



The 2018-21 Investment Assessment Framework (IAF) has been developed to give effect to the Government Policy Statement on land transport for 2018/19 to 2027/28 (GPS).

The Transport Agency uses the IAF, with our investment partners, as part of our investment decision making to assess and prioritise activities for investment from the National Land Transport Fund (NLTF) for inclusion in the National Land Transport Programme (NLTP). The IAF ensures that investment in land transport infrastructure and services delivers on the government's desired outcomes and priorities set out in the GPS.

28 June 2018

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This IAF document is a summary only of the Transport Agency's investment assessment framework as at 28 June 2018. It provides a high level snapshot in time and does not contain detailed current policy and guidance. Please refer to the Planning and Investment Knowledge Base (PIKB) as the official source of information.

More information

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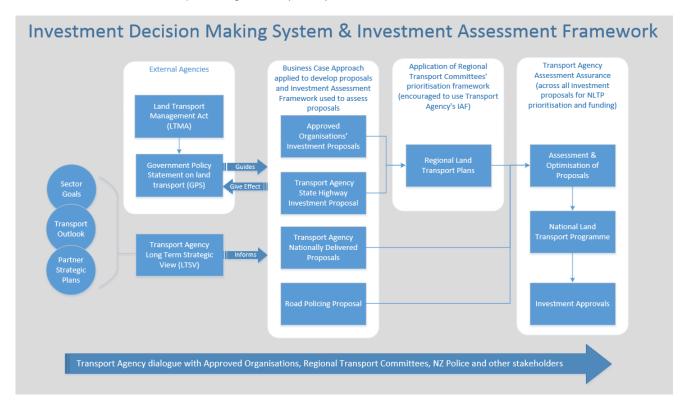
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IAF within the investment decision making system

The IAF is used to support the Transport Agency and our investment partners to develop land transport activities for inclusion in Regional Land Transport Plans (RLTPs), as part of the development and delivery of the 2018-21 National Land Transport Programme (NLTP).



IAF within the investment decision making system

The role of the IAF in the investment decision making system

The GPS sets out the government's priorities for the land transport sector including the outcomes the government expects from investment through the National Land Transport Fund (NLTF).

The IAF is the framework the Transport Agency uses, with approved organisations, to translate GPS priorities and expectations in order to develop an integrated prioritised NLTP that gives effect to the GPS.

The GPS direction

The GPS 2018 was released by the Ministry of Transport on 28 June 2018. The GPS identifies safety and access as key priorities, supported by the priorities of environment and value for money.

The GPS strategic objectives have been defined to provide a land transport system that:

- is a safe system, free of death and serious injury
- provides increased access to economic and social opportunities
- · enables transport choice and access
- is resilient
- reduces the adverse effects on the climate, local environment and public health
- delivers the right infrastructure and services to the right level at the best cost.

Themes have also been included in the GPS to assist understanding of how to effectively deliver on the priorities. The themes influence how the results should be delivered to ensure the best transport solutions for New Zealand are achieved. The themes for GPS 2018 are:

- a mode-neutral approach to transport planning and investment decisions
- incorporating technology and innovation into the design and delivery of land transport investment
- integrating land use and transport planning and delivery.

The GPS sets priorities, objectives, long, medium and short term results and ranges of funding to activity classes, to guide decision makers where to prioritise investment. The GPS does not determine the individual activities which will be funded, or how much funding any particular activity will receive. The role of the Transport Agency is to give effect to the GPS by using the IAF to prioritise which proposals should receive funding within the activity class funding ranges.

IAF key principles

The Transport Agency adopts a range of high level and activity class principles to ensure that the IAF appropriately achieves what the government seeks from investments in the transport sector:

- The IAF must help the Transport Agency give effect to the GPS and it must ensure there is a visible pathway from GPS priorities and results through to investment.
- The Transport Agency gives effect to the GPS by partnering with approved organisations and other sector stakeholders.
- The IAF is a translation of the GPS priorities and results into a prioritisation framework rather than a simple reiteration of the GPS which does not provide the granularity required for investment decision making.
- The GPS defines the outcomes and results from the sector which the government is looking for. The IAF
 interprets those results by defining the investment outputs which have been prioritised in the programme of
 work delivered under the NLTP.
- The IAF aims to achieve value for money by prioritising investment proposals which are targeted to achieve the GPS priorities and make efficient use of the available resources.
- Efficient use of available resources requires cost benefit appraisal which is tailored for the type of
 interventions required and the context of those interventions to achieve the GPS outcomes sought.
- Any activity already approved for local authorities is treated as committed ie they will not be required to be reviewed under the 2018-21 IAF.
- Any investment proposal seeking funding approval in the 2018-21 NLTP must be assessed and prioritised under the IAF by the Transport Agency.

Overview of the investment decision making system

Rigorous application of the investment decision making system gives effect to the GPS priority of achieving value for money. Entry to the investment decision making system is through the assessment of the business case, where proposals are assessed for evidence to identify the strategic case for investment.

The Transport Agency assesses business cases and supporting evidence for investment proposals and considers how well the principles of the business case approach have been applied. The business case approach forms the basis for activity and programme development for investment from the NLTF. It supports

planning and investing for outcomes, ensuring early collaboration between stakeholders and progressive development of a robust, evidence based investment case.

The business case provides the evidence to identify the strategic case for investment, and develops a short-list of potential options. It identifies the best option to address the issue and the benefits that will be realised while managing delivery risk.

At each investment decision point an assessment of the business case is undertaken by the Transport Agency before the activity progresses to assessment under the IAF. The assessment of the business case consists of a set of questions specific to the type of activity, ie whether it is an improvement activity, maintenance programme, public transport services programme or promotion of road safety and demand management.

Proposals that pass the assessment of the business case 'gateway' are then assessed against the two IAF factors, results alignment and cost benefit appraisal, and then prioritised. The Transport Agency will also assess that proposals are appropriately scaled and integrated according to their context, and options for the response are considered on a mode neutral basis.

We have retained the changes to the framework assessment components proposed in 2017, including the reduction to a two-factor assessment approach.

As shown in the diagram below, programme support will assist in high level filtering of issues and assessing their associated urgency within the national context, to address the identified strategic case within three years, 10 years or beyond 10 years.

Business case

Assessment of the Business Case
(Pass / Rework / Fail)
is there evidence that the issue and its benefits
tifies investment and that the proposed response
best solves the result identified (is it effective)?

IAF

Results Alignment
(Low / Medium / High / Very high)
What is the significance of the case for change to the desired results in the GPS
(is it in the public interest)?

Cost benefit Appraisal (Low / Medium / High / Very high) How efficient is the proposal?

Supported by

Programme Support (3 / 10 / 10+ years) What is the urgency?

Results alignment

Results alignment is an assessment of investment proposals against the outcomes sought from the GPS in terms of safety, access and environment. Assessment is at an activity class level and considers criteria that align to the GPS results, rating the alignment from low to very high.

