

Car Sharing using electric vehicles

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Car sharing using electric vehicles

Some Auckland context

- Auckland Transport
- Growth
- Strategic Priorities - PT

Why is AT interested in car sharing?

Process

- Why a Request for Proposal?
- What outcomes was it seeking?
- What were the 'dimensions' of responses?

What are the risks for public transport authority and how have those risks been mitigated?



Auckland Transport context

Nov 2010 Auckland Region became a unitary authority controlled by the Auckland Council

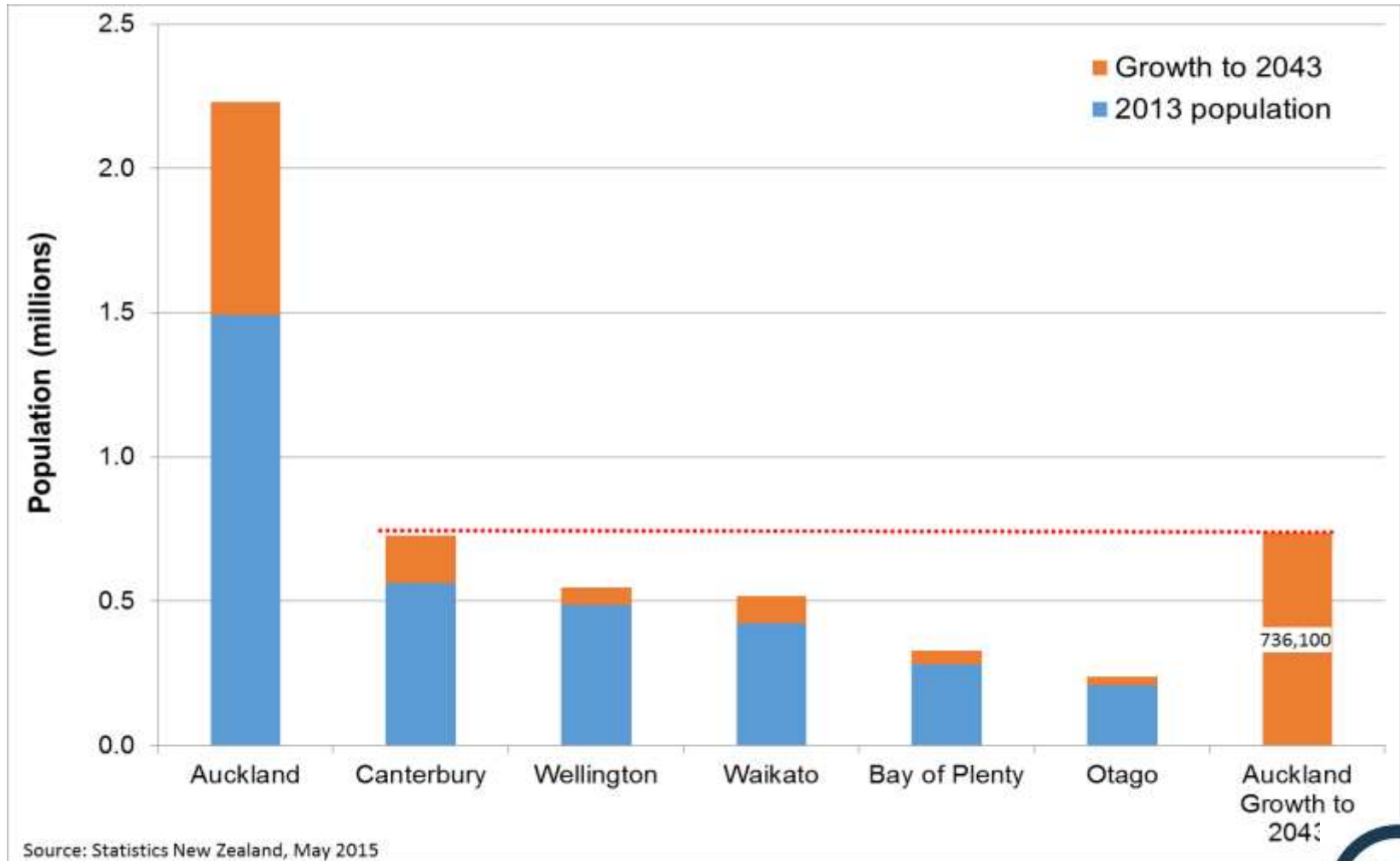
- Replaced previous regional council and seven local councils
- 1.5m population / 1890 sq mi

