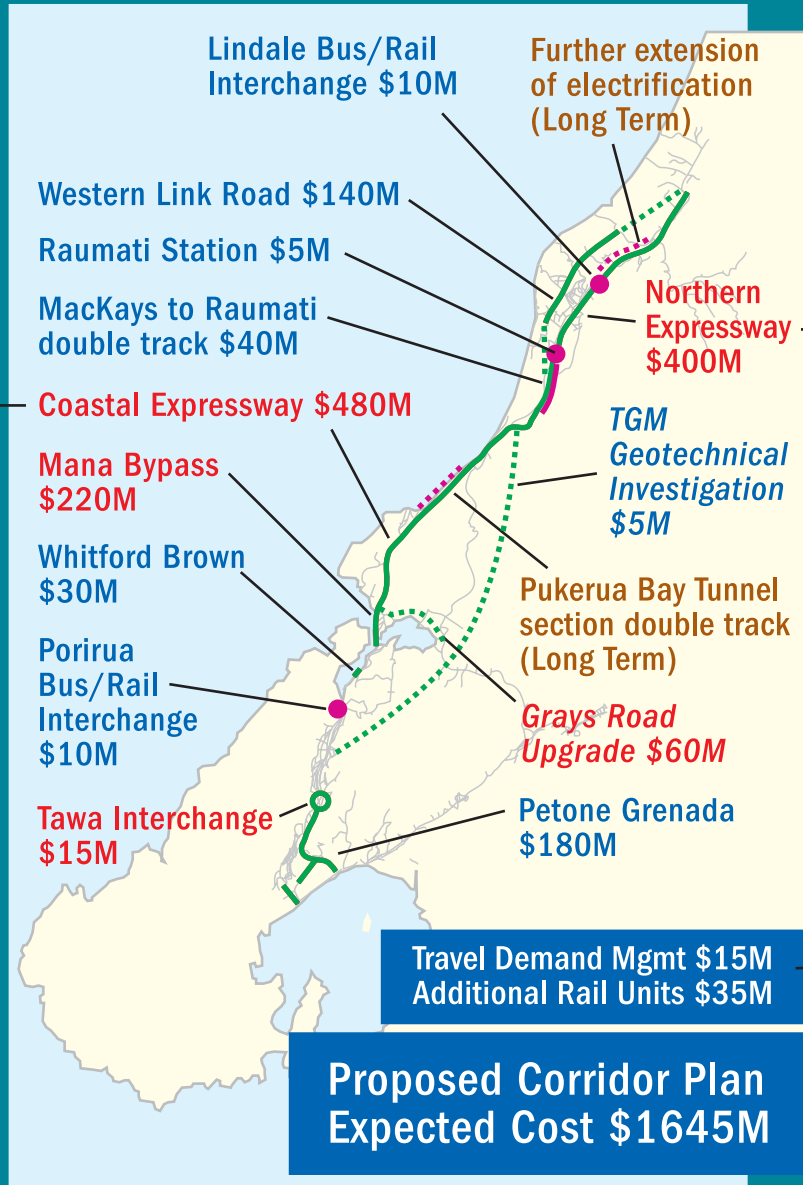


REGIONAL LAND TRANSPORT STRATEGY  
PROPOSED WESTERN CORRIDOR PLAN

# CONSULTATION DOCUMENT

1 OCTOBER 2005





Paekakariki Interchange Stage 1 (2 lane)	\$25M
Paekakariki Interchange Stage 2 (4 lane)	\$20M
Coastal Expressway	\$365M
Pukerua Bay Bypass Stage 1 (2 lane)	\$50M
Pukerua Bay Bypass Stage 2 (4 lane)	\$20M

Paraparaumu Bypass	\$140M
Waikanae Upgrade	\$80M
Otaihanga Stage 1 (2 lane)	\$35M
Otaihanga Stage 2 (4 lane)	\$20M
Northern Expressway Remainder	\$125M

TDM Marketing and Promotion, Car Sharing, Travel Planning	\$5M
Extension of ATMS	\$5M
Consideration of HOV Lanes in Ngauranga	\$5M

Travel Demand Mgmt \$15M  
 Additional Rail Units \$35M

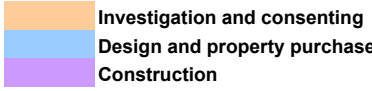
**Proposed Corridor Plan  
 Expected Cost \$1645M**

— Rail Improvements      — Road Improvements  
  First 10 Years      Second 10 years      Beyond 20 Years



# Proposed Western Corridor Plan

Projects	Source of funding	\$M	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20					
			2005/6	2006/7	2007/8	2008/9	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25					
TDM marketing and promotion, car sharing, travel planning	C1	2.5	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25											2.5				
TDM marketing and promotion, car sharing, travel planning	R	2.5											0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25			2.5		
TDM extension of ATMS along corridor	C1	5.0	0.5	0.5	4.0																				5.0		
Paekakariki Interchange - Stage 1	C2	25.0	1.0	1.0	18.0	5.0																				25.0	
Paekakariki Interschange - Stage 2	C3	20.0											1.0	1.0	18.0											20.0	
Porirua Bus Rail Interchange	R/GW (60/40)	10.0	0.5	0.5	4.0	5.0																				10.0	
Whitford Brown Interchange	R	30.0											1.0	14.0											30.0		
Western Link Rd - Stage 1	N/L- KCDC (75/25)	65.0	1.0	3.0	15.0	21.0	25.0																15.0	65.0			
MacKays to Raumati Double track	C2/GW (85/15)	40.0	0.5		0.5	0.5	1.5	17.0	20.0														40.0				
Raumati Station	R/GW (60/40)	5.0	0.2		0.2	4.6																5.0					
Lindale Bus Rail Interchange	C2/GW (60/40)	10.0	0.3			0.7	9.0																10.0				
Additional rail units	C2/GW (60/40)	35.0	24.0						11.0																35.0		
Petone-Grenada Link excl Petone Interchange	C1/C2/WCC (\$76/\$54/\$45)	180.0	1.0	2.0	2.0	1.0	1.0	15.0	20.0	40.0	50.0	48.0											180.0				
Ngauranga Gorge HOV lanes	C1	5.0											0.5	0.5	4.0							5.0					
Western Link Rd - Stage 3	C2/L- KCDC (75/25)	40.0	0.5			0.5	2.0	18.0	19.0														40.0				
Western Link Rd - Stage 2	R/L- KCDC (75/25)	35.0											1.0	1.0	2.0	14.0	17.0							35.0			
Coastal Expressway excl Paekakariki Interchange	C3	365.0	1.0	2.0	3.0	3.0	14.0	13.0	16.0	60.0	95.0	90.0	68.0											365.0			
Pukerua Bay Bypass (2-lane)	C2	50.0	1.0		1.0	3.0	5.0	20.0	20.0														50.0				
Pukerua Bay Bypass (4-lane)	C3	20.0											1.0	9.0	10.0											20.0	
Mana Bypass	N	220.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	8.0	8.0	8.0	8.0	8.0	85.0	86.0					220.0				
TGM Geotechnical Work	To be determined	5.0	2		3																				5.0		
Grays Road Upgrade	To be determined	60.0											1	6	23	30											60.0
Paraparaumu Bypass	N	140.0								1.0	1.0	0.5	0.5	1.0	1.0	1.0	11.0	11.0	12.0	50.0	50.0				140.0		
Waikanae Upgrade	N	80.0								1.0	1.0	1.0	1.0	8.0	10.0	28.0	30.0							80.0			
Otaihanga Interchange - Stage 1	C2	35.0									1.0	1.0	18.0	15.0									35.0				
Otaihanga Interchange - Stage 2	N	20.0											1	5	6.0	8.0							20.0				
Northern Expressway - remainder	N	125.0								0.5	0.5	0.5	0.5	1.0	1.0	1.0	10.0	10.0	10.0	30.0			30.0	30.0	125.0		
Tawa Interchange	N	15.0											1.0			2.0	12.0							15.0			
<b>Total Costs</b>		<b>1645</b>	<b>6</b>	<b>14</b>	<b>53</b>	<b>46</b>	<b>60</b>	<b>123</b>	<b>111</b>	<b>106</b>	<b>166</b>	<b>180</b>	<b>133</b>	<b>41</b>	<b>77</b>	<b>94</b>	<b>112</b>	<b>116</b>	<b>50</b>	<b>81</b>	<b>32</b>	<b>42</b>	<b>1645.0</b>				
National Land Transport Programme	N	649	1.75	3.25	12.25	16.75	19.75	1	3.5	3.5	3	10	18	20	39	64	112	116	50	81	32	42					
Regional Funding	R	68	0.3	0.42	2.52	5.76	1	14.75	0.75	1.5	10.5	12.75	0.25	0.25	15.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25					
PCC	L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
KCDC	L	35	0.25	0.75	3.875	5.375	6.75	4.75	5	0.5	3.5	4.25	0	0	0	0	0	0	0	0	0	0					
WCC	L	45	0.25	0.5	0.5	0.25	0.25	3.75	5	10	12.5	12	0	0	0	0	0	0	0	0	0	0					
GWRC	L	30	0.2	0.355	1.875	4.195	3.825	12.15	7.4	0	0	0	0	0	0	0	0	0	0	0	0	0					
Crown	C1	94	1.20	1.65	5.15	0.70	0.70	7.00	9.25	18.75	23.25	25.85	0	0	0	0	0	0	0	0	0	0					
Crown (\$255M)	C2	255	1.299	3.023	20.578	9.519	13.474	66.835	63.83	11.96	15.95	15.352	18	15	0	0	0	0	0	0	0	0					
Crown (\$405M)	C3	405	1.0	2.0	3.0	3.0	14.0	13.0	16.0	60.0	97.0	100.0	96.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
		1580																									