The results alignment criteria for each activity class grouping are tabulated from page 17 onwards of this document. Types of levels of service are defined with specific reference to gaps (or opportunities, including efficiency gains) in levels of service related to activity class frameworks, identified in Appendix 1: Reference frameworks, and the approach defines priority criteria summarised as follows:

GPS PRIORITY	LOW	MEDIUM	HIGH	VERY HIGH
Safety				
Access – thriving regions	Continuous programmes: a higher level of service than required Improvements: a gap in required levels of service	Continuous programmes: a fit- for-purpose level of service Improvements: an	Continuous programmes: a gap in existing levels of service	Directly link to specific priority results sought in the GPS
Access – liveable cities		identified gap of some significance in required levels of	Improvements: a significant gap in a targeted regional or national context	
Environment		services		

Details of the results alignment criteria and application can be found on the Transport Agency's PIKB.

Cost benefit appraisal

Overview

The cost benefit appraisal is the current evaluation tool used to assess the efficiency of proposed investments, comparing the benefits that are achieved with the inputs (primarily costs) used to achieve the benefits.

The Transport Agency is required to prioritise investments made through the NLTP and ensure that these achieve value for money. Value for money is one of the GPS strategic priorities and is expected to support the key GPS priorities of safety and access.

The GPS continues the emphasis on value for money to maximise the impact of money spent to achieve the government's outcomes. Achievement of value for money will be supported through decision makers taking account of the full range of benefits and costs over the whole life of investments. The GPS expects that achieving value for money will place greater emphasis on transparent investment decision-making, and seeks to ensure that investments are made at the best cost. It also identifies a need to investigate the appropriateness of current evaluation practices, to reflect best evidence to ensure they are fit-for-purpose in giving effect to the GPS strategic priorities.

The Transport Agency Board has approved the expansion of programme level assessment to improvement activity classes. A number of these improvement activities need to be delivered at a programme level to achieve the GPS priorities, especially in safety. Assessment of cost benefit appraisal at a programme level reflects this policy.

The Transport Agency has commenced an investigation into the effectiveness of its current evaluation practices and will provide the outcomes for consideration in the second stage GPS.

Cost benefit appraisal and results alignment ratings determine what projects and programmes are included in the NLTP, and inform priority for investment.

Cost benefit appraisal for improvement activities

For improvement activities the cost benefit appraisal assessment methodology normally requires determination of a benefit-cost ratio (BCR). As stated in the GPS investment decisions need to demonstrate delivery of net positive benefits that exceed the whole-of-life costs.

For prioritisation purposes, the BCR is categorised in priority order from low (for BCRs of 1-2.9) to very high (for BCRs of 10+).

For improvement activities where a BCR is not applicable, eg like-for-like bridge replacements, the cost benefit appraisal uses least whole-of-life economic cost. Instead of a priority rating, these activities are designated with a Present Value End of Life (PVEOL) rating.

Safety improvement activities

Safety is a key priority in the GPS which signals a requirement for a significant increase in the level of ambition for delivering a land transport system free of death and serious injury (DSI). The Transport Agency's current evaluation methodology can result in some worthy safety projects being assessed with a very low priority which does not meet the previous expectation of a BCR greater than one, eg the high cost of some safety interventions and the negative impact on travel time in some cases overriding the safety benefits.

The GPS provides greater flexibility to the Transport Agency in its investment decision making and application of the cost benefit appraisal. It provides explicit recognition that programme level evaluations can take place to ensure optimal investment decisions for complex outcomes such as safety, access and other specific government priorities. The Transport Agency will develop criteria for deciding when programme level evaluations should take place, and will transparently report when and why programme level evaluations have taken place.

The IAF assessment methodology enables programmes of safety projects to be included in the 2018-21 NLTP to deliver the step change in safety outcomes sought in the GPS by:

- 1. Allowing for assessment and investment decisions to be made at a programme rather than individual project level:
 - Currently packages of inter-related and inter-dependent activities submitted for funding consideration
 are able to include activities with BCRs < 1 provided the overall package demonstrates delivery of net
 positive benefits that exceed whole of life costs and all the components of the package are completed.
 - The new policy enables the same approach as packages to be taken for programmes of work when the
 components of the programme are seeking to deliver a common outcome but they are not necessarily
 inter-related or inter-dependent.
 - The policy also establishes the mechanism to allow inclusion of activities that are highly effective in achieving GPS priorities but have a BCR< 1 into a programme, provided the overall programme demonstrates delivery of net positive benefits that exceed whole of life costs.
- 2. Providing clarification of the 'do nothing' and 'do minimum' for economic appraisal of speed management activities. In this situation, the 'do minimum' will be set at the safe and appropriate speed under the <u>Speed management guide</u>. The 'do nothing' is the existing baseline conditions of the network, based on the existing speed limit and existing infrastructure and services and forms the basis for assessing the effects of a safe and appropriate speed limit in the 'do minimum'. For some situations the best safety improvement option may be to simply lower the operating speed to a safe and appropriate level through the use of speed limit signs and minor infrastructure improvements that go with the new speed limits this will be the do minimum option and can potentially be the preferred option to enable safety improvements.
- 3. With respect to the treatment of travel time changes, the Transport Agency expects the evaluation of all activities and/or programmes to include the calculations of all positive and negative benefits. Where the

travel time changes are neither significant nor relevant, it may be appropriate to provide sensitivity testing excluding travel time changes. Further guidance will be provided on our Planning & Investment Knowledge Base (PIKB).

Guidance for the 2018-21 NLTP will be subject to change once the results are available from research that is planned during 2018/19 and to be implemented for the 2021-24 NLTP.

In all instances where any proposal (standalone project, or an activity within a programme) has a BCR<1, funding for these will only be approved by exception at the appropriate level of delegation.

For selecting the best safety investment option for a project, incremental economic cost benefit appraisal continues to be required.

Cost benefit appraisal for continuous programmes

Cost efficiency benchmarking is the main cost benefit appraisal methodology for assessing continuous programmes as a whole, and the activities within them.

Levels of service performance comparisons are set against required customer levels of service and trend analysis (past and future costs and demands).

Continuous programmes are assessed where a low, medium or high rating is determined for cost benefit appraisal based on their relative cost effectiveness, established through peer group and sector benchmarking comparisons.

Prioritisation

Prioritisation is based on the two assessment factors of results alignment and cost benefit appraisal.

Prioritisation for improvement activities

Prioritisation is the basis for NLTP inclusion. Depending on the amount of funding available for an activity class, activities with sufficiently high priority are included in the NLTP. Activities are then assessed for funding approval at the time they are ready to progress, and an appropriate business case has been developed and assessed.

Activities prioritised as improvements (in no particular order)

- Public transport improvements
- Rapid transit improvements
- Rail improvements (public transport)
- Walking and cycling improvements
- Regional improvements
- Local road improvements
- State highways improvements

The two assessment factors of results alignment and cost benefit appraisal are brought together to form an assessment profile that determines a proposal's priority. The table below summarises the priority order for improvement programme proposals based on the scores achieved.

RESULTS ALIGNMENT	COST BENEFIT APPRAISAL	PRIORITY ORDER
Very high	L/M/H/VH	1
L/M/H	Very high (BCR 10+); PV_EoL	2
High	High (BCR 5-9.9)	3
High	Medium (BCR 3-4.9)	4
Medium	High (BCR 5-9.9)	4
High	Low (BCR 1-2.9)	5
Medium	Medium (BCR 3-4.9)	5
Medium	Low (BCR 1-2.9)	6
Low	High (BCR 5-9.9)	7
Low	Medium (BCR 3-4.9)	8
Low	Low (BCR 1-2.9)	Exclude

If an activity is rated very high for results alignment then it is considered the highest priority for funding, provided it has a cost benefit appraisal rating of L/M/H/VH.

