Footpaths

Executive Summary

- 1. This report provides a summary of FNDC's footpath assets including its inventory, condition and value for money.
- 2. Its purpose is to provide a greater level of understanding of FNDC's assets and current asset management initiatives.
- 3. The analysis includes shared cycle routes but excludes cycle tracks
- 4. Footpath assets represent around \$32 million of value over a 200 km road network. The network is increasing due to the addition of new subdivisions and FNDC's programme of enhancing the existing network through new footpaths, cycleways, and other improvements.
- 5. Current asset management initiatives are focussed on the upcoming Asset Management Plan 2018 to 2021.
- 6. Investment has to equitable, effective, efficient and provide value for money.
- 7. Further work is needed to strengthen asset data quality, particularly in relation to condition.
- 8. Further work is needed to develop footpath performance measures.

Strategic Context

9. The strategic context for this report is FNDC's stewardship of a footpath network that contributes to active transport modes and provides an alternative to vehicle travel in townships, particularly for local journeys. It aligns predominately with the community outcome to provide liveable communities that are healthy, safe, connected and sustainable.

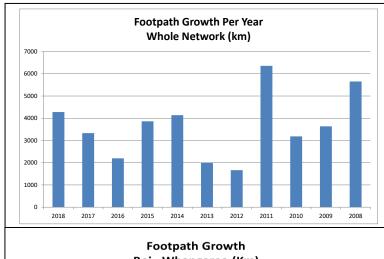
Population

10. Estimated population is based on figures produced by Statistics NZ. Land area is based on the Stats NZ Measures for land area, which excludes bodies of water larger than 15 km2 such as inlets, bays, and lakes (this captures Lake Omapere).

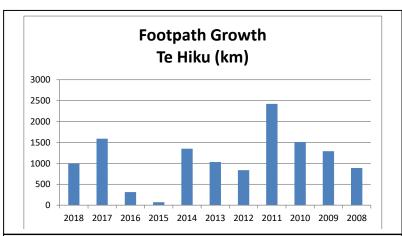
Area			Population Estimate									
7"	ou.	2013	2014	2014 2015		2017	(Km2)					
Te Hiku	Total Population	18950	19150	19250	19450	19850	2320					
	Density (p/km2)	8.2	8.3	8.3	8.4	8.6	2020					
Bay of Islands- Whangaroa	Total Population	27400	27600	27700	28100	28700	2063					
	Density (p/km2)	13.3	13.4	13.4	13.6	13.9	2000					
Kaikohe- Hokianga	Total Population	14250	14300	14350	14450	14700	2295					
	Density (p/km2)	6.2	6.2	6.3	6.3	6.4	2200					
FND Total	Total Population	60600	61050	61300	62000	63250	6677					
	Density (p/km2)	9.1	9.1	9.2	9.3	9.5	0017					

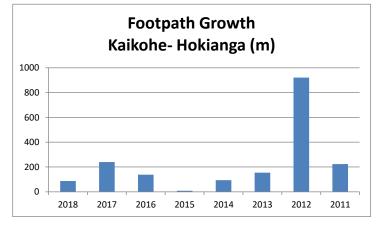
Asset Network

- 11. As at June 30th 2018, FNDC is responsible for a 201km long footpath network.
 - Te Hiku (North) length is 67.1km (34%)
 - Kaikohe-Hokianga (West) 29.5km (15%)
 - Bay of Islands-Whangaroa (East) 97.5km (48%)
 - State Highway 7km (4%)
- 12. Over the last ten years the footpath network has increased by 41 km.
 - Te Hiku (North) length is 12.3km
 - Kaikohe-Hokianga (West) 1.9km
 - Bay of Islands-Whangaroa (East) 24.1km
 - State Highway 2.0km