Projects planned for the first 10 years (blue)  
 Projects planned for the second 10 years (orange)

Sources of funding for the \$65M of additional work added to the Proposed Western Corridor Plan by the Regional Land Transport Committee on 29 August 2005 have yet to be determined  
 For further explanation see section titled Sources of Available Funding (refer Contents for page reference)

## THE SITUATION

The Western Corridor is the major route into the Capital and a key component of the primary north island-south island link through New Zealand. Improved road safety, reduction of delays and improve reliability (in terms of predictable travel times) is seen as urgent.

Along its length the Western Corridor carries from 20,000 to 75,000 vehicles and 11,500 rail passengers per day. It is estimated to carry 12 million tonnes of freight on road and 3 million tonnes on rail per year.

The Western Corridor currently has a high percentage of commuters using the rail corridor during peak periods. Services are provided approximately every 20 minutes from Paraparaumu and every 10 minutes from Porirua in the morning peak, with similar frequencies in the evening. The reliability of rail services is adversely affected by two sections of single track in the corridor.

The southern part of the Corridor experiences the highest levels of road congestion at peak hours; however a large part of the Corridor is also affected during peak weekend flows.

While the SH1 crash rate is average for a high volume road, the severity of the crashes is an issue, especially along the Centennial Highway north of Pukerua Bay and to a lesser degree north of Paraparaumu.

There is general agreement for the urgent need of an affordable, safe, efficient, reliable and sustainable Western Corridor transportation network for the benefit of the Wellington region and the nation, that provides reasonable capacity.

Greater Wellington Regional Council and Transit are consulting on the Proposed Western Corridor Plan to address this issue. The plan includes public transport improvements, travel demand management initiatives, and a staged programme of roading improvements that address safety, reliability and capacity.

The proposal for consultation includes a Coastal Route upgrade in the central section of the Western Corridor as the preferred option, which can be staged in line with available funding and demand.

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With funding that is currently available substantial progress can be made on implementing this proposal, which will provide a solution to this important regional issue.

Other options to the Coastal Route - such as Transmission Gully - have been evaluated in detail against strategic evaluation criteria. After careful consideration they have not been included in the plan. In order to achieve similar results these options would require extra sources of funding, such as increased rates and/or tolls or additional central government funding.

An additional \$580 million would be required over and above the currently identified funds available within the first 10 years if a decision was made to proceed with the Transmission Gully option and at this stage there is no identified way to cover this shortfall.

The interim improvements at Mana form part of the first 10 years of the coastal solution, with a full Mana bypass (or some variance to it) projected to be included in the second 10 years.

The central government funding announced this year provides a real opportunity for the Wellington region to solve its transport network issues. However, the region needs to reach agreement on its Western Corridor central section highway route to qualify for the additional \$405 million.

This transport issue affects all residents in the Greater Wellington area and it is important for people in the region to contribute to the process with ideas or suggestions that are in support or in opposition.

The submissions will be considered by the Hearings Subcommittee of the Regional Land Transport Committee and may be included in amendments to the Western Corridor Plan that will ultimately form part of Wellington Regional Land Transport Strategy.

Transit NZ will use the Western Corridor Plan to inform its 10 year State Highway Forecast.

## THE PROPOSED WESTERN CORRIDOR PLAN

### Vision

The vision for the Western Corridor is an affordable, safe, efficient, reliable and sustainable transportation corridor for the benefit of the region and the nation *that provides reasonable capacity*.

### Long Term Strategy

#### Land Use

- Support land use that minimises road use
- Support intensification of land use around Passenger Transport nodes (Glossary 1)

#### Passenger Transport

- Maintain rail as the key Passenger Transport commuting service
- Increase rail capacity in line with demand
- Enhance accessibility to rail services

- Extend rail services to the north in line with demand
- Improve efficiency of the existing service
- Improve reliability of the existing service
- Complement rail services with local bus networks
- Provide priority to buses in congested areas
- Integrate rail and bus services

#### **Freight**

- Improve linkage between Seaview and the north
- Provide priority to road freight in congested areas
- Provide improved rail freight capacity in line with demand

#### **Roads**

- Apply Travel Demand Management (Glossary 2) measures to maintain and increase Passenger Transport modal share
- Develop alternative routes for use in emergencies
- Partially relieve congestion south of Tawa with infrastructure
- Manage remaining travel demand south of Tawa
- Improve links to the Hutt Valley
- Develop a multi-lane median-divided expressway along the full length of the corridor matching sustainable levels of demand
- Upgrade Grays Road

#### **Proposed Western Corridor Plan**

- Provides a more reliable road and rail corridor
- Meets user expectations of a consistent regional corridor
- Reduces congestion in southern area
- Balanced investment in road and Passenger Transport along with Travel Demand Management
- Balanced Passenger Transport, Travel Demand Management and roads package
- Estimate 20 year funding of \$1,580 million
  - \$750m crown funding
  - \$650m national funding

- \$70m regional funding (existing petrol tax)
- \$110m local funding (rates)
- Staged implementation in line with funding and demand
- Corridor plan part of regional network
- Coordinated with other corridors
- Hutt corridor Plan 2003
- Ngauranga - Airport Corridor Plan 2006

## **Rail**

- Additional stations for Kapiti
- Raumati Station
- Lindale bus/rail hub (to be confirmed with Kapiti Coast District Council)
- Porirua bus/rail hub improvements
- 15 minute peak period services to Kapiti (additional units)
- Dual track from MacKays Crossing to Raumati
- Longer term -
- further extension of electrification in line with Kapiti Coast District Council development proposals
- north south junction track duplication

## **Travel Demand Management**

- Marketing and promotion of alternatives to car travel
- Travel planning
- Extension of existing Active Traffic Management Systems (Glossary 3)
- Park and ride, rail station improvements
- Consideration of High Occupancy Vehicle lanes in Ngauranga Gorge in conjunction with Petone Grenada Link
- CBD parking restraint (Glossary 4)

## **Road Improvements**

- Northern section
  - Kapiti Western Link Road
  - Northern Expressway (Glossary 5)
- Central section

- Coastal Route (Glossary 6)
- Grays Road (Glossary 7)
- *Proceed with geotechnical work on Transmission Gully (Glossary 8)*
- Southern section
  - Petone Grenada Link (Glossary 9)
  - Tawa Interchange.

