



From Geek to Hard Hats

Dr. Theunis F.P. Henning

16 September 2011



THE UNIVERSITY
OF AUCKLAND

NEW ZEALAND

Te Whare Wānanga o Tāmaki Makaurau



RIMS Purpose



ROAD
INFORMATION
MANAGEMENT
STEERING GROUP

To provide leadership and strategic advice to the New Zealand road management industry on best practice, asset management systems and tools for roads.

RIMS Past Activities



ROAD
INFORMATION
MANAGEMENT
STEERING GROUP

- 1990s Development of RAMM
- 1999-2008 Development of dTIMS
- 2008 Focus on Rooding Asset
 Management projects

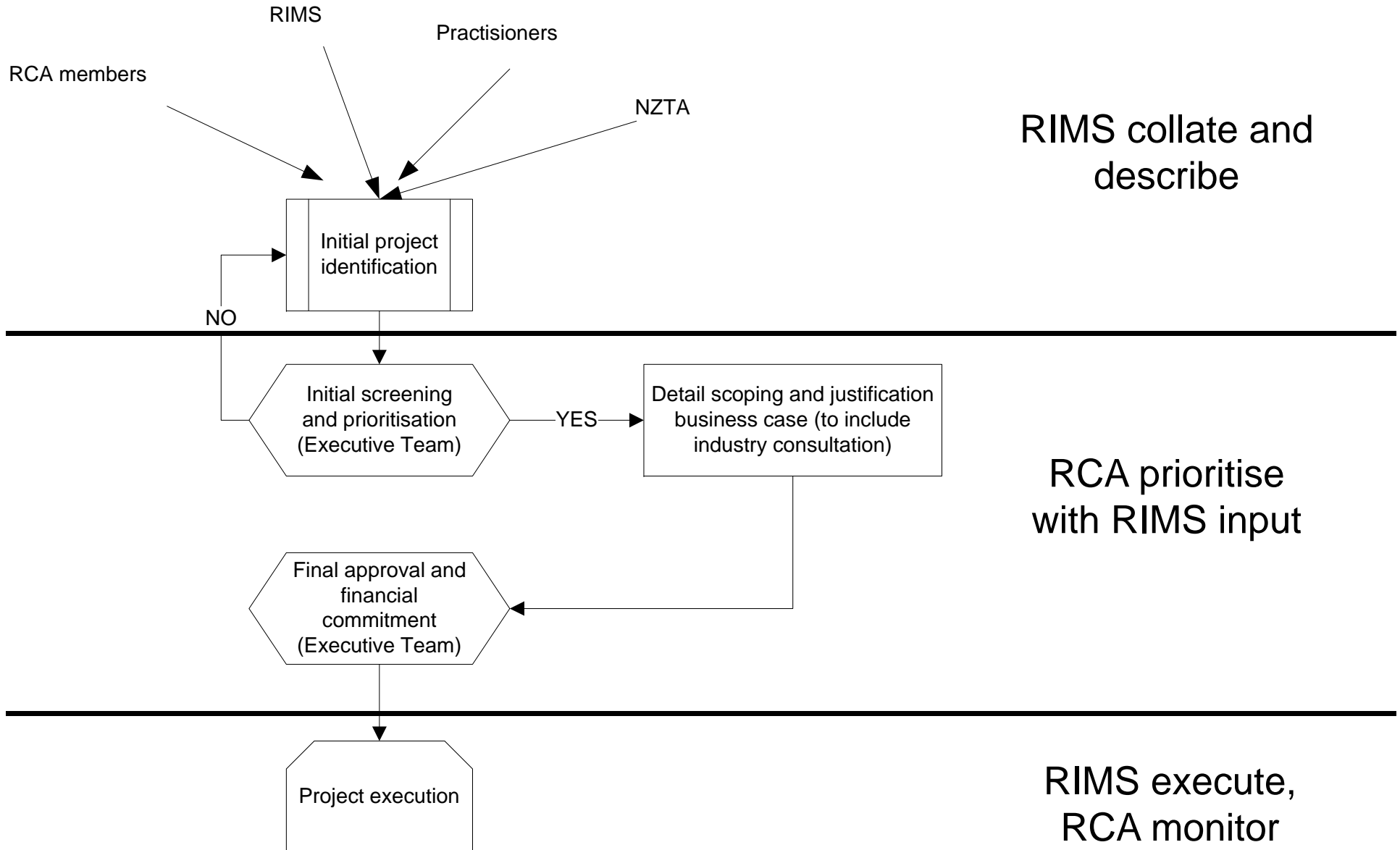
Therefore RIMS' main focus now is to provide tools in road management – started with converting research into practical, understandable guides

