

# GRG DEEP DIVE

22<sup>ND</sup> JUNE 2021

---

---



Released under the Official Information Act 1982

# OUR VISION:

Let's Get Wellington Moving is seen as a cohesive and future-focussed partnership, listening to the community and supporting the programme vision:

“A great harbour city, accessible to all with attractive places shared streets and efficient local and regional journeys. To realise our vision we need to move more people with fewer vehicles.”

We will do this by delivering robust and effective communications and engagement, that's best practice in our profession, right-sized for each project, and stands up to scrutiny.



# Purpose of this Deep Dive

- Interactive session to bring the GRG up to speed on progress made, where the Programme has got to, and the key challenges and opportunities going forward.
- Agenda
  - Key changes and assumptions guiding direction of programme
  - Programme options and assessment process
  - Final key challenges and messages

Released under the Official Information Act 1982

# Current Status

- Objectives updated
- Programme Long to short list assessment completed
- Programme Short list to technically preferred option – still to be completed

Released under the Official Information Act 1982

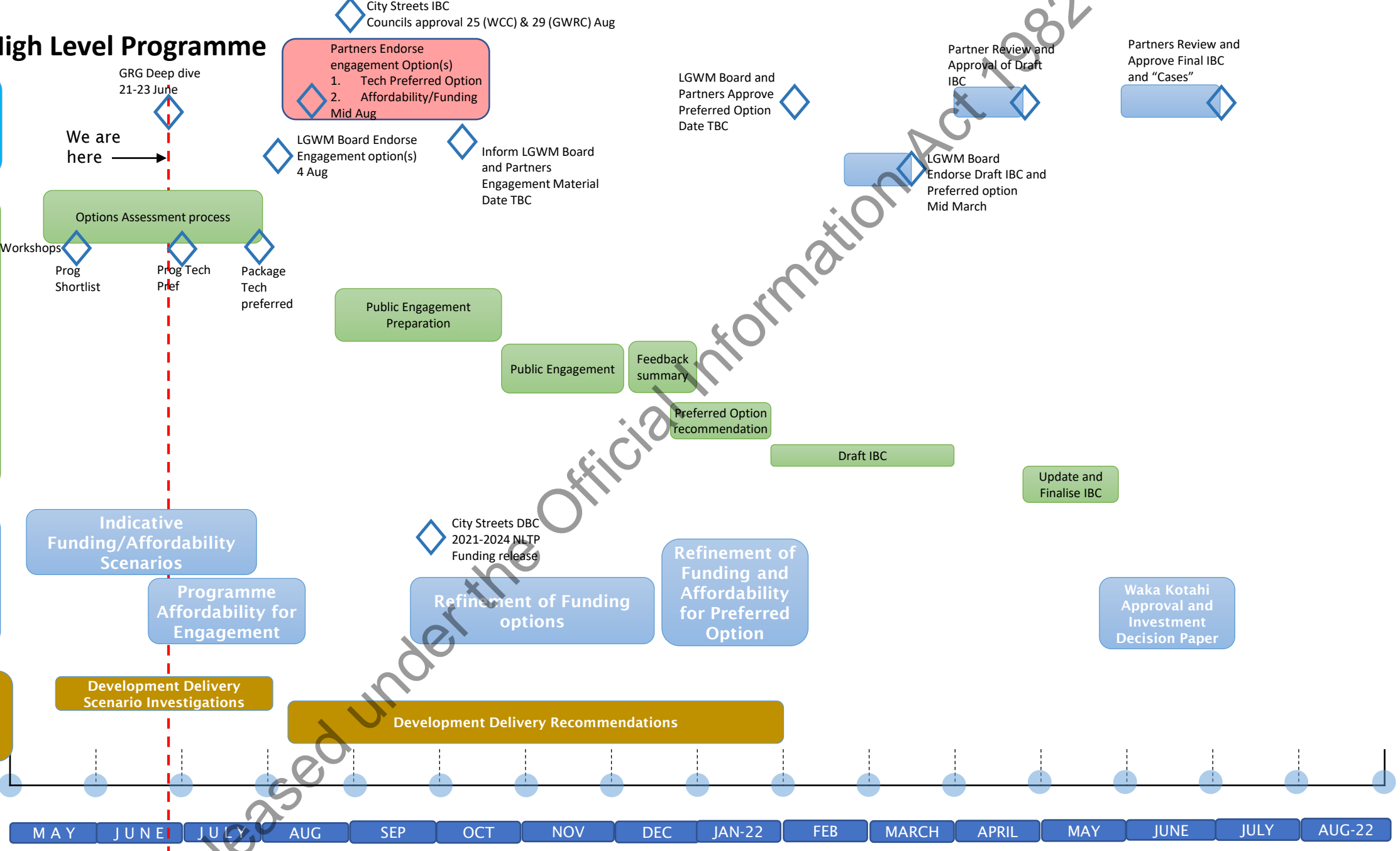
# MRT/SHI High Level Programme

## Governance

## MRT/SHI IBC

## Funding

## Urban Development



MAY JUNE JULY AUG SEP OCT NOV DEC JAN-22 FEB MARCH APRIL MAY JUNE JULY AUG-22

# Key assumptions

- Rail to the north
- Pricing
- Programme Multi modal and integrated approach

Released under the Official Information Act 1982

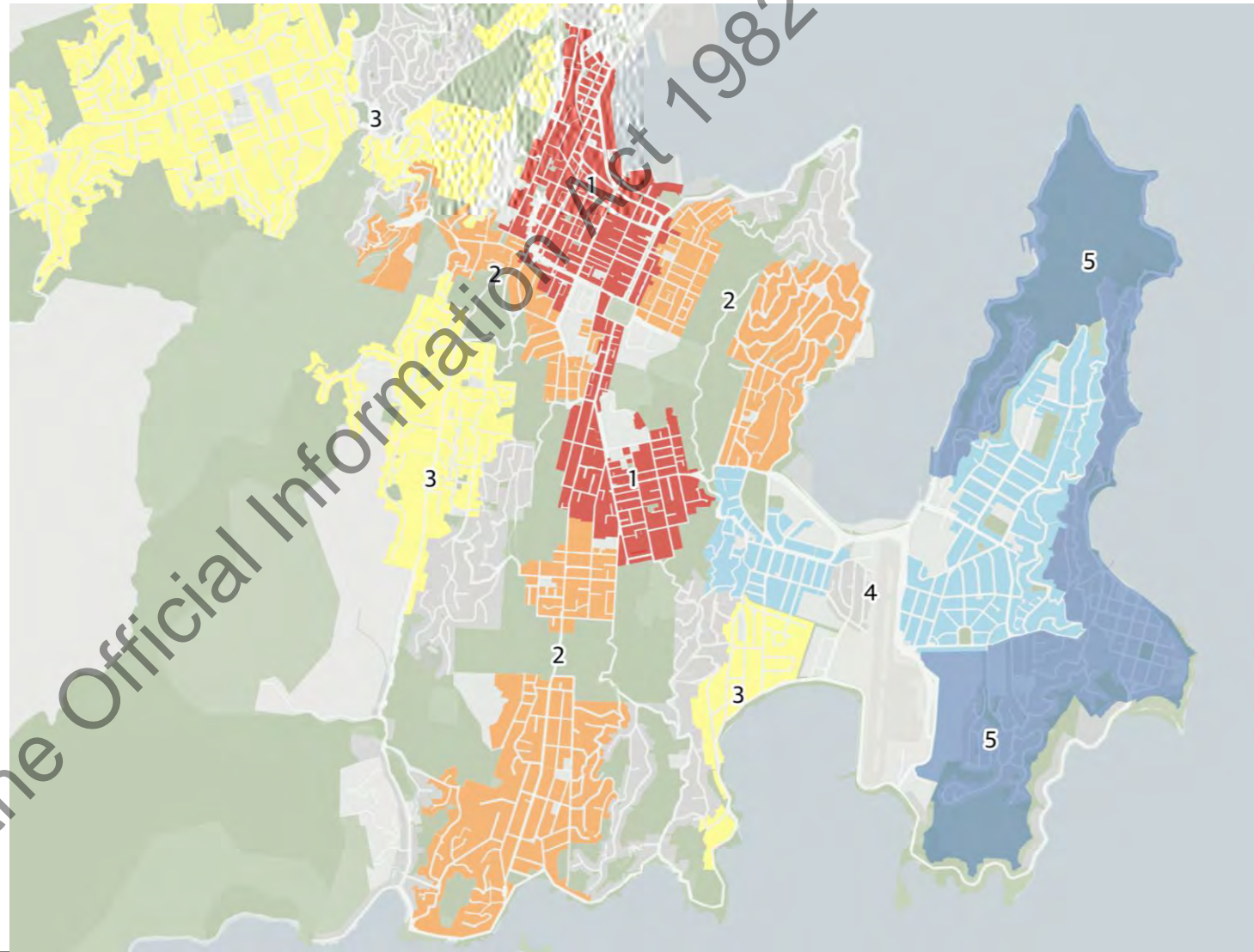
# Key Changes

- Planning for Growth
- Objectives – (Carbon, Mode shift, Development) – To enable city Transformation
- MRT Route Evidence so far – development focused

Released under the Official Information Act 1982

# Planning For Growth

- P4G proposes to prioritise in the Newtown, Berhampore and Island Bay corridor.
- Intensification in Kilbirnie and Miramar is longer-term.