*The Regional Land Transport Committee amendments as approved at its 29 August 2005 meeting are in italics. This committee also agreed to remove reference to the closure of Muri Station.*

## THE PROPOSED WESTERN CORRIDOR PLAN

### Glossary

1. **Passenger Transport nodes** are rail stations or bus/rail hubs such as Wellington Railway Station and the bus interchange or Waterloo interchange.
2. **Travel Demand Management** provides a way of passively managing traffic flows by promoting travel planning and alternatives to car travel, or actively by using High Occupancy Vehicle Lanes or parking restraints.
3. **Active Traffic Management Systems** are fixed or portable electronic signs used for highway incident management (eg. Ngauranga Gorge), and to provide drivers with real time travel information to assist in route selection and travel planning.
4. **Central Business District parking restraint** includes parking charges such as meters and coupon parking.
5. **Northern Expressway:** This is a four-lane median divided, expressway from Peka Peka to MacKays Crossing, with grade separated intersection.
6. **Coastal Route:** A four-lane median divided expressway from MacKays Crossing to Tawa with grade-separated interchanges at Paekakariki, Airlie Rd, Plimmerton/Ulrich St, Paremata and Whitford Brown. It includes the Centennial Highway coastal section, Pukerua Bay bypass (with connections) and a Mana bypass.
7. **Grays Road:** An upgrade of the existing central portion of Grays Road and new roads bypassing Cambourne and Pauatahanui communities.
8. **Geotechnical Work:** Preliminary geotechnical investigation along Transmission Gully route to better identify risks and reduce uncertainties around the cost.
9. **Petone Grenada Link:** This is a four-lane expressway connecting SH1 and Petone/Seaview to shorten the journey and ease congestion in Ngauranga Gorge and SH2.



## REGIONAL LAND TRANSPORT COMMITTEE RESOLUTIONS

On 29 August 2005, the Regional Land Transport Committee met to approve a draft Proposed Western Corridor Plan **for the purposes of public consultation**. The committee chose to make five amendments to the Proposed Western Corridor Plan.

The relevant **Regional Land Transport Committee** resolutions are:

That the Committee:

1. Approves the proposed Western Corridor Plan, as amended, **for formal public consultation** carried out under the terms of the Land Transport Management Act.
2. Agrees that, given the uncertainties around aspects of the coastal route, the public consultation on the proposed Western Corridor Plan also invite views on alternative routes, particularly Transmission Gully, for the central roading section.
3. Notes the board of Transit New Zealand has accepted the draft Corridor Plan as suitable for formal submissions and hearings.
4. Notes the Project Technical Group believes an upgraded Coastal Route would provide sufficient capacity to meet the demands of a 20-year high population growth scenario but that it would be prudent to retain the option of Transmission Gully, as a possible long term solution for the Western Corridor, to future-proof regional access.
5. Notes the reservations expressed in the Programme and Cost Review about the buildability and consentability of the Coastal Route and the differing timeframes for constructing the Coastal Route and Transmission Gully.
6. Notes the need for Transit New Zealand and appropriate local authorities to develop a detailed Western Corridor Implementation Plan, including a strategy for obtaining consents for a long-term coastal corridor option, which shows a reasonable prospect of success.
7. Agrees that if the coastal route proves to be unconsentable, and consequently an alternative such as Transmission Gully is adopted as the preferred project, that Government be requested to assist with an appropriate funding package involving Crown, users, and local authorities.
8. Notes that the final decision on the content of the Western Corridor Plan will be made following the public consultation process, and taking into account all cultural, economic, environmental, social, costing and technical information, as well as the availability of a robust consenting strategy for the coastal route.
9. Agrees that as part of the consultation process, substantial efforts are made to clearly explain the background and to communicate issues.

## TRANSIT NZ BOARD RESOLUTIONS

Transit New Zealand's Board met on 3 August 2005 and resolved that the Board:

1. Accepts the draft corridor plan as **suitable for formal submissions and hearings**;
2. Agrees that Transit's proposals for a final corridor plan will be subject to, inter alia:
  - confirmation that the completed consenting strategy for a coastal highway route shows a reasonable prospect of success;
  - confirmation of a significant cost saving for a coastal highway route when compared with Transmission Gully Motorway at acceptable levels of cost and time risk;
  - confirmation, on the basis of short term performance monitoring, that the Transit High Occupancy Vehicle lanes at Mana are predicted to perform satisfactorily over the next ten years

## WHAT THE REGION WANTS TO ACHIEVE

The Regional Land Transport Strategy objectives that apply to the Western Corridor were determined by the Regional Land Transport Committee in June 2004 and were based on the Land Management Act 2003. These objectives are:

- To assist economic and regional development
- To assist safety and personal security
- To improve access, mobility and network reliability
- To protect and promote public health
- To ensure environmental sustainability
- To consider economic efficiency and affordability

## TRANSPORT IMPROVEMENTS ALIGN WITH GROWTH DEMANDS

It is essential that improvements to the Western Corridor transport network meet future growth demands and integrates with the Wellington Regional Strategy that is presently open to consultation and expected to be completed late in 2006.

The Wellington Regional Strategy recognises that there are strong links between investment in infrastructure and boosting economic growth. It focuses on sustainable economic growth and quality regional forms and systems.

The Proposed Western Corridor Plan is aligned with the Wellington Regional Strategy Growth Framework in that it:

- Recognises the importance of making maximum use of the existing investment and infrastructure
- Stresses the need for urgent investment in transport infrastructure on the Western Corridor and associated east-west links
- Supports the promotion of a compact linear Corridor with strong transport routes to nodes of development
- Supports the development of sub-regional centres

The design and implementation of the Western Corridor Plan needs to consider land use policy and planning at regional and local level.

## **WESTERN CORRIDOR'S FIT WITHIN THE REGION**

The Proposed Western Corridor Plan has been considered in the context of the region's transport network and surrounding corridors.

Approximately 64 percent of the funding that will be invested in strategic roading improvements throughout the region in the next 10 years is expected to be spent within the Western Corridor. The remaining 36 percent will be spread between the Hutt, Wellington and Wairarapa corridors.

The area to the north of the study was reviewed in the last few years and a four-lane Otaki to Te Horo Expressway was proposed. This would effectively extend the Northern Expressway beyond Otaki.

The corridor to the south of the study area (Ngauranga to the airport) will be the subject of an upcoming corridor study.

The Hutt Corridor Plan was completed in December 2003. The connections between the Hutt Corridor and the Western Corridor were considered in both corridor studies and each identified that the Petone Grenada Link would be a beneficial link between the corridors.

## **SUMMARY OF TECHNICAL INFORMATION**

This section summarises the technical and consultation reports produced by the Western Corridor Transportation Study in developing the Proposed Western Corridor Plan. An index for this work is on Page 28 and identifies ways the public can access the information.

