Not so fast!

Slowing down for a healthier, wealthier and more sustainable city

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Presentation outline

- The supposed advantages of speed
- How did cities become obsessed with speed and time saving?
- Does speed actually save us time?
- The health impacts of the 'slower' modes
- Practical interventions and cultural shifts
- Based on Paul Tranter and Rodney Tolley: Slowing city transportation for a healthier, wealthier and more sustainable city, Elsevier, late 2019: feedback welcome!

The supposed advantages of speed

• Speed as 'progress':

- 'Higher speeds will save time for everyone'
- 'Higher speed boosts economic growth'
- 'Faster is always better'

How did our society develop an obsession with speed and time saving?

- Initial hostility to street invasion by cars
- Established social values
 - Streets used for games, socialising, trade
- Very real safety hazard
 - US crash fatalities doubled to 26,000 p.a. 1920-28, mainly cars killing people on foot
- Outcry against speed: public, police, judges and media

Motoring lobby: how to market speed 'advantage' of cars?

- Organise:
 - "Motordom"
- Fund:
 - Gasoline taxes
- Strategise:
 - Ruthless dismissal of negative views on speed
- "One of the biggest shifts in the status quo ...in history" (Norton, 2015)



Motordom: changing the culture

- Motordom had to change the stories about the past and the visions of the future
 - A 'new age', the 'motor age' i.e. the way we have been doing things is outdated and open to question
 - Change the beliefs from the past that streets are for people
 - Persuade city residents that speed was a positive change

Motordom: Re-framing the discourse

- Shift:
 - 'Safety' from a speed problem to an engineering problem
 - Cars have 'right to speed': 'the road is too slow for the car'
 - Blame for crashes from cars to 'reckless' people
 - Parallels: "guns don't kill people, people do"
 - Lobby for driver licencing: reckless drivers could be fined
 - School safety responsibility to AAA
 - Streets re-defined in teaching as 'places for autos'
 - AAA took over all school safety patrols
 - Past: stopped cars so that children could cross
 - New: stopped children until road was clear

Motordom: regulate 'reckless' pedestrians'!

- Crosswalks appeared
- Relentless propaganda and shaming campaigns
 - New term of ridicule: 'jaywalkers'
 - Signs banning jaywalking in LA paid for by Auto Club
 - Boy Scouts recruited to hand out cards to jaywalkers
- Radical shift in public, media and legal attitudes to street use
 - 1930s "Majority of fatal accidents caused by pedestrians"

Why is the story of motordom important?

- Concerted attempt to change views of speed in the city
 - Culture of speed not due to:
 - Inexorable logic
 - "It was what we wanted"
 - Innate advantages for cities or society
- Lessons?
 - A cultural change in the speed/safety paradigm is feasible

A culture of speed

- Does speed actually help us to save time?
 - Destinations
 - Effective speed and the work of Ivan Illich, 1974



Time 'savings' create isolated destinations

- Time savings from faster travel consumed by travelling further
 - Lewis Mumford, *The City in History*, 1961:
 - (Speed) "denies the possibility of easy meetings and encounters by scattering the fragments of a city at random over a whole region"
 - Ivan Illich, *Energy and equity*, 1974:
 - "Beyond a certain speed motorised vehicles create remoteness which only they can shrink. They create distances for all and shrink them for only a few"
 - The trap of longer travel distances, **required**, for everyone

Time spent travelling per day, by mode

- Car dominated North American cities:
 - Faster travel
 - More time spent each day travelling
- Western European cities (more 'active travel')
 - Slower travel
 - Less time spent each day travelling

(Joly,2004)

Gathering resources for speed

- An example: this machine 'saves you time' e.g. by fetching a bucket of water and saving you time walking)
- The catch: it takes an hour per day to wind up the spring to power it
- When we calculate the 'time saved' by using this machine, should we consider the time spent winding up the spring?

Increasing the time we must spend on travel

- Winding up the spring: earning money to pay for time-saving devices
- Illich: "The typical American male devotes more than 1,600 hours a year to his car
- And travels 7,500 miles: less than five miles per hour"
- This is "effective speed", which considers:
 - time driving
 - time spent earning money to pay costs of travel, such as purchase and service costs, fuel, parking, fines, insurance, taxes

Summary: the 'speed paradox'

- Destinations
 - Increased speed is used to cover more distance
 - Car-dominated cities pay for their speed with longer travel times
- Effective speeds
 - Include time we need to gather resources for travel
- The speed paradox
 - Increasing speed does NOT save us time
 - 'Slower' modes can SAVE us time: no need to 'wind up the spring'

If we used 'slower' modes more, would our cities be healthier, wealthier and more sustainable?