IAF prioritisation of safety activities excludes works undertaken for reasons of "urgent public safety", because these types of activities are funded using different prioritisation to enable urgent safety works eg the imminent collapse of a bridge.

Prioritisation for continuous programmes

Funding decisions for these programmes are made when the NLTP is adopted. This provides the sector and Transport Agency investment partners funding continuity certainty, tensioned through application of the appropriate assessment of the proposals received by the Transport Agency.

Applying the IAF to continuous programmes supports decisions around cost effective levels of investment to maintain an appropriate customer level of service, rather than providing definitive investment decisions.

Activities prioritised as continuous programmes (in no particular order)

- Public transport existing services
- Local road maintenance programme
- State highways maintenance programme

The two assessment factors of results alignment and cost benefit appraisal are brought together to form an assessment profile that determines proposal priority.

The business cases for continuous programmes are the result of collaborative assessment by the Transport Agency and its investment partners. They are therefore expected to achieve a medium or above rating from the IAF assessment. If there are inadequacies with a business case these would incur a condition of funding (eg one year of funding approved with the subsequent funding contingent on resolving the inadequacies during the NLTP period).

RESULTS ALIGNMENT	COST BENEFIT APPRAISAL	PRIORITY ORDER
Very high	Low/Medium/High	1
High	High	3
High	Medium	4
High	Low	5
Medium	High	4
Medium	Medium	5
Medium	Low	6

Funding levels will be informed by the profile and will take account of the Transport Agency's Intervention Hierarchy of maintain, operate and build.

Prioritisation for other programmes and activities

Hybrids of core improvement and continuous programmes

- Investment management, comprising:
 - o Regional land transport planning management.
 - Transport model development.
 - Activity management planning.
 - o Programme business case development.
- Promotion of road safety and demand management.
- Road policing programme.
- Low cost low risk improvement programmes.

Investment management

Only results alignment is assessed for investment management proposals.

For assessment, the investment management activity class is considered under its component parts, with each assessed and prioritised separately. Some parts are allocated a default profile eg regional land transport planning, sector research, and investment in the funding allocation system, recognising that these either are core activities (ie non-discretionary) or have a robust process for assessing and prioritising the activities within them.

Some parts of transport planning are assessed and prioritised for results alignment in a similar way to improvement activities, i.e. transport modelling, activity management planning improvements, and programme business case development (see the PIKB for definitions).

Promotion of road safety and demand management

The majority of road safety promotion activities are low cost, low risk activities, i.e. below \$1m in total cost, and therefore these are assessed as a programme in the same manner as low cost, low risk programmes for road improvements.

Road safety promotion activities above \$1m in total cost are assessed and prioritised separately, in the same way as an improvement activity in other activity classes.

Demand management promotion is a new component of this activity class and the activities are assessed and prioritised separately, also in the same way as an improvement activity.

Road policing programme

The road policing programme is made up of a base programme which maintains current levels of enforcement, and an improvements programme.

The base road policing component is assessed at a programme level, in a similar way to continuous programmes. Improvements to the road policing programme are assessed and prioritised in the same way as an improvement activity in other activity classes.

Road policing is under review and we anticipate a range of recommendations regarding delivery of, and investment in, the road policing programme.

Low cost low risk programmes

Low cost low risk improvement programmes of projects less than \$1m in total cost are assessed under a streamlined approach. The IAF identifies criteria for results alignment in respect of the low cost low risk programmes as follows:

- The assessment is made at the programme level. The generic rating for results alignment for low cost low risk programmes is high.
- Results alignment for each activity in the programme is captured in the relevant low cost, low risk template and it is critical this is completed and kept current.
- A strong linkage to activity management planning documents (eg AMP, RPTP) should provide insight to the quality and value proposition of these programmes.
- The generic rating for cost benefit appraisal for low cost, low risk programmes is medium.

Key principles for low cost low risk programmes include:

- The expectation is that the activities in these programmes will be optimised following a straightforward process to reflect the government's priorities. Investment partners can apply their own assessment framework during their programme prioritisation, but there is a clear expectation they will assess an individual project's alignment with the appropriate activity class results alignment criteria.
- Walking and cycling activities that form part of an investment partner's low cost, low risk programme should be cross-checked for alignment with activities out of the walking and cycling activity class.
- It's particularly important there is flexibility to adjust the programme over the three year NLTP period, particularly where parts of the programme are not well developed at the time the NLTP is adopted.
- Projects within a low cost low risk programme will not need to calculate a BCR. They will need to identify the principal benefit that the project is seeking to achieve.

Investment criteria tables

The investment assessment criteria tables below will enable assessors to determine the degree to which proposals align with the results sought in the GPS.

The Transport Agency has combined activity class assessment criteria where this makes sense. In some cases the criteria within each table apply only to certain components of activity classes eg public transport improvements and continuous programmes are assessed using different criteria, even though they are part of the same public transport activity class.

The GPS refers to main urban centres as "major metropolitan areas" (list provided in Appendix 2: Major metros). In the results alignment criteria tables below "major metros" includes the GPS major metropolitan areas plus Queenstown.

Explicit definitions are appropriate for key words used in the assessment criteria, consistent with the definitions which are referenced in the PIKB.

Definitions

Here is an overview of key definitions for words used in this document with specific meaning in the context of the IAF and the two assessment factors of results alignment and cost benefit appraisal. We will shortly be adding a comprehensive <u>list of definitions</u> to PIKB.

Definition of significant

Investment proposal assessment considers how the problem/issue/opportunity is significant:

- in relation to the desired GPS result(s)
- in relation to the scale of the gap to the appropriate customer level of service or performance measure
- · as part of an end-to-end journey
- from a national perspective (given local, regional, national perspectives)
- from a community perspective in regard to access to social and economic opportunities
- in relation to GPS timeframes ie a significant issue/opportunity within 3/10/10+ years.

A gap in the levels of service is defined as the difference between the appropriate level of service and the current level of service. Evidence is needed to support the significance of the gap. The problem and benefits should be described in the strategic case with reference to appropriate levels of service. Evidence collected about the current performance compared to the expected performance will help define a gap, if any. Evidence is needed to show that:

- the right level of service framework is being used to define the gap
- the framework is being used appropriately for the activity
- current system performance expectations or customer levels of service are not being met
- the benefits will deliver an improvement in levels of service or system performance
- the benefits are significant with regards to GPS priorities.

The level of service gaps are defined as follows:

Significant gap

Evidence shows that there is significant under-performance in at least one key aspect resulting in performance lower than its classification and the gap to the appropriate service levels or system performance significantly impacts on the customer experience. This will have been robustly defined against appropriate levels of service (or other proxy) relevant for the issue. When using the One Network Road Classification (ONRC), if the level of service fails to meet the expectations for the road classification below the classification of the road in question, then it is a significant gap.

Identified gap

Evidence shows that a gap in service level or system performance exists that does not meaningfully
meet at least one or more aspect described in its classification, intended use or function. When
using the ONRC, if the level of service fails to meet the expectations for the road classification of
the road in question, then it is an identified gap.