### **The Evaluation Tools**

A number of evaluation tools have been developed and used in this study. They include:

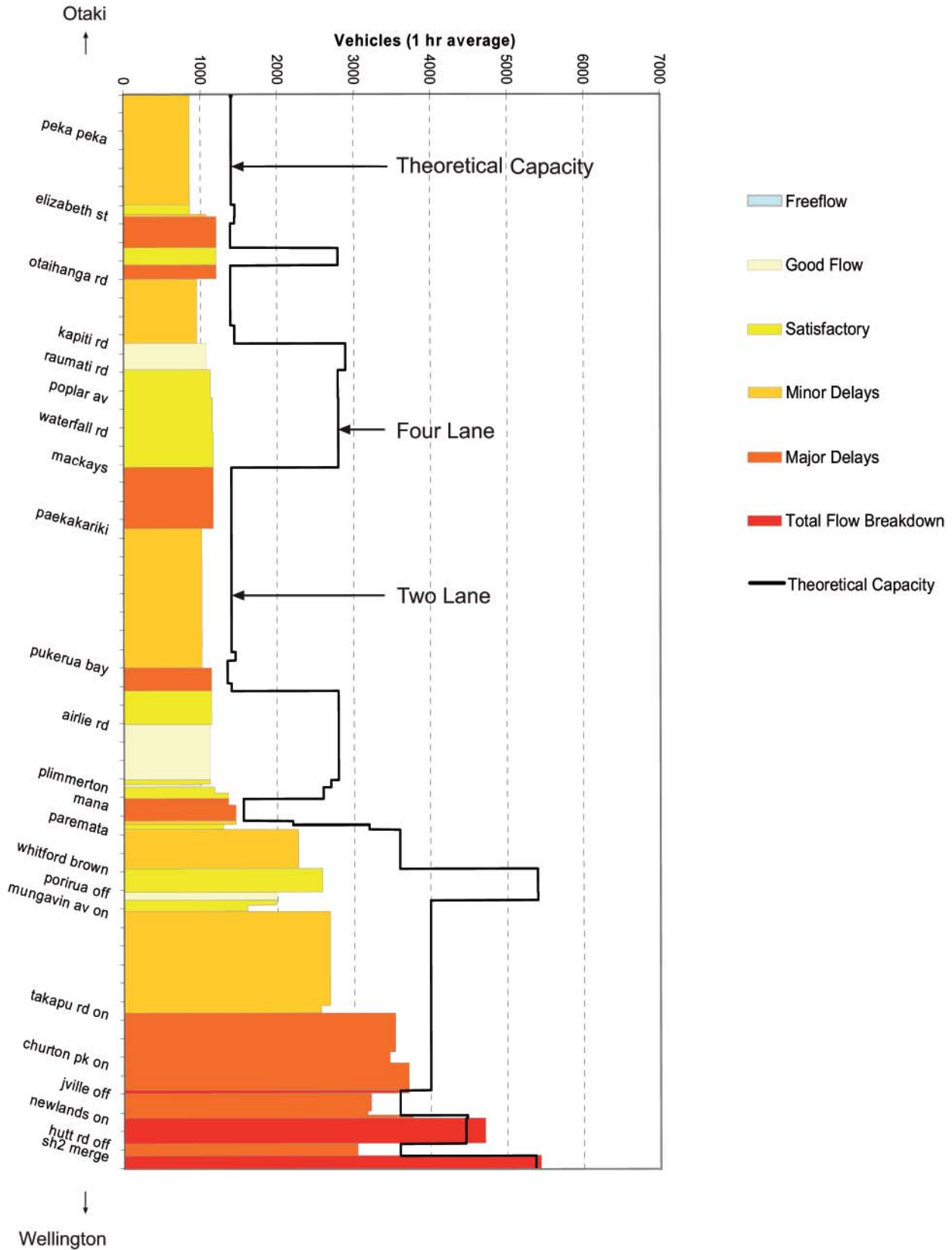
#### **The Wellington Transport Strategy Model.**

This is a strategic transport computer model that covers the entire Wellington Region. It has been used to model the effects of possible transport improvements or initiatives on the regional transport network.

It considers cars, trucks, buses, rail, walking and bicycle travel modes. It incorporates land use

### Theoretical Highway Congestion 2016:

Performance against location (Southbound), medium growth projections, morning peak period (7am-9am)



and demographic forecasts for low, medium and high growth. It can be used to model the impacts of the cost of fuel, tolling, increased frequency of commuter or freight trains.

An example of the modelling is the illustration on page 9, which predicts the level of congestion on the Western Corridor in 2016 under medium population growth projections.

This illustration is colour coded to show varying congestion levels for different sections along the existing highway. Darker colours represent the worst areas of congestion.

### **The Planning Balance Sheet.**

The Planning Balance Sheet gives a specific number or value to a range of equally specific variables, such as economic efficiency and affordability, travel time reliability, or public health.

An example is the value given to the effect of community severance, as it relates to achieving the Regional Land Transport Strategy objective of “protecting and promoting public health”.

The balance sheet then totals the values attributed, using weightings established by the Regional Land Transport Committee, to arrive at a score for one transportation package compared to another.

The Planning Balance Sheet provides a score out of 10 for each element or package, with scores above 5 representing positive benefits over and above the base case of 5, and scores below 5 being negative effects. The scores have been derived in a consistent calibrated way with 8 being considered to be a strong performance in the regional context.

Views were sought from key stakeholders and the general public on the weightings to enable sensitivity testing of the element or transport package improvement being evaluated.

### **Risk Assessment**

This is a process of identifying a wide range of possible element risks and the implications of that risk including delays and/or cost.

Following feedback from the second phase of consultation, further work was completed on the risks associated with the Western Corridor. Individual risk workshops were held with each Territorial Local Authority and Transit NZ. An independent Cost and Programme Review also considered and compared the risks between Transmission Gully Motorway and the Coastal Route.

## **PEER AND PARALLEL REVIEWS**

Key pieces of the technical work have been peer reviewed by a separate team of experts and includes:

### **Project Costs and Comparisons**

The costing of most elements has been undertaken in conjunction with international industry experts, Rob MacDonald and Associates, who previously undertook the parallel estimate for the proposed Transmission Gully project in March 2004 and this ensures element cost estimates are comparable.

Benchmarking was carried out against costs for similar-sized projects in Australia.



### Peer Review of Cost and Time to Completion

Transit NZ and Greater Wellington commissioned a separate, independent, parallel review of the two principal highway options between MacKays Crossing and Linden, namely Transmission Gully and the Coastal Route.

As a result, the study team has revised the original cost estimates for both options. The final expected cost estimate comparison is shown in the following table. The difference in the estimates relate largely to differences in scope and extent of mitigation.

Element	Peer review expected cost estimate	Maunsell (revised) expected cost estimate
Coastal Route	\$890M	\$730M
Transmission Gully Motorway	\$1,170M	\$1,090M

These differences include elements such as the extent of bridging along Centennial Highway and whether a level crossing or grade separated rail crossing is provided into Plimmerton. Until a designation is obtained for the Coastal Route, the final design solution and the extent of mitigation required would remain open to conjecture.

The review team recommended that a designation and coastal consent strategy is developed and implemented to confirm that the Coastal Expressway is not “fatally flawed” before final route selection is made.

Time issues around the completion of the projects were also considered within the review. The peer review also identifies the social and environmental impacts of the two routes.

### TRAVEL DEMAND MANAGEMENT

Travel Demand Management is a method of managing or influencing the demand for travel and ensuring efficient use of the transport network.

The aim of Travel Demand Management is to deliver a reduction in traffic along the Western Corridor at peak congestion times and to encourage use of public transport, particularly by commuters. It can also delay the need for expensive transport infrastructure upgrades.

A range of Travel Demand Management options including tolling, High Occupancy Vehicle lanes, a premium on CBD parking charges, or cordon charges (as applies in the London CBD) were considered. While generally more effective, they place a significant cost on individuals and commercial road users with a negative flow on affect for the region.

In the case of the Western Corridor the following Travel Demand Management measures are recommended:

- Promoting and encouraging travel planning such as car pooling, school travel plans or workplace shuttle services
- Increasing park and ride capacity along the corridor

- Rail station improvements
  - Lindale Bus/Rail interchange
  - Raumati Station
  - Porirua Bus/Rail interchange
- Increased rail frequency, capacity, and reliability
- Extension of Advanced Traffic Management System (ATMS) for highway incident management and real time information to assist in route selection and travel planning.

Combining Travel Demand Management measures will provide a more certain outcome, however the potential effect on traffic volumes should not be considered cumulative. It is expected that an integrated suite of Travel Demand Management measures will reduce traffic volumes in the order of 5 percent.

