Additional Waitematā Harbour Connections

Daniel Newcombe – Auckland Transport

Auckland Transport
An Auckland Council Organisation

Project partners

Auckland Council
Te Kaunihera o Tāmaki Makaurau

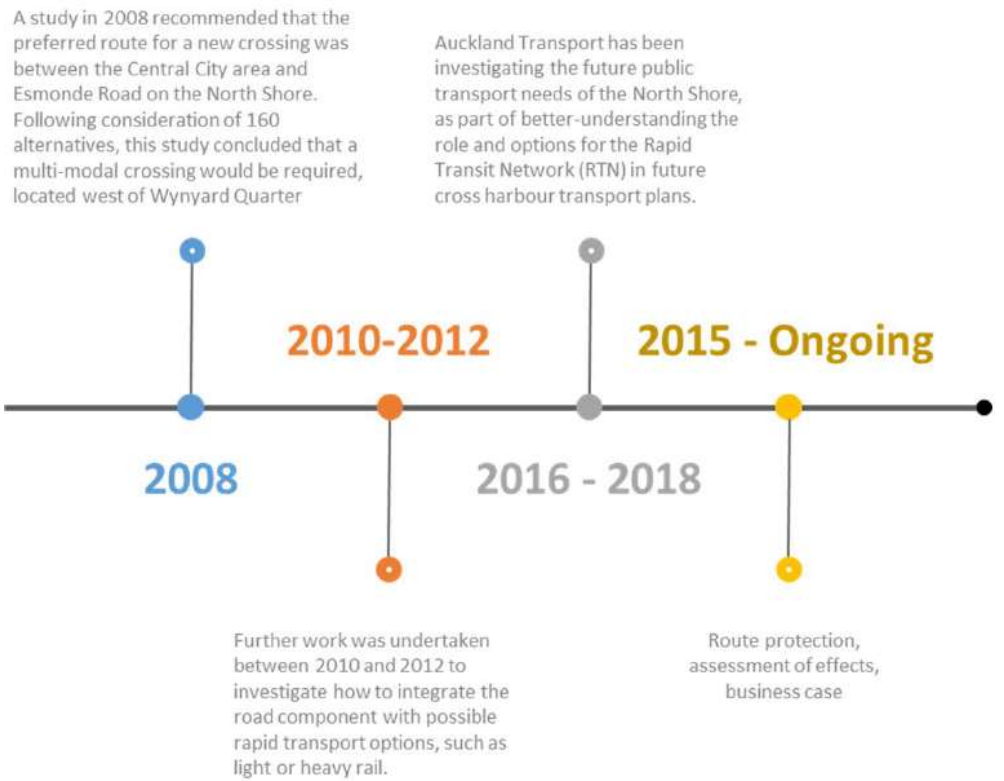
WAKA KOTAHI
NZ TRANSPORT AGENCY

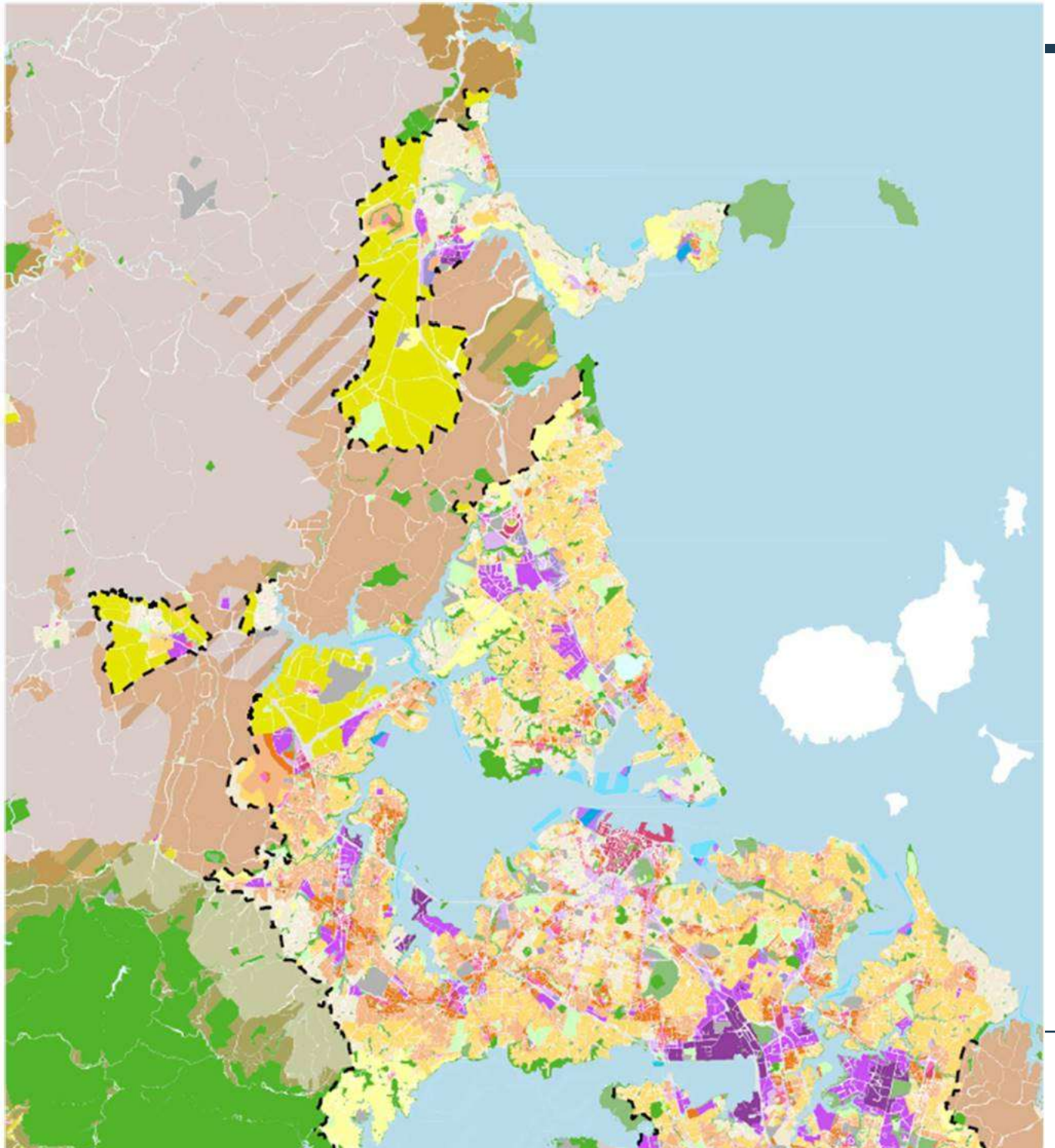
History

- **Waka Kotahi** have undertaken a number of investigations into