Addresses an issue

Evidence shows that the level of service or system performance materially achieves all aspects
described in its classification. The value of benefits and change to levels of service or system
performance are not significant or robustly defined.

During preparation of a business case, there may be situations where critical thinking through the business case approach uncovers no strong evidence that a gap in levels of service or system performance exist. This is an acceptable outcome to the Transport Agency as it might suggest the system is running optimally.

Also during the preparation of the business case, service levels may be shown to be above expectations. This indicates a system performance gap and further effort may be needed to assess the significance of this gap and consider system performance and optimisation.

Any potential need for investment comes from addressing a level of service gap and/or system performance gap in delivering the appropriate level of service. Historically, the gap has not been explicitly or consistently defined.

The ONRC defines nationally consistent customer levels of service for roads. It provides functional classification, customer levels of service and related performance measures orientated towards current network layout and performance, and is used to identify strategic gaps in performance where the road is not currently fit-for-purpose for the function it is meant to currently perform.

These gaps at the strategic level are then used to inform the development of strategic objectives of the Network Operating Framework (NOF) and the subsequent mapping stage of the NOF process. The NOF provides a 'One-Network' view across modes and ownership for an urban area. It is a planning tool that defines strategic intent and how far away from delivery the network is. It enables better visibility of conflict between modes and demonstrates the trade-offs required, balancing the competing demands for limited road space. For more information refer to the reference frameworks section below.

Over time, all roads in a particular category should offer an increasingly consistent fit for purpose customer level of service for users. Identifying the gap to the ONRC customer levels of service is a key input into the assessment of results alignment for improvements, while maintaining appropriate ONRC levels of service is the key input for assessment of maintenance programmes.

No nationally consistent level of service or classification yet exists for public transport or walking and cycling. We expect major metros and most urban areas to have a NOF, which would define the customer levels of service for all modes. In these activity classes we use the NOF to determine the significance of the problem, issue or opportunity including the geographical classification such as main urban areas or primary routes.

Definition of urban growth areas

Under the National Policy Statement on Urban Development Capacity (NPS) councils for urban growth areas identified as medium or high priority housing growth are required to develop a long term growth plan, and this will need to integrate with their strategic planning for integrated transport and land use.

To align the intentions of the NPS and GPS requires that the IAF appropriates the definitions for high and medium growth areas for the purposes of housing prioritisation.

High growth urban area means any urban area (as defined by Statistics New Zealand in 2016) that:

a)

has either:

- a resident population of over 30,000 people according to the most recent Statistics New Zealand urban area resident population estimates, or
- at any point in the year a combined resident population and visitor population of over 30,000 people, using the most recent Statistics New Zealand urban area resident population estimates

and

b) in which the resident population of that urban area is projected to grow by more than 10% between 2013 to 2023, according to the most recent Statistics New Zealand medium urban area population projections for 2013(base)-2023.

The second stage GPS will better reflect transport's role in the urban development agenda including support for high growth areas beyond major metros, and this may include those areas defined as medium growth urban areas.

Medium growth urban area means any urban area (as defined by Statistics New Zealand in 2016) that:

a) has a resident population of over 30,000 people according to the most recent Statistics New Zealand urban area resident population estimates

and

b) in which the resident population of that urban area is projected to grow by between 5% and 10% between 2013 to 2023, according to the most recent Statistics New Zealand medium urban area population projections for 2013(base)-2023.

Note that the definitions of high growth and medium growth urban areas are a transitional definition, and will be reviewed and amended by Statistics New Zealand no later than 31 December 2018. Any definition changes will inform the IAF definitions.

Definition of regional economic development (RED) areas

There are currently 10 regions targeted for economic development in the context of land transport investment:

- Northland
- Waikato
- Bay of Plenty
- Gisborne
- Hawke's Bay
- Manawatu/Whanganui
- Taranaki
- Canterbury
- West Coast
- Southland

Further regions may subsequently be included in the list eg Top of the South (Nelson/Marlborough/Tasman) and Otago.

Definition of predicted and perceived risk

In determining the rating for results alignment for the safety GPS priority, the terms predicted and perceived safety risks are stipulated:

- Predicted safety risk is defined in the Transport Agency's <u>High Risk Intersection Guides</u> as risk determined by prediction models based on traffic and road characteristics which have been developed in Transport Agency research projects, some of which have been included in the Economic Evaluation Manual (EEM). Further references include New Zealand Road Assessment Programme, <u>KiwiRAP</u> and <u>Infrastructure Risk</u> <u>Rating</u> (IRR).
- Perceived safety risk is a new consideration and is the risk transport system users or potential users believe
 exists, and that affects their use of the system ie the perceived danger of different transport modes whether
 through direct use or non-use. For reference, research has been conducted in this area eg <u>European</u>
 Survey of Road Users' Safety Attitudes.

Public transport, rapid transit and transitional rail improvements

Public transport improvements are a component of the public transport activity class and include new infrastructure and significant increases in services not covered by the public transport continuous programme. The criteria also cover new infrastructure for the new rapid transit and transitional rail improvements activity classes. This includes new improvements to existing assets and services.

Key principles

- The assessment and prioritisation of rapid transit improvements is the same as that for any other public transport improvements.
- Only public transport proposals that meet the very high criteria will qualify for consideration for rapid transit activity class funding.

GPS PRIORITIES	LOW	MEDIUM	HIGH	VERY HIGH
	A low results alignment may be given if the activity addresses one or more of the following criteria:	A medium results alignment may be given if the activity addresses one or more of the following criteria:	A high results alignment may be given if the activity addresses one or more of the following criteria:	A very high results alignment must only be given if the activity addresses one or more of the following criteria:
<u>Safety</u> - a safe transport system free of death and serious injury			enhances actual and perceived safe use of and access to public transport	addresses a very high predicted safety risk resulting from public transport
Access to opportunities, enables transport choice and access, and is resilient - thriving regions	addresses an identified gap in the level of service in accessing social or economic opportunities	 addresses a significant gap in level of service in accessing social or economic opportunities and is identified in an approved programme addresses a significant gap for inter-regional public transport 	 addresses a significant gap in level of service in accessing social or economic opportunities in a region and is identified in an approved regional economic development programme (RED) as making a significant contribution makes best use of the public transport service operations in a multi-modal context with land use supports technology to enhance public transport user experience addresses significant resilience gap in the public transport network addresses an unplanned loss of an existing significant public funded transport connection 	
Access to opportunities, enables transport choice and access, and is resilient - liveable cities	addresses an identified gap in the level of service in accessing social or economic opportunities	 addresses a significant gap in level of service in accessing social or economic opportunities and is identified in an approved programme address identified gap in access to new housing in medium growth urban areas trials innovations in public transport that test improvements in levels of service supports agreed integrated land use and multimodal plans in urban areas 	 addresses a significant gap in level of service in accessing social or economic opportunities and makes a significant contribution address significant gap in access to new housing in high growth urban areas supports agreed integrated land use, multi-modal plans and mode shift in major metros improves intermodal connectivity where this enhances the appropriate use of public transport makes best use of the public transport service operations and connection to other services supports technology to enhance public transport user experience address significant resilience risk to continued operation of the public transport network addresses an unplanned loss of an existing significant public funded transport connection 	enables a substantial increase in access to social and economic opportunities for large numbers of people¹ along dedicated key corridors and enables transit-oriented development
Environment - reduce adverse effects on the climate, local environment and public health		enables reductions in harm to the environment and people, particularly arising from land transport-related air pollution and noise	 enables significant reductions in harm to the environment and people, particularly arising from land transport-related air pollution and noise enables long term reductions in greenhouse gas emissions from land transport 	

¹ Rapid transit improvement proposals need to demonstrate that they will substantially increase the movement of large numbers of passengers on dedicated key major metro corridors.