Travel Demand Management measures will be implemented as soon as possible to limit a further decrease in the level of service on the road corridor but after passenger transport capacity has been increased. The target level of service on the highway would provide satisfactory travel characteristics off-peak and no more than minor delays during peak periods.

The level of service in the Ngauranga Gorge is already below the target level of service for the corridor, with major delays and flow breakdown occurring regularly in peak periods. The gorge is an early candidate for Travel Demand Management, with measures likely to be marketing and promotion of alternatives and travel planning. An example of Travel Demand Management is the soon to be opened High Occupancy Vehicle lanes through Mana for peak hour traffic.

Passenger transport infrastructure and Travel Demand Management strategies should be introduced before building new highway infrastructure. Making improvements to rail before the road infrastructure would encourage people to switch to rail and provide increased capacity for the shift from private to public transport that could be expected during any future roading improvements.

An improved rail service would also retain a greater proportion of the shift to public transport following roading improvements, which would help achieve less traffic on the highway for longer.

Greater Wellington Regional Council currently has a policy of providing as much park and ride commuter parking at railway stations as possible. This policy should be continued for the next 20 years.

Extending the Advanced Traffic Management System along the corridor would allow better traffic management following incidents that limit capacity of the highway. They will provide road users with real time information and would be used during maintenance or construction.

## NORTHERN SECTION – CORRIDOR PLAN IMPROVEMENTS

Element description	Expected Cost	Finish Date
Raumati Station	\$5M	2009
Kapiti Western Link Road (Stage 1)	\$65M	2010
Lindale Bus/Rail Interchange	\$10M	2010
Double track MacKays Crossing to Raumati	\$40M	2012
Kapiti Western Link Road (Stages 2 & 3)	\$75M	2015
Northern Expressway	\$400M	2025

The elements for Kapiti are inter-related and should be considered as one package and include land use planning that needs to be finalised by Kapiti Coast District Council. Removal of any one element from the package would affect the viability of other elements (eg. A Kapiti Western Link Road will influence the use of a Lindale Bus/Rail interchange.)

A new station at Raumati would reduce road congestion in Paraparaumu and encourage rail patronage.

The first stage of the Kapiti Western Link Road, connecting Te Moana Road, Waikanae, with Paraparaumu, would reduce state highway flows significantly as modelled by the Wellington Transport Strategy Model. It would connect well with the proposed Lindale transportation hub and provide an alternative Waikanae River crossing.

Focusing rail and bus services at Lindale would reduce traffic volumes through the congested SH1/ Kapiti Road intersection. A new Lindale Station would encourage use of the Kapiti Western Link Road, and could also link to SH1 via an extension to Ventnor Drive.

A new Lindale Station would provide relief to Paraparaumu for park and ride capacity, provide an improved service to current Paraparaumu Station users originating north of Paraparaumu, and encourage rail patronage.

Lindale Station would be most effective if land around the station was zoned medium or high density residential, thereby providing an increased catchment area. Extension of the electrification to Lindale is in line with the long-term vision to extend the electrification northwards.

Upgrading SH1 to a four-lane expressway would provide a safe, efficient, reliable highway along the Kapiti Coast in the longer term. The timing of this upgrade has been set near the end of the 20-year programme, to enable redevelopment of the town centres affected by these improvements.

## CENTRAL SECTION – CORRIDOR PLAN IMPROVEMENTS

### Passenger Transport

Element description	Expected Cost	Finish Date
Porirua Bus/Rail interchange	\$10M	2009
Increased peak period service frequency will require additional rail units	\$35M	2012

Improving facilities at Porirua with an upgraded bus/rail interchange and better linkage to Porirua Central Business District would increase rail patronage and reduce road congestion in the southern section of the corridor.

Station improvements at Porirua would have the greatest effect on rail patronage because Porirua Station has the greatest number of passenger boardings in the corridor, and any change that attracts users would affect the largest base load.

Peak period train frequency could be increased from 20 minutes to 15 minutes with one additional rail service. Additional capacity could also be obtained by increasing train lengths to eight cars. In total an additional 12 cars would be required on the Kapiti/Paraparaumu line.

In the longer term, reliability could be improved by double tracking the single-track section through the rail tunnels north of Pukerua Bay.

### ROAD IMPROVEMENTS

Element Description	Expected Cost	Finish Date
<i>Transmission Gully geotechnical investigation</i>	\$5M	2008
Paekakariki interchange (Stage 1)	\$25M	2009
Whitford Brown interchange (Stage 1)	\$15M	2011
Coastal Expressway including Pukerua Bay and Paekakariki, excluding Paekakariki interchange	\$435M	2016
Paekakariki interchange (Stage 2)	\$20M	2016
Whitford Brown (Stage 2)	\$15M	2018
<i>Grays Road upgrade</i>	\$60M	2019
Mana Bypass	\$220M	2021
Pukerua Bay Tunnel section double rail track (long term)	To be determined	Beyond 20 years

Undertaking geotechnical investigation along the Transmission Gully route would allow the associated risks to be better determined and reduce the range of cost estimate uncertainty.

The first stage of the grade-separated interchange at Paekakariki will cross the existing two lanes of SH1, with later stages capable of spanning a four-lane expressway. Both Paekakariki and Whitford Brown interchanges would be constructed early in the programme to address safety and access issues at these intersections.

Whitford Brown interchange can be built largely within the current designation. The first stage of the interchange would be designed for the key movements, the second stage would complete a full diamond interchange with all movements grade separated. (ramps and flyovers, no traffic lights), to suit the final arrangement of the expressway.

A coastal expressway would be a four-lane median divided highway with grade-separated interchanges at Paekakariki and Pukerua Bay. Reclamation is proposed on the seaward side of the existing state highway.

The Mana Bypass is a four-lane median divided highway adjacent to the position of the existing railway line, with grade separated interchanges into Plimmerton and at Paremata with connections to SH58. It would require the construction of a new bridge across the Pautahanui inlet, but the existing old bridge would be removed. Full access into the Ngati Toa Domain and to the Mana Railway Station would remain.

The final form of the expressway around Goat Point and in the vicinity of Steyne Avenue has yet to be decided and would be determined following consultation as part of the normal project development process.

Double tracking of the existing section of single railway line between Pukerua Bay and Paekakariki is seen as a long-term aim for the corridor. This would improve reliability of train operations and allow increased frequency of trains particularly during peak periods.

### SOUTHERN SECTION - CORRIDOR PLAN IMPROVEMENTS

Element Description	Expected Cost	Finish Date
Travel demand management	\$5.0M	On-going
Petone Grenada Link (excluding Petone Interchange)	\$180M	2015
Investigation into HOV lanes down Ngauranga Gorge (in conjunction with any increase in network capacity)	\$5M	2015

Currently 27 percent of traffic southbound in Ngauranga Gorge turns left to travel via State Highway 2 to Petone in the morning peak, and the reverse movement in the evening.

A new Petone Grenada link would provide a shorter alternative for this traffic and attract 22,600 vehicles per day in the 2016 corridor plan package.

The road would reduce traffic volumes in the most congested part of the corridor and also relieve congestion on SH2. Modelling indicates that if congestion is relieved in Ngauranga Gorge, vehicles would divert from Burma Road to take advantage of the improvement and therefore nullify much of the benefit to Ngauranga Gorge.

To sustain the benefits to Ngauranga Gorge High Occupancy Vehicle lanes could be introduced in the gorge when the Petone Grenada Link is opened. A connection to the Tawa interchange from



Grenada would complete the link and limit any associated increase in traffic on SH1 over that section.

The proposal is a 70-80km/hr four lane local road with a limited number of intersections. All identified proposals for this link road to date connect into the Hutt Road /Petone Esplanade roundabout

## **TRANSMISSION GULLY VERSUS COASTAL ROUTE**

One key area of contention is the choice of route in the central section between the Coastal Route and Transmission Gully.

Both Transmission Gully and the Coastal Route options provide similar corridor performance and regional economic benefits. The key differences are between affects on the coastal communities of Mana, Pukerua Bay and Paekakariki and expected cost.

