

# Growing cycling's contribution

Understanding the  
fundamentals

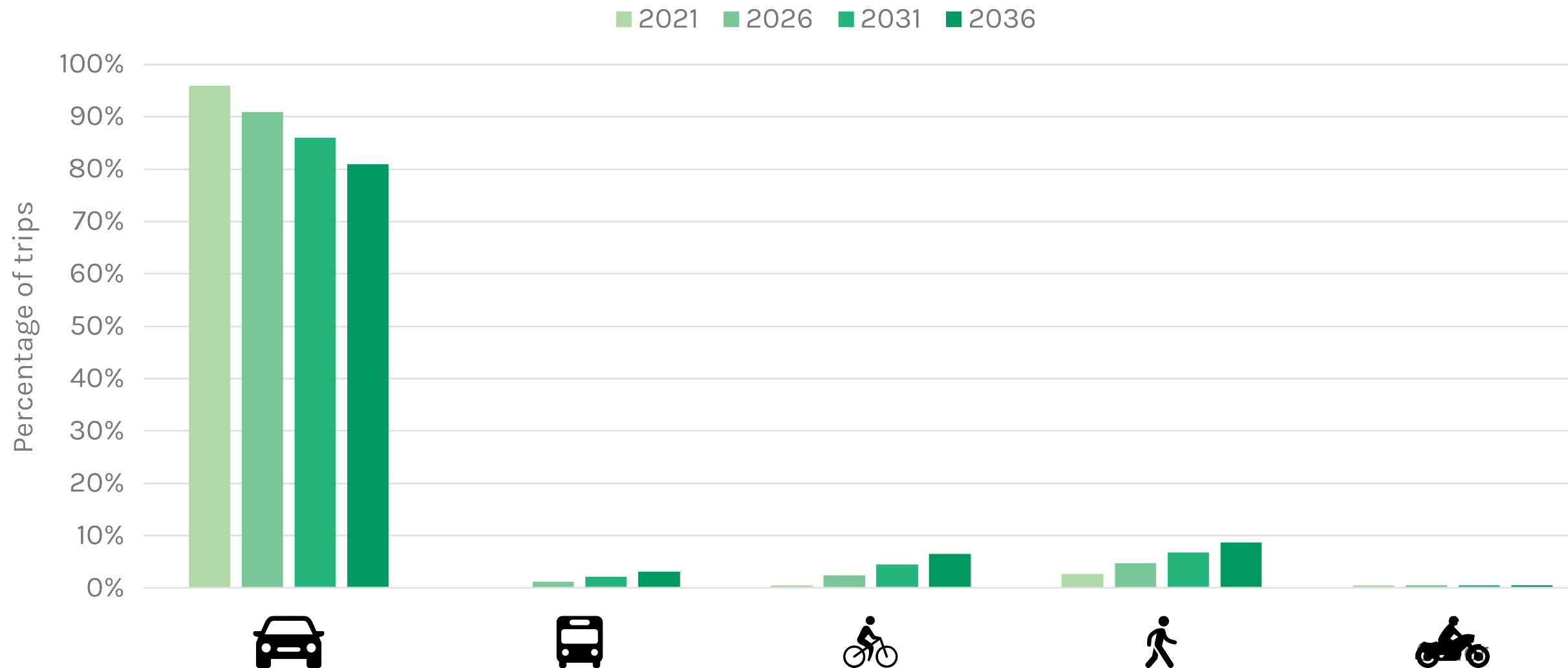
Dr Elliot Fishman  
Institute for Sensible Transport

