CRL & LRT

Constructing Excellence 21 October 2015

Steve Hawkins









Early works on Google Earth



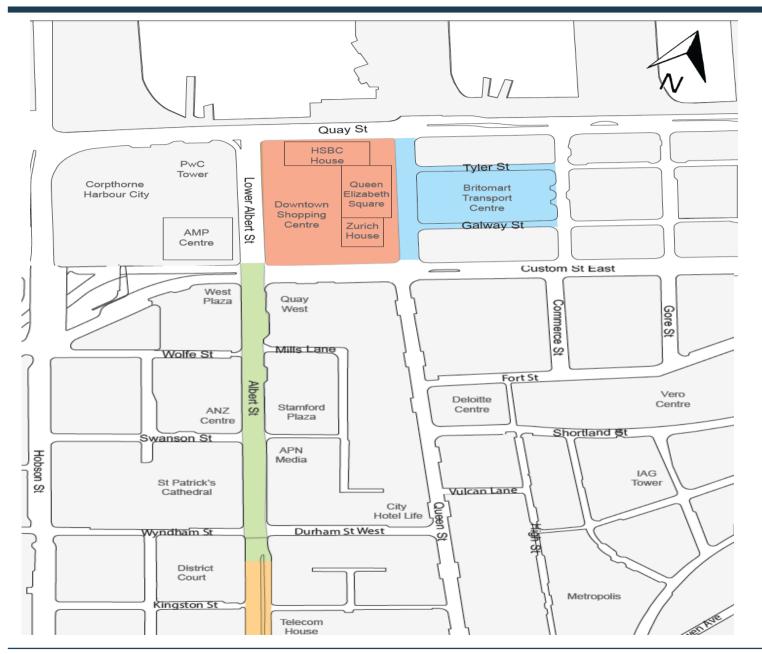


Britomart Station – temporary operations













Developments on Google Earth





Planning Effective Delivery





LRT

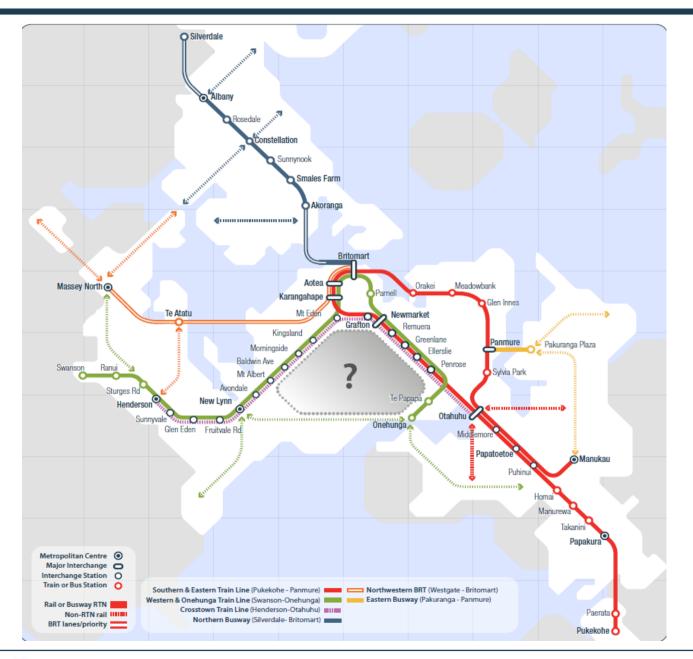




What is the problem?











