

Mt Victoria Tunnel Options

Option	Existing Mt Victoria Tunnel	New Diagonal 4-lane Tunnel	New Parallel Combined MRT and Active Modes Tunnel	New Parallel Active Modes Tunnel	Existing Hataitai Bus Tunnel
Option i - Diagonal	Converted for use by active modes only 	2 lanes for general traffic 2 lanes for bus priority 	-	-	No change: Local bus services only
Option i – Parallel	2 lanes for general traffic. Removal of active modes facility.	-	2 lanes for bus priority 2 lanes for active modes 	-	No change: Local bus services only
Option ii – Diagonal	Converted for use by active modes only 	2 lanes for general traffic 2 lanes for BRT 	-	-	No change: Local bus services only
Option ii – Parallel	2 lanes for general traffic. Removal of active modes facility.	-	2 lanes for BRT 2 lanes for active modes 	-	No change: Local bus services only
Option iii	2 lanes for general traffic. Removal of active modes facility	-	-	2 lanes for active modes. 	No change: Local and eastern suburbs bus services
Option iv	2 lanes for general traffic. Removal of active modes facility	-	-	2 lanes for active modes. 	No change: Local and eastern suburbs bus services

The Mt Victoria Tunnel options were derived to facilitate mass rapid transit options and are explained further below, as high-level concepts, with further detail to be developed as investigations continue.



New diagonal tunnel

A new tunnel would connect Paterson St (the entrance of which is proposed to the west of the existing tunnel) with Wellington Road (which connects to Cobham Drive) on a 'diagonal' cutting the corner off the existing route of the Mount Victoria Tunnel and Ruahine Street.

One tunnel is provided for each direction of travel. Both tunnels would have two lanes, one lane in each direction would be dedicated to BRT or Bus priority, the other for general traffic. Cross-tunnel connections would be provided between the two new tunnels for emergency egress but pedestrians and people on bikes and other micro-mobility devices would not be permitted. The new tunnels are approximately 1.2km, 500m longer than the existing Mt Victoria Tunnel (700m). Each of the tunnels would have a slightly larger cross-section when compared with the existing tunnel to accommodate modern safety requirements.



The new diagonal tunnel would also include reconfigured intersections along Wellington Road at Kilbirnie Crescent / Hamilton Road (to facilitate access from the diagonal tunnel to Kilbirnie for BRT / Bus) and Evans Bay Parade. The diagonal tunnel would result in changes in access for Hataitai and adjacent areas as the existing tunnel would be closed to vehicles (see below).