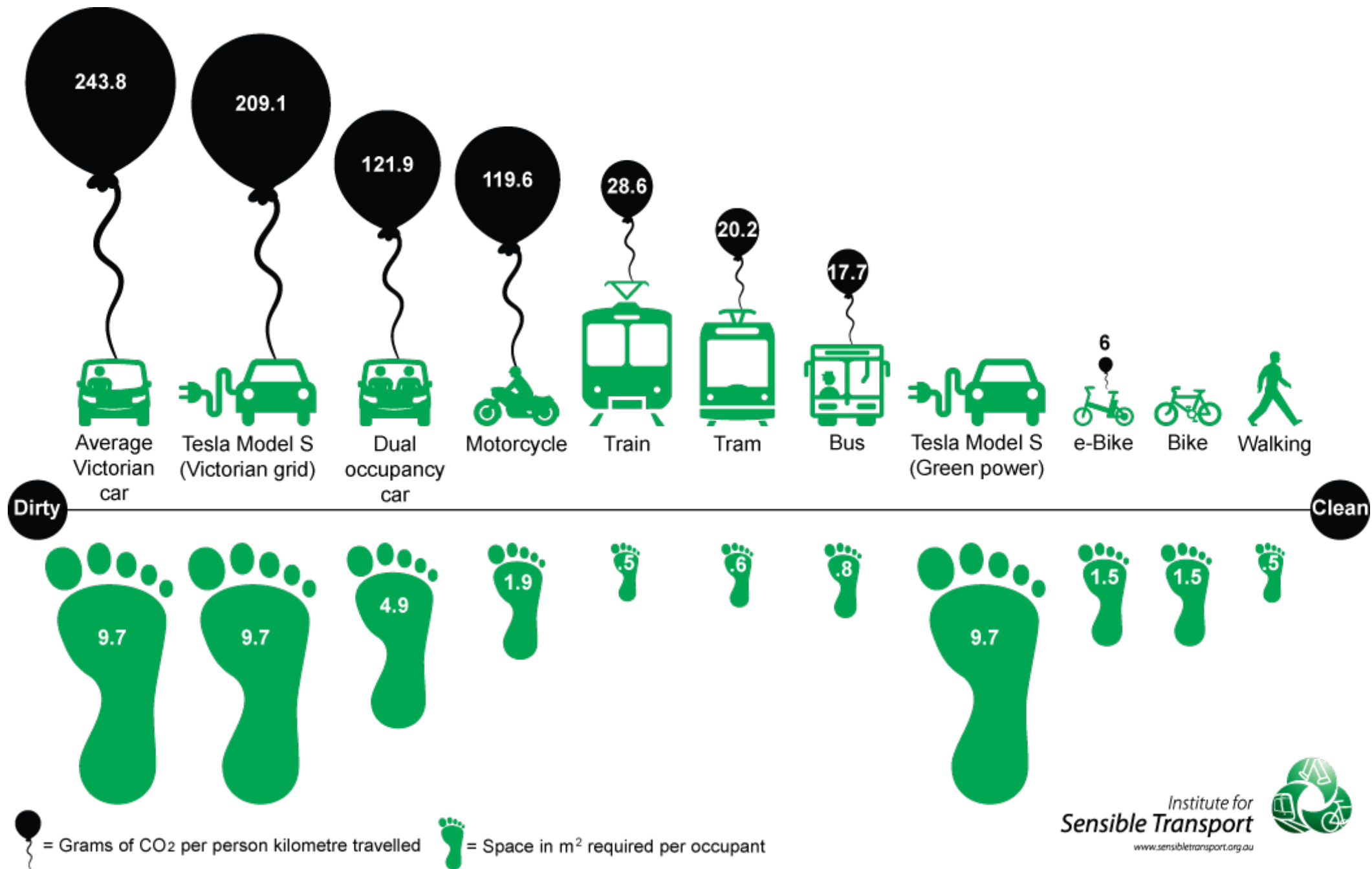
Institute for  
*Sensible Transport*

[www.sensibletransport.org.au](http://www.sensibletransport.org.au)



# A strategic approach





People do not make transport decisions in isolation.

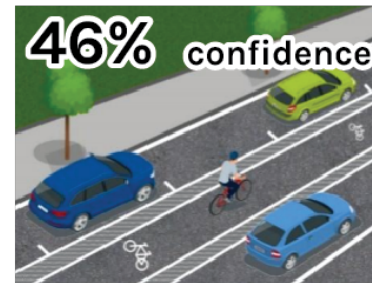
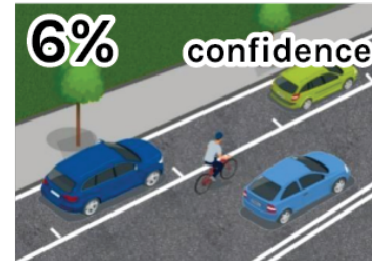
They weigh the pros and cons and choose the mode that make sense, from a convenience, cost and time perspective



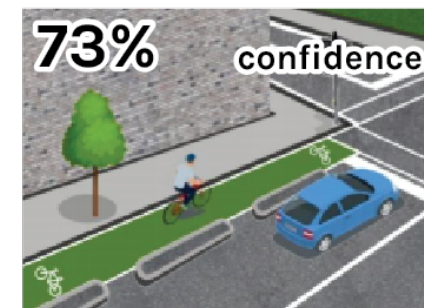
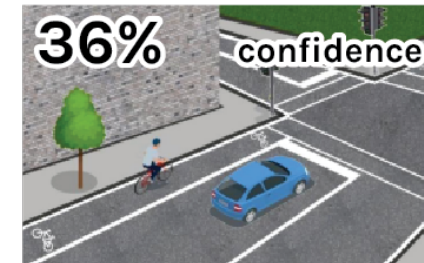
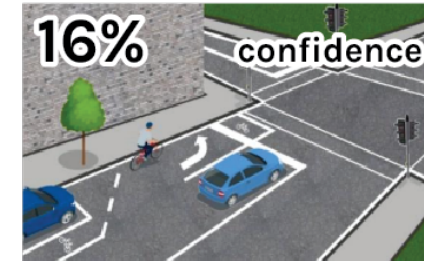
## Rider confidence by environment



