

Introducing the Bike-Train system into the New Zealand Context

Tom Williams



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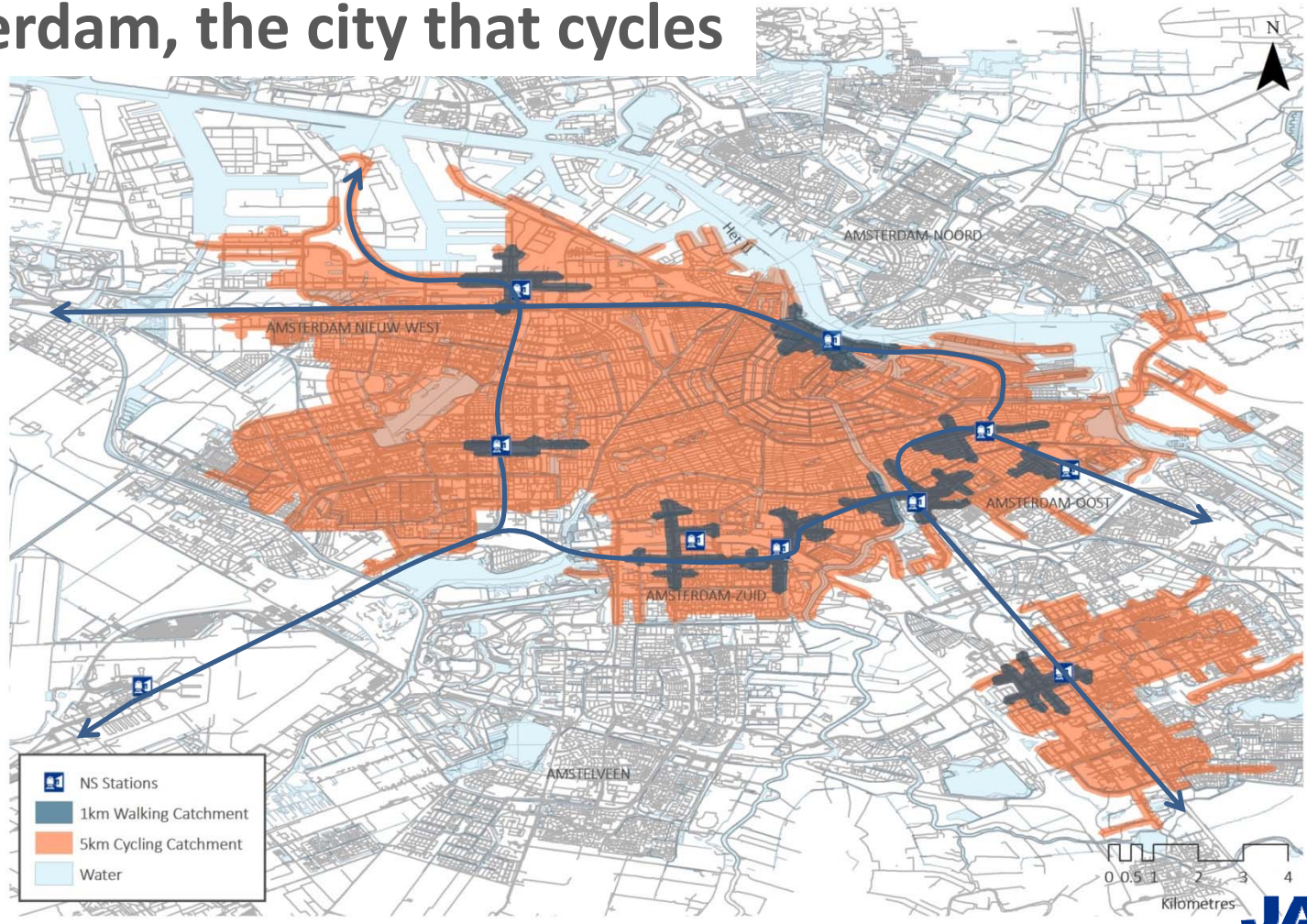
Parking problems ?

