



October 2021

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# Programme Sequencing

## Technical Summary

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Draft

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## Document Control

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## **1 Summary**

### **1.1 Purpose**

The purpose of this technical summary is to document the current thinking around sequencing of the programme to inform public engagement in November 2021. The information in this memo comes from a variety of sources which have been referenced where applicable.

### **1.2 Current sequencing**

This note documents that most components of the programme are proposed to occur as fast as practicable. In summary:

- The three-year programme projects will all be delivered by 2025;
- City Streets construction commences by 2023 and is concluded by 2030, with the later projects linked to decisions around the MRT and Strategic Highway improvements;
- Travel behaviour change measures will be aligned with the construction of key programme components, the first of which is likely to be the Golden Mile improvements;
- Different forms of user pricing, for example through a congesting charge, would require legislation so timing is less certain. However, these options would support the construction of the MRT and Strategic Highway improvements, and would also encourage a higher level of mode shift once MRT is operational;
- Once the scope and form of the MRT and Strategic Highway improvements is known then this will allow the conclusion of investigation, obtaining the necessary consents and the commencement of detailed design. The earliest that construction is expected to begin would be 2027;
- The form of MRT and Strategic Highway Improvements will inform programme sequencing. An example would be the need to deliver improvements at the Basin prior to delivering an MRT route to the south. Likewise the provision of improved Public Transport provision to the east would be heavily supported by an extra Mount Victoria tunnel; and
- If an LRT option is preferred then it would be more likely to build the whole route prior to it becoming operational, a BRT option would present more flexibility in sequencing and operations as vehicles do not rely tracks, plus BRT could be delivered quicker.

### **1.3 Further considerations**

As noted above, most components of the programme are proposed to occur as fast as practicable. Previous analysis has identified key aspects / factors that should be considered when the sequencing and staging of the programme is developed. These key aspects / factors have not been repeated here, but further consideration of these is required before the programme sequencing can be confirmed, especially for large scale improvements such as the MRT / Strategic Highway improvements.

## 2 Background

### 2.1 Programme Business Case

The Programme Business Case (PBC)<sup>1</sup> was released in June 2019 and included some initial thinking on project sequencing which is summarised in Figure 1 below. The PBC noted that there were various factors and considerations which would need to be balanced to determine the most optimal sequencing. The PBC also noted that more detailed investigations of the individual components and ongoing review of the trade-offs between various factors and considerations would likely result in the sequence presented below changing.