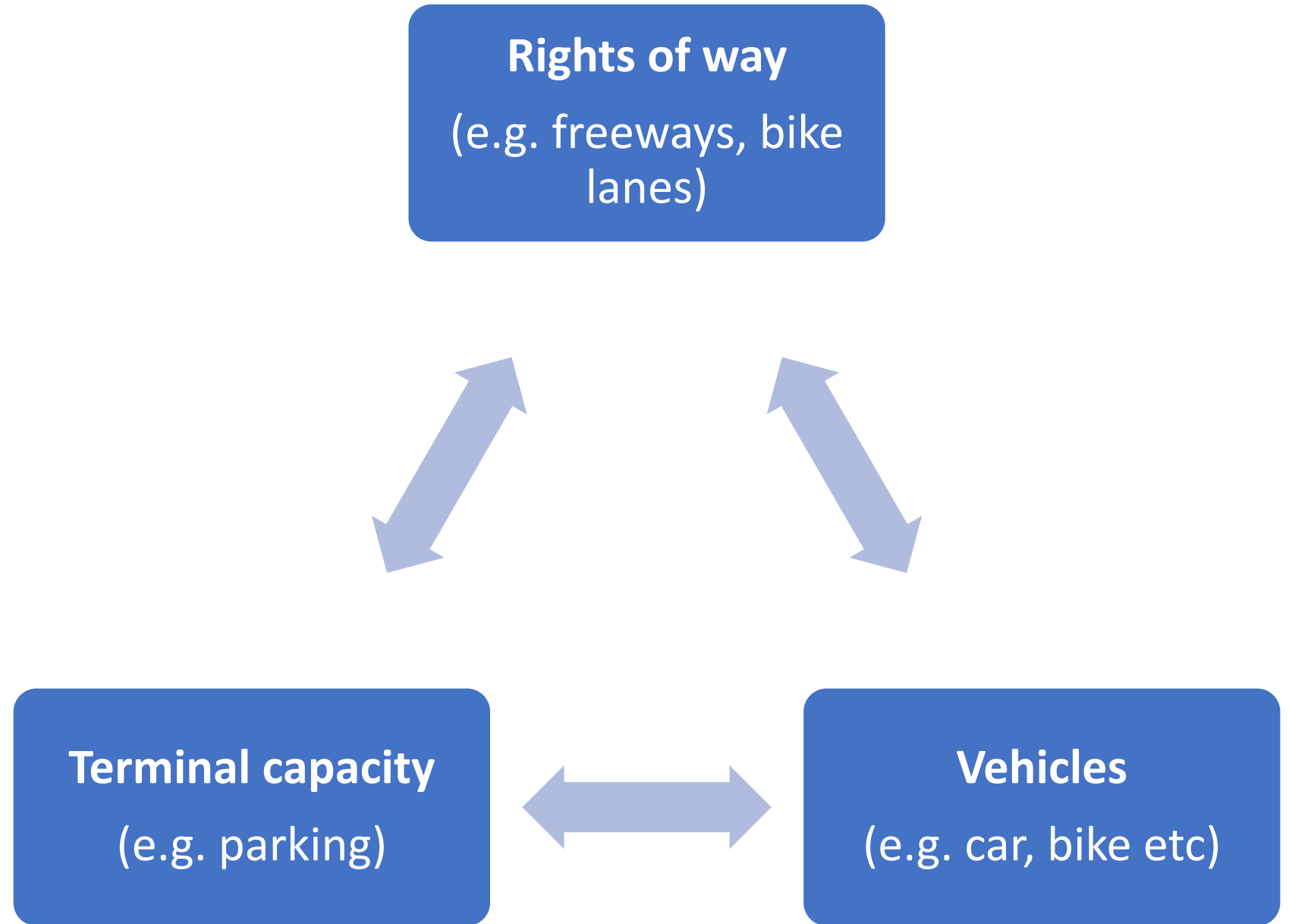
## Midblock



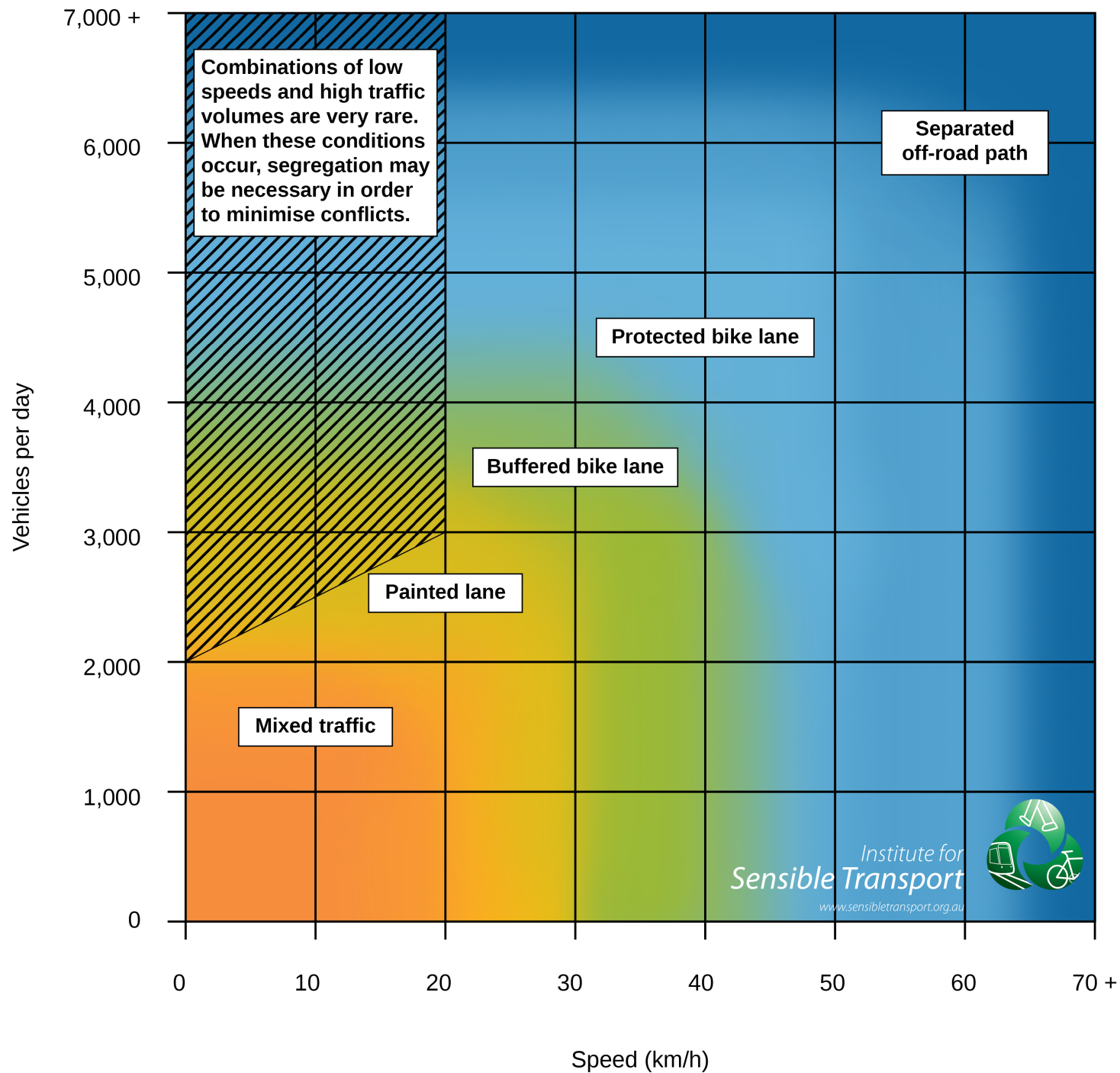
## Intersection



# 3 elements of every transport mode

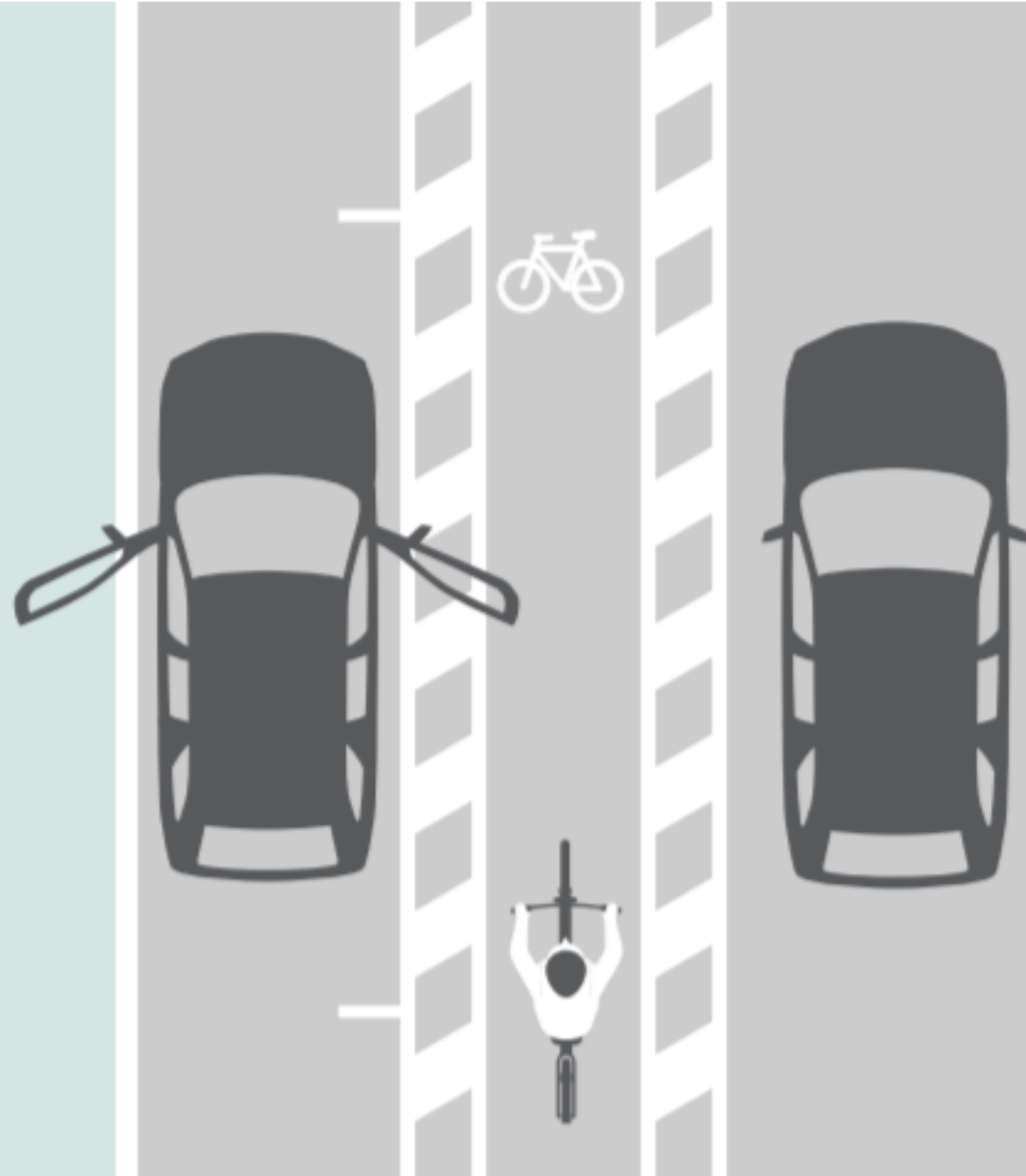


# Guidance on appropriate infrastructure















# Cost per typology

PBN Typology	Cost (\$/km)	Cost (\$/km)	Cost (\$/km)	Cost (\$/km)
Area	Sydney 0-5kms	Sydney 5-10kms	Parramatta 0-5kms	Parramatta 5-10kms
Bicycle Lane - on road	\$800,000	\$500,000	\$800,000	\$500,000
Protected Bicycle Lane - on or off-road bicycle only	\$9,900,000	\$3,000,000	\$5,200,000	\$1,600,000
Shared Path - off road shared with pedestrians	\$5,500,000	\$1,500,000	\$2,900,000	\$1,200,000
Separated Path - off road visual sep cycle/ped	\$7,400,000	\$2,000,000	\$3,900,000	\$1,600,000
Road Shoulder - on road shared w parked vehicles	\$800,000	\$500,000	\$800,000	\$500,000
Freeway Shoulder - on road along motorway	\$800,000	\$500,000	\$800,000	\$500,000
Mixed Traffic - on road shared with traffic	\$800,000	\$500,000	\$800,000	\$500,000
Bicycle Boulevard - mixed traffic low speed/volume	\$900,000	\$600,000	\$800,000	\$500,000
Vast/expensive infrastructure (e.g. bridges, overpasses and underpasses)	\$100,000,000	\$100,000,000	\$100,000,000	\$100,000,000