additional connections of the Waitematā Harbour have been undertaken in the past, however they have focussed on a road crossing

- **Auckland Transport** have separately investigated public transport issues (next slides)

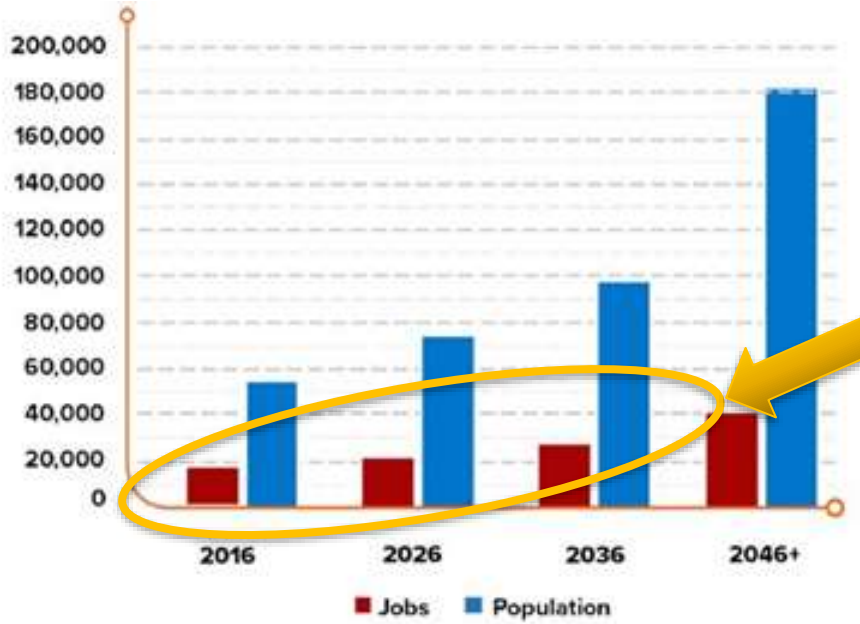
- The Additional Waitemata Harbour Connections Business Case (2020) is the first time that an **integrated approach** has been taken





