State highway three-year plan instructions manual

Manual Number SM 018

Transport Services

23 October 2024

Version 24

More information

NZ Transport Agency Waka Kotahi
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Contents

Chapter 1- Introduction

1.1 Introduction

This chapter introduces the purpose and objectives of *SM 018* and the *State highway maintenance, operations and renewals 3-year plans (2024/25-27)*, of which there will be 41 to cover all areas of investment (refer to Appendix 1). Chapter 1 also provides background on the development and key improvements of this version (24) of *SM 018* and how to access additional help or provide feedback.

This document was written in October 2023 to support the development of the 2024-27 3-year plans, consequently the dates presented reflect that point in time. The only exceptions to this are:

- Section 2.4 of this manual
- appendix 7
- Template: Change management request.

The document will be updated to reflect organisational structural changes with the NZTA.

1.2 Purpose and objectives of SM018

SM 018 instructs how the plans for investing in state highway maintenance, operations and renewals need to be developed, presented, and reviewed. The objectives of *SM 018* are to:

- Facilitate the process for developing work category funding requests for the maintenance, operations and renewals of the state highway network for a 3-year period and then confirming this annually.
- Assist all key roles to carry out their accountabilities and/or responsibilities.
- Contribute to ensuring the value for money story for the National Land Transport Programme (NLTP) by setting expectations for how the *3-year plans* give effect to the State Highway Investment Proposal (SHIP) and the State Highway Activity Management Plan (SHAMP).
- Contribute to ensuring that investment decisions are based on the best possible asset information of the state highway network and associated assets and the analysis of the required treatment.
- Informing longer term investment needs.

1.3 Purpose and objectives of the 3-year plans

The purpose of the *3-year plans* is to Inform what the work category allocations should be for specific activities and projects within the three-year period of the 2024-27 NLTP to give effect to the SHIP and SHAMP.

The objectives of the *3-year plans* are to produce a plan that is transparent, accurate, complete, consistent, and comparable as far as practicable, as per the following sub-objectives:

- **Transparent** - All needs of investment and their respective treatment/solutions are itemised separately as far as practicable; and developed and evidenced comprehensively to justify all investment in a robust manner.
- **Accurate** - All costs should be accurate in the sense that they are systematically neither over nor under the true cost, as far as can be judged and the true cost represents the best value for money in delivering renewals and a well-engineered balance of routine maintenance to deliver the level of service outcomes expected. Greater uncertainty is expected in planning for the years two and three.
- **Complete** - While the plans present a prioritised list of investment needs, all aspects of the asset and its condition/state/needs have been considered in the development of the plan.
- **Comparable** - All relevant templates are used for submitting each plan.
- **Consistent** -
    - The prioritisation/ranking methodology used to determine what is included in the plan, is consistent throughout the *3-year plan* period.
    - The methodology for determining the condition of the asset is consistent where relevant.
    - The plans align with any relevant contracted or committed levels of service. The plans comply with all relevant manuals and guides.

1.4 Chapter and appendix outlines

Chapters include:

- Chapter 2: Operational and strategic context provides the essential understanding as to why the plans are required and why it's important that they are of a high quality and meet their required timeframes.
- Chapter 3: Kotahitanga – better together – expectations of key roles on what and how they must contribute towards ensuring the plans meet their objectives.
- Chapter 4: Dates and timeframes provides all key dates and timeframes.
- Chapter 5: Deliverable requirements provides all requirements for ensuring that each plan delivers on its objectives.

Appendices include:

- Appendix 1: Areas of investment
- Appendix 2: Definitions of abbreviations used in figure 3.1.1
- Appendix 3: Key relationships, accountabilities and responsibilities used in figure 3.2.1
- Appendix 4: Guideline for the population of 3-year plan tables
- Appendix 5: Activity lookup table used in 3-year plan tables
- Appendix 6: Guideline for the 10-year plan tables
- Appendix 7: Guidelines for the Achievements Tracker Process
- Appendix 8: Storing, managing, and sharing information relevant to 3-year plans

1.5 Development of SM 018

Version 24 of SM 018 was developed in collaboration with relevant teams within NZ Transport Agency Waka Kotahi, led by the Portfolio & Performance team and ratified by the NZTA National Manager, Programme & Standards.