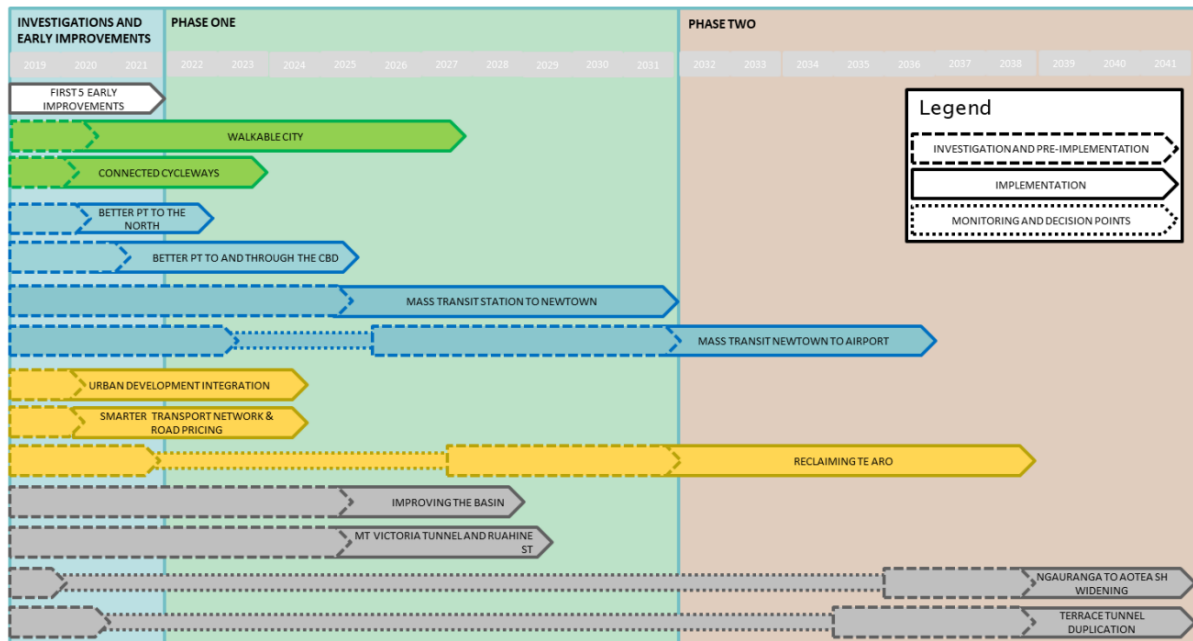


Figure 1: Initial thinking on sequencing from the PBC (Figure 22)

### 2.2 Staging and Sequencing Considerations, options and next steps

The Staging and Sequencing Considerations, options and next steps report<sup>2</sup> was prepared in November 2018 with an addendum issued in October 2019. The original report was a key input into the PBC and expands further on other potential sequencing options and the trade-offs between various factors and considerations.

<sup>1</sup> <https://lgwm.nz/assets/Documents/Programme-Business-Case/LGWM-PBC-Report-21-June-2019-Draft.pdf>

<sup>2</sup> <https://lgwm.nz/assets/Documents/Staging-and-Sequencing-Considerations-options-and-next-steps.pdf>

### 3 Current Status of Programme Components

The components of the programme have developed and evolved from those envisaged in the PBC. Table 1 below summarise the current components of the programme and the status of each component.

Table 1: Current status of programme components

Component group	Component	Current status	Next step
Three-year programme	Golden Mile	Draft SSBC complete	Pre-implementation (detailed design)
	Thorndon Quay / Hutt Road	Draft SSBC complete	Pre-implementation (detailed design)
	Central City safer speeds	Implementation Complete	n/a
	Cobham Drive Crossing and SH1 safer speeds	Pre-implementation (detailed design)	Implementation
	Central city walking improvements	Pre-implementation (detailed design)	Implementation
City streets		Draft IBC complete	SSBCs for each component
Travel Demand Management	Travel Behaviour Change	Draft SSBC complete	Pre-implementation
	Parking levy / congestion charging	Draft SSBC complete / preliminary investigation	Confirmation of preferred approach / feasibility and approach to legislation
Mass transit and strategic highway improvements	Basin Reserve	Combined IBC underway	DBC's for components
	Mass Transit to Newtown		
	Improvements through Mt Victoria for active travel and mass transit		

#### 4 Current plan for sequencing to implementation

The following sub-sections expand on the proposed sequencing for each of the component groups identified in Table 1 above. The sequencing shown is based on the current funding assumptions (unless noted otherwise).

The following key applies to the schedules shown.

Detailed Business Case / Single Stage Business Case
Pre-Implementation
Implementation

In general, all of the components of the programme are proposed to be implemented as soon as practicable. As outlined in the sections below, the various components are at different stages of development and have different constraints which impact on sequencing (including but not limited to; consenting, inter component dependencies and funding availability).

#### 4.1 Three-year programme

The three-year programme includes components that:

- Are generally independent of any wider programme decisions around larger medium to long term components (such as mass rapid transit); and
- Address a pressing safety concern; or
- Will provide benefit to a significant number of users travelling by sustainable modes of transport.

For the reasons above, the components of the three-year programme are proposed to be delivered as soon as practicable as shown in Table 2 below. None of the components of the three-year programme require property purchase or consenting and can proceed directly from detailed design (pre-implementation) to construction implementation.

Note some aspects of the City Streets programme are intended to be delivered within three years but these have not been included in this section for clarity.