AT is a Council Controlled Organisation with its own Board

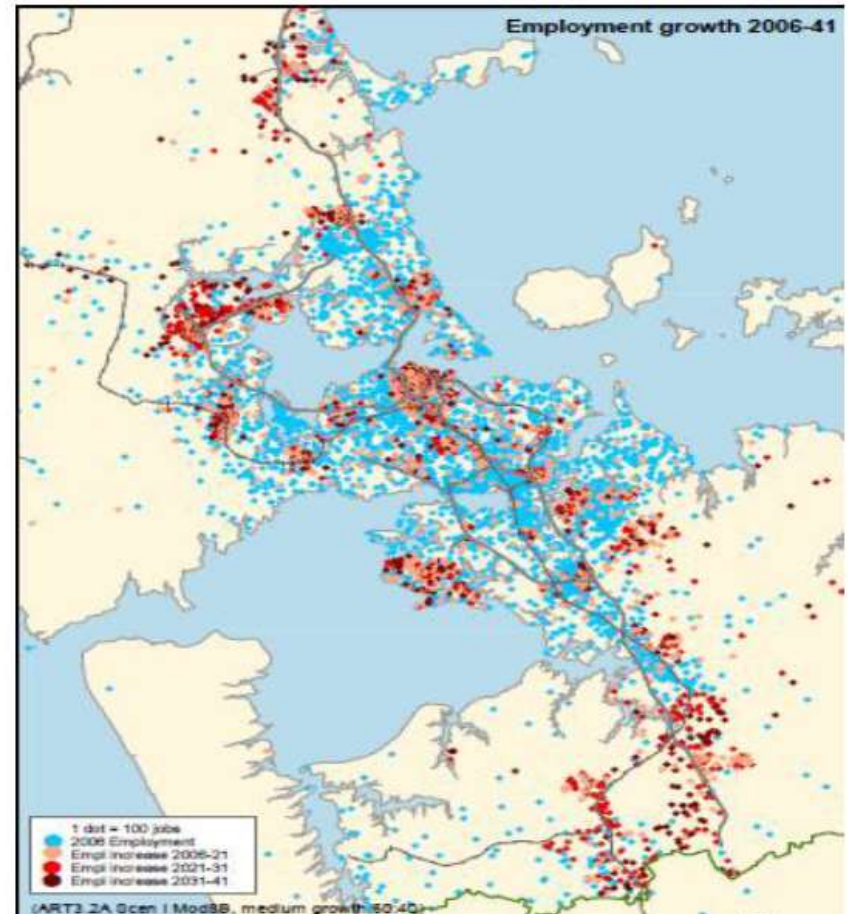
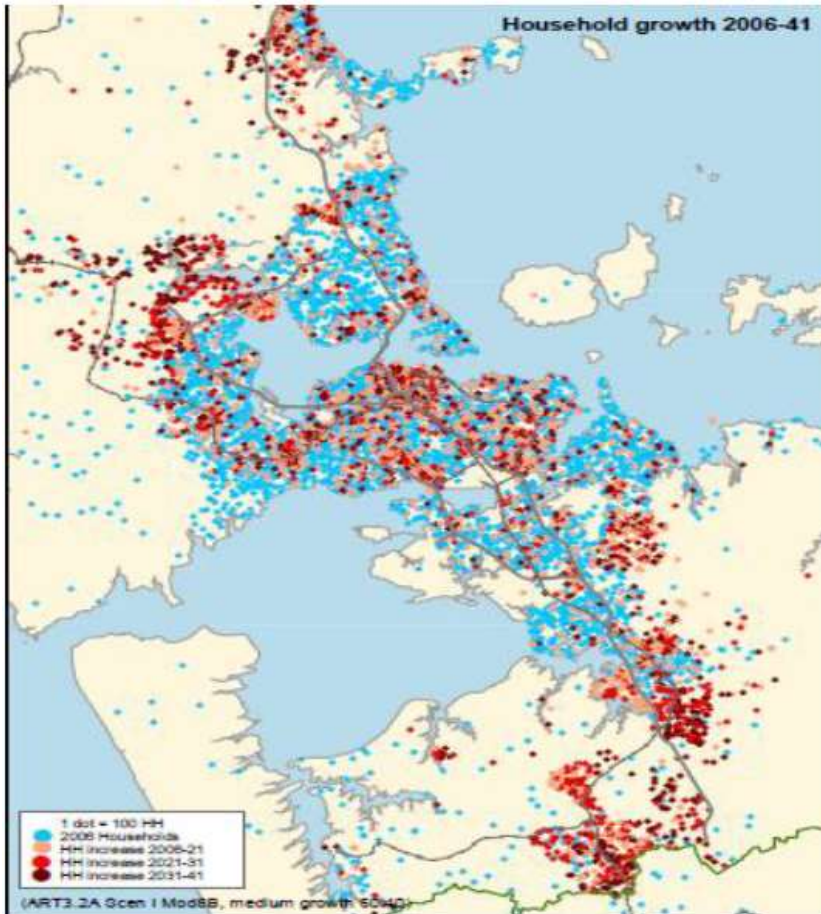
- Jointly funded by Auckland Council and NZ Transport Agency
- All public transport, active transport (walking and cycling), road operations and maintenance, all on-street parking, and a number of off-street parking facilities