1.6 Key improvements introduced in SM 018 v.24

Version 24 of *SM 018* introduces an improved approach in line with relevant contract requirements to develop detailed programmes that will give effect to the SHIP and SHAMP. This means that much of the work required to develop many of the plans has now already been completed for the purpose of developing the SHIP and SHAMP. There has been a significant amount of analysis undertaken to develop the SHIP estimates of the required investment, including national estimates and work category estimates based on the SHAMP and top-down scenarios. The top-down scenarios are informed by expenditure analysis, as well as regional and sector trends and insight. The SHIP is available here. The SHAMP will be made available internally.

Version 24 of *SM 018* also introduces greater transparency and new templates as the deliverables. The greater transparency introduced is the inclusion of information on the relevant operational and strategic context, roles, and accountabilities and step by step instruction on how to complete the deliverable. The new templates include an excel workbook that has fields for all required information, most of which is either automated or a selection from a drop-down menu.

1.7 Providing feedback

Consistent with the value of kotahitanga, better together, feedback on *SM 018* is always sought and welcome to help ensure the guidelines continue to improve. The NZTA Portfolio and Performance Team maintains a register of feedback that they receive, and this is reviewed on a regular basis to identify what improvements could be made to ensure you are supported to deliver high-quality, timely and relevant plans.

The channels for providing feedback include:

- A survey following the finalisation of the plans and confirmed allocations.
- Raising with the NZTA Portfolio & Performance team at: SM018@nzta.govt.nz.
- If prefer, feedback may be given via trusted peers, your people leader, senior network manager group, or governance group.

Feedback sought includes:

- What was/wasn't particularly helpful within *SM 018*.
- What was missing from *SM 018* that would have helped you.

1.8 Additional help

If *SM 018* does not include sufficient information, please do not hesitate to get in touch with the NZTA Portfolio & Performance Team at: SM018@nzta.govt.nz.