The risk assessment work showed that Transmission Gully and the Coastal Route are both considered to have very high-risk profiles but for different reasons.

Transmission Gully has major risk associated with unknown geotechnical conditions and sheer scale of the project. It is noted that the cost of undertaking the preliminary geotechnical testing is small in relation to the overall cost of Transmission Gully and would result in a considerable reduction in the risks. But risks would remain around the sheer size of the project.

The Coastal Route has major risks associated with obtaining the necessary consents under the planning process. It is noted that the cost of obtaining consents is small in relation to the potential cost difference between the construction costs for the Coastal Route and Transmission Gully.

Once consents are obtained, the Coastal Route would have a lower risk profile and greater cost certainty than Transmission Gully.

### **Transmission Gully Variants Considered**

Other proposals were put to the technical team. Those considered were:

- the “S” option expressway (utilising the Coastal Expressway from MacKay’s Crossing to Airlie Road, a new route from Airlie Road to Pauatahanui and the southern section of Transmission Gully from Pauatahanui to Linden);
- a two-lane Transmission Gully option,
- the northern section of Transmission Gully only and
- the southern section of Transmission Gully only.

Technical investigations indicate that partial Transmission Gully options would not address the corridor needs as well as a full Transmission Gully or the Coastal Route and could at best only be considered an interim stage. Partial Transmission Gully would come in at much the same costs, but deliver fewer benefits.

### Planning Balance Sheet Results

As described above the Planning Balance Sheet was one of the evaluation tools that was used to compare Transmission with the Coastal Route.

	Coastal	TGM	
Regional Land Transport Strategy Objective	Planning Balance Sheet Scores		Comments
Assist economic and regional development	7.5	7.3	The Coastal Route would provide the same regional benefits as Transmission Gully Motorway for less regional cost
Assist safety and personal security	7.2	7.0	The Coastal Route would provide a safer route for all road users.  Those road users who do not use Transmission Gully Motorway will not receive any benefit as the travel on the alternative (existing SH1) road
Improve access, mobility and network reliability	7.5	7.6	Coastal Route would provide more accessibility to the existing communities. Transmission Gully would provide more corridor resilience
Protect and promote public health	5.3	6.0	Transmission Gully removes traffic from the existing communities and does not have the same community severance effects
Ensure environmental sustainability	4.2	4.6	Coastal Route has less impact on indigenous habitats and ecosystems.  Transmission Gully has less impact on iwi, landscape, recreational, archaeological and heritage issues
Consider economic efficiency and affordability	5.3	4.2	The expected cost of the Coastal Route is ~33% less than Transmission Gully
<b>Total Score</b>	<b>6.2</b>	<b>5.9</b>	<b>Regional Land Transport Strategy weightings</b>

The Coastal Route is preferred for the following key reasons:

- Achieves a better outcome towards key objectives of the New Zealand Land Transport Strategy, Regional Land Transport Strategy and the Land Transport Management Act.
- Lower cost
- Higher project efficiency
- Can be staged to suit available funds
- Benefits are accrued as each stage is completed
- Better utilisation of existing infrastructure

Both routes would have at least a 100kph design speed, four lanes and a continuous central median barrier. The seal width and minimum curve radii are similar.

The Coastal Route would have greater potential for traffic disruption during construction. Building on the seaward side of the existing state highway would reduce the potential traffic disruption.

The Coastal Route allows for a staged implementation and progressive benefits and these outweigh the economic cost to the region from traffic disruption.

The choice of route hinges on affordability against other regional priorities. When the costs and priorities of all other transportation projects are considered against available funding, Transmission Gully appears to remain unaffordable over the next 20 years, at least. The Coastal Route is more affordable and would provide similar levels of regional benefit to Transmission Gully.

## SOURCES OF AVAILABLE FUNDING

The Wellington Region has undertaken discussions with Government and has received additional funding to assist it deliver the New Zealand Transport Strategy objectives.

In spite of this there is still insufficient funding to solve all transport issues on the Western Corridor even with identified 20-year funding of \$1580 million, which comprises:

- \$750m of Crown funding
- \$650m National Land Transport Programme funding
- \$70m Regional funding (existing petrol tax)
- \$110m local funding (rates)

The \$750 million is made up of:

- \$90 million for Travel Demand Management measures, extension of Active Traffic Management Systems along the corridor, additional rail units and partial funding of Petone Grenada link road.
- \$255 million includes funding for the highest priority projects as agreed by the Minister to be:
  - Infrastructure and rolling stock to provide a 15 minute frequency of rail passenger transport to Kapiti
  - Travel Demand Management through improved variable message signs
  - Intersection safety and bottleneck improvements including a possible two-lane Pukerua Bay Bypass

- The Petone Grenada Link road
- Kapiti Western Link Road
- \$405 million is specifically for a four-lane highway in the central section of the Western Corridor and is conditional on regional agreement on the preferred option (whether the Coastal Route or Transmission Gully) and the provision of a detailed implementation plan.

The **\$649 million** is for projects identified as beneficial and agreed by Land Transport New Zealand as having a suitable national funding priority.

The **\$68 million** is crown funding sourced from nationally collected petrol tax for identified regional transport projects. This \$38 million of this is allocated to projects in the rest of the corridor.

Local funding will provide a further **\$110 million** and will come from local authority rates for specific projects (e.g. Kapiti Western Link road) and regional rates for public transport initiatives.

The Proposed Western Corridor Plan is based on upgrading the Coastal Route at an expected cost of \$730 million. It has been assumed the funding for a Mana bypass in the corridor plan would come from the National Land Transport programme and would need to compete against national rather than regional priorities.

**The estimated cost of Transmission Gully is \$1090 million and under existing funding criteria is not likely to qualify for National Land Transport programme funding. The shortfall would need to be funded from other sources e.g. tolling and rates.**

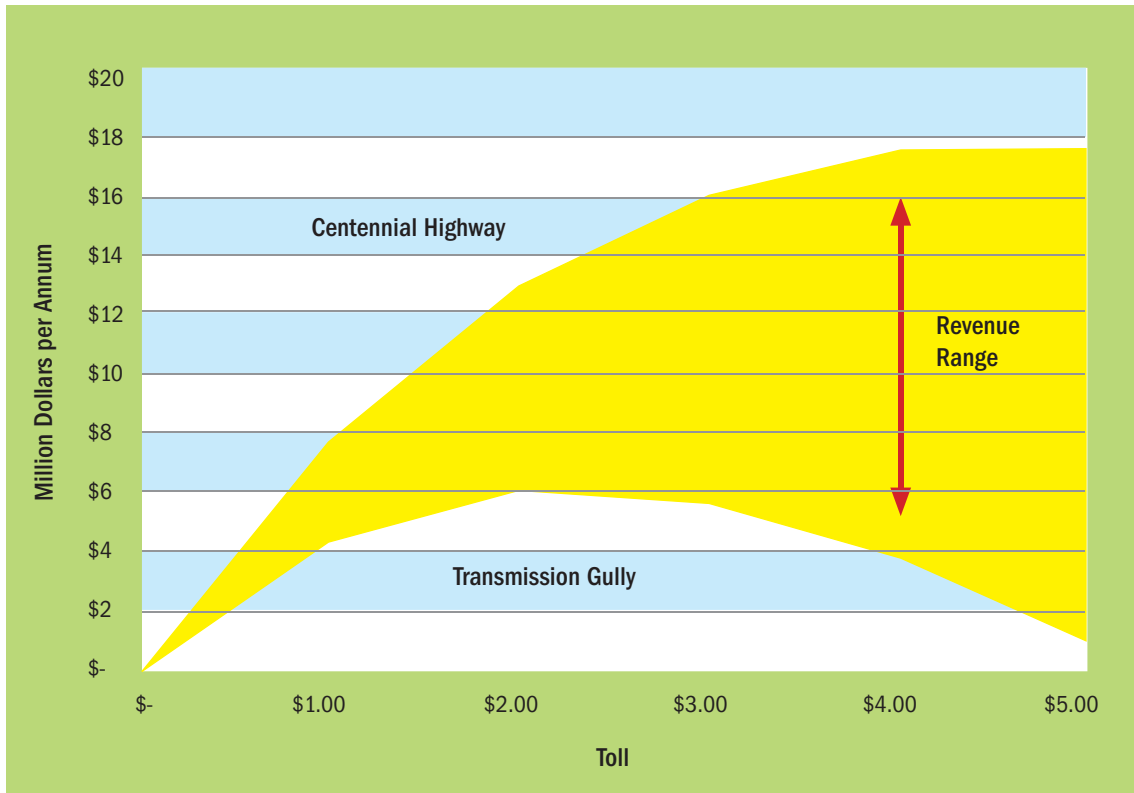
	Coastal Route	Transmission Gully
National Land Transport Programme Funding	\$220M	-
Crown Funding is made up of two components. \$75 million from C2 funding and \$405 million from C3 funding	\$480M	\$480M
Regional	\$30M	\$30M
Total funds available	\$730M	\$510M
Estimated completion costs	\$730M	\$1,090M
Gap	-	\$580M
Tolling	-	\$115M
Remaining funds to be found after tolling	-	\$465M