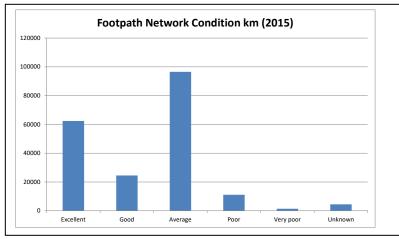


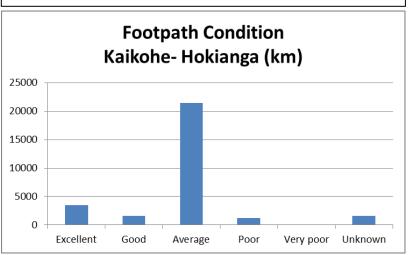


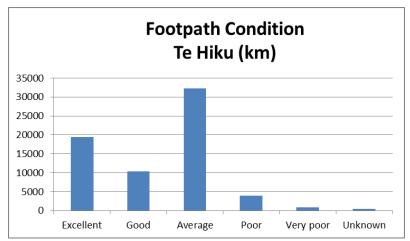


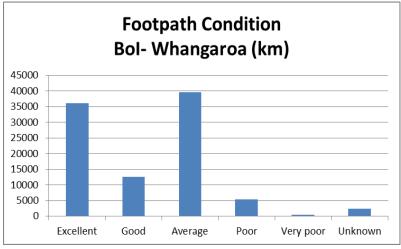
Asset Condition

13. Footpath condition is undertaken on a standardised visual grade rating system, with the assessment of individual footpath sections being given a score ranging from Excellent (1) to Very Poor (5). The last footpath condition assessment was undertaken in 2015. The Northland Transportation Alliance is currently undertaking new footpath condition assessments. It is likely that condition deterioration has occurred since the last condition assessment.



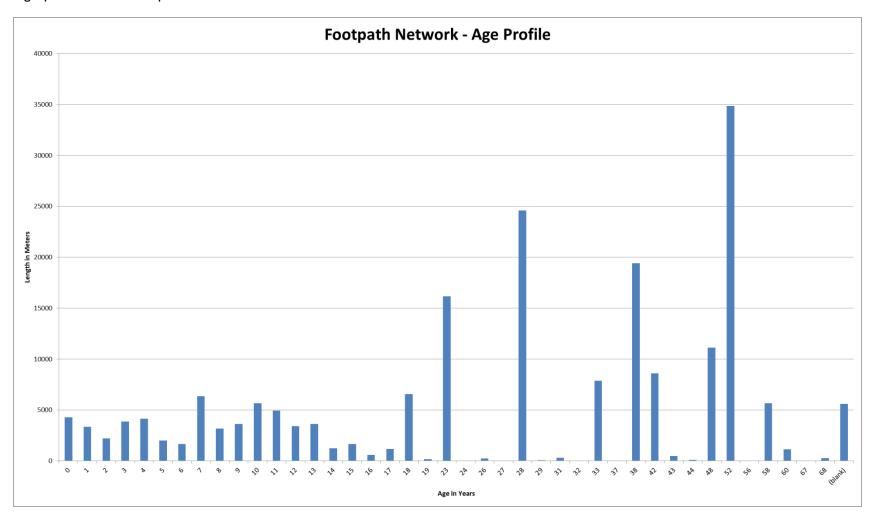






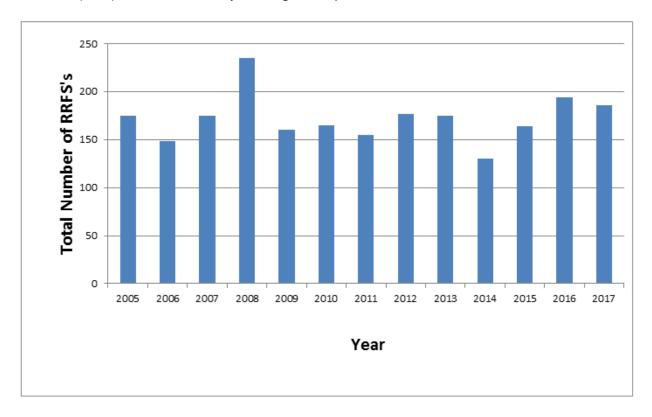
Asset Age

14. The age profile for the footpath network is detailed below:



Customer Service Requests

15. The total Requests for Service (RFS) recorded annually relating to footpaths are detailed below:



At this time it is not possible to filter RFS's by ward.