<b>1: 'Go now'</b> Priority investment & upgrade areas (focus next 0-10 years)	<b>2: 'Go slower'</b> Longer-term investment & upgrade areas (10-20 years)	<b>3: 'Go slowest'</b> Long term investment (with a focus on maintenance, deferred upgrades) (20+ years)	<b>4: TBC areas</b> Investment scale & timing dependent on LGWM and natural hazard and resilience planning	<b>5: Opportunity sites</b> Other party/ Developer driven (likely 10-20 years)
Total pop (minus Tawa): 24,307-26,019	Total pop (incl Tawa, excl Karori): 16,085-22,898	Total pop (incl Karori): 10,219-14,822	Total pop: 2,314-3,596	Total pop (excl Strathmore Park): 4,170-6,970



# Objectives and weightings

## Revised LGWM

Following a joint workshop with the partners, the objectives were reviewed and weightings were recommended. The LGWM board has proposed changes (see table) to incorporate the workshop feedback:

Proposed objectives and weightings will be submitted to council partners for forma consideration as follows:

- 24 June WCC planning and environment committee
- 29 June GWRC

The Waka Kothi board will be updated on 23 June.

### PREVIOUS

Objectives

Descriptors

LIVEABILITY	ACCESS	REDUCED CAR RELIANCE	SAFETY	RESILIENCE
A transport system that:				
Enhances the liveability of the central city	Provides more efficient and reliable access for users	Reduces reliance on private vehicle travel	Improves safety for all users	Is adaptable to disruptions and future uncertainty



### PROPOSED

Objectives

Descriptors

Changes in blue

LIVEABILITY	ACCESS	CARBON EMISSIONS AND MODE SHIFT	SAFETY	RESILIENCE
Enhances urban amenity and enables urban development outcomes	Provides more efficient and reliable access for users	Reduces carbon emissions and increases mode shift by reducing reliance on private vehicles	Improves safety for all users	Is adaptable to disruptions and future uncertainty
20	15	40	15	10

# Defining Mass Rapid Transit

## The **Government Policy Statement for Land Transport 2021**

defines **Rapid Transit** as:

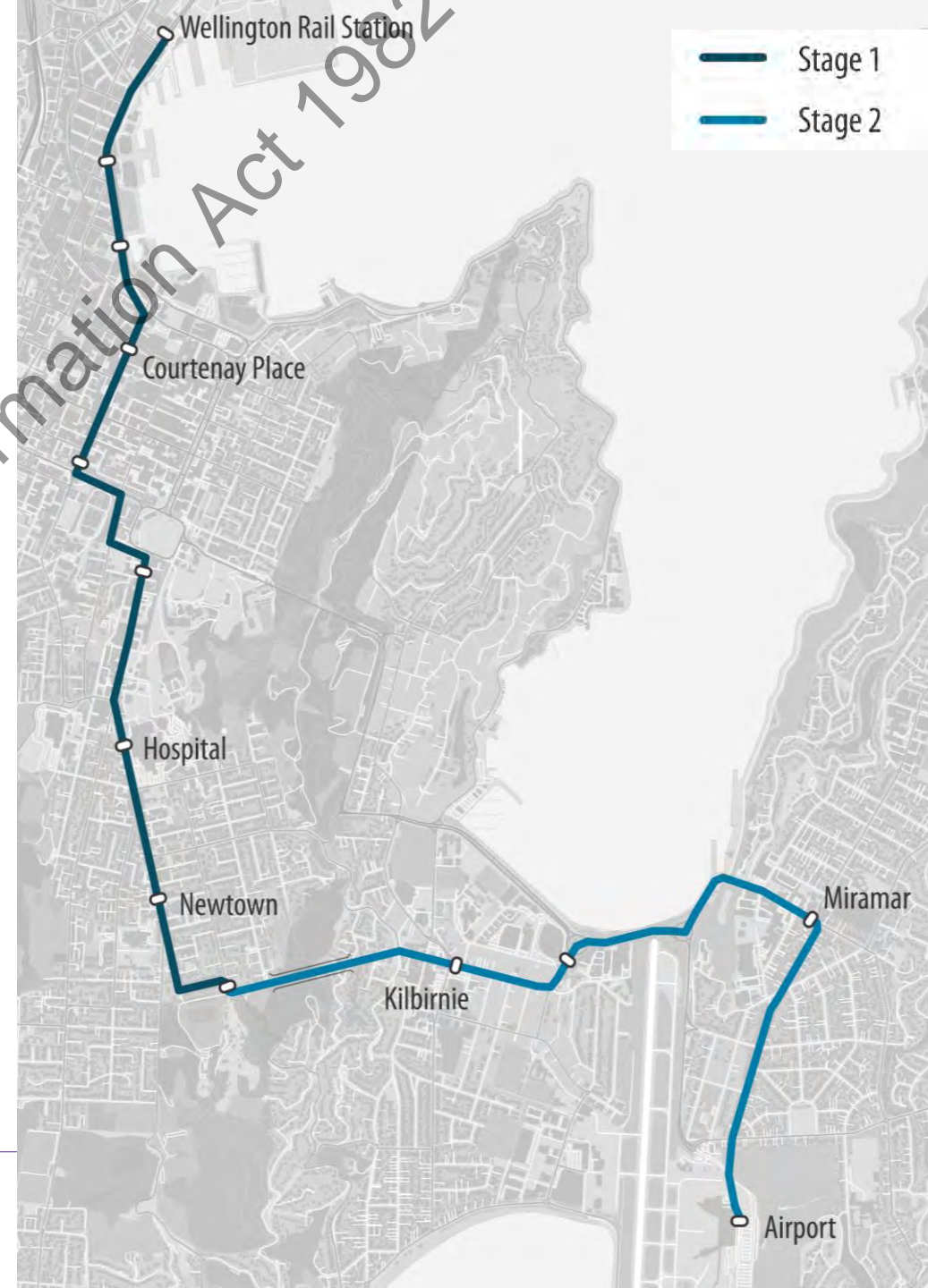
*A quick, frequent, reliable and high-capacity public transport service that operates on a permanent route (road or rail) that is largely separated from other traffic.*

# Scope of the Mass Rapid Transit IBC

- Develop an MRT system that contributes to the wider objectives of the LGWM programme
  - Review the PBC Baseline route as a starting point for business case options development
  - Develop route options and confirm a recommended route(s)
  - Recommend an MRT mode or modes compatible with the recommended routes.
- Demonstrate the viability of MRT with respect to cost, consentability, implementability and risk.
- Demonstrate the interface with the wider transport system and Wellington urban fabric.
- Present a scope and management case for the next steps in the investigation, delivery and staging.
- Provide Project Partners with information needed to inform LTP, RLTP and NLTP processes.

# PBC Baseline Route

- The MRT Baseline Route was detailed in the Programme Business Case.
- The 10.2 km route was presented as two potential stages:
  - Stage 1: Wellington Rail Station to Newtown travelling via the waterfront quays through the CBD, Taranaki Street, Memorial Park, Tasman Street, Adelaide Road and Riddiford Street.
  - Stage 2: Newtown to Wellington Airport travelling via a new tunnel through Mt Albert to Kilbirnie and Miramar.



# Baseline Route Observations

## Route directness

- The Baseline route adds more than 20% to travel distances.

## Operating speed

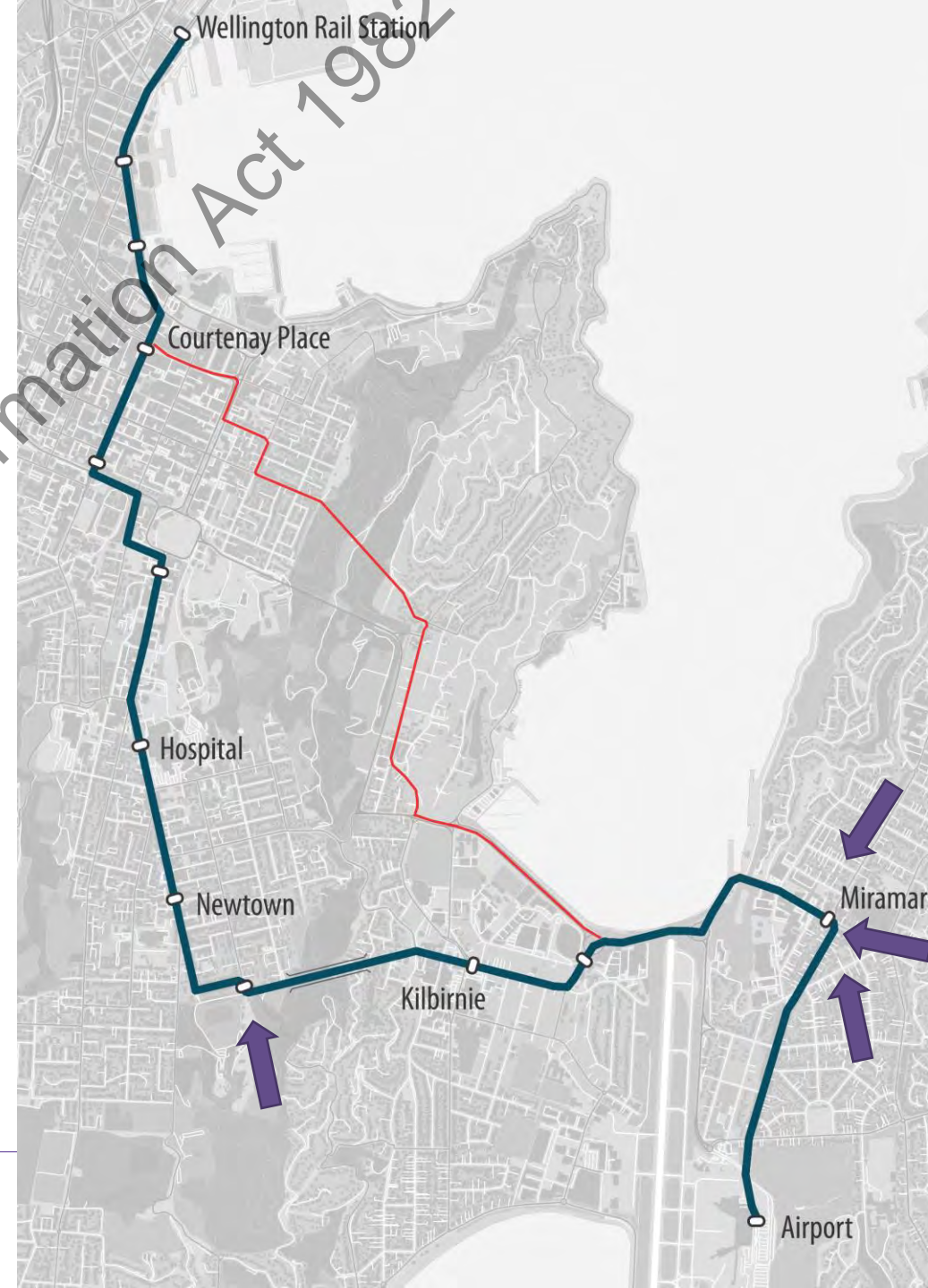
- An operating speed of 30km/h for the service was previously assumed.
- A speed of 20-22 km/h is more likely.