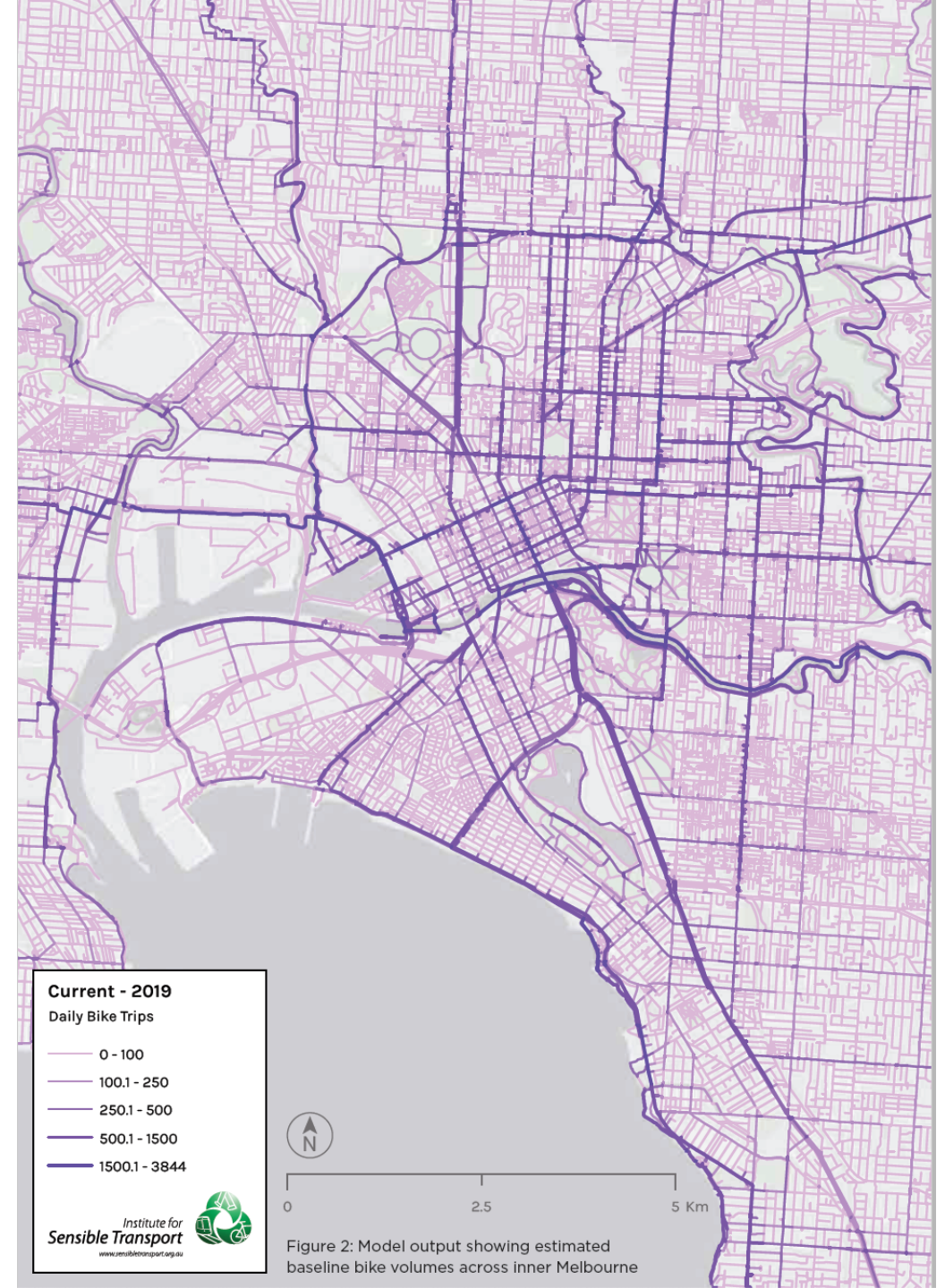
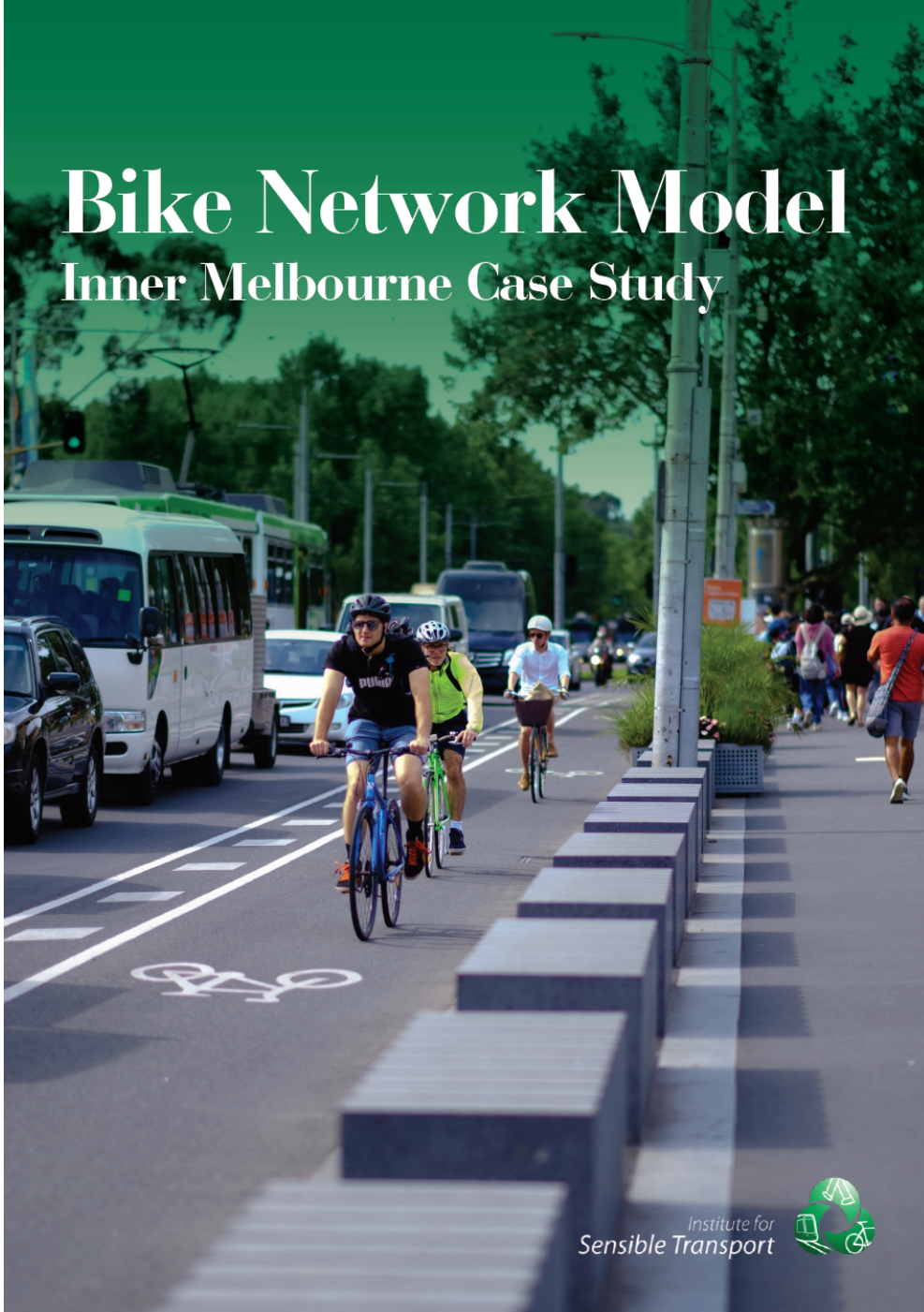
# Estimating demand for cycling

