

# NATIONAL NETWORK INVESTMENT

## Assessment Tools & Available Evidence

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# IN PRESENTATION

## Today's discussion

- The challenge
- NLTF investment in maintenance
- Expenditure trends
- Network performance trends
- National assessment



# IN SUMMARY

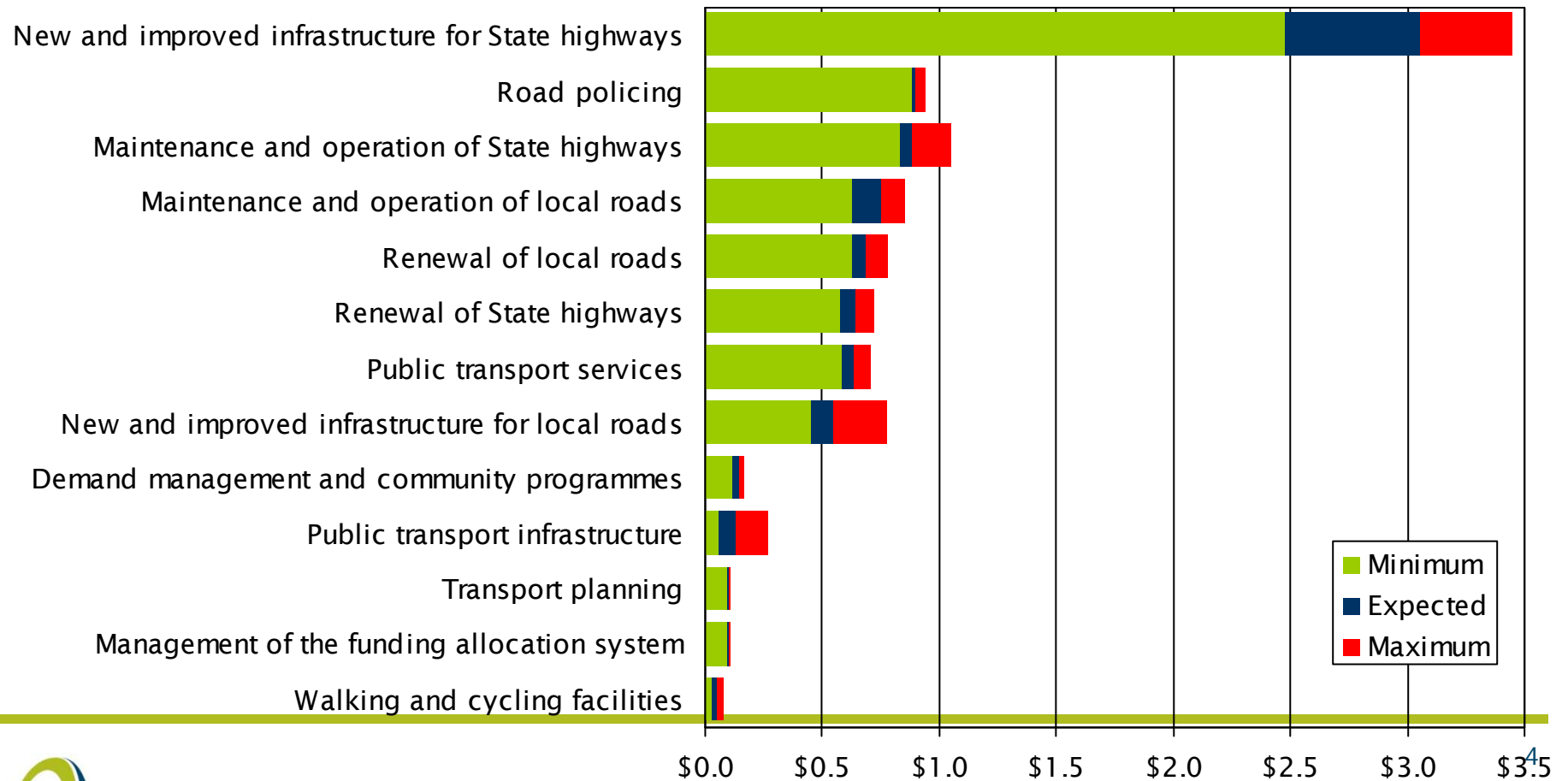
## The challenge for NZ transport sector

- Maintaining and optimising what we've got
- Meeting our forward commitments
- Giving effect to Government and regional direction
- Meeting transport user and ratepayer expectations
- Optimising the above within flat-lined revenue

