

The Western Corridor Transportation Study

A bold new step in a brave new world or traditional transport planning recycled

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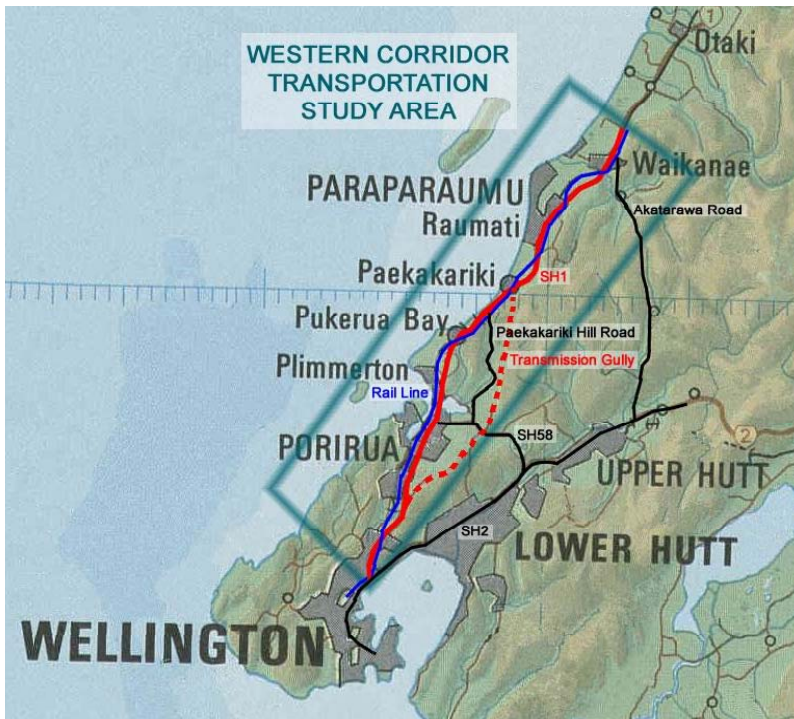
Purpose of the study

To provide safer, more efficient, more reliable and sustainable transportation along the Western Corridor for the benefit of the Wellington region and the nation

Western Corridor

Strategic transport corridor from Ngauranga Interchange to Peka Peka Rd (Nth of Waikanae) including road, rail, pedestrian and cycle facilities

Principal route into the capital and key part of the primary north- south link through New Zealand



- Carries 20,000 to 75,000 vehicles per day and 11,500 rail passengers
- Estimated to carry 12 million tonnes of freight per year on road and 3 million tonnes per year on rail

Table 1. Mode share at base of Ngauranga Gorge in the morning peak

Mode	%
Private vehicle	66
Rail	28
Bus	6

Study Process

Table 2. The time frame

Phase 1 consultation	Nov 04
Key briefings	April/ May
Phase 2 consultation	May
Draft corridor plan	July
Submissions & Hearings	Aug/Sept
Recommendation	October
RLTC/ TNZ Board approval	November
Approved corridor plan	December

Multi objective assessment

- Assessment against a planning balance sheet – matrix of performance against objectives – KPI's
- Road and rail corridor performance is an important consideration –time (speed), reliability, safety
- Assessment of risks
- Trade offs - cost>performance>impact

Draft 2005-2015

RLTS Objectives

- Developed from New Zealand Transport Strategy
- Closely aligned with NZTS
- Western Corridor proposals will support RLTS objectives

Planning Balance Sheet

- Tool to assist decision making

- Incorporates all objectives
- Able to evaluate elements and scenarios
- Base case is mid point in 1-10 scale
- RLTC weightings developed in workshop
- Alternative weightings gathered from interested groups

Planning Balance Sheet Weightings	RLTC	Land Transport NZ	Transport Action Group	Transport 2000+
Assist economic and regional development	19%	20%	25%	20%
Assist safety and personal security	14%	20%	13%	20%
Improve access, mobility and network reliability	16%	20%	15%	20%
Protect and promote public health	11%	20%	10%	20%
Ensure environmental sustainability	16%	20%	15%	20%
Consider economic efficiency and affordability	24%	Consider separately	22%	-

Planning balance sheet sub attributes

- Economic and Regional Development
 - * Average multi modal user cost
 - * Average road freight user cost
 - * Changes to GDP
- Safety and Personal Security
 - * Accident cost
 - * Perceived safety
- Access, Mobility and Network Reliability
 - * Multi modal accessibility and integration
 - * Reliability of travel time
 - * Network resilience

- * Mode option choice
- Public Health
 - * Air quality
 - * Noise
 - * Active travel
 - * Community severance and related effects
 - * Community displacement and construction disruption effects
- (5) Environmental Sustainability
 - * Iwi values
 - * Greenhouse gases
 - * Indigenous habitats
 - * Significant ecosystems
 - * Landscape and visual
 - * Archaeology and heritage
- (6) Economic Efficiency and Affordability
 - * Element/ Scenario efficiency
 - * Element/ Scenario affordability

Legislation

WCTS meets new requirements of:

- Land Transport Management Act 2003:
 - * Long term perspective
 - * Wider objectives for sustainable land transport
 - * Increased consultative requirements