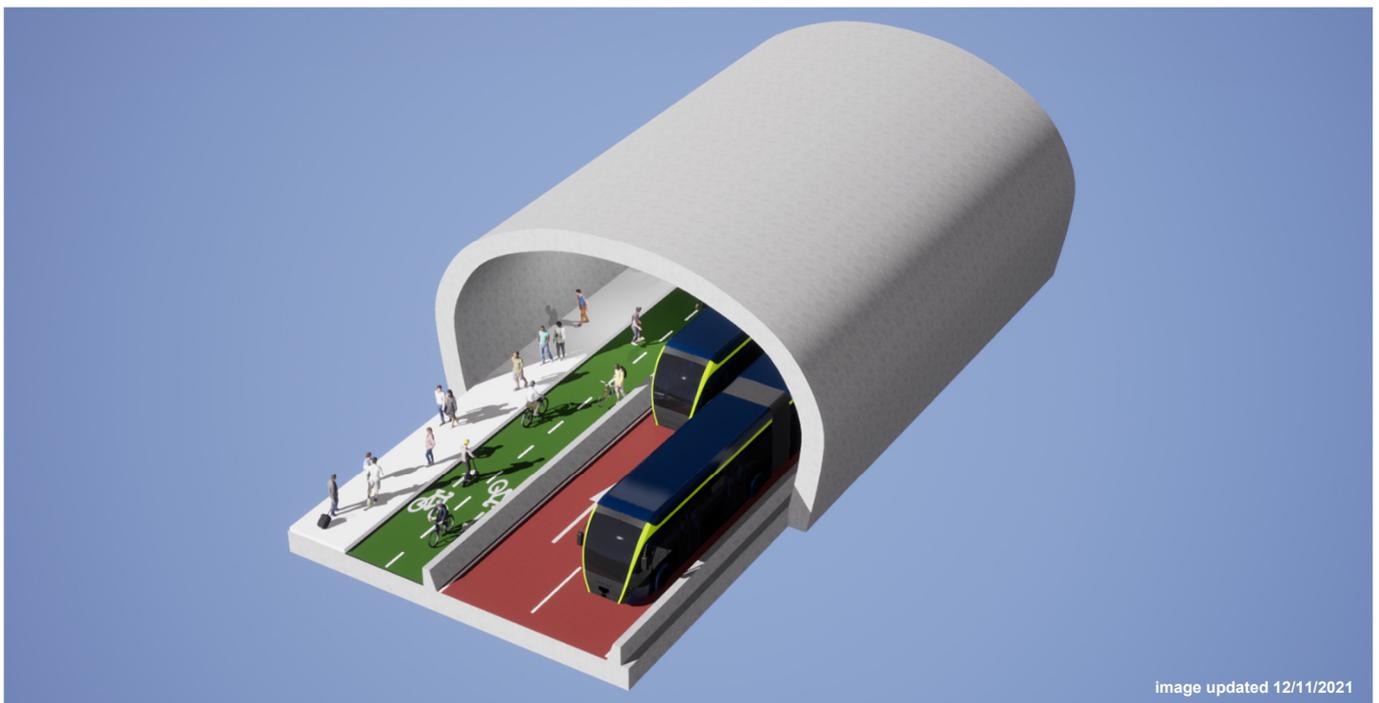


New parallel combined MRT and active modes tunnel

A new tunnel would connect Paterson St (the entrance of which is proposed to the north of the existing tunnel) with Ruahine St (which connects to Wellington Road and Cobham Drive) on a 'parallel' alignment immediately to the north of the existing tunnel (700m).

One new tunnel would be provided encompassing 2 lanes for Bus priority (Option i) or BRT (Option ii) and 2 lanes for active modes. The open nature of the tunnel would provide security for active mode users by providing visibility between the Bus priority or BRT vehicles and the active mode users (the existing active mode facility in the existing tunnel would be removed).

The existing vehicle lanes along Ruahine Street would be retained, but relocated within a widened corridor to accommodate the same facilities proposed in the new parallel tunnel (2 MRT lanes and active mode lanes) adjacent to a service lane providing access to properties along Ruahine Street. Similar facilities would be provided along Wellington Road integrating with the reconfigured intersections along Wellington Road. The result would be a high-quality active travel facility from the Basin Reserve connecting through to the Tahitai path along Cobham Drive and paths along Evans Bay Parade.





Existing Mt Victoria tunnel repurposed

In conjunction with construction of a new diagonal tunnel (see above), the existing Mt Victoria tunnel would be repurposed as a dedicated active travel connection between the CBD and the eastern suburbs. The route would be more direct and flatter than the current alternatives of around the Bays and Crawford Road respectively. The two existing traffic lanes (approximately 6m total width) would be converted into a safe pedestrian path separated by a kerb from a path for faster bike and micro-mobility device users.

