

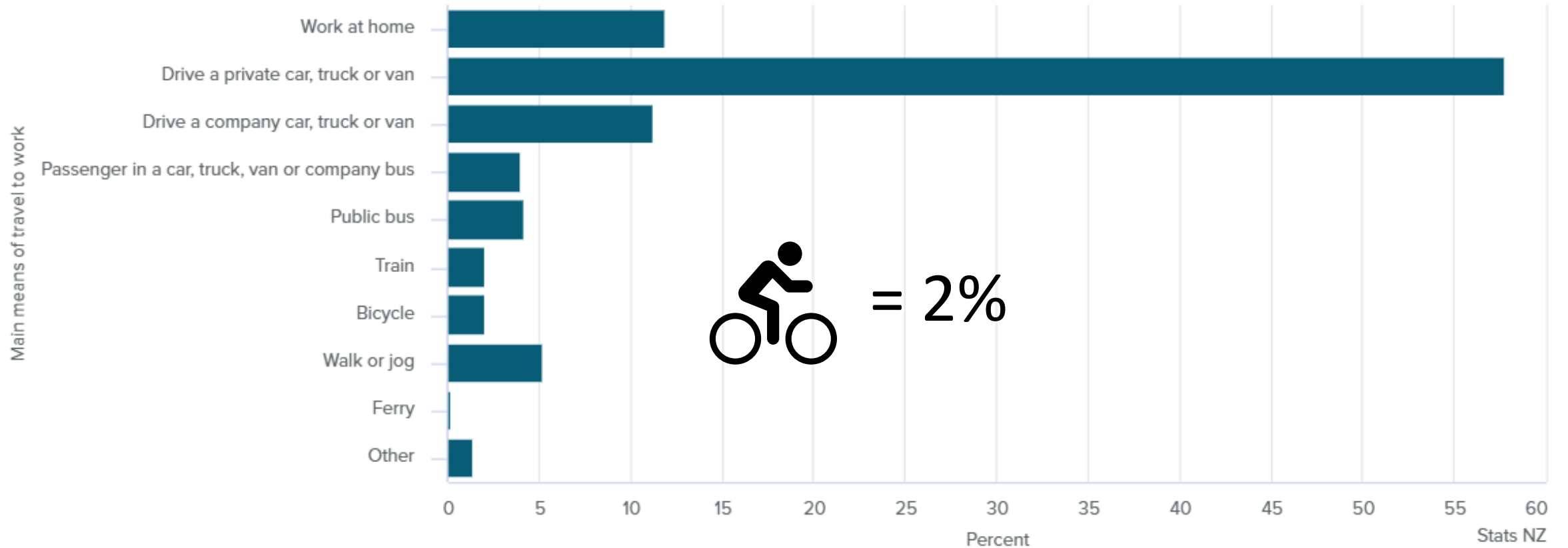
A city skyline at dusk, reflected in water. The skyline includes several skyscrapers, some with illuminated windows, and a prominent tall tower on the right. A bridge with blue and green lighting is visible on the left. The water in the foreground is calm, creating a clear reflection of the buildings and lights.