Other legislation:

- Local Government Act 2002,
- Land Transport Act 1998

Risk assessment

- Risks associated with elements and packages have been assessed in a technical workshop

- Risk has many dimensions including cost, time, environmental, image and political implications
- Risk assessments will be considered in the costings and in the assessment of packages
- Risks include both threats and opportunities

Surrounding studies

WCTS must interact and integrate with:

- Wellington Regional Strategy
- CBD corridor study
- Hutt corridor plan
- Regional Road Pricing Study
- Regional Freight Study
- TDM Strategy

Population Growth

- Population growth is expected to peak in the next twenty to forty years

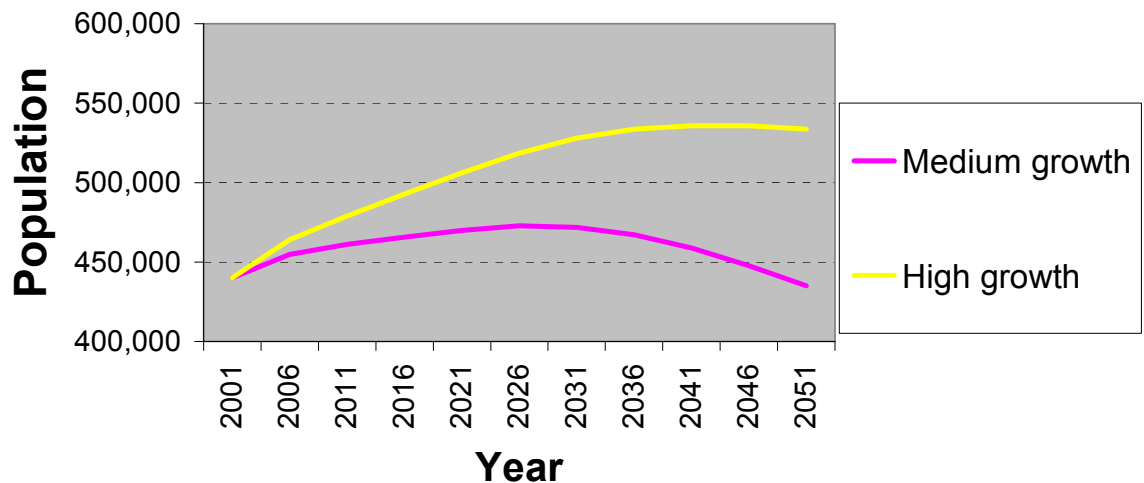


Figure 1. Projected population growth

Freight

- Road freight has increased 3% per year and is forecast to continue

- Road freight is affected by congestion
- National port rationalisation is under consideration – the Western Corridor may affect the outcome

Sustainability

- Land use
- Travel demand management
- Passenger transport
- Roads
 - * North of MacKays Crossing
 - * South of Linden
 - * Central

“The last thing we do is build new roads”

Possible packages

- Major passenger transport and travel demand management
- Major roads
- Reliability
- Congestion relief
- Economic efficiency

Performance

	Safety	Reliability	Congestion	Mode share	TDM*
Major PT &TDM	neutral	√		62 : 31 : 6	15%
Major roads	√ √	√	√ √	66 : 26 : 7	0%
Reliability	√ √	√ √	√	63 : 29 : 8	5%
Congestion	neutral	√	√ √	66 : 27 : 7	0%
Economic efficiency	neutral	neutral	neutral	62 : 30 : 7	5%

* required reduction in traffic volume with TDM to obtain reasonably stable traffic flows in 2016

* 2016 base mode share 64 : 30 : 6, vehicle : rail : bus

Assessment

Objective scores	PT & TDM	Roads	Improved reliability	Congestion relief	Project efficiency
Assist economic and regional development	5.2	6.6	6.6	6.0	5.9
Assist safety and personal security	5.8	7.1	7.3	4.3	4.6
Improve access, mobility and network reliability	5.4	7.5	7.7	6.6	5.8
Protect and promote public health	5.0	6.2	5.3	4.5	4.9
Ensure environmental sustainability	4.5	4.9	4.2	4.2	4.5
Consider economic efficiency and affordability	5.6	2.8	3.8	5.2	5.8
PBS scores					
RLTC	5.3	5.6	5.7	5.2	5.4
Land Transport NZ	5.2	6.5	6.2	5.1	5.2
Transport Action Group	5.3	5.7	5.7	5.3	5.4
Transport 2000+	5.2	6.5	6.2	5.1	5.2

Approach

- A pure economics approach to funding would likely result in the following outcomes
 - * An incremental upgrade of the existing highway
 - * The section along Centennial Highway would remain two lane forever
 - * Similarly the single rail track would remain
 - * Little, if any, other rail infrastructure improvements
 - * In effect, the economic efficiency package
- The New Zealand Transport Strategy allows a different approach to be taken
- Principles

- * Sustainability
- * Integration
- * Safety
- * Responsiveness
- Objectives
 - * Incorporated in the RLTS objectives

Successful Outcome

- Strong regional consensus on the process and the final corridor plan
- Improved corridor performance
- Public acceptance
- Certainty for the region
- Affordable with agreed funding