**Engineering** 

## Travel plans:

Definition, issues & effectiveness

END5035Z Management of Transport Supply and Demand

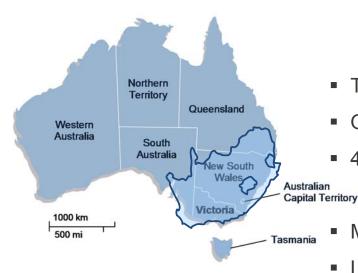
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Background Definition Issues Effectivenes

## Geographical context



- Total population = 24 million
- Only 3 people per km<sup>2</sup>
- 45 people per km<sup>2</sup> in South Africa
- Melbourne's population = 4 million
  - Largest urban tram network in world
  - 70% of Melbournians drive to work



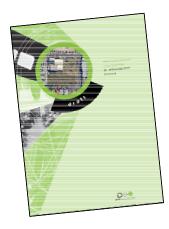




## What is a travel plan?

 Strategy containing a package of tailored initiatives and facilities that encourage the use of more sustainable forms of transport





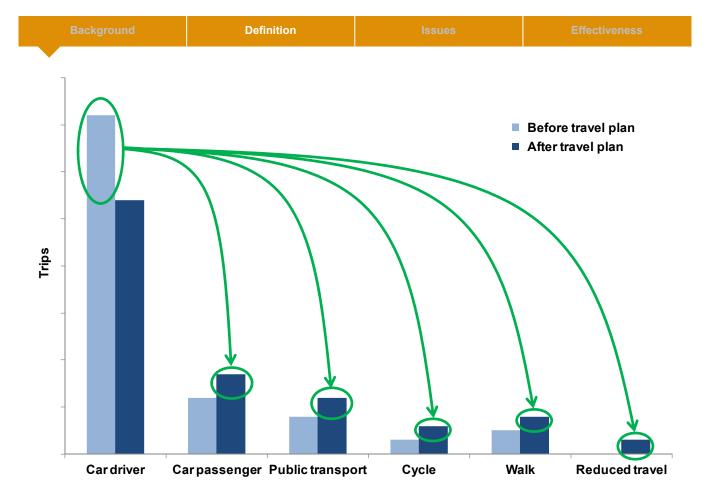


- No two travel plans are the same important to tailor to needs of site
- Travel plans can be applied to both existing & new developments

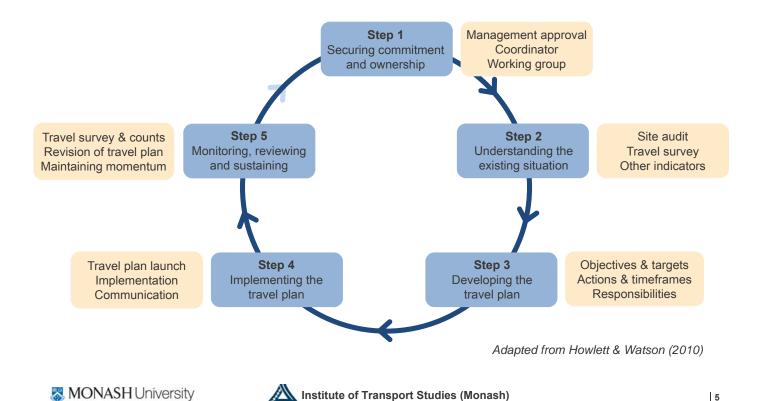




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## The travel planning process



Definition

Institute of Transport Studies (Monash)

The Australian Research Council Key Centre in Transport Management

## Examples of actions in a travel plan

### **Programs**

Carpool matching Bicycle users group Walking school bus



### Information

Maps & timetables New resident kits Online information



#### Infrastructure

Bicycle parking Showers & lockers Car sharing service



#### Incentives

Discounted tickets Carpooling parking Parking charges



#### Other

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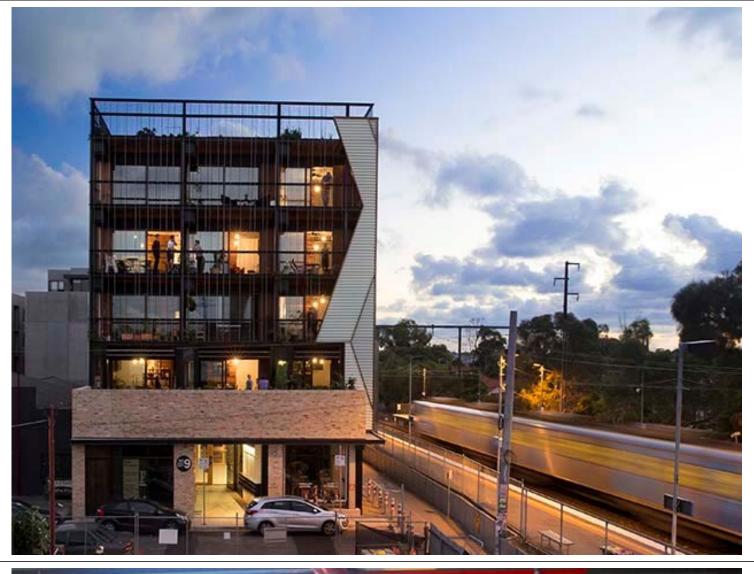
Videoconferencing Flexible working Travel policies



