



NZ TRANSPORT AGENCY  
WAKA KOTAHI

# Transport - An Enabler of Economic Development

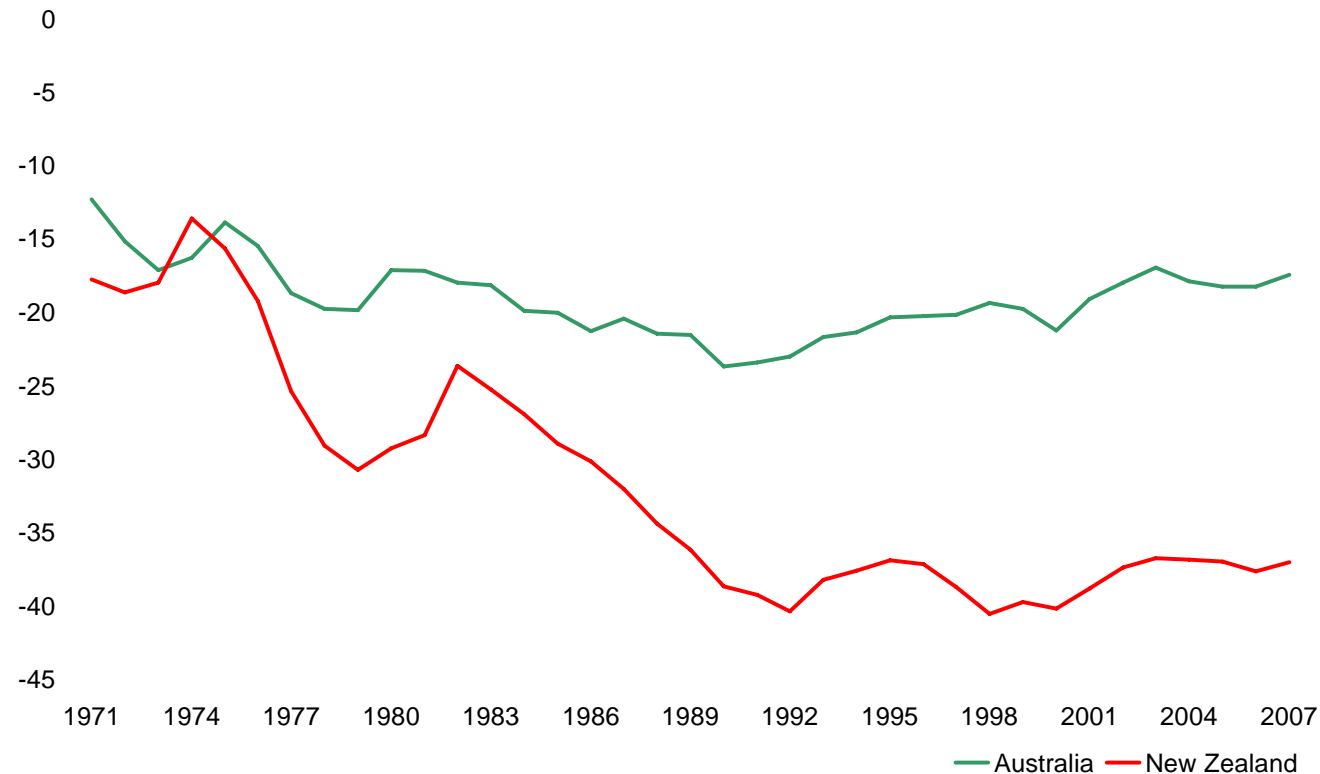
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# Problem Statement

Ability to compete internationally reflects long-term declining trend....

GDP Per Capita - Gap against US (Constant 2000 Prices)



GDP per capita

	1990	2007
Luxembourg	1	1
Norway	12	2
United States	3	3
Ireland	22	4
Switzerland	2	5
Netherlands	14	6
Canada	5	7
Australia	17	8
Austria	6	9
Sweden	7	10
Denmark	10	11
Iceland	4	12
United Kingdom	19	13
Belgium	9	14
Finland	13	15
Germany	11	16
Japan	8	17
France	16	18
OECD total	18	19
Spain	21	20
Italy	15	21
Greece	23	22
New Zealand	20	23
Korea	26	24
Czech Republic	24	25
Portugal	25	26
Poland	28	27
Mexico	27	28
Turkey	29	29

# Solution Statement

.. although a trend reversal is possible...