Propensity to Cycle Tool

Presenter: Werner Pretorius
Principal Transport Planner at AECOM

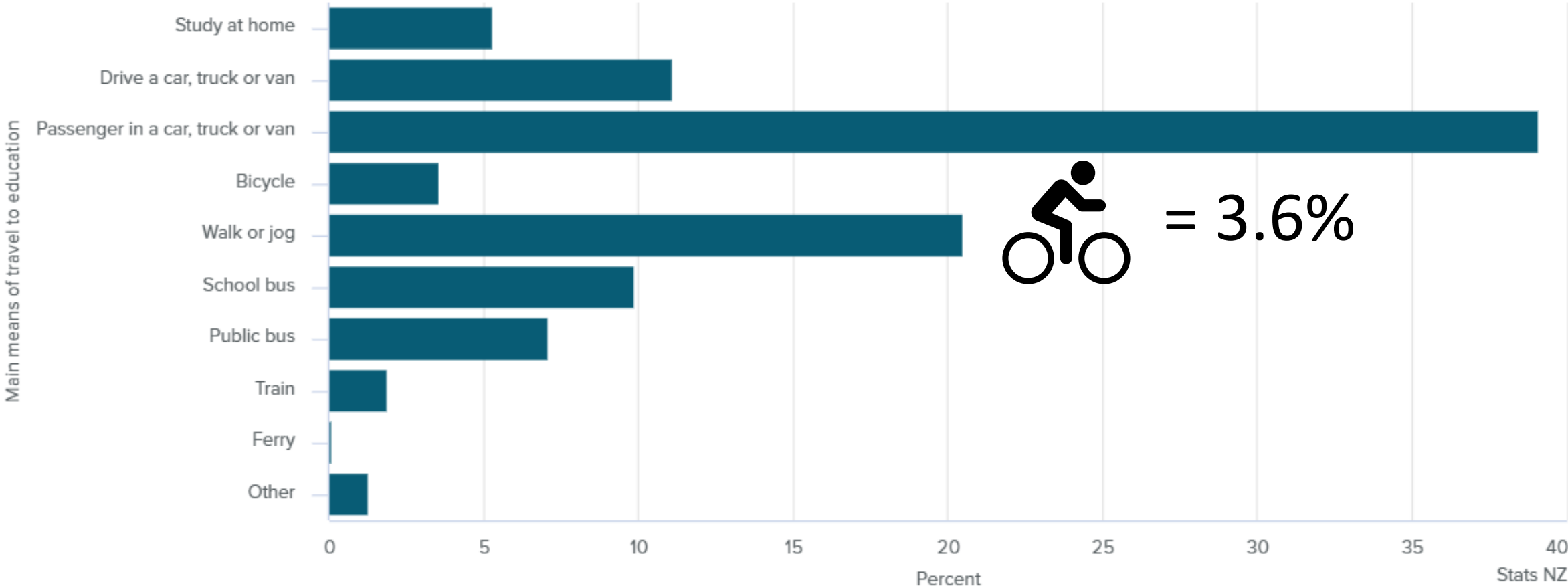
Travel To Work (Census 2018)

Main means of travel to work for the employed census usually resident population, aged 15 years and over, 2018
Census



Travel To Education (Census 2018)

Main means of travel to education for the census usually resident population participating in study, 2018 Census



Why don't people cycle in NZ ?

- Weather
- Culture
- Love for cars
- Safety
- Infrastructure
- Distance / travel time
- Lack of facilities
- Bad driving
- Dangerously designed roads
- Perception of danger
- They've had an accident
- State of the roads
- Not being in Germany or the Netherlands
- Rain and hills