Growth - regional



Growth - Household and Employment

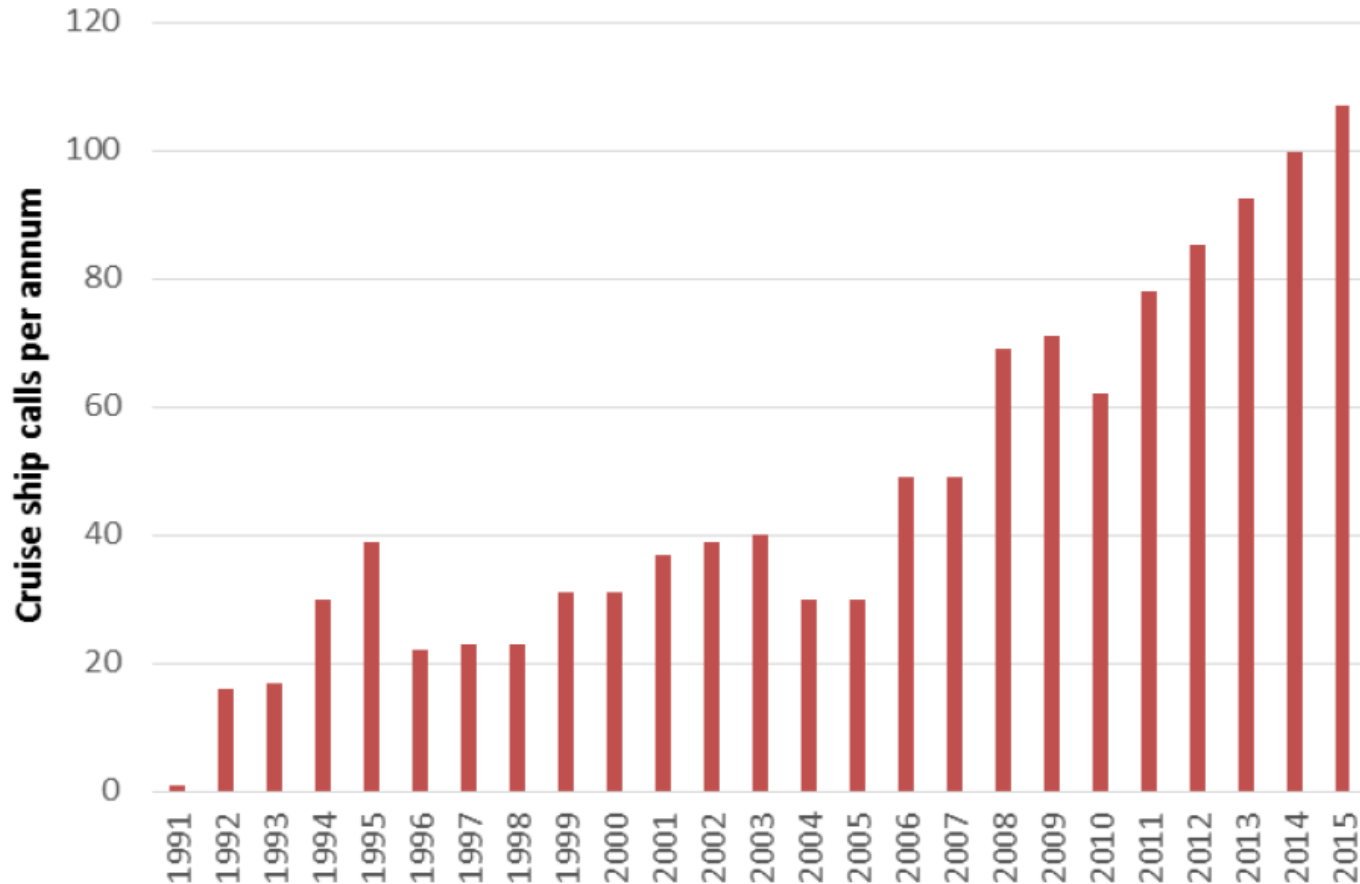


Growth – City Centre

	Employees	Residents
2001	76,520	9,260