## Requirement to transfer

- Baseline route planning assumed more than 50% of customers from Miramar would transfer from local feeder buses.

## Ability to deliver network integration benefits

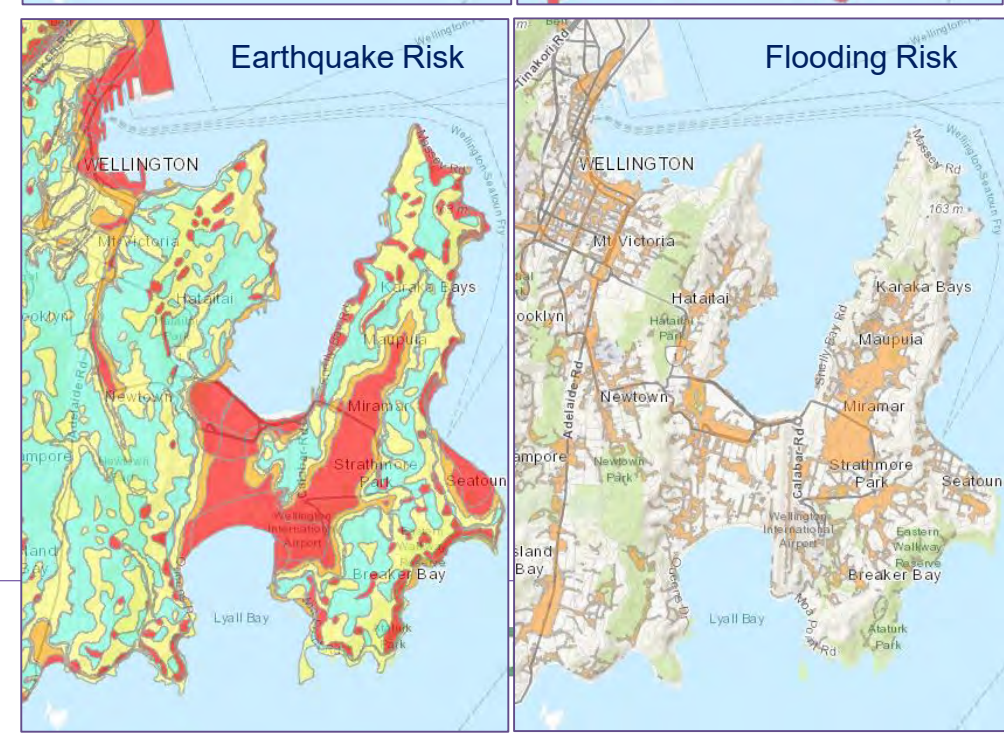
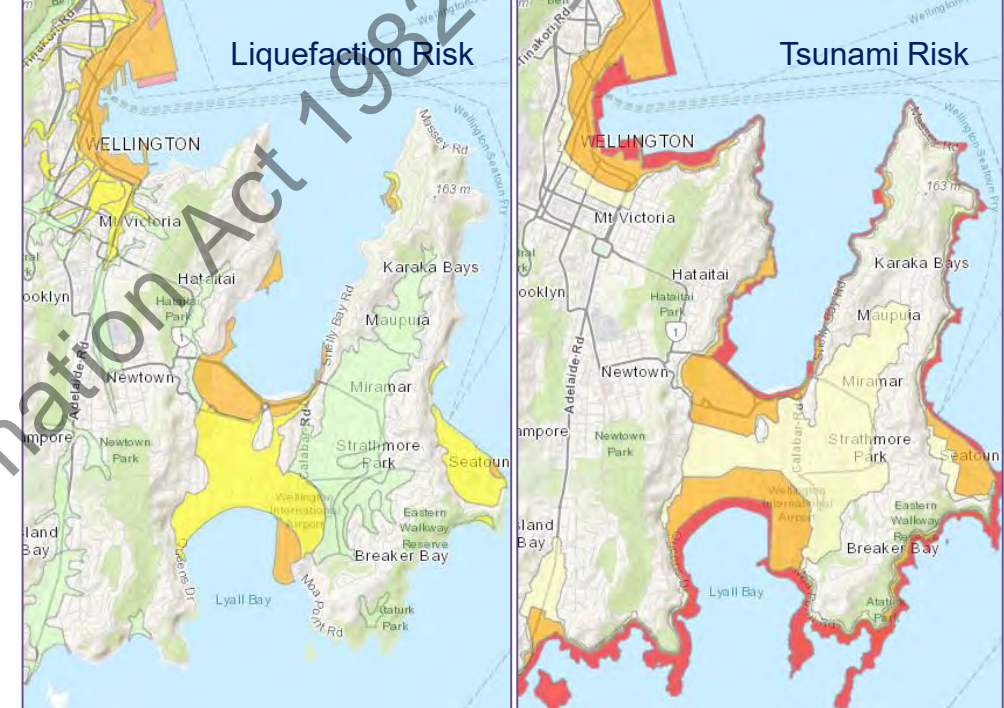
- The Baseline route overlaps several existing, frequent routes, but doesn't completely replace any of them.



# Baseline Route Observations

## Resilience & Urban Development Potential

- MRT needs to support and encourage urban development along the routes, and around stations.
- Resilience assessment highlights Kilbirnie as a resilience 'hot spot' with parts of the suburb potentially subject to ground shaking, liquefaction, flooding, sea level rise and tsunami inundation.
- Other parts of the city also experience these risks, including the Miramar peninsula.



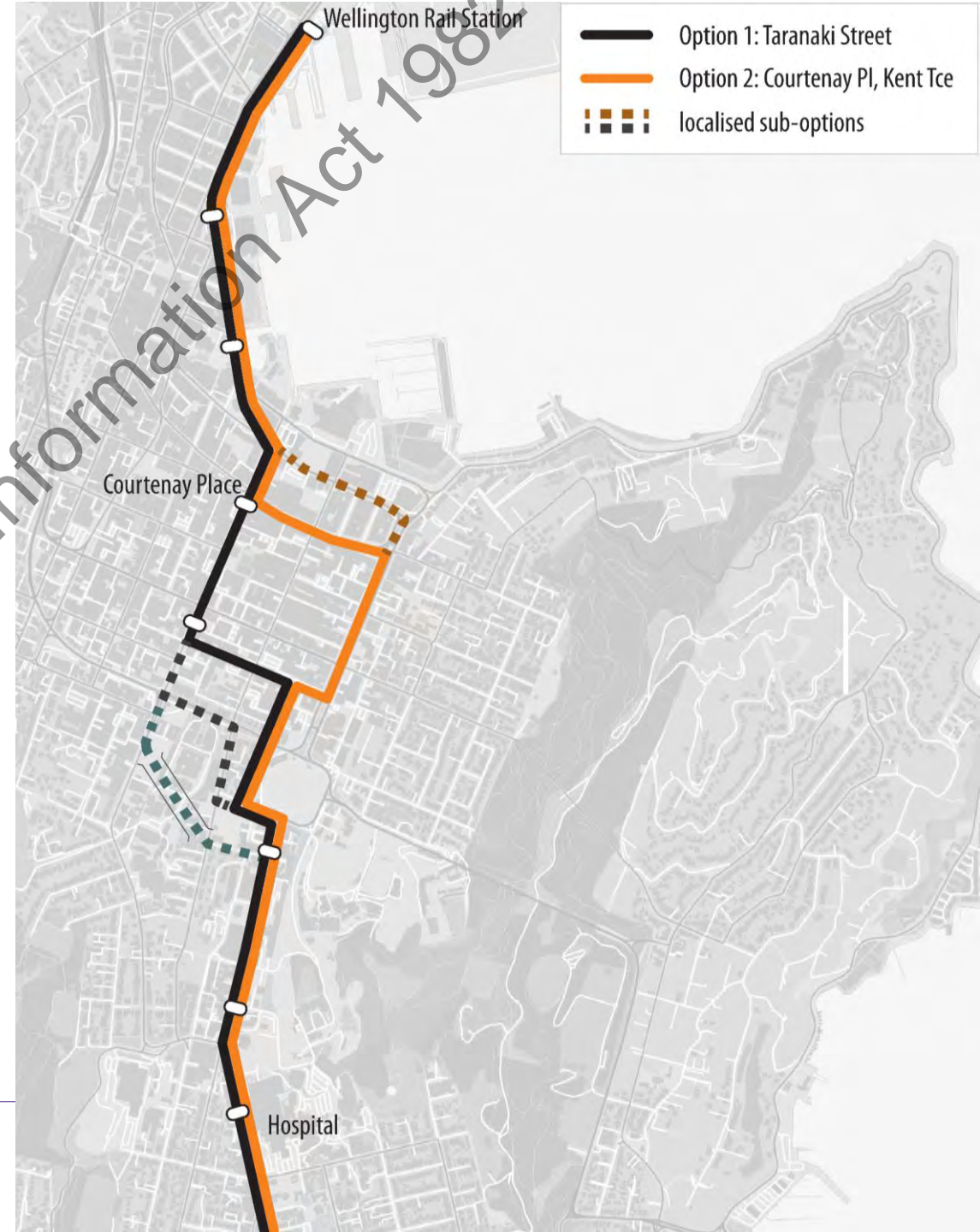
Released under the Official Information Act 1982

