



Transportation policy and funding impacts the shape of urban development

If you do what you always did...



To foster sustainable communities

- remove minimum parking requirements
- remove single use zoning
- invest heavily in walking, cycling and PT
- wait until transport market distortions are sorted before building new highway capacity



Urban Planning Rules and Zoning



Pattern of urban development affects the trips we need to take



Minimum Parking Requirements

Particularly bad when they are not based on having a minimum number of jobs

The problem

Real estate market requirements for 100% parking for 20,000 jobs in a residential area



Remove Minimum Requirements

understand the value and impact of parking for the city

New Management Paradigm

Pricing to manage demand



sharing

comprehensive parking management plans

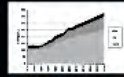


- wait until transport market distortions are sorted before building new highway capacity

Removing the Roadblocks to a Sustainable Auckland

a new paradigm for transport planning and policy

Julie Anne Genter



Energy

Carbon emissions Oil Prices



Health



Transport Challenges

Air & water pollution

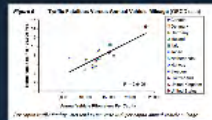
About the same number of people die prematurely from vehicle emissions as in road crashes.

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

Paved surfaces create additional stormwater runoff
Pollutes our water ways



Safety



We estimate that to get the carbon to support system
if we could do nothing, why they are not doing
more to help?

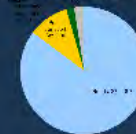
Available for the car

Economy

Local Govt



Central Govt



Households & Business

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

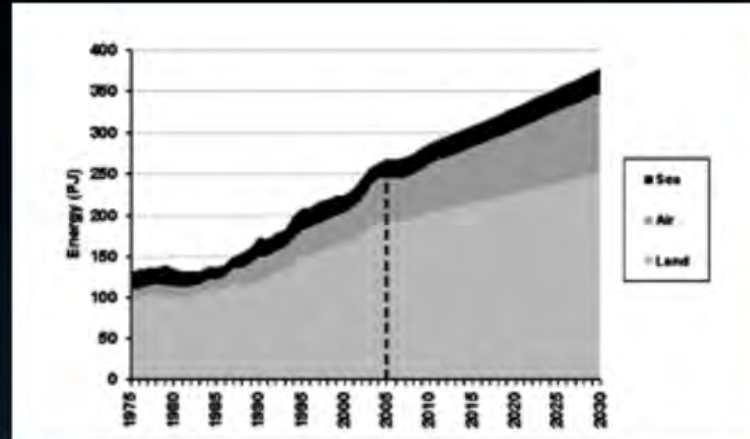
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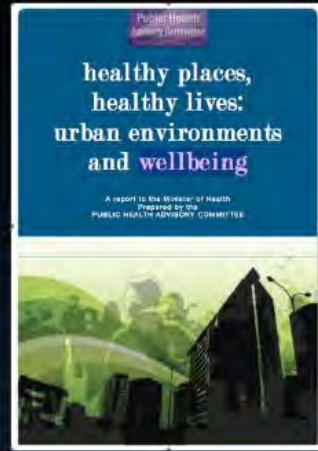




Energy

Carbon emissions

Oil Prices



Health

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



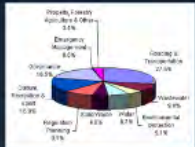
Safety

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

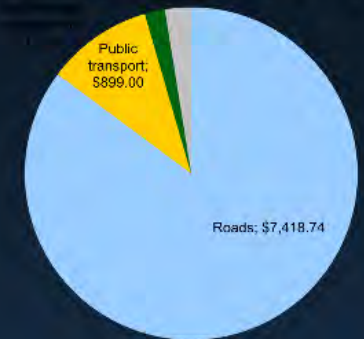


Economy

Local Govt



Central Govt



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?

Human activities necessarily result in vehicle trips.



"Human activities necessarily result in vehicle trips."





