

Removing the Roadblocks to Safe & Sustainable Communities

a new paradigm for transport planning and policy

Julie Anne Genter



Removing the Roadblocks to Safe & Sustainable Communities
a new paradigm for transport planning and policy

If you do what you always did... you will get what you always got.

Minimum Parking Requirements
The current minimum parking requirements are based on a 1950s model of car-dependent development. They are not based on current land use patterns, transportation modes, or the needs of the community.

Maximum Parking Requirements
The current maximum parking requirements are based on a 1950s model of car-dependent development. They are not based on current land use patterns, transportation modes, or the needs of the community.

New Management Paradigm

- Minimum Parking Requirements
- Maximum Parking Requirements
- Land use
- Transportation
- Sharing
- Community planning
- Policy

Transport Challenges

- Urban
- Suburban
- Rural
- Economy

Land use

- Urban
- Suburban
- Rural

Transportation

- Urban
- Suburban
- Rural

Sharing

- Urban
- Suburban
- Rural

Community planning

- Urban
- Suburban
- Rural

Policy

- Urban
- Suburban
- Rural



Energy

Oil Prices

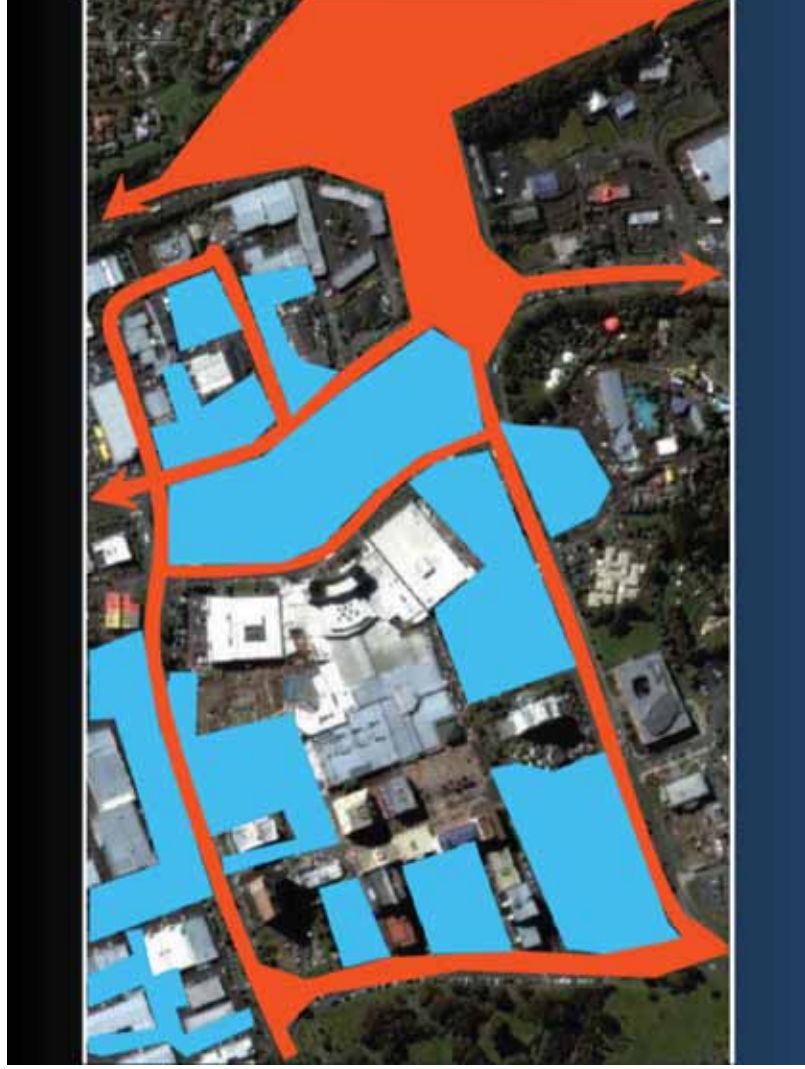
Carbon emissions

Air & water pollution

About the same number of people die prematurely
from vehicle emissions as in road crashes.

Almost 1/4 of dangerous particulates are from tyres and
brakes.