1. Estimating baseline cycling
2. Understand the network typology
3. Apply the proposed network
4. Forecast population growth



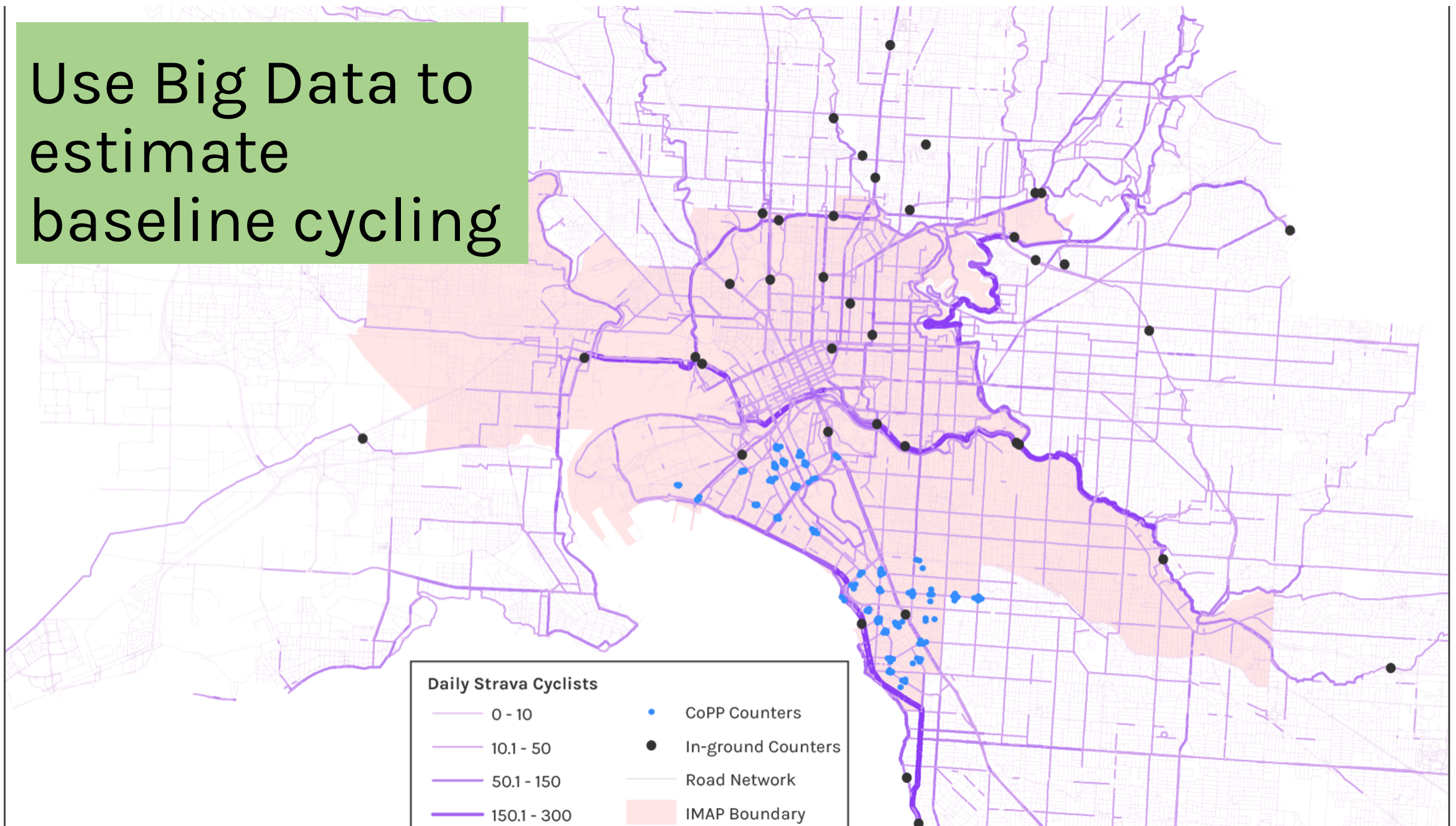
