



SI Freight Study : Progress to date

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The problem

- “ SI freight expected to grow from 12 to 16bn t-kms from 2012 to 2042
 - . Increasing strain on the South Island transport network.
- “ Do existing price and regulatory signals give best use of the transport network
- “ What happens if consider broader environmental safety, resilience and urban congestion issues
- “ What are prospects for effecting beneficial modal change.

The approach

- “ Desktop studies
 - . Externality costs
 - . Freight forecasts
- “ Engagement with industry stakeholders to identify key issues
- “ Development of case studies to illustrate possible approaches to redress problems
- “ Action plan

Externality costs

Review of NZ and overseas studies
Final framework covers road and rail
and indications for coastal shipping

Includes

GHG

Emissions

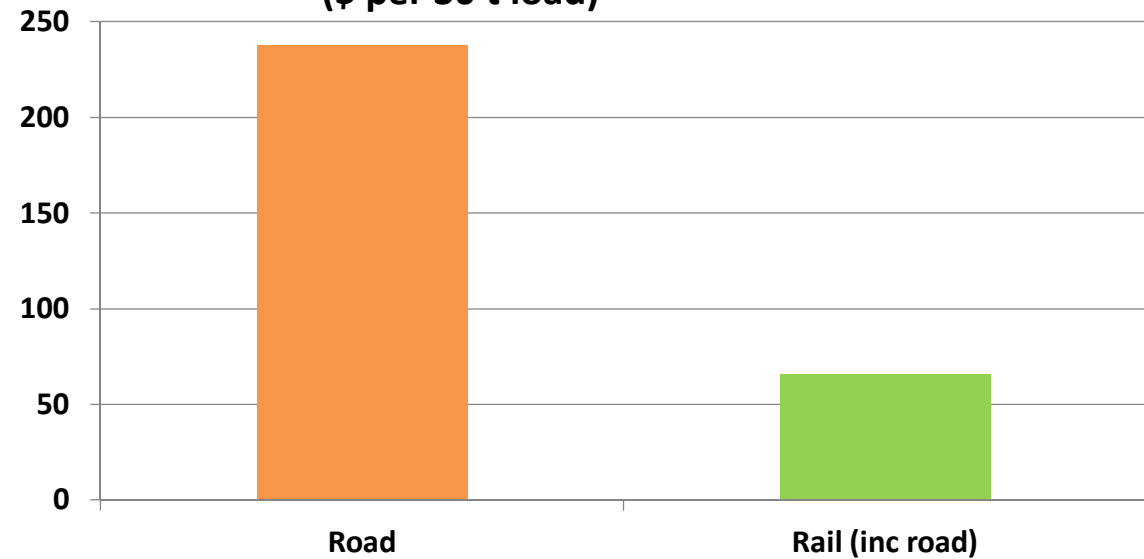
Other environmental costs

Accidents

Congestion

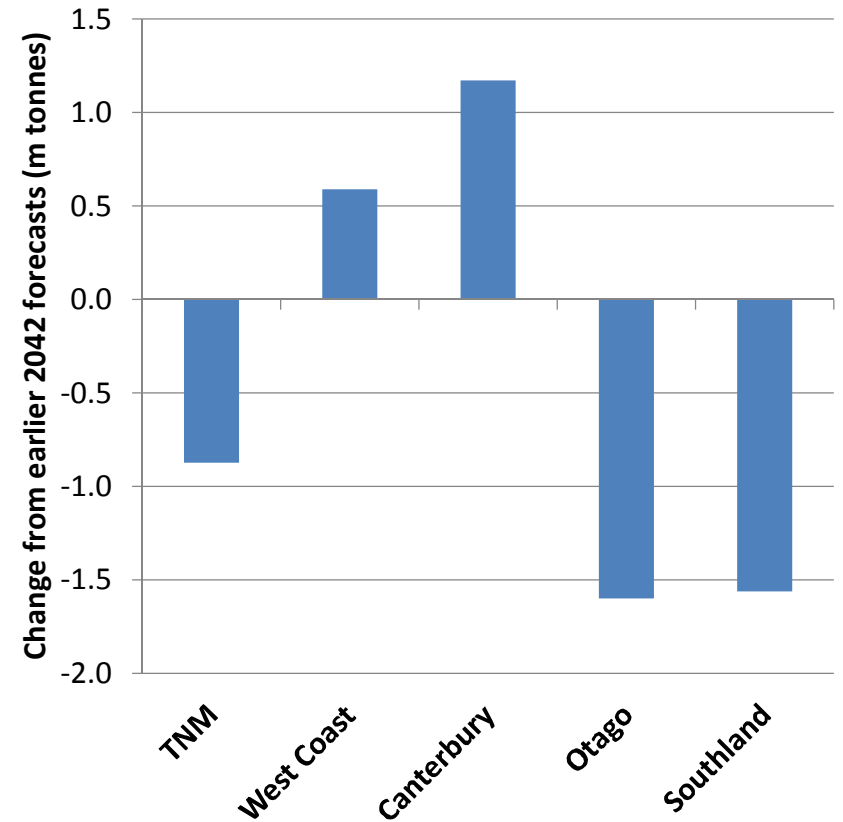
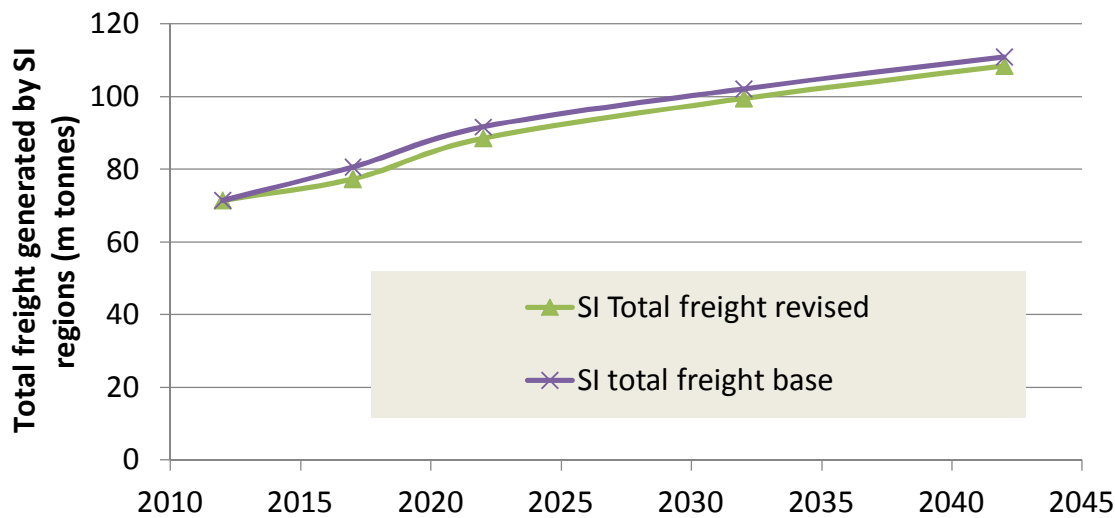
Also road wear not met by
RUC

Typical costs Hokitika-Timaru
Comparative environmental, accident and congestion costs
(\$ per 30 t load)



Freight forecasts

- ” Update of MoT Transport Outcomes model
- ” Where available used 2017 actual data
 - Commodity production by region
 - Economic variables
- ” Used model for forecasts of other variables
- ” Results for South Island



Stakeholder engagement - 1

” Scale of engagement

- . Interviews with a wide range of stakeholders