2006	83,330	19,670
2013	94,550	29,300

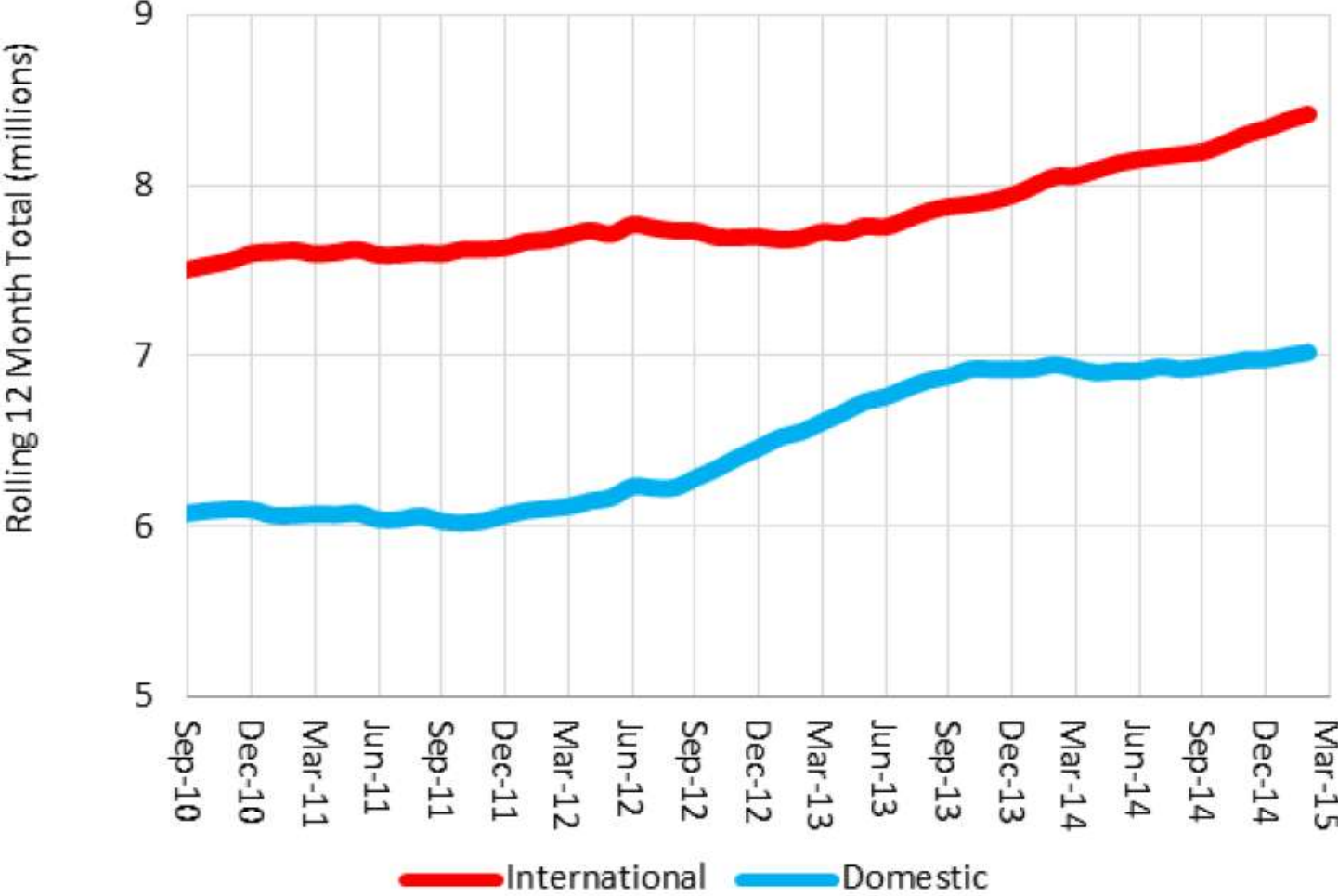


Growth - Cruise Ships



Ships are getting larger so passenger