Current Members



- Gordon Hart
NZTA (Chair)
- Peter Scott
Auckland Transport
- Jim McQueen
Dunedin City Council
- Peter Thompson
Marlborough District
- Matthew Rodwell
Hastings District Council
- Vaughan McEwan
Wellington City Council
- Simon Gough
Whangarei District
- Tony Lange
NZTA

Partnership with RCA



The Body of Knowledge



ROAD
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STEERING GROUP

- Body of Knowledge to be the main vehicle of disseminating tools based on research outcomes
- Hard folder or Web-document
- First chapters
 - High Speed Data Collector Guideline
 - Risk Management for Roading Activities
 - Maintenance Cost Framework

This Year's Projects



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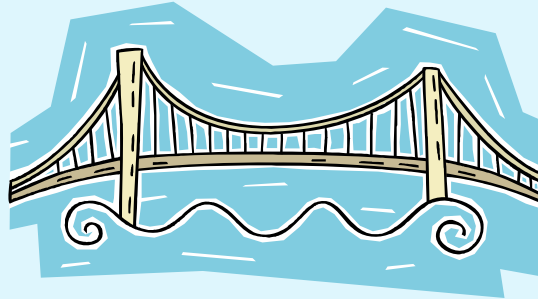
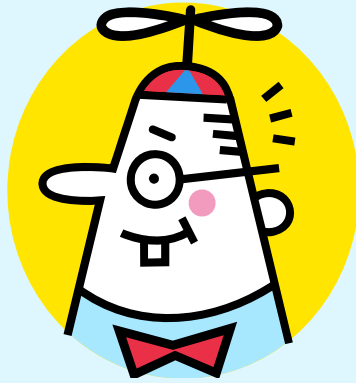
- Good Practice Guide for Roading Asset Management
- Road Asset Management Information Systems – Good practice Guide
- Good Practice Guidelines for Data Collection and Monitoring of Road Bridges
- Guidelines for Pavement Strength Testing