Public transport existing services (continuous programme)

This component of the public transport activity class includes investment in provision of existing services, at appropriate levels of service, and may include moderate investments in incremental service improvements.

Principles

- Continuous programmes are supported through an approved RLTP.
- The results alignment rating assessment is not an indication of how well a continuous programme is being optimised and delivered by an organisation. A medium rather than a high results alignment rating should not be viewed as having "negative" management connotations regarding network performance. A medium results alignment rating provides an indication a network is being managed to largely meet appropriate customer levels of service.

GPS PRIORITIES	LOW	MEDIUM	HIGH	VERY HIGH
	A low results alignment may be given if the activity addresses the following criteria:	A medium results alignment may be given if the activity addresses as many of the following criteria as possible:	A high results alignment may be given if the activity addresses as many of the following criteria as possible:	Not applicable
<u>Safety</u> - a safe transport system free of death and serious injury		maintains levels of safety and security	addresses a gap in levels of safety and security that can be addressed through moderate increase in investment	
Access to opportunities, enables transport choice and access, and is resilient - thriving regions Access to opportunities, enables transport choice and access, and is resilient - liveable cities	maintains a customer level of service above the required level	provides an appropriate customer level of service for access to social and economic opportunities	addresses a gap in an appropriate customer level of service that can be addressed through moderate increase in investment	
Environment - reduce adverse effects on the climate, local environment and public health		enables reductions in harm to the environment and people, particularly arising from transport- related air pollution and noise	 enables significant reductions in harm to the environment and people, particularly arising from land transport-related air pollution and noise enables long term reductions in greenhouse gas emissions from land transport 	

Local road and state highway maintenance

These activity classes allow for investment to maintain local roads and state highways (including footpaths and cycleways) at appropriate levels of service and also to respond to reduced levels of service as a result of natural events.

The opportunity will be provided to include footpath maintenance within local road maintenance programmes.

Key principles

- The Transport Agency expects road maintenance programmes to be well linked to long term planning documents, particularly activity management plans (AMPs).
- The programme must be supported by a robust business case, in most cases the AMP, and should reflect both the direction provided by the GPS and levels of service guidance in the ONRC.
- The programme must demonstrate how the request makes best use of the life-cycle costs of the road networks in delivering the appropriate customer levels of service.

GPS PRIORITIES	LOW	MEDIUM	HIGH	VERY HIGH
	A low results alignment may be given if the activity addresses the following criteria:	A medium results alignment may be given if the activity addresses as many of the following criteria as possible:	A high results alignment may be given if the activity addresses as many of the following criteria as possible:	A very high results alignment must only be given if the activity addresses the following criteria:
Safety - a safe transport system free of death and serious injury Access to opportunities, enables transport choice and access, and is resilient - thriving regions Access to opportunities, enables transport choice and access, and is resilient - liveable cities Environment - reduce adverse effects on the climate, local environment and public health	maintains a customer level of service above the required level	 maintains appropriate customer levels of service, to provide safe and resilient access to social and economic opportunities, including tourism and freight movement maintains the ability to use existing network, including use by people who identify as disabled, and reduce environmental and public health harms 	 addresses a significant gap in customer levels of service to provide safe and resilient access to social and economic opportunities, including tourism and freight movement makes best use of the existing network, including use by people who identify as disabled, and reduce environmental and public health harms 	addresses the immediate response and reinstatement of levels of service as a result of the significant impact of patural events.

Promotion of road safety and demand management

This activity class is a combination of investment in road safety promotion and new activity of transport system demand management promotion. These programmes are assessed as improvements rather than continuous programmes as they involve assessing investment proposals to achieve step changes in performance.

New Zealand's current road safety strategy, Safer Journeys, was released in 2010 to guide improvements in road safety from 2010 to 2020. It targets the reduction of deaths and serious injuries and the improvement of public health outcomes as a key strategic priority.

The Safer Journeys' vision is of a safe road system increasingly free of death and serious injury. Safer Journeys will be completed in 2020, and a new road safety strategy will be developed for 2020-2030. The government has signalled that it sees a review of the strategy as a priority. It has also signalled that any new strategy should be broader in scope and explore the benefits of a broader harm reduction strategy for New Zealand with a focus on all road transport users. It should include a greater focus on walking and cycling and consideration of a broader range of benefits and harms, including health related impacts from emissions and noise pollution, as well as how improving safety can support greater choice in transport options. It should also explicitly consider personal safety while travelling, especially in the developing shared, and potentially driverless, modes of travel.

The Transport Agency has adopted the Communities at Risk Register to prioritise funding to those communities that feature highly within a national risk area. It also addresses issues that are not identified as an area of high concern in the Safer Journeys strategy, but are still a significant local risk issue.

Demand management promotion contributes towards safety, the use of alternative modes, environmental and public health outcomes. It also provides tangible financial benefits for individuals, businesses and organisations (eg deferral of infrastructure investment, reducing business travel costs such as office parking space, and improving land use).

Key principle

• Safer Journeys or future safety strategies developed by government will define strategy for road safety promotion programmes and activities.

GPS PRIORITIES	LOW	MEDIUM	HIGH	VERY HIGH
	A low results alignment may be given if the activity addresses the following criteria:	A medium results alignment may be given if the activity addresses as many of the following criteria as possible:	A high results alignment may be given if the activity addresses as many of the following criteria as possible:	A very high results alignment must only be given if the activity addresses as many of the following criteria as possible:
Safety - a safe transport system free of death and serious injury	promotes an approach across road safety promotion programmes and tools	 targets a national or local issue in a Safer Journeys area of ongoing or medium concern targets an integrated approach across road safety promotion programmes and tools focused on medium risks promotes system user awareness of safety issues and risks targets a local issue for a community at medium risk² 	 targets a national or local issue in a Safer Journeys area of high concern targets an integrated approach across road safety promotion programmes and tools focused on high risks promotes system user awareness of significant safety issues and risks targets a local issue for a community at high risk⁴ 	 promotes the implementation of an approved speed management approach focused on treating the top 10 percent of the network that will result in the greatest reduction in deaths and serious injuries promotes changes made to safety regulation that address one of the high priority safety areas
Access to opportunities, enables transport choice and access, and is resilient - thriving regions		 promotes system user and community³ awareness and use of optimal travel choices including tourism and freight 	 targets mode shifting and ride sharing particularly from single occupancy vehicles to improve access to economic and social opportunities 	
Access to opportunities, enables transport choice and access, and is resilient - liveable cities		 promotes increases in average vehicle occupancy promotes system user and community awareness and use of optimal travel choices supports agreed integrated land use and multi-modal plans in urban areas promotes mode shifting to improve access to economic and social opportunities and improve amenity in metro areas promotes opportunity to establish and promote active modes or public transport access to new housing in medium growth urban areas 	 targets the uptake of technology for the purposes of improved demand management in major metros targets system user and community awareness and use of optimal travel choices at peak system use periods supports agreed integrated land use and multi-modal plans in major metros targets mode shifting and ride sharing to improve access to economic and social opportunities and improve amenity in major metros targets opportunity to establish and promote active modes or public transport access to new housing in high growth urban areas 	
Environment - reduce adverse effects on the climate, local environment and public health		 promotes lower emissions from the transport system to reduce environmental and public health harms promotes the use of active modes for health and environmental benefits 	 targets promotion of significant lower emissions from the transport system to reduce environmental and public health harms targets the use of active modes for health and environmental benefits 	

As defined in the Communities at Risk Register.
 Community is widely defined and may include residents, schools, employers, logistics providers and developers.