# Bike Network Model

## Inner Melbourne Case Study

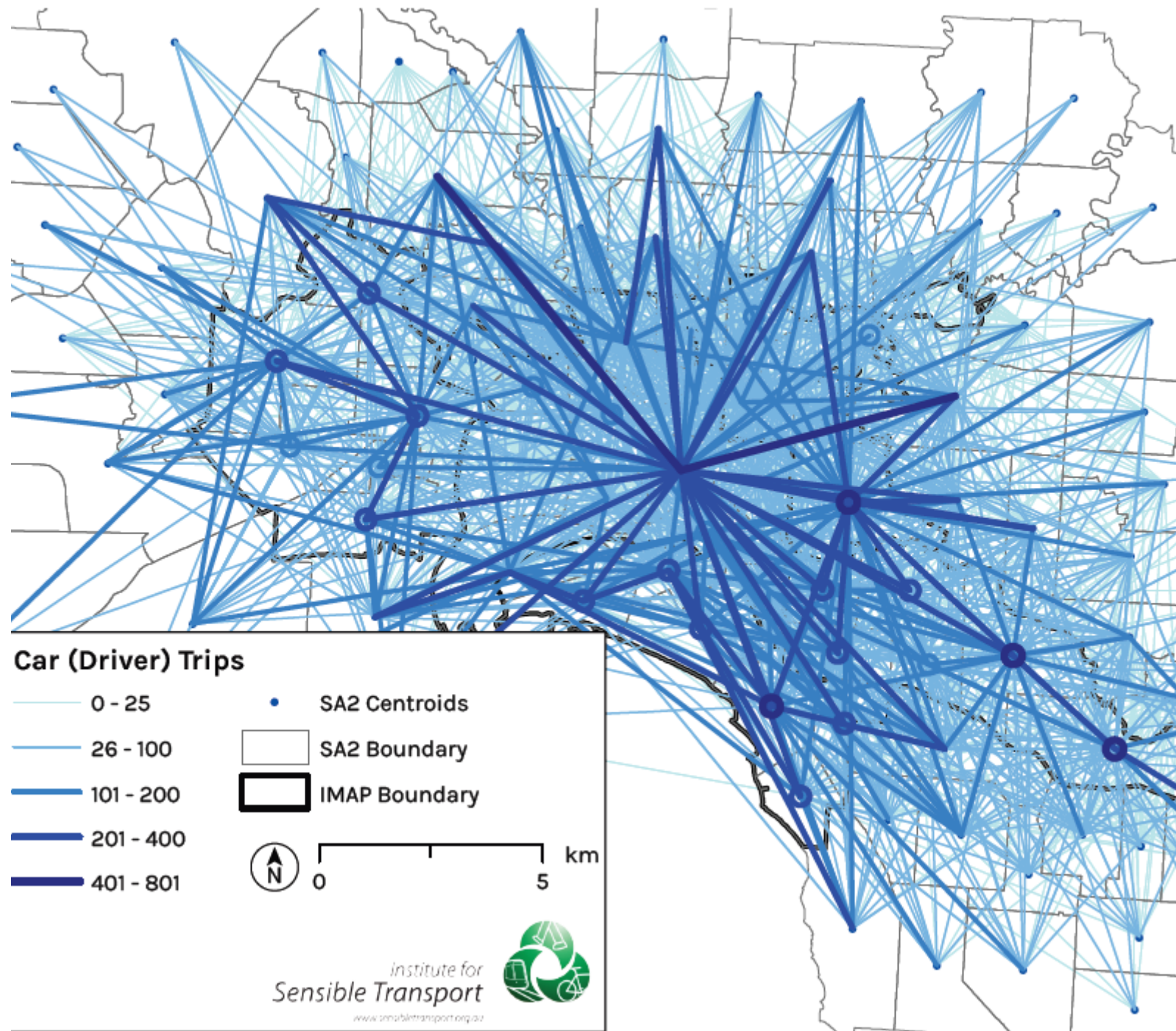




# Use Big Data to estimate baseline cycling

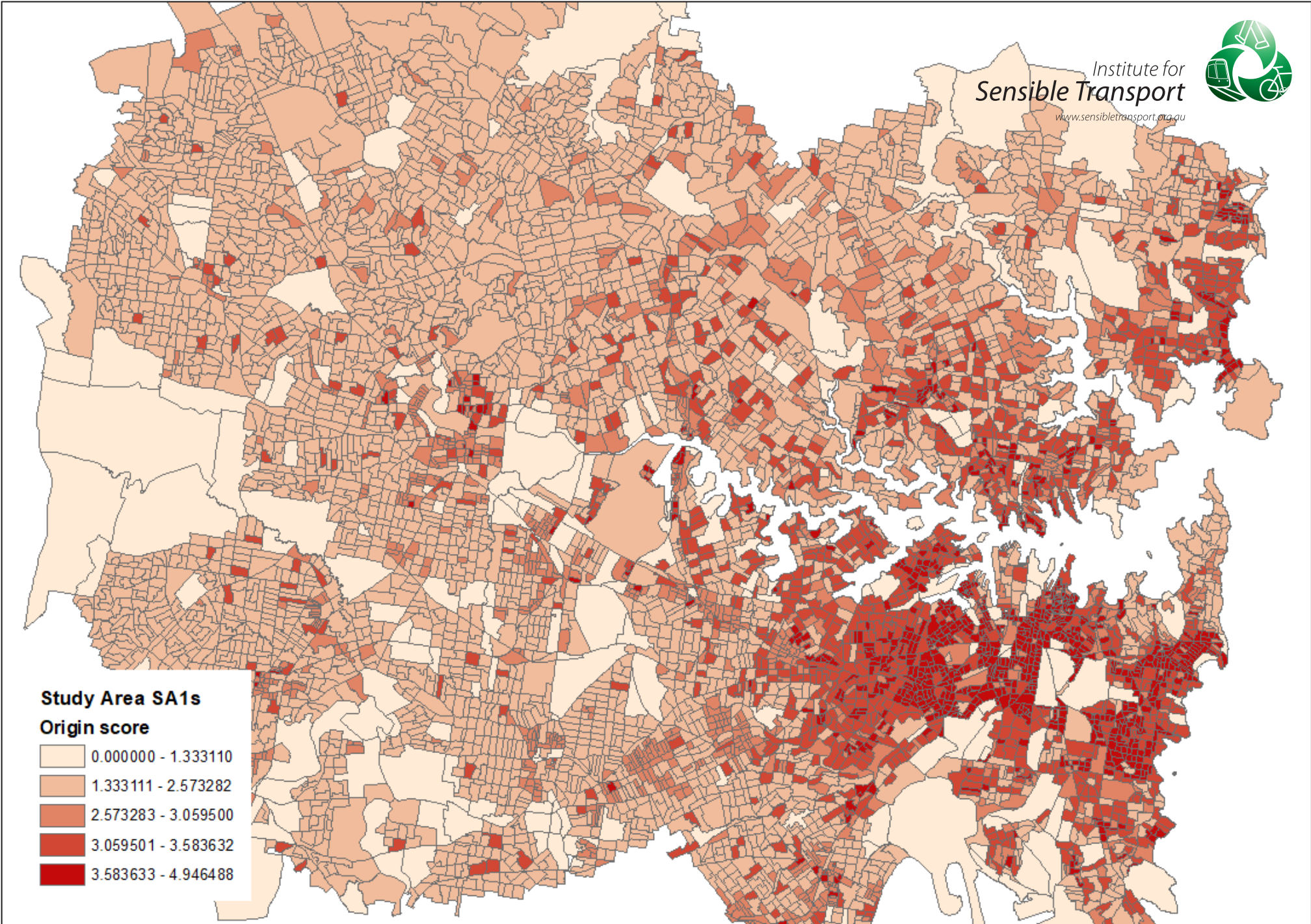


Go fishing  
where the  