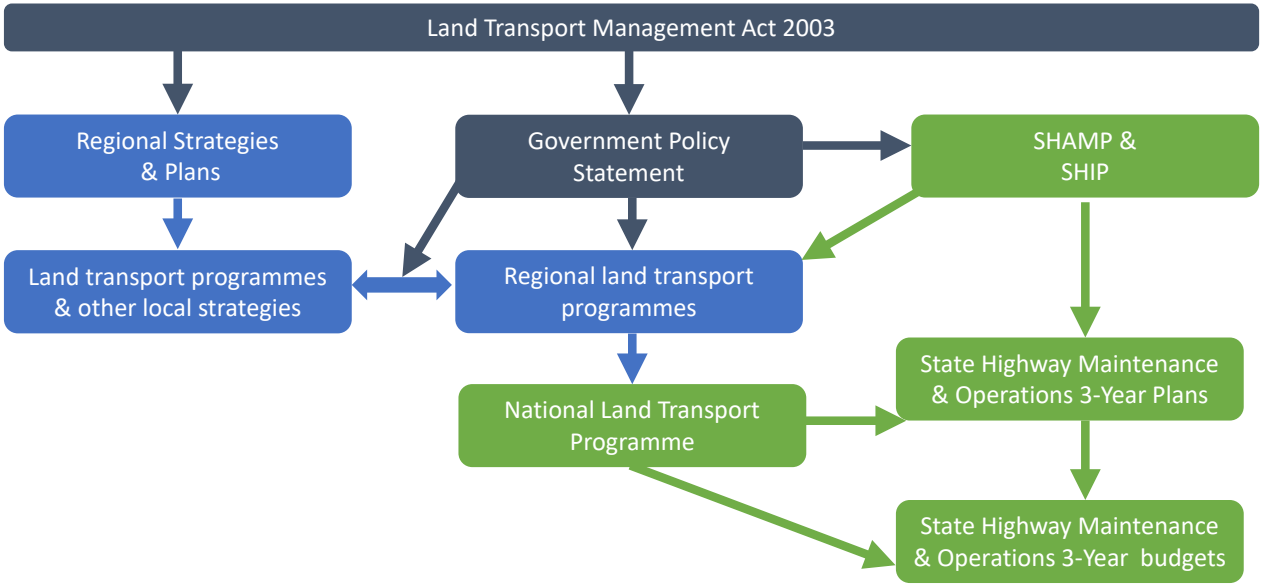
Chapter 2 – Strategic context

2.1 Introduction

The answer to the question “why are these plans required?” and, “why must it be consistent with the standard laid out in these guidelines?” – is in short to ensure we are delivering the best value for money for Aotearoa New Zealand. NZTA must demonstrate they are delivering value for money, and this is emphasised in the Land Transport Management Act 2003 which guides the context of the *3-year plans* and *10 year plans* (Figure 2.1.1). The concept of value for money is defined as getting the most from limited resources by demonstrating both efficiency and effectiveness while delivering intended outcomes. This means it is important that you understand:

- the fiscal constraints for maintenance and operational activities [limited resources]
- delivering optimal outputs with minimal wasted effort or expense [efficiency]
- successfully delivering on the outcomes of the *GPS 2024* by giving effect to the SHIP [effectiveness]

Figure 2.1.1: The strategic context



Note: SHAMP =State Highway Asset Management Plan; SHIP = State Highway Investment Proposal. Navy boxes indicate that the document is developed and owned by the Ministry of Transport, lighter blue boxes are developed and owned by local authorities; green boxes are developed and owned by NZTA.

2.2 Fiscal constraints

New Zealand faces increasing costs to maintain existing assets. Road transport demand and renewal is forecasted to grow for some time until mode shifts offset the impact of economic and population growth. Road networks continue to grow both in terms of size and complexity in response to the growth in urban populations; as safety and traffic operation infrastructure is added to the existing networks; and as safer practices are used to keep workers and customers safe at roadwork sites. There are also increasing impacts from climate change with more frequent and severe weather events. These emergency events divert resources for the recovery effort resulting in impact on levels of service and carry-over of projects.

As in previous years, funding made available for land transport activities, including through the National Land Transport Fund (NLTF), will need to prioritise investments and make difficult trade-offs, including deferring or scaling co-funding commitments to proposals that support the strategic priorities. It is critical that all transport investment decisions continue to be transparent and provide the best impact and value to New Zealanders. All decision-makers should have an ongoing focus on achieving value for money across the programme.

The government expects NZTA and partners to deliver benefits that support multiple strategic priorities and outcomes. This means there should be greater collaboration occurring with other NLTP funded areas i.e., state highway capital projects and safety led projects to identify opportunities to deliver more with less.

2.3 Optimal outputs with minimal wasted effort or expense

As an asset owner, NZTA must be confident that its investment in the state highway network will achieve our desired outcomes as efficiently as possible. This means we require robust evidence that there is a case for investment and that the recommended approach is best practice for the asset. There must be evidence that all relevant alternative options were explored.

To ensure efficiency of delivering within limited funding, an appropriate balance must be sought between investing in maintenance activities as a reactive approach and investing in renewal activities as a proactive approach. Quite simply we cannot afford to renew all assets that we would like to. Nor can we afford the risks and long-term financial cost of only maintaining assets.

It is complex to identify the appropriate balance for each network, region and aspect of operations across the entire portfolio of *3-year plans* for the state highway network. To sustain service levels and provide a state highway network that road users expect, more operational and maintenance works are required than in the past. This is because demands on maintenance works continue to grow, combined with the fact that the condition of the network infrastructure is depreciating at a rate faster than renewal works.