Performance Measures

- 16. Existing performance measures around footpaths are still emerging and will need strengthening to provide meaningful indicators.
 - Department of Internal Affairs (mandatory)

Footpaths: To maintain the District's footpath network and infrastructure to high standards.

		Result Performance Targets					
	DIA Performance Measures	2016/17	2018/19	2019/20	2020/2021	2021 onwards	Measurement Method
	4:Footpaths The percentage of footpaths within a territorial authority district that fall within the level of service or service standard for the condition of footpaths that is set out in the territorial authority's relevant document (such as its annual plan, activity management plan, asset management plan, annual works program or long term plan).	Not measured	Year 1: Baseline to be established and targets established.	Maintain / increase	Maintain / increase	Maintain / increase	We need to audit/condition rate the footpath network assets place prior to any measuring, this should be completed by end of 2017/18 year.

• Proposed Council Performance Measure in draft Long Term Plan

Foo	Footpaths													
Тоі	To maintain the District's footpath network and infrastructure to high standards.													
Proposed District Performance		Result		Performan	ce Targets		Measurement							
Mea	asure for 2018-28 LTP	2016/17	2018/19	2019/20	2020/2021	2021 onwards	Method							
1.9	Resurface and extend the footpath network as outlined in the Long Term Plan and the Annual Plan	New	≥95% of planned work completed	Contractor compliance reports monitored monthly										

17. Interventions for Far North footpaths are driven from RFS's raised. Complaints and concerns raised by customers are inspected and programmed for repair by the roading engineers and roading inspectors. A new approach will be undertaken following the condition assessment. A maintenance intervention strategy will be developed that prioritises renewals programs and maintenance items. This will be once levels of service have been set from the condition data analysis of the assessment in year one of the coming LTP.

The following performance specifications for footpaths are included in the new roading maintenance contracts:

Footpath Maintenance, Renewals and New shall meet the following criteria to the satisfaction of the Engineer:

- The Contractor shall take all necessary measures to ensure that while the concrete is setting the surface finish is not damaged.
- All repaired surfaces are to match existing in colour and level unless specified otherwise by the Engineer
- All repaired surfaces are to provide adequate slip resistance for foot and/or cycle traffic.
- The work is completed in accordance with the material specifications.

Footpath Cleaning shall meet the following criteria to the satisfaction of the Engineer:

- A consistent visual appearance shall be obtained on treated sites.
- The entire treated surface in each scheduled area shall be free from detritus.

Definitions

18. The following definitions refer to the key physical works activities undertaken. The activity is related to the funding source.

Maintenance - work carried out to keep an asset functioning or providing a predetermined level of service. This can be either reactive or planned/programmed. An Opex cost, and for footpaths funded through Ward Rates.

Reactive maintenance, also often referred to as breakdown maintenance or corrective maintenance is very much a reactive strategy where repairs are performed at the point when assets fail. This is a far more costly approach for an organization due to unplanned downtime, damaged assets overtime and callout fees. Ideally this method should only be performed on assets that are inexpensive and easy to replace or repair. Items such as guardrails and signs fit reactive maintenance profiles due to damages from accidents.

Planned/programmed maintenance on the other hand, also referred to as scheduled maintenance or preventive maintenance, is a proactive strategy where maintenance and inspections of assets are undertaken at regular intervals to ensure that they remain operating correctly so as to minimize breakdown and level of service interruptions.

Operations - the planning and management tasks undertaken to enable forward works programs to be developed and delivered. This can include activities such as Asset Management Plan development, network inspections and responding to Customer queries. An Opex cost, and for footpaths funded through Ward Rates.

Renewal - work carried out to replace an existing asset that has achieved its lifecycle return or has failed beyond repair. This does not increase the existing level of service. A Capex cost, and for footpaths funded through Renewal Funding Depreciation.

