

# Revised reporting measures for the Government Policy Statement (GPS) on land transport 2018

## Version control

This document provides Version 8 of the revised updated list of measures for GPS 2018.

Version	Details	Date
1.	Draft measures published in GPS 2018	June 2018
2.	Revised based on the workshops held in October/November 2018	December 2018
3.	Revised based on feedback received on the Version 2 measures, as well as additional engagement with NZTA, local governments, and relevant data owners	8 April 2019
4.	Revised based on feedback received on the Version 3 measures from NZTA and MOT staff.	24 May 2019
5.	Revised based on final internal discussions.	5 June 2019
6.	Final version approved by SLT	27 June 2019
7.	Minor revisions to incorporate feedback from Ministers and updated detail from NZTA relating to data availability	9 September 2019
8.	Final version for publication	10 September 2019

## Types of measures

There are a total of 82 proposed measures and they have been designed to be read together as a set of measures. There is at least one measure for each of the 33 GPS 2018 short-term results (listed here on page 3 onwards), but in several cases the same measure is used for more than one result. The set includes different types of measures:

- Input measures (often focussing on \$ spent)
- Output measures (including measures from NZTA output class reporting, e.g. “Number of passenger boardings using urban public transport services”)
- Outcome measures (this is where we are moving towards but it is not possible to measure for all aspects at this stage)

## Data availability

Only 48 of the total 82 measures are likely to be able to be reported on for the 2018/19 financial year (i.e. the first year of GPS 2018 reporting).

Reporting year	2018/19	2019/20	2020/21	Require significant work – availability date TBC	Total
# of measures	48	61 (48 from previous year + 13 newly available)	62 (61 from previous year + 1 newly available)	20	82

Measures have been colour coded to reflect data availability.

	Measures currently reported elsewhere
	Measures being developed
	Measures that have a data source identified but require further work

## Research and data gaps

Measures that have been coded as yellow or red (i.e. measures not currently available) reflect data, information and research gaps. These are identified as recommended initiatives<sup>1</sup> in the *Transport Evidence Base Strategy* (as per the table on the next page) and will be delivered via the associated work programme currently under development.

## Additional measures

This list is based on the best available information as of June 2019. As new measures are developed and as new data sources become available (e.g. through changes in technology), additional measures may also be used to report on GPS performance.

## Collated measures

A summary of the measures is provided on the next page. More detail about the measures, and how they reflect the long and short-term results are provided in the rest of the document.

<sup>1</sup> <https://www.transport.govt.nz/assets/Uploads/Research/Documents/78c3678af6/Transport-Domain-Plan-full-list-of-recommended-initiatives.pdf>

Measure	Associated GPS result/s	Likely first reporting cycle	Recommended initiatives as per the Transport Evidence Base Strategy
\$ investment in activities with a benefit cost ratio of less than one	29	2018/19	R4.1E
\$ investment in investment management	29	2018/19	-
\$ investment in promotion of road safety and demand management	5	2018/19	-
\$ investment in public transport, rapid transit, and transitional rail	6	2018/19	-
\$ investment in road policing	4	2018/19	-
\$ investment in state highway improvements and local road improvements	2	2018/19	-
\$ investment in state highway maintenance and local road maintenance	33	2018/19	-
\$ investment in Total Mobility	20	2018/19	R2.4
\$ investment in walking and cycling	3, 15	2018/19	-
% of household spending on transport	19	2018/19	-
% of national cycling tourist routes completed	13	2018/19	R2.13
% of people unable to make a beneficial land transport journey	6, 19	2018/19	-
% of population with access to frequent public transport services	6	2018/19	-
% of road safety advertising campaigns that meet or exceed their agreed success criteria	5	2018/19	-
% of state highway and local road networks modified to align with safe and appropriate speed	2, 12	2018/19	-
% of Te Araroa at a roadside without a path	13	2018/19	R2.13
% of urban network with speed limit of 40 km/h or below	7	2018/19	R4.14
A monitoring and evaluation system is in place for investment decisions	30	2018/19	R4.1E
Access to essential services	6	2018/19	R2.4 + Research Strategy
Access to jobs	6	2018/19	R2.4 + Research Strategy
Availability of state highway network	23	2018/19	-
Cycling count in urban areas	15	2018/19	-
Deaths and serious injuries where alcohol, speed, fatigue, or distraction was a contributing factor	4	2018/19	-
Deaths and serious injuries where drugs were a contributing factor	5	2018/19	-
Dedicated road policing staff	4	2018/19	-
Distance per capita travelled in single occupancy vehicles	14	2018/19	-
Hospitalisations from road crashes	2, 3, 16	2018/19	R10.6
Investment aligned to GPS priorities (assessed strategic case benefits)	29	2018/19	-
Lane kilometres of improved regional roading	12	2018/19	-
Maintenance cost per lane kilometre delivered for state highways, and local roads	33	2018/19	-
Mode share – people	6, 14, 17, 28	2018/19	-
Mode share for how children travel to/from school	17	2018/19	-
Network kilometres of walking and cycling facilities delivered	3, 15, 18	2018/19	-
Number of passenger boardings using urban public transport services	6, 17	2018/19	-
Number of people exposed to elevated levels of land transport noise	25	2018/19	R10.1 + Research Strategy
Pedestrian and cyclist injuries	3, 16	2018/19	-
Perceived safety of walking and cycling	16	2018/19	-
Police supported resolutions	4	2018/19	-
Projected benefits for implementation activities at time of funding approval	29	2018/19	R4.1E
Public attitudes towards road safety	5	2018/19	-
Release of an annual GPS assessment report	30	2018/19	R4.1E
Reporting of the assessment used in investment decisions	29	2018/19	R4.1E
Road deaths and serious injuries	2, 3, 16	2018/19	-
SuperGold patronage	19	2018/19	-
Tonnes of greenhouse gases emitted per year from land transport	24	2018/19	R11.1 + Research Strategy
Total cost of managing the funding allocation system as a % of the National Land Transport Programme expenditure	29	2018/19	-
Use of cycling tourist routes	13	2018/19	-
Use of specialised services	20	2018/19	-
Vehicle occupant deaths where restraints not worn	4	2018/19	-
% of recently built residential dwellings with access to public transport services and active modes	7, 9	2019/20	R2.4
% of road safety education programmes meeting targets for access to road safety information	5	2019/20	-
% of routes of most economic and social importance that have viable alternative routes	12, 21	2019/20	R11.10 / R4.19
Kilometres of road and rail infrastructure susceptible to coastal inundation with sea level rise	21	2019/20	R11.10 + Research Strategy
Number of people exposed to elevated concentrations of land transport-related air pollution	26	2019/20	R10.1 + Research Strategy
Population harm from land transport-related air pollution	26	2019/20	R10.1 + Research Strategy
Predictability of travel times on priority routes for freight and tourism	10, 12, 13	2019/20	R3.6E
Projected versus realised benefits and costs of funded activities	29	2019/20	R4.1E
Release of a new road safety strategy and associated work programme	1	2019/20	-
Tonnes of harmful emissions emitted per year from land transport	26	2019/20	R11.1 + Research Strategy
Use of Te Araroa trails	13	2019/20	R2.13
Walking count in urban areas	15	2019/20	R2.13
% of space in cities dedicated to motorised vehicles	7	2020/21	R5.2
\$ investment in greenhouse gas emission reduction measures	24, 26	TBC	R4.1E
\$ investment in improving access to public transport for people with disabilities	19	TBC	R4.1E
\$ investment in intelligent transport systems and other technologies, and research and evaluations related to intelligent transport systems and other technologies	11	TBC	R4.1E
\$ investment in noise management practices	25	TBC	R4.1E
\$ investment in providing public transport for new housing in metropolitan and high growth urban areas	9	TBC	R4.1E
\$ investment in resilience	22	TBC	R4.1E + Research Strategy
\$ investment in safety improvement activities (across all activity classes)	2	TBC	R4.1E
\$ investment in storm water quality management, and biodiversity management practices	27	TBC	R4.1E
\$ investment in tourist routes for walking and cycling	13	TBC	R4.1E / R2.13
% alignment of funded research to the NZ Transport Research Strategy	31	TBC	-
% of business cases that include resilience	22	TBC	-
% of key national and regional networks that meet One Network Road Classification (ONRC) customer levels of service for safety, resilience/access, and travel time reliability	10	TBC	-
Mean free speed and proportion of driving over a safe and appropriate speed	4	TBC	R10.1
Mode share – freight	6	TBC	R3.9E
Number of affected travel hours that routes of most economic and social importance are unavailable	23	TBC	R11.10 + Research Strategy
Number of trials undertaken, and trials implemented	11	TBC	-
Predictability of travel times for people and freight in metropolitan and high growth areas	8	TBC	R3.6E
Realised benefits relating to innovation for internal and external projects (size and scope appropriate)	32	TBC	R4.1E + Research Strategy
Tonnes of selected contaminants discharged from the land transport network into sensitive water bodies	27	TBC	R10.1 + Research Strategy
Utilisation of key movement corridors for people and freight	8	TBC	R3.6E

