INTEGRATING HEALTH, ACTIVE TRANSPORT AND LAND USE PLANNING

Transport Case Study
OUTLINE

› Health and transport connections
› Lifestyle disease and transport
› Increasing active modes and justifying new infrastructure
› Emerging evidence
› Future directions
Awareness of the many different connections between health and transport is not new

- Safety
- Transport emissions
- Health impacts of sedentary behaviour an area of growing concern
  - Decline in more active transport modes
    - Walking
    - Cycling
- Negative impacts of driving

Source: designbuildsource.com.au
Insufficient Physical activity and increase in travel are both concerns
- Car travel works against meeting physical activity guidelines
- Increasing travel by car exacerbates effect

Policy approaches are three pronged
- Reduce harms of driving
- Reduce the daily travel by car
- Increase active travel modes

Benefits of healthier travel
- Benefit individuals
- Benefit society
  - Countries with high levels of non motorised travel have fewer fatalities and injuries per km
WHAT CONSTITUTES ACTIVE TRAVEL

- Walking
- Cycling
- Public transport use
  - Users need to access public transport
  - Mode switch to public transport reduces harm to drivers
  - Improves capacity utilisation of road networks
INCREASING ACTIVE MODES

› ‘Soft’ policies
  - Reducing travel
    - Sticks – eg purchase taxes, congestion charges, parking charges
    - Carrots – improving conditions for active travel, improving attraction of nearby attractions
    - Encouraging mode shift through planning eg travel plans
    - Design of more walkable areas

› Infrastructure to make active transport more amenable and safe
JUSTIFYING INFRASTRUCTURE SOLUTIONS

› Public infrastructure is justified in evaluation
  - Identifying costs
  - Identifying benefits

› Current guidelines capture health impacts imperfectly
  - Costs include extra time taken eg to interchange on public transport but not benefits of this walking to physical activity targets
  - Costs include the provision of new active transport infrastructure but struggle with identifying benefits as many active transport trips are slower
    - Methodological difficulties of
      - Identifying demand
      - Quantifying health benefits
    - Costs of implementing walkable neighbourhoods but not the benefits – amenity values etc
WHY IS EVIDENCE IMPORTANT?

› Evaluation compares COSTS and BENEFITS
› Better evidence on COSTS and less good evidence on BENEFITS
› Better evidence on BENEFITS of public transport use make public transport infrastructure easier to justify

Source: tetest.idea.gov.uk
Walking in NSW

- Estimated benefits of switch to walking for journeys of less than 1km (10 mins)
  - 5% switch: $134 m benefits
  - 10% switch: $214 m benefits
- Methodology for inclusion in CBA evaluation
- Multimodal transport options currently only count costs, not benefits of walking
Cycling

- methodology for route choice and mode switch as input into demand forecasting for new infrastructure
- Quantification of health benefits evidence
  - Direct costs of health estimated $1,682 bn (2010 prices) or $171 per insufficiently active person in Australia
  - Indirect costs – overall disease burden (time lost in illness, disability or premature death)
- Recommended km rate for evaluation = $1.12

Source: Queensland Department of Transport and Main Roads, 2011
› Evaluation guidelines under review provide an opportunity to include health related benefits
  - Win-Win for transport and health

› More infrastructure
  - Encourages more use providing virtuous circle for health and transport
  - Reinforces sustainable transport policy objectives

› Ongoing need for collaboration between transport and health
  - To refine methodologies and parameter values
  - To translate concepts into policy practice

› Foster interest in academic community
  - To find synergies in transport and health
  - To support development of the evidence base

Source: sdx.com.au