The University of Auckland: Core Messages

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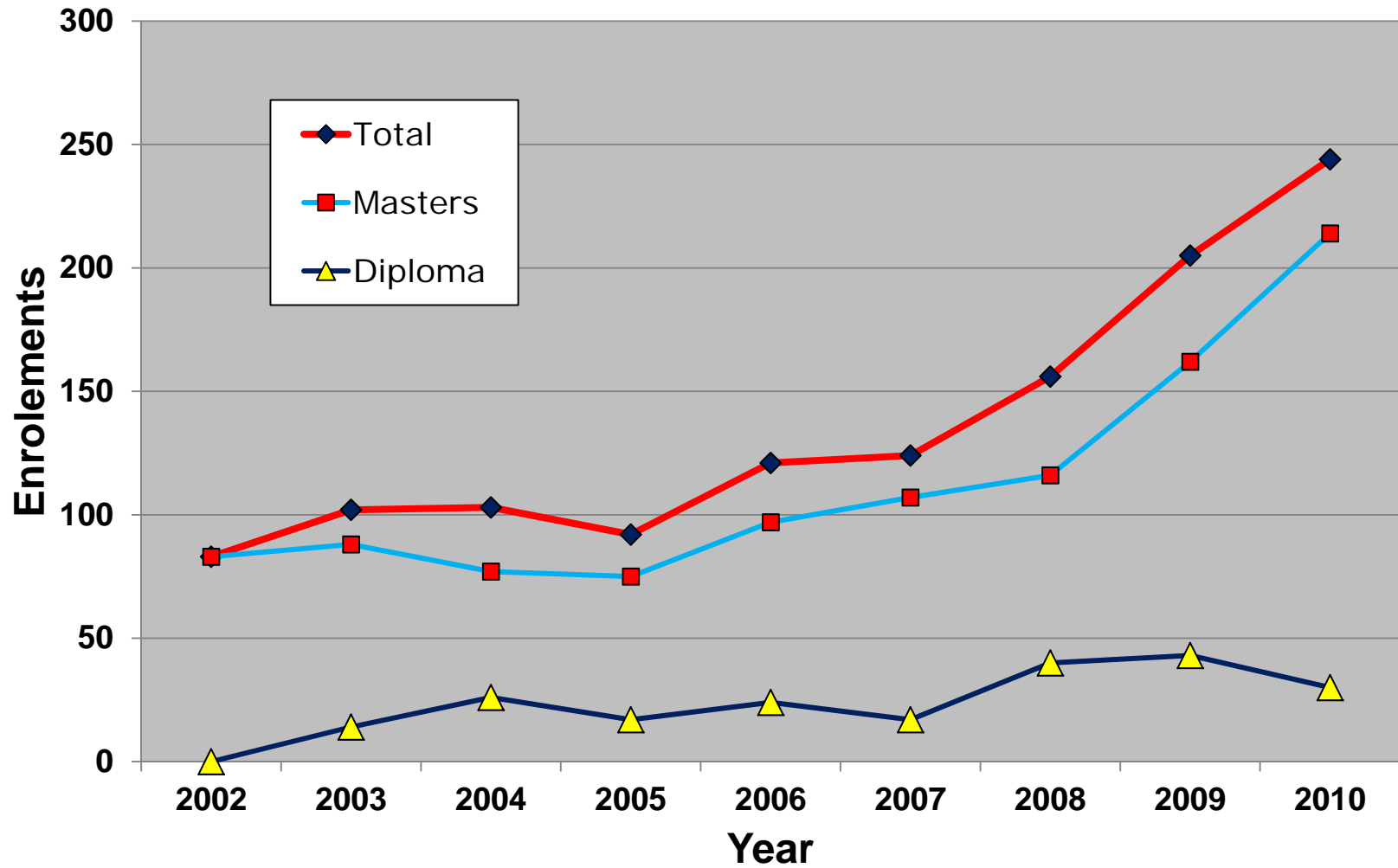
- ❑ Increasing research capacity
- ❑ Decreasing funding availability
- ❑ Different drivers at University - \$\$ are not always the issue

