Presentation Outline

• Background
• Data Analysis (Stage 1)
  • Methodology
  • Findings
  • Data Issues
• Consultation (Stage 2)
  • Methodology
  • Findings
• Development of Initiatives (Stage 3)
  • Methodology
  • Recommendations
• Next Steps
Background to the Study

“Increasing cycling requires better behaved drivers”

“At war with the motorist”

“Cyclists v motorists: it’s war”

“Motorists and cyclists at loggerheads”

“Tensions mount between cyclists, motorists”

“Crash sparks call for better cycling infrastructure”
Background to the Study

Cyclists continue to represent a disproportionate number of crash casualties.

- 26% female
- High bicycle ownership

Graph showing transport modes: 92% Car, 91% Public transport, 2.7% Walking, and 0% Cycling.
Background to the Study

To identify a strategy to promote safer cycling & safer interaction between cyclists & other road & path users throughout the ACT.
Data Analysis (Stage 1)

• ACT Police Data
  • 5 years of data between 2005-2009
  • 728 bicycle crashes

• Hospital Data
  • Canberra Hospital Emergency Department
  • 5 years of data (2001-03 / 2006-07)
  • 2,102 crashes
  • Crashes in transport-related environment difficult to isolate
  • Data with insufficient information was removed
Data Issues

Police Data
• Under-representation of off-road crashes
• Little information on crashes resulting in less serious injury

Hospital Data
• Limited information about crash details (e.g. crash location)
• Eliminated records

Comparing Data
• No cross matching of datasets
• Different definitions
• Not unique to the ACT / this study
What the Hospital data tells us

- **Number of Accidents**
  - **On-road**: 317
  - **Shared Path**: 111
  - **Off-road**: 50
  - **Driveway**: 13
  - **Unknown**: 11
  - **Gravel**: 3

- **Age Groups**
  - Male
  - Female
  - Unknown

- **Road Types**
  - On-road
  - Shared Path
  - Off-road
  - Driveway
  - Unknown
  - Gravel
## Crash Characteristics (Police Data)

<table>
<thead>
<tr>
<th>RUM Code</th>
<th>Number of Crashes</th>
<th>Indicative diagram</th>
</tr>
</thead>
<tbody>
<tr>
<td>101</td>
<td>166</td>
<td><img src="image1.png" alt="Diagram 1" /></td>
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<tr>
<td>104</td>
<td>83</td>
<td><img src="image2.png" alt="Diagram 2" /></td>
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<td>408</td>
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<td>107</td>
<td>60</td>
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<td>305</td>
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<td>406</td>
<td>21</td>
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<td>102</td>
<td>19</td>
<td><img src="image10.png" alt="Diagram 10" /></td>
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</table>
Consultation (Stage 2)

- 3 community focus groups – 10 people in each
- 1 group of Government & peak body stakeholders
Structured Discussion Format

- Salience of road / cycling safety in issues agenda
- Benefits of & barriers to cycling participation
- Awareness & understanding of cycling issues
- ‘cyclists’ versus ‘bike riders’
- Attitudes toward cycling
- Responsibility for cycling safety messages
- Recall / discussion of previous cycling safety campaigns
- Interaction of pedestrians & cyclists on shared paths
What the community thought?
Development of Initiatives (Stage 3)

Aim: To respond to the issues and ideas raised in stage 1 & 2

<table>
<thead>
<tr>
<th>Priority</th>
<th>Project Feasibility</th>
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</thead>
<tbody>
<tr>
<td>Priority 1</td>
<td>Short Term</td>
</tr>
<tr>
<td>Priority 2</td>
<td>Short Term</td>
</tr>
<tr>
<td>Priority 3</td>
<td>Medium Term</td>
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</table>

<table>
<thead>
<tr>
<th>Cost Estimate (Hard Infrastructure)</th>
<th>Potential Safety Benefits</th>
<th>Cost Estimate (Hard Infrastructure)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; $200,000</td>
<td>Low</td>
<td>Priority 1</td>
</tr>
<tr>
<td>$200,000 - $1,000,000</td>
<td>Medium</td>
<td>Priority 1</td>
</tr>
<tr>
<td>&gt; $1,000,000</td>
<td>High</td>
<td>Priority 2</td>
</tr>
</tbody>
</table>

Potential Safety Benefits:
- High
- Medium
- Low

Cost Estimate:
- < $200,000
- $200,000 - $1,000,000
- > $1,000,000
## Hard Infrastructure Initiatives