# 2009 GPS FUNDING RANGES

## The Investment Parameters

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



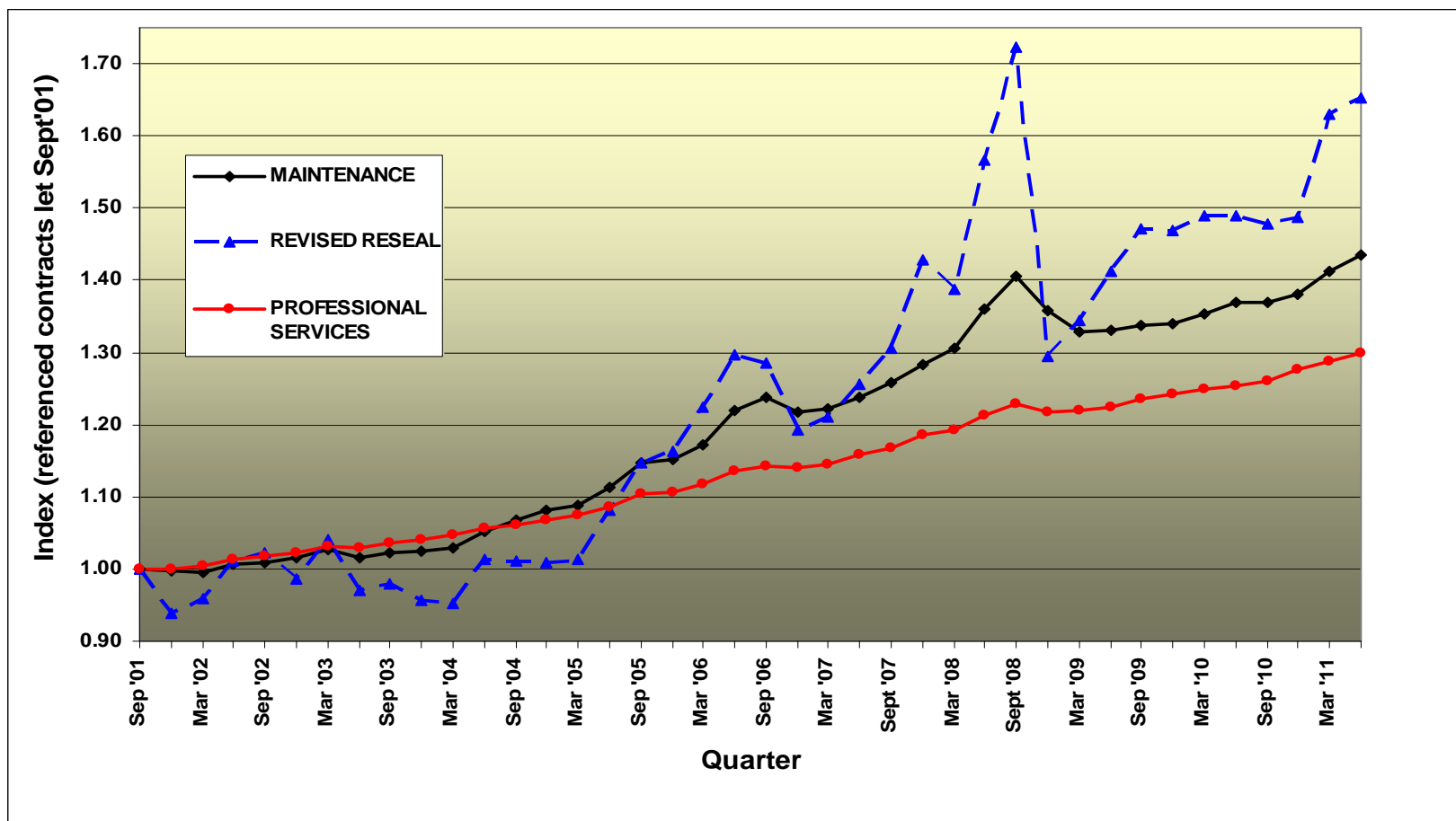
# BLOCK MAINTENANCE PROGRAMMES

## Pavement maintenance and renewal annual expenditure

	Local roads	State highways
Sealed kilometres	51,000	10,900
Unsealed kilometres	31,800	32

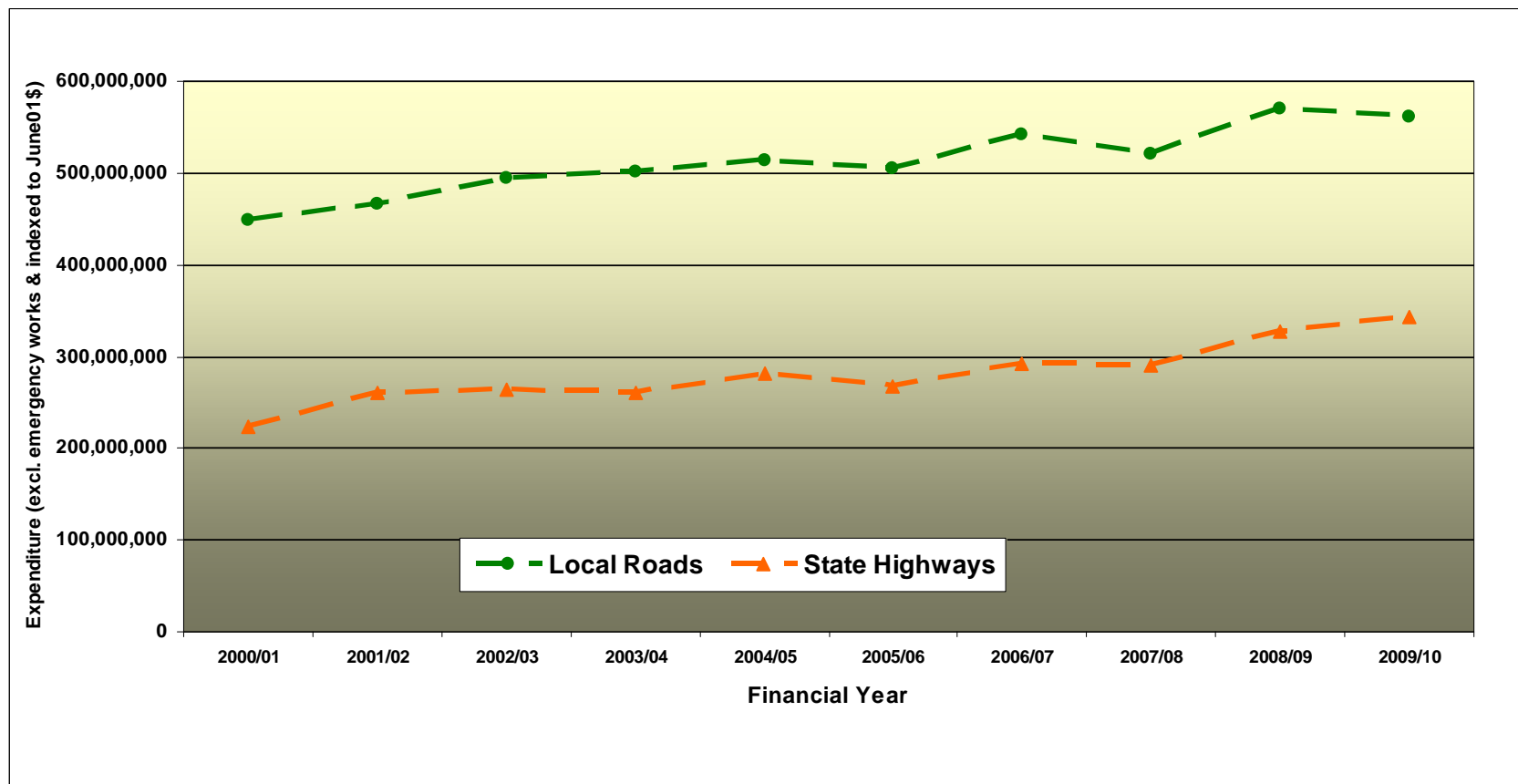
Total cost	Local roads	State highways
Sealed pavements	\$390m	\$235m
Traffic services	\$114m	\$65m
Drainage/environmental	\$105m	\$48m
Unsealed pavements	\$70m	\$0.5m
Network management	\$53m	\$57m
Structures	\$30m	\$32m

