

NLTP signals: emissions reduction vehicle kilometers travelled (VKT) planning

PURPOSE

To provide guidance on planning for vehicle kilometres travelled (VKT) reduction at a national and regional level, and outline evidence developed which can support the identification of interventions that would help achieve VKT reduction targets based on funding availability.

BACKGROUND

New Zealand has committed to achieving net zero carbon emissions (excluding biogenic methane) by 2050. The Government's first Emissions Reduction Plan (ERP) sets interim targets that are expected to result in a reduction in transport emissions of approximately 41 per cent by 2035 (from 2019 levels), including a 20% reduction in Vehicle Kilometres Travelled (VKT) by cars and light vehicles by 2035.

To deliver on the emissions reductions will require significant shifts in how people and goods are moved. A whole of system approach is required to reduce reliance on travel by car, support the uptake of lower emission modes for people and freight, and improve the energy efficiency of the light and heavy vehicle fleet.

These measures can also deliver significant benefits beyond reducing emissions, such as improving travel choice and accessibility, better health and safety, and less congestion.

THE ROLE OF VKT PLANNING IN ACHIEVING EMISSIONS REDUCTION TARGETS

The Government's first Emissions Reduction Plan (ERP) introduces a comprehensive set of transport policies to achieve the transport system targets and sub-targets.

Specifically, policy to integrate land use, urban development, and transport planning to reduce emissions, to support people to walk, cycle and use public transport as well as settings to enable congestion charging; investigate other pricing and demand management tools

Substantive planning is required for VKT reduction in the next 12 months and will need to cover consideration of the setting and robust planning at a national level and at the proposed sub-national VKT target level.

High levels of collaboration are needed to develop solutions to achieve the substantial reduction of emissions by 2035.

Local Councils are encouraged to use these guidelines to support their planning work:

Planning with the Avoid- Shift- Improve Framework

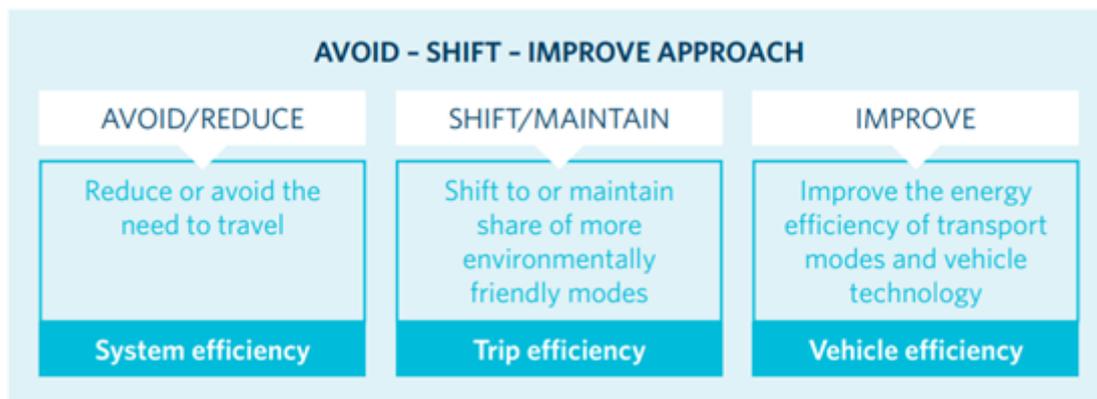
The Avoid-Shift-Improve (ASI) Framework(below) is an internationally recognised sustainable transport framework to reduce environmental impacts and improve access and liveability. This framework underpins transport emission reduction policies.

Underpinning the use of the avoid-shift-improve framework is the need to move away from 'predict and provide' planning, where decisions about future transport infrastructure are based on projections from current trends.

The avoid-shift-improve framework will support a 'decide and provide' model, where decisions are based on desired outcomes from the future transport system.

In addition, using the avoid-shift-improve framework will clarify the dependencies between land use and transport interventions and sequencing of activity that needs to be considered.

Single actions cannot address the scope of change required for the emissions reduction's targets. Rather consider packages of activity required to address the scale of change required.



AVOID/REDUCE

Avoid/Reduce interventions aim to avoid or reduce the need to travel, and trip lengths, while improving access and liveability, eg through compact urban form that supports well-connected multi-modal access to services and employment. This is critical for long term emission reductions at a system level. It brings many other transport, public health, and environmental benefits, through reduced air and noise pollution, increased levels of physical activity, reduced congestion, better connected communities and improved safety.

SHIFT/MAINTAIN

Shift/Maintain interventions focus on shifting people who need to travel from cars to more energy efficient modes such as public transport and active or shared modes, eg through better provision of low emission travel options and incentives to choose them.

IMPROVE

Improve interventions focus on improving the energy efficiency of motorised vehicles (eg through fuel standards and the uptake of electric vehicles (EV) uptake)

Equity Considerations

The ERP outlines Government's commitment to ensuring the transition leaves no community, no family and no person behind. Supporting low-income whānau, households and other vulnerable groups who may face transition impacts and require access to resources and technologies to help them reduce emissions is key.