fish are

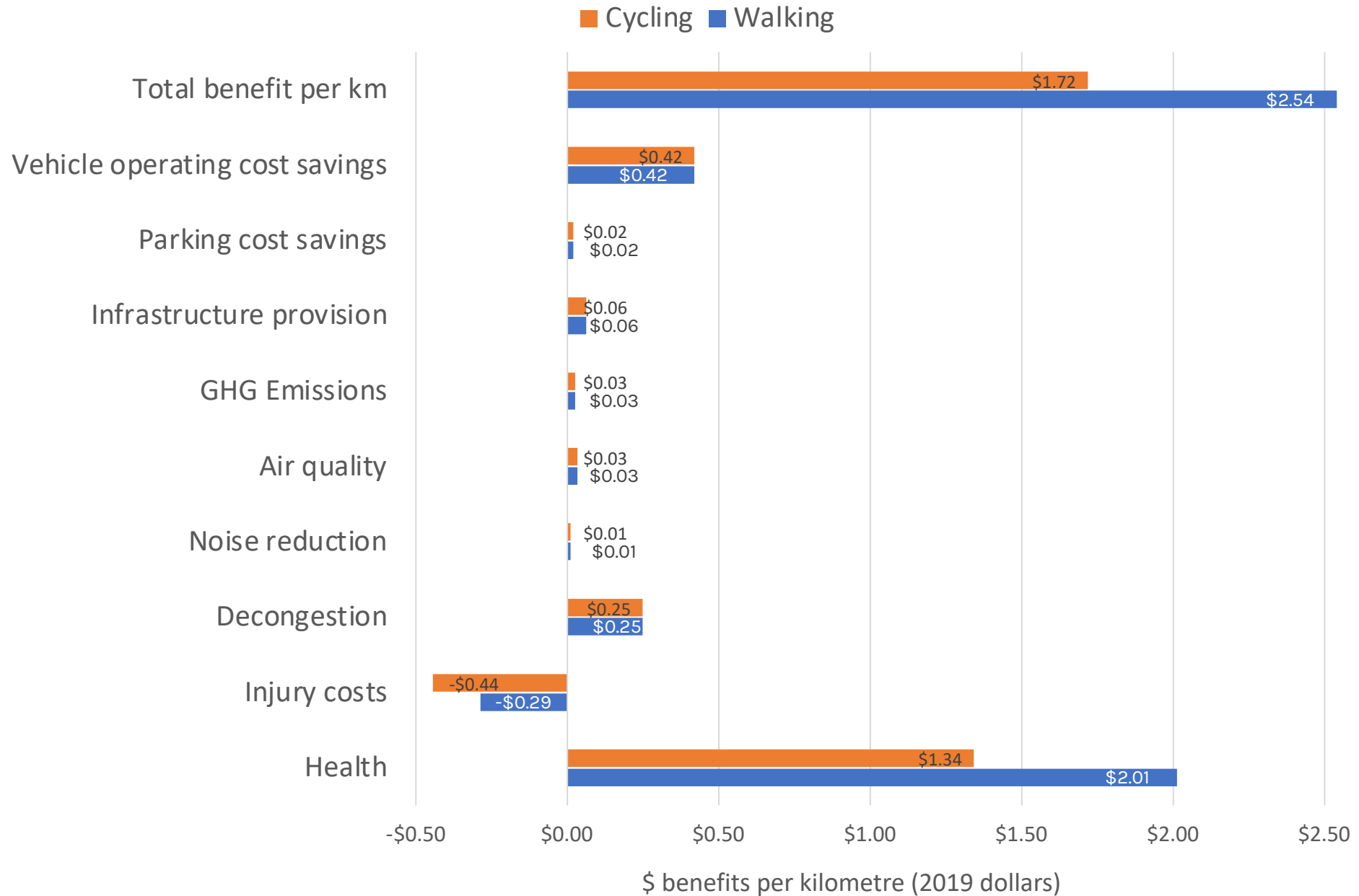




# Mapping latent demand for cycling



# Monetising the benefits



Thanks  
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