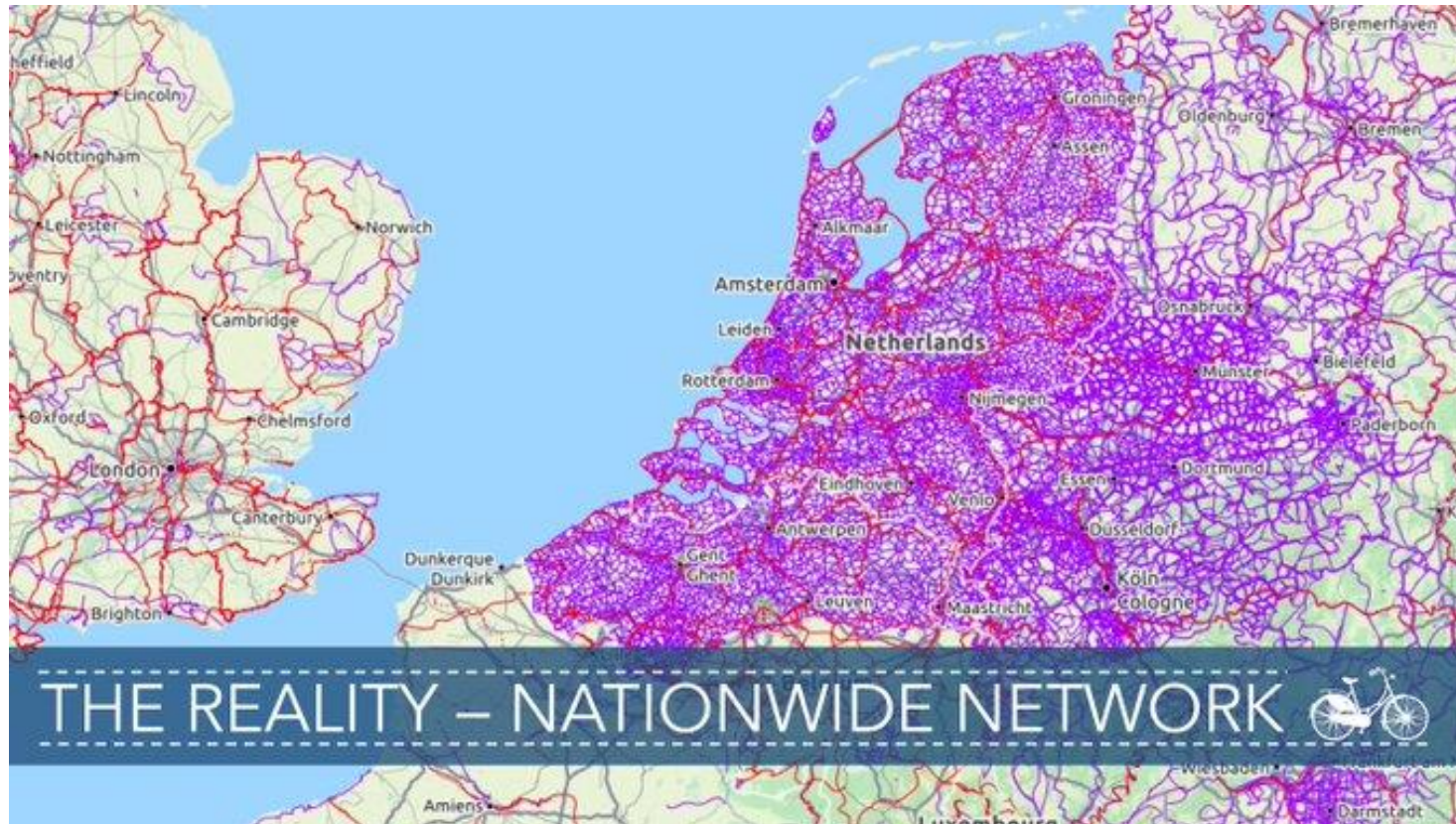
Barrier to cycling/cycling more

LOOKING AT THE BARRIERS TO CYCLING/CYCLING MORE		2017
INFRASTRUCTURE	I don't feel safe because of how people drive	58%
	I don't feel safe cycling in the dark	44%
	There's not enough cycle lanes or separated routes	32%