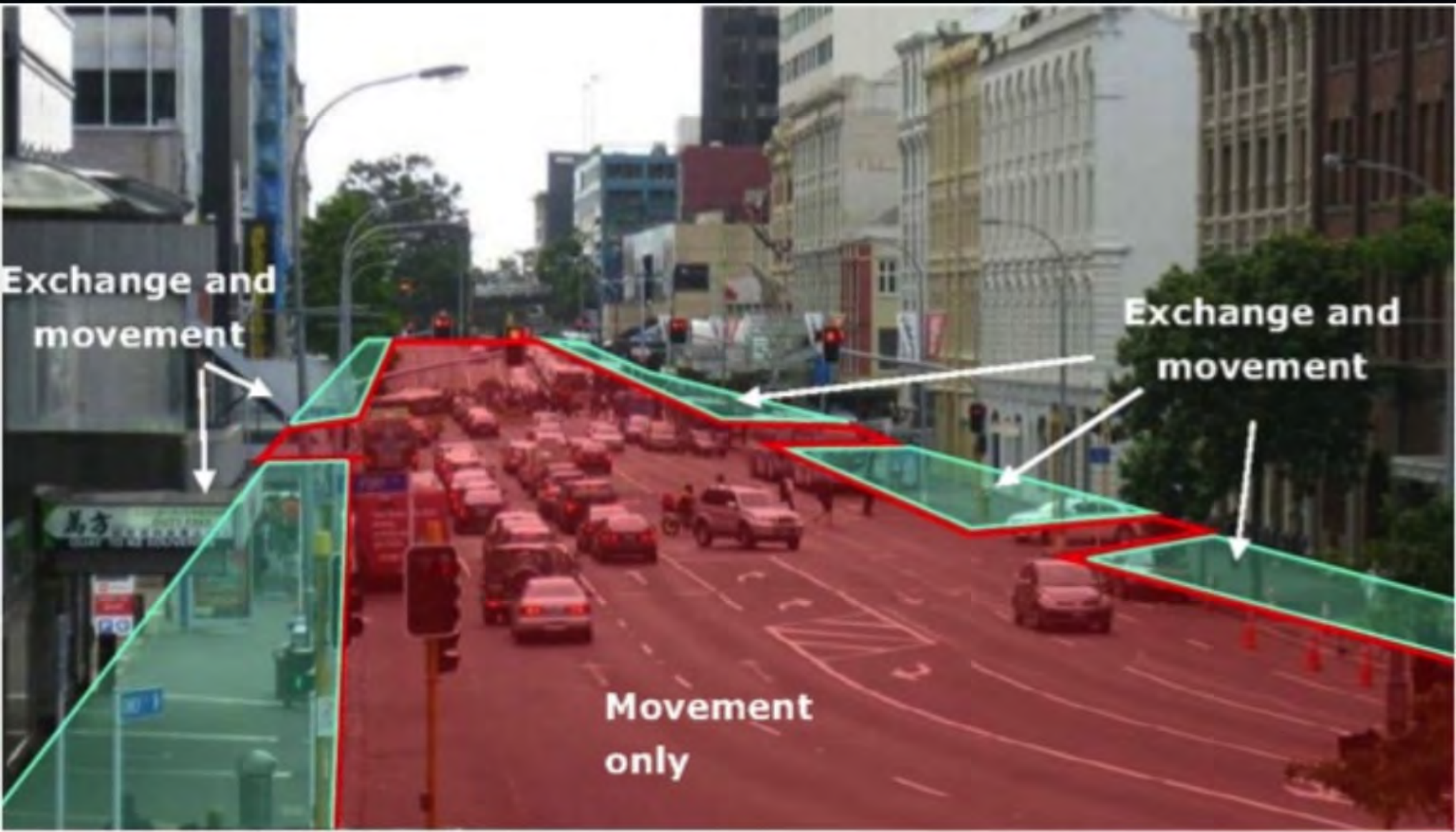


Traditional Traffic Engineering Paradigm

- 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





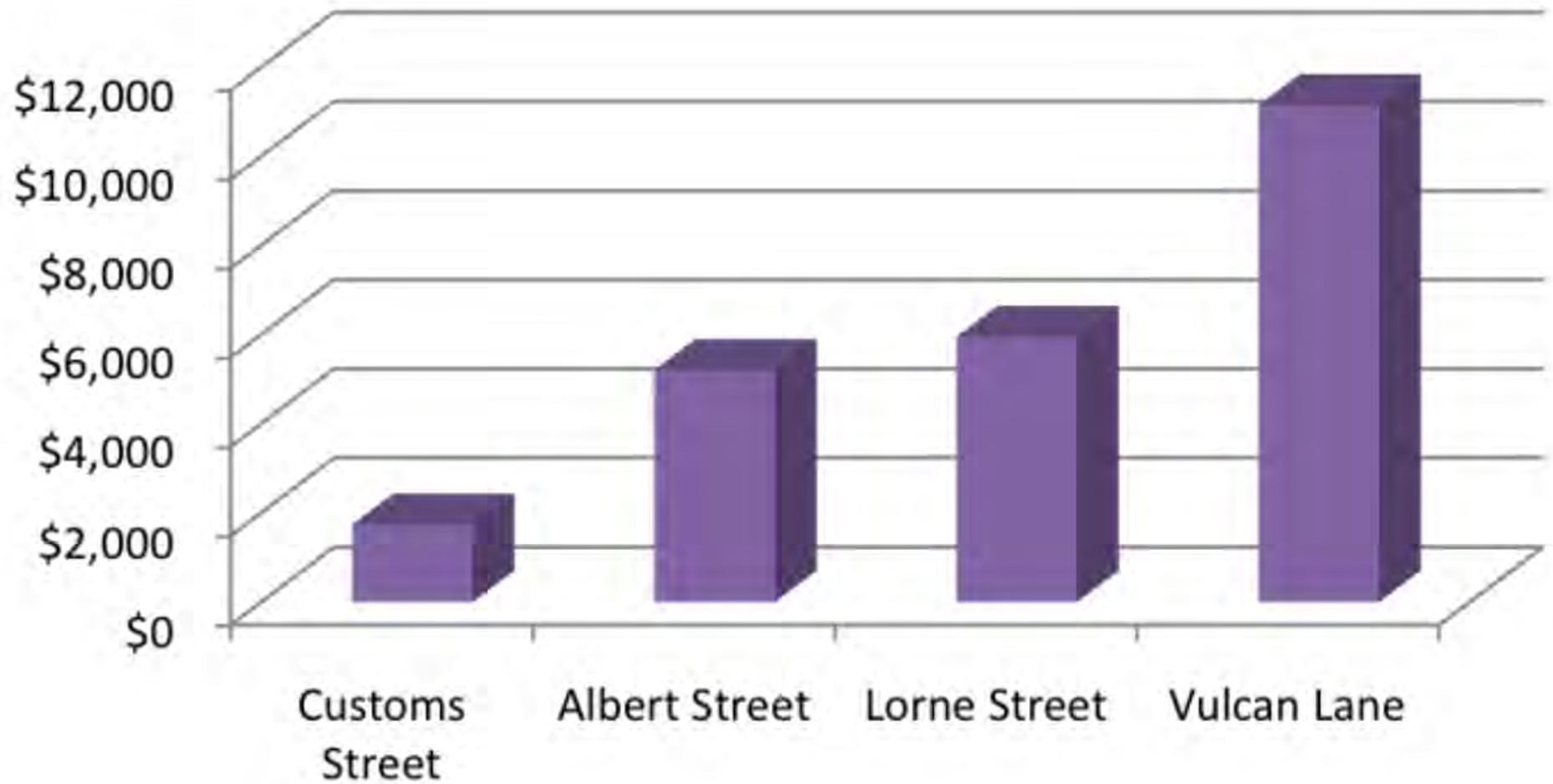