# IMPACT OF ESCALATION COST ADJUSTMENT FACTORS

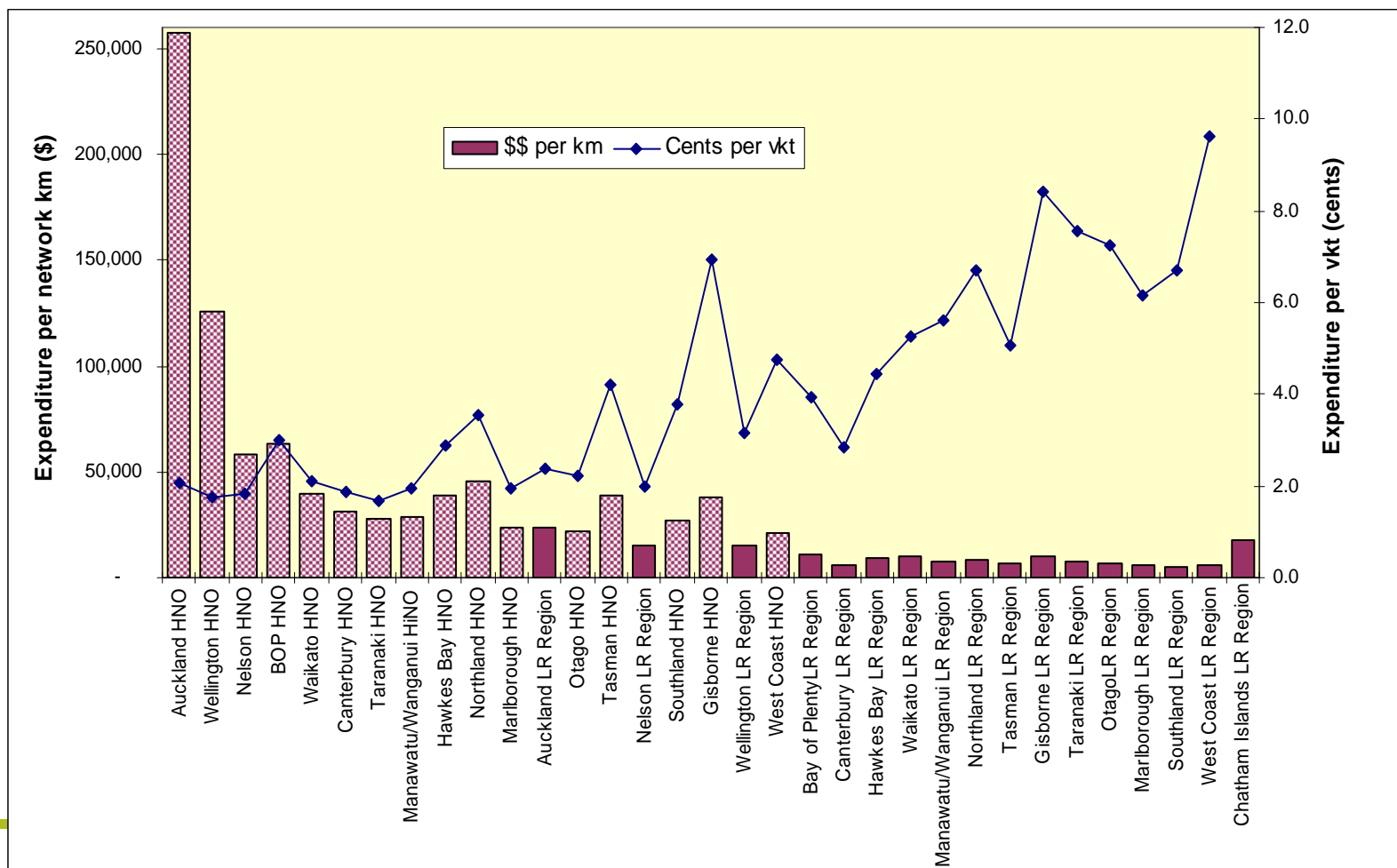


# EXPENDITURE TRENDS

## Maintenance cost comparison (escalation adjusted)



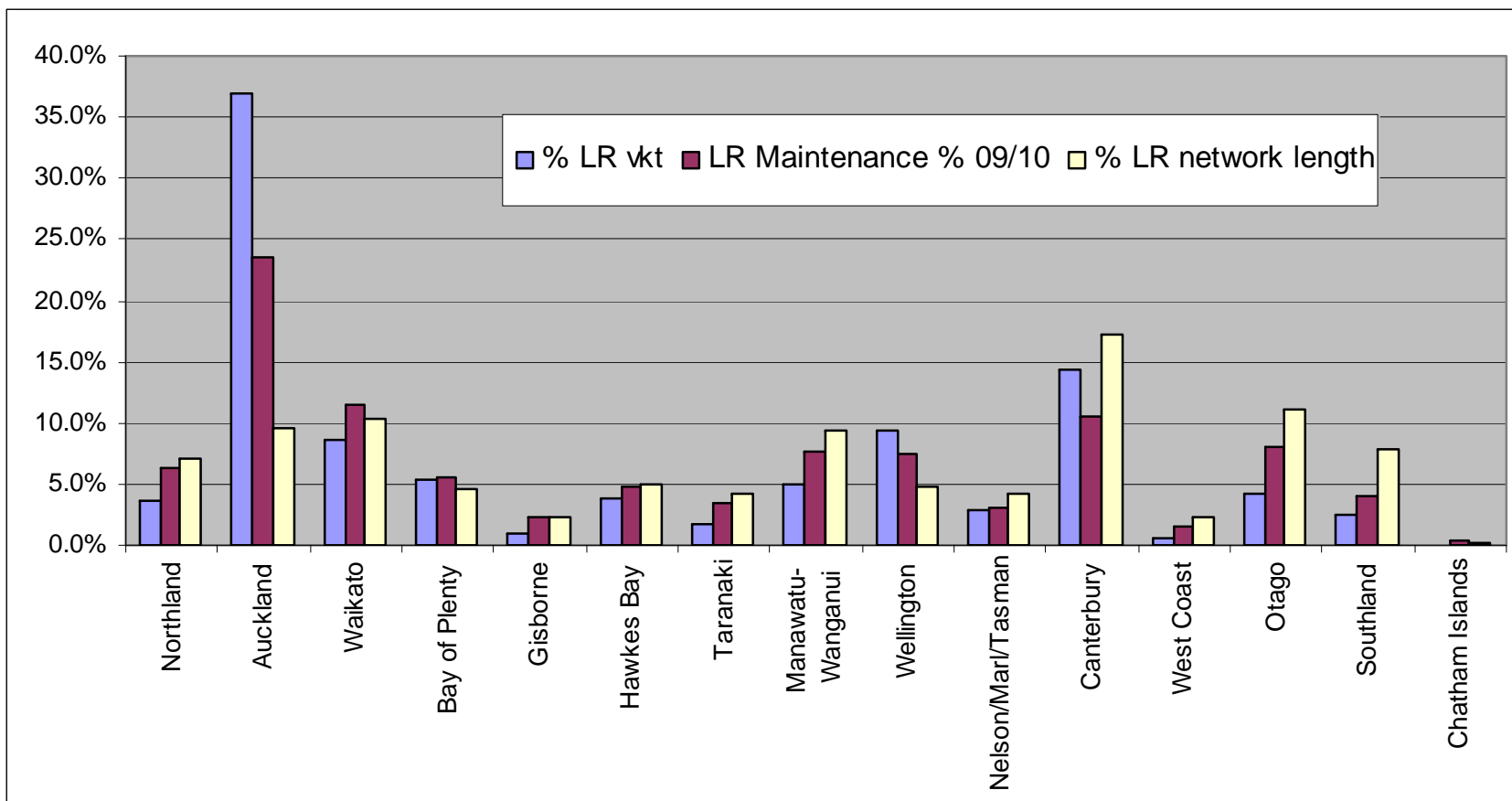
# REGIONAL MAINTENANCE EXPENDITURE 2009/10 - NLTP plus local share