	There's no secure place to leave a bike when out and about	29%
DISTANCE	Cycling is not a quick way for me to get where I need to go	32%
	I live too far away for it to be practical	26%

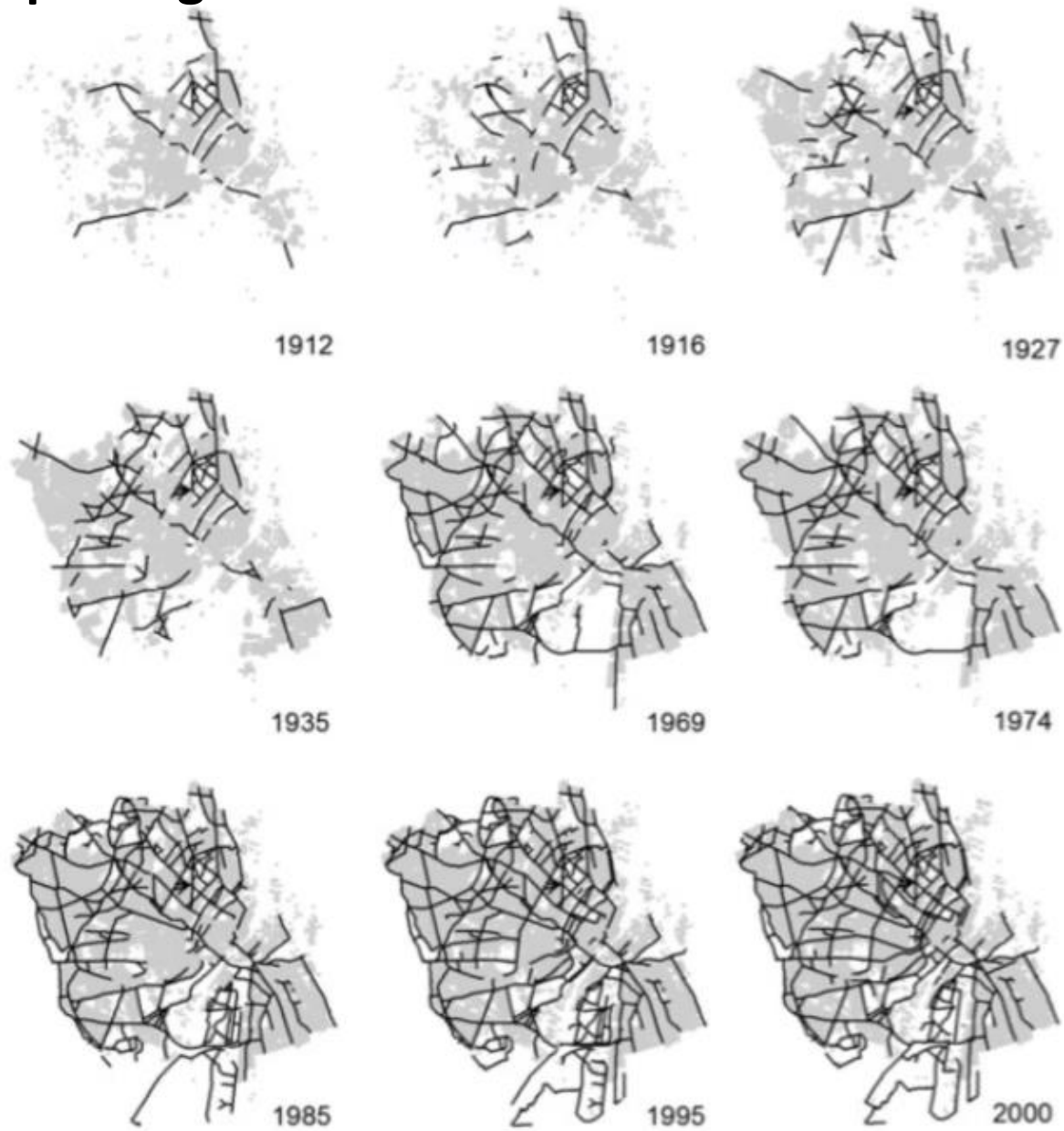
Why do the Dutch cycle?

