Parental Perceptions of Driving and Taking a Bus to School: Why or Why Not?

Sandy Mandic, Charlotte Flaherty, Debbie Hopkins, Enrique Garcia Bengoechea, John C Spence
Who Makes a Decision How Dunedin Adolescents Travel to School?

### Adolescents’ decisions
- Motorised Transport: 45.3%
- Active Transport: 40.5%
- Motorised + Active Transport: 14.2%

### Parental decisions
- Motorised Transport: 70.0%
- Motorised + Active Transport: 15.9%
- Active Transport: 14.1%

**BEATS Student Survey**
- n=1,443 (boarders excluded)

<table>
<thead>
<tr>
<th>Response</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adolescents</td>
<td>43.4%</td>
</tr>
<tr>
<td>Parents</td>
<td>45.8%</td>
</tr>
<tr>
<td>School</td>
<td>3.4%</td>
</tr>
<tr>
<td>Other(s)</td>
<td>7.5%</td>
</tr>
</tbody>
</table>
Transport to School Habits in Dunedin Adolescents
Transport to School Habits in Dunedin Adolescents

<table>
<thead>
<tr>
<th>Mode</th>
<th>Most of the time / All of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Driven by others</td>
<td>48.7%</td>
</tr>
<tr>
<td>Walk</td>
<td>30.4%</td>
</tr>
<tr>
<td>School bus</td>
<td>13.3%</td>
</tr>
<tr>
<td>Public bus</td>
<td>6.7%</td>
</tr>
<tr>
<td>Driving myself</td>
<td>5.1%</td>
</tr>
<tr>
<td>Other</td>
<td>2.1%</td>
</tr>
<tr>
<td>Bike (n=22)</td>
<td>1.5%</td>
</tr>
</tbody>
</table>

n=1,476 (boarders excluded)
Being Driven to School*

Variation by School

*Most of the time / all of the time

n=1,476
(boarders excluded)
Adolescents’ Perceptions of Route to School for Walking or Cycling

- Too much traffic: 35.6%
- Too many hills: 32.9%
- Boring route: 33.3%
- Dangerous crossing(s): 32.4%
- Convenience of being driven to school by someone on the way to something else: 52.9%

n=753

Mandic et al. (2016) Abstract. (Accepted to ISPAH)
Why Parents Drive Adolescents to School?

Convenience: 71.3%

Distance: 65.5%

Child has too much stuff to carry: 65.5%

Dangerous roads: 50.6%

Personal safety: 46.0%

Time constraints: 46.0%

Public transport
Not available: 26.4%
Not suitable: 32.2%

My child does not enjoy walking or cycling: 20.7%

No other transport options: 26.4%

BEATS Parental Survey
(n=87 parents who drive child(ren) to school)
What about Taking a Bus to School?

<table>
<thead>
<tr>
<th>Travel to school</th>
<th>Most of the time / All of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>School bus</td>
<td>13.3%</td>
</tr>
<tr>
<td>Public bus</td>
<td>6.7%</td>
</tr>
</tbody>
</table>

Scheduled bus service available in the area

- Public bus only: 50.0%
- School bus only: 17.2%
- Public & school bus: 19.5%
- No bus available: 10.2%
- Don't know: 3.1%

BEATS Student Survey
n=1,476 (boarders excluded)

BEATS Parental Survey
(n=128)
What about Taking a Bus to School?

Walking time to the closest bus stop from home

- 33.8% within <1 min
- 40.5% within 1-5 min
- 13.5% within 6-10 min
- 5.4% within 11-15 min
- 2.7% within 16-20 min
- 1.4% within 21-30 min
- 2.7% >30 min

87.8% lived within a 10-minute walk to the closest bus stop

BEATS Parental Survey (n=62)
Parental Barriers to Taking Bus to School

Adolescents’ activities before/after school: 50.4%

- Bus is too expensive: 45.9%
- Perceive convenience of driving: 45.9%
- Lack of free-of-charge bus bike racks: 27.6%
- Bus trip takes too long: 26.3%

- 23.3% Live too close to school
- 12.8% Bus stop is too far from home
- 8.3% Bullying on the bus concern

BEATS Parental Survey (n=133)
### Adolescents’ Travel Mode(s) in General

<table>
<thead>
<tr>
<th>Mode</th>
<th>Current</th>
<th>Preferred</th>
</tr>
</thead>
<tbody>
<tr>
<td>Car</td>
<td>69%</td>
<td>49%</td>
</tr>
<tr>
<td>12%</td>
<td>12%</td>
<td>28%</td>
</tr>
<tr>
<td>30%</td>
<td>30%</td>
<td>14%</td>
</tr>
<tr>
<td>17%</td>
<td>17%</td>
<td>3%</td>
</tr>
<tr>
<td>4%</td>
<td>4%</td>
<td>4%</td>
</tr>
</tbody>
</table>

**BEATS Student Survey**

n=1,199 (boarders excluded)
Walking, Cycling, Bus or Driving - Why?

n=1,199 (boarders excluded)

<table>
<thead>
<tr>
<th>Preferred Mode</th>
<th>Convenience</th>
<th>Lifestyle</th>
</tr>
</thead>
<tbody>
<tr>
<td>49% Car</td>
<td>71%</td>
<td>19%</td>
</tr>
<tr>
<td>28% Car</td>
<td>60%</td>
<td>23%</td>
</tr>
<tr>
<td>14% Walking</td>
<td>36% Health</td>
<td>11%</td>
</tr>
<tr>
<td>14% Walking</td>
<td>29%</td>
<td>11%</td>
</tr>
<tr>
<td>3% Bus</td>
<td>30%</td>
<td>15%</td>
</tr>
<tr>
<td>3% Bus</td>
<td>25% Cheapest</td>
<td></td>
</tr>
<tr>
<td>4% Cycling</td>
<td>35% Health</td>
<td>17%</td>
</tr>
<tr>
<td>4% Cycling</td>
<td>11%</td>
<td>9%</td>
</tr>
</tbody>
</table>

Convenience Lifestyle

36% Health

17% Convenience

11% Environmentally-friendly

11% Cheapest

9% Lifestyle
Preliminary Conclusions

• **Main reasons for driving adolescents to school:**
  – Perceived convenience of driving
  – Adolescents have too much to carry
  – Distance to school
  – Traffic and personal safety
  – Time constraints

• **Main barriers for using bus to school:**
  – Adolescents’ out-of-school activities
  – Cost
  – Convenience of driving
Active Living Laboratory
otago.ac.nz/active-living
Thank you!