World's Most Accessible City

Presentation to "Before After" Forum

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TRAFFIC ENGINEERING AND PLANNING

Vision for Christchurch

- World's most accessible city
- Easy access for people walking, cycling, in wheelchairs, old and young, visitors & locals
- Outcompetes Auckland and Wellington with quicker travel times, more travel options
- Location of choice for businesses, residents
- Strong vibrant city centre; outcompetes malls

Jan Gehl's recs for central city

- A City for People Action Plan (CCC, 2010):
  - Increase pedestrian priority
  - Spoil the cyclists
  - Support public transport
  - Reduce impact of vehicles

Combined Age 136 years

Home

Dinner

Celebrating a 45th Wedding Anniversary

Sustainable transport

- Walking and cycling

- Public transport

- Travel demand management
  - minimising car travel (other modes, car sharing, managing parking, etc)
  - minimising truck travel (other modes, local supplies, etc)

- Core part of sustainable planning and urban design

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Sustainable transport good for urban design

- Integration of land use, transport and urban design
- Slow core in central city
- Residential base (30,000) to support retail and office
- Walking and cycling core components
- Viable suburbs and neighbourhood centres

Sustainable urban design(ers)

- Not only:
  - Architects and landscape architects
  - Urban designers and planners
- But also:
  - Traffic engineers and transport planners
  - Surveyors
  - Health professionals
  - Developers
  - Politicians and the public

Road user hierarchy (UK)