## Priority 1: Safety

### Long-term result: Significant reduction in deaths and serious injuries

Short-term result	Proposed measure	Specifications / definitions	Reporting requirements	Responsible agency	Data source	Expected availability
1. Renewed strategic focus to have the greatest impact on reducing death and serious injury	1A. Release of a new road safety strategy and associated work programme	-	-	Ministry of Transport	-	2019/20
2. State highways and local roads are safer for everyone	2A. Road deaths and serious injuries	Definitions as per Crash Analysis System (CAS). <ul style="list-style-type: none"> <li>Road deaths are defined as the instance where an injury or multiple injuries resulted in death within 30 days of when the crash happened. This is consistent with the international definition.</li> <li>Serious injuries include fractures, concussions, internal injuries, crushings, severe cuts, lacerations, severe general shock necessitating medical treatment, and any other injury requiring admittance or detention in hospital.</li> <li>Mode includes: driver, passenger, motorcycle rider, motorcycle pillion, pedestrian, cyclist. Note, this only includes pedestrians where a motor vehicle was also involved.</li> <li>Road type includes: local road (open road and urban road), and state highway (open road and urban road). Note that this dataset only includes crashes that occur on public roads.</li> </ul>	Total (1) road deaths, and (2) serious injuries for drivers, passengers, motorcycle riders/pillion passengers, pedestrians, and cyclists: <ul style="list-style-type: none"> <li>As a national total (by mode)</li> <li>Per capita (by mode)</li> <li>By distance travelled (by mode)</li> <li>By mode by region</li> <li>By road type by region</li> </ul>	Ministry of Transport / NZ Transport Agency / NZ Police	Crash data from the Crash Analysis System (CAS), taken from Police Traffic Crash Reports. Population data (for per capita calculation) from Stats NZ. Vehicle kilometre data (for by distance travelled calculation) from the Household Travel Survey.	2018/19
	2B. Hospitalisations from road crashes	People who, as a result of a motor vehicle crash and for cyclists who were injured in non-motor vehicle traffic crashes, were injured seriously enough to be admitted to hospital. This only includes crashes that occurs on public roads.	To be reported: <ul style="list-style-type: none"> <li>As a national total (by mode)</li> <li>Per 100,000 population</li> <li>By mode by region</li> </ul>	Ministry of Health	Hospitalisation data from the Ministry of Health.	2018/19
	2C. % of state highway and local road networks modified to align with safe and appropriate speed	As per NZTA output class measure: <ul style="list-style-type: none"> <li>Proportion of the state highway network that has speed limit reductions or engineering improvements completed to ensure travel speeds are safe at current or higher speed limits where appropriate</li> <li>Proportion of the local roads network that have speed limit reductions or engineering improvements completed to ensure travel speeds are safe at current or higher speed limits where appropriate.</li> </ul> We expect this measure to include reporting against the range of interventions to align with safe and appropriate speed (not just engineering improvements and changing the posted speed limit).	As per NZTA output class measure <sup>2</sup> .	NZ Transport Agency	Existing NZTA output class reporting.	2018/19
	2D. \$ investment in: <ul style="list-style-type: none"> <li>State highway improvements</li> <li>Local road improvements</li> </ul>	As per NZTA output class definition.	As per NZTA output class definition.	NZ Transport Agency	Existing NZTA output class reporting.	2018/19
	2E. \$ investment in safety improvement activities (across all activity classes)	To be developed.	To be developed.	NZ Transport Agency	Possible from NZTA financial reporting but requires additional work.	To be confirmed