“The **Dutch don't cycle** because they are morally superior to us.

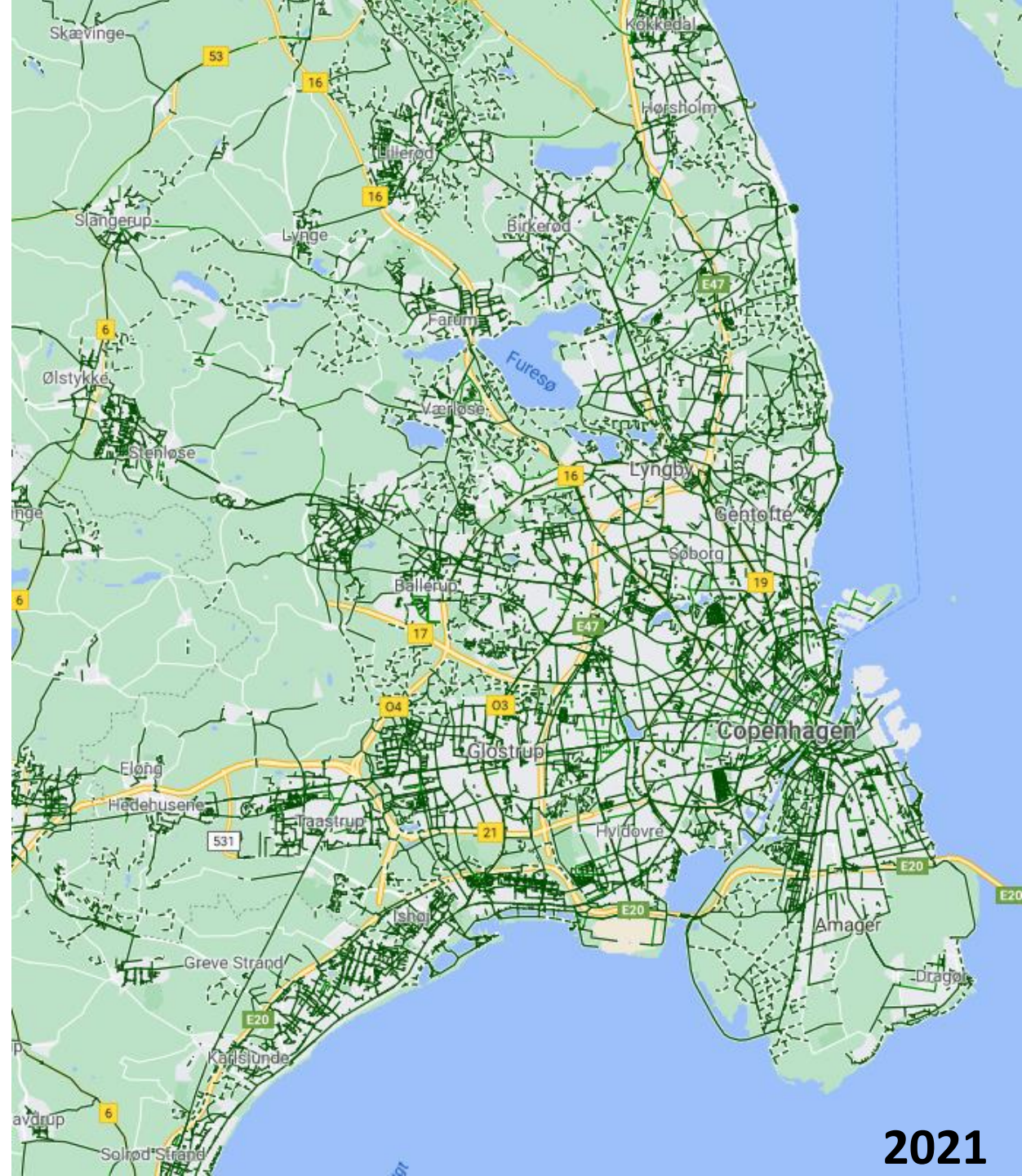
They cycle because they've built a dense, 35,000 kilometre network of safe fully segregated facilities, equal to a quarter of their road network” Chris and Melissa Bruntlet