growth even more significant

Growth - Air Passenger Arrivals



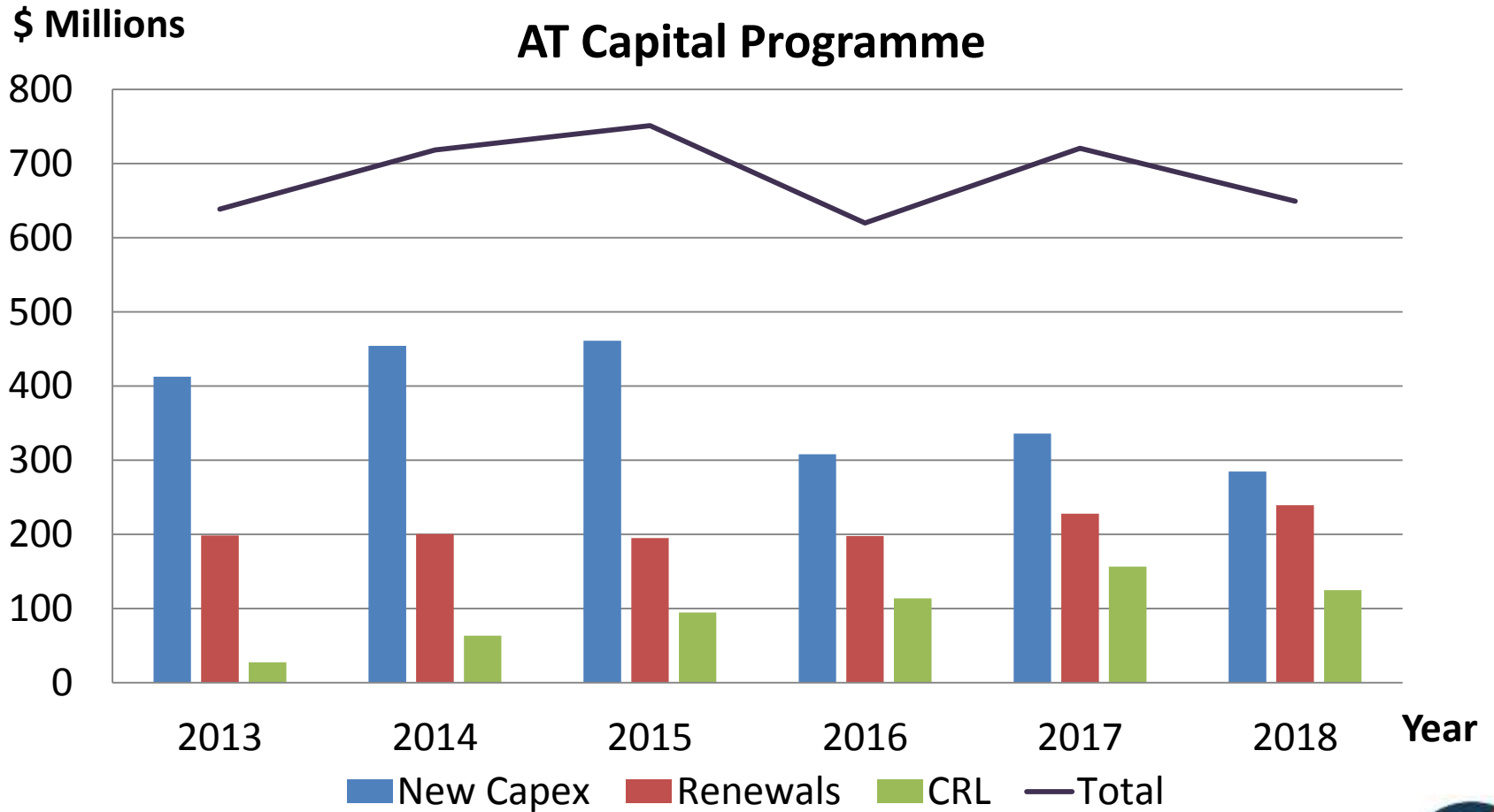
AT Strategic Themes



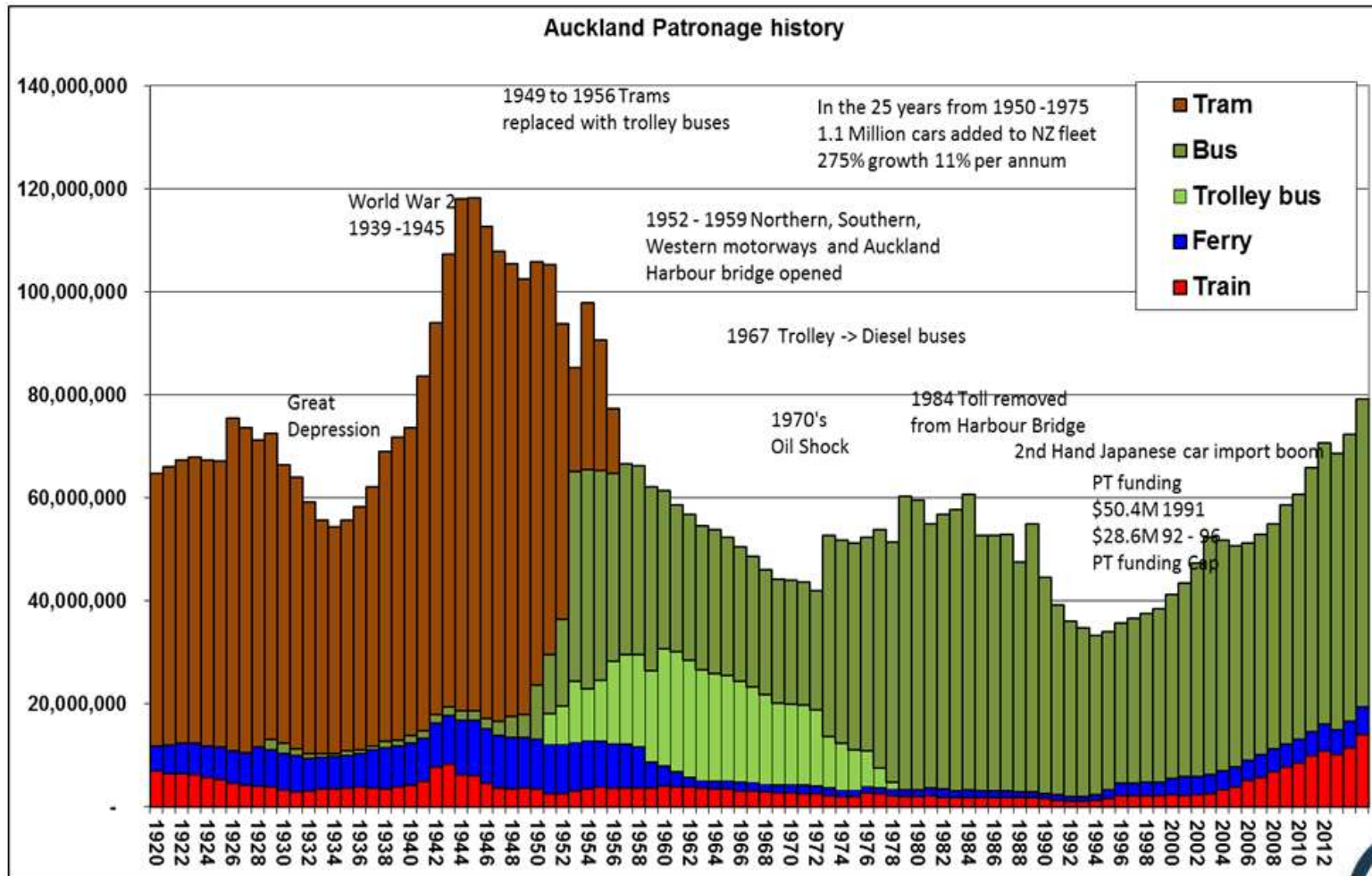