Capital Works – New works, building of new assets to improve on a level of service. A Capex cost, and for footpaths funded through Borrowing.

Northland Transportation Alliance (NTA)

19. The Northland Transportation Alliance was formed on 1 July 2016 and is a shared service business unit that incorporates transport staff from WDC, KDC, FNDC and NRC.

The objective of the NTA is to share services, create a centre of transport excellence, to encourage collaboration and sharing of ideas and to create efficiencies by increasing buying power and combining contracts. This should result in more consistent and efficient planning and operations being adopted across the region.

The Northland Strategic Business Objectives are:

- More engaged and capable workforce delivering superior asset management
- Improved regional strategy, planning and procurement
- Improved transport/customer outcomes, enabling investment and social opportunities
- Transport infrastructure is more affordable.

Footpath Investment

20. Historic and current investment is detailed in the tables below:

• Maintenance and Operations – Historic and Current Year

	BOI -	Te Hiku	Kaikohe-	Ward Total
	Whangaroa		Hokianga	
	(\$'000)	(\$'000)	(\$'000)	(\$'000)
14/15 Annual Plan Budget	65	59	30	154
14/15 Actual	85	55	24	164
15/16 LTP Budget	64	61	32	157
15/16 Actual	51	75	21	147
16/17 Annual Plan Budget	84	63	32	179
16/17 Actual	86	18	18	122
17/18 Annual Plan Budget	85	64	34	183
17/18 Actual	24	25	7	56

Ward	Av Budget/km (14/15, 15/16, 16/17)	Av Budget/population (14/15, 15/16, 16/17)
Te Hiku	\$2,727	\$3.13
Kaikohe-Hokianga	\$3,254	\$2.16
Bol - Whangaroa	\$2,205	\$2.52

• Renewals – Historic and Current Year

								District Wide Total
	BOI - Whangaroa		Te Hiku	Kaikohe - Hokianga		Ward Total		Walking Facilities
	Renewals		Renewals	Renewals		Renewal		Renewal
	(\$'000)		(\$'000)	(\$'000)		(\$'000)		(\$'000)
14/15 Annual Plan Budget	261		125	58		444		0
14/15 C/fwd from prior year	168		0	88		256		0
14/15 Forecast	409		125	146		680		
14/15 Actual	177		53	22		252		
15/16 LTP Budget	69		373	34		476		0
15/16 C/fwd from prior year	80		55	87		222		0
15/16 Forecast	149		184	138		471		0
15/16 Actual	122		17	123		262		0
16/17 Annual Plan Budget	232		55	119		406		0
16/17 C/fwd from prior year	16		168	10		194		0
16/17 Forecast	190		205	129		524	_	
16/17 Actual	57		187	19		263	-	
17/18 Annual Plan Budget	130		18	28		176		0
17/18 C/fwd from prior year	97		11	110		218		0
17/18 Forecast	169		29	110		308		
17/18 Actual	104		28	0		132		

17/18 figures are to March 2018

Ward	Maint & Ops Budget (14/15, 15/16, 16/17)				
	/km	/ av population			
Te Hiku	\$2,282	\$9.44			
Kaikohe - Hokianga	\$3,287	\$4.85			
Bol - Whangoroa	\$2,166	\$6.65			

• 2017/2018 Footpath Renewal Programme:

Ward	Project List
BOI - Whangaroa	Skudders Beach Road - Completed
	Mill Lane Kerikeri Footpath - Completed
	Seaview Road Paihia Footpath – Carry Forward
	Albert Street Footpath Kawakawa - Completed
	Harry's Place Footpath Kawakawa - Completed
	State Highway 11 Footpath Kawakawa – Carry Forward
	Moerewa Footpath - Deferred
	State Highway 10 Kaeo Footpath - Completed
	Mawson Avenue Footpath Waipapa - Completed
Te Hiku	Mangonui Beach – Carry Forward
	Commerce Street Kaitaia - Completed
	Ahipara Footpath - Completed
	Coopers Beach - Completed