Paved surfaces create additional stormwater runoff
Pollutes our water ways





Health



Figure 12 Mode Split Versus National Obesity Rates (Bassett, et al 2008)

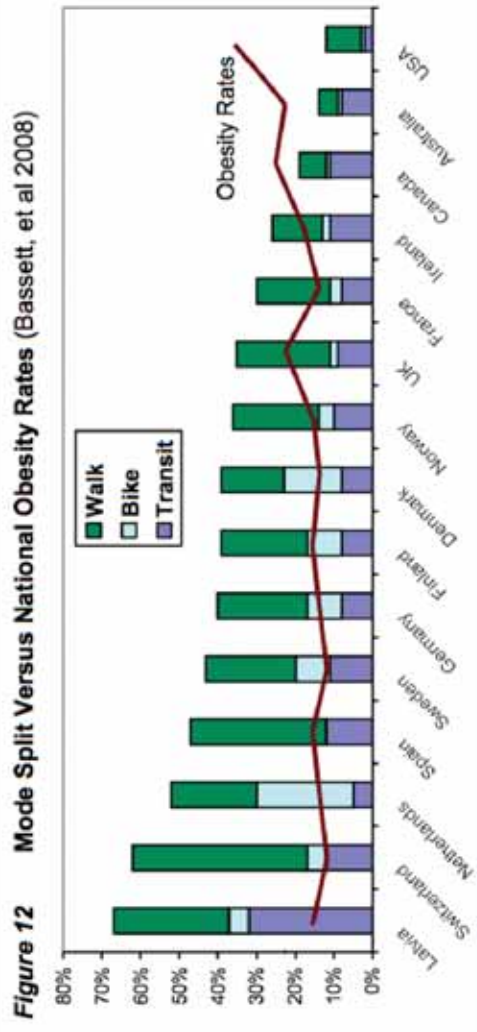
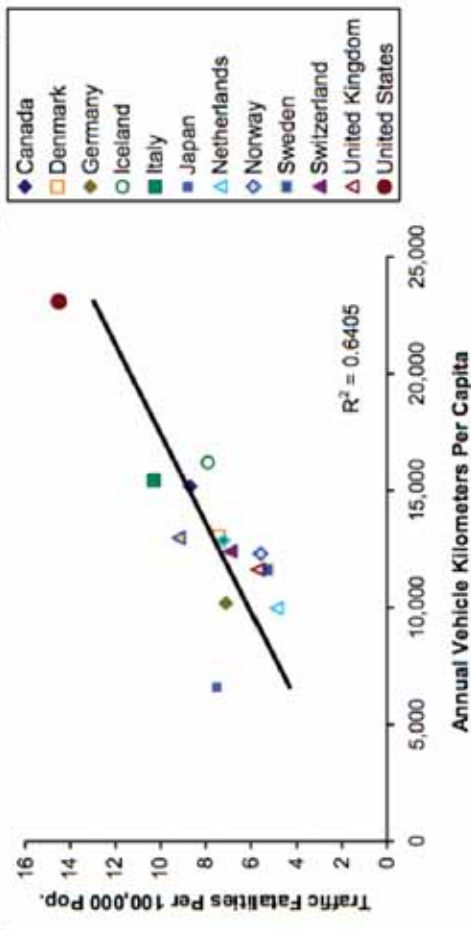


Figure 12 Mode Split Versus National Obesity Rates (Bassett, et al 2008)

Safety



Figure 5 Traffic Fatalities Versus Annual Vehicle Mileage (OECD data)



Per capita traffic fatality rates tend to increase with per capita annual vehicle mileage.