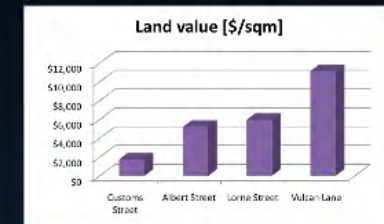
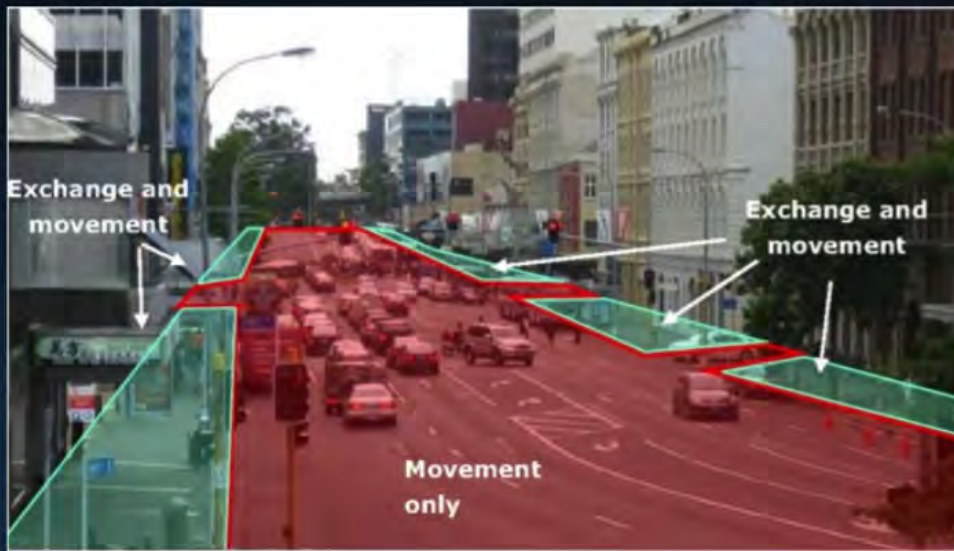
Exchange and movement

Exchange and movement

Movement only

Land value [\$/sqm]