Table 2: Three-year programme sequencing

Component	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29
Golden Mile								
Thorndon Quay / Hutt Road (excluding Aotea Quay roundabout)								
Cobham Drive Crossing and SH1 safer speeds								
Central city walking improvements								



## 4.2 City streets

The city streets programme has been divided into four tranche groups as identified below:

- Tranche 1 – Immediate start with partner desire to commit to construction start within three years
- Tranche 1 – SSBC Immediate start
- Tranche 1 – Conditional on form and route of mass transit being confirmed
- Tranche 2 – Subject to future funding approvals considering progress on Tranche 1 and programme review

The city streets IBC<sup>3</sup> includes a more detailed programme for each project, for the purposes of simplicity the sequencing in Table 3 is based on the worst case within each tranche group (however the relative proportions for each stage may not be accurate).

Table 3: City streets programme sequencing

Component	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33
Tranche 1 – construction within three years												
Tranche 1 – immediate start of SSBC												
Tranche 1 – awaiting MRT decisions												
Tranche 2 – pending funding availability												



<sup>3</sup> <https://lgwm-prod-public.s3.ap-southeast-2.amazonaws.com/public/Documents/City-Streets-Final-Draft-IBC17.7MB.pdf>

### 4.3 Travel Demand Management

The Travel Demand Management programme includes largely non-infrastructure components.

Pre-implementation for travel behaviour change is underway with implementation throughout the life of the programme to encourage mode shift and mitigate construction disruption from certain projects as show in Table 4 below. Parking levy / congestion charging has a long pre-implementation phase as there are legal considerations to work through before either scheme can be implemented.

Table 4: Smart transport network programme sequencing

Component	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33
Travel Behaviour Change												
Parking levy / congestion charging												

#### 4.4 Mass transit and strategic highway improvements

Mass transit and strategic highway improvements are high-cost improvements that will require property purchase and consenting. In addition, the components that make up the programme have not been confirmed and will be agreed at a high level following the November 2021 engagement with further development through the subsequent Detailed Business Case phases.

Table 5 below shows a potential package timeframe which is based on a joint package DBC and consenting with construction of all elements in parallel. This has significant challenges due to industry capacity and the disruption that would occur by constructing all elements in parallel. The construction timeframe from 2027/2028 to 2032/2033 is more likely upwards of 8 years to allow for some elements to be delivered consecutively. More certainty around implementation timeframes will be available once a preferred package is identified and the DBC's have been completed.

It should be noted that there are some direct interdependencies between some of the potential sub-components which are not reflected in the timeframes below. For example, "Bus to Miramar (via new tunnel)" or "Mass transit to Miramar (BRT)" both require the construction of the "New Mt Victoria tunnel for MRT" before they can be fully implemented.

Table 5: Mass transit and strategic highway improvements sequencing

Component	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33
All												

Note: timeframe based on a joint DBC and consenting with construction of all elements simultaneously

## 5 Considerations as the programme develops

As mentioned above, in general, all of the components of the programme are proposed to be implemented as soon as practicable (noting the exceptions recorded above). Key component interdependencies have been identified and are listed below:

- Some tranche 1 components of city streets are reliant on confirmation of the route and mode of mass transit. The decision on the route and mode of mass transit is expected to be made when the combined IBC is concluded in mid-2022.
- There are currently a number of component variants for the mass transit and strategic highway improvements which will be engaged on in November 2021. Some of these component variants have interdependencies with each other that apply to some of the consultation options but not others. The mass transit and strategic highway improvements components will be confirmed at a high level following the November 2021 engagement with further decisions made through the subsequent Detailed Business Case phases.
- The decision on the mass transit and strategic highway improvements components also potentially impacts the overall programme funding, which in turn impacts on the timeframes for tranche 2 of city streets.

The PBC; the staging and sequencing considerations, options and next steps report; and programme report all include a discussion of key aspects / factors that should be considered when the sequencing and staging of the programme is developed. These key aspects / factors have not been repeated here, but further consideration of these is required before the programme sequencing can be confirmed, especially for the larger scale components of mass transit and strategic highway improvements and parking levy / congestion charging.