North Shore land uses

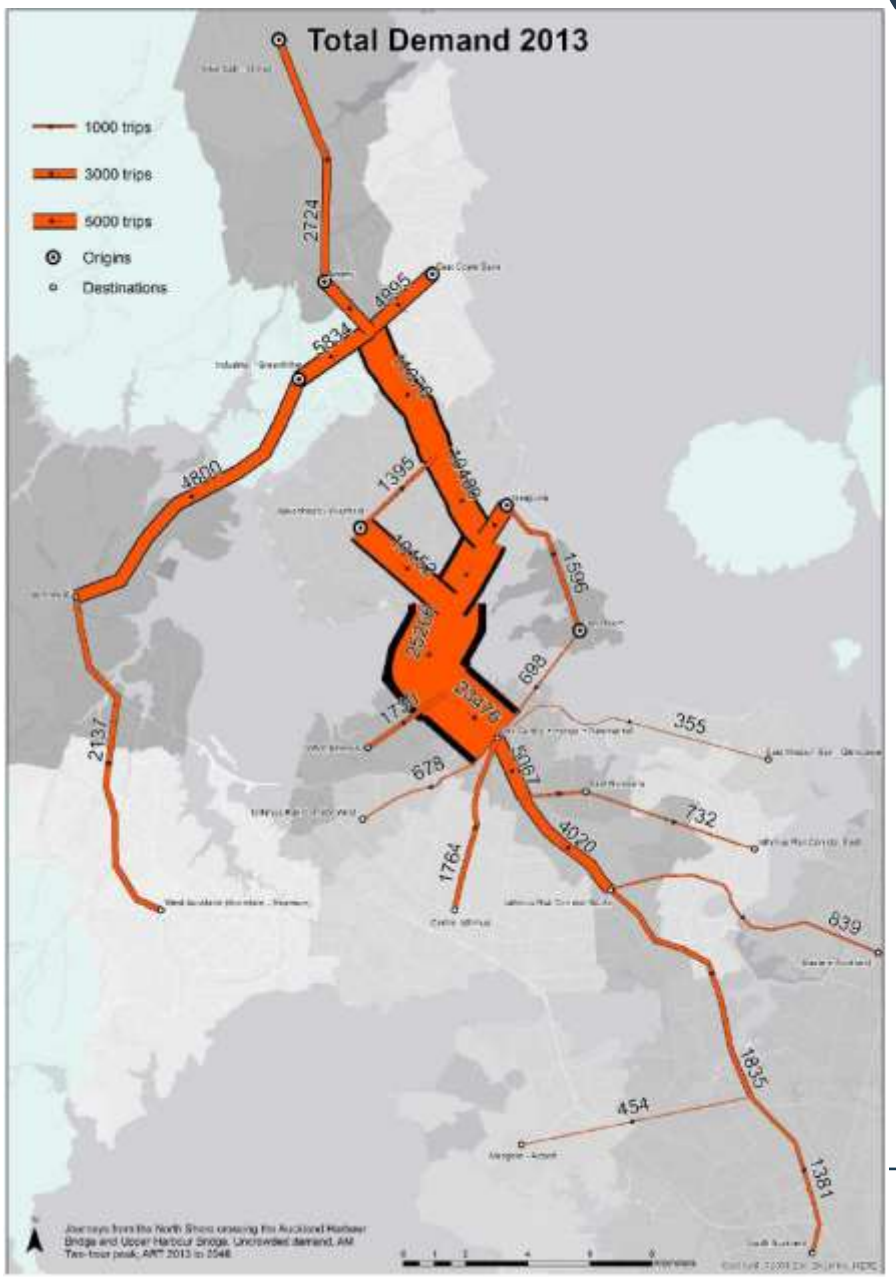
Growth in the North

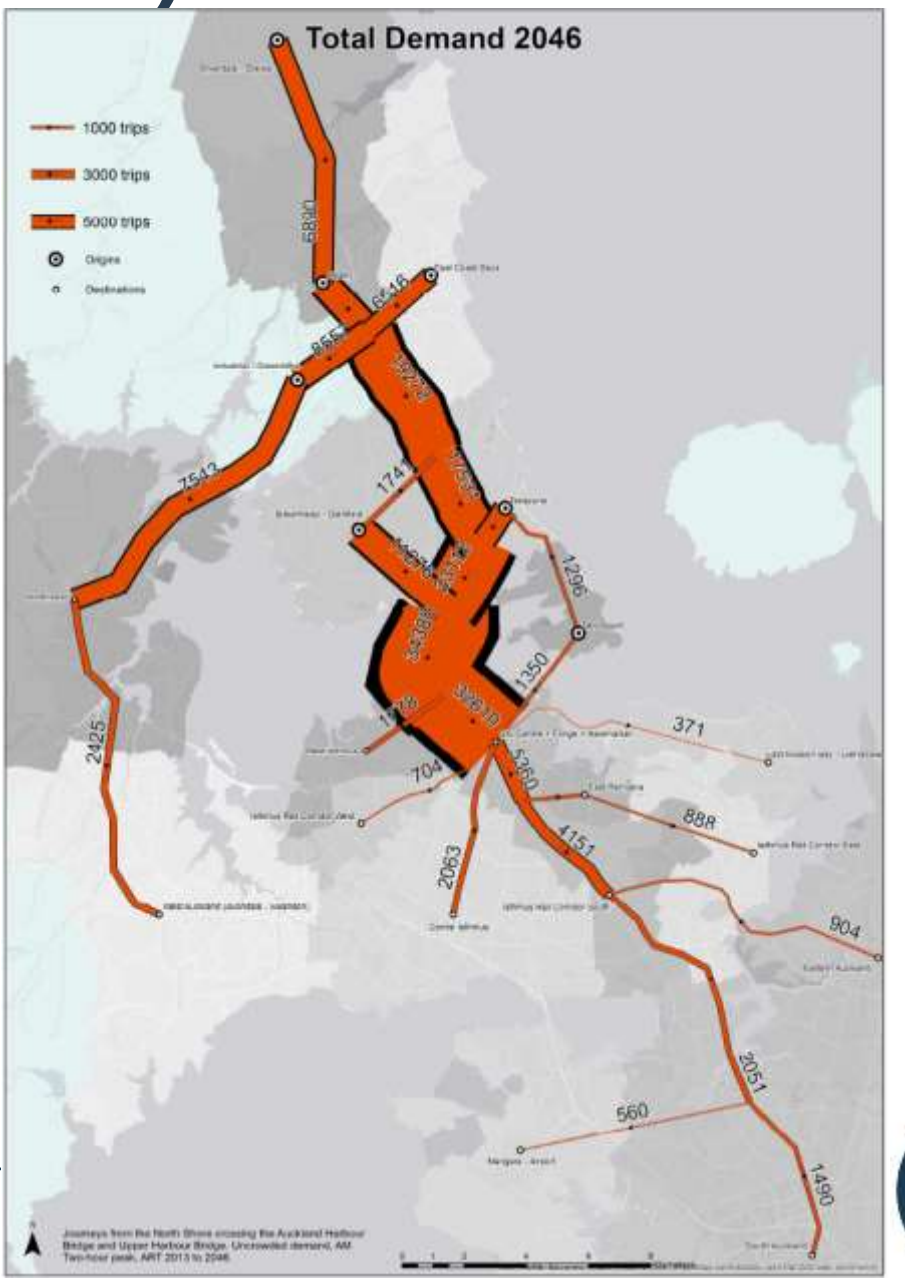


There will be an on-going strong demand for travel out of the North Shore for work

