



greater WELLINGTON
REGIONAL COUNCIL

Wellington Regional Land Transport Strategy (RLTS) Review

Review of draft RLTS response to NEECS

September 2005

1. Introduction

The Land Transport Management Act 2003 introduced amendments to the Land Transport Act 1998, including the new requirement under the amended Section 175 (2)(c) that every Regional Land Transport Strategy (RLTS) shall take into account the National Energy Efficiency and Conservation Strategy (NEECS).

The purpose of this paper is to demonstrate the way NEECS has been taken into account in the review of the RLTS, and to document the relevant issues and responses.

2. The National Energy Efficiency & Conservation Strategy

The NEECS was developed as a requirement of the Energy Efficiency and Conservation Act 2000. As required by the Act, the Strategy sets out policies, objectives and targets, supported by specific measures to achieve them.

‘The Strategy’s purpose is to promote energy efficiency, energy conservation and renewable energy and move New Zealand towards a sustainable energy future’ (EECA, 2004).

The National Energy Efficiency and Conservation Strategy was released by the Minister of Energy in September 2001. It sets two specific energy efficiency targets for the national economy:

- A 20% improvement in energy efficiency by 2012
- An additional 30 Petajoules (PJ) of consumer energy from renewable sources by 2012.

NEECS has six goals. These are (in no particular order):

- Reduce CO₂ emissions
- Reduce local environmental impacts
- Improve economic productivity
- Promote industry development
- Improve economic resilience
- Improve health and welfare

3. Energy Efficiency and the Transport Sector

NEECS is relevant to transport because it focuses on the use of renewable energy, including renewable transport fuel and programmes to increase the use of energy efficient modes and technologies.

Transport is our country's single largest energy consumer and transport energy use continues to grow. Within New Zealand, transport accounts for over 43% of all consumer energy use and it emits 46% of the country's carbon dioxide emissions (NZCCO, 2005).

Therefore, in addition to setting objectives and targets for the economy as a whole, NEECS also sets out specific objectives for five different sectors including transport. The key strategic objectives of NEECS as they relate to the transport sector are as follows:

- Reduce energy use by reducing the need to travel
- Progressively improve energy performance of the transport fleet
- Greater provision and use of low energy transport options

4. The RLTS review and NEECS

The current RLTS was adopted as a whole on 15 September 1999. This was updated by the Western Corridor Implementation Plan in June 2000. The RLTS has been under review since August 2003 and updates include:

- a Hutt Corridor Plan (December 2003)
- a Wairarapa Corridor Plan (December 2003)
- a Regional Cycling Strategy (May 2004)
- a Regional Pedestrian Strategy (May 2004)
- a Regional Road Safety Strategy (September 2004); and
- draft vision and draft objectives for the RLTS review (December 2004).

Other ongoing updates include:

- development of outcomes and strategic options for the RLTS review
- development of a Western Corridor Plan
- development of a Travel Demand Management Strategy
- early stages of developing a CBD Corridor Plan, a Road Pricing Strategy, and a Freight Strategy.
- development of a Passenger Transport Plan that is integrated with all the above activities.

The above plans and strategies will all be included as chapters in the draft RLTS to be released for public consultation in early 2006.

4.1 Alignment of the RLTS Vision & Objectives to NEECS goals

The draft RLTS vision is ‘To deliver an integrated land transport system that supports the region’s prosperity in a way that is economically, environmentally, and socially sustainable’ This vision shows a good fit with NEECS which has been developed within the context of sustainability, as is reflected in its goals. The following table shows the relationship between the six draft RLTS objectives with the six NEECS goals.

Table 1: Relationship between the draft RLTS Objectives and NEECS Goals

Draft RLTS Objectives	NEECS Goals					
	Reduce CO ₂ emissions	Reduced local environmental impacts	Improve economic productivity	Industry & business development	Improved economic resilience	Improved health & welfare
Assist economic & regional development	-	-	✓	✓	✓	-
Assist safety & personal security	-	-	-	-	-	✓
Improve access, mobility & reliability	-	✓	✓	✓	✓	✓
Protect & promote public health	-	✓	✓	✓	✓	✓
Ensure environmental sustainability	✓	✓	✓	✓	✓	-
Consider economic efficiency & affordability	✓	-	✓	✓	✓	✓

✓ good fit - neutral ✗ poor fit

The above table demonstrates that NEECS goals are taken account of within the objectives of the draft RLTS. All of the NEECS goals shown across the top of the table have more than one tick representing a good fit with the various RLTS objectives.

In relation to the NEECS goal to ‘Reduce CO₂ emissions’, the draft RLTS objective to ensure environmental sustainability provides the best recognition. Also, the objective to consider economic efficiency & affordability can include the development of cost effective, energy efficient measures

which reduce CO₂ emissions and improve the economy’s performance and benefit it derives from use of energy resources.

The NEECS goal to ‘reduced local environmental impacts’, such as local air quality improvements, are supported primarily by the RLTS objectives relating to environmental sustainability and public health. The RLTS objective to improve access, mobility & reliability could also be considered to take account of this goal where access to energy efficient modes is improved and the need to travel by car reduced.