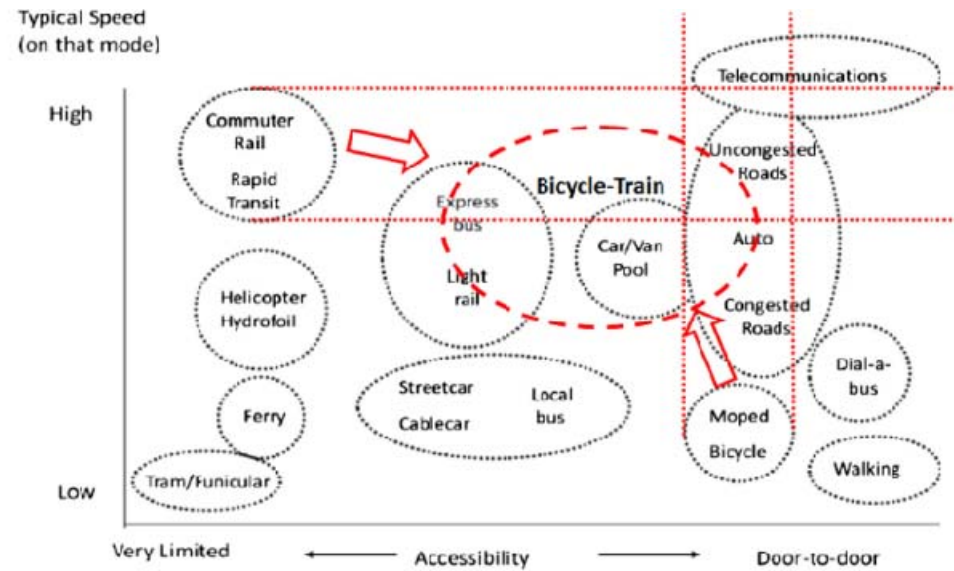


Overview

- **Why do so many Amsterdamers ride bikes on a daily basis?**
- **Why do so many Dutch people cycle to train stations?**
- **Bike-Train:** the concept and reality
- **Bike-Train in New Zealand:** what would be the benefits?
- Auckland and Wellington examples
- Limitations to BT uptake
- **Key messages**

Amsterdam, the city that cycles





Characterisation of transport modes

(Kager et al, 2016)



Public Transport is accessed by bicycle, this increases the accessibility and service area of Public Transport.

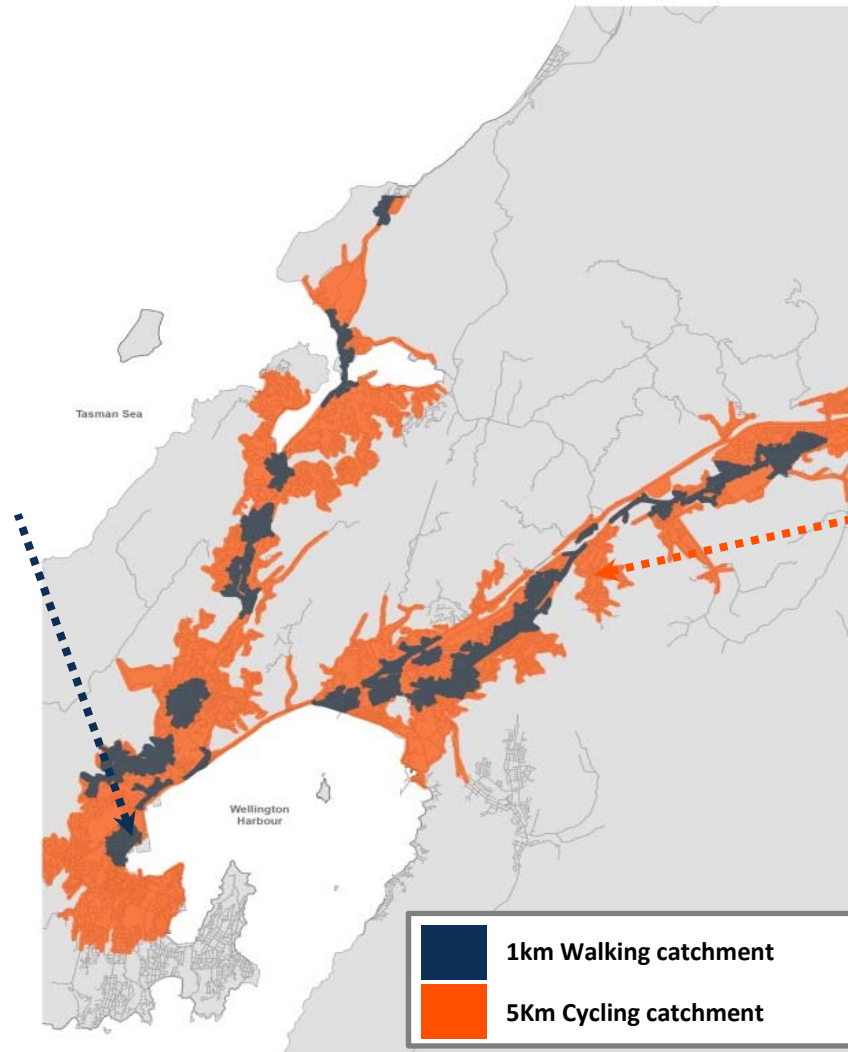
Bicycles are left at the station.