Student Enrolments on Transportation

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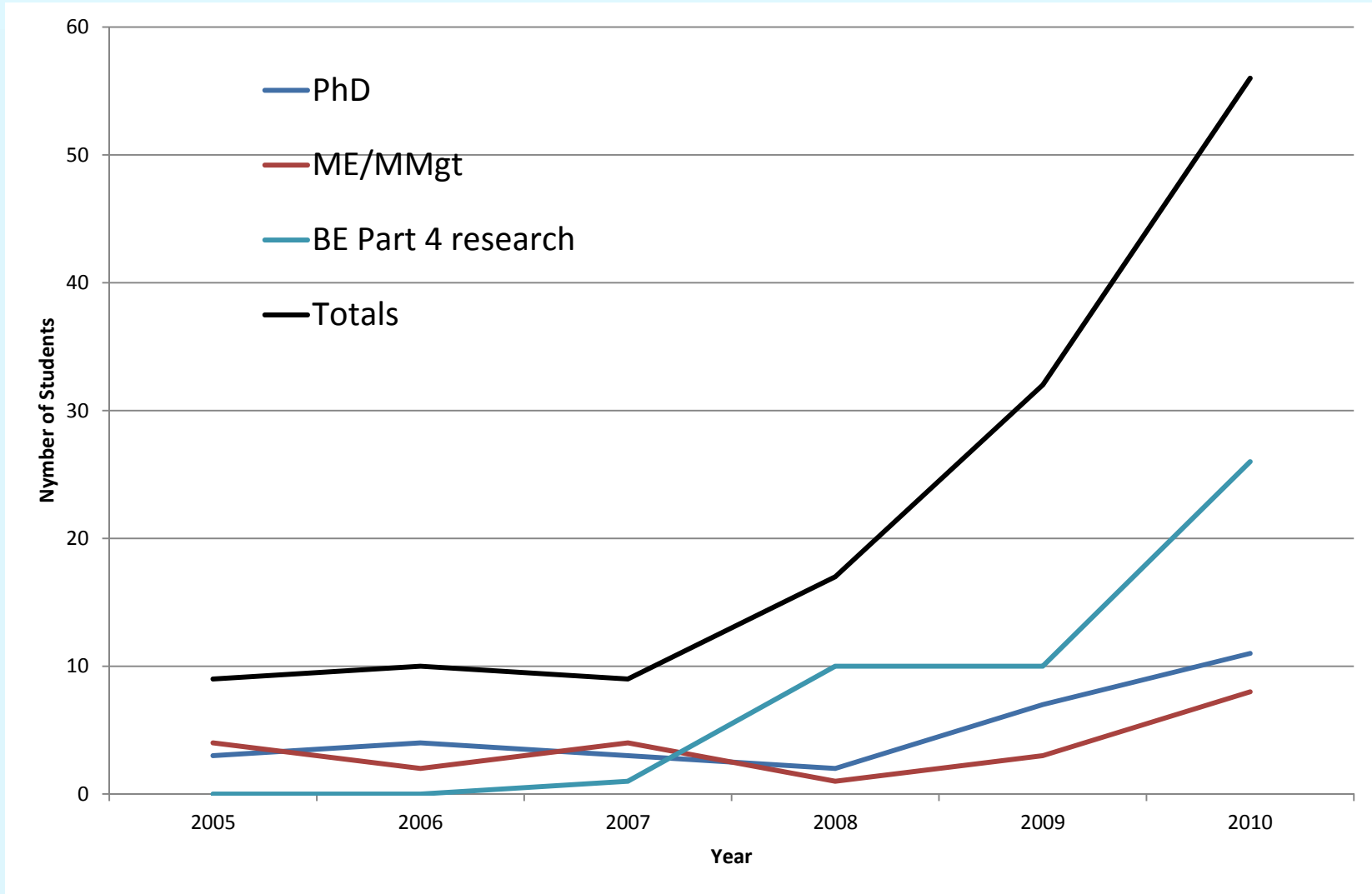
Research Students (5 ½ Staff)



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There is a high-level, co-ordinated strategic approach



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■ **Centre for Infrastructure Research**

- The Centre for Infrastructure Research (CIR) has been established to adopt a multi-disciplinary approach to support government and industry with infrastructure research and evidence-based decision-making.