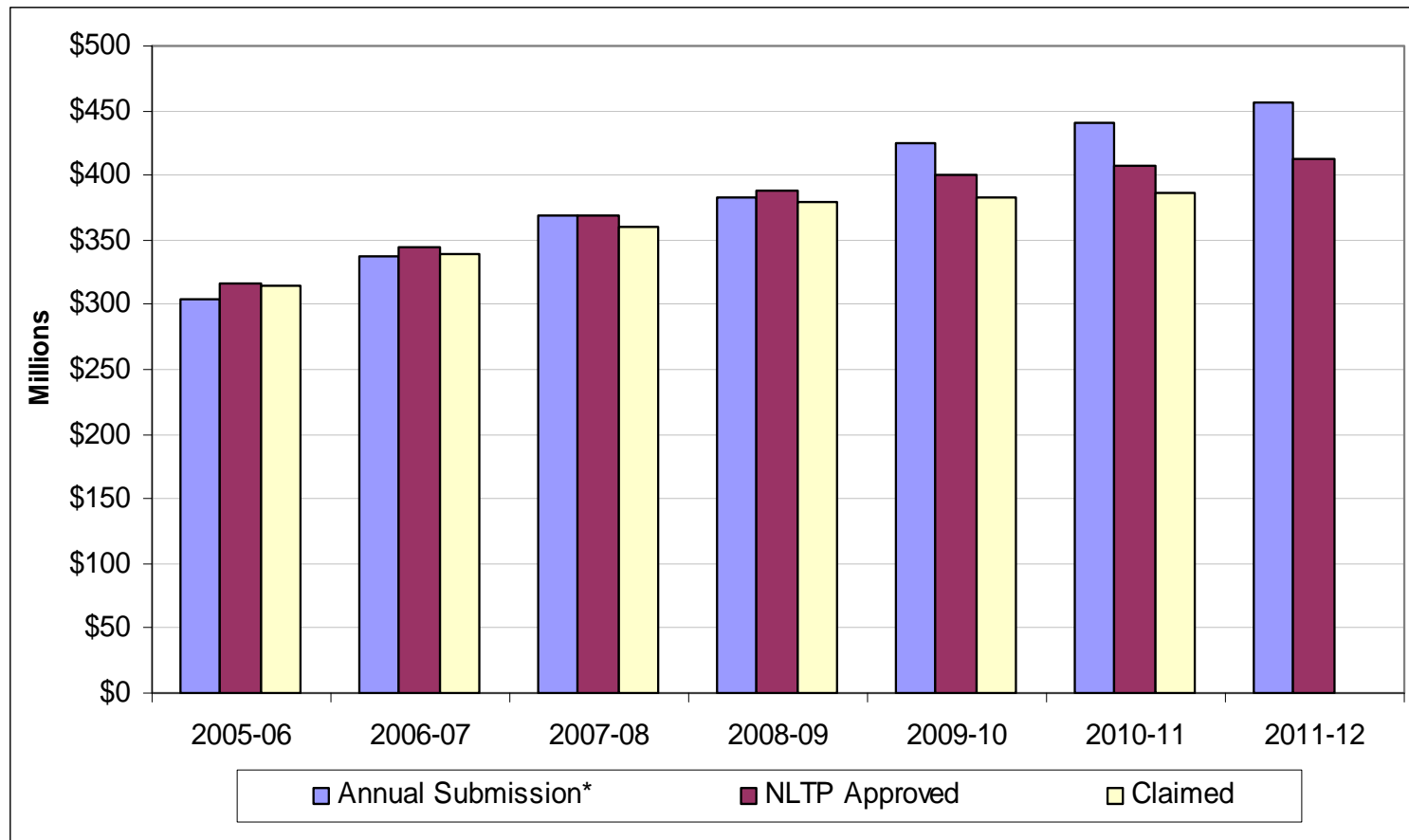
# REGIONAL PROPORTIONS

## Network Demand/NLTP Allocation/Length



# LOCAL ROAD MAINTENANCE SPEND

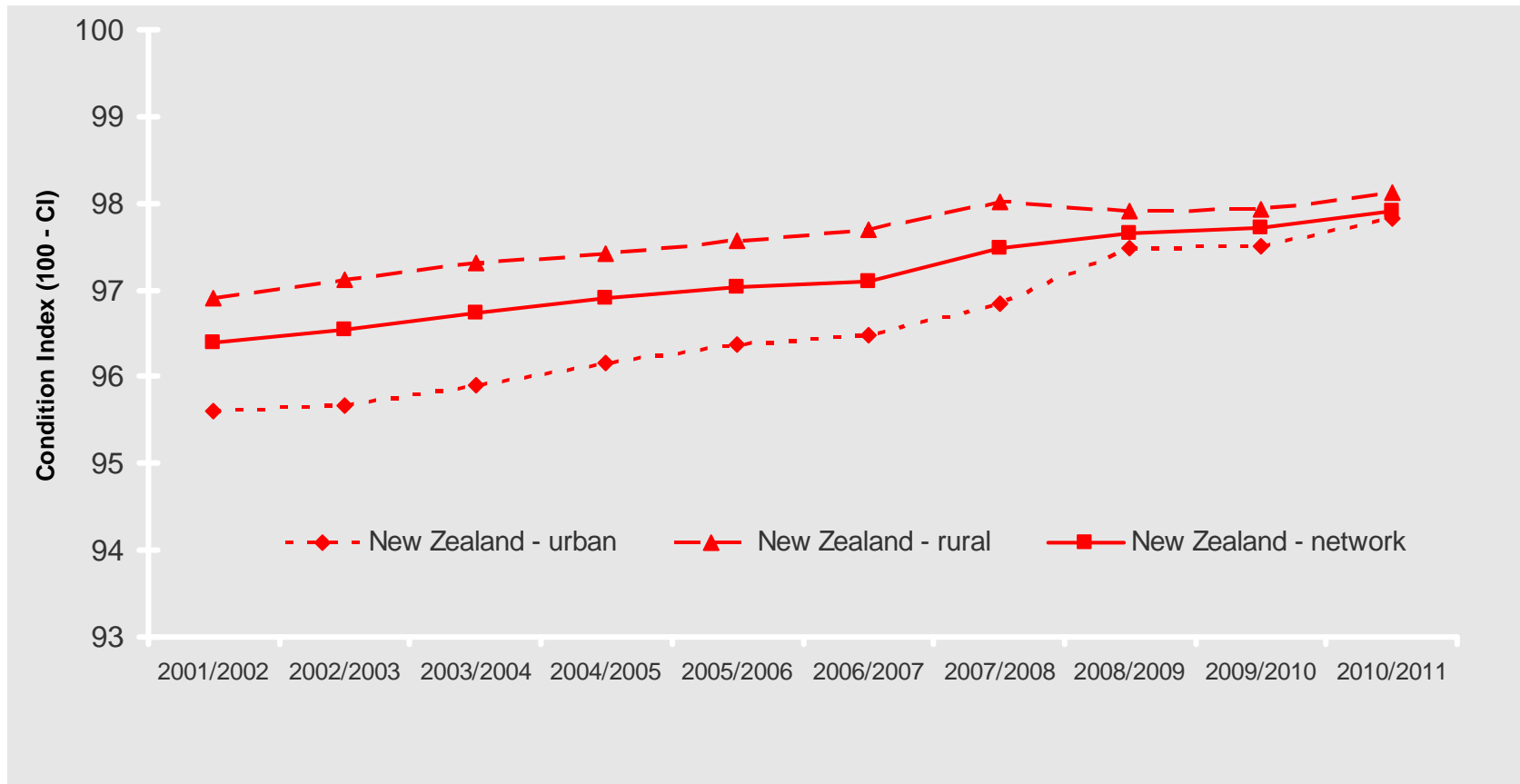
## Request Versus Allocation Versus Claimed



