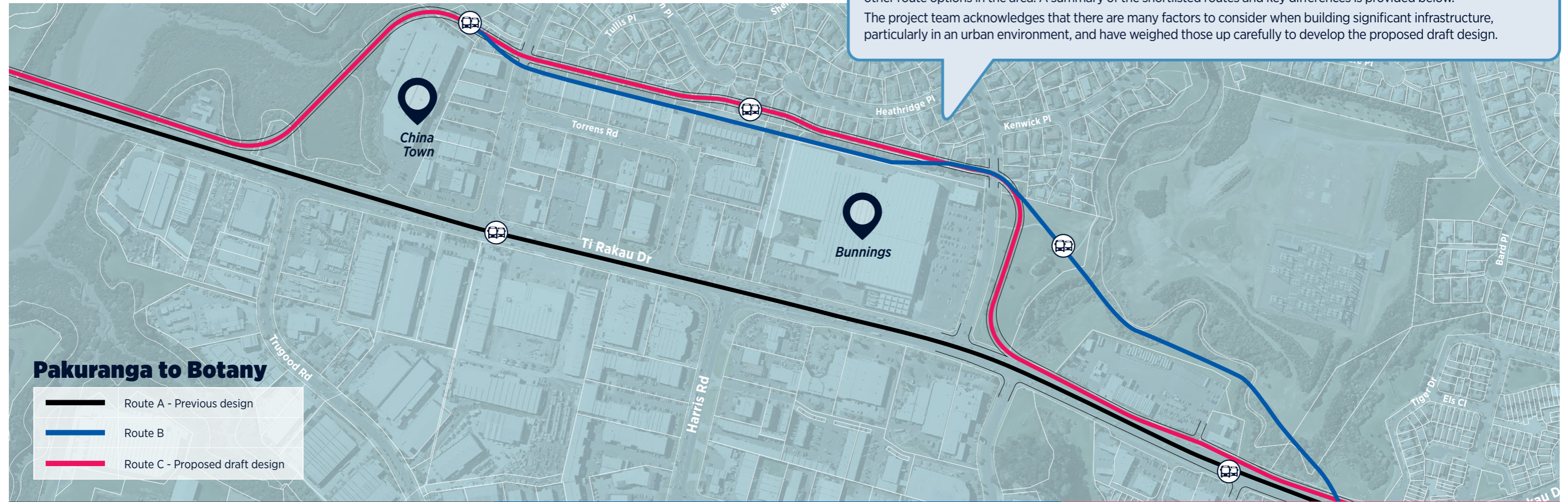


# How the design was developed

The Eastern Busway has been planned and designed over several decades with a priority being to provide as many people as possible with high-quality transport options. Research during that time has recommended an urban busway. That's a rapid bus system where buses have their own separate lanes similar to the Northern Busway, as an ideal way for supporting growth and improving public transport between east Auckland and the city centre. A broad range of alignments and designs, including elevated structures, has also been considered.

In 2018 Auckland Transport shared a draft design for community feedback which showed the busway continuing along the middle of Ti Rakau Drive, through the commercial section towards Botany. A number of safety, access and construction related challenges were found with that design and the project team and Auckland Transport have considered several other route options in the area. A summary of the shortlisted routes and key differences is provided below. The project team acknowledges that there are many factors to consider when building significant infrastructure, particularly in an urban environment, and have weighed those up carefully to develop the proposed draft design.



Route A – Previous Design	Route B	Route C – Proposed draft design
Widening Ti Rakau Drive for the 2 lane busway to continue along the middle.	2 lane busway on a separate structure behind China Town and Bunnings, largely in between commercial and residential properties with 2 stations - one behind China Town and one in Burswood Reserve.	2 lane busway on a separate structure behind China Town and Bunnings with centrally located station and separate walking and cycling facilities.
<b>Transport</b> <ul style="list-style-type: none"> <li>Reduced access to the busway for residents and neighbouring communities compared to other routes</li> <li>Journey time reliability impacted by busy signalised intersections on Ti Rakau Drive</li> <li>Safety issues for walking and cycling facilities.</li> </ul>	<b>Transport</b> <ul style="list-style-type: none"> <li>Increased access for residents and nearby communities</li> <li>Journey time reliability improved</li> <li>Due to space constraints, walking and cycling facilities would continue along Ti Rakau Drive which has safety issues.</li> </ul>	<b>Transport</b> <ul style="list-style-type: none"> <li>Increased access for residents and nearby communities</li> <li>Journey time reliability improved</li> <li>Safe and separated walking and cycling facilities.</li> </ul>
<b>Construction</b> <ul style="list-style-type: none"> <li>Longest construction period compared to other routes (on a major arterial road)</li> <li>Upgrades required to large intersections</li> <li>Disruption and access challenges for commercial properties.</li> </ul>	<b>Construction</b> <ul style="list-style-type: none"> <li>Very narrow construction corridor. High risk of impacting neighbouring residents and commercial properties</li> <li>Largely 'offline' construction away from traffic</li> <li>Disruption for residential and commercial communities.</li> </ul>	<b>Construction</b> <ul style="list-style-type: none"> <li>Shortest construction period compared to other routes</li> <li>Largely 'offline' construction, away from traffic</li> <li>Disruption for residential communities.</li> </ul>
<b>Property</b> <ul style="list-style-type: none"> <li>Requires acquisition of commercial properties</li> <li>Creates ongoing access issues for commercial properties.</li> </ul>	<b>Property</b> <ul style="list-style-type: none"> <li>Requires acquisition of commercial and some residential properties.</li> </ul>	<b>Property</b> <ul style="list-style-type: none"> <li>Requires acquisition of residential properties.</li> </ul>
<b>Urban design and environment</b> <ul style="list-style-type: none"> <li>Reduced future land use opportunities in line with the government's policies on urban development compared to other routes.</li> </ul>	<b>Urban design and environment</b> <ul style="list-style-type: none"> <li>Busway very close to residential homes with high noise wall required along boundary</li> <li>Future land use opportunities in line with policies on urban development</li> <li>Increased footprint within Burswood Reserve</li> <li>Impact on wetlands within Burswood Reserve.</li> </ul>	<b>Urban design and environment</b> <ul style="list-style-type: none"> <li>Creates space between homes and busway for landscaping, walking and cycling facilities</li> <li>Future land use opportunities in line with policies on urban development</li> <li>Opportunity for improvements to water quality.</li> </ul>
<b>Cost</b> <ul style="list-style-type: none"> <li>Highest, compared to other routes.</li> </ul>	<b>Cost</b> <ul style="list-style-type: none"> <li>Mid, compared to other routes.</li> </ul>	<b>Cost</b> <ul style="list-style-type: none"> <li>Lowest, compared to other routes.</li> </ul>