Public Transport Key Priorities



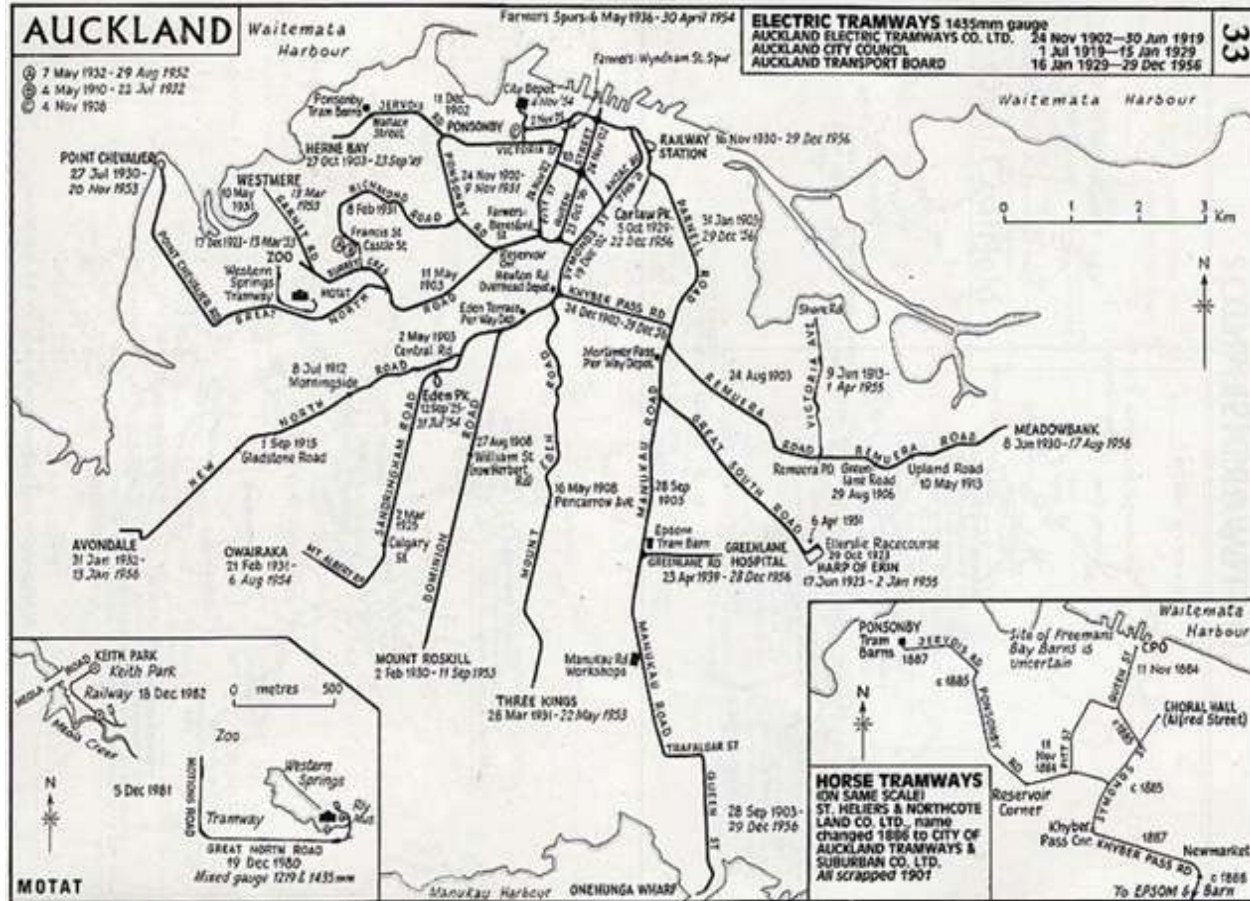
Investing in Public Transport



Public Transport Patronage