\*Value submitted to NZTA post value for money testing

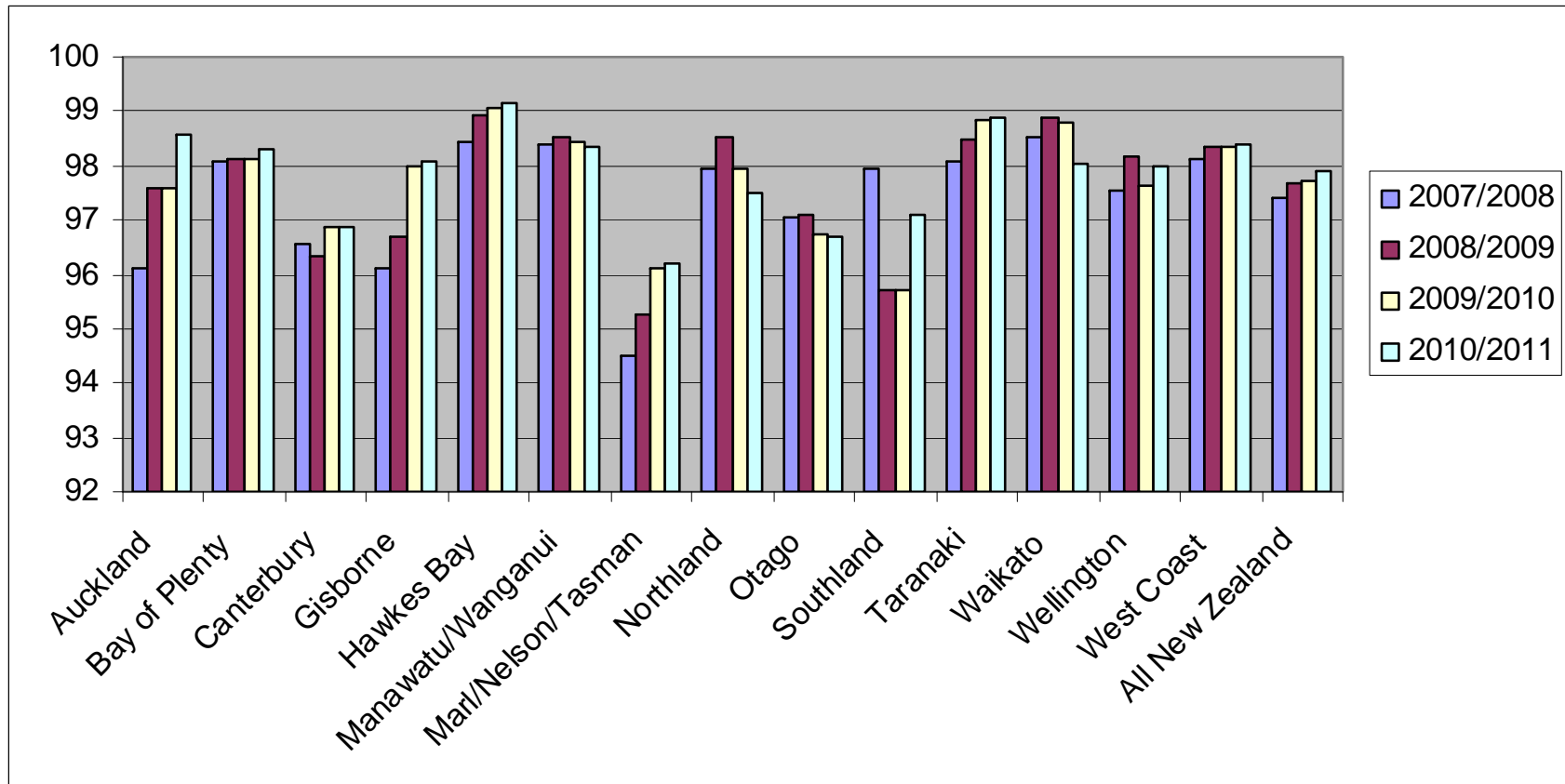
# SEALED ROADS PERFORMANCE TRENDS

## National Average Road Surface Condition



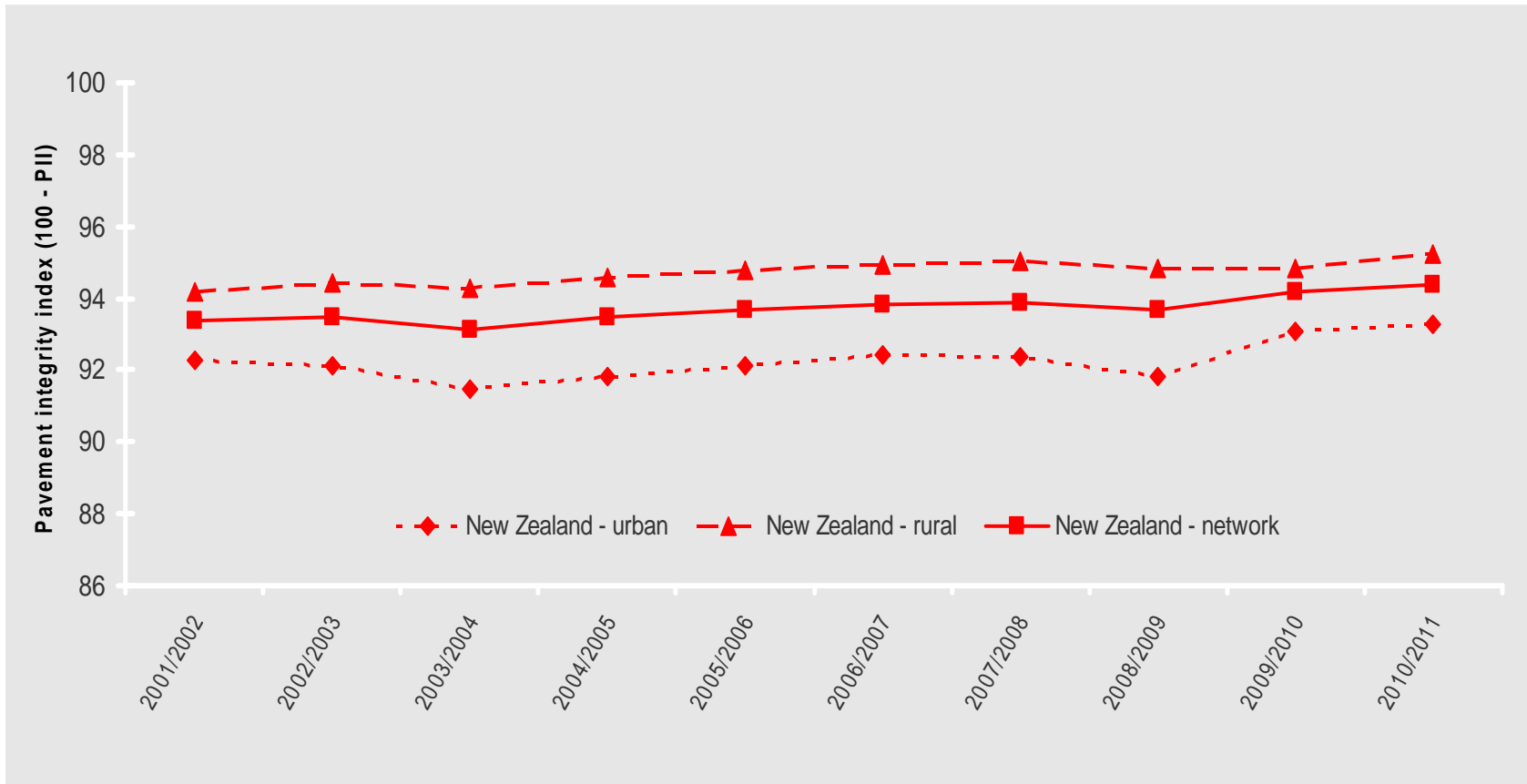
# REGIONAL TRENDS SURFACE CONDITION

Results over 4 years 2007-2010



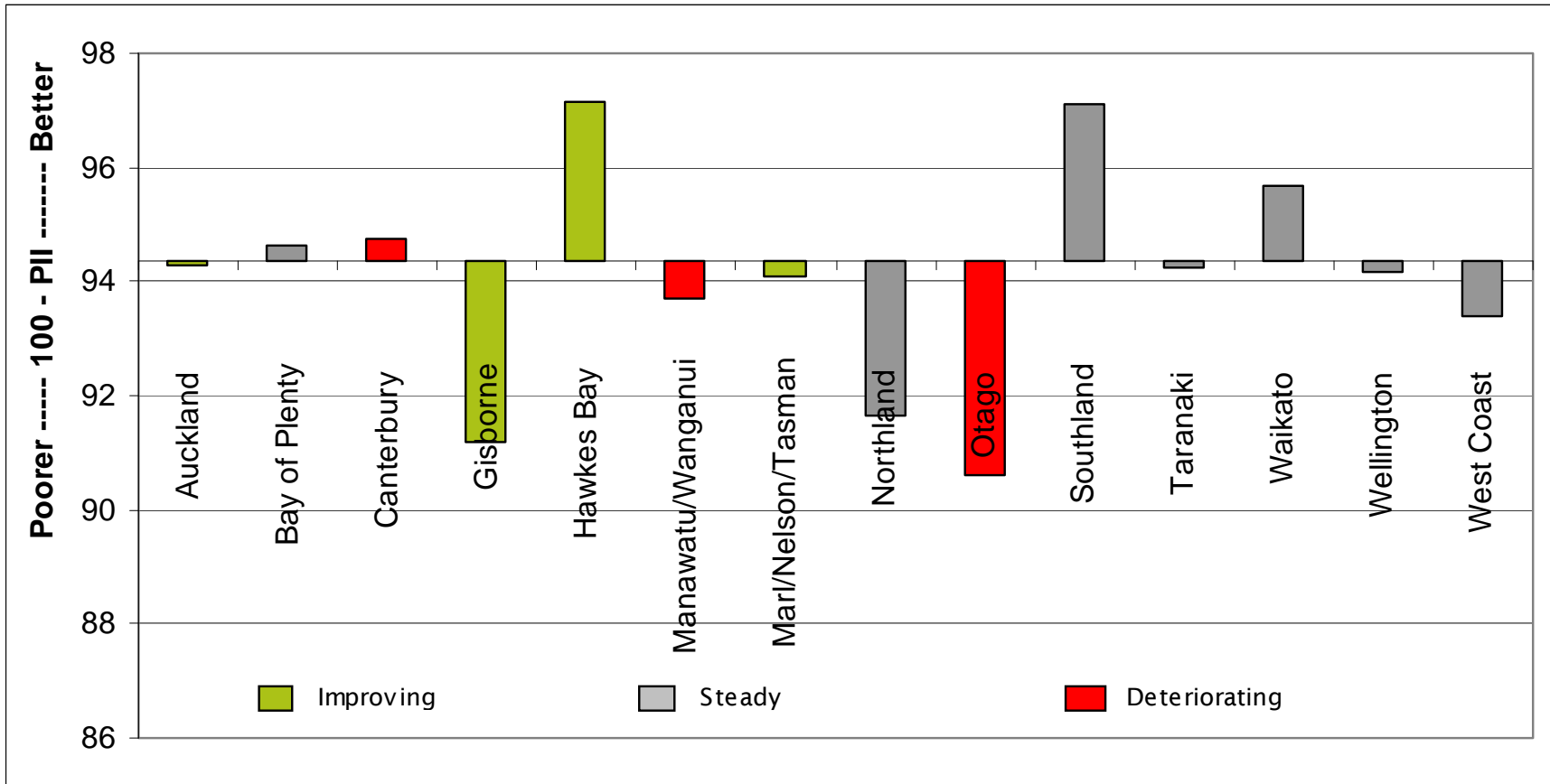
# SEALED ROADS PERFORMANCE TRENDS

## National Average Pavement Integrity Index



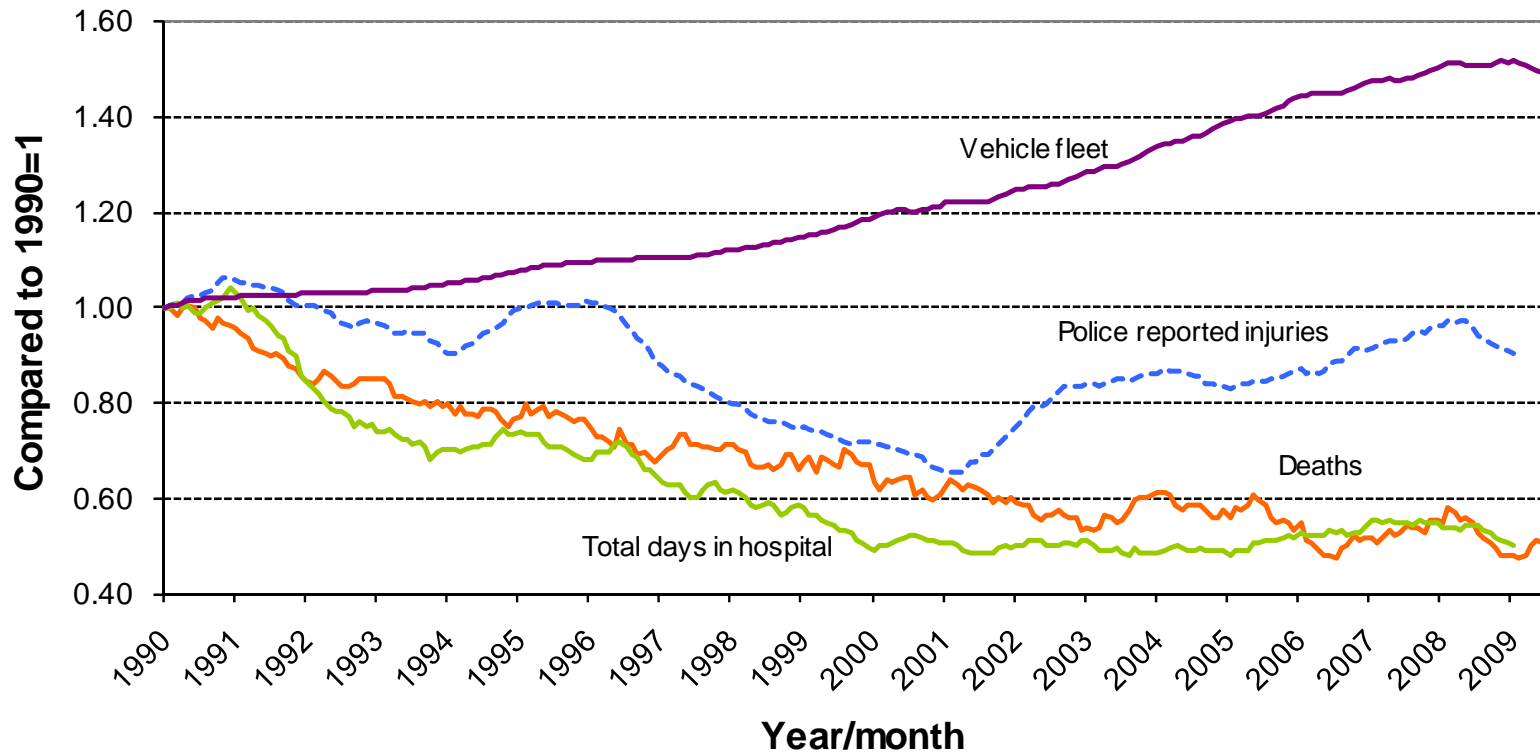
# REGIONAL TRENDS PAVEMENT INTEGRITY

## PII Variation From National Average 2010/11



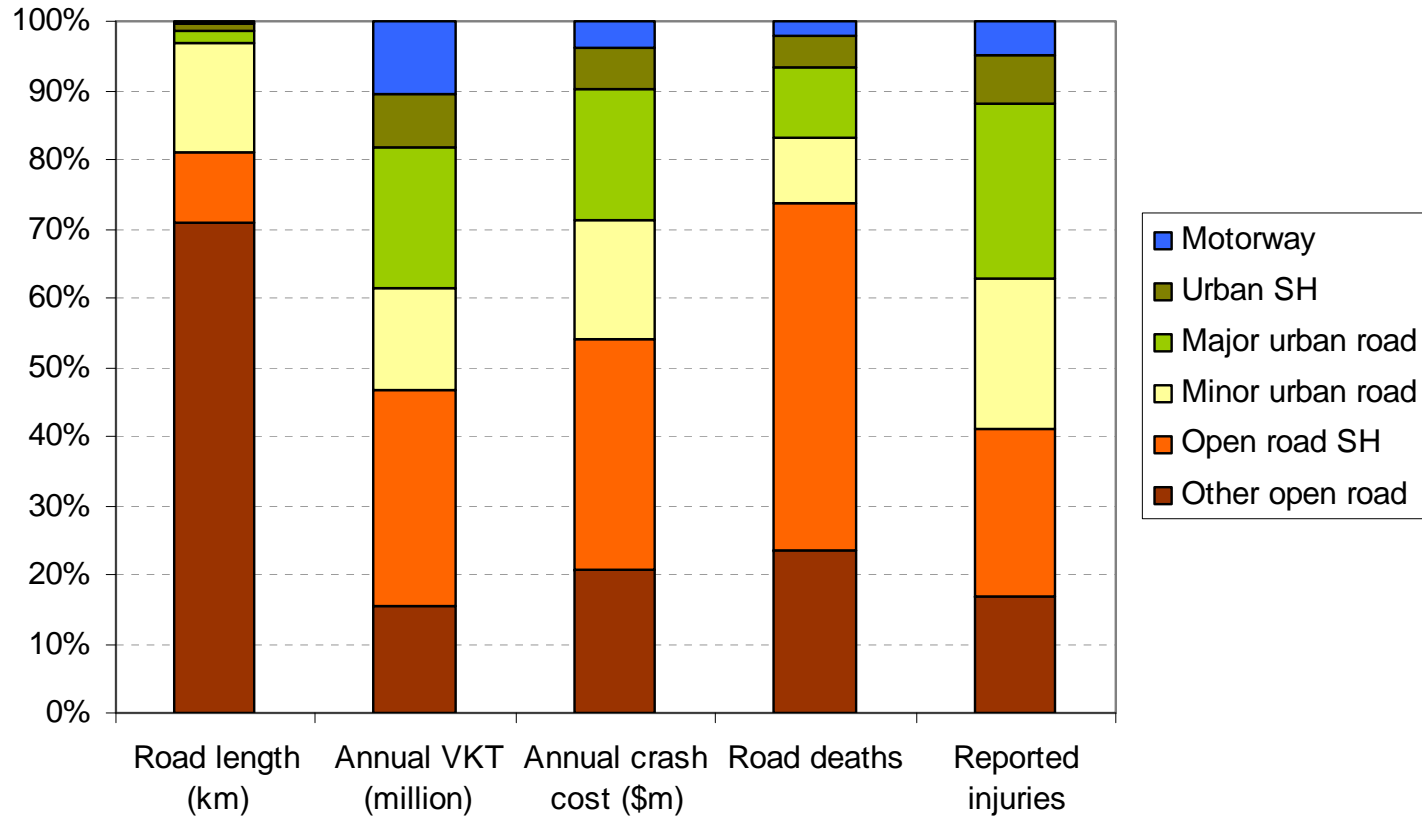