Walking and cycling improvements

This activity class is intended to cover funding for walking and cycling investments that are not otherwise part of a road improvement or public transport improvement activity. This includes new improvements and improvements to existing assets and services.

Investment to maintain and renew walking and cycling infrastructure (including eligible emergency works) will be covered under the local road and state highway maintenance activity classes. Walking and cycling improvements are assumed to enable transport choice and safe use, contribute to reductions of adverse effects on climate, and positively contribute towards public health. Building walking and cycling infrastructure needs to be complemented by investment to promote and encourage safe use of the transport network.

Key principle

- In the absence of a defined levels of service framework for cycling the default is the Cycle Network Guidance Planning and Design (CNG) to guide appropriate levels of service using the Austroads levels of service tool.
- In the absence of a defined levels of service framework for walking the default is the Pedestrian Planning and Design guide and use of the Austroads levels of service tool is recommended.

GPS PRIORITIES	LOW	MEDIUM	HIGH	VERY HIGH
	A low results alignment may be given if the activity addresses one or more of the following criteria:	A medium results alignment may be given if the activity addresses one or more of the following criteria:	A high results alignment may be given if the activity addresses one or more of the following criteria:	A very high results alignment must only be given if the activity addresses one or more of the following criteria:
<u>Safety</u> - a safe transport system free of death and serious injury	addresses identified safety issues	 addresses a predicted medium walking or cycling safety risk⁴ addresses a perceived safety risk to use of the mode 	 addresses a high predicted walking or cycling safety risk⁶ addresses a high perceived safety risk to use of the mode 	addresses a very high predicted walking or cycling safety risk
Access to opportunities, enables transport choice and access, and is resilient - thriving regions	addresses a gap in access to social and economic opportunities	 address an identified gap in an approved RED programme targets the completion and promotion of strategic networks to enable access to social and economic opportunities addresses an identified problem with the ability to use existing facilities including use by people who identify as disabled and young people addresses a high resilience risk in a corridor 	 address a significant gap in an approved RED programme supports development of the connections to the NZ Cycle Network and Te Araroa Trail, including the premium tourism trails addresses a significant problem with the ability to use existing facilities including promotion, and use by people who identify as disabled and young people supports increasing the uptake of children using walking and cycling especially to and from school addresses a very high resilience risk in a corridor 	addresses a critical missing link in a strategic network connection
Access to opportunities, enables transport choice and access, and is resilient - liveable cities	addresses a gap in access to social and economic opportunities	 targets the completion and promotion of networks in urban areas to enable access to social and economic opportunities addresses a high resilience risk in a corridor in an urban area supports agreed integrated land use and multi-modal plans in urban areas addresses an identified problem with the ability to use existing facilities including use by people who identify as disabled and young people address identified gap in access to new housing in medium growth urban areas 	 targets the completion and promotion of networks in major metros to enable access to social and economic opportunities addresses a significant problem with the ability to use existing facilities including use by people who identify as disabled supports increasing the uptake of children using walking and cycling especially to and from school addresses a high or very high resilience risk in a corridor in a main urban area supports agreed integrated land use and multi-modal plans in major metros address significant gap in access to new housing in high growth urban areas 	addresses a critical missing link in a strategic network or multi-modal interchange in major metros
Environment - reduce adverse effects on the climate, local environment and public health		enables a modal shift from private motor vehicles to active modes	enables a significant modal shift from private motor vehicles to active modes	

⁴ As defined in the Communities at Risk Register.

Regional, local road and state highway improvements

This activity class includes investment in improvements of regional, local roads and state highway infrastructure. This includes new improvements to existing assets and services. Evaluation of proposals considers short and long term impacts which may identify gaps such as amenity and placemaking⁵ eg in Wanaka where the road improvement slowed traffic to enhance economic and social opportunities for tourism based on active modes.

Principles

- The ONRC defines the levels of service for these activity classes and is the basis of assessment criteria.
- The IAF will support investment proposals that are complementary to the Provincial Growth Fund (PGF), and demonstrated linkages are evident in business cases.

GPS PRIORITIES	LOW	MEDIUM	HIGH	VERY HIGH
	A low results alignment may be given if the activity addresses one or more of the following criteria:	A medium results alignment may be given if the activity addresses one or more of the following criteria:	A high results alignment may be given if the activity addresses one or more of the following criteria:	A very high results alignment must only be given if the activity addresses one or more of the following criteria:
Safety - a safe transport system free of death and serious injury	address safety gaps with reference to the ONRC	addresses safety issues presenting a medium crash risk ⁶ , affecting communities subject to medium safety risk, and/or in Safer Journeys area of medium concern	 addresses safety issues presenting a high crash risk, affecting communities subject to high safety risk, and/or in Safer Journeys area of high concern addresses safety issues presenting a high societal consequence risk 	 implements a speed management approach focusing on treating the top 10 percent of the network that will result in the greatest reduction in deaths and serious injuries targeting areas of high collective risk with high DSI reduction measures that achieve a DSI reduction of at least 40%
Access to opportunities, enables transport choice and access, and is resilient - Thriving regions	address identified resilience gap or impediments to accessing social and economic opportunities	 addresses an identified gap in an approved RED programme addresses significant resilience gap or impediment to access on regionally important social and economic connections supports priority elements in agreed integrated land use and multimodal plans in regions makes best use of key corridors that prioritise regional freight and tourism provides operational efficiencies to reduce the costs of meeting appropriate levels of service without impacting benefits adversely 	 enables a significant regional economic development opportunity in an approved RED programme addresses significant resilience gap or impediment to access on nationally important social and economic connections addresses a gap in an approved RED programme in high priority RED regions makes best use of key corridors that prioritise national freight and tourism provides significant operational efficiencies to reduce the costs of meeting appropriate levels of service without impacting benefits adversely 	
Access to opportunities, enables transport choice and access, and is resilient - Liveable cities	address identified resilience gap or impediments to accessing social and economic opportunities	 addresses significant gap in access to social or economic opportunities address identified gap in access to new housing in medium growth urban areas addresses identified resilience risk to continued operation of the network addresses significant gap in integrated intermodal and user information, and significant deficiencies in network operation provides operational efficiencies to reduce the costs of meeting appropriate levels of service without impacting benefits adversely 	 supports high priority elements in agreed integrated land use and multi-modal plans address significant gap in access to new housing in high growth urban areas addresses a significant resilience risk to continued operation of key corridors makes best use of key corridors that prioritise multi-modal use and freight provides significant operational efficiencies to reduce the costs of meeting appropriate levels of service without impacting benefits adversely 	
Environment - Reduce adverse effects on the climate, local environment and public health		 enables reductions in harm to the environment and people, particularly arising from land transport-related air pollution, noise, and impact of construction and ongoing use of transport infrastructure on water quality and biodiversity addresses long term reductions in greenhouse gas emissions from land transport 	 addresses significant reductions in harm to the environment and people, particularly arising from land transport-related air pollution, noise, and impact of construction and ongoing use of transport infrastructure on water quality and biodiversity addresses long term significant reductions in greenhouse gas emissions from land transport 	

⁵ Placemaking is a multi-faceted approach to the planning, design and management of public spaces.