2.4 Successfully delivering on the GPS outcomes

Under legislation, everything funded by the NLTF needs to be able to demonstrate that it gives effect to the government position statement (GPS) and maintenance and operations is no exception. The maintenance and operations of the state highway network is funded through three activity classes: state highway operations; state highway pothole prevention; and walking and cycling. Figure 2.4.1 demonstrates which work categories make up each activity class. The activities within these classes contribute to the desired transport outcomes in different ways. In July 2024, the Minister of Transport released the *government policy statement on land transport 2024* | te *tauākī kaupapa here a te kāwanatanga mō ngā waka whenua 2024 (GPS 2024)*. GPS 2024, states that the four key strategic priorities are:

- Economic growth and productivity
- Increased maintenance and resilience
- Safety
- Value for money

The expectations of the government for maintaining and operating the system are as follows:

> *"GPS 2024 establishes new activity classes to ensure maintenance funds are prioritised and ringfenced to fix potholes, and to prevent potholes by ensuring that state highways, local and rural roads are maintained to a higher standard. The State Highway Pothole Prevention and Local Road Pothole Prevention activity classes will ensure that maintenance funds are prioritised and ringfenced, with clear outcomes that must be achieved by both central and local government. Funding from these activity classes will only be available for the following activities: road resealing, road rehabilitation and drainage maintenance."*

Figure 2.4.1 shows which work categories make up which activity class.

State Highway Maintenance		
Activity Class	**Work Category**	**Work Category Name**
SH Operations	WC114	Structure Maintenance
	WC121	Environmental Maintenance
	WC122	Network Services Maintenance
	WC123	Network Operations
	WC131	Rail level crossing warning devices maintenance
	WC140	Minor Events
	WC141	Emergency Works
	WC151	Network and Asset Management
	WC161	Property Management
	WC215	Structure Component replacement
	WC221	Environmental Renewals
	WC222	Traffic Services Renewals
SH Pothole Prevention	WC111	Sealed Pavement Maintenance
	WC112	Unselead Pavement Maintenance
	WC113	Drainage Maintenance
	WC211	Unsealed Road Metalling
	WC212	Sealed Road Resurfacing
	WC213	Drainage Renewal
	WC214	Sealed Road Pavement rehabilitation
Walking & Cycling	WC124	Cycle Path Maintenance
	WC125	Footpath Maintenance
	WC224	Cycle Path Renewal
	WC225	Footpath Renewal

2.5 State highway investment proposal and state highway activity management plan

Two critical documents for you to understand are the SHIP and SHAMP. The SHIP is the bid for how much budget there should be for state highway maintenance, and its work categories to deliver on the draft GPS 2024 and other land transport commitments during the period of the GPS. The SHAMP sets out the case for investment in maintenance, renewal, and operational activities, and provides a summary of the improvement activities (including low-cost, low-risk improvements) proposed on the state highway network as part of the 2024-27 NLTP in response to the draft GPS 2024. It presents a more detailed case for investment than that presented in the overarching the SHIP and as such should be read together.

The NLTP process then determines how much of the bid will be invested in, which sets the amount NZTA can allocate to the *3-year plans*. Consequently, the SHIP and SHAMP establishes much of the value for money story for state highway maintenance and operations. The *3-year plans* must be consistent with the strategic direction and trade-offs made by the SHIP and SHAMP. You might be thinking, how is it different to the plans that you will develop? Table 2.5.1 highlights the key differences between the SHIP, the SHAMP and the different types of plans. In short, the top-down estimate of what the State highway maintenance budget will be for the three-year period (as prepared for the SHIP), allows the NZTA Board to consider maintenance and operations funding against other funding priorities while you are still preparing your Plans. The SHIP will present three top-down investment scenarios to the NZTA Board: Bare minimum (going backwards with current capacity); Conservative (standing still); and Ambitious.

The SHIP is finalised by NZTA for the Board to consider. Between March and April NZTA will host hui to review and discuss how the *3-year plans* need to be adapted to respond to the provisional investment for any risks and/or opportunities ahead of provisional allocations being prepared (est. late May 2024).