# MRT System Options Development and Assessment

- Mass Rapid Transit is being planned as a system for the whole city.
- Planning has focused on regionally important destinations as recognised in the PBC Baseline route, in three sections:
  - Core Route: Wellington Railway Station to the Hospital & Newtown
  - Eastern Route to the Miramar peninsula, via Kilbirnie, serving the Airport and eastern suburbs destinations
  - Southern Route to Island Bay
- The design of the MRT system will be future-proofed, to enable future extension to the west (Karori) and/or to the northern suburbs if desired in the future.

# Route Options in the Core

- The Core route is generally well supported.
- It provides a logical and relatively direct connection between the city centre and Newtown, including Wellington Hospital.
- Two main options exist: via Taranaki Street and via Kent Terrace.
- Sub-options have been explored to assess local constraints and opportunities.

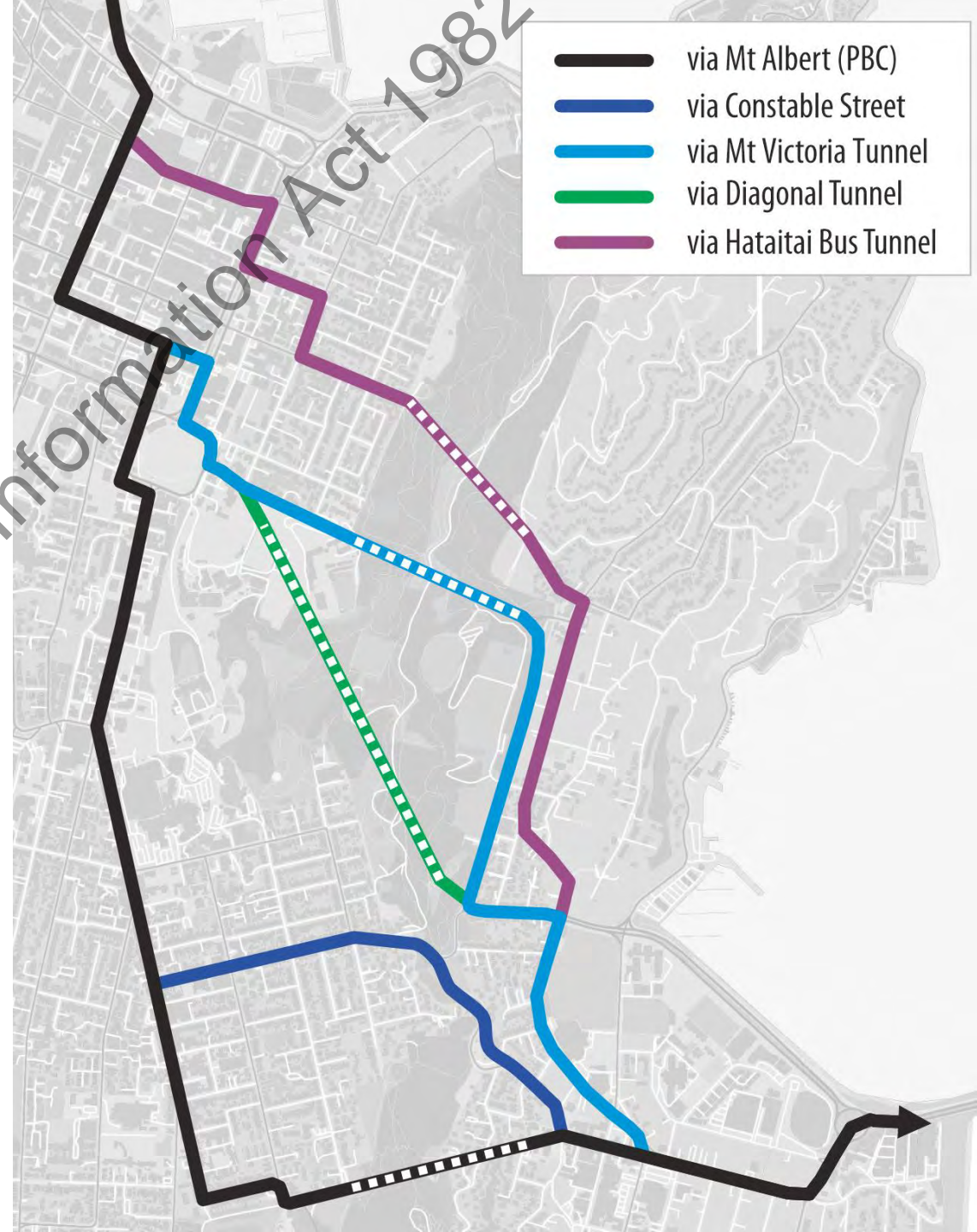




# Route Options to the East

Five route options to the east have been considered.

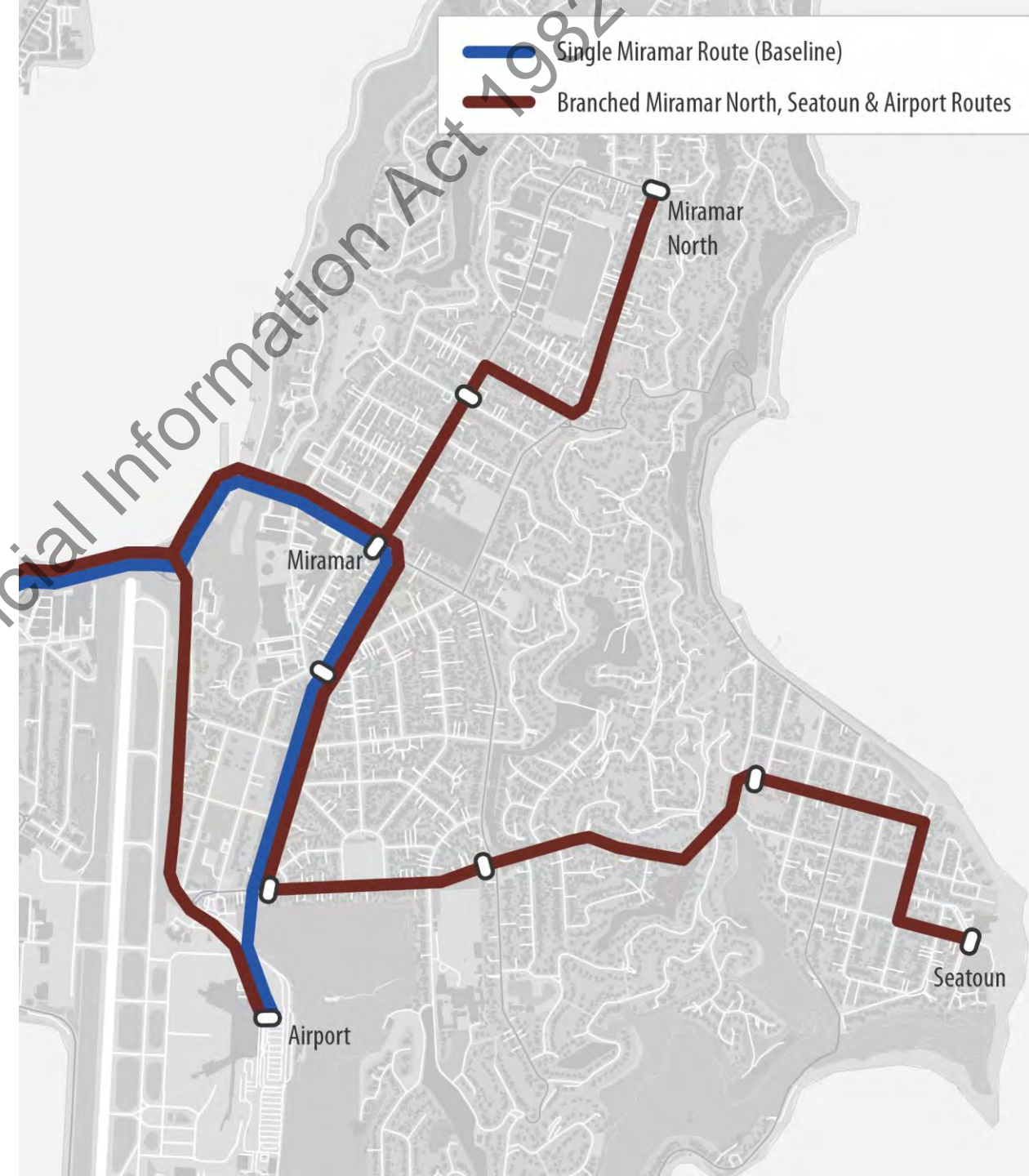
1. PBC Baseline route requires a new Mt Albert tunnel (~\$250M).
2. Constable Street could be widened and Crawford Street realigned, but significant impact on property and Town Belt.
3. Mt Victoria tunnel, either duplicated or converted, depending on SHI options.
4. Within new Diagonal Tunnel, located in dedicated or HOV lanes.
5. Existing Hataitai Bus Tunnel and approach roads cannot be upgraded to MRT standard. But some improvements can be achieved in Moxham Avenue to improve bus reliability.



