

2018-2028 TRANSPORTATION ASSET MANAGEMENT PLAN
He Rautaki Whakahaere Rawa mō Ngā Ara Kawenga

STREET FURNITURE NGĀ TAPUTAPU A-TIRITI

VOLUME SIX | PUKAPUKA TUAONO



Mountain to Sea
Te Kaunihera-ā-Rohe o Ngāmotu
NEW PLYMOUTH DISTRICT COUNCIL
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Prepared By	Steve Ilkovics, Asset Operations Planning Lead Cristina Gonzalez, Asset Engineer
Reviewed By	Carl Whittleston, Manager Transportation
Approved By	David Langford, Infrastructure Manager

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This volume provides details of the asset lifecycle management for the **Street Furniture** asset category of the Transportation AMP. The framework and key elements of the overall asset management plan are outlined in Table 1.

Table 1 Asset management document summary

No.	Document Name	Key Document Contents
1	Long Term Plan (LTP)	Infrastructure Strategy <ul style="list-style-type: none"> • Strategic Framework • Guiding Themes • High Level Information for Each Asset Class Council Services <ul style="list-style-type: none"> • High Level Information • Levels of Service • Financial Plan
2	Asset Management Strategy	General Asset Management Principles and Overview
3	Asset Class General Volume (Strategic Case)	General Information and Glossary about each asset class <ul style="list-style-type: none"> • Summary • District Overview • Strategic Context • Defining Problems & Consequences • The Benefits of Investment • Outcomes Sought • Status of Existing Evidence Base • Transport Outcomes Invested In • Financial Forecasts • Economic Case • Financial Case • Management Case • Commercial Case • Risk Management • Investment Logic Maps • Programme Business Cases

4	Asset Category Lifecycle Management Volumes	Asset Life Cycle Management for each asset category within each asset class <ul style="list-style-type: none"> • Description • Condition • Remaining Lives • Valuation • Operations & Maintenance • Renewals • Acquisition and Augmentation • Disposals • Annual Work Plan • Risk Management • Financial Summary • Improvement Plan
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Purpose and Key Issues

Street furniture includes bus shelters, litter bins, seats/benches, cycle racks, pits, security cameras and other miscellaneous features.

Bus shelters provide a structure for passengers to wait for buses safely and sheltered from inclement weather. The Land Transport Management Act requires regional councils to ensure appropriate public transport within their jurisdiction and to liaise with the local authorities in the area to provide a viable service to communities.

The Regional Public Transport Plan for Taranaki 2014/2024 documents the agreed plan for the applicable 10 year period. Infrastructure for the service comprises an agreed area that serves as the terminus for the services provided, bus stop locations and demarcations, and bus shelters. The key issues relating to bus shelters are:

- Vandalism and graffiti on the structures
- Providing sufficient numbers of shelters at appropriate locations
- Variations in bus routes over time
- A staged renewal programme of older style bus shelter stock
- Following guidelines on the applicable use of the different styles of shelter in current installations

Other **street furniture** includes elements in the urban street environment that provide comfort, safety and convenience. The key issues relating to other street furniture assets are:

- The need for ongoing improvements in CBD and suburban commercial areas to maintain a high quality environment.
- Maximising the ongoing security benefits of crime prevention cameras installed in the relevant CBD's, which are connected to a CCTV circuit and monitored by Police.
- Suitability of traffic calming devices in residential and commercial areas.

Levels of Service

The levels of service and investment KPIs for the operations, maintenance, renewals and minor improvement of the Transportation system are included in Section 6 of the Transportation Strategic Case (General Volume). The investment KPIs are developed from the problem statements and benefits in the Programme Business Cases (PBCs) included in the Appendices of the Transportation Strategic Case (General Volume). The investment KPIs applicable to street furniture are summarised in Table 2.