More effective travel plans use both 'carrots' and 'sticks'









# Are there any issues with requiring a travel plan for a new residential development?







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Background Definition Issues Effectiveness

## Issues with requiring travel plans for new residential developments

- No legal requirement for them in Australia
- Hand-over and implementation responsibilities
- Quality of the travel plans being approved
- Expected by some to provide a 'silver bullet' solution
- Lack of monitoring and enforcement

"You can have the document there and you can stamp it, but unless it's followed up on then it's not worth the paper it's printed on." [Local govt representative]

# How can we measure effectiveness of travel plans at new residential developments?







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Background Definition Issues Effectiveness

## Measuring effectiveness of travel plans for new residential developments

- Count of people entering & leaving developments, by transport mode
- Count of car parking supply and demand
- Counts conducted at:
  - Case sites: developments with travel plans
  - Control sites: developments without travel plans
- Comparisons to published vehicle trip generation rates
- Comparison between case and control sites





Background Definition Issues Effectiveness

### **Case sites**









### **Control sites**





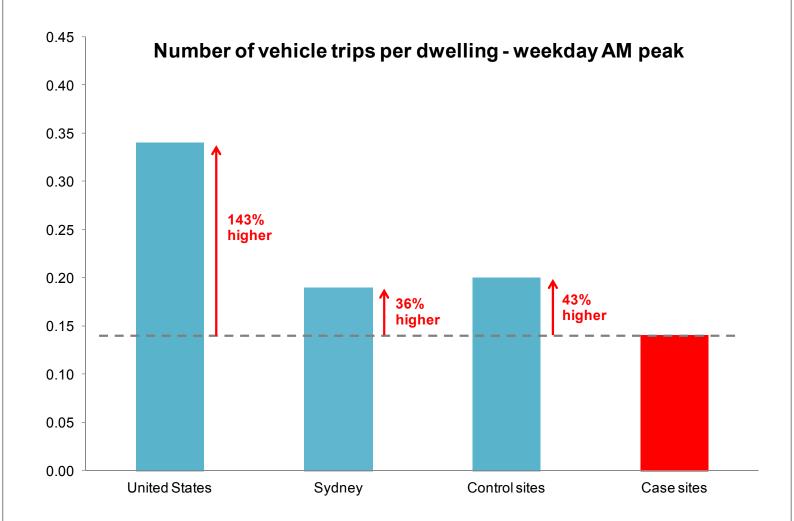


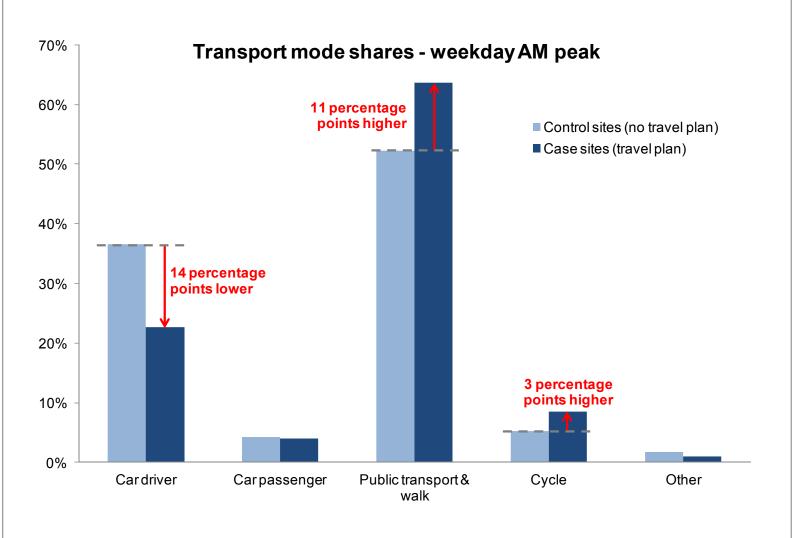






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	Definition	Issues	Effectiveness
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## Car & bicycle parking utilisation

	Avg cars parked/dwelling	Avg bikes parked/dwelling
Control sites	0.55	0.43
Case sites	0.42	0.73

Less cars & more bikes per dwelling at case sites

	% car parking spaces used	% bike parking spaces used
Control sites	52%	98%
Case sites	68%	102%

- More efficient utilisation of parking facilities at case sites
- Over supply of car parking and under supply of bike parking





## Take home messages

What is a travel plan?

Strategy containing a package of tailored initiatives and facilities that encourage the use of more sustainable forms of transport

- What are some of the issues in requiring them?
  Monitoring & enforcement, implementation, quality, expectations
- How effective are they?
  Up to 14% less car use when compared to similar (control) sites





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## **Contact details**



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