<table>
<thead>
<tr>
<th>Potential Benefits</th>
<th>Cost</th>
<th>Priority</th>
<th>Feasibility</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>i1a – Upgrade bicycle infrastructure at major intersections</td>
<td>HIGH</td>
<td>HIGH</td>
<td>2</td>
<td>MEDIUM TERM</td>
</tr>
<tr>
<td>i1b - Upgrade bicycle infrastructure at minor intersections</td>
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<td>HIGH</td>
<td>MEDIUM</td>
<td>MEDIUM TERM</td>
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<tr>
<td>i2 – Provide more dedicated bicycle infrastructure</td>
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<td>MEDIUM</td>
<td>2</td>
<td>MEDIUM TERM</td>
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<td>i3 – Complete key missing links in the bicycle network</td>
<td>HIGH</td>
<td>HIGH</td>
<td>2</td>
<td>MEDIUM TERM</td>
</tr>
<tr>
<td>i4 – Increase separation between bike riders in bicycle lanes and cars</td>
<td>HIGH</td>
<td>MEDIUM</td>
<td>2</td>
<td>MEDIUM TERM</td>
</tr>
<tr>
<td>i5 – Audit, review and implement consistent signage and linemarking guidelines</td>
<td>MEDIUM</td>
<td>MEDIUM</td>
<td>2</td>
<td>MEDIUM TERM</td>
</tr>
<tr>
<td>i6 – Implement traffic calming and reduce vehicle speed limits</td>
<td>HIGH</td>
<td>MEDIUM</td>
<td>1</td>
<td>SHORT TERM</td>
</tr>
<tr>
<td>i7 – Implement low speed zones on shared paths</td>
<td>MEDIUM</td>
<td>LOW</td>
<td>1</td>
<td>SHORT TERM</td>
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<tr>
<td>i8 – Adopt a regular path maintenance program</td>
<td>MEDIUM</td>
<td>LOW</td>
<td>1</td>
<td>SHORT TERM</td>
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<tr>
<td>i9 – Report-a-hazard smart phone application</td>
<td>MEDIUM</td>
<td>LOW</td>
<td>1</td>
<td>SHORT TERM</td>
</tr>
<tr>
<td>Action Description</td>
<td>Potential Benefits</td>
<td>Cost</td>
<td>Priority</td>
<td>Feasibility</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------------------</td>
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<tr>
<td><strong>e1 – Develop an effective advertising campaign to promote safer cycling</strong></td>
<td>MEDIUM</td>
<td>HIGH</td>
<td>3</td>
<td>HIGH</td>
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<tr>
<td><strong>e2 – Develop an information guide for bike riders in the ACT</strong></td>
<td>LOW</td>
<td>LOW</td>
<td>2</td>
<td>HIGH</td>
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<tr>
<td><strong>e3 – Provide subsidised training courses for bike riders</strong></td>
<td>HIGH</td>
<td>HIGH</td>
<td>2</td>
<td>MEDIUM</td>
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<tr>
<td><strong>e4 – Road rule review and amendment</strong></td>
<td>MEDIUM</td>
<td>LOW</td>
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<td>LOW</td>
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<tr>
<td><strong>e5 – Increase road rule compliance</strong></td>
<td>MEDIUM</td>
<td>MEDIUM</td>
<td>2</td>
<td>HIGH</td>
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<tr>
<td><strong>e6 – Develop and promote a shared path code-of-conduct</strong></td>
<td>LOW</td>
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<td>2</td>
<td>HIGH</td>
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<tr>
<td><strong>e7 – Improve cycling data collection in the ACT</strong></td>
<td>LOW</td>
<td>MEDIUM</td>
<td>3</td>
<td>LOW</td>
</tr>
</tbody>
</table>
i3 – Complete missing links in the bicycle network
i9 – Report-a-hazard smart phone application
e5 – Increase road rule compliance

“riding through red lights is frequently cited as the cyclist behaviour that most annoys drivers and is perceived as typical behaviour” (Johnson et al, 2010)
Next Steps

- Current conditions and planning in the ACT
- Best practice and experience, including specific literature review for each initiative
- Selection of pilot study locations and / or identification of the target audience
- Cost benefit analysis
- Develop an implementation strategy
- How to determine success factors
- Identification of supportive initiatives required