Kaikohe - Hokianga	Settlers Way - Completed
	State Highway 12 Opononi - Deferred

• LTP 2018 Footpath Renewals Inflated Budget:

Ward	2018/2019	2019/2020	2020/2021	Total		
Te Hiku	\$150,000	\$153,000	\$156,360	\$459,360		
Kaikohe- Hokianga	\$95,000	\$96,900	\$99,028	\$290,928		
Bol- Whangaroa	\$205,000	\$209,100	\$213,692	\$627,792		
Totals	\$450,000	\$459,000	\$469,080	\$1,378,080		

Ward	Renewals Budget (14/15, 15/16, 16/17)				
	/km	/ av population			
Te Hiku	\$2,282	\$7.85			
Kaikohe - Hokianga	\$3,287	\$6.69			
Bol - Whangoroa	\$2,166	\$7.43			

• Historic and Current Footpath Capital Works Budget by Ward:

											District Wide Total			
		BOI - W	'ha	ngaroa	7	Ге Hiku	Κ	aikohe- Hokianga	Ward Total		Walking Facilities	Minor Imp		
		New		Haruru Falls		New		New	New		New	Kerikeri Shared	SH11 Waitangi	KK Packhous to SH 10
	((\$'000)		(\$'000)	(\$'000)	(\$'000)	(\$'000)		(\$'000)	(\$'000)	(\$'000)	(\$'000)
14/15 Annual Plan Budget		290		696		41		117	1144					
14/15 C/fwd from prior year		139		0		0		0	139		(
14/15 Forecast		406		696		41		36	1179					
14/15 Actual		377		15		41		45	478					
15/16 LTP Budget		0		500		0		0	500		317	300		
15/16 C/fwd from prior year		40		681		17		114	852			0		
15/16 Forecast		46		310				84	440		31	300		
15/16 Actual		0		74		0		50	124		69	8		
16/17 Annual Plan Budget		0		871		118		0	989		(0	0	0
16/17 C/fwd from prior year		0		238		0		30	268		249	85	0	0
16/17 Forecast		35		1109		100		30	1274		214			216
16/17 Actual		18		513		0		25	556		57	192	300	0
17/18 Annual Plan Budget		0		0		18		0	18		450	0	0	0
17/18 C/fwd from prior year		34		583		100		0	717		15		0	216
17/18 Forecast		34		583		118		0	735		60			230
17/18 Actual		12		551		0		0	563		120			164

17/18 figures are to March 2018

• 2017/2018 Capital Works Programme – current status

Kaik	ohe-Hokianga Ward						
ID	Footpath Location	Cost Estimate	Comments				
1	Omapere: Part of Signal Station Road	\$ 30,000	As per the resolution passed on 7 February 2018, the footpath is to remain on the prioritized list whilst alternatives for external funding are to be explored. Carry forward \$30k budget. Full works cost currently estimated at \$285k so further work is needed on this project.				
2	Kohukohu: Part of Marriner Street to Sports Club	\$ 35,000	On hold, Awaiting Tourism Infrastructure Fund feasibility study Carry forward \$30k budget. Full works cost estimated at \$134k, so further budget will be required.				
3	Kaikohe: Recreation Road	\$ 73,000	These works are interdependent with a proposed storm water upgrade along Recreation Road planned for 2019/20. Works are to be deferred for a collaborative approach to both projects.				
4	Opononi: Taumatawiwi Street to State Highway 12 via Bowling Green	\$ 15,000	Consultation is being undertaken with the bowling club, as this is leased land. Provided the outcome of the consultation is approval, physical works to commence in June				
5	Opononi: Fairly Crescent to State highway 12 through reserve	\$ 15,000	Completed				
6	Rawene: Manning Street	\$ 20,000	Physical works are due to commence in June. Commit \$20k before financial year end.				