The main component of the journey is undertaken by 'train like' Public Transport.

Egress trips are either undertaken by walking or bike-share.

Current walking catchments (1km):

- 20% of total population
- 11% commute to work by train
- 2% commute to work by bike



Bike-Train catchments (5km):

- 65% of total population
- 202% increase in station catchment size

Travel time savings in Wellington

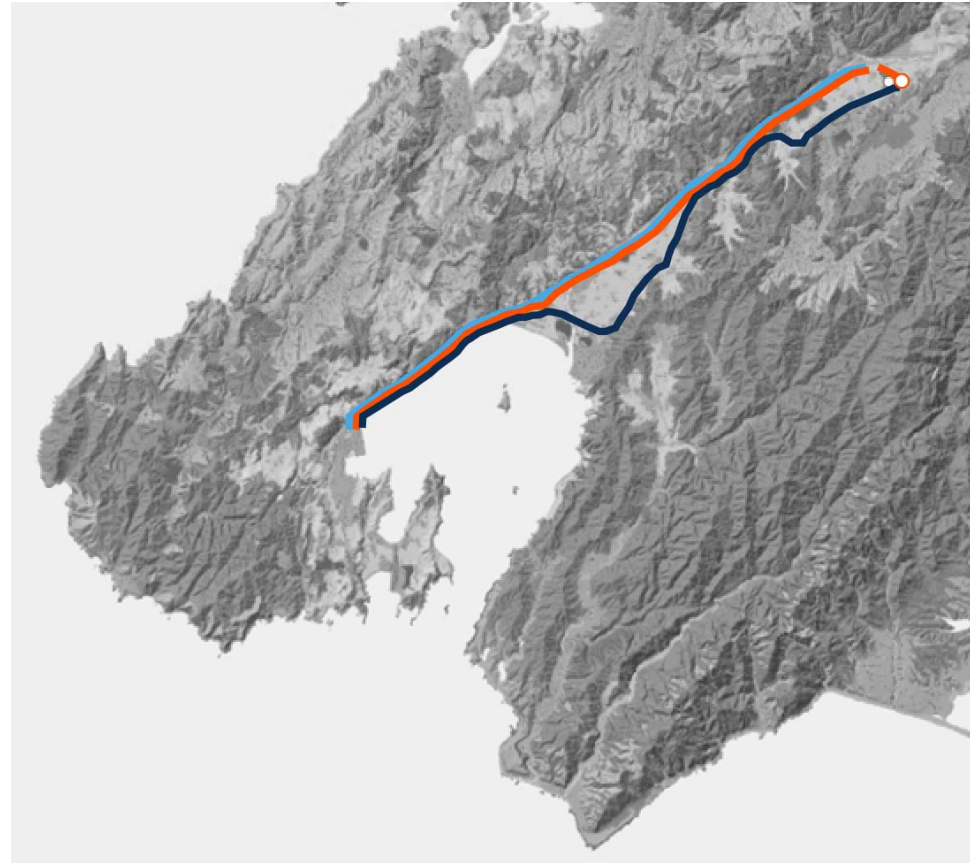
Travel times based on Google maps

Car: 0:40 – 1:00

Public Transport: 1:10

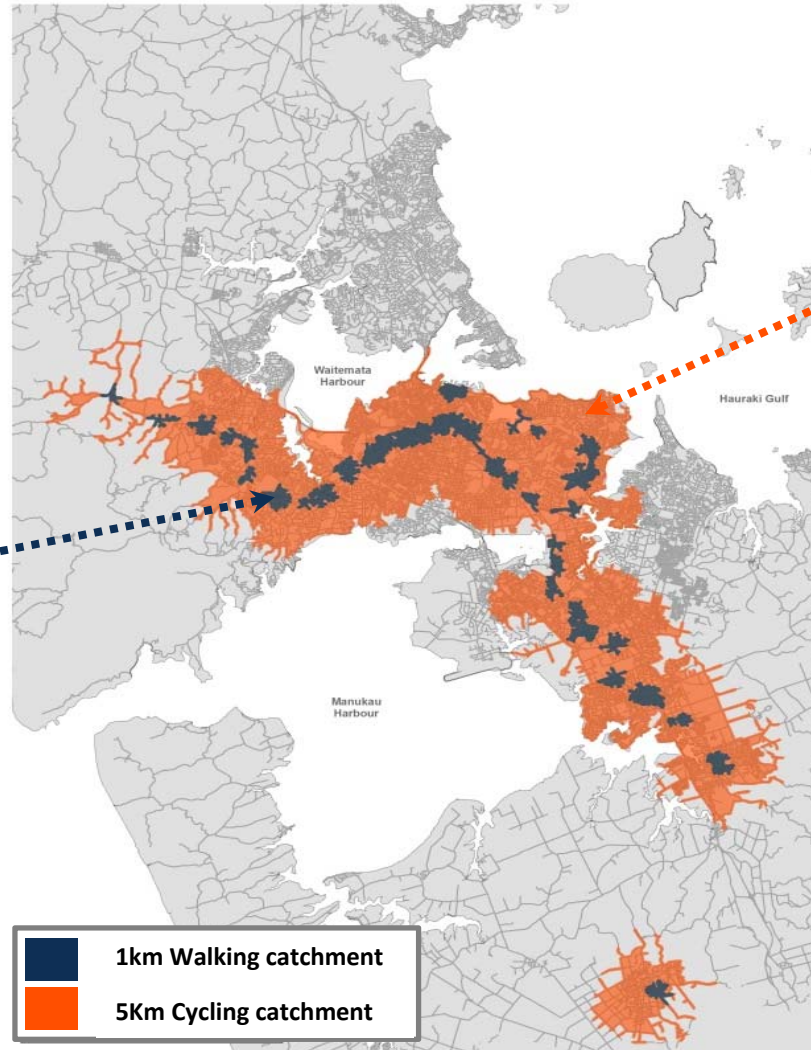
Bike: 1:50

Bike-Train: 0:45



Current walking catchments (1km):

- 14% of total population
- 2% commute to work by train
- 1% commute to work by bike



Bike-Train catchments (5km):

- 60% of total population
- 320% increase in station catchment size

Travel time savings in Auckland

Travel times based on Google maps

Car: 0:35 – 1:10

Public Transport: 1:20

Bike: 1:30

Bike-Train: 0:55

Post CRL: BT 0:45



Limitations to the up take of the Bike-Train system in NZ

- Hills, people don't usually like biking up hills (although electric bikes help here)
- Weather
- The provision of safe and attractive cycle routes
- Provision of safe and attractive cycle parking at train stations
- Willingness to cycle, not everyone is willing (or able) to ride a bike
- Feasibility of cycle hire schemes for egress trips (particularly due to helmet laws)

In summary:



Car Travel:

Is attractive due to the personalised mobility it offers, but journey times can be highly variable.



Public Transport:

The accessibility of PT depends on the number of stops. More stops result in a more accessible but slower service. For longer journeys, it may be necessary to take multiple services.



Bicycle use:

Is only attractive for short trips (up to 5km).



BikeTrain:

Increases the accessibility and catchment size of train stations.

Provides a transport mode that is predictable and has reliable journey times.

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