Inclusive access matters – measure it

What is accessibility?
Why does it matter?
How do we measure it?
How would measuring it change our decisions?

Tim Hughes
Inclusive access  - the top priority

What is it?
Click to edit subtitle

• The purpose of transport is to provide access – movement is for a reason.
• Access is defined as Ease of access to social and economic opportunities for people
• Could also include:
  • access to resource and markets for business.
  • Catchments for location of services
• Top government transport priority

• GPS requires us to improve accessibility and to measure accessibility outcomes.
• I will share some early easy steps so far
• Opportunities to do much more.
Inclusive access - the top priority

What is it?

Click to edit subtitle

• The purpose of transport is to provide access – movement is for a reason.
• We are very good at measuring and modelling traffic movement but very poor at measuring movement by active modes.
• Our process are very poor at measuring transport equity.
• We don’t measure the opportunities missed due to transport difficulties.
• Or the trip you hope you will never have to make.
• Land use change feedback
Figure 1: Relationship between accessibility and mobility graphed using a gravity model, and showing the regional groupings of 46 world cities.

Source: William Ross; Accessibility and Mobility: the Yin and Yan of planning
We need something better than opposite of VKT

Need for a better indicator for accessibility outcomes from transport and land use changes.

• Existing methods used in economic analysis are based on changes in movement and assume that time savings improve access especially by increasing the number of opportunities.
• But motor vehicle time savings result in destinations shifting.
• Which reduces accessibility for every other mode
• Car accessibility may already be more than optimal.
• Care based measures do not consider equity
Measuring transport outcomes

What is it?

Click to edit subtitle

- Measure what you value and value what you measure
- You manage what you measure.
- “Corporate managers start off trying to manage what they want, and finish up wanting what they can measure.’
- the easy-to-measure drives out the hard, even when the latter is more important
- What gets measured gets managed - so be sure you have the right measures, because the wrong ones kill.
- “Measure what you value and others will value what you measure.”
- So: measure what you value then value what you measure.
Measuring transport outcomes - so far

What is it?

What indicators: depends on what you are using it for:

- Easy to understand,

- Thresholds: can you reach nearest destination within 20 minutes

- How many opportunities can you reach within 20 minutes

- Where are the problems - where for whom?

- These measures are not linear - not good for assessing value of change.
## Christchurch

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Population: 331,767
Measuring transport outcomes

What is it?
Click to edit subtitle

- In project and programme assessment
- What is the value of accessibility changes to people.
- Utility measure.
A utility base indicator proxy for economic evaluation

A mode comparison score

• Comparing non-car to car modes.

A potential composite score?

• The value of each destination
• The generalised cost of getting to the nearest destination.
• The value of a choice of destination
• The value of mode choice