<sup>2</sup> Acknowledging that these output class definitions and measures may be subject to change by NZTA.

3. Cycling and walking is safer	3A. Pedestrian and cyclist injuries	Number of entitlement claims related to walking and cycling injuries. Entitlement claims are defined by ACC and are considered to cover moderate to serious injuries requiring entitlement beyond medical treatment only.	To be reported <ul style="list-style-type: none"> <li>As a national total (by mode)</li> <li>Per capita (by mode)</li> <li>By mode by region</li> </ul>	ACC	ACC entitlement claims data (motor vehicle account, and on-road walking and cycling accidents in the non-motor vehicle accounts)	2018/19
	3B. Network kilometres of walking and cycling facilities delivered	As per NZTA output class measure: <i>Total length of new walking and cycling facilities added to the network, including lengths on existing pathways and cycleways where improvements were made.</i>	As per NZTA output class measure.	NZ Transport Agency	Existing NZTA output class reporting.	2018/19
	3C. \$ investment in walking and cycling	As per NZTA output class definition.	As per NZTA output class definition. Ultimately this measure is expected to move towards also including \$ investment in walking and cycling through other output classes (e.g. walkways as part of new expressways).	NZ Transport Agency	Existing NZTA output class reporting.	2018/19
	***As per #2A*** Road deaths and serious injuries	-	-	-	-	-
	***As per #2B*** Hospitalisations from road crashes	-	-	-	-	-
4. Effective enforcement activity to promote safe behaviour by road users	4A. Police supported resolutions	To include: <ul style="list-style-type: none"> <li>Child safety restraints</li> <li>Warrant of fitness (WOF) or Certificate of fitness (COF)</li> <li>Minor vehicle defects</li> <li>Driver licences</li> <li>Cycle helmets or cycle lighting</li> <li>Vehicle licensing</li> </ul>	Infringements waived through the Police compliance process, to be reported as: <ul style="list-style-type: none"> <li>Total number (by offence type and Police district)</li> <li>% of all infringements issued (by offence type)</li> </ul>	NZ Police	Combination of business objects and SAS (to be moved to SAS entirely).	2018/19
	4B. Mean free speed and proportion of driving over a safe and appropriate speed	To be developed.	To be developed. Regional break-downs to be reported where possible.	NZ Transport Agency	Likely possible using Traffic Management System data and/or data from TomTom or similar commercial providers.	To be confirmed
	4C. Deaths and serious injuries where alcohol, speed, fatigue, or distraction was a contributing factor	As per Crash Analysis System (CAS) definitions.	To be reported as (1) total number, and (2) % of: <ul style="list-style-type: none"> <li>Deaths where:               <ul style="list-style-type: none"> <li>alcohol was a contributing factor</li> <li>speed was a contributing factor</li> <li>fatigue was a contributing factor</li> <li>distraction was a contributing factor</li> </ul> </li> <li>Serious injuries where:               <ul style="list-style-type: none"> <li>alcohol was a contributing factor</li> <li>speed was a contributing factor</li> <li>fatigue was a contributing factor</li> <li>distraction was a contributing factor</li> </ul> </li> </ul> Regional break-downs to be reported where possible.	NZ Transport Agency	Research based on Crash Analysis System (CAS).	2018/19
	4D. Vehicle occupant deaths where restraints not worn	As per Crash Analysis System (CAS) definitions.	To be reported as (1) total number, and (2) % of deaths. Regional break-downs to be reported where possible.	NZ Transport Agency	Research based on Crash Analysis System (CAS).	2018/19
	4E. Dedicated road policing staff	As per Police definition.	Number of sworn road policing staff, to be reported by Police district as: <ul style="list-style-type: none"> <li>Total number of FTE</li> <li>% of current funded target</li> </ul>	NZ Police	NZ Police's MyPolice database	2018/19
	4F. \$ investment in road policing	As per NZTA output class definition.	As per NZTA output class definition	NZ Transport Agency / NZ Police	Existing NZTA output class reporting.	2018/19

5. Safer road use through appropriate education and promotion activities, and regulatory changes	5A. % of road safety advertising campaigns that meet or exceed their agreed success criteria	As per NZTA output class measure: <i>Composite measure reflecting the number and breadth of the advertising campaigns used, the varied media in which they are presented (including online), and the different aspects of the campaigns that are measured (including likeability, relevance, message takeout, likelihood to change attitude and prompted recall)</i>	As per NZTA output class measure.	NZ Transport Agency	Existing NZTA output class reporting (based on independently conducted surveys, media and website reporting).	2018/19
	5B. % of road safety education programmes meeting targets for access to road safety information	Currently under development.	Currently under development.	NZ Transport Agency	Currently under development.	2019/20
	5C. Public attitudes towards road safety	To include: <ul style="list-style-type: none"> <li>• Speeding</li> <li>• Driving while tired</li> <li>• Driving while distracted (including cellphone use)</li> <li>• Drink driving</li> <li>• Drug driving</li> <li>• Likelihood of being stopped by Police</li> </ul>	As per NZTA Tracking Survey on road safety advertising.	NZ Transport Agency	NZTA tracking survey on road safety advertising. May be supplemented by other surveys (e.g. NZ Police Citizens' Satisfaction Survey) as required.	2018/19
	5D. Deaths and serious injuries where drugs were a contributing factor	As per Crash Analysis System (CAS) definitions.	To be reported as (1) total number, and (2) % of: <ul style="list-style-type: none"> <li>• Deaths where drugs was a contributing factor</li> <li>• Serious injuries where drugs was a contributing factor</li> </ul> Regional break-downs to be reported where possible.	NZ Transport Agency	Research based on Crash Analysis System (CAS).	2018/19
	5E. \$ investment in promotion of road safety and demand management	As per NZTA output class definition.	As per NZTA output class definition.	NZ Transport Agency	Existing NZTA output class reporting.	2018/19