## But requires a sharpened focus on:

- Minimising unit production costs
- Maximising unit revenues by exploiting value added opportunities

## To facilitate this the current government has 6 main policy drivers:

- Providing a high-quality regulatory environment
- Improving quality of public spending - delivering better, smarter services
- Innovation and business assistance
- World-class tax system
- Education and skills
- Investment in productive infrastructure - a large chunk of which is in

# Investment in transport infrastructure

.. which is directed by the Government Policy Statement (GPS)...

## GPS issued by the Minister of Transport every three years:

- Sets out short to medium term direction for how revenue from FED, RUC and MVR is to be invested in land transport
- Can be amended by the Minister at anytime
- NZTA **must** 'give effect to it'

## New government amended GPS – 19 May 2009

- **Targets replaced** with impacts
- Strong focus on **economic growth and productivity**
- Safety, environment, transport choice and public health as other desired impact
- Clear national direction

# Economic growth and productivity

.. and how the GPS aims to improve our performance...

Investing in infrastructure and services that enhance transport efficiency and lower the cost of transportation through the following impacts:

- improvements in journey time reliability
- easing of severe congestion
- more efficient freight supply chains
- better use of existing transport capacity.
- better access to markets, employment and areas that contribute to economic growth
- a secure and resilient transport network.

# The National Land Transport Programme

.. how the NZTA will invest \$8.6bn over next three years...

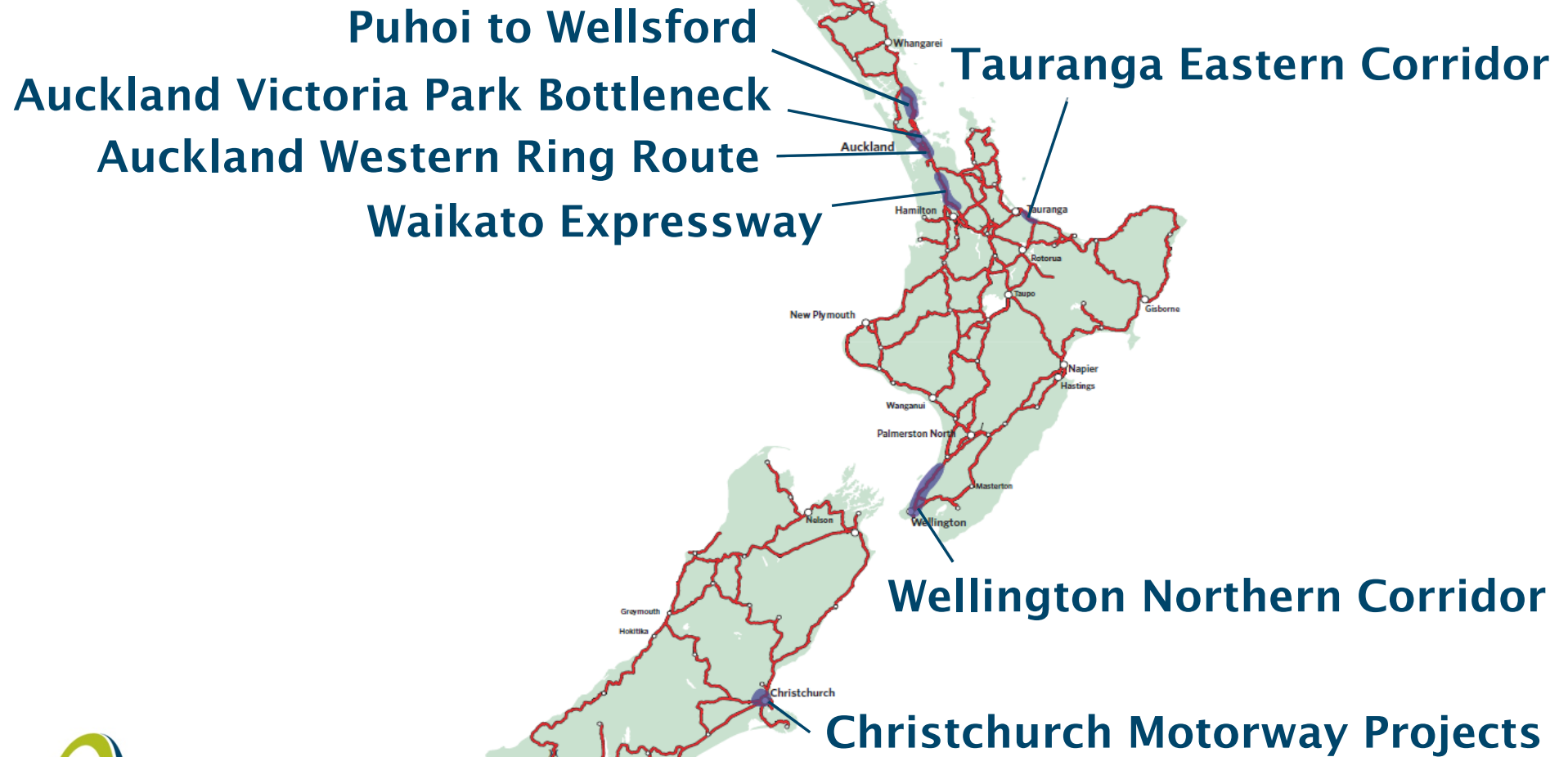
## New investment priorities to achieve the desired impacts of the GPS:

- Roads of National Significance and local roads critical to them
- Key freight and tourism routes
- Key urban arterials
- Model urban walking and cycling communities
- Public transport making significant contributions to easing severe congestion
- Optimising existing capacity and levels of service on highly trafficked roads.

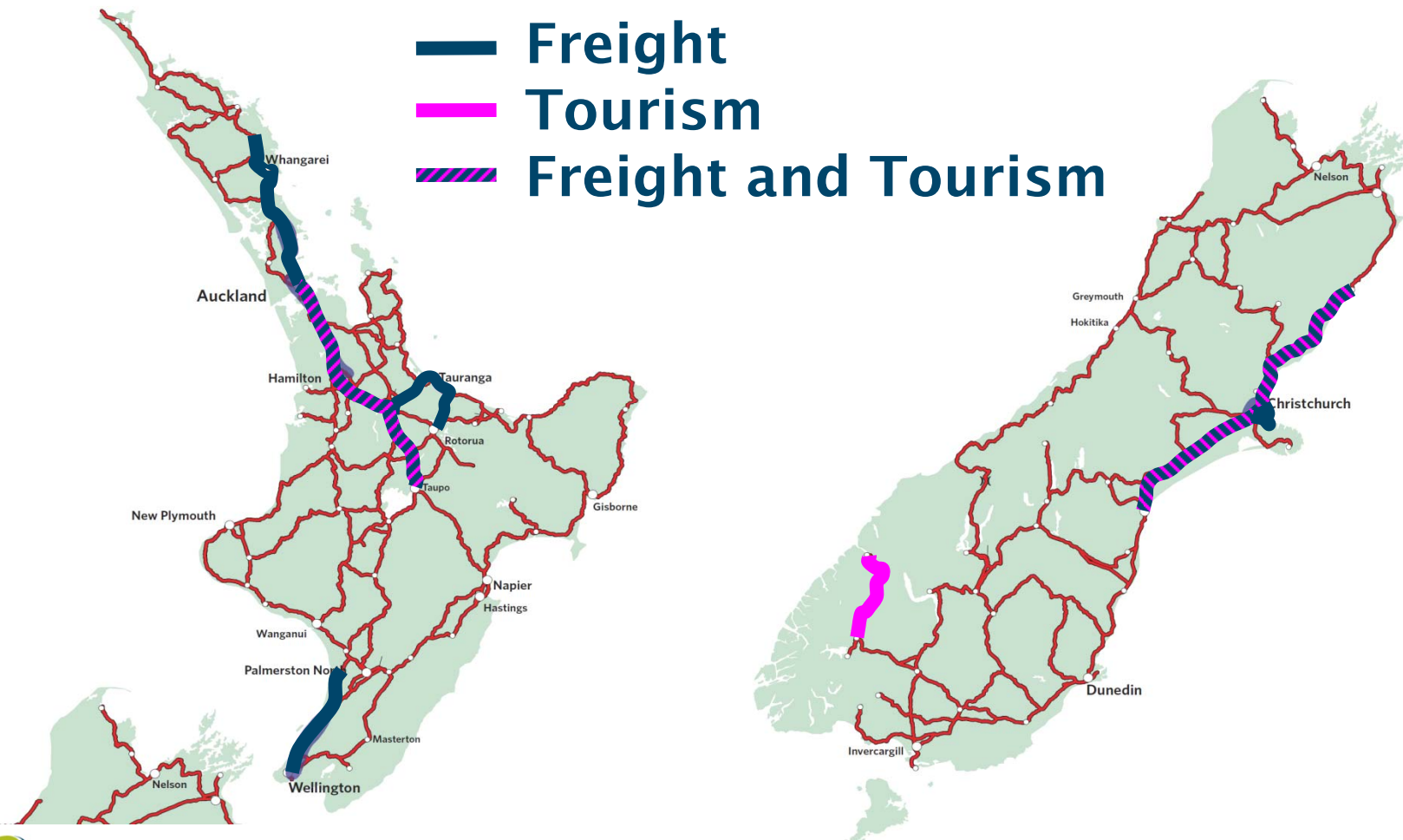
## Also:

