



Report 12.344  
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Committee Economic Wellbeing  
Author Ian Gordon, Team Leader Rail Assets

## Rail assets prioritisation framework

### 1. Purpose

The purpose of this report is to outline the proposed methodology in allocating the like for like replacement and minor improvement budget for rail infrastructure, and to seek Committee endorsement of the proposed methodology.

### 2. The decision-making process and significance

The matter requiring decision in this report has been considered by officers against the requirements of Part 6 of the Local Government Act 2002.

#### 2.1 Significance of the decision

Officers have considered the significance of the matter, taking into account the Council's significance policy and decision-making guidelines. Due to the procedural nature of this decision officers recommend that the matter be considered to have low significance.

Officers do not consider that a formal record outlining consideration of the decision-making process is required in this instance.

### 3. Background

At two recent Economic Wellbeing Committee workshops officers discussed with committee members how they proposed to adopt a structured programme approach to minimising the life-cycle costs of rail infrastructure asset ownership while maintaining the required service levels and sustaining the infrastructure. The focus of the discussions were how to allocate the like for like replacement and minor improvement budget in a way which reflected the condition and criticality of the asset in delivering Greater Wellington urban rail services.

Key to the like for like replacement and minor improvement programme is knowledge of the asset condition. All rail infrastructure assets have recently

undergone a condition assessment, not just to determine if the asset should be replaced or repaired, but also to evaluate the frequencies and activities involved in normal maintenance. A planned maintenance regime is now in place for all rail infrastructure assets, and this will be sufficient for those assets graded good or better. For those assets graded poor or worse, any improvement work will in all likelihood come from the like for like replacement and minor improvement budget. The following methodology was proposed in allocating the annual budget which has been set at \$3.5m pa.

## **4. Budget Allocation Methodology**

### **4.1 Step 1 Station classification**

The budget allocation methodology determines the criticality of Greater Wellington's rail infrastructure on the basis of the volume of traffic going through each station during morning peak. Stations were divided into one of three groups; high, medium or low usage.

- a high use station was defined as accommodating a morning peak of greater than 300 passengers,
- a medium use station was defined as accommodating a morning peak of 100 – 300 passengers, and
- a low use station was defined as accommodating a morning peak of less than 100 passengers

There was some discussion at the workshop as to how these figures were derived and the impact on stations which sit on the boundary between the groups (i.e. what was the real difference between the bottom station in the high use group and the top station in the medium use group). At the conclusion of this discussion councillors were satisfied that the definition of the three groups represented a fair and reasonable approach to determining criticality and proportioning the \$3.5m budget.

### **4.2 Step 2 Group allocation**

Having identified the critical groups, the next step was to determine a means by which to proportion the budget across these groups. A number of options were discussed, each reflecting a different allocation of the budget across the different groups. As part of these discussions Councillors expressed a desire to have some of the budget set aside for discretionary spend which could be applied to specific projects on a per annum basis. These discussions resulted in the addition of a fourth group (opportunities) and the percentage allocation of the budget to each group is reflected in the following table.

### Like for like and minor improvement budget allocation (\$3.5m pa)

Group	Number of Stations	Budget (%)	Per Station
High Use	10	\$1.4m (40%)	\$140K (4%)
Medium Use	25	\$1.4m (40%)	\$56K (1.6%)
Low Use	13	\$175K (5%)	\$26.9K (0.4%)
Opportunities	n/a	\$525K (15%)	n/a

#### 4.3 Step 3 Works prioritisation

With a known budget allocation for each of the four groups, officers proposed a further level of prioritisation to be applied within each of the groups. A weighted criterion was proposed based on four areas of risk; risk to safety if not addressed, risk of cost increases if not addressed, risk of further degradation if not addressed, and risk to service levels if not addressed. It was generally agreed that these criterion were appropriate and that a percentage weighting to each criterion should also be applied. The percentage weighting considered the most appropriate was 30%, 30%, 10% and 30%. The criterion and percentage weightings are:

- risk to safety if not addressed – 30%
- risk of cost increases if not addressed – 30%
- risk of further degradation if not addressed – 10%
- risk to service levels if not addressed – 30%