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

walking city



transit city



auto city

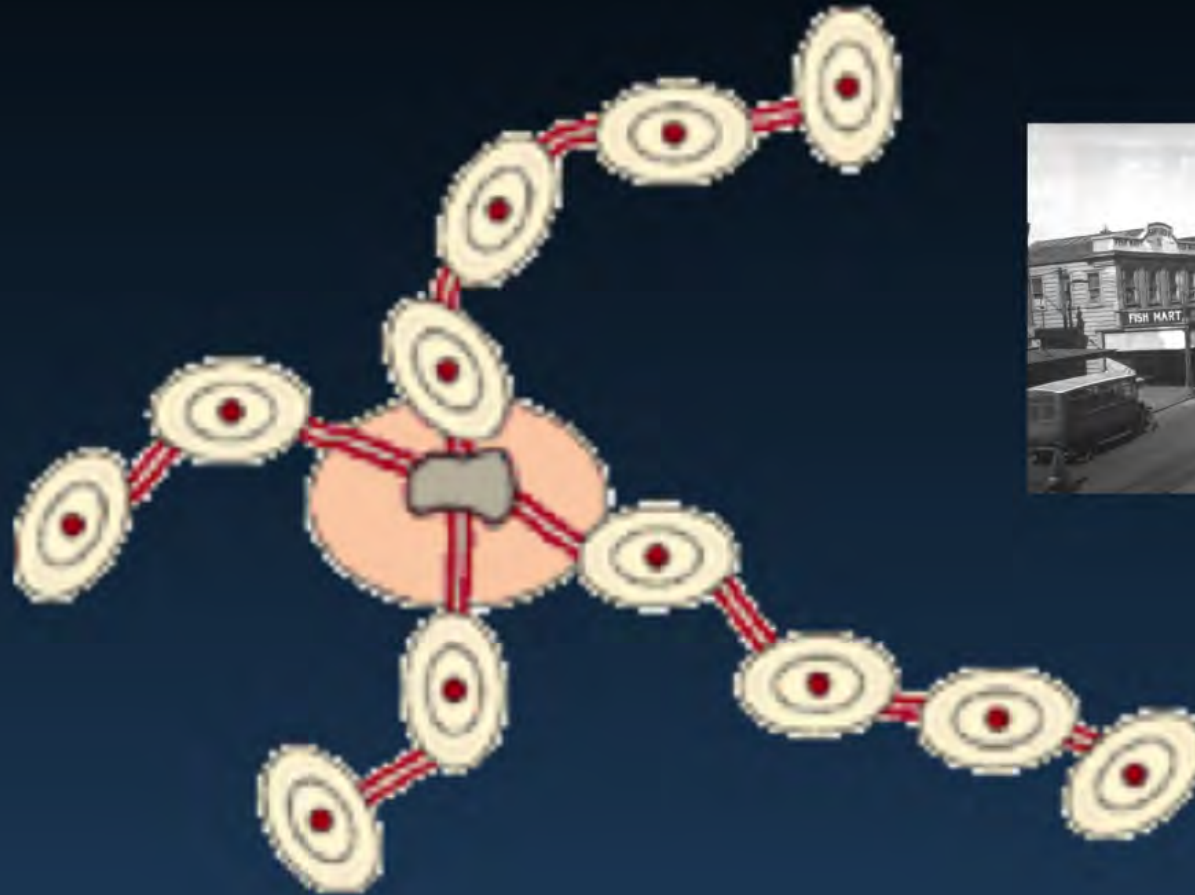


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walking city



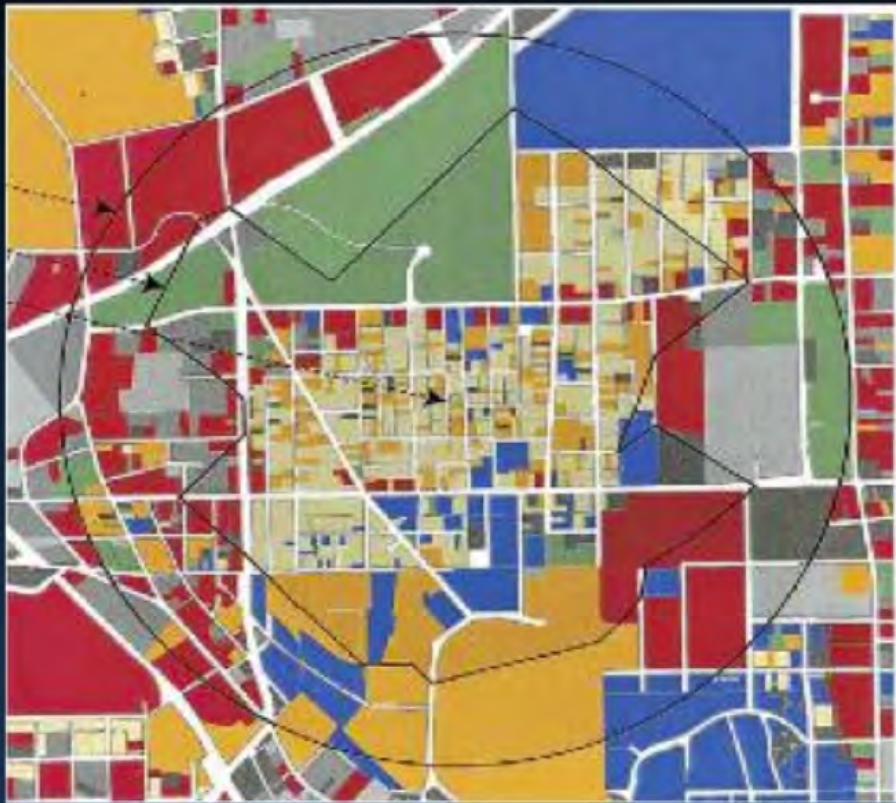
transit city







Urban Planning Rules and Zoning



Urban Planning Rules and Zoning



Pattern of urban development affects
the trips we need to take



The High Cost of Free Parking

DONALD SHOUP

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

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

05 55th percentile of peak

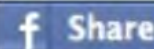
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Kindy facing eviction for carpark

By [Elizabeth Binning](#)

5:30 AM Wednesday Aug 10, 2011



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The early childhood education of more than 200 children is up in the air following plans to bulldoze an Auckland kindergarten – so the land can be turned into a carpark.