The NEECS goals to ‘improve economic productivity’, ‘promote industry development’, and ‘improve economic resilience’ are considered to consistent with almost all of the RLTS objectives. This is because cost effective, energy efficient initiatives which contribute improve the economy’s performance and increase the benefit gained from use of energy resources (as sought by these NEECS goals) are consistent with the principles of economic and regional development, access and mobility, promoting public health and wellbeing, environmental sustainability, and economic efficiency.

The final NEECS goal of ‘Improved health & welfare’ has a very good fit with the RLTS objectives relating to safety & personal security, access & mobility, and protecting and promotion of public health. In addition, improving health and welfare as it relates to energy involves the availability of affordable low energy option, therefore linking to the RLTS objective of economic efficiency and affordability.

4.2 Alignment of the RLTS Land Transport Outcomes to NEECS

The Regional Land Transport Committee has developed a series of outcomes for the RLTS review, and the strategic options for achieving those outcomes, in accordance with Section 175(2)(1) of the LTMA 2003. The following table sets out the relationship between the land transport outcomes sought by the region and NEECS three strategic objectives which relate to transport.

Table 2: Relationship between RLTS Outcomes and NEECS Goals

RLTS Outcome	NEECS Strategic Objectives – Transport Sector		
	Reduce energy use by reducing the need to travel (interpreted as reducing the use of single occupant car travel)	Progressively improve energy performance of the transport fleet	Greater provision and use of low energy transport options
Roading			
<ul style="list-style-type: none"> • Maintained vehicle travel times • Reduced road congestion • Improved reliability of strategic roading network 	<p>-</p> <p>✓</p> <p>-</p>	<p>-</p> <p>-</p> <p>-</p>	<p>-</p> <p>✓</p> <p>-</p>

RLTS Outcome	Reduce energy use by reducing the need to travel (interpreted as reducing the use of single occupant car travel)	Progressively improve energy performance of the transport fleet	Greater provision and use of low energy transport options
Passenger Transport (PT) <ul style="list-style-type: none"> • Maintained peak period mode share • Enhanced off peak mode share and community connectedness • Improved accessibility • Improved customer satisfaction 	<ul style="list-style-type: none"> - ✓ ✓ - 	<ul style="list-style-type: none"> - - - - 	<ul style="list-style-type: none"> ✓ ✓ ✓ ✓
Travel Demand Management (TDM) <ul style="list-style-type: none"> • Reduced traffic demand • Reduced greenhouse gas emissions • Reduced fuel consumption • Reduced road congestion • Improved journey to work mode share • Increased vehicle occupancy • Increased resident satisfaction • More efficient landuse • No adverse impact on economic development 	<ul style="list-style-type: none"> ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ - 	<ul style="list-style-type: none"> - ✓ ✓ - - - - - - 	<ul style="list-style-type: none"> ✓ ✓ ✓ ✓ ✓ ✓ - ✓ ✓
Pedestrian <ul style="list-style-type: none"> • Increased level of service for pedestrians • Increased mode share for pedestrians, especially for short trips • Increased safety for pedestrians • Improved perception of pedestrian safety for children 	<ul style="list-style-type: none"> ✓ ✓ ✓ ✓ 	<ul style="list-style-type: none"> - - - - 	<ul style="list-style-type: none"> ✓ ✓ ✓ ✓

RLTS Outcome	Reduce energy use by reducing the need to travel (interpreted as reducing the use of single occupant car travel)	Progressively improve energy performance of the transport fleet	Greater provision and use of low energy transport options
Cycling <ul style="list-style-type: none"> • Improved level of service for cycling • Increased proportion of all trips cycled • Improved perception of cycling safety, convenience and ease • Reduced relative risk of cycling as a transport mode 	<ul style="list-style-type: none"> ✓ ✓ ✓ ✓ 	<ul style="list-style-type: none"> - - - - 	<ul style="list-style-type: none"> ✓ ✓ ✓ ✓
Road Safety <ul style="list-style-type: none"> • Improved regional road safety • Improved perceptions of road safety • A safer roading environment 	<ul style="list-style-type: none"> - - - 	<ul style="list-style-type: none"> - - - 	<ul style="list-style-type: none"> ✓ ✓ ✓

✓ good fit - neutral ✗ poor fit

In examining the relationships in the above table it was assumed that the intent of the NEECS objective to ‘reduce energy use by reducing the need to travel’ refers to travel by car, while maintaining accessibility and mobility, which means we have included reference to outcomes which involve improvements to the uptake of energy efficient modes such as walking, cycling, and PT.

As reflected in the above table, the specific land transport outcomes sought under the draft RLTS show a good fit overall with the three transport specific strategic objectives of NEECS. In particular, the NEECS objective to reduce energy use by reducing the need to travel, and greater provision and use of low energy transport options are addressed under all outcome areas. The NEECS transport objective to ‘progressively improve energy performance of the transport fleet’ shows a limited fit but it is considered that this objective is more appropriately dealt with at central government level.

The fit shown between the RLTS roading outcome ‘reduced congestion’ and the NEECS objectives is less direct, but recognises the link between congestion and increased fuel use by vehicles idling in congested conditions. Also, a reduction in congestion is likely to improve bus travel times and may encourage the use of this type of passenger transport.