- . Producers, transport operators and infrastructure owners

” Topics covered

- . Patterns of flows
- . Use of different modes
- . Environmental sensitivities
- . Potential use of new technology

Stakeholder engagement - 2

” Key findings

- Shortage of rail capacity to meet demands
- Concerns about reliability of rail services
- Need a long term planning/funding horizon for rail
- Firms generally looking for environmentally sustainable solutions (incl safety)
 - But little enthusiasm for paying more for environmentally good solutions in their own right
- Transporters seeking to eliminate waste
- Watching eye on new vehicle technology

Development of case studies - 1

- “ Elements of successful case studies
 - “ Long distance point to point flows
 - “ Movements with potential for consolidation or adding value at intermediate points
 - “ Potential for backloading
 - “ Products with limited requirement for quick delivery
 - “ Products with regular or predictable flows
 - “ Products which can benefit from higher container loads
 - “ Movements avoiding need for travel through congested areas or which improve environmental conditions



Development of case studies - 2

- “ Case studies under consideration
- Logs from West Coast
 - Dunedin Inland Port
 - Greymouth intermodal terminal
 - Milton logging hub
 - Waste to West Coast
 - Garnet Hokitika
 - Water at Kumara WC
 - Urban distribution with electric vehicles



Next steps

- “ Evaluation of options
- “ Action plan

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