Bay	of Islands - Whangaroa Ward						
ID	Location	Project Cost Estimate	Comment				
1	Kerikeri: Kerikeri Road from Maraenui Road to State Highway 10	\$ 216,000	Completed				
2	Kawakawa: Hospital Road from Hospital Road along Greenacres Drive to Johnson Road	\$ 200,000	Tender to be released end of the month – so funds can be committed this FY				
3	Kawakawa: Station Road to provide safe access to tourists accessing cycle trail, locals walking to various facilities.	\$ 35,000	Completed				
4	Moerewa: Marshall Street	\$ 15,000	Completed				
5	Waitangi to Haruru Stage 3: Landslips Section	\$ 215,000	Design underway - Carry Forward.				
Te l	 						
ID	Location	Project Cost Estimate					
1	Coopers Beach: State Highway 10. From existing footpath on Kupe Road along State Highway 10 to Beach Road	\$ 207,500	Awaiting NZTA safety audit of design - tender expected to be released July.				
2	Doubtless Bay: Tokerau Beach Road. From Virtue Crescent to Virtue Crescent.	\$ 80,000	Completed				

Other Footpaths planned/completed under NZTA subsidy

ID	Location	Project Cost Estimate	Comments
1	Coopers Beach: State Highway 10. From existing footpath on Kupe Road along State Highway 10 to Beach Road	\$ 207,500	Awaiting NZTA safety audit of design - tender expected to be released July.
2	Waitangi to Haruru Stage 3: Landslips Section	\$ 215,000	Under design review
3	Kerikeri: Kerikeri Road from Maraenui Road to State Highway 10	\$ 216,000	Completed

Funding

21. Maintenance and Operations

CONSOLIDATED FOOTPATHS						
PROSPECTIVE STATEMENT OF FINANCIAL PERFORMANCE						
	LTP	LTP				
	2017/18	2018-19	2019-20	2020-21	2021-22	2022-23
	\$'000s	\$'000s	\$'000s	\$'000s	\$'000s	\$'000s
Revenue						
Rates - Ward	1,020	984	988	1,008	1,014	1,037
Rates - Penalties	29	29	29	29	29	29
Other Contributions	0	-	-	-	-	-
Total Comprehensive Revenue	1,049	1,013	1,017	1,037	1,043	1,065
Direct Costs						
Direct Costs	240	175	172	181	179	189
Interest	112	104	101	96	90	83
Depreciation	615	651	662	675	689	704
Total Direct Operating Expenditure	966	930	935	953	958	976
Indirect Costs	83	83	83	84	85	89
Total Indirect Costs	83	83	83	84	85	89
Total Operating Expenditure	1,049	1,013	1,017	1,037	1,043	1,065
Total Operating Experiulture	1,043	1,013	1,017	1,037	1,043	1,005
NET SURPLUS/(DEFICIT)	0	0	0	0	0	0

22. Capital and Renewals

CONSOLIDATED FOOTPATHS						
STATEMENT OF SOURCE AND APPLICATION OF FUNDS						
	LTP	LTP				
	2017/18	2018-19	2019-20	2020-21	2021-22	2022-23
	\$'000s	\$'000s	\$'000s	\$'000s	\$'000s	\$'000s
CAPITAL STATEMENT						
Net Surplus/(Deficit)	-	-	-	-	-	-
Renewal Funding	589	599	608	618	628	639
Notional Loans Raised	-	-	-	-	-	-
Total Funding	589	599	608	618	628	639
Capital Expenditure						
Capital Projects	472	450	459	469	479	490
Debt Repayment	116	149	149	149	149	149
Total Capital Expenditure	589	599	608	618	628	639
NET SURPLUS/(DEFICIT)	0	0	0	0	0	0

Footpath Depreciation Funds Held

23. Prior to 2016/2017 all renewal funding (depreciation) for all asset classes in each ward was held in a single account. During 2016/2017 the funds were allocated to the correct asset class. This is why there is an increase in 2016/2017.