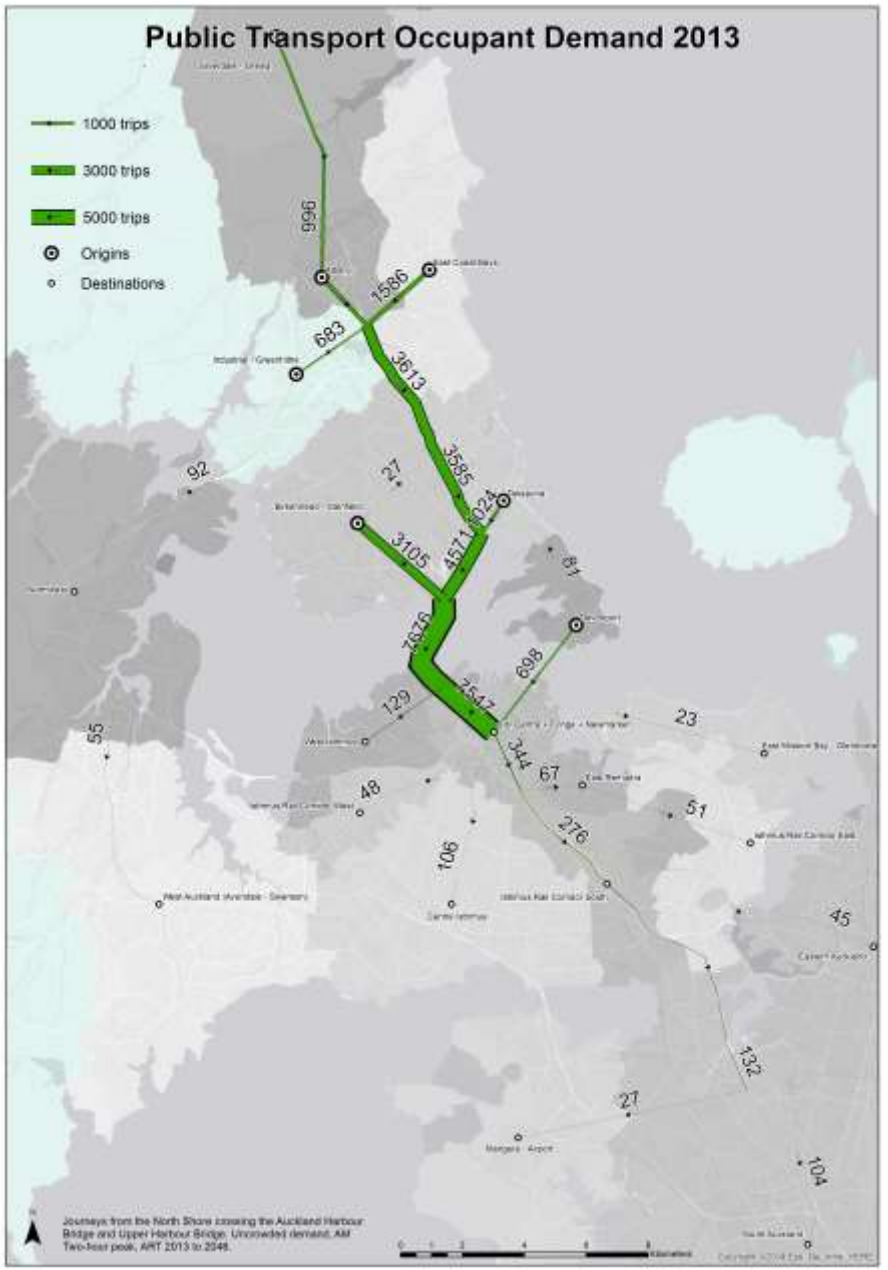
Vast majority of population growth will occur within existing urban areas

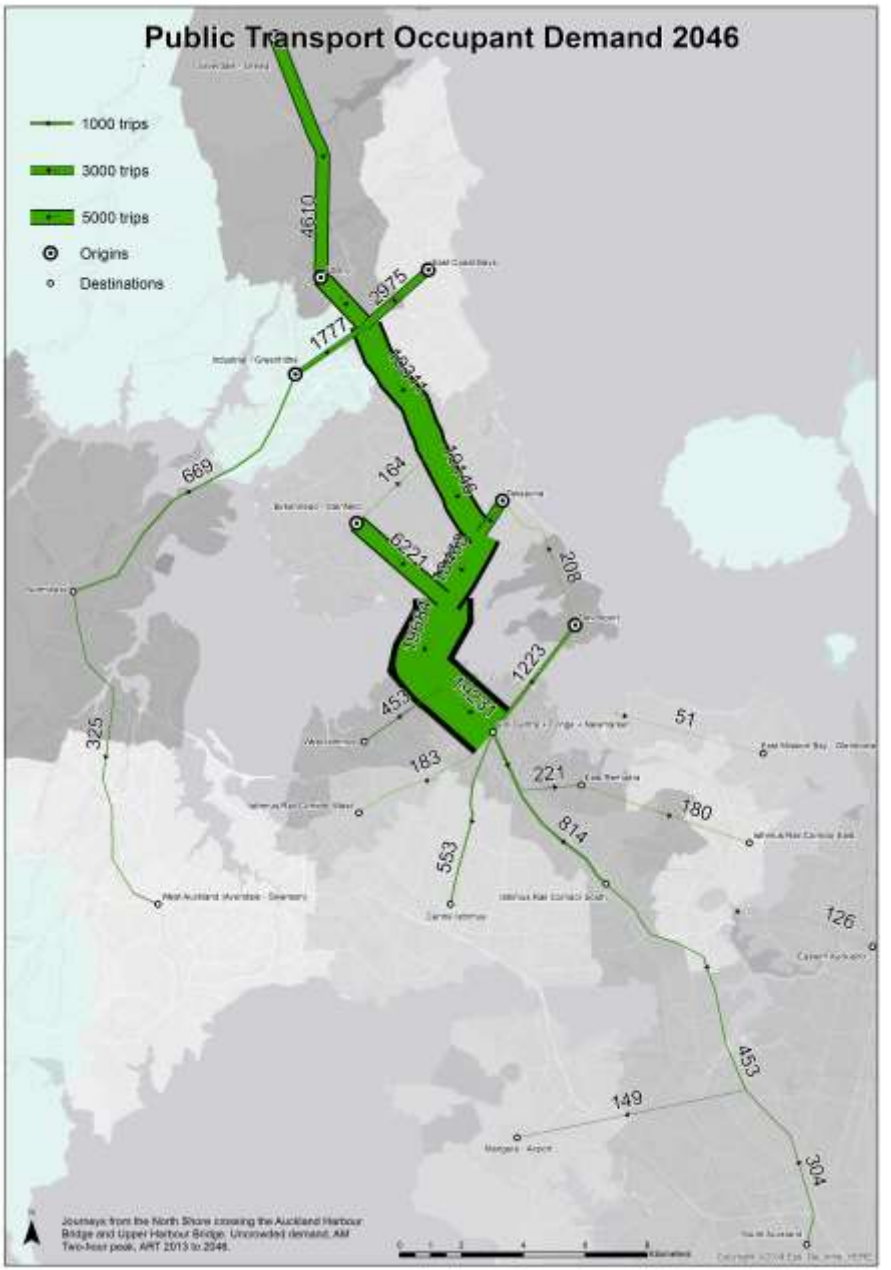
Total travel Demand (2-hr)