- Greater weight given to benefit cost ratio i.e. efficiency
- Tougher assessment of the effectiveness of a proposed activity.

# Roads of national significance

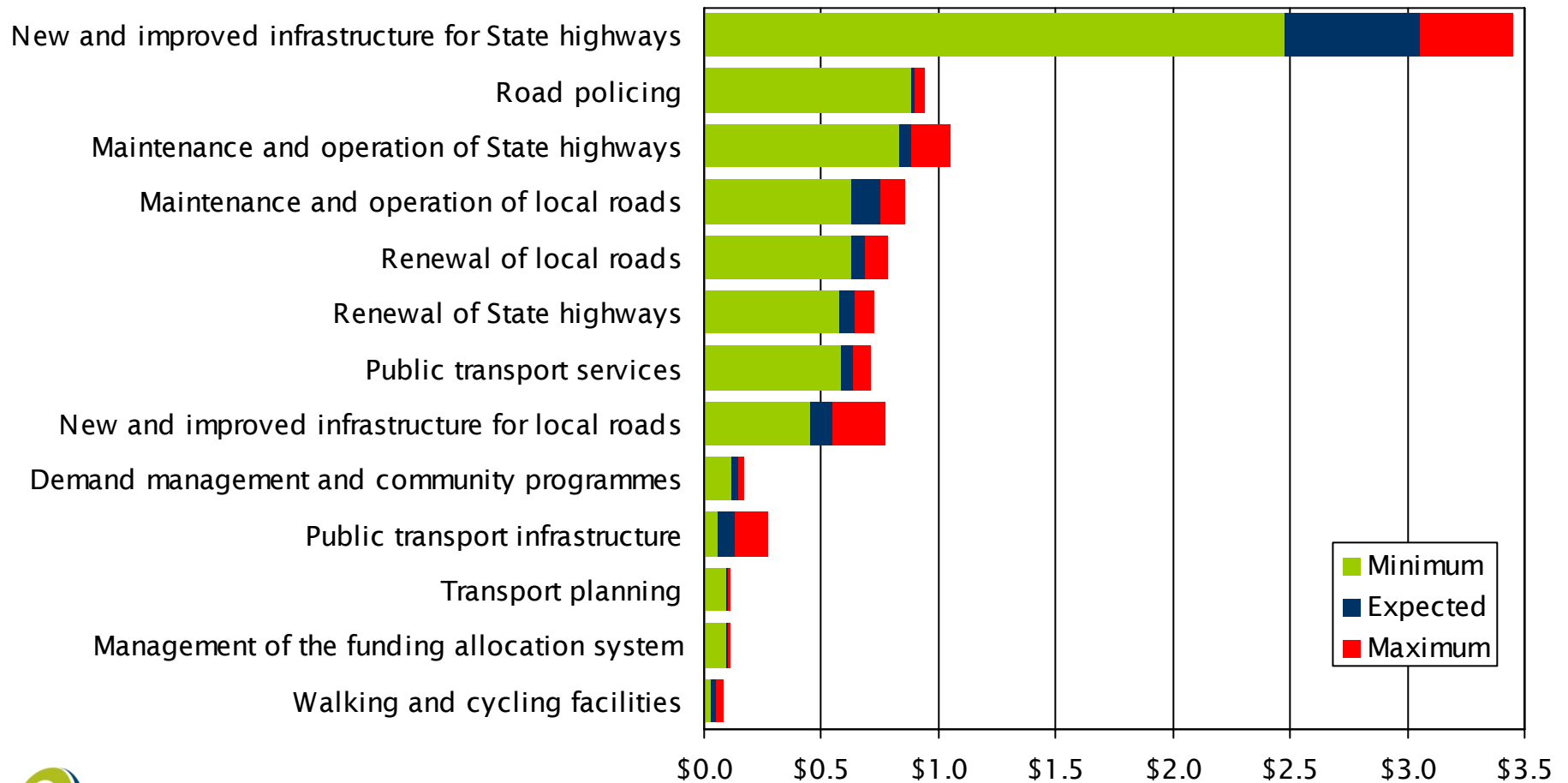


