Which is Melbourne?

Melbourne

Not Melbourne
Which is Melbourne?

Melbourne

Not Melbourne
A ‘city functional’ with wide streets
Space used by transport companies
The project will deliver an upgraded explanation and upgraded **ECONOMIC MODEL**
Value is saved in layers

- **Owner** = **Ownership** + **Storage** + **Use**
- **Car share user** = **Value** + **Parking** + **Use**
- **Community** = **Density** + **More Spaces** + **Emissions**
- **UNKNOWNs** = **CPTED** + **Heat Island** + **Externality**
IMPACTS WE CAN SEE
IMPACTS WE CAN MEASURE
Transport
Congestion

Public Health
Sedentary lifestyle
Trauma
Local pollution
Noise

Economic
Lower cost of living

Environment
Urban impact
Emissions
VALUE OF IMPACTS
Interaction between factors

Vehicle Ownership → Mode Choice → Sedentary lifestyle

Vehicle Storage → Lower housing cost

Vehicle Use (VKT) → Lower travel cost

- Urban impact
- Congestion
- Trauma
- Local pollution
- Noise
- Emissions

The Economic Model
REduced OWNERSHIP
Members reduce their car ownership

<table>
<thead>
<tr>
<th>MEMBERS WHO</th>
<th>Cars avoided/member</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do not replace their car</td>
<td>0.12</td>
</tr>
<tr>
<td>Can sell their car</td>
<td>0.12</td>
</tr>
<tr>
<td>Can avoid buying a car</td>
<td>0.09</td>
</tr>
<tr>
<td>Use the service as ‘an extra car’</td>
<td>0.17</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>0.5</strong></td>
</tr>
</tbody>
</table>

Source: PBA analysis of various sources including local member surveys undertaken in 2013
REDUCED STORAGE
The average car is 85% idle

**Average Australian Vehicles**

**In motion (IM)**
- 15,000 km every year
- @ 40 km/h average
- IM = 375 hours

**Time at destination parking (P)**
- Assume P = 2 x IM
- 750 hours in ‘parking’
- IM + P = 1,075 hours in use (IU)

**Time in storage (S)**
- 8,760 hours in a year
- IU = 1,075 hours
- S = 8,010 hours or 87%

Source: RACV 2014 data

Source: PBA Analysis
Fewer stored cars
What else could we use the space for?

15m²

30m³
Kerbspace options
In building podiums
In basements
As structures
As 1,100 apartments

- Lower cost of living
- Local economic multiplier
- Lower housing costs
- Higher value built space
- Higher value land
- Higher value public space
REDUCED USE
Data on reduced use

Typical Owner Australia
- 15,000km each year

Typical Owner
- Owners in the City of Melbourne drive 5,000km every year

Carshare
- Car share users in City of Melbourne drive 2,500km every year
Data on reduced use

Typical Owner Australia

15,000km each year

Typical Owner

Owners in the City of Melbourne drive 5,000km every year

Carshare

NEW VALUE

Car share users in City of Melbourne drive 2,500km every year
Members who switch modes

<table>
<thead>
<tr>
<th>Mode Share of Members</th>
<th>Before</th>
<th>After</th>
<th>Average Mode Shift</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bus</td>
<td>5.3%</td>
<td>11.2%</td>
<td>+5.9%</td>
</tr>
<tr>
<td>Train</td>
<td>10.6%</td>
<td>11.4%</td>
<td>+0.8%</td>
</tr>
<tr>
<td>Tram</td>
<td>12.1%</td>
<td>12.8%</td>
<td>+0.7%</td>
</tr>
<tr>
<td>Walking</td>
<td>9.8%</td>
<td>13.7%</td>
<td>+3.9%</td>
</tr>
<tr>
<td>Bicycle</td>
<td>20.8%</td>
<td>24.2%</td>
<td>+3.4%</td>
</tr>
<tr>
<td>Car/Motorbike</td>
<td>41.4%</td>
<td>26.6%</td>
<td>-14.8%</td>
</tr>
</tbody>
</table>

Note: This data is highly specific to the location being served and must be generated for each area in a robust manner
Source: PBA analysis of various sources including local member surveys undertaken in 2013
Mode switchers get more physical activity
Members increase their physical activity by around 9 minutes/day

<table>
<thead>
<tr>
<th>Mode</th>
<th>Minutes/day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bus</td>
<td>+0.25</td>
</tr>
<tr>
<td>Train</td>
<td>+0.13</td>
</tr>
<tr>
<td>Tram</td>
<td>+0.38</td>
</tr>
<tr>
<td>Walking</td>
<td>+8.39</td>
</tr>
<tr>
<td>Bicycle</td>
<td>+0.40</td>
</tr>
<tr>
<td>Car/Motorbike</td>
<td>+0.12</td>
</tr>
</tbody>
</table>

Note: This data is highly specific to the location being served and must be generated for each area in a robust manner
Source: PBA analysis of various sources including local member surveys undertaken in 2013
Benefits and Costs

Annual Cost/Benefit per Car Share Vehicle

- Value of Reduced Congestion: $10,961
- Health Benefits of Additional Walking: $8,053
- Value of Reduced Road Crashes: $2,365
- Air pollution, greenhouse gas, noise: $1,069
- Health Benefits of Additional Bicycle riding: $1,150
- Opportunity Cost of Not Owning a Car Space: $22,274
- Value of Not Owning a Car: $13,389
- Value of Driving a Car Less: $7,886
- Council establishment fee for approved bay: $333
- Community value space: -$5,478
- Council Strategy: -$2,006
- Council admin & infrastructure: -$25,879

Net Benefit: $34,119
Stand by for our next report
The project could also explore the

PRACTICAL BARRIERS
How and why people change to car share
Relevance and importance to Councils
What car share needs Councils to provide
Support, neutral, suppress
Economic model
Decision
Perceptions and paradigms
Public anxiety about parking supply
Traditional parking management
Statutory planning and negotiations
Is car sharing like...

a Library?  Rubbish?  Café tables?

We subsidise to generate a community benefit
We pool funding and break even for community benefit
We tax them to reflect private use of public space
Or is it like resident parking...

We provide free space for personal benefit
Renting low use items is cheaper
Private companies want access to our scarce public space
World’s most livable city
Questions?

Knowles Tivendale
Principal

m. +61 412 213 770
t. +61 3 8679 6942
e. knowles@phillipboyle.com.au
w. www.phillipboyle.com.au

Unit 3, 1014 Doncaster Road
Doncaster East VIC 3109

Harry Barber OAM
Expert Advisor

m. +61 407 491 182
t. +61 3 8679 6948
e. hbarber@phillipboyle.com.au
w. www.phillipboyle.com.au

Unit 3, 1014 Doncaster Road
Doncaster East VIC 3109