Ward	_	2016/17	2015/16	2014/15
Eastern		(2,025,904.72)	(196,989.47)	(95,755.52)
Northern		(1,776,994.98)	(368,331.71)	(170,868.25)
Western		(490,442.92)	(48,971.85)	(81,185.62)
Grand Total		(4,293,342.62)	(614,293.03)	(347,809.39)

NZTA Subsidy

24. Prior to July 2018 all footpath works were not subsidised by NZTA (but cycleways were?) From July 2018 this has changed and all footpath and cycleway works are now fully subsidised at 66%. We are still working through the implications of this, but it is likely that the local share the Council makes towards the footpath activity class will be lower. The cost savings to the local share may mean that the maintenance and renewal programmes can be accelerated.

Walking and Cycling Strategy

25. Work updating the 2007 Walking and Cycling Strategy began in 2016. Much of the work involves consultation with communities and identifying projects on the urban networks that focus on improving pedestrian and cyclist health, safety and well-being. Completion of the FNDC W&C Strategy will closely follow the publication of the regional strategy. This is expected to be August 2018.

Risks

Fa Di	r North strict Counc	il AMP	Risk Dashboard – Fo	Date: December 2017				
Risk ID	Inherent Risk Score	Risk Statement	Impact	Treatment proposed	Treatment Implemented	Residual Risk Score	Effectiveness	
F1	15	Structural damage, failure or collapse due to age, inappropriate usage and asset condition/design/construction leading to accessibility issues, Health and Safety hazards and increased costs to Council	Pedestrian or cyclists safety Widespread footpath deterioration caused by lack of funding Footpath or cycleway deterioration caused by poor design/construction or poor reinstatement by utility providers Accessibility issues for disabled persons / wheelchairs /strollers / walkers/ prams / mobility scooters from road parking areas, pedestrian crossings	Implement 12-monthly inspection program for the entire network. Audit programme	Inspections of high use footpaths and cycleway in town centres only. Respond to RFS in other areas	11	Good	
F2	5	Changing population (areas of expansion and ageing) coupled with new design requirements will impact costs to ratepayers and expected / desired level of service	Financial costs to ratepayers Increased level of RFS's	Review of funding allocation based on results from inspection program. Complete inspection program of entire footpath network, then determine appropriate funding allocations (e.g. depreciation)	Review of funding allocation based on results from inspection program. Reactive renewals as reported by the public or Council officers	5	Good	
F3	7	FNDC organisational structure is not optimised to support staff, institutional knowledge and efficient achievement of FNDC objectives to create value for the ratepayer	 Capital works projects not delivered in full, on time to specification Work programming is impacted 	Corridor Access requests and compliance with Councils Engineering Standards and Guidelines. Undertake peer reviews and audits. Use external Engineering Plan Approval or Corridor Access Request processes to ensure compliance with Council's Engineering Standards and Guidelines	Regular peer reviews and audits carried out Engineering Plan Approval and Corridor Access Request processes in place to ensure compliance with Council's Engineering Standards and Guidelines	7	Good	

F4	5	FNDC lacks process and i technology, missed opport	nformation s creating wa	ervices and	d updated			Review Council policy for taking bonds, communication protocols and inspections upon completion of works.			 Identify issues via community groups Typically reactive identification of works Established communication through a disability forum, which meets quarterly 			5	Good
F5	11	Rate payer experiences increased costs and/or loss of services due to amplified rate of asset deterioration caused by poor asset management and/or lack of knowledge/condition assessment of the asset The Community Trust may not have the time, skills and/or experience to govern, operate and maintain the Twin Coast Cycle Trail					Coast (supports the cycle Trail unti riate trustees	il	Cycle Tra	supports the ail until appro can be found	opriate	7	Good	
		Financial Risk C			ustomer Risk Rep			outational	Risk	Com	pliance/Le	gal Risk	Heal	th and S	afety Risk
High - Intolerable															
Medium		5			1		1			3			5	1	
Low- none	1, 2, 4	3,		2, 3, 4,	5		2, 3, 4, 5			1, 2, 4, 5			2, 3, 4		
	Unlik	ely Probable	Will Happen	Unlikel	y Probable	Will Happen	Unlikely	Probable	Will Happen	Unlikely	Probable	Will Happen	Unlikely	Probab	le Will Happen