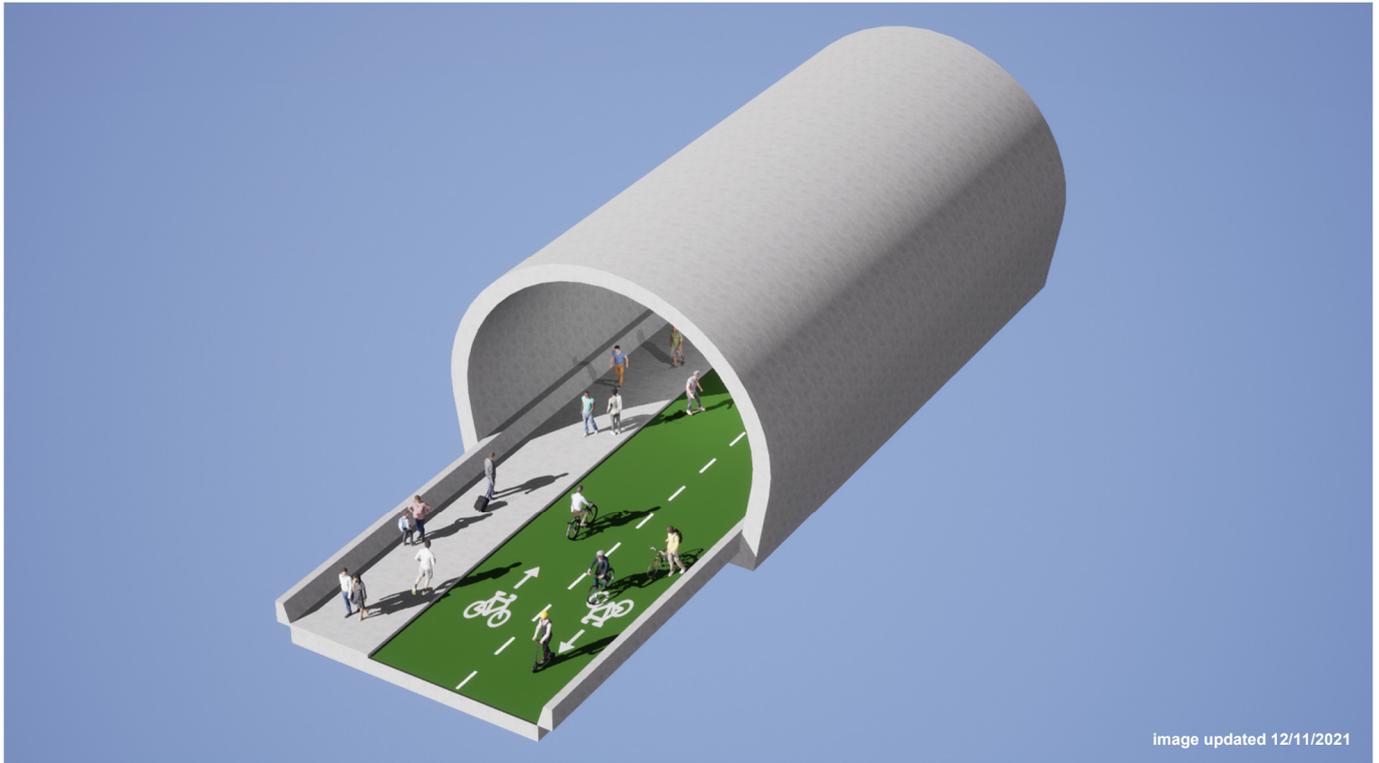


The existing vehicle lanes along Ruahine Street would also be repurposed to provide the same facilities proposed in the tunnel adjacent to a service lane providing access to properties along Ruahine Street. Similar facilities would be provided along Wellington Road integrating with the reconfigured intersections along Wellington Road required for the diagonal tunnel. The result would be a high-quality active travel facility from the Basin Reserve connecting through to the Tahitai path along Cobham Drive and paths along Evans Bay Parade.



New parallel tunnel for active travel users

In options where BRT / Bus priority to the east does not travel through a new Mt Victoria tunnel, there is still a need to provide a high-quality active travel facility connection between the CBD and the eastern suburbs for the reasons listed above. This option provides a new tunnel immediately to the north of the existing tunnel. The new tunnel would be a similar length to the existing tunnel (700m) and have a similar cross-section.



As with the repurposed option described above, the new tunnel would also include improvements along Ruahine Street and Wellington Road to provide a high-quality active travel facility from the Basin Reserve connecting through to the Tahitai path along Cobham Drive and paths along Evans Bay Parade. The improvements along Ruahine Street and Wellington Road would require realignment of the existing vehicle lanes.