## Priority 2: Access-Access

*Long-term result: Metropolitan and high growth urban areas are better connected and accessible*

Short-term result	Proposed measure	Specifications / definitions	Reporting requirements	Responsible agency	Data source (including availability)	Expected availability
6. A more accessible and better integrated transport network including public transport walking and cycling	6A. % of population with access to frequent public transport services	As per NZTA output class measure: <i>Proportion of the population that is within 500 metres walking distance (isochrones using footpaths, rather than 'as the crow flies') of a frequent bus-stop or ferry terminal, or within 1 km of a frequent rapid transit stop (mainly trains, but also includes grade-separated bus ways). Frequent means scheduled every 15 minutes (or 30 minutes for ferry) during the morning peak Monday to Friday (7am-9am).</i>	As per NZTA output class measure. Currently only available for Auckland, Wellington and Christchurch but to be expanded to the other metropolitan and high growth urban areas. In future, this measure may be developed further to provide more nuanced reporting, for example, by different levels of frequency (e.g. 5-10 minutes; 15 minutes) and/or to cover a wider time period (e.g. 7am to 7pm 7 days per week).	NZ Transport Agency	Existing NZTA output class reporting.	2018/19
	6B. Mode share – people	% of travel using a particular mode. Modes to include: pedestrian, car/van driver, car/van passenger, cyclist, motorcyclist, bus, train, ferry (as per the Household Travel Survey). In future, ride share data is also expected to be included.	To be reported by: <ul style="list-style-type: none"> <li>• Trips taken</li> <li>• Distance travelled</li> <li>• Time spent travelling.</li> </ul> Regional break-downs to be reported where possible.	Ministry of Transport	Household Travel Survey.	2018/19
	6C. Mode share – freight	% of freight by mode, including: road, rail and coastal shipping.	To be reported by: <ul style="list-style-type: none"> <li>• Tonne</li> <li>• Tonne-km</li> </ul>	Ministry of Transport	National Freight Demand Study. Last completed 2014.	To be confirmed
	6D. Access to jobs	% jobs accessible within a reasonable travel time during weekday morning peak. "Reasonable time" is defined as: <ul style="list-style-type: none"> <li>• 45 minutes public transport (includes walking to/from stop and transfers as well as transit)</li> <li>• 45 minutes walk</li> <li>• 45 minutes cycle (door to door – note that this is mapped for a confident cyclist who is willing to cycle on the road)</li> <li>• 30 minutes drive time (equivalent to 45 minutes for other modes to account for approximately 15 minutes to find a carpark and get to/from parked car to destination).</li> </ul>	To be reported by mode and by region.	NZ Transport Agency	Interactive maps and data available for car, public transport, walking and cycling.	2018/19

	6E. Access to essential services	% of people who have access to shopping facilities (e.g. supermarket) and education and health facilities (e.g. GP practice). Different travel-time thresholds are available at national and regional level (e.g. % within 15 minutes by mode).	To be reported by region.	NZ Transport Agency	Currently under development.	2018/19
	6F. Number of passenger boardings using urban public transport services	As per NZTA output class measure: <i>Sum of all public transport passenger boardings by bus, train and ferry across all regions. This measure is sometimes called 'patronage'. It includes boardings using SuperGold card concessions. A boarding is a single trip made on public transport, for example when a person boards a bus to when they get off. This is not to be confused with a journey, which concerns an individual's origin and destination, which may involve multiple trips and modes.</i>	To be reported: <ul style="list-style-type: none"> <li>Total (by region)</li> <li>Per capita (by region)</li> </ul>	NZ Transport Agency	Existing NZTA output class reporting.	2018/19
	6G. % of people unable to make a beneficial land transport journey	Proportion of people surveyed that reported they were unable to take a journey that would have beneficial to them in the last week because: <ul style="list-style-type: none"> <li>journey would have been too expensive</li> <li>journey would have taken too long</li> <li>no suitable transport option available.</li> </ul>	To be segmented by age, gender, ethnicity, trip purpose and region (where available).	NZ Transport Agency	Customer Experience and Behaviour Journey Monitor Survey	2018/19
	6H. \$ investment in: <ul style="list-style-type: none"> <li>Public transport</li> <li>Rapid transit</li> <li>Transitional rail</li> </ul>	As per NZTA output class definition.	As per NZTA output class definition.	NZ Transport Agency	Existing NZTA output class reporting.	2018/19
	***As per #3C*** \$ investment in walking and cycling	-	-	-	-	-
7. Improved land use and transport planning to create more liveable cities	7A. % of recently built residential dwellings with access to public transport services and active modes	Currently under development. Access to public transport is defined as per measure #6A (NZTA output class measure above). "Access to active modes" is yet to be defined. "Recently built" will likely be defined as the last three years.	Currently under development.	NZ Transport Agency	Currently under development. Likely to be based on building consent data.	2019/20
	7B. % of space in cities dedicated to motorised vehicles	Currently under development. This measure is a proxy for % of space dedicated to people / other mode types.	Currently under development.	NZ Transport Agency	Currently under development.	2020/21
	7C. % of urban network with speed limit of 40 km/h or below	Currently under development. This measure is a proxy for a specific liveability measure, based on the assumption that lower speeds improve liveability.	Currently under development.	NZ Transport Agency	Currently under development. Likely to be based on the National Speed Limit Register.	2018/19
8. Improved throughput of people and goods in metropolitan areas	8A. Utilisation of key movement corridors for people and freight	% of effective utilisation (capacity and use) on key movement corridors for people and freight in metropolitan and high growth areas.	To be reported by region and by mode.	NZ Transport Agency / Regional Councils	Likely possible using regional transport models.	To be confirmed
	8B. Predictability of travel times for people and freight in metropolitan and high growth areas	To be developed as an urban equivalent to measure #10A "Predictability of travel times on priority routes for freight and tourism" which is currently under development. This measure may include public transport.	To be developed.	NZ Transport Agency	To be developed.	To be confirmed
9. Improved transport access to new and existing housing including provision of public transport services	9A. \$ investment in providing public transport for new housing in metropolitan and high growth urban areas	To be developed.	To be developed.	NZ Transport Agency	Possible from NZTA financial reporting but requires additional work.	To be confirmed
	***As per #7A*** % of recently built residential dwellings with access to public transport services and active modes	-	-	-	-	-