This table only relates to funding for roading components of the Central Section. C2 funding is from central government for high priority transport projects on the Western Corridor. C3 funding is also from central government and was provided specifically to address congestion in the Central Section of the Western Corridor.

## ALTERNATIVE FUNDING TRANSMISSION GULLY

### Tolling

One way of raising revenue to fund Transmission Gully is to collect a toll. The following graph shows possible annual revenue collection.



Without any speed reductions on the coastal route the predicted toll revenue for Transmission Gully would be in the order of \$6 million a year at a charge of \$3 to \$4 per trip.

Reducing the speed limit to 50kph over the entire length of road from MacKays Crossing to Mana would discourage use of the coastal route, with the exception of local residents making short trips.

In these circumstances it may be possible to raise a net \$10 million a year toll after costs. This toll revenue could service a \$115 million debt at 8 percent interest over 35 years. It is noted that there would be some risks associated with reliance on the potential toll revenue.



## Rates

If the funding shortfall is not met by central government, it could be sourced from local rates.

The following table provides one rating model based on benefits to road users, regional economy and local impacts. This model would increase average annual rates for 35 years by \$49 in Upper Hutt and up to \$727 in Porirua.

	Weighting	Kapiti	Porirua	Wellington	Lower Hutt	Upper Hutt
Road users by origin	50%	37%	33%	23%	6%	2%
Existence, regional economy, tourism, national strategic	20%	9%	9%	56%	19%	7%
Local strategic	10%	20%	60%	20%		
Avoided noise and pollution, accessibility, severance, congestion	20%	20%	80%			
Territorial Local Authority Share		26%	40%	22%	9%	3%
Repayments over 35 years at 8 percent						
Annual Repayments	\$400M loan	\$8,971,906	\$13,779,815	\$7,700,097	\$2,984,528	\$884,961
Annual rate increase per \$100,000 Rateable Value	\$400M loan	\$177	\$270	\$25	\$28	\$23

To calculate the potential rate increase for your home or business go to [www.gw.govt.nz/westerncorridor](http://www.gw.govt.nz/westerncorridor)

## SUMMARY OF PREVIOUS CONSULTATION

The original study began with public consultation on issues and options based on the release of a Preliminary Discussion Document and Draft Performance Indicators in November 2004.

During May 2005 a second round of consultation was held on the initial technical findings and five possible scenarios for the corridor. In addition to this there has been ongoing dialogue with key stakeholders including Iwi. A Consultation Summary Report has been issued for each consultation round. Feedback from the Phase 2 consultation was:

- Certainty is required for the region
- Commitment to action is required in the short to medium term
- The national strategic importance of the corridor
- The urgency of reducing delays and improving road safety
- Reliability, in terms of predictable travel times, is essential
- A balanced solution is needed including an upgrade of passenger transport and road infrastructure

- The coastal expressway is opposed on the grounds of environmental effects, natural hazard risk, construction delays and social severance
- Transmission Gully Motorway is not favoured if unaffordable in the short to medium term
- Transmission Gully Motorway is considered the best solution environmentally and strategically
- There is a preference for a staged solution to obtain benefits sooner
- The most important rail elements are double tracking and extension of electrification
- The most important road elements apart from Transmission Gully Motorway and the Coastal Expressway are Petone Grenada Link and Western Link Road
- Petone Grenada Link has environmental and community impact issues to be resolved
- Further upgrades through the Mana/Plimmerton area are unwelcome

Discussions have been held with the Wellington Regional Strategy Project Executive Group regarding implications of plan packages.

The Strategy is seeking to ensure that quality regional form and systems are achieved involving good design, good accessibility, strong sense of community and strong sense of personal safety.

The Coastal Route is based on meeting the high growth scenario for 2026. There is little risk that further capacity would be required in the foreseeable future.

## **THE NEXT STEPS**

Following the current round of consultation submissions will go forward to a formal hearing in December.

After any amendments, the approved Western Corridor Plan will become part of the Regional Land Transport Strategy 2006 - 2015. The Regional Land Transport Committee will inform Transit in the preparation of its 10-year State Highway Forecast, where any state highway projects must be programmed. Transit has a statutory duty to take into account the Regional Land Transport Committee plans, but is not bound by it.

Further public consultation will be included during investigation, design and construction phases.

## **YOUR VIEWS ARE IMPORTANT**

A Hearings Subcommittee of the Regional Land Transport Committee has been set up to receive and hear public submissions on the Proposed Western Corridor Plan. The Subcommittee needs to have all relevant facts and opinions relating to the Proposed Western Corridor Plan in order to make recommendations and report comprehensively to the Regional Land Transport Committee.

One of the roles of the Hearings Subcommittee will be to ensure that the advice given to the Regional Land Transport Committee adequately, fairly and demonstrably reflects submitters' comments. It is not the role of the subcommittee to be an advocate for the Proposed Plan.

The initial members of the Subcommittee are Cr Terry McDavitt (chairman of the Regional Land Transport Committee), Charles Finny (chief executive of the Wellington Regional Chambers of Commerce) and Alan Bickers (former chairman Transit NZ). The remainder of the subcommittee membership will be determined, and final Terms of Reference approved, by the Regional Land Transport Committee on 6 October 2005.

The Proposed Western Corridor Plan follows best practice principles and is derived from the best available information. The public and all interested parties should use it as the basis of their submissions whether they support, oppose or simply wish to comment.

## **WHERE TO FIND DETAILED INFORMATION**

The Proposed Western Corridor Plan and supporting technical reports, studies and consultation reports can be viewed at:

### **WELLINGTON**

Greater Wellington Regional Council Office, 142-146 Wakefield Street

Transit New Zealand, Wellington Regional Office, 186-190 Willis Street

Wellington City Council Service Centre, 101 Wakefield Street

Wellington Central Library, 65 Victoria Street

Suburban branch libraries at Brooklyn, Ngaio, Wadestown, Island Bay, Johnsonville, Tawa, Khandallah, Karori, Miramar, Kilbirnie, and Newtown

### **PORIRUA**

Porirua City Council Office, 16 Cobham Court

Porirua Information Centre, 8 Cobham Court

Porirua Central Library, Cnr Norrie & Parumoana Streets

Suburban branch libraries at Cannons Creek, Titahi Bay, Pukerua Bay and Whitby

- consideration of the issues raised during the above submissions and hearing;

## **KAPITI COAST**

Kapiti Coast District Council Office, Rimu Road, Paraparaumu

Paraparaumu Library, adjacent to the Council Office

Local branch libraries at Otaki and Waikanae

## **HUTT VALLEY**

Upper Hutt City Council Office, 838-842 Fergusson Drive

Upper Hutt Library, 844 Fergusson Drive

Hutt City Council Office, 30 Laings Road

Hutt City Central Library Queens Drive & Woburn Road

Suburban branch libraries at Petone, Eastbourne, Moera, Naenae, Stokes Valley, Wainuiomata and Taita.