# Route Options at Miramar

Options on the Miramar peninsula considered:

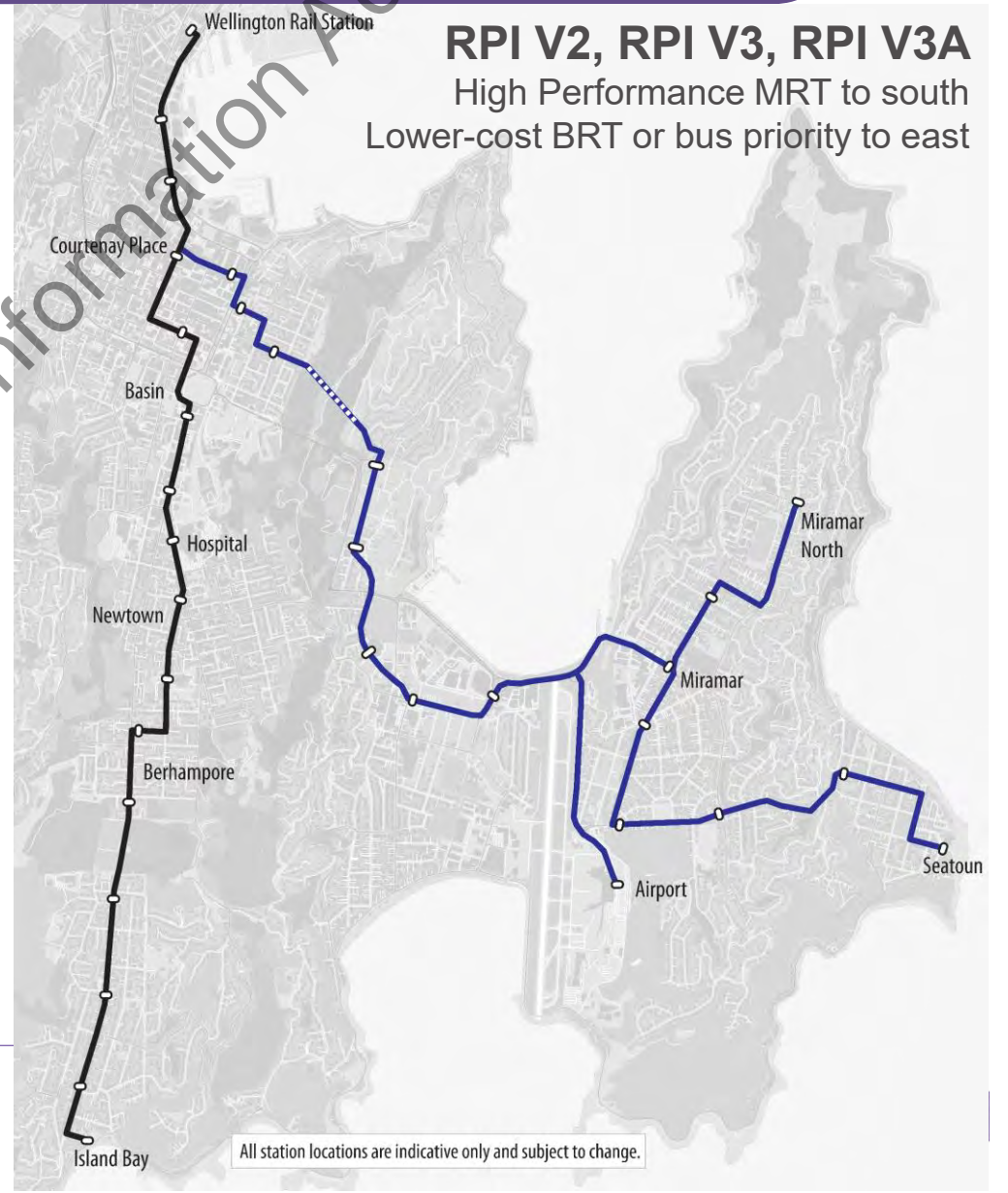
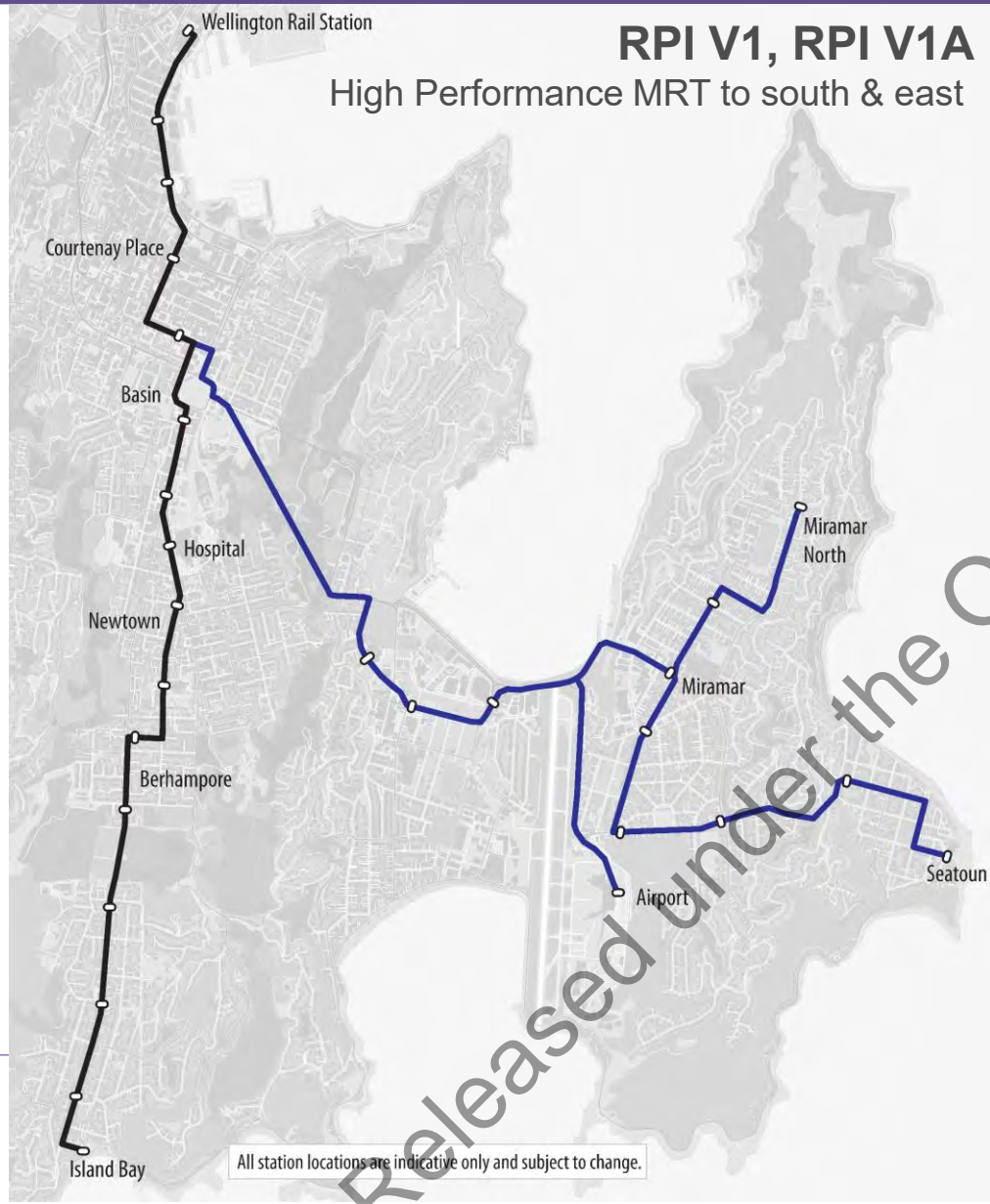
- The PBC Baseline route, via Miramar town centre.
- Large requirement for customer transfer.
- Branched route to Airport, Miramar and Seatoun.
- Customer-centric approach.
- Prioritises single-seat journeys.
- Airport service tailored to the needs of airport customers.



## Route Option to Island Bay

- A route to Island Bay was developed to replicate and replace the existing successful Route 1 bus service.
- This urban footprint is within 500m of the corridor allowing the entire catchment can be served with a single route.
- Fewer resilience issues within the corridor allow urban intensification to be focused around station locations.