*Long-term result: Better access to markets, business areas, and supporting tourism*

Short-term result	Proposed measure	Specifications / definitions	Reporting requirements	Responsible agency	Data source (including availability)	Expected availability
10. Nationally important transport connections are maintained or improved to support areas of growth, changes in population, freight and tourism, and to improve safety	10A. Predictability of travel times on priority routes for freight and tourism	Currently under development.	Currently under development.	NZ Transport Agency	Currently under development.	2019/20
	10B. % of key national and regional networks that meet One Network Road Classification (ONRC) customer levels of service for: <ul style="list-style-type: none"> <li>• Safety</li> <li>• Resilience/access</li> <li>• Travel time reliability</li> </ul>	The ONRC divides New Zealand's roads into six categories based on how busy they are, whether they connect to important destinations, or are the only route available: <ul style="list-style-type: none"> <li>• National – link major population centres and transport hubs</li> <li>• Regional – major connectors between and within regions; often public transport routes</li> </ul>	To be reported by region.	NZ Transport Agency	This measure is not currently available but will be considered for development after the upcoming revision of the ONRC.	TBC
11. Enhanced testing and deployment of intelligent transport systems and other technologies to make the best use of existing networks	11A. Number of: <ul style="list-style-type: none"> <li>• Trials undertaken</li> <li>• Trials implemented</li> </ul>	To be developed.	To be developed.	NZ Transport Agency	Possible to calculate using a manual count from TIO but requires additional work.	To be confirmed
	11B. \$ investment in: <ul style="list-style-type: none"> <li>• Intelligent transport systems and other technologies</li> <li>• Research and evaluations related to intelligent transport systems and other technologies</li> </ul>	To be developed.	To be developed.	NZ Transport Agency	Possible from NZTA financial reporting but requires additional work.	To be confirmed

*Long-term result: Sustainable economic development of regional New Zealand is supported by safer and better transport connections*

Short-term result	Proposed measure	Specifications / definitions	Reporting requirements	Responsible agency	Data source (including availability)	Expected availability	
12. Regional networks (including key regional freight routes) are safer, better connected and more resilient	12A. Lane kilometres of improved regional roading	As per NZTA output class definition.	As per NZTA output class definition.	NZ Transport Agency	Existing NZTA output class reporting.	2018/19 (but to be discontinued after this)	
	12B. % of routes of most economic and social importance that have viable alternative routes	Currently under development. Viable alternative routes are currently defined by NZTA as one which: <ul style="list-style-type: none"> <li>• Is unlikely to be affected by the same or related event that disrupts the availability of the original route, and</li> <li>• Is available to all vehicle types likely to be diverted to the alternative route, and</li> <li>• Has the capacity to carry the volume of traffic diverted from the original route, and</li> <li>• The additional travel time for 85% of disrupted trips is no more than               <ul style="list-style-type: none"> <li>- 20 minutes where original trip time is up to 40 minutes</li> <li>- 50% of original trip time where original trip time is 40-300 minutes</li> <li>- 2.5 hours where the original trip time is less than 5 hours</li> </ul> </li> </ul>	Currently under development.	NZ Transport Agency	Currently under development.	2019/20	
	***As per #10A*** Predictability of travel times on priority routes for freight and tourism	-	-	-	-	-	-
	***As per #2C*** % of state highway and local road networks modified to align with safe and appropriate speed	-	-	-	-	-	-

13. Improved transport connections (including local roads, public transport and active modes) on key regional tourist routes to make these routes safer for all	13A. % of national cycling tourist routes completed	To be defined. Will be based on the NZ Cycling Network.	To be reported by region.	NZ Transport Agency	Possible from existing NZTA data.	2018/19
	13B. Use of cycling tourist routes	Number of people cycling the Great Ride routes.	To be reported by Great Ride.	NZ Transport Agency	Great Ride counter data.	2018/19
	13C. % of Te Araroa at a roadside without a path	To be defined.	To be reported by region.	NZ Transport Agency / Te Araroa Trust	Possible from existing NZTA data.	2018/19
	13D. Use of Te Araroa trails	Number of people walking (at least part of) the Te Araroa.	To be reported by region.	NZ Transport Agency / Te Araroa Trust	Te Araroa Trust estimated usage numbers. Feasibility of collecting this data needs to be explored further.	2019/20
	13E. \$ investment in tourist routes for walking and cycling	To be developed (including clarifying what is within scope of NLTF).	To be reported by region.	NZ Transport Agency	Possible from NZTA financial reporting but requires additional work.	To be confirmed
	***As per #10A*** Predictability of travel times on priority routes for freight and tourism	-	-	-	-	-