Pt Chevalier Kindergarten has been told its lease at Pt Chevalier Primary School will come to an end next year as the land is needed for more carparking – a council requirement when eight new classrooms are



+ EXPAND

Shona Grundy says she'll have to keep her daughter Eden, 3, at home if Pt Chevalier Kindergarten closes. Photo / Natalie Slade



[Brian Rudman: Councillors' parking small sacrifice for opening up a city jewel](#)

[Kindergartens crying poor - with big cash stashes](#)





Remove Minimum Requirements

allow developers to choose, and develop at higher densities

New Management Paradigm

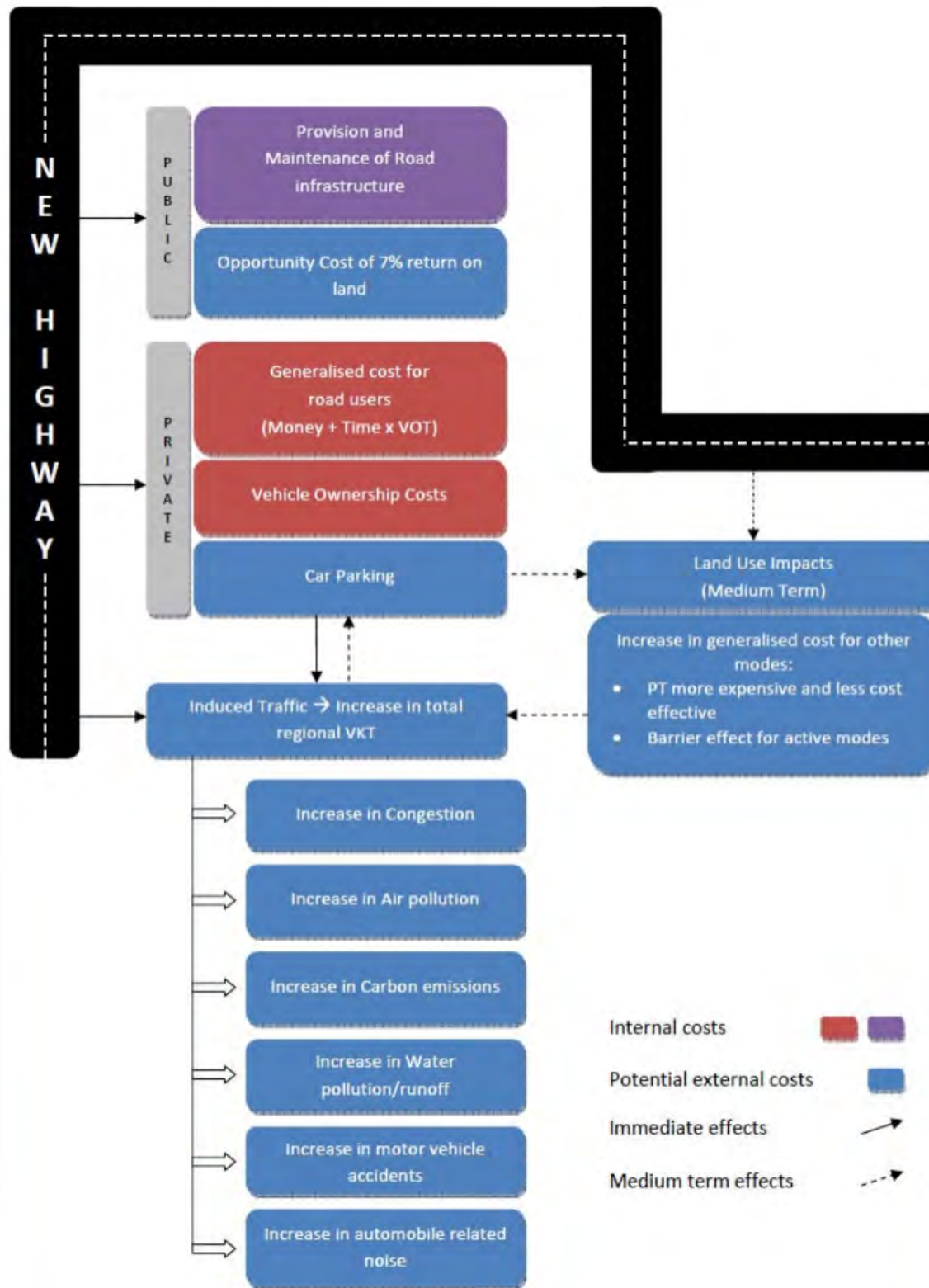
Pricing to manage demand



do more with less
sharing



comprehensive
parking management
plans



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