Public Transport Demand (2 hr)





Public transport demand forecasts exceed current infrastructure capacity

(Note: latest ATAP and Covid impacts will be included in updated scenarios but are not expected to fundamentally change the situation)

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Waka Kotahi work

- WK was pursuing design and route protection of two 3-lane road tunnels from Esmonde Rd to Cook St
- With AT's proof of the need for better RTN, the Minister directed WK to work with AT and Council on the "*need, timing, form and function of any new cross harbour connections*"
- This triggered what has become the **Additional Waitemata Harbour Connections Business Case**

Most recent WK road tunnel concept

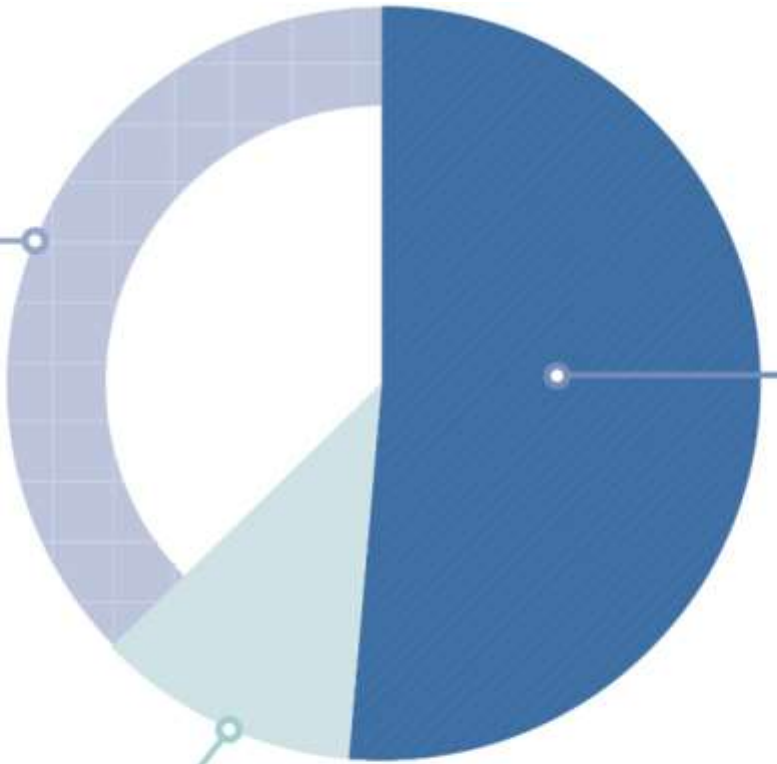
AWHC Business Case - Problems

Vulnerability & Resilience

PROBLEM 3

30%

Reliance on a constrained & vulnerable harbour bridge & corridor risks the provision of resilient & reliable transport & utilities services.



Travel Choice & Connectivity

PROBLEM 1

55%

Increasing difficulties serving the growing travel demand along the corridor is worsening travel choice & reducing connectivity between people & places.