The ERP also outlines the need to:

- uphold Te Tiriti o Waitangi, work in partnership with Māori to maximise opportunities and avoid disproportionately affecting Māori or locking in existing inequities

- work collaboratively and inclusively with affected groups to understand their needs
- take opportunities to reduce inequalities and support communities and regions to transition in line with local objectives and aspirations
- prioritise support to those most affected and least able to adjust, particularly lower income households

In light of VKT planning requirements, these and further consideration relating to the choices of transport modes considered should be included.

Role of spatial planning in VKT reduction

A combination of improving urban form, offering better transport options, and using demand management will be necessary to reduce VKT by light vehicles.

Most VKT reduction needs to occur in our largest cities, where people are more likely to have other travel options and where VKT reduction delivers the greatest wider benefits for access, health, safety, and reduced congestion.

Spatial planning has a key role in identifying the desired urban form and transport choices to meet VKT and emissions reduction, housing, and other objectives for our key urban areas.

Spatial planning work, across urban development and transport organisations nationally and locally currently underway, will provide an important context for development of national and urban VKT reduction programmes.

Sub-national targets for our largest towns and cities set the foundation

To achieve the national VKT reduction target, clear targets are being established for each area of New Zealand.

Te Manatū Waka has the responsibility of setting targets for our largest towns and cities, as this is where most of the change needs to occur. Analysis from the [‘Waka Kotahi Research Note’](#), has informed Te Manatū Waka sub-national VKT target setting for each city. The targets will be revisited through the development of the next Emissions Reduction Plan, in 2026.

Planning should consider the targets that have been recommended. These will be ratified by Cabinet by December, and the following will then apply:

Local and central government are encouraged to work in partnership with mana whenua to decide on the actions, investment and interventions that will be needed to achieve sub-national VKT targets, based on the needs and aspirations of each community.

Councils are encouraged to work with their community to discuss what is right for them, and to understand the impact that may be caused by changes to transport in their area.

Local and central government are encouraged to work together on the best combination of interventions to achieve the sub-national targets, how they will be sequenced and funded.

National VKT reduction plan being established bring cohesion

A national plan will set out the Waka Kotahi view on what’s needed, and the actions to be taken, to help achieve the national VKT reduction target. It will also set a framework for VKT reduction programmes to be developed in urban, rural and provincial places over time.

Planning should be conducted with the knowledge that the Waka Kotahi national VKT reduction plan will build on “[Keeping Cities Moving](#)” – the first national mode shift plan published in September 2019.

The national plan is likely to include:

- National direction, guidance, evidence and tools to support VKT reduction planning, investment, and delivery in urban, provincial, and rural Aotearoa
- National network planning for all modes that move people (walking, cycling, micro-mobility, public transport (including rapid transit))
- National benchmark modelling of VKT and mode shift
- Indicators to monitor progress
- Research and monitoring for more equitable investment in PT and active infrastructure.

Evidence base to support the planning required to deliver VKT targets

As part of the development of [Arataki - 30 Year Plan](#), Waka Kotahi has developed an evidence base to support the planning required to deliver VKT targets.

The evidence base builds on existing research, international case studies and local data and evidence to generate insights into existing VKT patterns and trends, the types of interventions (and combinations of interventions) most likely to generate VKT reductions, customer behaviour and barriers to delivering mode shift.

This evidence base will be available to share externally in late September 2022.

Importantly the evidence base can support the work Waka Kotahi and local government need to do to identify where to focus efforts for the upcoming RLTP/NLTP (and VKT reduction plan/programmes).

In addition, Waka Kotahi is preparing an initial assessment of how well existing growth strategies and plans are aligned with the national target. This work is being undertaken in partnership with the Urban Growth Agenda central government partners and will inform the national VKT reduction plan and urban VKT reduction programmes. Initial findings will be shared with UGA local government partners in September.

Timelines for the development of VKT reduction programmes

The following timelines should be considered in planning:

1. Waka Kotahi national VKT reduction action plan to be published by mid-2023
2. Urban VKT reduction programmes in Tier 1 urban areas established by the end of 2023
3. Urban VKT reduction programmes in Tier 2 urban areas established by mid-2024

A phased and partnering approach will underpin the development of the urban VKT reduction programmes as follows:

Phase 1

Councils in the main urban areas specifically Auckland, Hamilton, Tauranga, Wellington, Queenstown, and Christchurch will work with Waka Kotahi, Māori and community representatives to produce their urban VKT reduction programmes by the end of December 2023.

This work will build from mode shift plans already developed for these places.

Phase 2

Councils in the urban areas of Dunedin, Nelson Tasman, Palmerston North, Napier Hastings, New Plymouth, Rotorua and Whāngarei, will work with Waka Kotahi, Māori and community representatives to produce their programmes by the end of June 2024.