### Priority 3: Access-Choice

Long-term result: Increased mode shift from private vehicle trips to walking, cycling and public transport

Short-term result	Proposed measure	Specifications / definitions	Reporting requirements	Responsible agency	Data source (including availability)	Expected availability
14. A reduction in overall single occupant private vehicle travel in urban areas	14A. Distance per capita travelled in single occupancy vehicles	Distance travelled in single occupancy vehicles in major urban areas on weekdays.	To be reported as a three-year average. To be reported by region per capita.	Ministry of Transport	Household Travel Survey	2018/19
	***As per #6B*** Mode share – people	-	-	-	-	-
15. Improved good-quality, fit-for-purpose walking and cycling infrastructure	15A. Cycling count in urban areas	As per NZTA output class measure: Number of cyclists counted in the annual cycling cordon count in Auckland, Wellington, Christchurch.	As per NZTA output class measure. Currently only available for Auckland, Wellington and Christchurch but expected to be expanded to all urban centres.	NZ Transport Agency	Existing NZTA output class reporting.	2018/19
	15B. Walking count in urban areas	Walking equivalent for existing cycling count above (to be developed).	To be developed. Likely to be reported initially for Auckland, Wellington and Christchurch only but expected to be expanded to all urban centres.	NZ Transport Agency	NZTA is currently exploring this further.	2019/20
	***As per #3B*** Network kilometres of walking and cycling facilities delivered	-	-	-	-	-
	***As per #3C*** \$ investment in walking and cycling	-	-	-	-	-
16. Improved real and perceived safety for both pedestrians and cyclists	16A. Perceived safety of walking and cycling	As per survey questions: <ul style="list-style-type: none"> <li>% agreed they don't feel safe walking in the day</li> <li>% agreed they don't feel safe walking in the dark</li> <li>% agreed they don't feel safe walking because of how people drive</li> <li>% who said they feel safe or extremely safe riding a bicycle</li> <li>% agreed it has become more safe to cycle on the road</li> <li>% agreed they don't feel safe cycling because of how people drive</li> <li>% agreed they don't feel safe cycling in the dark</li> </ul>	To be reported by region. To be reported separately for: <ul style="list-style-type: none"> <li>Walking</li> <li>Cycling</li> </ul>	NZ Transport Agency	Understanding attitudes and perceptions of cycling and walking (annual survey commissioned by NZTA and run by The Research Agency).	2018/19
	***As per #2A*** Road deaths and serious injuries	-	-	-	-	-
	***As per #2B*** Hospitalisations from road crashes	-	-	-	-	-
	***As per #3A*** Pedestrian and cyclist injuries	-	-	-	-	-

17. Increased proportion of journeys made using public transport and active modes of travel [including children travelling to and from school])	17A. Mode share for how children travel to/from school	As per the NZ Health Survey: Child questionnaire. Currently this includes the question: "How does X usually get to and from school?" <ul style="list-style-type: none"> <li>• Walk</li> <li>• Bike</li> <li>• Skate or other physical activity</li> <li>• Car</li> <li>• School bus</li> <li>• Public Transport</li> </ul>	Mode share by region (where possible).	Ministry of Health / Ministry of Transport	NZ Health Survey (may be supplemented by data from the NZ Census and/or the Household Travel Survey).	2018/19
	***As per #6B*** Mode share – people	-	-	-	-	-
	***As per #6F*** Number of passenger boardings using urban public transport services	-	-	-	-	-
18. Expanded and better connected walking and cycling networks both in urban and rural areas	***As per #3B*** Network kilometres of walking and cycling facilities delivered	-	-	-	-	-

*Long-term result: More transport choice (including for people with less or limited access to transport)*

Short-term result	Proposed measure	Specifications / definitions	Reporting requirements	Responsible agency	Data source (including availability)	Expected availability
19. Public transport is more accessible and affordable, especially for those reliant on it to reach social and economic opportunities [including people with disabilities, low-income people, and SuperGold card holders]	19A. % of household spending on transport	Household spending on "passenger transport services".	To be reported: <ul style="list-style-type: none"> <li>• By income (high/medium/low)</li> <li>• For Māori households</li> <li>• For Superannuitants (≈SuperGold card holders)</li> </ul>	Statistics NZ	Household Living-Cost Price Indexes	2018/19
	19B. SuperGold boardings	As per NZTA output class measure: Patronage (number of boardings using SuperGold concessions).	As per NZTA output class measure. If similar other programmes are introduced then use of these programmes will also be reported.	NZ Transport Agency	Existing NZTA output class reporting.	2018/19
	19C. \$ investment in improving access to public transport for people with disabilities	To be developed.	To be developed.	NZ Transport Agency	Should be possible from NZTA / Council financial reporting but requires additional work since expenditure is not currently disaggregated to this level.	To be confirmed
	***As per #6E*** % of people unable to make a beneficial land transport journey	-	-	-	-	-
20. Specialised services provide better access to transport for people [including people with disabilities] unable to drive themselves or use scheduled public transport	20A. Use of specialised services	Number of journeys being undertaken using specialised services. In future reporting is expected to include frequency and type of journeys.	To be reported by: <ul style="list-style-type: none"> <li>• Total number</li> <li>• Regional breakdowns</li> </ul>	NZ Transport Agency / Councils	Council-collected data on Total Mobility scheme.	2018/19
	20B. \$ investment in Total Mobility	To be developed (noting that Total Mobility may be reviewed).	To be reported by region.	NZ Transport Agency	Possible from NZTA / Council financial reporting but requires additional work.	2018/19