4.3 Relationship with NEECS Transport Programme: Output Activity & Associated Objectives

The following table sets out the NEECS output activities & associated objectives specific to the Transport Sector, and how these are taken account of by the various sub strategies which will form chapters of the new RLTS.



Table 3: Relationship between NEECS Transport Programme Output Activity & Objectives and the RLTS

NEECS Output Activity	NEECS Transport Programme Objectives	Relevant for RLTS review?	RLTS response by sub strategy					Comment
			Regional Pedestrian Strategy	Regional Cycling Strategy	Regional TDM Strategy	Regional Road Safety Strategy	Regional Passenger Transport Plan	
Substitutes for Travel and Demand Management	Reduce the need to travel by individuals, business, and government	Yes	✓	✓	✓		✓	<p>Regional TDM Strategy seeks to reduce the need to travel through promoting integrating land use and transport, and travel plan initiatives such as teleworking, working from home etc.</p> <p>Assumes the intent of this NEECS outcome activity & objective are about reducing the need to travel by motor car - hence we have included strategies which promote travel by energy efficient modes.</p>
Eco efficient vehicles and fuel options	Transform the technology and energy systems powering the transport fleet	No	-	-	-	-	-	<p>GW considers these matters are more appropriately dealt with at central government level rather than as part of the RLTS.</p> <p>While not specifically addressed by RLTS, GW has been involved in promoting fuel efficient/energy</p>
	To reduce the average fuel consumption thereby improving the energy efficiency of the NZ vehicle	No	-	-	-	-	-	

	fleet Provide fuel efficiency information to encourage the selection of more energy efficient vehicles	No	-	-	-	-	-	efficient vehicles through campaigns such as 'Be the Difference'
NEECS Output Activity	NEECS Transport Programme Objectives	Relevant for RLTS review?	RLTS response by sub strategy					Comment
			Regional Pedestrian Strategy	Regional Cycling Strategy	Regional TDM Strategy	Regional Road Safety Strategy	Regional Passenger Transport Plan	
Pricing	Alter behaviour and steer investment towards energy efficiency	Yes			✓			Regional TDM Strategy authorises the detailed investigation of a road pricing scheme for the region.
	Improve the effectiveness of funding for alternatives to roading	Yes	✓	✓	✓		✓	Regional Cycling, Pedestrian, TDM Strategies and Regional PT Plan involve funding & promoting improvements for alternative modes.
Energy Efficient Modes	Energy savings can be achieved if people and businesses choose less energy intensive transport	Yes	✓	✓	✓		✓	Regional Cycling, Pedestrian, TDM and Regional PT Plan all promote the use of less energy intensive transport modes by individuals and businesses.
Energy Efficient Road Networks and Traffic Management	Improve management of traffic flows and improve roading characteristics, eg. Reducing road rolling resistance, grades and alignment	Yes			✓			A Traffic Management Plan is included as an initiative in Regional TDM Strategy.
	Reduce open road speeds to conserve energy	Indirectly				✓		Regional Road Safety Strategy involves road safety education through various campaigns, potential for reducing speed through these.
Education and Information	Change fleet management perceptions, purchase decisions and management practices	Yes			✓			Potential to influence through business travel plans developed and funded through the Regional TDM Strategy.
	Change personal perceptions,	Yes	✓	✓	✓		✓	Awareness campaigns under the

	purchase decisions, management practices and other behaviour								Regional TDM Strategy to include information and promotion of efficient travel and modal options.
--	--	--	--	--	--	--	--	--	---

✓ specifically addressed



The above table illustrates that all of the NEECS output activities and specific objectives are addressed by at least one of the sub strategies which form part of the RLTS review, thereby demonstrating further consistency between the two strategies.

The RLTS review also includes various corridor plans as set out earlier in this report. These corridor plans relate to specific parts of our transport network, but are developed in accordance with the overriding RLTS vision, objectives, and land transport outcomes sought.

5. Conclusion

The strategic approach of NEECS in relation to the transport sector is to identify six output areas for energy savings and promotion of renewable energy. The majority of these output areas rely on improving the overall functioning and efficiency of the land transport system. This includes measures to promote attractive, low energy transport options such as walking, cycling, and passenger transport, trip reduction initiatives, road pricing to reflect environmental costs, and other demand management methods (EECA, 2001).

These areas are also a focus of the draft RLTS which as demonstrated in this report, is well aligned with the issues set out in NEECS, both in terms of its vision, objectives and land transport outcomes, and through its various sub strategies.

6. References

1. Energy Efficiency & Conservation Authority (EECA) and Ministry for the Environment (MfE), 2001. *National Energy Efficiency & Conservation Strategy*. Wellington.
2. Energy Efficiency & Conservation Authority (EECA), 2004. *National Strategy* – retrieved from EECA website www.eeca.govt.nz/strategy.index.asp
3. New Zealand Climate Change Office (NZCCO), 2005. *New Zealand - Four Million Careful Owners*. Retrieved on 24 August 2005 from www.4million.org.nz/index.php