Public Transport déjà vu....?



PT Investment Results

Morning commute:

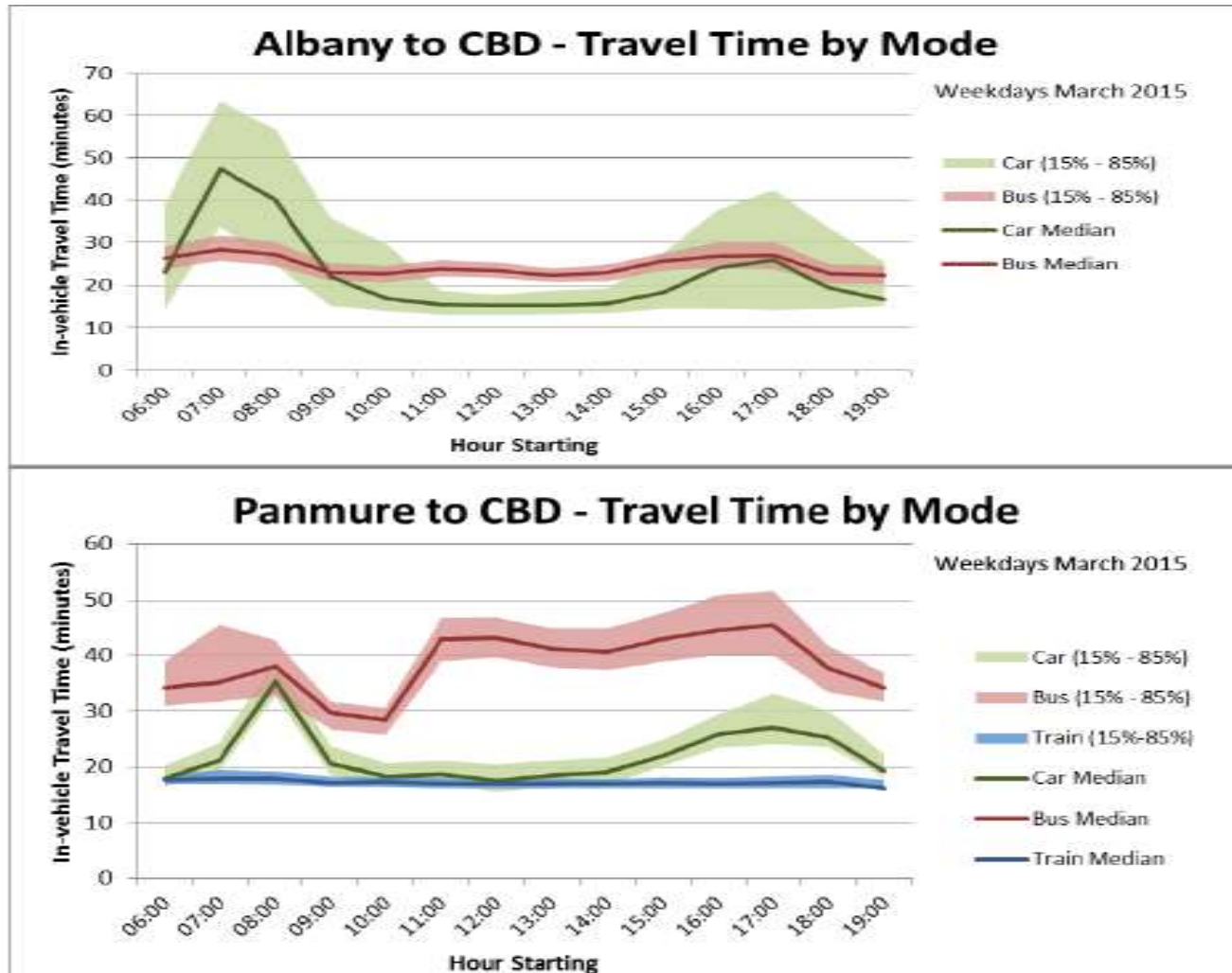
more now use public transport than drive