## Priority 4: Access-Resilience

Long-term result: Improved network resilience for the most critical connections

Short-term result	Proposed measure	Specifications / definitions	Reporting requirements	Responsible agency	Data source (including availability)	Expected availability
21. Improved resilience on routes where disruptions pose the highest economic and social costs	21A. Kilometres of road and rail infrastructure susceptible to coastal inundation with sea level rise	Length of state highway and local roads and rail at a specific height above mean high water springs (i.e. the highest level that spring tides reach on the average over a period of time). Specific height to be determined.	To be developed.	NZ Transport Agency/ Local Government New Zealand	To be developed.	2019/20
	***As per #12B*** % of routes of most economic and social importance that have viable alternative routes	-	-	-	-	-
22. Improved targeting of resilience risk and vulnerabilities through the use of an integrated whole-of-system approach which may include investment in non-transport infrastructure when this has clear transport benefits	22A. % of business cases that include resilience	% of business cases that cover routes of the most economic and social importance which: <ul style="list-style-type: none"> <li>• Demonstrate application of a resilience risk management framework</li> <li>• Identify resilience as a primary benefit of the proposed activity</li> <li>• Show how the resilience need will be addressed in the delivery of the activity</li> </ul>	To be reported for: <ul style="list-style-type: none"> <li>• State highways</li> <li>• Local roads.</li> </ul>	NZ Transport Agency	Manual query of Transport Investment Online and associated funding application documents. Feasibility of this is still unconfirmed.	To be confirmed
	22B. \$ investment in resilience	To be developed.	To be developed.	NZ Transport Agency	Possible from NZTA financial reporting (if resilience is captured as an outcome for investment) but requires additional work.	To be confirmed
23. When disruption to the network occurs, impacts of disruption are reduced at the parts of the network that have the most economic and social importance	23A. Number of affected travel hours that routes of most economic and social importance are unavailable	To be developed.	To be reported as: <ul style="list-style-type: none"> <li>• Total number of outages</li> <li>• Median length of outages (in hours)</li> <li>• % change since previous year</li> </ul>	NZ Transport Agency	To be developed.	To be confirmed
	23B. Availability of state highway network	As per NZTA output class measure: <i>Proportion of unplanned road closures resolved within standard timeframes.</i>	As per NZTA output class measure.	NZ Transport Agency	Existing NZTA output class reporting.	2018/19

## Priority 5: Environment

Long-term result: Reduce greenhouse gas emissions from transport

Short-term result	Proposed measure	Specifications / definitions	Reporting requirements	Responsible agency	Data source (including availability)	Expected availability
24. Reduced greenhouse gas emissions from land transport using whole-of system approach	24A. Tonnes of greenhouse gases emitted per year from land transport	Tonnes of CO2 equivalent emitted per year from land transport. Currently this measure is limited to road transport but is expected to be extended over time to include rail.	To be reported by mode and by region: <ul style="list-style-type: none"> <li>• Absolute value</li> <li>• Per capita</li> <li>• % change since previous year</li> <li>• As a % of total New Zealand emissions</li> </ul>	NZ Transport Agency	Vehicle emissions mapping tool (under development)	2018/19
	24B. \$ investment in greenhouse gas emission reduction measures	Total spend on: <ul style="list-style-type: none"> <li>• Supporting the uptake of low emission vehicles</li> <li>• Mobility and network management measures</li> </ul>	To be developed.	NZ Transport Agency	Possible from NZTA / Council financial reporting but requires additional work.	To be confirmed

## Long-term result: Reduce transport's negative effects on the local environment and public health

Short-term result	Proposed measure	Specifications / definitions	Reporting requirements	Responsible agency	Data source (including availability)	Expected availability
25. Reduced significant harmful effects of land transport related noise	25A. Number of people exposed to elevated levels of land transport noise	"Elevated" is yet to be defined but will likely be based on existing standards (e.g. those provided by Standards NZ, or the World Health Organisation). Currently this measure is limited to road transport on national, regional and arterial roads but is expected to be extended over time to include rail.	To be reported by region by: <ul style="list-style-type: none"> <li>• Absolute value</li> <li>• % change since previous year</li> <li>• % of total New Zealand population</li> </ul>	NZ Transport Agency	Land transport noise pollution model (under development).	2018/19
	25B. \$ investment in noise management practices	Total spend on: <ul style="list-style-type: none"> <li>• New noise mitigation measures/infrastructure</li> <li>• Maintenance and operations network management measures</li> </ul>	As an initial stage, this reporting will focus specifically on investment specifically targeting noise management. Ultimately the ideal measure would also include other activities that also have noise mitigation purposes, for example, road surfacing.	NZ Transport Agency	Not currently reported but possible from NZTA financial reporting data.	To be confirmed
26. Reduced significant harmful effects of land transport-related air pollution	26A. Tonnes of harmful emissions emitted per year from land transport	Tonnes of harmful emissions (e.g. fine particles PM <sub>10</sub> and PM <sub>2.5</sub> , oxides of nitrogen) emitted per year from land transport. Currently this measure is limited to road transport but is expected to be extended over time to include rail.	To be reported by mode and by region by: <ul style="list-style-type: none"> <li>• Absolute value</li> <li>• Per capita</li> <li>• % change since previous year</li> <li>• As a % of total New Zealand emissions</li> </ul>	NZ Transport Agency	Vehicle emissions mapping tool (under development).	2019/20
	26B. Number of people exposed to elevated concentrations of land transport-related air pollution	Elevated concentrations of air pollution (and how this is attributed to road transport) needs to be further defined but will likely be based on existing standards (e.g. national ambient air quality guidelines and standards, or those from the World Health Organisation). Currently this measure is limited to road transport but is expected to be extended over time to include rail. At this time, land transport related air pollution does not include dust from unsealed roads.	To be reported by mode and by region by: <ul style="list-style-type: none"> <li>• Absolute value</li> <li>• % change since previous year</li> <li>• % of total New Zealand population</li> </ul>	NZ Transport Agency	Vehicle emissions mapping tool (under development).	2019/20
	26C. Population harm from land transport-related air pollution	Apportioned deaths and Quality Adjusted Life Years (QALYS) from exposure to air pollutants from land transport.	To be reported by region.	Ministry for the Environment / Ministry of Transport / NZ Transport Agency / Health Research Council	Health and Air Pollution in New Zealand Study (HAPiNZ). Last completed in 2012, update confirmed for 2019.	2019/20
	***As per #24B*** \$ investment in greenhouse gas emission reduction measures	-	-	-	-	-
27. Reduced significant negative effects on water quality and biodiversity from construction and ongoing use of transport infrastructure	27A. Tonnes of selected contaminants discharged from the land transport network into sensitive water bodies	Tonnes of selected contaminants (including copper and zinc) discharged from the land transport network into outstanding freshwater bodies, wetlands of significant value or the coastal marine area	To be developed.	NZ Transport Agency / Ministry for the Environment	NZTA research stormwater research project outcomes could be adapted for this purpose, but this is likely to require significant resourcing. To be completed bi-annually and then four-yearly.	To be confirmed
	27B. \$ investment in: <ul style="list-style-type: none"> <li>• Storm water quality management</li> <li>• Biodiversity management practices</li> </ul>	Total spend on: <ul style="list-style-type: none"> <li>• New mitigation approaches</li> <li>• Network management measures</li> </ul>	To be developed.	NZ Transport Agency	This data is not currently captured at a national reporting level but may be held by Road Controlling Authorities.	To be confirmed
28. Increased uptake of active travel modes such as walking and cycling to support environmental and public health objectives	***As per #6B*** Mode share – people	-	-	-	-	-