- Plan and provide for:
  - Pedestrians
  - Cyclists
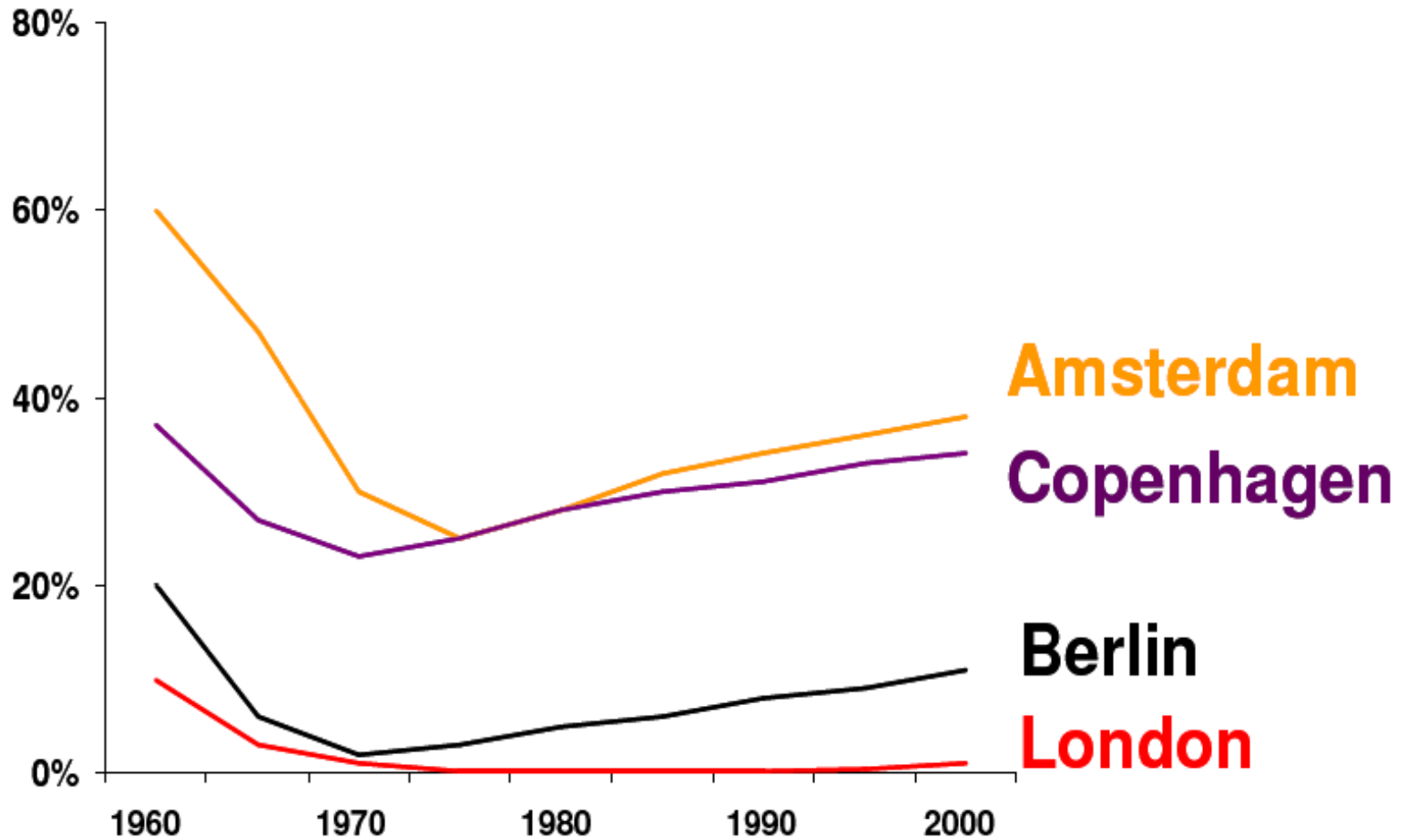 - Public transport
  - Freight
  - Cars (last)
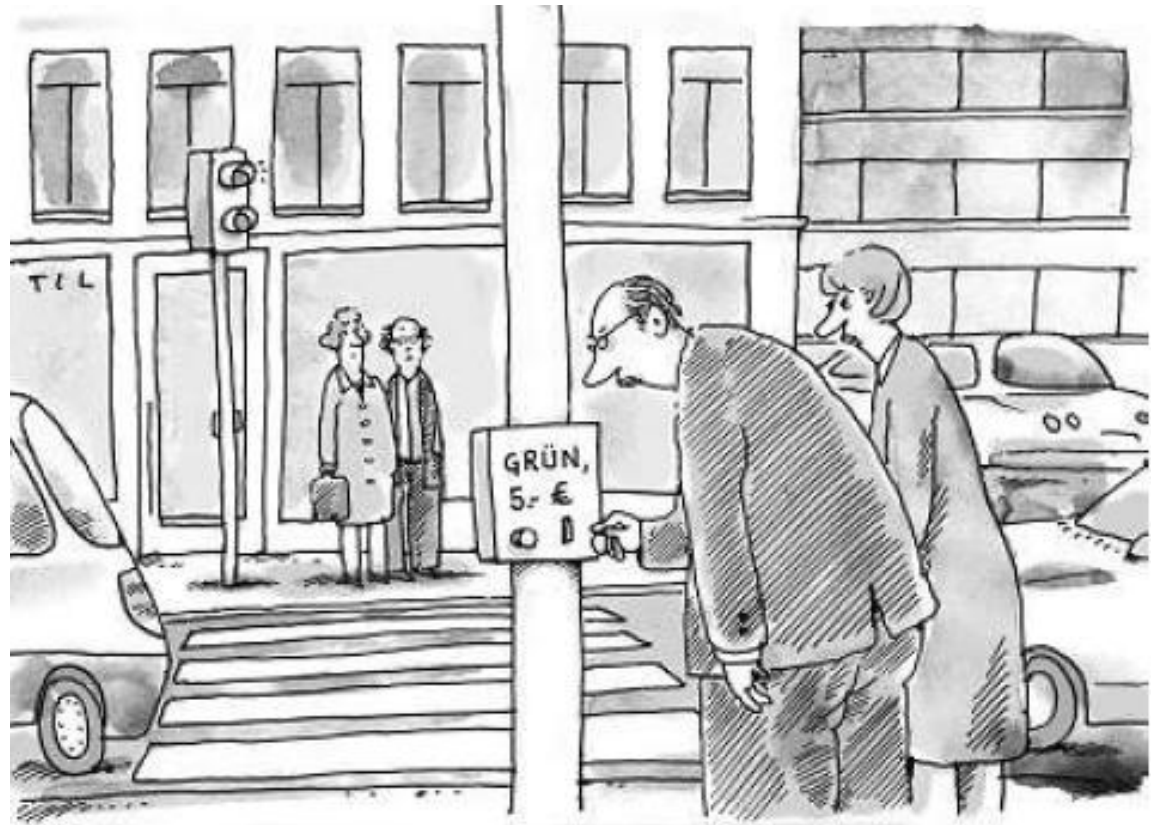
Permeability