Table 2 Street furniture investment KPI summary

Problems	Benefits	Investment KPIs (PBC for each one)
<ul style="list-style-type: none"> • The changing expectations of the community requires a reprioritisation of investment to meet the agreed and future Level of Service for all transport modes. • Growth in the movement of people and goods on key corridors will result in increasing travel time unreliability during peak periods. • Geology, weather and climate activity plus some sub-standard assets results in a high level of full and partial closures of the network impacting lifelines and economic viability. • Driver behaviour, safe system approach and other factors are resulting in a high proportion of Death and Serious Injury crashes for vulnerable road users. 	<ul style="list-style-type: none"> • An easy to understand and efficient (economically viable) network for all transport modes. • A resilient network. • A safe network. 	<ol style="list-style-type: none"> 1. Network Availability 2. Customer Satisfaction 3. Maintain Travel Time Reliability with Increased Activity 4. Value for Money 5. Response Times 6. Network Audit of Condition 7. Crashes

The particular measures used to monitor the performance of street furniture assets are shown in Table 3. More details about the measures are included in the Programme Business Cases included in the Transportation Strategic Case (General Volume).

Table 3 Street furniture O&M KPIs

KPI No	KPI	Baseline Performance	Target Performance
1.3	% properties on 50kph roads within 200m of bus route	TBC	TBC
2.1	Count of complaints recorded by Contact Centre	33 per annum average 2011/12 – 2016/17	<=40 per annum
5.1	LoS 5 – respond to requests in reasonable timeframe	Current performance is 95%	Maintain at 95%

Related legislation, codes and standards

- Transport Act 1962
- NZS 4404: Land development and subdivision Infrastructure
- Taranaki Roads Safety Management Systems

Future Demand

Future demand and growth in the district is addressed in our report [Keeping New Plymouth Moving and Growing](#). This report includes Investment Logic Maps (ILMs) and a series of problem statements, benefits and investment KPIs for growth. These are summarised in the table below.

Table 4 Street furniture growth investment KPIs

Problems	Benefits	Investment KPIs (PBC for each one)
<ul style="list-style-type: none"> • Capacity limitations of key and strategic arterial routes do not meet current demand and will not support future growth. • Natural landforms, arterial layout and poor alternative mode permeability are limiting city connectivity. • Complex roads and a high number of modal conflict points are driving high actual and perceived personal and collective risk. • A lack of viable alternative routes during a major event results in significant delays and risk of transport and utility severance. 	<ul style="list-style-type: none"> • Improved transport network performance • Improved safety outcomes • Improved economic outcomes for the district • More viable transport choices 	<ul style="list-style-type: none"> • Effectiveness • Network Availability • Improved Infrastructure Quality • Improved actual safety • Improved safety perception • Business investment • Transport network supports future growth • Increased use of alternative modes • Improved community perception • Improved alternative mode infrastructure

2. LIFECYCLE MANAGEMENT PLAN

2.1 Asset Description

Details of the street furniture numbers and construction materials are shown in Tables 5 - 9.

Table 5 Bus shelter material types

Bus Shelter Material	No of
Block	1
Concrete	27
Steel and Glass	55
Steel Composite	1
Timber	11
Total	95

Table 6 Bin material types

Bin Material	No of
Bin Proprietary Plastic	143
Bin Proprietary Steel	10
Bin Stainless Steel	20
Bin Suburban Upgrade	18
Total	191

Table 7 Seat locations and numbers

Seat Description	No of
Seat Bell Block	2
Seat Fitzroy	1
Seat Generic	1
Seat Inglewood	26
Seat Motoroa	8
Seat New Plymouth	5
Seat New Plymouth CBD	57
Seat Oakura	7
Seat Okato	1
Seat Suburban Upgrade	12
Seat Urenui	4
Seat Waitara	13
Seat Westtown	5
Seat with B/rest Proprietary	18
Bench New Plymouth	3
Bench no B/rest Proprietary	10
Bench Oakura	3
Bench Okato	2
Bench Urenui	1
Bench Waitara	8
Total	187

2. LIFECYCLE MANAGEMENT PLAN

Table 8 Bike Rack locations and numbers

Bike Rack Description	No of
Bike Rack Generic	1
Bike Rack Inglewood	3
Bike Rack Lets Go Project	4
Bike Rack Motorua	1
Bike Rack New Plymouth	27
Bike Rack Urenui	1
Bike Rack Waitara	4
Total	41