The Proposed Western Corridor Plan and supporting documentation may also be viewed and/or downloaded from the following websites:

[www.transit.govt.nz](http://www.transit.govt.nz)

[www.gw.govt.nz/westerncorridor](http://www.gw.govt.nz/westerncorridor)

An electronic version of the Proposed Western Corridor Plan and full supporting technical reports, studies and consultation reports is also available as a CD-ROM on request and free of charge.

## **INDEX TO REPORTS**

### **Notes to Reports:**

The following reports provide detailed information on the studies undertaken for the Proposed Western Corridor Plan.

The reports are either consultation reports or technical reports and are divided accordingly in this index.

Each report is identified as either a consultation report (“CR”) or technical report (“TR”) on the individual summary sheets prepared in respect of each of the reports.

The summary sheets are intended purely as a guide in understanding of each report’s content and context. The full reports can be seen online at [www.gw.govt.nz](http://www.gw.govt.nz) or [www.transit.govt.nz](http://www.transit.govt.nz).

Copies of the technical reports can be purchased individually or as a complete set from the Greater Wellington Regional Council or can be obtained free of charge in CD-ROM format. Reference copies can be found in all Wellington regional libraries, including Porirua, Hutt Valley, Petone, Tawa and Kapiti and also at the Wellington City Council Service Centre, the Porirua City Council and Information Centre, the Kapiti Coast District Council and at the offices of Greater Wellington Regional Council and Transit New Zealand.

### **Consultation Reports (the “CR” reports)**

This preliminary consultation period, or Phase 1 period, was designed to identify interested parties, generate feedback on the issues and options for the corridor and to obtain an understanding of interested parties’ preferred solutions.

#### **Draft Performance Indicators (CR1) - October 2004**

A public discussion document explaining the background to the Western Corridor Transportation Study.

#### **Preliminary Discussion Document (CR2) - October 2004**

A report to explain the background and purpose of the Western Corridor Transportation Study

#### **Consultation findings: Phase 1 (CR3) - December 2004**

A report to present the findings of the first phase of consultation on the Western Corridor.

Phase 2 consultation involved the development of reports that identified different alternatives and findings related to the second consultation phase.

#### **Consultation: Phase 2 Alternative Scenarios (CR4) - May 2005**

A report to present background information on the Western Corridor Transportation Study and present five transportation scenarios for the Western Corridor.

**Consultation Findings: Phase 2 (CR5) - July 2005**

A report to present the findings of the second consultation phase on the Western Corridor.

The third phase of consultation seeks public submissions on the Proposed Western Corridor Plan including any views on alternative routes, particularly Transmission Gully, for the central roading section.

**Consultation Document - Proposed Western Corridor Plan (CR6) - October 2005**

A document outlining the submission process for members of the public wishing to have their say on the Proposed Western Corridor Plan, including the Proposed Western Corridor Plan and an outline of supporting technical reports.

**Technical Reports (The “TR” reports)**

The first report was developed prior to the Western Corridor Transportation Study.

**Transmission Gully Motorway Cost Estimate - Executive Summary (TR1) - March 2004**

A report produced by Beca Carter Hollings & Ferner Ltd to update the cost of Transmission Gully Motorway in order to obtain greater certainty around the estimated cost of the project.

The following reports were developed during the Western Corridor Transportation Study.

**Confirmed Elements (TR2) - February 2005**

The report identified three groups of elements (projects) being those to be assessed, those to be assessed if modelling showed them to be favourable, and those not assessed for a number of reasons.

**Risk Assessment Workshop Report (TR3) - April 2005**

A report prepared to present findings of the risk assessment workshop held in February 2005.

**Summary of Draft Technical Report - Stage 1 (TR4) - April 2005**

A summary of technical work carried out before the Phase 2 consultation on the Western Corridor as of 20 April 2005.

**Draft Technical Report Stage 1 (TR5) - April 2005**

A report recording key findings from the technical work carried out in respect of the Western Corridor study, including consideration of the five scenarios.

**Draft Technical Report - Stage 1 Appendices (TR6) - April 2005**

Appendices to the Draft Technical Report. These contain detailed descriptions of the elements (projects) and concept plans, modelling results and cost estimates.

**Travel Demand Management (TR7) - April 2005**

A report that describes potential travel demand management measures that might apply to the Western Corridor. Travel demand management provides a way of managing traffic flows by promoting travel planning and alternatives to car travel, particularly during peak congestion periods.

**Rail Issues and Options (TR8) - April 2005**

This report considers passenger and freight rail issues and options in respect of the Western Corridor so as to best complement the development of the corridor.

**Planning Balance Sheet Assessment (TR9) - April 2005**

This report describes the development and construction of the Planning Balance Sheet - a tool applied to evaluate the performance of elements (projects) and packages (integrated combinations of projects).

**Cost and Programme Review Update- Transmission Gully Motorway and Coastal Route (TR10) - August 2005**

A report to review and compare risks, costs and a possible time to build the Coastal Route or Transmission Gully Motorway, and identifies the social and environmental impacts of the two routes.

**Porirua City Council Transmission Gully Options (TR11) - August 2005**

A report to examine the Transmission Gully variants as presented by Porirua City Council to determine whether alternative lower cost options perform satisfactorily.

**Report to Regional Land Transport Committee (TR12) - August 2005**

A report that considered costs and risks issues of Transmission Gully Motorway and Coastal Route for the Regional Land Transport Committee's workshop in August 2005.

**Travel Demand Management - Final (TR13) - September 2005**

This report updates the first Travel Demand Management Report and describes travel management measures designed to reduce travel at peak times and complement proposals for the infrastructure improvements in the Proposed Western Corridor Plan.

**Planning Balance Sheet Assessment - Final (TR14) - September 2005**

This report updates the first Planning Balance Sheet Assessment Report and further describes the evaluation of elements (projects) and packages (integrated combinations of projects) against the objectives of the Regional Land Transport Strategy.



## MAKING A SUBMISSION

Make your submission online at [www.gw.govt.nz/westerncorridor](http://www.gw.govt.nz/westerncorridor) or by using the tear out form at the back of this document.

- Post it to  
Proposed Western Corridor Plan  
Greater Wellington Regional Council, P O Box 11646, Wellington
- Deliver it to  
Proposed Western Corridor Plan  
Greater Wellington Regional Council, 142-146 Wakefield Street, Wellington
- Fax it to  
04 385 6960  
Attn: Proposed Western Corridor Plan
- Email to [western.corridor@gw.govt.nz](mailto:western.corridor@gw.govt.nz)

Additional submission forms are available from the Greater Wellington Regional Council office, from [www.gw.govt.nz](http://www.gw.govt.nz) or will be mailed to you if you phone 04 381 7779.

When making a submission you must indicate whether or not you wish to be heard in support of your submission.

Submissions close at 5 pm on Friday 4 November 2005.

The public submission process of the Proposed Western Corridor Plan is:

- Submitters will receive an acknowledgment of receipt of their submission.
- After the closing date, the submissions will be copied and a complete set of submissions will be available for public viewing at Greater Wellington Council, 142 Wakefield Street Wellington and at Transit New Zealand, Wellington Regional Office, 186-190 Willis Street.
- A Hearings Subcommittee will hold a public hearing, consider the submissions received and report back to the Regional Land Transport Committee.
- If you wish to be heard in support of your submission, you will be given notice of the hearing dates and an explanation of how you may exercise the opportunity to be heard.
- If you are making a submission as an individual, Greater Wellington Regional Council will consider removing your personal details if you so request in your submission prior to making your submission available to the public.

Persons who lodge a submission will receive information concerning the decision of the Hearings Subcommittee and the reasons for those decisions.

**Submissions close at 5 pm on Friday 4 November 2005**