Table 2.5.1 key differences between the SHIP and SHAMP compared with the 3-year plans

	The SHIP and SHAMP	3-Year Plans
Decision maker	NZTA Board	NZTA Transport Services Group General Manager
Decision	What the recommended national budget for maintenance and operations should be for all of State highway maintenance. For the 2021-24 NLTP, it was advised that $3.2 billion was needed and the Waka Kotahi Board allocated $2.8 billion. The SHIP recommends what this might look like for each work category. In doing so, it explains what the strategic trade-offs are. It does not determine which projects are allocated what funding. It provides a 10-year planning horizon.	What the allocations are for the next three years, working within the budget set by the NZTA Board when it adopts the NLTP.
Timing of decision (see also Chapter 4)	September 2023 is when the SHIP is expected to be finalised as a recommendation and then provided to the Regional Transport Committee for inclusion in the Regional Land Transport Plans.	Provisional decision in late May 2024 & the final decision in September 2024. The provisional decision will create certainty for year 1, any changes with the final decision will only affect years 2 and or 3.
Scope of coverage	National	Specific to Areas of Investment, as per Appendix 1 and collated as National Portfolio
Estimates	Estimates are based on the State Highway Asset Management Plan and top-down scenarios, down to work category level. The top-down scenarios are informed by expenditure analysis, as well as regional and sector trends and insights.	Estimates are project specific, a bottom-up approach, derived from contract fixed rates, current market rates and estimated resources. These estimates are considered to be reliably close to what the actual delivery costs will be.
Development	Collaboration between NZTA Transport Services teams: 'Programme and Standards' and 'Maintenance and Operations'.	These are informed by the SHIP. Collaboration is specific for each of the *3-year plans*. Some include contracted service providers, as well as the NZTA digital teams, property advisors, and 'Programme and Standards' and 'Maintenance and Operations' in collaboration with our trusted Suppliers

2.6 Future view – lifecycle asset management plans (specific to network plans 1-22)

Lifecyle asset management plans (LAMPS) provide a comprehensive understanding of the:

- asset condition
- treatment strategy
- investment journey to achieve the optimal treatment
- prioritisation at a national and regional level.

When the *LAMPs* are completed, they will direct the initial draft programmes for multiple asset types. They are currently under development and will be more influential in future renewals works.

We anticipate that some of the available *LAMP* content will support the development of the *3-year plans (2024/25-27)* and the *10-year work plans (2028-2034)*.