# SAFER JOURNEYS ANALYSIS

## National Trends



# SAFER JOURNEYS ANALYSIS

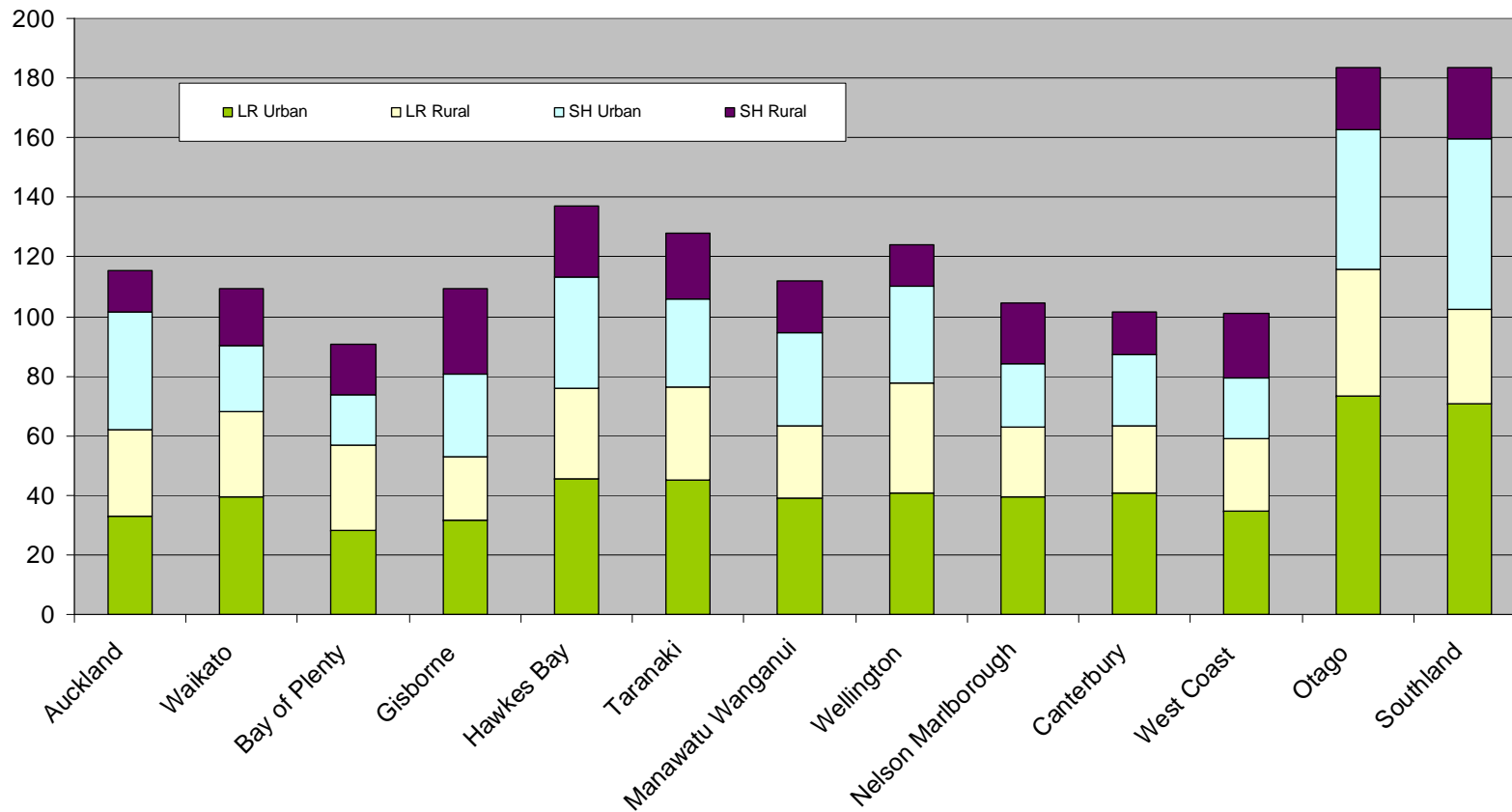
## Road Type And Crash Outcomes





# NETWORK SAFETY REGIONAL VARIABILITY

## Crashes Per 10,000 Vehicle Kms Travelled



# ASSESSMENT FRAMEWORK

## Maintenance programme components

- Network security and resilience
- Optimising network capacity
- Preservation of key assets
- Measures to extend asset life
- Maintenance of agreed levels of service
- Network management
- Environmental effects
- Associated improvement for network security
- Remaining components of programme

# ASSESSMENT FRAMEWORK

## Strategic fit of maintenance activities

### Prioritised against components with focus on:

- mitigation of risk of failure of key network elements;
- high use networks;
- optimal timing of interventions;
- network reliability;
- road user safety;
- fundamental asset integrity; and
- managing adverse environmental effects.

# ASSESSMENT FRAMEWORK

## Effectiveness & efficiency

- **Demonstration of good value for money principles**
  - Benchmarking costs
  - Track record of delivery
  - Trends in network performance
  - Long term affordability
- **Demonstration of link to issues and opportunities**
  - Link to strategic documents
  - Risks understood
  - Confidence in interventions
- **Optimisation evident in programme**
  - Robust underlying assumptions
  - Options considered
  - Supported by whole of life cost calculations
  - Timing reasonable

# NATIONAL ASSESSMENT

## 2012/15 LTP Submissions

Investment decisions rely on:

- Current, complete, accurate data
- Sound reasoning in business case
- Demonstrated good track record





# Questions?

<http://www.smartmovez.org.nz/data>