- More pathways for pedestrians and cyclists than motor vehicles
- Gives competitive advantage for walking and cycling
- Examples:
  – laneways
  – contra-flow cycle lanes
  – road closures

1970s oil crisis reversed trend

Cycle trips as % of total trips

Zurich plans for pedestrians

- "Our goal is to reconquer public space for pedestrians, not to make it easy for drivers."
- "A person using a car takes up 115 cubic metres of urban space in Zurich while a pedestrian takes three."
- "So it's not really fair to everyone else if you take the car."
  - Zurich's chief traffic planner, Andy Fellmann

Copenhagen plans for cyclists

- Car owning, driving and parking expensive
- 37% of work and education trips by bike
- 55% of cyclists female
- Cycling done in all seasons

New York cycling facilities

- 1997 = 190 km cycle facilities
- 2006 = 670 km cycle facilities
- 2006 Mayor Bloomberg & Transportation Commissioner Janette Sadik-Khan
- 2009 = 1150 km cycle facilities
- Cycle boulevards, road space reallocation

London cycling revolution

Targets:

- 400% increase by 2026
- 5% of trips by bike

— Boris Johnson, Mayor of London; leadership

Parking takes up excessive space

- Blue area is commercially productive
- Parking – green (left) and brown (right) is a cost to all
- Parking utilisation typically low

CBD parking spaces/1000 employees

- Phoenix: 906
- **Christchurch: 875**
- Canberra: 842 (Australia's highest)
- Auckland: 703
- Wellington: 548
- New York: 60
- European average: 230

Newman and Kenworthy (1999) Sustainability and cities: Overcoming Automobile dependence

Copenhagen land use planning

- Developments quite dense (but mostly < 6 stories)

- Incorporates sustainable transport

- Focuses on "brownfield" developments

- Requires private and public bicycle parking

Carlsberg brewery site redevelopment

- 33 hectare site; 3 km to city centre
- Planning 5,000 residents and 3,000 jobs
- Retention of key historic buildings
- Sustainability key focus

Central city plans for 30,000 residents

33 hectares

33 ha = 3,000 residents plus 5,000 jobs

Central city revitalisation

Reduced speeds

↓

Reduced crashes, noise, traffic fear

↓

Increased liveability, use of other modes

↓

More residents, tourists and businesses

↓

Increased economic vitality

Opportunity to create model city

- Denmark, Netherlands started reversing cycling decline in 1970s, not knowing if they could succeed

- We know what to do and can/must act now

- "Share an Idea" supports sustainability

- Need technical and political leadership

- Collaborate!

Opportunity to recreate streets

- More pedestrian friendly
- More attractive – trees and landscaping
- Places to sit and talk (private and public)
- Slower traffic speeds, less traffic, quieter

City-wide recommendations

- Restrict urban sprawl; support brownfield development

- Strong network of greenways and separated (car-free) cycle facilities

- Improve public transport

- Reduce traffic speeds

- Limit new road capacity (use other modes; don't widen bridges across Waimakariri)

- Charge for commercial car parking

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Central city recommendations

- Use road user hierarchy (peds first)
- Develop vibrant central city with slow core
- Convert at least Durham and Montreal to two-way and reduce operating speeds
- Medium density retail, commercial and residential; precincts (eg Arts Centre)
- New north/south lanes to break up long blocks
- Quality urban design