# MRT Options Included in Programme Short List



# Programme Options – Common features

- Short term programme:
  - Golden Mile
  - Thorndon Quay / Hutt Road improvements
  - Central City pedestrian improvements – minor safety improvements at ~20 intersections around the city
  - Cobham crossing and safer speeds – signalised crossing of Cobham Drive adjacent to ASB Sports centre and reduced speed limits on SH1 (Ruahine Street and Cobham Drive).
- City Streets (will vary by programme as noted) – see next slide for projects
- Travel Demand Management:
  - Travel behaviour change
  - Pricing (will be a sensitivity test for all programmes)

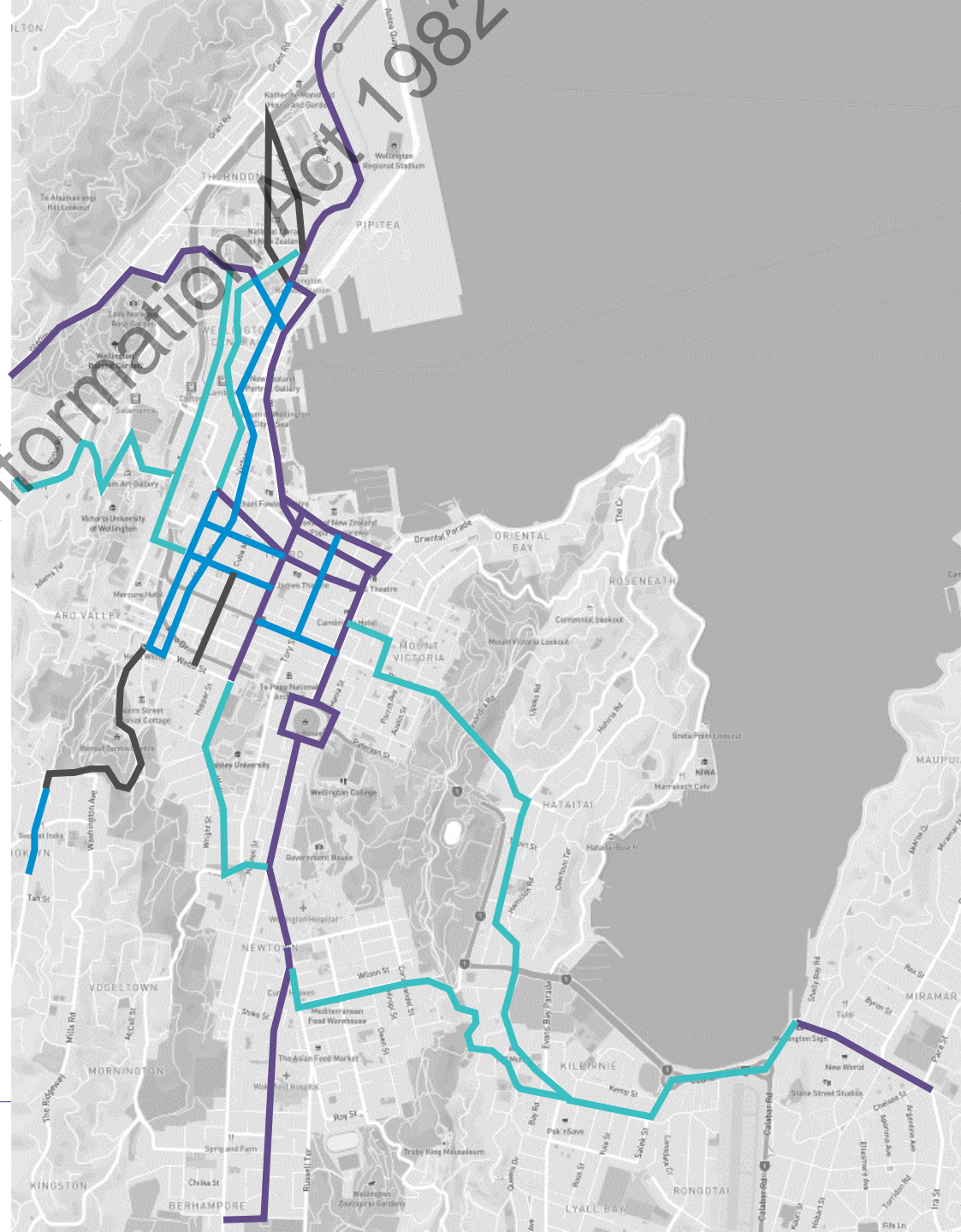
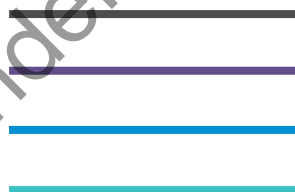
# City Streets + Short Term Programme

Projects included but not shown:

- Newlands
- Karori tunnel to Karori
- Ngauranga Gorge to Johnsonville
- Bus Stop Rationalisation Strategy
- Northern CBD – Network Operating Plan – Feasibility Testing
- City Streets Corridor – Tactical Improvements




































## Key

- Walking, amenity and safety
- Cycle + bus + other
- Cycle + other
- Bus + other


















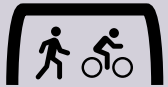









# LGWM Programme Long List

All options to be considered with and without congestion charging, shows key differences only  
 Items in blue have not been developed to same level of detail under IBC process to date

Programme	PT south	PT east	Basin	Mt Vic	Te Aro & Terrace Tunnel	Long Tunnel
RPI	Airport via Newtown 			 	 	
IP	Airport via Newtown 			 		
RPI V1	Island Bay 	Miramar 		 	 	
RPI V1A	Island Bay 	Miramar 		 		
RPI V2	Island Bay 	Miramar 				
RPI V3	Island Bay 	Miramar 				
RPI V3A	Island Bay 	Miramar 				

Released under the Official Information Act 2000


























# Programme Short List

Programme	PT south	PT east	Basin	Mt Vic	Te Aro & Terrace Tunnel	Long Tunnel
RPI V1	Island Bay 	Miramar 		 	 	
RPI V1A	Island Bay 	Miramar 		 		
RPI V2	Island Bay 	Miramar 				
RPI V3	Island Bay 	Miramar 				
RPI V3A	Island Bay 	Miramar 				

All options to be considered with and without congestion charging. Table summarises key differences only  
**Items in blue were not developed during the previous IBC process – currently being worked on for this short list assessment processes**



# Programme Short List

Programme	PT south	PT east	Basin	Mt Vic	Te Aro & Terrace Tunnel	Long Tunnel
RPI V1	Island Bay 	Miramar 		 	 	
RPI V1A	Island Bay 	Miramar 		 		
RPI V2	Island Bay 	Miramar 				
RPI V3	Island Bay 	Miramar 				
RPI V3A	Island Bay 	Miramar 				

All options to be considered with and without congestion charging. Table summarises key differences only  
**Items in blue have not been developed to same level of detail in the original IBC process – currently being worked on for this short list assessment processes**



Released under the Official Information Act 1982
















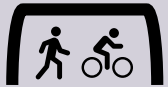









Released under the Official Information Act 1982

Released under the Official Information Act 1982

Released under the Official Information Act 1982

Released under the Official Information Act 1982

# Programme Short List

Programme	PT south	PT east	Basin	Mt Vic	Te Aro & Terrace Tunnel	Long Tunnel
RPI V1	Island Bay 	Miramar 		 	 	
RPI V1A	Island Bay 	Miramar 		 		
RPI V2	Island Bay 	Miramar 				
RPI V3	Island Bay 	Miramar 				
RPI V3A	Island Bay 	Miramar 				

All options to be considered with and without congestion charging. Table summarises key differences only  
**Items in blue have not been developed to same level of detail in the original IBC process – currently being worked on for this short list assessment processes**



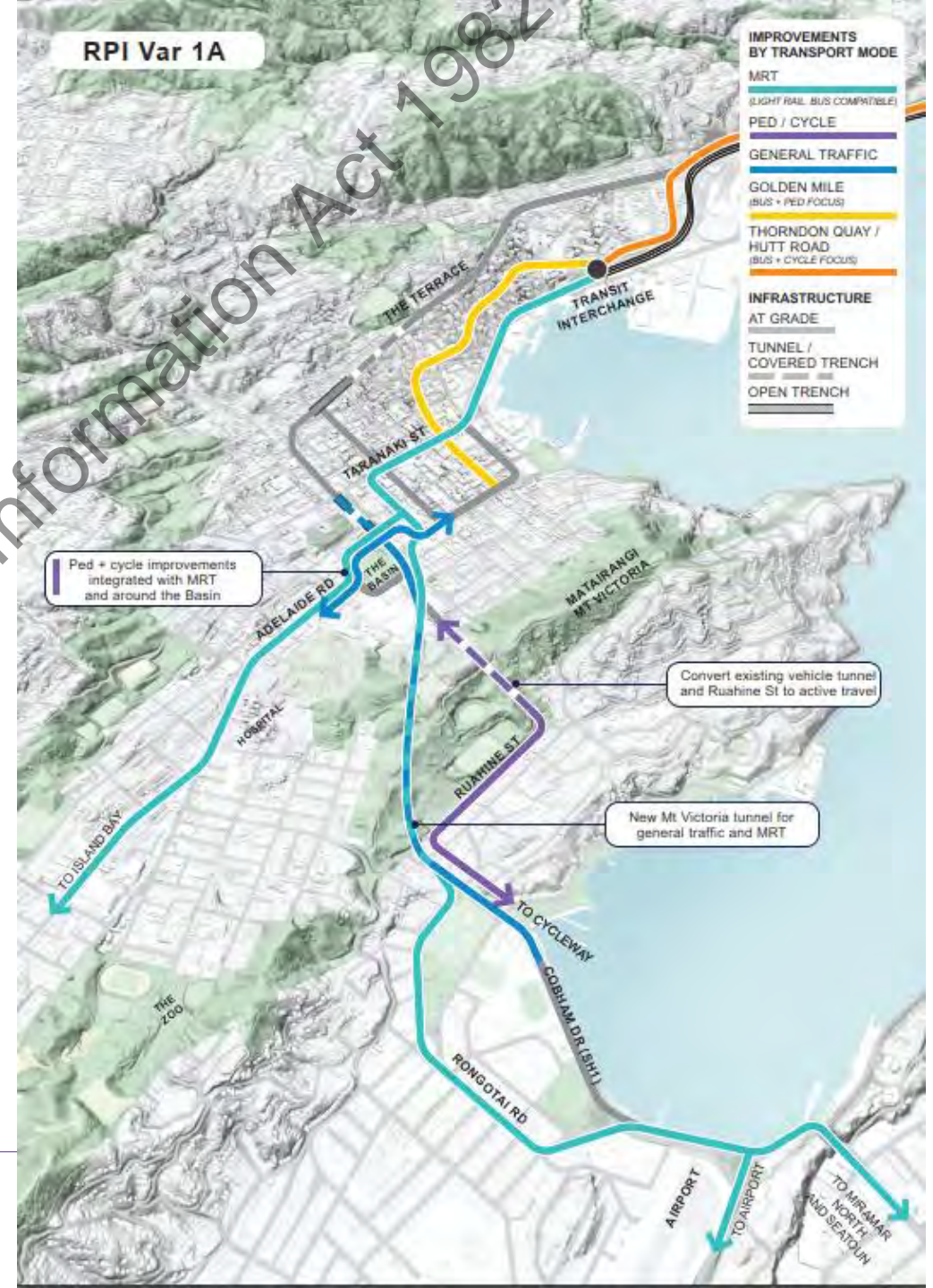
# RPI Variant 1 A

Other aspects not shown visually here:













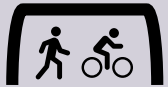









- Bus integration with MRT route
- City Streets
- Travel behaviour change
- Parking levy / congestion charging

City Streets projects delivered via MRT:

- Waterfront/Quays Route
- Taranaki
- Basin to Newtown
- Kilbirnie to Miramar Cutting
- Newtown to Berhampore
- Miramar town centre



# Programme Short List

Programme	PT south	PT east	Basin	Mt Vic	Te Aro & Terrace Tunnel	Long Tunnel
RPI V1	Island Bay 	Miramar 				
RPI V1A	Island Bay 	Miramar 				
RPI V2	Island Bay 	Miramar 				
RPI V3	Island Bay 	Miramar 				
RPI V3A	Island Bay 	Miramar 				

All options to be considered with and without congestion charging. Table summarises key differences only  
**Items in blue have not been developed to same level of detail in the original IBC process – currently being worked on for this short list assessment processes**

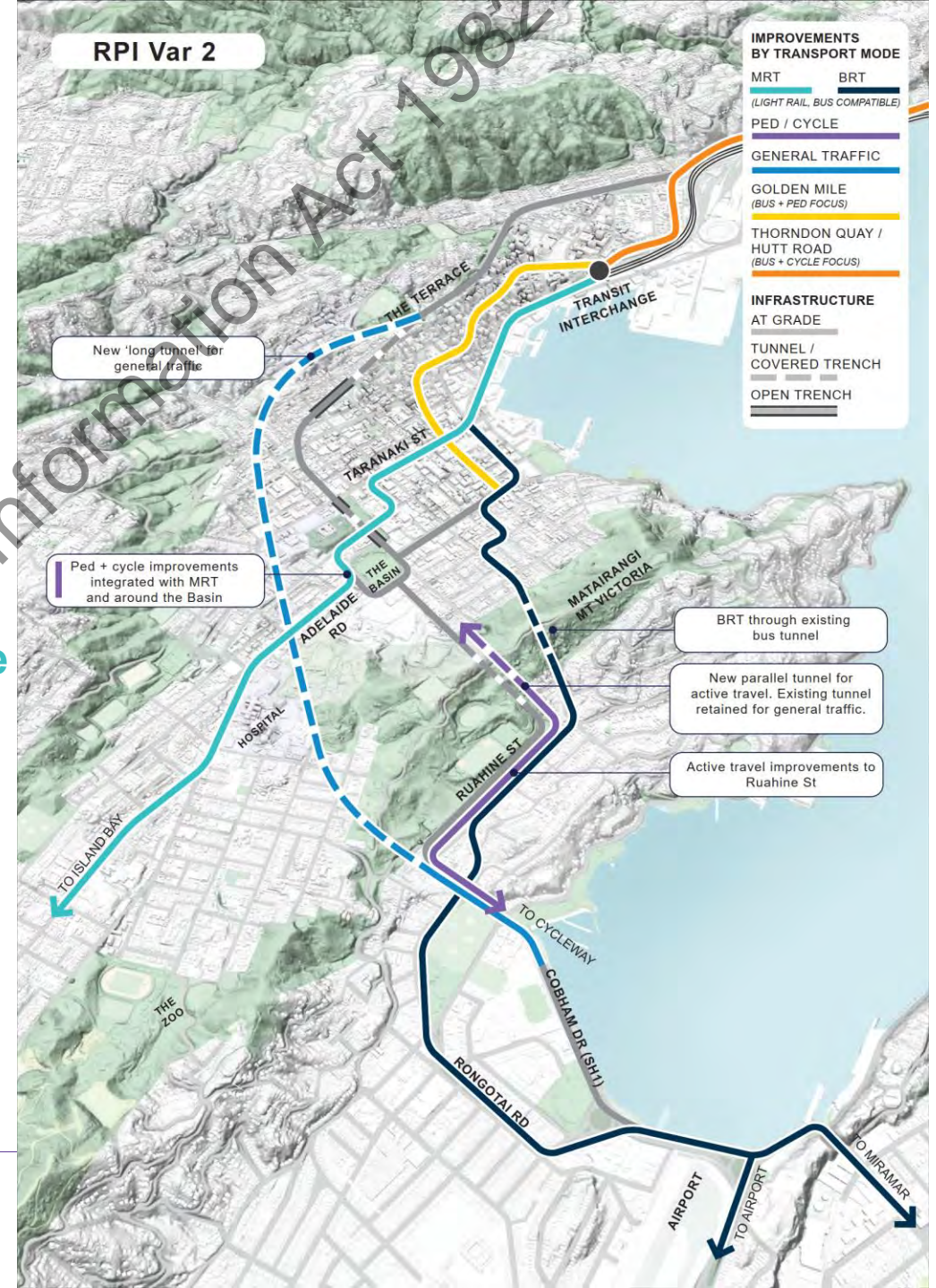
# RPI Variant 2

Other aspects not shown visually here:

- Bus integration with MRT route
- City Streets
- Travel behaviour change
- Parking levy / congestion charging
- Basin improvements (pre and post long tunnel)
- **Enhanced City Streets in Te Aro to reclaim road space**
















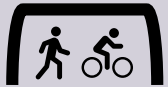









City Streets projects delivered via MRT:

- Waterfront/Quays Route
- Taranaki
- Basin to Newtown
- Newtown to Berhampore



Released under the Official Information Act 1982

# Programme Short List

Programme	PT south	PT east	Basin	Mt Vic	Te Aro & Terrace Tunnel	Long Tunnel
RPI V1	Island Bay 	Miramar 		 	 	
RPI V1A	Island Bay 	Miramar 		 		
RPI V2	Island Bay 	Miramar 				
RPI V3	Island Bay 	Miramar 				
RPI V3A	Island Bay 	Miramar 				

All options to be considered with and without congestion charging. Table summarises key differences only  
**Items in blue have not been developed to same level of detail in the original IBC process – currently being worked on for this short list assessment processes**