Freight Productivity

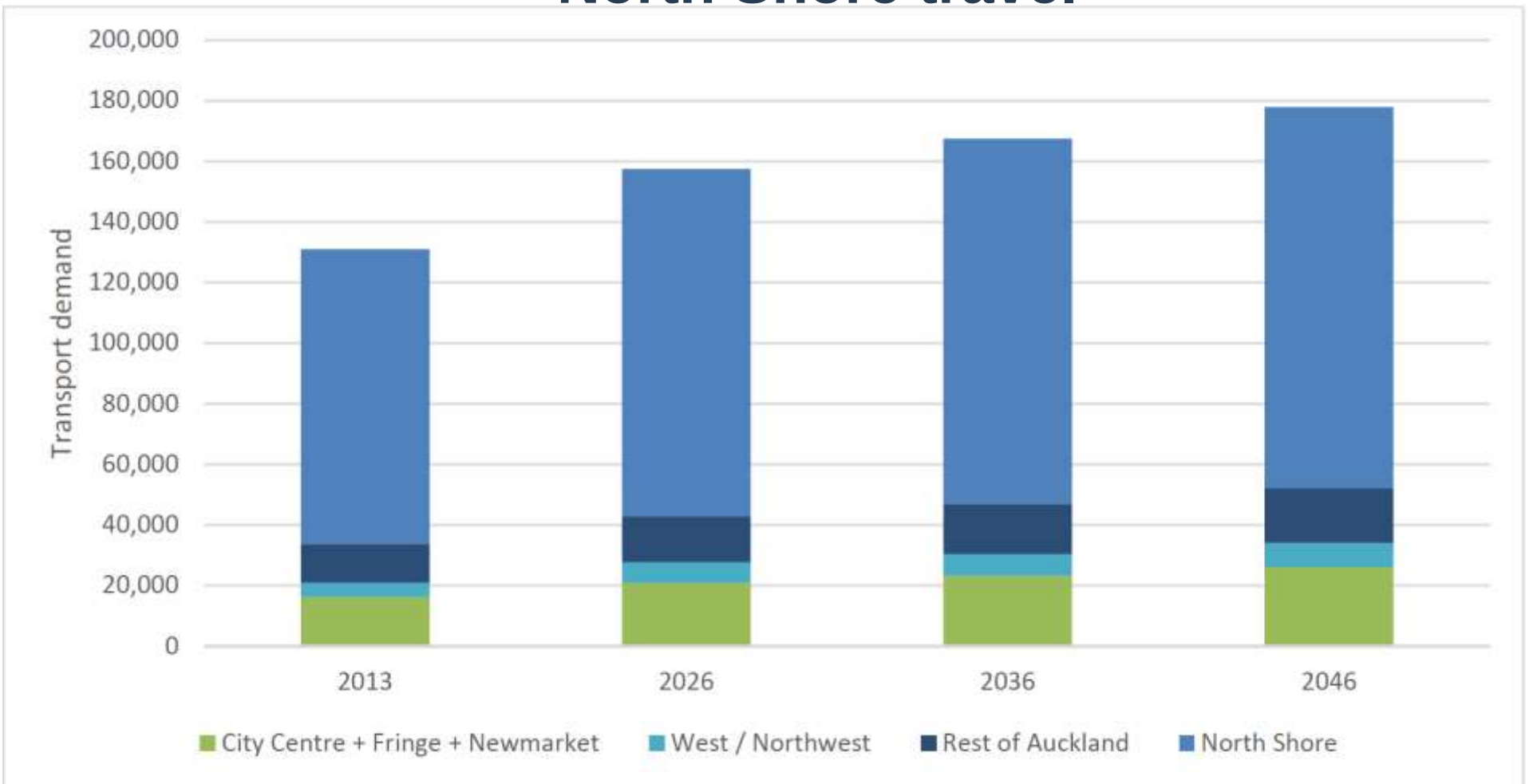
PROBLEM 2

15%

Inefficiencies & unreliability in the movement of goods & services will drive up costs & delays & impede access to markets & customers.

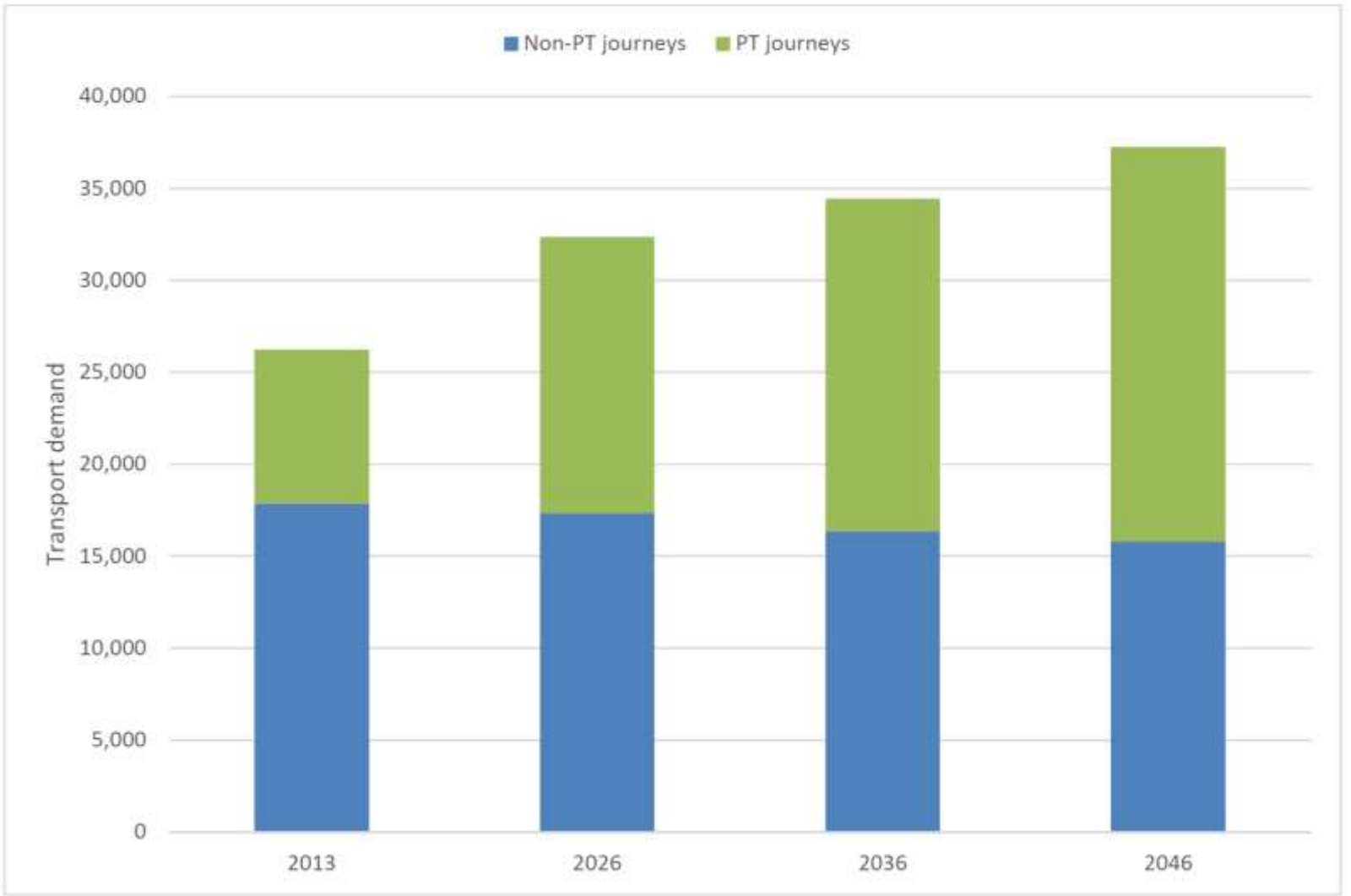
Travel Choice & Connectivity – where are people going?