■ **Transportation Research Centre**

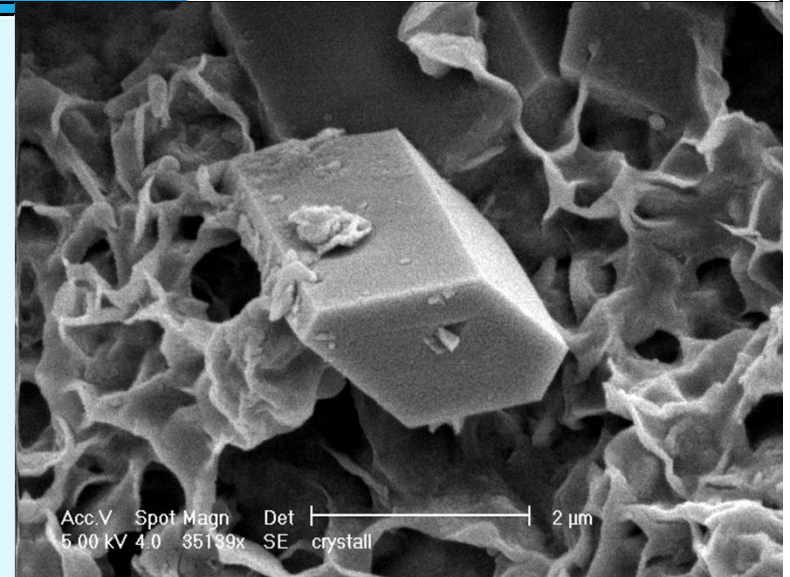
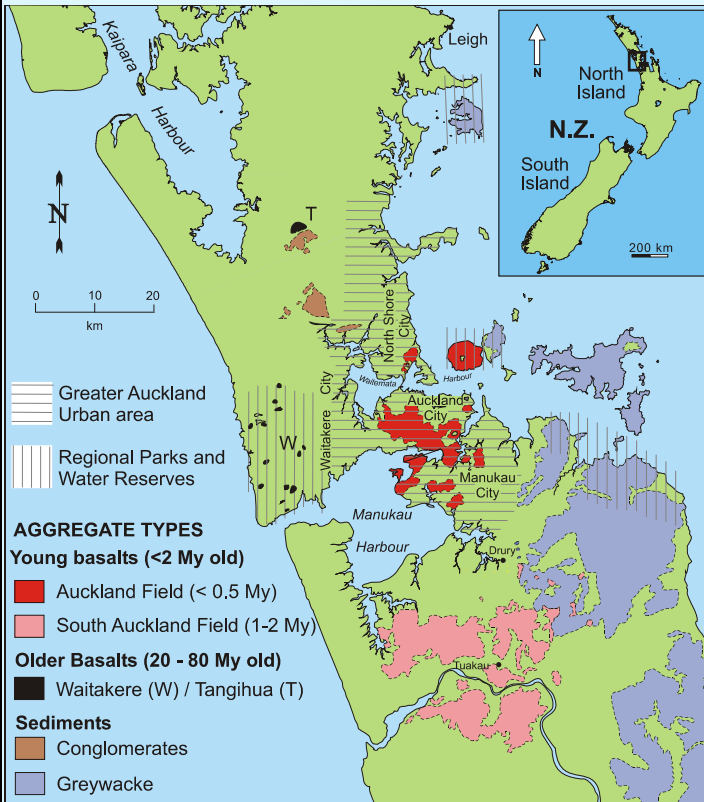
- Our vision is to be an international leader in transportation engineering research, by developing best practice in the planning, design, construction, maintenance and operation of transport systems

Achieving Sustainability through use of Marginal Aggregates

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Road Performance LTPP and CAPTIF

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Data Collection

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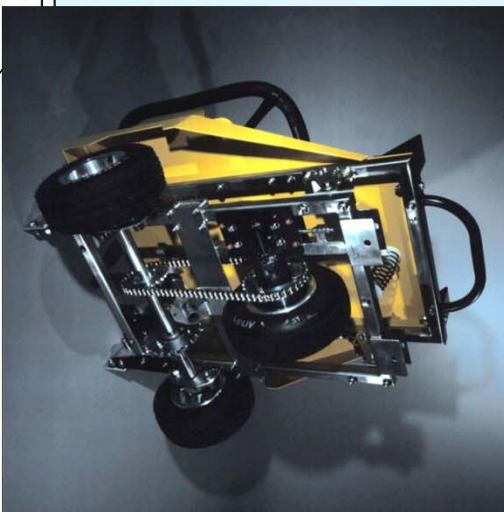