Economy

Central Govt



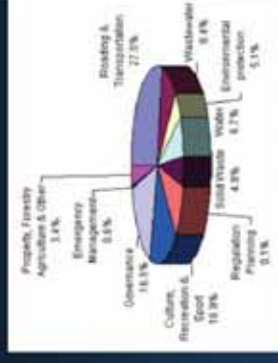
Households & Business

Motor vehicles and petrol are over 1/4 of our imports – over \$10b annually

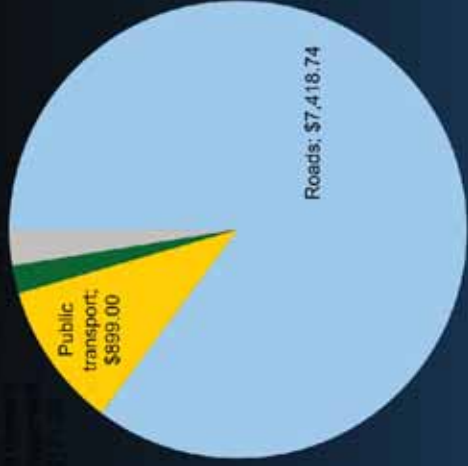
Local Govt



Local Govt



Central Govt



SS

Households & Business

Motor vehicles and petrol are over 1/4 of our imports -- over \$10b annually



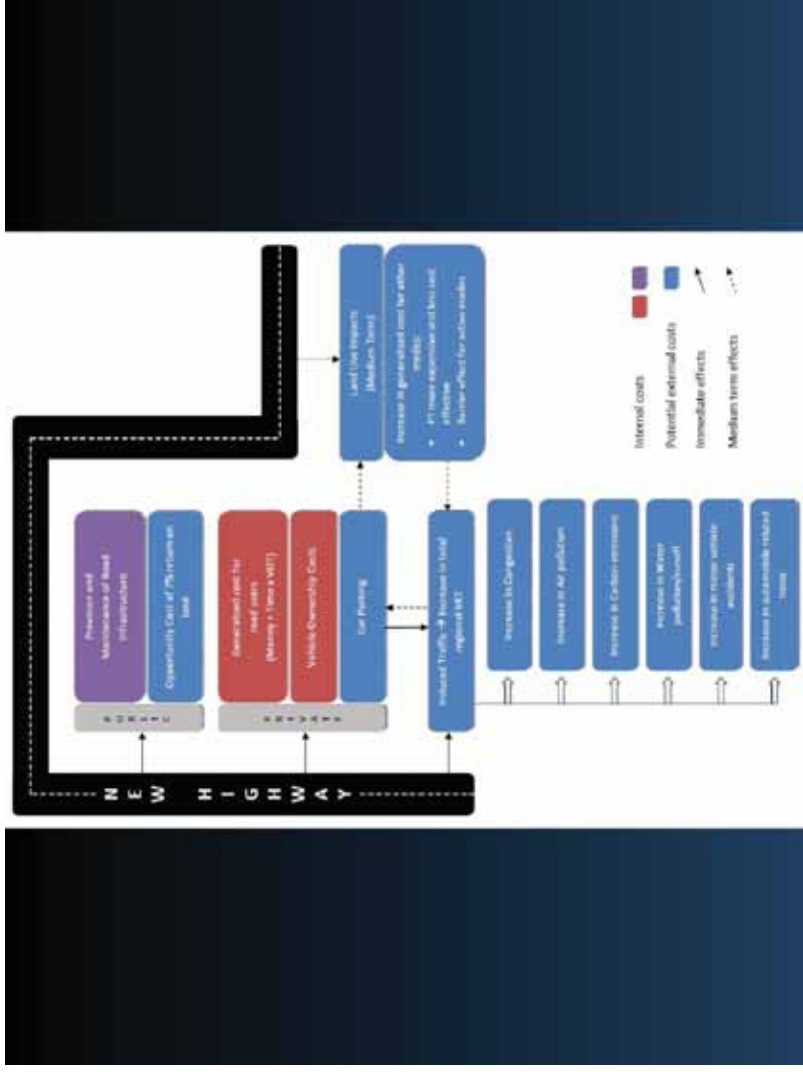
All of these are linked to a car-based transport system.

If the costs are so high, why have we ended up so reliant on cars?

A culture of the car?

Traditional Traffic Engineering Paradigm

- made it seem cheaper and easier to use cars – but spreads costs around
- assumes a fixed demand for vehicle trips, and constant growth in traffic
- method of economic evaluation underestimates the costs