North Shore travel

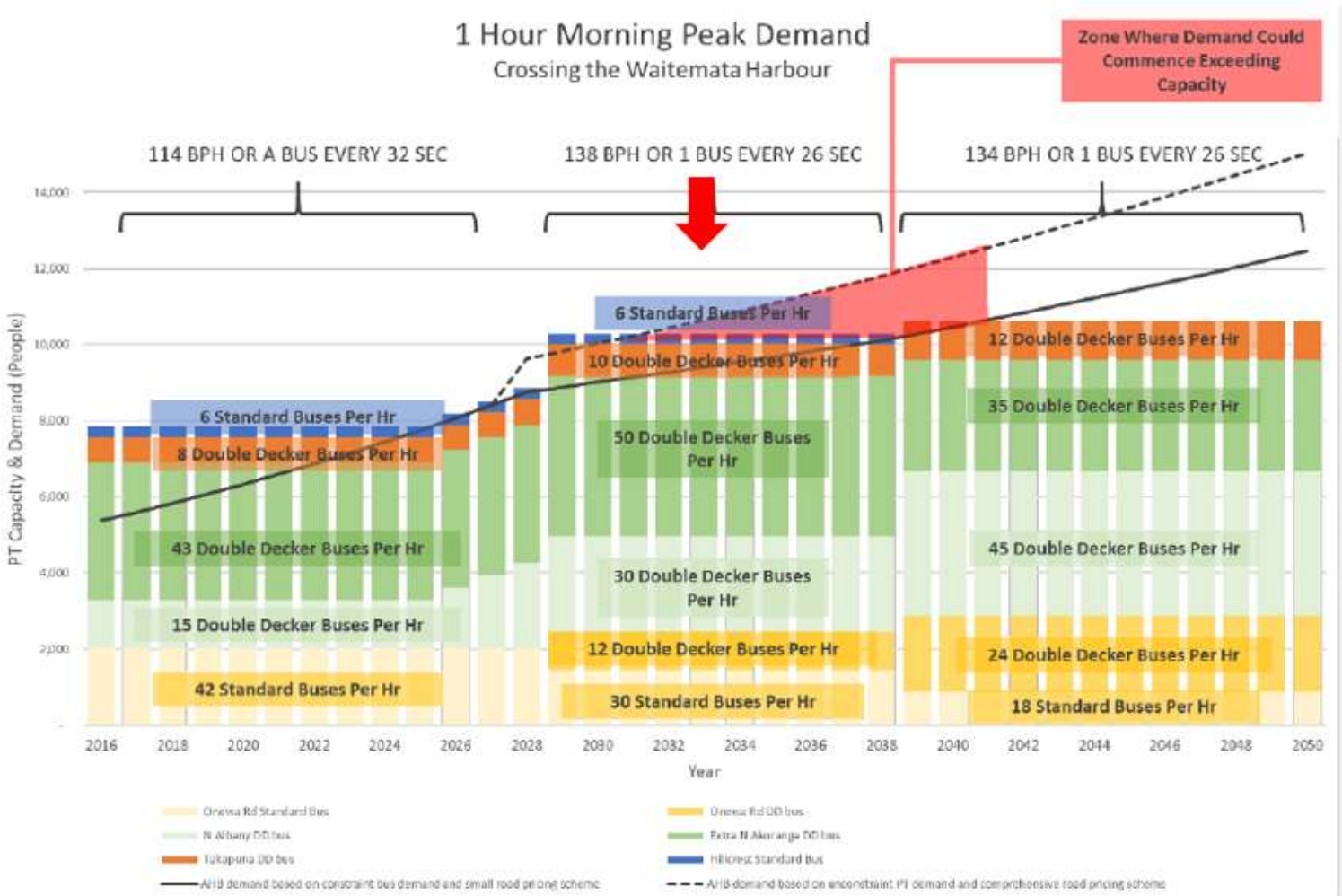


Travel Choice & Connectivity – how are they getting there?

Forecast AM peak PT and private vehicle travel demand across the Auckland Harbour Bridge.



Travel Choice & Connectivity – what does that mean for buses?



Extrapolated Demands – Not Modelled

The busway system is projected to run out of capacity from mid-late 2030s

Adding additional buses not possible given downstream constraints in city

Strategy is to re-route some buses in the lower North Shore to new Smales farm bus/rail interchange, and utilising additional headroom created for additional buses on the busway

A new RTN supplementing the busway south of Smales will also reduce the pressure on this section of the busway

Vulnerability & Resilience – inundation

Road Surface Levels

The section between the Esmonde Road Interchange and the Onewa Road Interchange has the highest risk of coastal inundation due to the lowest ground levels in this section.

Coastal storm tide inundation occurs on the busway lane approximately once per year and 4-5 times per year on the Northern Busway shoulder.

Programme Conclusions

- A **demand management approach (such as congestion pricing) alone was not sufficient** to address the forecast increased demand and that a complete multi-modal transport approach is required