#### 4.4 Step 4 Project prioritisation

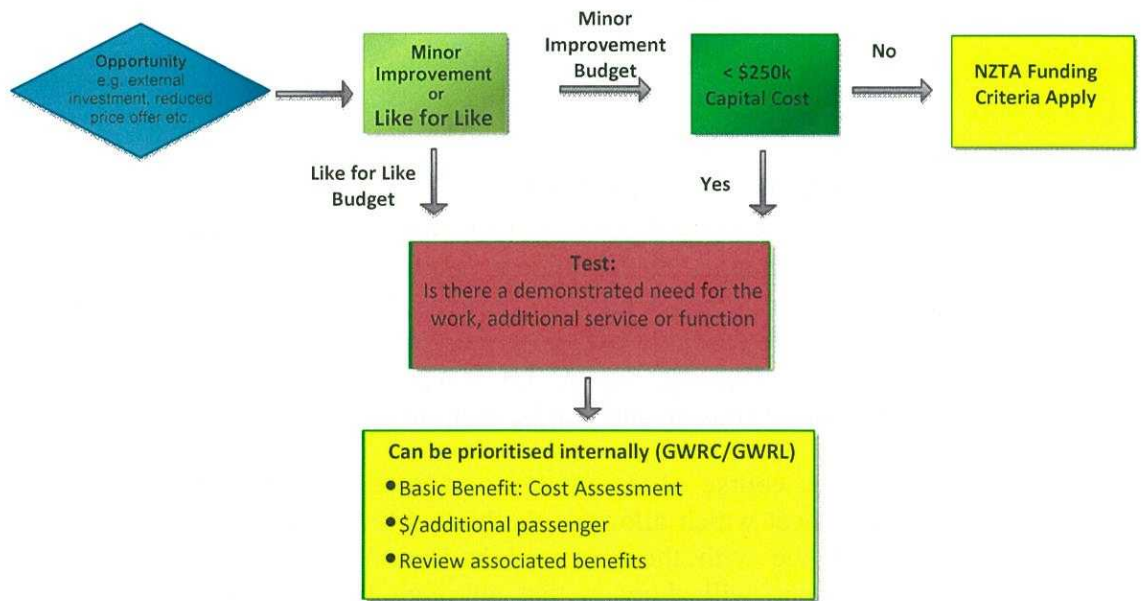
Having prioritised the budget, the next step is to identify what work needs to be done across the full portfolio and then flow this into a multi year programme. The asset condition assessment provides the base information upon which to determine the order within which work needs to be considered for prioritisation, with those assets graded as having safety related issues being considered first, followed by those assets graded very poor (asset condition grade 5), and then those assets graded poor (asset condition grade 4). By considering work within this order and applying the prioritisation methodology as discussed at the workshops and articulated in the previous paragraphs, the most urgent projects can be identified and placed within a multi year programme of work.

**Attachment 1** provides a two year view of how the projects identified to date will fit into a programme of work when this methodology is applied. The entire budget has yet to be allocated as officers are still analysing the full range of condition assessment data in preparation of developing a full five year plan.

#### **4.5 Step 5 Opportunities prioritisation**

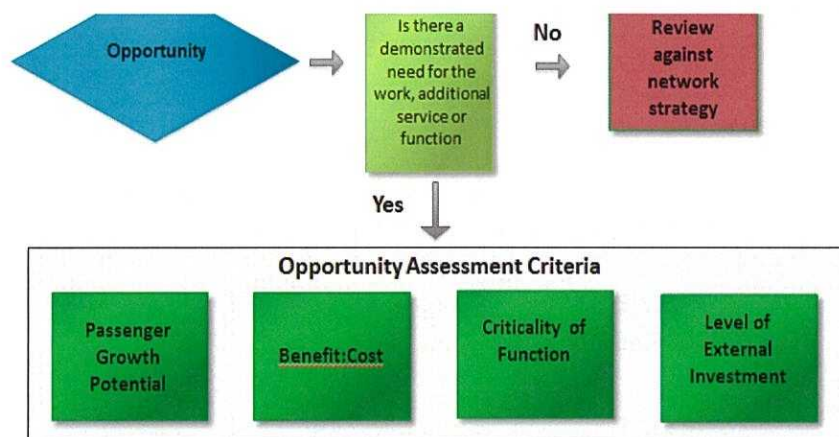
Projects identified as “opportunities” will undergo a two step process to ensure there is a demonstrated need for the work and if so, how these opportunities are to be prioritised. The process to determine whether or not a need has been demonstrated is illustrated in the following diagram.

## Step one – demonstrating the need



Once the need has been demonstrated a comparable evaluation is carried out against set criteria of all the opportunities identified in order to determine which opportunities should be funded first. The flow diagram for prioritising the opportunities is as follows:

## Step two – opportunity assessment criteria



### Opportunity Assessment Criteria Definition

Passenger numbers – recognises increase in passenger numbers, particularly for peak.

Benefit cost – recognises those opportunities which reduce costs or improve network service.

Criticality of function – recognises whether or not the asset is critical to the function of the station.

Level of external investment – recognises any level of investment external to Greater Wellington.

## **5. Managing the budgets**

**Attachment 1** highlights that some project costs will not necessarily fall neatly within the budget allocation on a year by year basis. An example of this is the year one projects for high use stations (Naenae carryover plus completing the Waterloo re-roofing) will cost more than the \$1.4m allocated for high use stations. However, we do not intend to delay the commencement of the Waterloo re-roofing and will be looking at options in managing the cash flow.

Over the course of the next two months officers will be putting together a spreadsheet which allocates the budget to projects over the next five years in accordance with the proposed budget allocation methodology. What this programme will show is that although there is immediate pressure on the overall budget, brought about by a small number of large projects, this will taper off in the following years. The challenge will be to deliver a work programme in accordance with the budget allocation methodology over a five year period whilst at the same time managing cash flow on a per annum basis.

## **6. Communication**

No specific external communications are required although it should be noted that the asset management plan is subject to review by the New Zealand Transport Agency and the Office of the Auditor General.

## **7. Recommendations**

*That the Committee:*

- 1. Receives the report.*
- 2. Endorses the proposed allocation methodology for the like for like replacement and minor improvement budget.*
- 3. Notes the programme of works and budget allocations, as set out in Attachment 1 to this report.*

Report prepared by:



**Ian Gordon**  
Team Leader Rail Assets

Report approved by:



**Angus Gabara**  
Manager, Rail Projects

Report approved by:



**Rhona Hewitt**  
Acting General Manager,  
Public Transport

**Attachment 1:** Two Year View of Like For Like and Improvement Budget