Table 9 Tree pit types

Tree Pit Description	No of
Pit-F/path-Flush-Conc-Okato	3
Pit-F/path-Flush-Conc-Urenui	7
Pit-F/path-Flush-Conc-Westown	21
Pit-F/path-Flush-Grate-N Ply	64
Pit-F/path-Flush-Wood-Fitzroy	13
Pit-F/path-Flush-Wood-N Ply	14
Pit-F/path-Flush-Wood-Oakura	4
Pit-F/path-Flush-Wood-Okato	3
Pit-F/path-Kerb-Blue stone - N Ply	2
Pit-F/path-Kerb-Conc-Inglewood	26
Pit-F/path-Kerb-Conc-N Ply	13
Pit-F/path-Kerb-Conc-Waitara	40
Pit-F/path-Raised-Conc-N Ply	3
Pit-F/path-Raised-D(c&tile)-Fitzroy	8
Pit-F/path-Raised-Tile-N Ply	9
Pit-F/path-Raised-Wood-Fitzroy	1

Pit-Road-Flush-Conc-Motorua	15
Pit-Road-Flush-Conc-N Ply	22
Pit-Road-Flush-Conc-Strandon	8
Pit-Road-Kerb-Bluestone-N Ply	15
Pit-Road-Kerb-Conc-Fitzroy	4
Pit-Road-Kerb-Conc-Inglewood	3
Pit-Road-Kerb-Conc-Oakura	7
Pit-Road-Kerb-Conc-Waitara	23
Total	328

The closed circuit television (CCTV) security system installed in the CBD is for crime prevention purposes. It consists of a number of cameras mounted on street lighting poles and traffic signals, and an underground cable network. It is owned by us but monitored solely by NZ Police.

The data presented in this AMP on the quantity and type of the assets is classed as grade **B – Reliable** due to our well maintained and updated asset inventory in RAMM.

2.2 Asset Condition

We update the inventory on the condition and description of bus shelters on an ongoing basis. Although many shelters are dated in appearance, the general condition of shelters is good, with only minor ongoing maintenance required.

The performance and condition of other street furniture is currently assessed by the annual network inspections of the urban roads general maintenance contractor and the CBD cleaning contractor. We do not currently conduct formal condition assessments; however, regular network inspections identify defects such as crash damage which is corrected through reactive maintenance programmes.

The data on the condition of the assets presented in this AMP is classed as grade **C – Uncertain**. While it is **based** on sound records, procedures and inspections, the data is incomplete.

2. LIFECYCLE MANAGEMENT PLAN

2.3 Asset Remaining Lives

The expected life of the bus shelters and other street furniture assets are detailed in Tables 10 and 11.

Table 10 Bus shelter expected lives

Bus Shelter Material	No of	Life Years
Block	1	30
Concrete	27	30
Steel and Glass	55	40
Steel Composite	1	50
Timber	11	30
Total	95	

Table 11 Bin expected lives

Bin Material	Life years
Bin Proprietary Plastic	10
Bin Proprietary Steel	15
Bin Proprietary Steel	15
Bin Proprietary Upgrade	15

Seats, benches and cycle racks generally have a life expectancy of 15 years. Pits have a life expectancy of 25 years and security cameras 6 years. The age of the assets is recorded in RAMM where available.

The data on the remaining life of the assets presented in this AMP is classed as grade **D - Uncertain** due to data being based on unconfirmed verbal reports or cursory inspections with most data estimated or extrapolated.

2.4 Asset Valuation

The value of these assets as at 30 June 2016 is shown in Table 12.

Table 12 Asset valuation

Category	Gross Current (\$)	Annual (\$)	Optimised Depreciated Replacement Cost (ODRC) (\$)
Bus Shelters	1,615,020	37,792	1,258,326
Bins	435,270	27,762	217,635
Seats/Benches	925,254	45,456	462,627
Cycle Racks	188,408	11,419	94,204
Pits	1,067,396	38,814	533,698
Security Cameras	338,184	43,554	338,184
Other (Minor miscellaneous assets)	865,832	56,538	94,733
Total	5,435,364	261,335	2,999,407

Values are from the 2016 statutory valuation. The data accuracy and confidence level is rated as **A - Reliable**. Internal staff conducted a detailed valuation which was peer reviewed and endorsed by Beca Consultants.

2.5 Operations and Maintenance

Bus shelters are maintained under the Urban General Maintenance Contract. They are long life assets with an effective life of 30 years, but may have high maintenance costs associated with graffiti removal and general vandalism.

Street Furniture is also maintained under the Urban General Maintenance contract. These are generally low cost maintenance items. Most maintenance is reactive.

The 10-year forecast for the operation and maintenance of bus shelters and street furniture is shown in Table 13.

