimated increase of 111 hours for all traffic over a year.	\$1,600	The costs of implementation and the slightly slower travel time are outweighed by the safety benefits.
Ruakiwi Road between Te	The mean operating speed is expected to decrease by 8 km/h, resulting in a	It is expected that the mean operating speed will reduce by 8 km/h, and there	\$1,600	The costs of implementation and

Road	Safety	Travel Time	Implementation	Summary
Wharau Road and end of road	potential to reduce all injury crashes by around 24%.	will be an increase in travel time of 23 seconds for each vehicle and an estimated increase of 49 hours for all traffic over a year.		the slightly slower travel time are outweighed by the safety benefits.
Short Road between Park Road and Somerset Road	The mean operating speed is expected to decrease by 8 km/h, resulting in a potential to reduce all injury crashes by around 24%.	It is expected that the mean operating speed will reduce by 8 km/h, and there will be an increase in travel time of 4 seconds for each vehicle and an estimated increase of 32 hours for all traffic over a year.	\$400	The costs of implementation and the slightly slower travel time are outweighed by the safety benefits.
Te Awa Road between Te Kopi Road and end of road	The mean operating speed is expected to decrease by 8 km/h, resulting in a potential to reduce all injury crashes by around 24%.	It is expected that the mean operating speed will reduce by 8 km/h, and there will be an increase in travel time of 11 seconds for each vehicle and an estimated increase of 25 hours for all traffic over a year.	\$1,200	The costs of implementation and the slightly slower travel time are outweighed by the safety benefits.
Te Wharau Road between 50 m north of Driscoll Road to Flat Point Road	The historic average number of crashes is 0.2 serious injury crashes per year. The expected serious injury crashes are expected to reduce by 50%. The mean operating speed is expected to decrease by 8 km/h, resulting in a potential to reduce all injury crashes by around 24%.	It is expected that the mean operating speed will reduce by 8 km/h, and there will be an increase in travel time of 1 min 2 seconds for each vehicle and an estimated increase of 798 hours for all traffic over a year.	\$2,800	The costs of implementation and the slower travel time are outweighed by the safety benefits.
Tea Creek Road between Mangatarere Valley Road and end of	The mean operating speed is expected to decrease by 8 km/h, resulting in a potential to reduce all injury crashes by around 24%.	It is expected that the mean operating speed will reduce by 8 km/h, and there will be an increase in travel time of 20 seconds for each vehicle and an	\$1,200	The costs of implementation and the slower travel time are outweighed by the

Road	Safety	Travel Time	Implementation	Summary
road		estimated increase of 43 hours for all traffic over a year.		safety benefits.
Tiffin Road between 160m west of Gladstone Road to Tiffin Hill Road	The mean operating speed is expected to decrease by 8 km/h, resulting in a potential to reduce all injury crashes by around 24%.	It is expected that the mean operating speed will reduce by 8 km/h, and there will be an increase in travel time of 8 seconds for each vehicle and an estimated increase of 88 hours for all traffic over a year.	\$800	The costs of implementation and the slower travel time are outweighed by the safety benefits.
Udy Street between Marshalls Road and end of road	The mean operating speed is expected to decrease by 8 km/h, resulting in a potential to reduce all injury crashes by around 24%.	It is not expected that there will be any material changes in travel time based on the short length of changed speed limit.	\$400	The costs of implementation are outweighed by the safety benefits.
Waihakeke Road between Taumata Island Road and end of road	The mean operating speed is expected to decrease by 8 km/h, resulting in a potential to reduce all injury crashes by around 24%.	It is not expected that there will be any material changes in travel time based on the short length of changed speed limit.	\$400	The costs of implementation are outweighed by the safety benefits.
Waimana Road between Admiral Road and end of road	The mean operating speed is expected to decrease by 8 km/h, resulting in a potential to reduce all injury crashes by around 24%.	It is not expected that there will be any material changes in travel time based on the short length of changed speed limit.	\$400	The costs of implementation are outweighed by the safety benefits.
Waipopo Road between Te Whiti Road and end of road	The mean operating speed is expected to decrease by 8 km/h, resulting in a potential to reduce all injury crashes by around 24%.	It is not expected that there will be any material changes in travel time based on the short length of changed speed limit.	\$400	The costs of implementation are outweighed by the safety benefits.
Brooklands Road between Te Whiti Road and end of	The mean operating speed is expected to decrease by 8 km/h, resulting in a potential to reduce all injury crashes by	It is not expected that there will be any material changes in travel time based on the short length of changed speed limit.	\$400	The costs of implementation are outweighed by the

Road	Safety	Travel Time	Implementation	Summary
road	around 24%.			safety benefits.
Opuakaio Road between Kokotau Road and end of road	The mean operating speed is expected to decrease by 8 km/h, resulting in a potential to reduce all injury crashes by around 24%.	It is not expected that there will be any material changes in travel time based on the short length of changed speed limit.	\$400	The costs of implementation are outweighed by the safety benefits.
Hoeke Road between Belvedere Road and end of road	The mean operating speed is expected to decrease resulting in a potential to reduce crashes.	It is expected that there will be an increase in travel time of 27 seconds for each vehicle and an estimated increase of 219 hours for all traffic over a year.	\$400	The costs of implementation and the slower travel time are outweighed by the safety benefits.