- A holistic view of 'health'
- Personal and community health
 - Physical health
 - Mental health
 - Frequency and severity of crashes
 - Social capital
- Environmental health
 - Air pollution levels
 - Greenhouse gas emissions
- Economic health for families, business and city administrations

Physical health Active travel is vital

 "From the health promotion point of view, walking is the most important form of physical activity that should be encouraged to improve public health"

(Hillsdon and Thorogood, 1995)

 Many and varied mental health benefits too

Environmental health impacts of speed Air pollution and GHG emissions

• Air pollution

- 4m deaths p.a. from outdoor pollution (3 times the crash toll)
- Higher speed produces less emissions per km per vehicle but:
 - Benefits overwhelmed by more travel and total of emission
 - Sprawl effects: reduced use of other less polluting modes

• GHG emissions

- Cars in Australia responsible for 50% of GHGs from transport
 - More fuel-efficient vehicles but more of them, bigger and faster
 - Sprawl: loss of forests, more food miles and more consumerism in suburbs
 - Overall, GHGs the most damaging environmental health impact of high speed city transport

Economic health

The impact of slowing on individuals and families

- Reduced costs of living car-free or car-light
- Long-term equity gains of the slow neighbourhood
 - 'High car-needs/ low housing cost' (suburbs)
 - 'High housing cost/ low car-need' (inner city/TOD)
 - Factors:
 - Vehicles depreciate, housing appreciates
 - TOD/inner city: higher initial value and land value growth
 - Consequences (Litman, 2017)
 - *"After one decade the TOD home gains an additional \$63,789 in equity, and nearly \$450k after 25 years...*

"The owners could retire at age 65, with around \$1m dollars more than the owners of the urban fringe house"

Economic health Impacts of slowing on retailing

- People on foot spend more than drivers
 - Visit local centres more often than drivers and spend more money
 - Disproportionately add to vibrancy: the turbocharger effect
 - Re-allocating parking space attracts more shoppers and people
- Better quality of slow travel environments increases how far shoppers (and public transport users) will walk/bike

Economic health Impacts of slowing on city productivity

- Foot Traffic Ahead: Leinburger and Rodriguez, 2016
 - The 3 most walkable places in the US have GDP 52% higher than 3 least walkable
 - *"For perhaps the first time in 60 years, walkable urban places in all 30 of the largest metros in the USA are gaining market share over their drivable suburban competition"*
- Auckland CBD studies 2017
 - Strong relationship between productivity and connectivity on foot
 - Walkable streets: a platform for business and the spread of knowledge

Practical action for slowing the city: some examples

- Reducing the speed of motorised traffic
 - e.g. area-wide low speed zones
- Traffic management approaches
 - e.g. promoting the slower modes
- Reallocating road capacity
 - e.g. prioritising slow and sustainable choices
- Land-use and planning changes
 - e.g. zoning and codes

Practical action example Reducing the speed of motorised traffic

- Growing acceptance of lower urban speed limits
- Spread of area-wide 30km/h zones in Europe
 - '20's Plenty for Us', UK: 13 million people live in cities with a default 20 mph limit
 - Munich, Berlin, Vienna: traffic calmed about 80% of their road networks
- Graz (1992) as pioneer for 30 km/h default across entire city
 - Paris (2016) now enacting this
 - Spain country-wide 30 km/h limits on most city streets
- Global spread of default low speeds
 - Boston; Portland; Central Christchurch 30 km/h (2016)

Practical action example Traffic management: promoting 'slow' modes

- How many of you live in a place with a cycling strategy?
- How many of you live in a place with a walking strategy?
- "Until you solve that problem, the position of the walker will not improve"
- (Ole Thorsson, International Federation of Pedestrians, 2015)

Practical action example: Reallocating road capacity

- Global Street Design Guide, NACTO, 2016
 - Sets a new global baseline for designing urban streets
 - The first worldwide standard for redesigning city streets to prioritise slow travel and sustainable mobility



http://nacto.org/globalstreet-design-guide

Cultural shifts What do we want from the city?

- The goal: accessibility or mobility?
- The difference between the two concepts is simple:
 - Mobility is how far you can go in a given amount of time.
 - Accessibility is how much you can get to in that time.
- Accessibility matters most to jobs, friends and daily needs
- Almost universally, the most accessibility-rich locations are places where you don't move very fast
- Minneapolis city planner Paul Mogush:

"Put the stuff closer together so it's easier to get to the stuff."

Cultural shifts The world wide renaissance of 'slow' travel

- Rediscovering the importance of SLOW
 - Health, physical and mental
 - Reducing road danger
 - Cleaner air, less GHGs
 - Economic benefits
 - Social and community: connection and resilience

- Learning how to deliver
 - Professional skills
 - Measuring: Walkscore, GIS, Int. Walking Data Standard
 - Infrastructure: density, healthy design, placemaking, networks
 - Political leadership
 - Public awareness
 - Advocacy movements
 - Community engagement
 - Partnerships, especially with health

Motordom?

• Cities throughout the world are learning that speed is not the magic solution that motordom promised

- Motordom claimed: "It's a new age"
 - "The ways we have been doing things in city transport for the last 100 years are now outdated and open to question"
- Proponents of slower, healthier, wealthier cities can claim the same thing: "It's a new age"
 - "The ways we have been doing things in city transport for the last 100 years are now outdated and open to question"

The healthier, wealthier and more sustainable city

• Successful cities are re-discovering 'slower' transport

"The 20th Century was about getting around. The 21st Century will be about staying in a place worth staying in" (James Howard Kunstler)

So get on with it!

- "We are realising that if you have people walk and bicycle more, you have a more lively, more liveable, more attractive, more safe, more sustainable and more healthy city.
- And what are you waiting for?"
 Jan Gehl



Ask your children...What kind of place do you want to live in?

Slow travellers are the indicator species for quality of life in our cities



Thank you! rodney.tolley@gmail.com