

The accessibility – sustainability connection

Exploring the links between accessibility and sustainability

PANIA ELLIOT - NZTA - ADVISOR TRAVEL PLANNING

Definition of key concepts

'Accessibility' 'ease of reach'

The ability to access key activities – health care, employment, education, shopping etc

Mobility 'ease of movement'

Car, bus, bike, walking etc

Definition of key concepts cont'd

Accessibility planning

“a structured process for the assessment of and planning for, accessibility”

addresses barriers to accessing what we need including: physical, geographical, facilities, economic, time based, fear based and space based (information based)

(Chapman, S., 2008) (Solomon, J., 2003).

Definition of key concepts cont'd

Sustainability

The economic, social, environmental needs and aspirations of society are interdependent.

We need to ensure that a balance can be achieved in planning to achieve desired and necessary outcomes in these areas (Bruntland, G., 1987).

Relationship between concepts

Accessibility, mobility

Mobility is an aspect of accessibility

Mobility does not always ensure good accessibility

Accessibility planning

Enables us to measure accessibility levels, assess barriers to access and target improvements (some of which are non – transport related)

Accessibility & sustainability

Accessibility is an enabler of sustainability

Relationship between concepts

Access via mobility

We have in the past focused on providing for access via mobility i.e. to get from destination A to B we built a road.....

Continued

This approach has served us well during times of relative economic prosperity, population growth, urban expansion

But times have changed.....

The sustainability agenda

NZ Transport Strategy 2008

Government policy statement 2009/10-2018-19

Outline

The key challenges we face: Environmental, social, economic

Components, targets/interventions to address them

The sustainability agenda - key challenges

We face a number of key challenges that have been identified by the government in the NZTS and GPS

Transport affordability

Climate change

Energy security and cost

Increases in the environmental and social costs of transport

An ageing population

Managing the integration between land use and transport

The targets contained in the GPS and NZTS call for a change in the way we provide for access to key services and activities

The sustainability agenda - key challenges

NZTS

A “business as usual” approach will not enable us to meet the challenges we face and allow us to reach the government’s vision for transport.

Accessibility planning

So how can we provide better access...

Accessibility planning

Plans for better integration between

- Key population groups (origins)
- Key services (destinations)
- Networks (transport, virtual)

Continued

Accessibility planning allows:

integrated planning

a focus on the planning process

methodical assessment/evaluation

for co-ordination

delivers positive community outcomes

NZTS components and challenges

NZTS key component	NZTS challenge
Integrated planning	Responding to climate change Funding of investment in infrastructure and services while keeping transport affordable Increases in the environmental and social impacts of transport
Making the best use of existing networks and infrastructure	Funding of investment in infrastructure and services while keeping transport affordable Increases in the environmental and social impacts of transport
Increasing the availability and use of public transport, cycling, walking and other shared and active modes	Responding to climate change Increases in the environmental and social impacts of transport Changing demands arising from the ageing of New Zealand's population

Accessibility planning - overseas

- USA (Southern California)
- Holland (regulatory)
- UK (comprehensive)

How could it work in the New Zealand context?

1 National strategic assessment – policy, data audit
2 Local strategic assessment – policy audit
3 Local accessibility assessment – data audit
4 Option appraisal
5 Accessibility strategy/plan
6 Monitoring and evaluation

Accessibility planning – how does it work?

Informed by a range of data sources

Central government strategies

NZTS, NZEECS, NZ Health Positive ageing strategy, urban design protocol, NZ Disability strategy, GPS, TMIF

Qualitative

Census, social report, Property and land records

Quantitative

Interviews, surveys

Accessibility planning – how does it work?

Process supported by core national indicators e.g.

Accessibility to school/further education
Accessibility to employment
Accessibility to a doctor

Core indicators are supplemented by

Threshold, continuous and local indicators

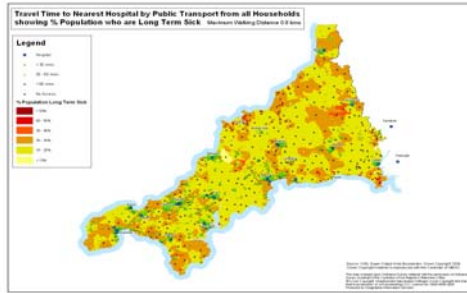
Accessibility planning – how does it work?

Accessibility to medical services

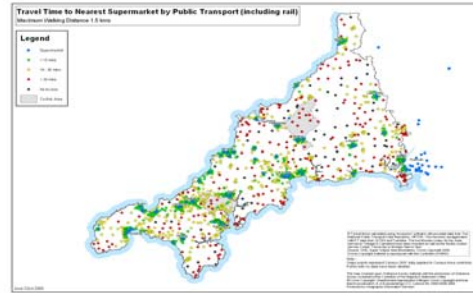
% of households within 15 mins of a GP by PT

% of households without access to a car within 15-30 mins of a GP by PT

GIS Map – nearest hospital (Cornwall County Council, UK)



Travel time by public transport to supermarket (Cornwall County Council, UK)



Conclusion

The UK application of accessibility planning has enabled shared approaches to shared outcomes:

Ensuring the location of key services improves the accessibility of these services (rationalisation of land use patterns)

Rationalisation of service provision

Improvements to public transport infrastructure and services

Improvements to walking and cycling infrastructure

Where to from here....?

Options for the trialling of accessibility planning methodology in NZ are currently being investigated by the MoT and NZTA

'Accessibility planning methods' report is being published on the NZTA website in the next few weeks