Chapter 3 – Kotahitanga – better together – roles and responsibilities

3.1 Introduction

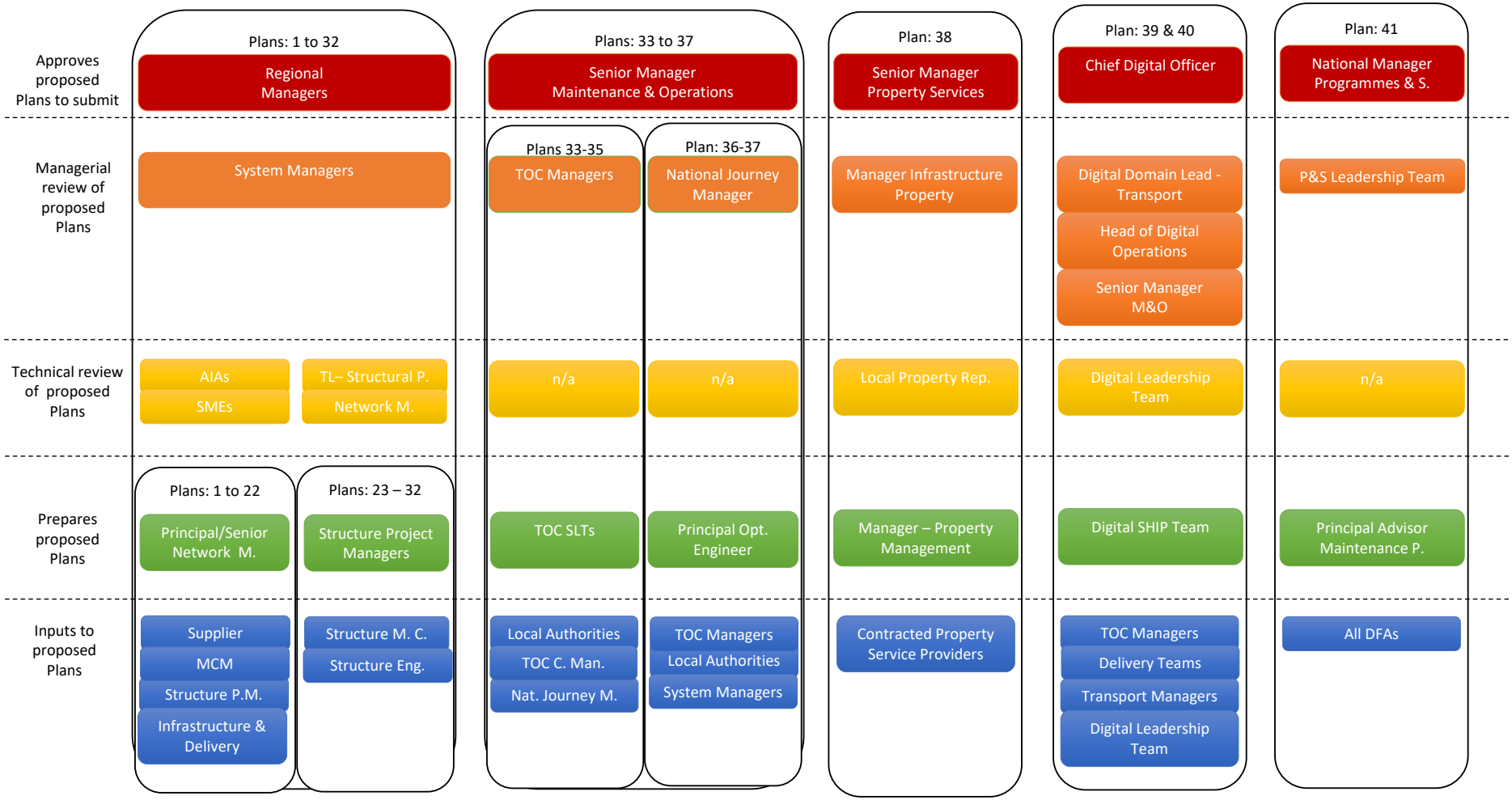
It is important that everyone understands the expectations of *SM 018* and that of other key roles to help ensure we are reflecting the value of kotahitanga – better together with the development of the *3-year plans*. Great collaboration will help ensure our proposed *3-year plans* are timely, of high quality, and reflect funding priorities. As with understanding the 'why' in chapter 2, at a practical level, an understanding of the key roles and accountabilities would help minimise feedback on proposed *3-year plans* and help ensure no surprises when final allocations decisions are made.

3.2 Overview of roles and responsibilities

Figure 3.2.1 provides an overview of all key roles for developing the *3-year plan* for submission to NZTA's Portfolio & Performance Team.

- Appendix 2 provides the list of definitions for each abbreviation used in Figure 3.2.1.
- Appendix 3 provides greater detail for each of the Roles included between 3.3 to 3.13, including:
  - Key Relationships
  - Accountabilities
  - Responsibilities
- Table 3.2.1 provides an overview of all key roles for assessing the submitted plans and as a portfolio (set of all areas of investment) through to making a decision.

Figure 3.2.1 Overview of all key roles in developing the 3-year plans



For detailed description of key relationships, accountabilities and responsibilities of these roles, in relation to *SM 018*, refer to Appendix 3.