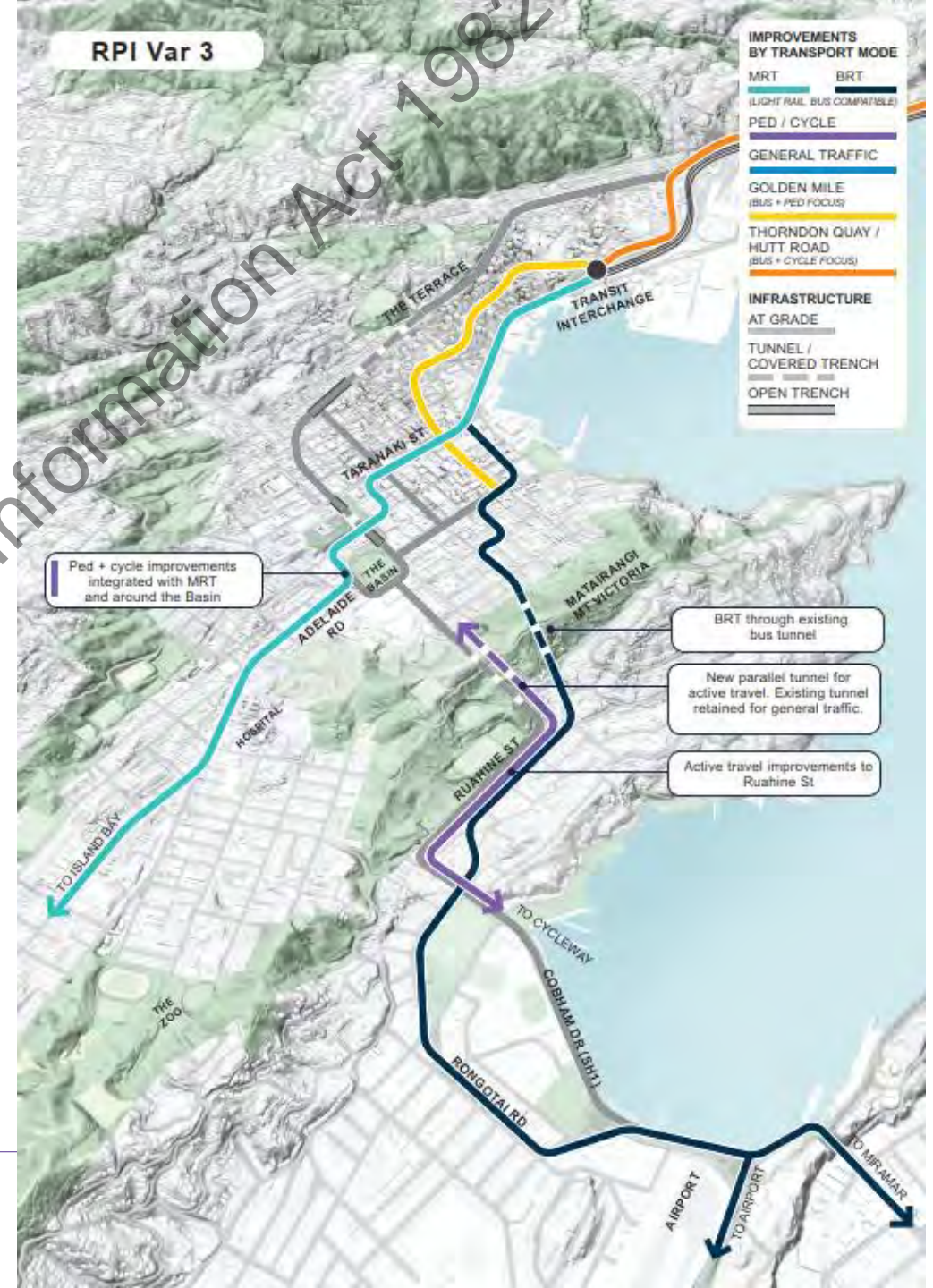
# RPI Variant 3

Other aspects not shown visually here:

























- Bus integration with MRT route
- City Streets
- Travel behaviour change
- Parking levy / congestion charging
- Basin improvements

City Streets projects delivered via MRT:

- Waterfront/Quays Route
- Taranaki
- Basin to Newtown
- Newtown to Berhampore



# Programme Short List

Programme	PT south	PT east	Basin	Mt Vic	Te Aro & Terrace Tunnel	Long Tunnel
RPI V1	Island Bay 	Miramar 		 		
RPI V1A	Island Bay 	Miramar 		 		
RPI V2	Island Bay 	Miramar 				
RPI V3	Island Bay 	Miramar 				
RPI V3A	Island Bay 	Miramar 				

All options to be considered with and without congestion charging. Table summarises key differences only  
**Items in blue have not been developed to same level of detail in the original IBC process – currently being worked on for this short list assessment processes**

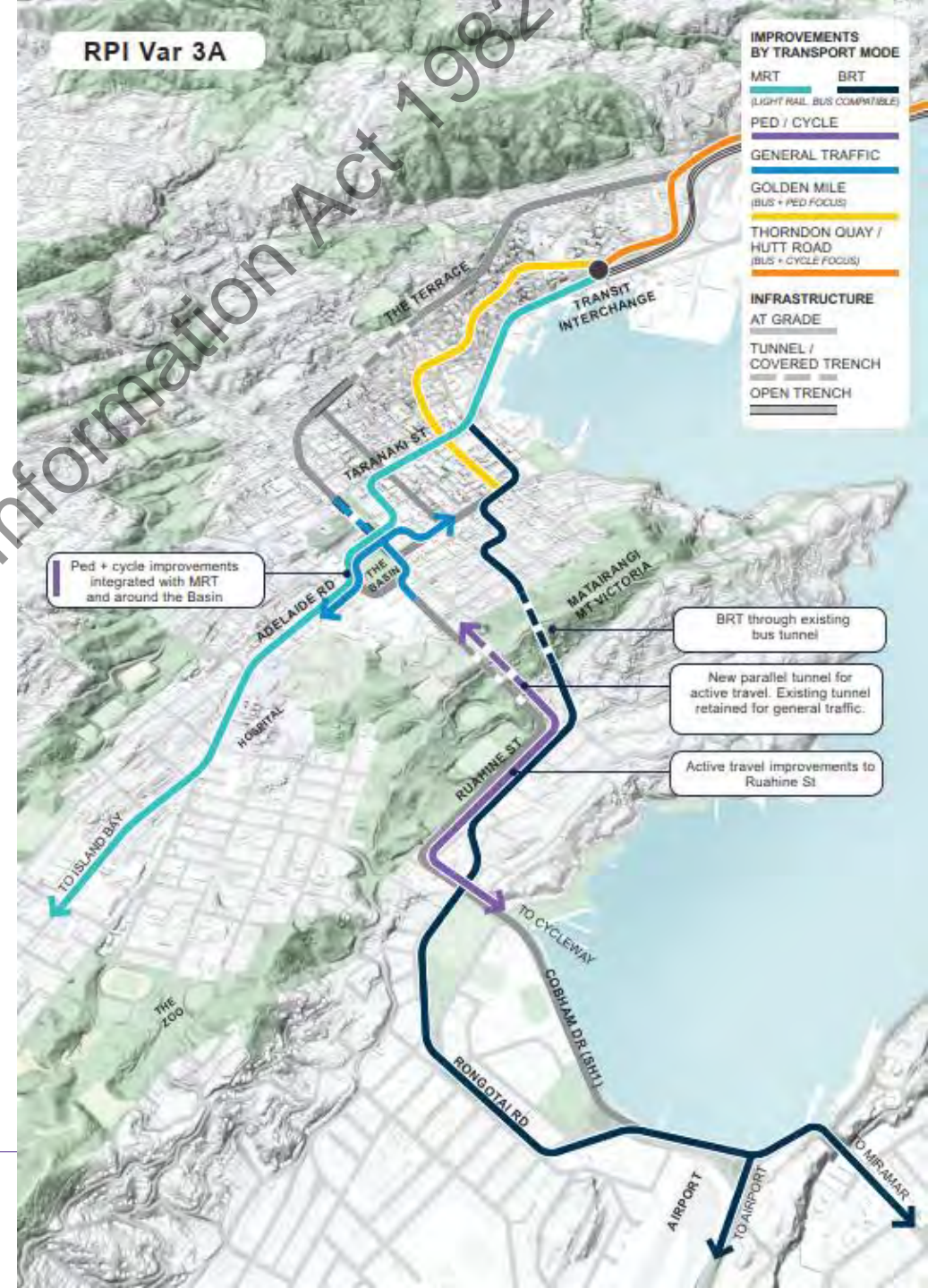
# RPI Variant 3A

Other aspects not shown visually here:

- Bus integration with MRT route
- City Streets
- Travel behaviour change
- Parking levy / congestion charging
- Basin improvements

City Streets projects delivered via MRT:

- Waterfront/Quays Route
- Taranaki
- Basin to Newtown
- Newtown to Berhampore





Released under the Official Information Act 1982

Released under the Official Information Act 1982

Released under the Official Information Act 1982

Released under the Official Information Act 1982



Articulated Bus 18m



Bi-Articulated Bus 24m



ART 'Trackless Tram' 32m



Light Rail 33m



Irizar ieTram 18m

Released under the CC BY 4.0 license



Van Hool Exquicity 24m



Released under the Official Information Act 1982

Van Hool Exquicity 24m





**CRRC ART 'Trackless Tram' 32m**

# CAF Urbos 33m LRT Vehicle



# City Streets: first tranche

## Completing the City Streets IBC

**June** Draft IBC completed

**July** Internal and external reviews

**August** Councils approve

**September** Waka Kotahi approve

**October** Funding released for DBC's

## Key considerations

Prioritisation in the recommended list

Level of service gaps data:



Conflict with the mass transit route

Confidence in the achievability of the project

## What does it mean to be in the first tranche?

Develop detailed business cases (DBC's)

Set up project teams

Deep dive into location specific problems and opportunities

Options and concepts for changes, including preferred option

Community engagement

Partner approval, towards construction

If approved, shovels in the ground within 3-5 years

# First tranche

Bowen Street

City north/south cycle route and walking connections

Victoria/Willis/Dixon Street

Taranaki Street

Wallace/John Street

Basin Reserve to Newtown

Newtown to Island Bay

Targeted bus improvements  
(with a Karori focus)

Targeted improvements  
(with a safety and cycling focus)

Johnsonville triangle

Ngauranga Gorge

Kent/Cambridge Terrace

City to Kilbirnie

Miramar town centre

Kilbirnie to Miramar

Immediate

Dependant on mass transit route

DRAFT for discussion

# BOX HEADING

- Box body text



## H3 Subheading

### H3 Subheading

- Figure text: que niminct uritasit quissunt inis cum eatiunt la nosa.

### H3 Subheading

- Figure text: que niminct uritasit quissunt inis cum eatiunt la nosa

### H3 Subheading

- Figure text: que niminct uritasit quissunt inis cum eatiunt la nosa

### H3 Subheading

- Figure text: que niminct uritasit quissunt inis cum eatiunt la nosa

### H3 Subheading

- Figure text: que niminct uritasit quissunt inis cum eatiunt la nosa

### H3 Subheading

- Figure text: que niminct uritasit quissunt inis cum eatiunt la nosa

- One of the world's most liveable cities
- One of NZ's best tourism destinations
- Regional engine for the economy and jobs

- One of the world's most liveable cities
- One of NZ's best tourism destinations
- Regional engine for the economy and jobs

- One of the world's most liveable cities
- One of NZ's best tourism destinations
- Regional engine for the economy and jobs

- One of the world's most liveable cities
- One of NZ's best tourism destinations
- Regional engine for the economy and jobs



### H3 Subheading



### H3 Subheading



Released under the Official Information Act 1982





Released under the Official Information Act 1982

Let's GET  
Wellington  
MOVING



Released under the Official Information Act 1982