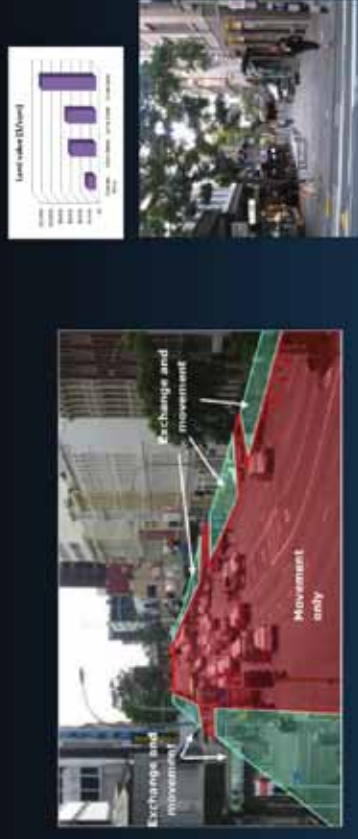




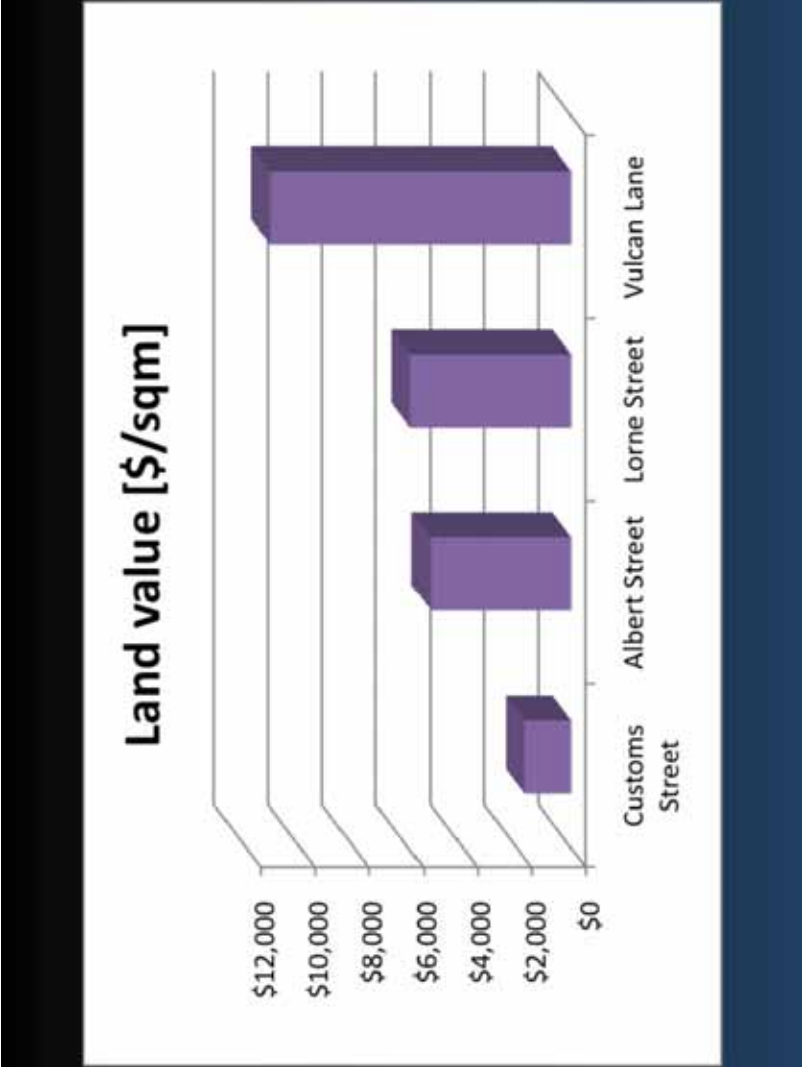
Pattern of urban development affects
the trips we need to take



Transportation policy and funding impacts the shape of urban development



Traditional traffic engineering prioritises movement, at the expense of exchange.
This affects land values in a negative way.



All transport modes have three components

- vehicles
- right of way
- terminal capacity



Minimum Parking Requirements

Put in place so local authorities could avoid having to enforce on street parking

Site specific

Based on demand (trip generation) for FREE parking at 85-95th percentile of peak hour



Level Use Type	Required Parking Spaces
Office/Commercial/Institutional	1 space per square foot
Church/School	1 space per 100 sq ft
Multi-Family Residential	1.5 spaces per 1,000 sq ft
Hotel and Commercial Area	1 space per 1,000 sq ft
Residential Density (New Develop)	2.1 spaces per unit

having to enforce on street parking

Site specific

Based on demand (trip generation) for FREE parking at 85-95th percentile of peak hour

Land Use Type	Required Parking Spaces
Squash Club with Sauna	7 spaces per squash court
Child care centre	1 space per 10 children Employee parking 1 space per employee
Retail and Commercial Area	1 space per 15m ² gfa
Medium Density Residential	2.5 spaces per unit

COMMUNITIES

Julie Anne Gentry







Land Use



Creates over supply of parking under values land

Inflates cost of all other goods and services through higher land costs (e.g. reduces housing affordability)

Discourages compact development in areas with high land prices by raising costs

Reduced development densities and sprawl

Transport choice

Over supply reduces user price for parking (usually free)

Subsidises vehicle trips (approx 50% of perceived journey cost)

Undermines efforts to increase public transport, walking and cycling



Over supply reduces user price for parking (usually free)
 Subsidises vehicle trips (approx 50% of perceived journey cost)

Undermines efforts to increase public transport, walking and cycling



Urban design

"Very costly empirical estimations lead us to believe that it is the availability of parking that is the dominant factor in determining the cost of a trip to parking."

— Christopher Anderson
 A Parking Study



Category	Value
Category 1	10
Category 2	20
Category 3	30
Category 4	40
Category 5	50
Category 6	60
Category 7	70
Category 8	80
Category 9	90
Category 10	100

Remove Minimum Requirements

allow developers to choose, and develop at higher densities

New Management Paradigm

comprehensive parking management plans



Pricing to manage demand



do more with less

sharing



If you do what you always did...

To change our world in 10 years, all we need to do is

- remove minimum parking requirements
- start managing parking differently
- invest heavily in walking, cycling and PT
- wait until transport market distortions are sorted before building new highway capacity
- start PLANNING for increases in walking, cycling and public transport



If we remove the regulatory road blocks and change our investment



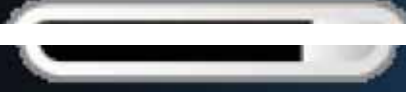
we can create safe, sustainable & economically thriving settlements.

If we remove the regulatory road blocks



we can create safe, sustainable
thriving settlements

road blocks and change our investment



, sustainable & economically
settlements

If we remove the regulatory road blocks and change our investment



we can create safe, sustainable & economically thriving settlements.