# Initial routes for freight and tourism



# 2009/10 to 2011/12 expenditure ranges

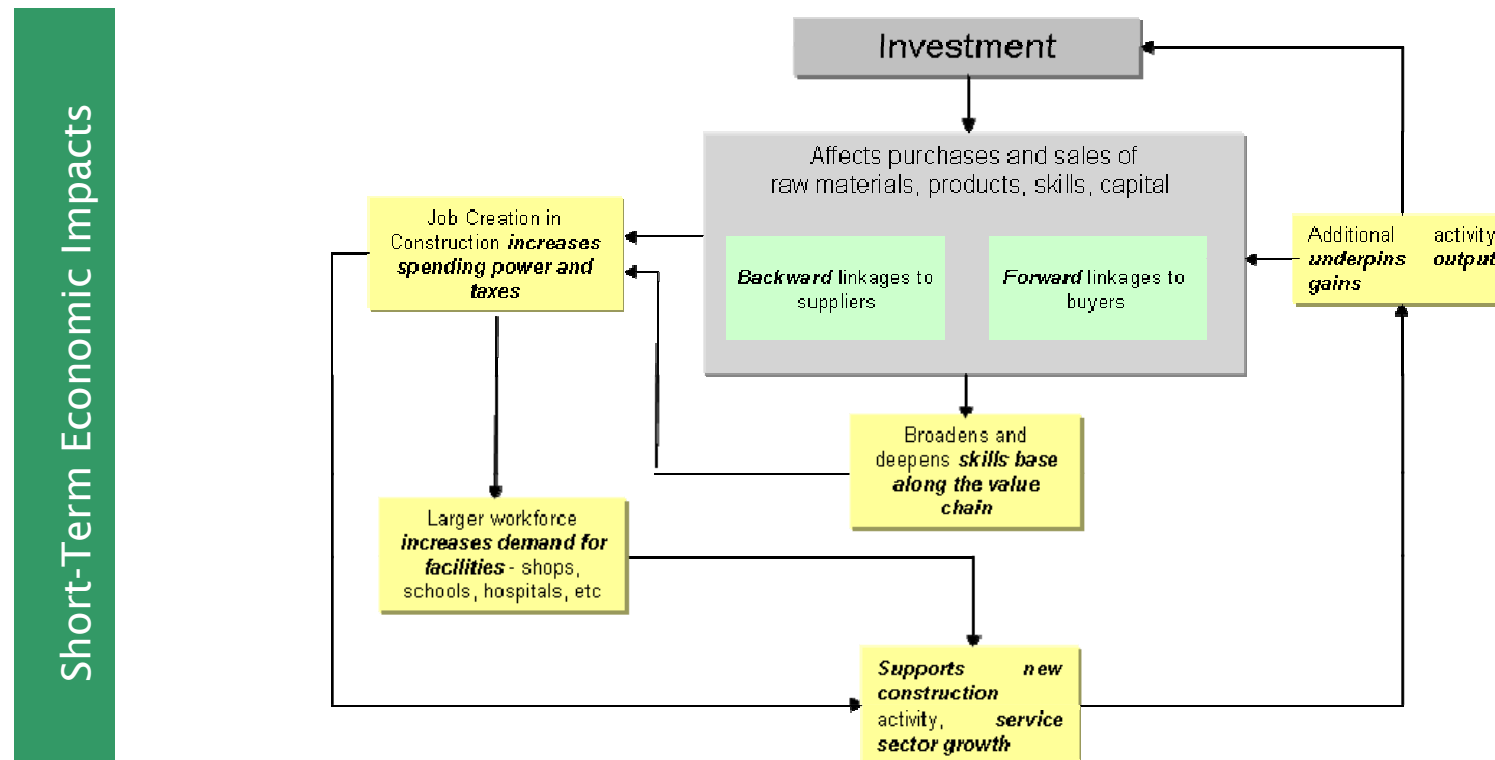
## Expected Expenditure on Transport Infrastructure - 2009/10 to 2011/12 (NZ\$bn)