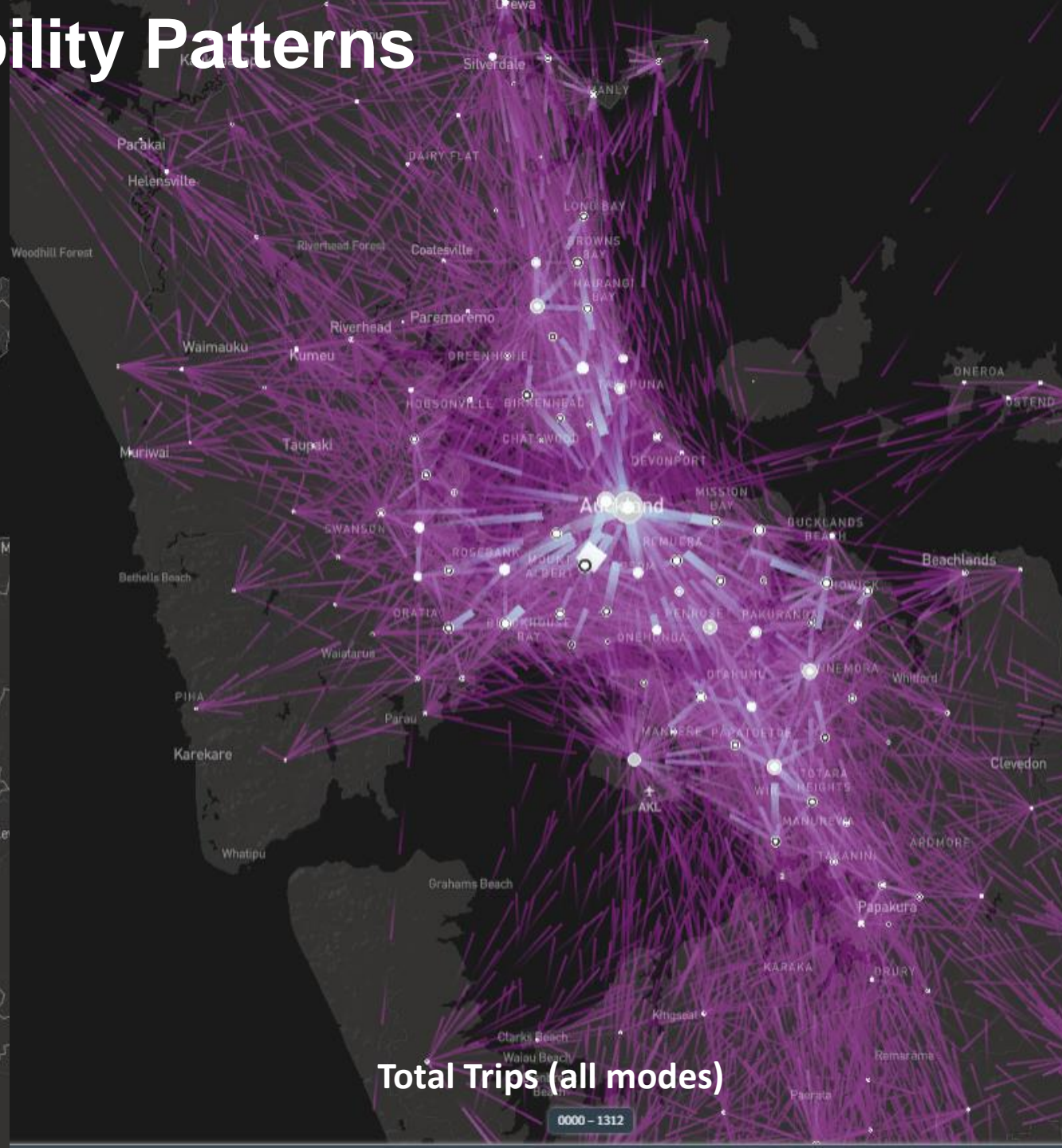
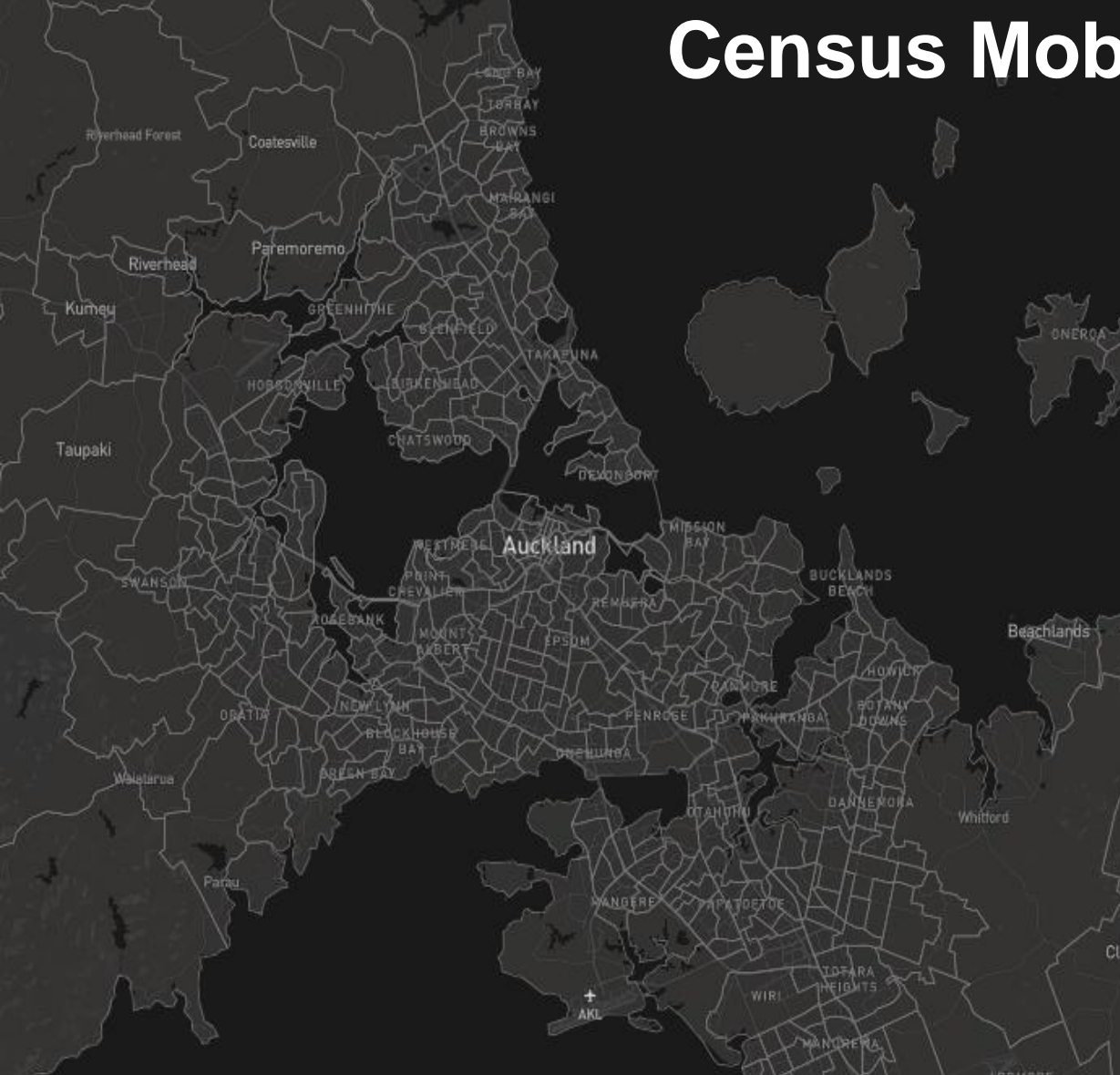
Copenhagen