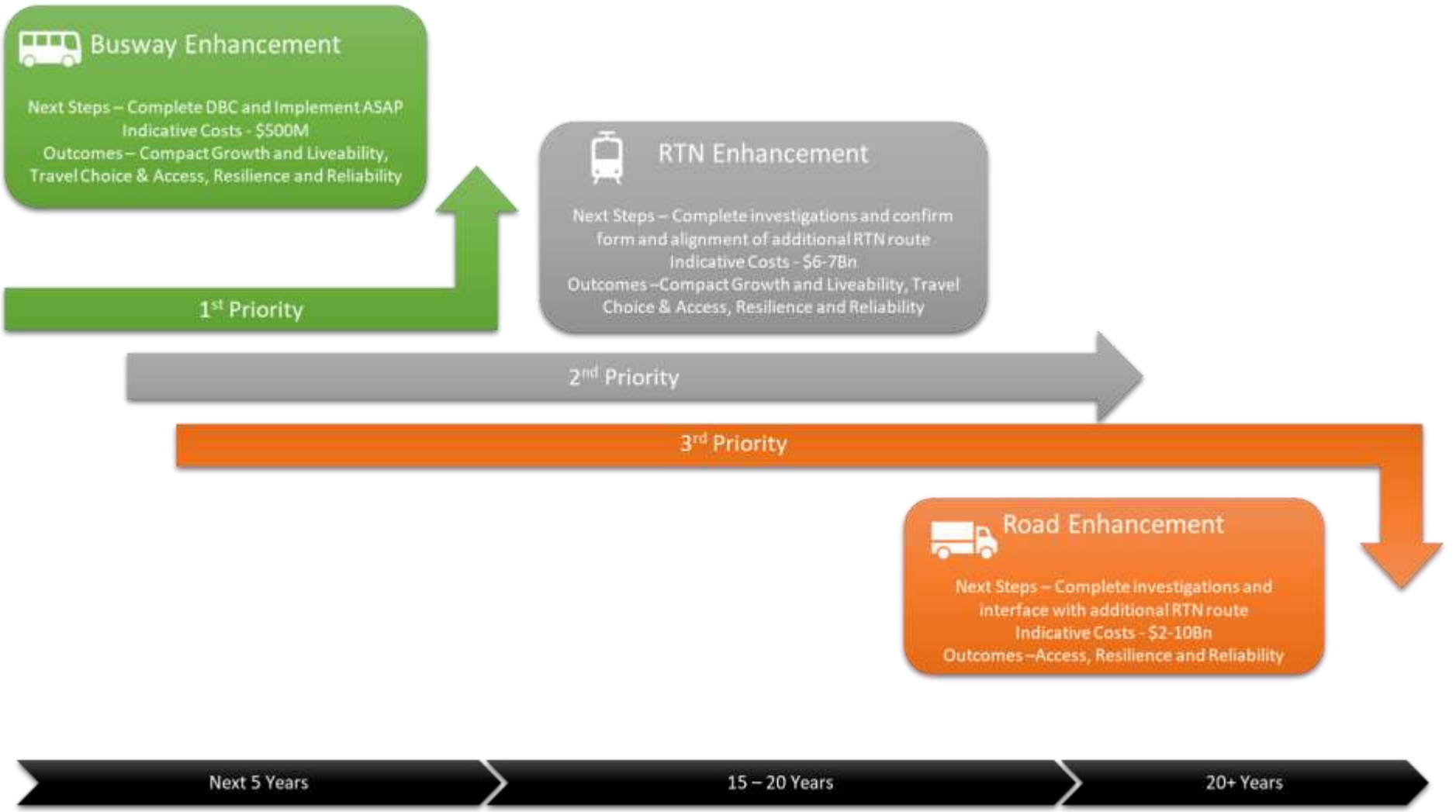
- **Public transport demand is forecast to grow** to a level that means in the long term, a **high capacity rail-based RTN system is required**

- The **busway**, however, **plays an increasingly critical role in the short to medium term**

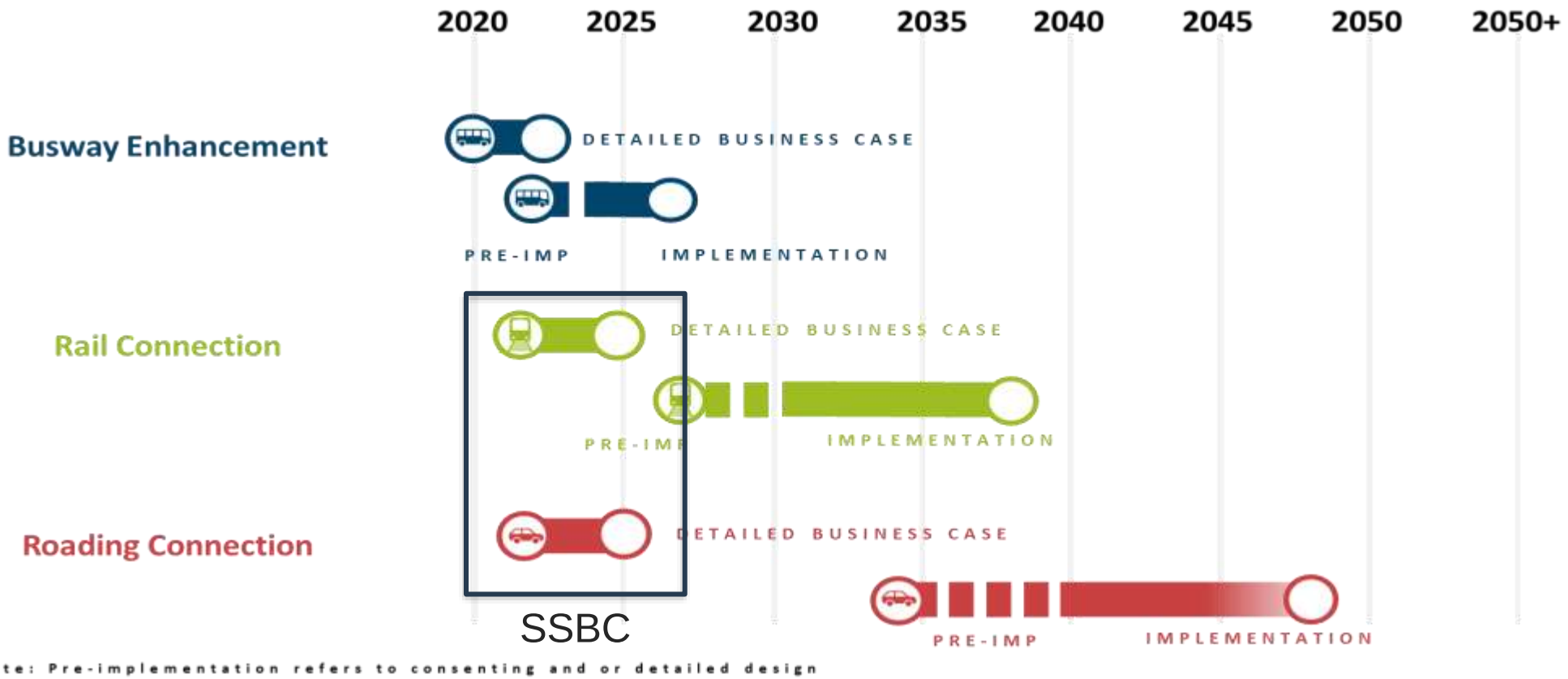
- **Both an enhanced busway and an additional RTN connection are required to meet future demand**

- Even with increase public transport capacity **there is a need in the long term to provide increased resilience and productivity for private vehicles**

Programme Recommendations



Indicative Programme Timing



Note: Pre-implementation refers to consenting and or detailed design

Thank you.

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