# Investment Multiplier Effects

... which, in the short-term, should help to boost jobs, income and regional output

Investment in construction starts a cascade of events that increases economic activity

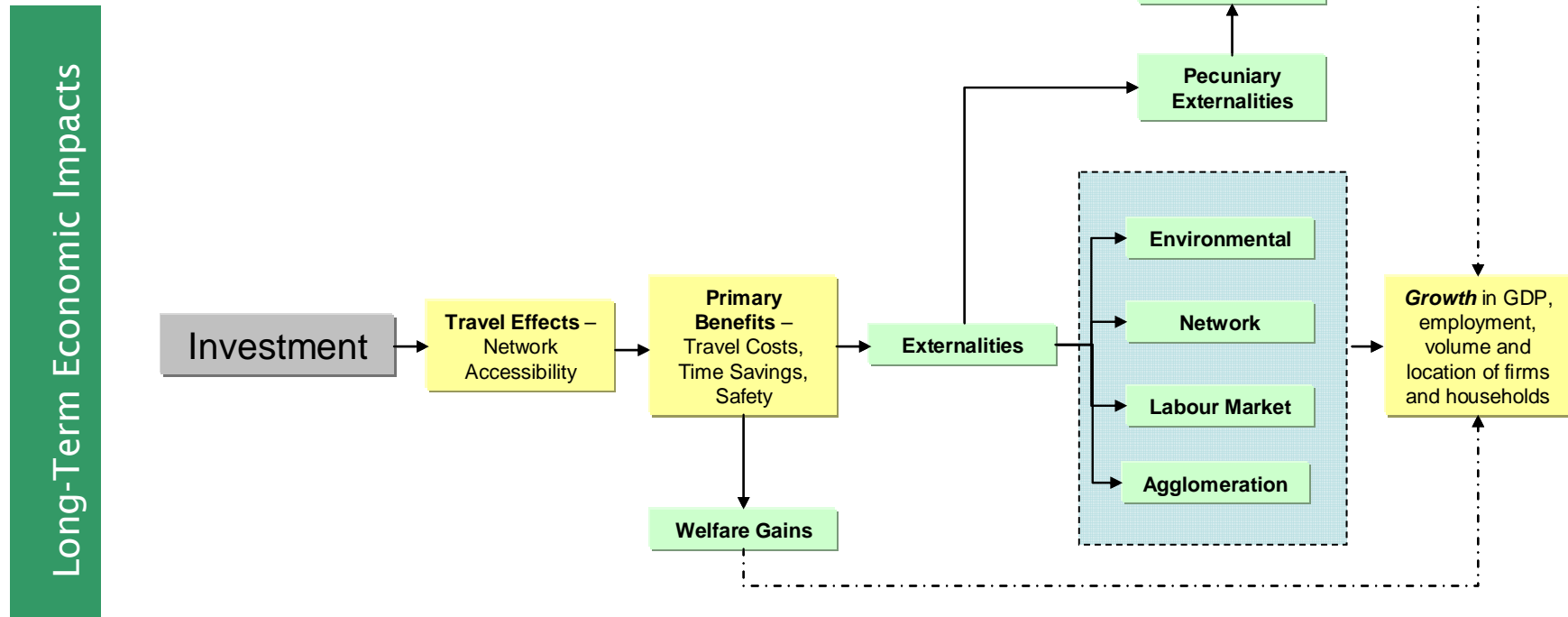


MoT modelling suggests that a NZ\$1 investment in transport infrastructure will result in an increase in gross output of between NZ\$2.4 and NZ\$2.9

# Additional Stock Effects

...as well as yield long-term economic benefits...

Effects on output that are in addition to those generated from simply adding to the productive capital stock



Economic efficiency considerations that specify the extent to which the primary benefits of a project exceed its costs are one of the key factors when approving funding

# Empirical Evidence – Lasting effects

...although the picture is mixed when comparing different countries...

The relationship between investment and growth has been difficult to establish empirically. Recent econometric work undertaken by the OECD has provided the following results:

- Mean co-efficient for all OECD countries suggests that lagged investment has a positive and significant effect on growth and long-run output levels.
- State Highway estimates - generally more positive, in part, reflecting the impact of increasing freight services.
- Some countries reflect negative coefficients.
- NZ's coefficients are positive across all indicated modes, suggesting an infrastructure deficit

Coefficients - Impact of Investment on Long-Run Output

	Roads	Rail	State Highways
