Traffic volume, social interaction and community development

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Plan

• Traffic and community
• Appleyard’s work
• Christchurch case study
• Why?
• Implications and policy responses
Traffic and Community

Mum, Why can't I walk to School?

'Cos there's too much traffic.

Kingham, Wiki and Banwell
Traffic levels: 16,000, 8,000 and 2,000 vehs per day

Figure 2: This illustration shows how a resident’s sense of their home territories shrinks as traffic grows heavier and faster.

Source: Figure 4, page 23, Livable Streets, Donald Appleyard, University of California Press, 1981.
Traffic levels: 16,000, 8,000 and 2,000 vehs per day

Figure 1: This image shows how community ties can actually be knit together by a street that is livable and inviting — or torn apart when auto traffic noise, pollution, and threats dominate the street environment.

Source: Figure 3, page 21, Livable Streets, Donald Appleyard, University of California Press, 1981.
Other studies


Kingham, Wiki and Banwell
Why Christchurch

• Does it happen in New Zealand?
• How much traffic?
Christchurch Case Study

“We have taken the creative crucible of the city –its streets- and handed them over to a form of movement which destroys both the essential elements of creativity: diversity and spontaneity”

### Study Area

<table>
<thead>
<tr>
<th>Study Area</th>
<th>Study Classification</th>
<th>NZTA Classification</th>
<th>Traffic Volume (VPD#)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milton Street</td>
<td>Heavy</td>
<td>Level 2</td>
<td>13,720</td>
</tr>
<tr>
<td>Grants Road, section 1</td>
<td>Heavy</td>
<td>Level 2</td>
<td>8,400</td>
</tr>
<tr>
<td>Grants Road, section 2</td>
<td>Moderate</td>
<td>Level 1</td>
<td>2,500</td>
</tr>
<tr>
<td>Roker Street</td>
<td>Moderate</td>
<td>Level 1</td>
<td>1,400</td>
</tr>
<tr>
<td>Proctor Street</td>
<td>Light</td>
<td>Level 1</td>
<td>500</td>
</tr>
<tr>
<td>Taunton Green</td>
<td>Light</td>
<td>Low Volume</td>
<td>150*</td>
</tr>
<tr>
<td>Stenness Avenue</td>
<td>Light</td>
<td>Low Volume</td>
<td>100*</td>
</tr>
</tbody>
</table>

*CCC does not display accurate information for counts of less than 500 VPD, estimated numbers only.

# vehicles per day, two way traffic volumes.
Local Home Area

**LIGHT**

“We have adopted this street as our home”
“Quiet, clean and friendly”

“Local parks host most of the leisure activities and games”
“I like the general ambience”

**MODERATE**

**HEAVY**

“You don’t see many people”
“I would prefer not to live on such a busy and public street with noise, car fumes and dust”
Neighbourhood Connections

LIGHT

5.1 average connections

“Most people get out and about and talk on the street”
“Family-orientated and friendly”

MODERATE

5.9 average connections

“We have great neighbours and live in a safe street”
“I enjoy talking with my neighbours”

HEAVY

2.1 average connections

“My street is a car thoroughfare”
“Lived here over 35 years, a decline in people talking to neighbours and children playing”
• Role of street space as an agent of diverse exchange subverted by vehicular dominance

• Significant impacts on the livability of streets & wellbeing of residents

• Raises questions about for whom and what residential street spaces should be designed
Why?

• Distance and proximity
  – “If you have to get in your car it’s not local”

• Walkability

• Bumping places
  – Activity centres (e.g. schools, greenspace)
  – Quiet streets & cul-de-sacs
  – Multiple back sections with shared drive
Implications and policy responses

Streets

• Reduce traffic – encourage *social* modes
• Reduce traffic speed
• Better design of new streets of 3,000+ vehicles (or retrofit existing)
  – e.g. back lanes, access lanes
e.g. Montreal
Back lanes as recreational areas

THE IPOH City Council is mulling the idea of converting back lanes into recreational areas, similar to what is being done in many other countries.

Mayor Datuk Zamri Man said the council is studying the suitable locations at Ipoh’s Old and New Town areas.

He said either the back lanes could be converted to recreational areas or made into parking lots.

"Since we have limited places to construct recreational areas within the city, we need to enhance and upgrade the existing ones."

Gardening? It's right up our alley! Community transforms Victorian passageway behind homes into oasis of greenery

- Once-dingy lane in Middlesbrough now haven of hanging baskets, trellises and trees with apples and pears
- Mavis Arnold has helped turn lane into a wonderland, while neighbouring alleys are still scruffy and rundown
- Alley was well-kept in 1960s but as the decades dragged on residents began to dump their rubbish on cobbles
Implications and policy responses

Streets

• Reduce traffic – encourage *social* modes
• Reduce traffic speed
• Better design new streets of 3,000+ vehicles (or retrofit existing)
  – e.g. back lanes, access lanes
  – e.g. alternative *bumping places*
    • Street furniture, bus stops, greenspace
Implications and policy responses

Places

• Design *bumping places* (shared space) in new urban developments
• Value and enhance existing *bumping places* e.g. schools
Summary

• Traffic affects social interaction and community development in New Zealand
• Need to create *bumping spaces*