Skid Resistance and Road Safety

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The GripTester



Northland Skid Testing Sites

Modeling and Simulation of Traffic

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Vehicle Types (MODEL)

Vehicle Types: HCV, LCV, Prb

Attributes: Name [Car]

Parameter	Mean	Deviat.	Minimum	Maximum
Name	4.40	0.43	4.00	5.50
Length	1.80	0.10	1.80	2.20
Width	1.80	0.10	1.80	2.20
Max Desired Speed	96.00	15.30	70.00	135.00
Max Acceleration	3.50	0.20	3.00	5.00
Normal deceleration	4.00	0.00	4.00	4.00
Max deceleration	6.00	0.00	6.00	6.00
Speed Acceptance	1.00	0.00	1.00	1.00
Min Distance Veh	1.00	0.00	1.00	1.00
Give Way time	20.00	5.00	0.01	30.00
Guidance Acceptance	1.00	0.00	1.00	1.00

Name: JCV

Parameter	Mean	Deviat.	Minimum	Maximum
Name	16.60	3.55	11.50	26.00
Length	2.00	0.10	1.80	2.40
Width	90.00	14.90	75.00	120.00
Max Desired Speed	1.80	0.20	1.40	2.40
Max Acceleration	3.00	0.30	2.00	4.00
Normal deceleration	4.60	0.30	4.00	6.00
Max deceleration	1.00	0.00	1.00	1.00
Speed Acceptance	1.00	0.00	1.00	1.00
Min Distance Veh	1.00	0.00	1.00	1.00
Give Way time	5.00	2.00	1.00	15.00

AIMSUN2 v3.2 patch 4

File Objects View Experiment Run Output

Speed - Statistical Data

View Help

Speed (km/h)

- 650: E11 mid-IC NB
- 752: E11 mid-IC NB

Variable: Speed

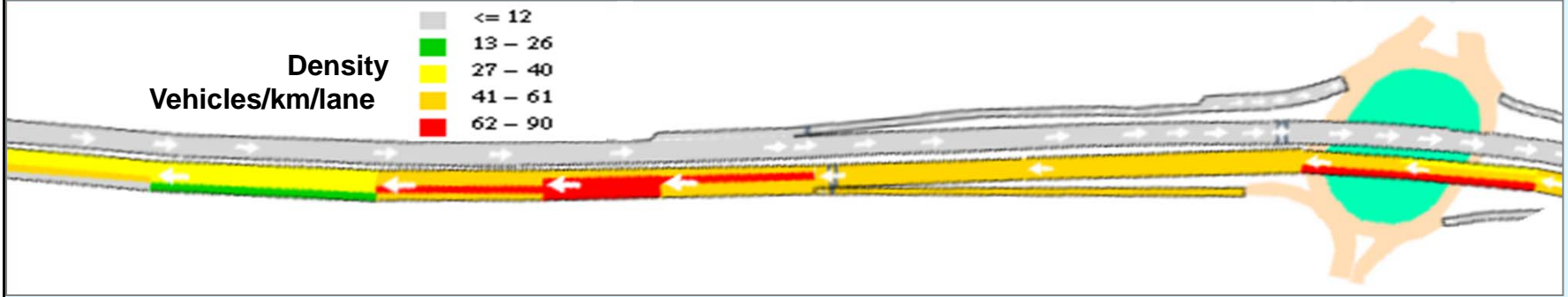
Display Close

Vehicle Types

- Car
- HCV
- LCV
- Prb

Network: HWAY12 Time: 07:21:02

Control: O/D Matrix: 26-9 am Scale 1: 3000





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THE SEVENTH INTERNATIONAL CONFERENCE ON MAINTENANCE AND
REHABILITATION OF PAVEMENTS AND TECHNOLOGICAL CONTROL
AUCKLAND - NEW ZEALAND SEPTEMBER 5-7, 2012