Australia	0.17	0.46	
Austria	-0.13	2.27	0.17
Belgium	0.27	-1.01	0.12
Canada		0.45	
Denmark	1.19	-0.20	0.10
Finland	1.66	0.29	0.00
France	-0.81	-2.52	0.09
Greece	-0.09	2.22	
Iceland	-1.45		
Ireland	-2.29	2.02	0.00
Italy	-0.28	-0.94	0.06
Japan	0.64	2.46	0.13
Korea	0.17	1.06	
Mexico	0.17		
Netherlands	-0.45	-0.15	1.00
New Zealand	1.85	0.95	0.05
Norway	0.75	-1.37	
Portugal	0.30	0.09	0.00
Spain	-0.43	-1.28	0.16
Sweden	-0.14	-0.22	0.16
Switzerland	-0.55	-3.65	0.11
Turkey	-0.13	-0.83	
United Kingdom	0.92	0.30	-0.12
United States	1.86	-0.07	-0.47
<b>Mean - OECD</b>	<b>0.46</b>	<b>0.53</b>	<b>0.40</b>

Source: OECD Report titled "Infrastructure Investment: Links to Growth and the Role of Public Policies", pg 48, dated 24 March 2009

# Conclusion

...in part because of differences in public policy

Empirical evidence suggests that the impact of infrastructure investment on growth is country-specific. In part, this is because of policy rules that affect:

- Market Structure
    - Extent of Concentration
    - Public and provision
    - Private Provision through Concessions and PPPs
  - Market Rules
    - Regulation of production and delivery
  - Investment Decision Making
    - Project selection/prioritisation
      - “Building Australia” Initiative / National Infrastructure Plan
- Identifying projects with high returns and shorter times lags across different types of infrastructure (and work types)

**Investment in transport is a necessary, but not sufficient condition to meet governments overall economic objectives**