⁶ As currently defined in the PIKB (can be redefined as Safety Risk if considered appropriate, given the broad context of roading improvement programmes which may include activities from other activity classes).

Road policing programme

This activity class enables funding to be invested in road policing activities nationally, targeting safety in particular.

The road policing programme is negotiated and the New Zealand Police report back to the Transport Agency on investment performance. The current road policing programme review will potentially move us from the current negotiated approach to a partnership approach focused on agreed outcomes and accountability.

Key principle

- Effective road policing activities, in partnership with other interventions contributes to achieving the vision of Safer Journeys and reducing deaths and serious injuries.
- Base elements of the road policing programme are treated as a continuous programme, and include investment in the provision of existing services at appropriate levels of service, and may include moderate investment in service and productivity improvements.

GPS PRIORITIES	LOW	MEDIUM	HIGH	VERY HIGH
	A low results alignment may be given if the activity addresses all of the following criteria:	A medium results alignment may be given if the activity addresses all of the following criteria:	A high results alignment may be given if the activity addresses all of the following criteria:	A very high results alignment must only be given if the activity addresses all of the following criteria:
Safety - a safe transport system free of death and serious injury	enforces legislative requirements	 targets activities identified as medium concern in the Safer Journeys Strategy and Action Plan contributes to minimising the level of death and serious injuries on our roads through prevention ensures vehicle fleet and operation complies with the legislative requirements 	 targets activities identified as high concern in the Safer Journeys Strategy and Action Plan and is well integrated with other road safety activities targets the use of technology to drive improved safety performance across the transport system targets high risk behaviours, particularly driver distraction and use of restraints 	 supports implementation of the Speed Management Guide targets activities to address driving at unsafe speeds targets activities to address driver impairment
Access to opportunities, enables transport choice and access, and is resilient - thriving regions Access to opportunities, enables transport choice and access, and is resilient - liveable cities	contributes to minimising the levels of economic and social disruption in transport system operation	 targets a significant contribution to minimising the levels of economic and social disruption in transport system operation ensures vehicle fleet and operation complies with the legislative requirements ensures users of the transport system comply with the legislative requirements for accessing the system 	 targets technology and process improvement to optimise continuity of economic and social connections in transport system operation promotes an integrated partnership approach to effective operation of the vehicle fleet and compliance to access the system 	supports continued management of the transport system following the unplanned loss of a significant link
Environment - reduce adverse effects on the climate, local environment and public health	contributes to limiting the harmful effects of road vehicles	enables reductions in harm to the environment and people, particularly arising from land transport-related air pollution and noise	 enables significant reductions in harm to the environment and people, particularly arising from land transport-related air pollution and noise enables long term reductions in greenhouse gas emissions from land transport 	

Investment management

This activity class covers transport planning, sector research and investment in the Funding Allocation System (IFAS). A single factor Results Alignment assessment is applied for this activity class.

Key principles

- A mode neutral approach is applied in transport planning to ensure that a full range of modal options is considered in response to the transport issue.
- All new investment proposals will be supported by a business case (with some exceptions).
- Core (non-discretionary) components or components that have robust investment processes have default ratings.
- Network Operating Plans or National Infrastructure Plans are only fundable if completed as part of a Programme Business Case or an Activity Management Plan to ensure the best use of existing plans ie stand-alone funding is not supported.

Sector research

The purpose of sector research is to acquire new knowledge so that it can be applied by transport decision makers to deliver a more effective and efficient transport system. The research programme is a nationally delivered programme managed by the Transport Agency. The Transport Agency research programme is developed through a robust process which targets the high priority research issues and strives for value for money.

A default profile of high results alignment is applied to the sector research programme as a whole.

Investment in the funding allocation system (IFAS)

Investment in the funding allocation system is the activity that incorporates the processes, tools and systems required to plan, optimise and deliver the NLTP, thereby giving effect to the GPS. The activity is developed as a nationally delivered activity as part of the Transport Agency business planning assessment and prioritisation process.

A default profile of high results alignment is applied to the IFAS programme as a whole.

Integrated transport and land use planning

The GPS identifies that integrated land use planning is a key component of transport system planning, especially in relation to enabling housing development, multi-modal connections and placemaking. Development of RLTPs is assessed with a generic profile of high results alignment, noting that additional variations of RLTPs may be required within the upcoming NLTP period to align with the government's strategic direction.

GPS PRIORITIES	LOW	MEDIUM	HIGH	VERY HIGH
	Not applicable	A medium results alignment may be given if the activity addresses as many of the following criteria as possible:	A high results alignment may be given if the activity addresses as many of the following criteria as possible:	Not applicable
Safety - a safe transport system free of death and serious injury		considers approaches to addressing safety issues in areas identified as being of medium predicted crash risk	considers approaches to addressing safety issues in areas identified as being of high predicted crash risk	
Access to opportunities, enables transport choice and access, and is resilient - thriving regions Access to opportunities, enables transport choice and access, and is resilient - liveable cities		 addresses identified gaps in activity management planning (eg AMP, Regional Public Transport Plan (RPTP), Road Safety Action Plan (RSAP), Procurement strategies) considers approaches to addressing a significant actual or predicted gap in access to economic and social opportunities and ensures integration of modes, transport and land use planning, and network optimisation considers approaches to addressing a significant resilience gap in a regionally important social and economic connection 	 addresses significant gaps in activity management planning (eg AMP, RPTP, RSAP, Procurement strategies) considers approaches to addressing a significant actual or predicted gap in access to economic and social opportunities in major metros and makes improvements to multi-modal whole-of-network, long-term local, regional and national planning considers approaches to addressing a significant resilience gap in nationally important social and economic connections considers approaches to addressing significant transport gaps in regional development and consider coordination with PGF funding (high priority RED region emphasis) considers approaches to addressing an unplanned loss of an existing significant connection from the impact of significant natural events 	
Environment - reduce adverse effects on the climate, local environment and public health		considers approaches to addressing identified environmental and public health impacts on and from operation of the land transport system	considers approaches to addressing significant environmental and public health impacts on and from operation of the land transport system	

Appendix 1: Reference frameworks

The IAF references a number of Transport Agency and external and international best-practice performance measurement frameworks, specifically addressing one or more activity classes.

Road safety strategy and Safer Journeys

Safer Journeys is the government's strategy to guide improvements in road safety over the period 2010 to 2020. The strategy's vision is a safe road system increasingly free of death and serious injury and introduces the Safe System approach to New Zealand. In May 2016 the third and final Safer Journeys Action Plan 2016-2020 was released.

The Safe System approach recognises that people make mistakes and are vulnerable in a crash. It reduces the price paid for a mistake so crashes don't result in loss of life or limb. Mistakes are inevitable – deaths and serious injuries from road crashes are not.