Table 13 O&M expenditure forecast

\$000	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28
O&M Bus Shelters and Street Furniture	303	309	316	322	330	337	345	353	362	371

The overall Opex forecast for Transportation activities including operations and maintenance is included in the Transportation Strategic Case (General Volume).

2.6 Renewals Plan

In co-operation with TRC and aligned with the Model Communities Project, the location and style of bus shelters is being reviewed to raise the profile of public transport as an alternative mode of transport and to ensure we make cost effective replacement decisions.

Bus shelters are renewed in a reactive manner on a case-by-case basis. However, condition inspections as part of general maintenance contracts do allow for planning of maintenance items. TRC contributes 51% of the cost of bus stop renewals.

The 10-year forecast for the renewal of bus shelters is shown in the Table 14.

Table 14 Bus shelter renewals expenditure forecast

\$000	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28
Bus Shelters Renewals	101	103	105	107	110	112	115	118	121	124
TRC contribution (51%)	51	52	54	55	56	57	59	60	62	63

2. LIFECYCLE MANAGEMENT PLAN

Other street furniture renewals are undertaken as and where required as part of the Urban General Maintenance Contract. The cost of this maintenance is not subsidised by NZTA.

The 10-year forecast for the renewal of bus shelters is shown in Table 15.

Table 15 Street furniture renewals expenditure forecast

\$000	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28
Street Furniture Renewals	101	103	105	107	110	112	115	118	121	124

2.7 Acquisition and Augmentation Plan

Acquisition

No acquisition of bus shelters or street furniture is planned over the 10 year AMP period.

Level of Service

TRC may plan to expand bus services and hence require additional bus shelters. This will be discussed with TRC during the first year of the plan and adjustments made if required.

Growth

No acquisition of bus shelters or street furniture is planned over the 10 year AMP period.

2.8 Disposal Plan

Disposal is the retirement or sale of assets when they become surplus or superseded by new or improved systems. Assets may become surplus to requirements for any of the following reasons:

- Under-utilisation
- Obsolescence
- Provision exceeds required level of service
- Replacement before end of predicted economic life
- Uneconomic to upgrade or operate
- Policy changes
- Service provided by other means (e.g. private sector involvement)

Potential risk of ownership (financial, environmental, legal, social)

No disposal of bus shelter of street furniture asset is planned over the 10 year AMP period.

3. RISK MANAGEMENT PLAN

3.1 Critical Assets

Bus shelters and street furniture are not critical to the safe and reliable operation or reliability of the Transportation network and have not been assigned any criticality ratings.

3.2 Risk Assessment

Our Risk Management Framework and details of key risks to Transportation assets are included in Section 14 of the Transportation Strategic Case (General Volume) and section 7 of the Asset Management Strategy.

3.3 Infrastructure Resilience Approach

Resilience is not an issue for bus shelters or street furniture. The network would continue to function safely if these assets were rendered unavailable for any period of time.



4. FINANCIAL SUMMARY

A summary of the expenditure forecasts included in this volume is shown in Table 14.

Table 16 Expenditure forecast summary

Street Furniture Expenditure Forecast (\$000)											
Activity	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	Total
Maintenance	303	309	316	322	330	337	345	353	362	371	3,348
Renewals	202	206	210	214	220	224	230	236	242	248	2,232
Service Level	-	-	-	-	-	-	-	-	-	-	-
Growth	-	-	-	-	-	-	-	-	-	-	-
Total	505	515	526	536	550	561	575	589	604	619	5,580

A summary of the NZTA contribution forecasts included in this volume is shown in Table15.

Table 17 Subsidy forecast summary

Street Furniture Subsidy Forecast (\$000)											
Activity	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	Total
Maintenance	-	-	-	-	-	-	-	-	-	-	-
Renewals	51	52	54	55	56	57	59	60	62	63	569
Service Level	-	-	-	-	-	-	-	-	-	-	-
Growth	-	-	-	-	-	-	-	-	-	-	-
Total	51	52	54	55	56	57	59	60	62	63	569

Full details about overall transportation operational expenditure are included in the Transportation Strategic Case (General Volume).

5. IMPROVEMENT AND MONITORING PLAN

Our general Asset Management Maturity Improvement Plan is included in the Asset Management Strategy.

There are no specific areas of improvement identified for street furniture assets.



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