## Priority 6: Value for money

## Long-term result: Better informed investment decision-making

Short-term result	Proposed measure	Specifications / definitions	Reporting requirements	Responsible agency	Data source (including availability)	Expected availability
29. A more rigorous and transparent investment appraisal system	29A. \$ investment in investment management	As per NZTA output class definition.	As per NZTA output class definition.	NZ Transport Agency	Existing NZTA output class reporting.	2018/19
	29B. Total cost of managing the funding allocation system as a % of the National Land Transport Programme expenditure	As per NZTA output class measure.	As per NZTA output class measure.	NZ Transport Agency	Existing NZTA output class reporting.	2018/19
	29C. Investment aligned to GPS priorities (assessed strategic case benefits)	\$ of all National Land Transport Fund investment that aligns with each of the GPS (sub)priorities.	To be reported as (1) total \$ investment, and (2) as % of all investment, for each of the sub-priorities: <ul style="list-style-type: none"> <li>• Safety</li> <li>• Access – Access</li> <li>• Access – Choice</li> <li>• Access – Resilience</li> <li>• Environment</li> </ul> Regional break-downs to be reported where possible.	NZ Transport Agency	NZTA funding approval and benefits mapping.	2018/19
	29D. Projected benefits for implementation activities at time of funding approval	To be defined. Will likely be limited to projects over an agreed threshold (e.g. \$100 million).	Benefits % of total project benefits and \$ identified in the business case at funding approval.	NZ Transport Agency	NZTA funding approvals and benefits mapping	2018/19
	29E. Projected versus realised benefits and costs of funded activities	Representative sample of completed implementation activities across activity classes for implementation activities.	To be supplemented by case studies of chosen projects (e.g. those where many adjustments were made).	NZ Transport Agency	Post approval reviews and post-implementation reviews	2019/20
	29F. Reporting of the assessment used in investment decisions	The assessment profile used for investment decisions in the NLTP.	Distribution of assessment profiles in activity classes (current IAF uses Results Alignment and Cost Benefit Appraisal).	NZ Transport Agency	NZTA funding approvals and assessment profiles	2018/19
	29G. \$ investment in activities with a benefit cost ratio of less than one	To be developed.	To be developed.	NZ Transport Agency	NZTA funding approvals and assessment profiles	2018/19
30. Enhanced reporting, monitoring and evaluation of GPS 2018 investment	30A. A monitoring and evaluation system is in place for investment decisions	<ul style="list-style-type: none"> <li>• Regular reports of investment decisions are published</li> <li>• Post implementation evaluations are published</li> </ul>	To be developed.	Ministry of Transport / NZ Transport Agency	NZTA benefits realisation	2018/19
	30B. Release of an annual GPS assessment report	-	-	Ministry of Transport	-	2018/19
31. Better integrated transport research across government	31A. % alignment of funded research to the NZ Transport Research Strategy	Number of projects that align with the NZ Transport Research Strategy, and total \$ investment into these projects.	To be reported as: <ul style="list-style-type: none"> <li>• Total number of relevant projects, and as a % of all funded research projects</li> <li>• Total \$ investment into relevant projects, and as a % of all investment into funded research projects</li> <li>• To be supplemented by case studies of chosen projects.</li> </ul>	NZ Transport Agency	Possible from NZTA funding approvals but requires additional work.	To be confirmed

## Long-term result: Improved returns

Short-term result	Proposed measure	Specifications / definitions	Reporting requirements	Responsible agency	Data source (including availability)	Expected availability
32. More effective and efficient investment from innovation in systems, standards, procurement and technology	32A. Realised benefits relating to innovation for internal and external projects (size and scope appropriate)	To be defined.	To be supplemented by case studies of chosen projects.	NZ Transport Agency	Possible from NZTA funding approvals but requires additional work.	To be confirmed

33. Improved returns from maintenance	33A. \$ investment in: <ul style="list-style-type: none"> <li>State highway maintenance</li> <li>Local road maintenance</li> </ul>	As per NZTA output class definition.	As per NZTA output class definition.	NZ Transport Agency	Existing NZTA output class reporting.	2018/19
	33B. Maintenance cost per lane kilometre delivered for: <ul style="list-style-type: none"> <li>State highway</li> <li>Local roads</li> </ul>	As per NZTA output class measure. "Lane kilometre delivered" is assumed to mean delivered to the required standard.	As per NZTA output class measure.	NZ Transport Agency	Existing NZTA output class reporting.	2018/19