Significant progress has been made under the two previous action plans across all key areas of the Safe System approach. This includes initiatives such as:

- raising public awareness through advertising campaigns
- lowering blood alcohol levels
- making our high risk roads safer through rumble strips and median barriers
- mandating electronic stability control for light vehicles.

Many of these initiatives will continue as a core part of the policies and decision making of various agencies. However, there are still areas where progress towards a safe road system needs more momentum. The third action plan renews focus on areas of greatest risk and disproportionate harm, and present opportunities for the use of current and emerging technologies. In particular, this action plan's focus (and specific objectives) is to:

- enable smart and safe choices on the road (particularly through technology enablement)
- make motorcycling safer (road environment, education and technology to address crash severity)
- ensure roads and roadsides support safer travel (highest risk roads including local urban arterials, head on, run off road and intersection crashes, and open road crashes)
- encourage safe vehicles (technology and vehicle safety standards).

Here are some examples of investment in primary safe system treatments that reduce the risk of:

- head-on and run-off road crashes (such as through the installation of median and side barriers)
- urban and rural intersection crashes (such as through the installation of roundabouts or speed management devices)
- harm to vulnerable road users, including pedestrians, cyclists, mobility impaired (such as through segregated facilities, markings or speed management devices, including raised platforms at roundabouts, traffic signals, and pedestrian facilities)
- lower cost safety interventions such as improved skid resistance, signs and markings (including rumble strips), safety targeted seal widening and speed management
- maintenance to ensure these safe system treatments remain fit for purpose
- rail safety, including to partner with KiwiRail to upgrade level crossings.

One Network Road Classification

The One Network Road Classification (ONRC) has been adopted by the sector to ensure national consistency around the levels of service delivered by a network. The Road Efficiency Group (REG), including the Transport Agency, has developed a suite of 27 performance measures to support the next phase of implementing ONRC in the 2018 - 2021 NLTP.

All approved organisations and the Transport Agency (for state highways) are required to provide evidence of the customer levels of service that they propose to deliver and how they relate to the ONRC measures.

Maintenance programme submissions from approved organisations and the Transport Agency may be supported by and take account of a wider set of performance measures than those currently mandated in support of ONRC. For example an approved organisation may wish to support their submission with their Long Term Plan (LTP) measures in addition to the ONRC measures. Consideration of funding allocations for maintenance programmes in the 2018-21 NLTP will be based primarily on assessment of the transport network performance to be achieved as measured against the ONRC measures.

The Transport Agency expects further development of the suite of performance measures will continue during the 2018-21 NLTP and lead to a broader set of specific performance targets for investment for the 2021-24 NLTP.

Networking operating framework (NOF)

The NOF provides a one network view across modes and ownership for an urban area. It is a planning tool that defines strategic intent and how far away from delivery the network is. It enables better visibility of conflict between modes and demonstrates the trade-offs required, balancing the competing demands for limited road space.

The relationship between NOF and ONRC:

- The NOF is a process aimed at optimising and planning the network in order to deliver strategic intent. It does this
 in a series of steps; agreeing the strategic objectives, translating these objectives into network principles,
 mapping the network by mode and time of day, applying relative levels of priority to each mode in order to deliver
 strategic objectives, and identifying performance issues and testing concepts to address these.
- Both the ONRC and NOF refer to customer levels of service (CLoS). The purpose of the ONRC CLoS, with its
 associated performance measures, is to set out the broad levels of service that a customer can expect on each
 category of road for it to fulfil its function (be fit for purpose) under the classification. The CLoS outcomes cover
 travel time reliability, resilience, optimal speed, safety, amenity and accessibility and relate to both urban and rural
 areas and all modes.
- In contrast, the NOF CLoS set out a rising aspirational level of service from poor to excellent for each mode and are used to optimise and develop the network by mode and time of day. In short, the classification is about assigning roads into categories based on their function at a strategic level while the NOF, and particularly the Network Operating Plan which enables the NOF, is about optimising the network by mode and by time of day.
- There is also a recognition that the higher detailed and mode specific networks mapped with the NOF process are
 often better able to replicate urban networks. Conversely the ONRC system has more applicability and has a
 granularity that better reflects rural networks.

Public transport

For public transport 'levels of service' refers to a range of factors from service frequency to quality and placement of public transport infrastructure like bus stops. Determining the appropriate level of service for public transport, which unlike for roads, are not subject to a national standard. For the purposes of determining whether there is a gap in current levels of service, factors that could be looked at include:

- Land use and density do services link residential areas with commercial/social/employment centres (ie places where people want to go) and does the public transport network reflect future land use intentions?
- Existing services does demand exceed supply of services? Is there a need to increase service levels to meet demand?
- Congestion could congestion in parts of the roading network be helped by increasing public transport service levels?
- Transport disadvantaged do existing public transport service levels provide an adequate modal alternative to car?
- Hours of service do the hours of operation enable travel at times people want to travel?
- Customer information does the level of customer information provided meet customer expectation?

There are draft guidelines for <u>Public Transport Infrastructure</u> for provision of bus stops and facilities at bus stops which provide a good guide for levels of service at bus stops. The Transport Agency recommends use of the draft guideline to guide appropriate levels of service at bus stops. We are actively considering the wider public transport infrastructure levels of service and guidelines.

Walking and cycling network guidance

The Transport Agency continues to recommend use of the <u>Cycle Network Guidance – Planning and Design</u> (CNG) to guide appropriate levels of service to determine what is fit-for-purpose when considering new cycling facilities. A NZ level of service tool for cycling is under development. In the interim the Austroads levels of service (LoS) tool is recommends by the CNG.

The CNG aims to promote a consistent, best-practice approach to cycling network and route planning throughout New Zealand. It sets out a principles-based process for deciding what cycling provision is desirable, and provides best-practice guidance for the design of cycleways.

Regional transport committees and approved organisations need to have a clear understanding of who the cycling programme is targeting, what level of service is required in delivering the activity or activities, and how different activities might complement each other to maximise the benefits of investment.

The main factors influencing level of service relate to safety, comfort, delays, which consider network characteristics such as traffic volumes and speed, degree of separation from motor traffic, facility width, delay etc.

For walking the Transport Agency recommends the use of the <u>Pedestrian Planning and Design guide</u> along with the Austroads LoS tool. For existing situations, the <u>Community Street Review</u> process is also recommended and for new designs the Pedestrian LoS prediction tool in NZTA research report 452 Predicting Walkability.

The full reference for the Austroads LoS tool is: Level of Service metrics for Network operations Planning (AP-R475-15).

Appendix 2: Major metros

The draft GPS identifies the following as major metropolitan areas for the purposes of land transport planning, defined using employment density by Statistics New Zealand:

- Northern Auckland Zone
- Western Auckland Zone
- Central Auckland Zone
- Southern Auckland Zone
- Hamilton Zone
- Tauranga
- Porirua Zone
- Upper Hutt Zone
- Lower Hutt Zone
- Wellington Zone
- Christchurch
- Dunedin

The Transport Agency has identified Queenstown as a specific major metropolitan area given similarities in its transport requirements to those in the major metropolitan areas listed in the GPS, and therefore the application of the IAF criteria is treated in the same way as major metropolitan areas.

The combined areas are referred to as "major metros" in the IAF criteria.