Public transport	34,700 (45%)
Bus	24,698 (32%)
Train	6,570 (8%)
Ferry	3,429 (4%)
Drivers	31,704 (41%)
Car passengers	4,551 (6%)
Walking	5,330 (7%)
Cycling	1,015 (1%)



Buses make up 2.5% of vehicles but carry 30% of people

PT Investment Rapid Transit Network



Why is AT Interested in Car Sharing?

Prioritise rapid, high frequency public transport

- Supports first and final leg - some vehicles at PT hubs
- Car share members are more likely to use PT

Transform and elevate customer focus and experience

- Provides viable alternative to car ownership for some
- Compliments PT and active modes, reducing air pollution and fuel use per capita

Build network optimisation and resilience

- Supports higher density development and more efficient land use by reducing parking requirements

Ensure a sustainable funding model

- Commercial scheme - no net cost to AT
- Potential for AT fleet efficiencies

Develop creative, adaptive, innovative implementation

- Uses mobile technology to support a highly flexible booking, billing, and returns process
- Potential to integrated with PT journey planning and real time traffic data to provide adaptive end-to-end journey planning
- Potential to use AT HOP card in vehicle opening/lockir - process.

Why a RFP and What Outcomes?

RFP approach

- Front-foot
- Fairness
- Attract broad range of bidders

Open RFP issued 9th March 2015 inviting operators to submit proposals to establish an electric vehicle based car sharing scheme in Auckland

Non-prescriptive; it stated:

- A **strong preference for an A to B or zonal model** based on greater utility for the customer;
- An **estimated number of 250-300 vehicles** for start-up based on comparison with other cities, but this level was not made a requirement;
- AT **believed that such a scheme can be operated using Plug-in Electric Vehicles (PEVs)**, but again this was not made a requirement;
- Proposals to be based upon the scheme being **established and operated on a commercial basis**, with no net cost to Auckland Transport.

RFP closed 19th June 2015 with nine responses; short-list of 3 responses; recommendation to Board

RFP Response 'Dimensions'

Diverse response to RFP:

The approach to the **size of initial fleet**

- Some respondents argued for small scale CBD-centric deployment which grows in response to demand;
- Others that only a larger and broader scale deployment creates a level of utility (the 'network effect') that will attract customers

The approach to **charging infrastructure**

- Some proposals leveraged commitments made by third parties for publically available chargers;
- Others brought a turn-key solution which included chargers

The use of **Plug-in Electric Vehicles**

- Some respondents mitigated the start-up costs and operational risks by commencing service with a small proportion of PEVs in their fleet, growing the mix over time;
- Others deployed a full PEV fleet from day one

Exclusivity

- Some proposals required exclusivity;
- Others saw at this stage of market development there is benefit in having a number of operators to grow the market – the more service provision there is, the more attractive car sharing is as a proposition

Risks and Mitigations

Organisational support

- Cross functional team – Strategy & Planning; Parking Services; Road Corridor Access/Ops; Metro (PT); Finance/Investments; Procurement; Auckland Council Sustainability
- Executive Steering Group and Board

Attracting proposals

- Mayor and Chair fronted a very public launch event with press invited
- Invitation letter from CEO outlining why Auckland is attractive
- Balanced 'no net cost' requirement with offer for in-kind support
- Non-prescriptive RFP with interactive process
- Extension requests viewed favourably

Public sector procurement process

- Real-time probity assurance

Policy and public law

- Review

Thank you.