Carstensen et al., *Geografisk Tidsskrift* 115:2, 142-156 (2015)



Census Mobility Patterns



'where is cycling currently common and where does cycling have the greatest potential to grow?'

Total Trips (all modes)

0000 - 1312

Propensity to walk, scoot and bike - distance profiling (<5km)

New Zealand Commutes

2018 Census Main means of travel to work and education by Statistical Area 2.

Created by: [Werner Pretorius](#)

Original data source: [StatsNZ 2018 Census](#)

Data behind this map is in [this spreadsheet](#).
You can [publish your own](#) too.

1,631,685 of 2,421,333 trips

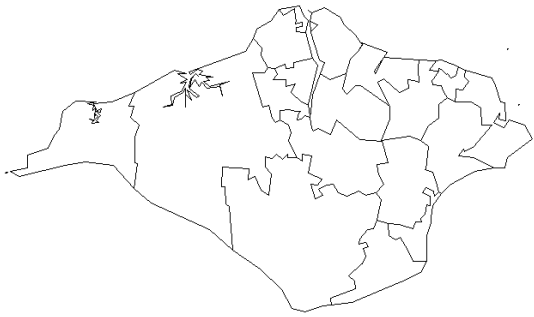
67% are <5km

Note: using crow fly distance

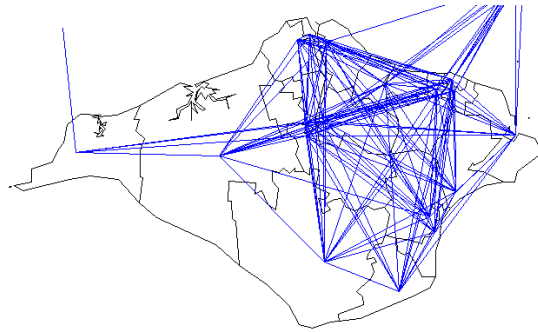


Propensity to Cycle Tool

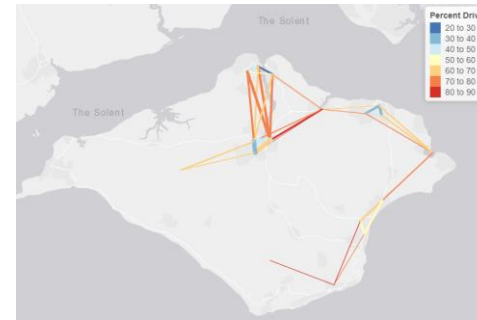
Zones



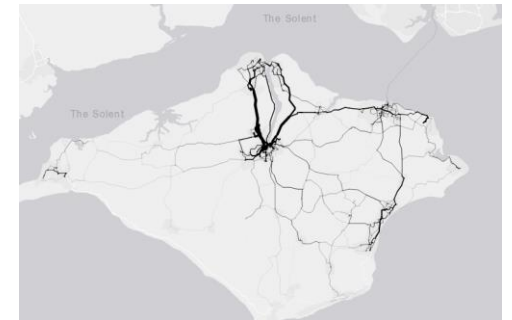
Movements



Demand



Assigned












Direction of Travel



Cycling Propensity

- Current Baseline
- Government Target
- Gender Equality
- Go Dutch
- E-bikes
- Climate

Potential Applications

-  Assist transport planners and policy makers to prioritise investments
-  Help answer where does cycling have the greatest potential to grow
-  Understanding cycling propensity with different version of the future
-  Studying Mobility Patterns
-  Visualise Movement Data
-  TDM Scenario Planning
-  Nation-wide active mode planning tool
-  Streamline evidence for Business Cases
-  Many more

Questions?



Werner Pretorius



werner.pretorius@aecom.com



021586235