Demand over and near capacity

CRL



CRL

CRL





R

Existing conditions on the bus network





Bus flow service volumes

Flow Rates for Exclusive or Near - Exclusive Lane			
ARTERIAL STREETS			
Free Flow	25 or less	15	
Stable Flow - Unconstrained	26 to 45	35	
Stable Flow - Interference	46 to 75	60	
Stable Flow - Some Platooning	76 to 105	90	
Unstable Flow - Queuing	106 to 135	120	
Forced Flow - Poor Operation	Over 135*	150*	
CBD STREETS			
Free Flow	20 or less	15	
Stable Flow - Unconstrained	21 to 40	-0	
Stable Flow - Interference	41 to 60	60	
Stable Flow - Some Platooning	61 00	70	
Unstable Flow - Queuing	81 to 100	90	
Forced Flow - Poor Operation	Over 100*	100*	
*Results in more than one-lane o	peration		

This is the problem (unstable flow and queuing after 80 buses per hour)





Existing conditions: Symonds Street (AM Peak)







Options investigated





Option 1: High Bus investment

Option 2: Light Rail investment





Option 2: Light Rail Investment Scenario





Light Rail on Google Earth





Overseas examples: Bus and LRT





Overseas example: Brisbane BRT







Overseas examples: Brisbane BRT





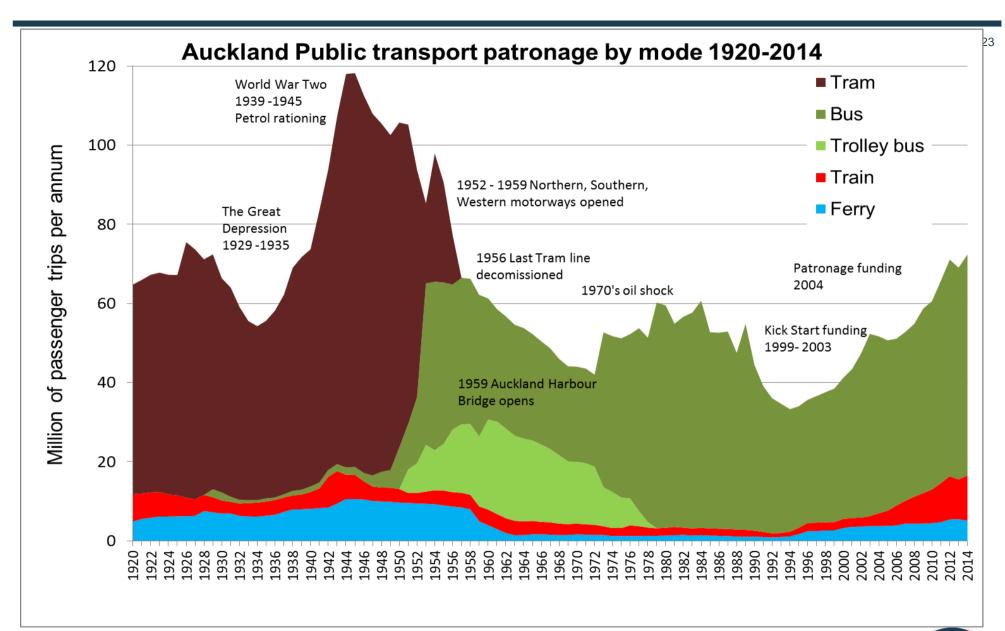


Overseas examples

Trams at the Bourke Street Mall











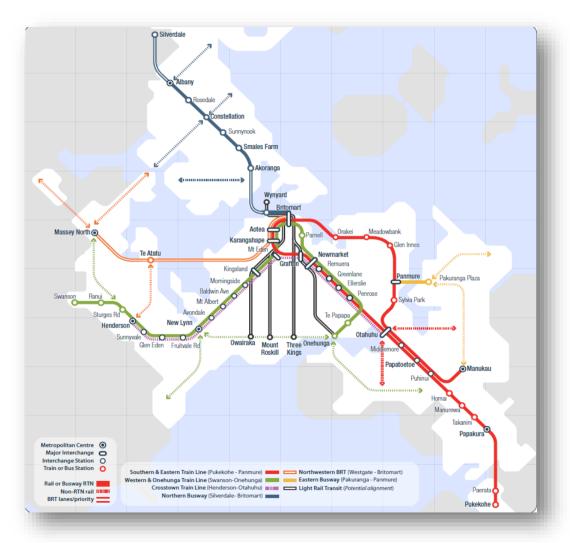
Commuter and light rail

Metro rail - CRL - links what exists

• A regional solution to optimise rail for an efficient transport network

Light rail - a new solution

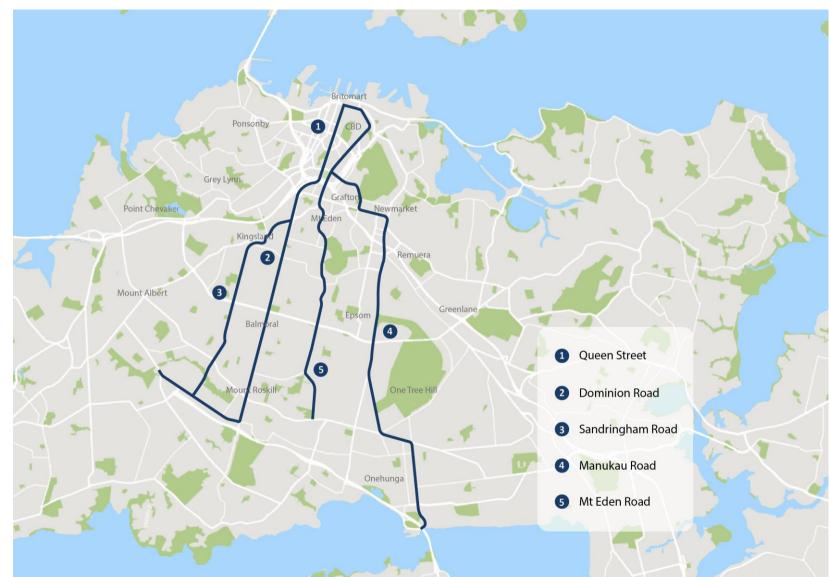
• Optimises road within the transport network







Staging







Planning Effective Delivery





Concept images







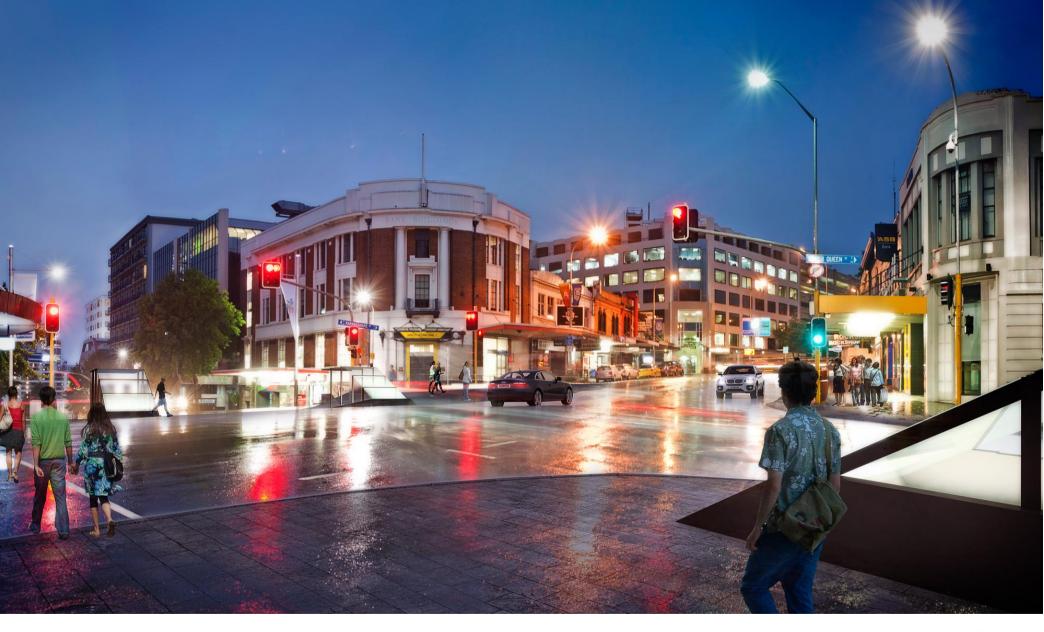












































to Waitakere **Delivering transport choices** to get you where you want, when you want.

r Vision

Platform 4