Table 3.2.1 Overview of all NZTA key roles involved in the process from preparing the portfolio through to making a decision

Process	3-Year Plan Portfolio (set of 41)	3-Year Plan Review – if there are variances
Prepares portfolio and manages process	Portfolio & Performance Team	Portfolio & Performance Team
Leads and Guides through process	Governance Group	Governance Group
Recommends Portfolio	Manager Portfolio & Performance	Manager Portfolio & Performance
Endorses Portfolio	Value, Outcome & Scope Committee	N/A
Decision maker	Group General Manager – Transport Services	Appropriate DFA

Chapter 4 - Key milestones

4.1 Introduction

Chapter 4 presents the key milestones for the development of the *3-year plans* and contextual decisions for the development of the SHIP and NLTP. It is important that deadlines are met for the submission of the *3-year plans* and preparers are available if/when input is required in the period between submitting the *3-year plans* and receiving confirmed allocations. Particularly workshops and hui to understand the SHIP bid and approved funding levels in 2024.

4.2 Milestones

Table 4.2.1 shows the milestones for the development of the plans and associated input/output for the SHIP and NLTP.

Table 4.2.1 Milestones for the required plans & other relevant milestones

Timeframes/ deadlines	Milestones for 2024-27 3-Year Plans	Other relevant milestones
2023 11		SHAMP made available
2023 11	SM 018 v.24 **final release** (after ratification) and will include pre-populated planning tables based on SHIP information.	
2023 11 30	For *3-year plans* 1-22, 2024/25 (Year 1) pavement and surfacing programme is accurately recorded in JunoViewer and provisional NPVs are provided. Year 2 & 3 preliminary programme (no preliminary NPVs required at this stage) are in JunoViewer. Deliverables developed with your Asset Investment Advisor.	
2024 03 01	3-Year Plan, and all supporting information (including Final NPVs for Year 1) must be approved & submitted to the Portfolio & Performance Team	
2024 03	The portfolio is prepared by Maintenance Portfolio Team with the assistance and input of the governance group.	

Timeframes/ deadlines	Milestones for 2024-27 3-Year Plans	Other relevant milestones
2024 04	Support provided to the governance group as needed	
2024 05	**Provisional** allocations are expected to be made available in late May to assist in the refinement of the *3-year plans*. Year 1 allocations can be treated with certainty. If the final allocations change then only the allocations for years 2 and 3 will be impacted.	
2024 06 30	Preliminary NPVs are due for submission	
2024 08 31		NLTP adopted by the NZTA Board
2024 09		NLTP published
2024 09	Recommended confirmed allocations made to the Group General Manager – Transport Services	
2024 09	• Confirmed 3-year allocation tables are made available in InfoHub & allocated in SAP (provisional estimate were made available in late May 2024) 2024/25 (year 1) detailed programmes are due for baseline establishment	
2024 12 15	2024/25 (year 1) a*chievement tracker change management request* close date (for non-mitigating circumstances)	
2025 03 01	2024/25 (year 1) c*hange management request – mitigating circumstances* due	
2025 04 30	2025/26 (year 2) 3-year plan review	

Timeframes/ deadlines	Milestones for 2024-27 3-Year Plans	Other relevant milestones
2025 07 31	2025/26 (year 2) allocations entered into SAP by Portfolio & Performance	
2025 08 31	2025/26 (year 2) allocations distributed in SAP by the preparers of the plans	
Repeat steps and dates for 2026		

4.2.1 Related milestones for the detailed annual programmes and statement of performance expectations (SPE) measures

Network detailed a*nnual plan programmes* are required alongside the *3-year plans*. These form two critical reporting functions within the state highway maintenance portfolio:

1. Setting baseline targets to track and report to the NZTA Board and Te Manatū Waka on our performance, as part of the SPEs, and
2. Setting baseline targets to track achievement and deviation from programmes of significance asset value and network investment:
    - WC212 Pavement resurfacing
    - WC214 Pavement rehabilitation
    - WC123 Drainage maintenance
    - WC213 Drainage renewals
    - WC215 Structural component renewals
    - WC222 Delineation audio tactile profile (ATP) renewal

Further information and instructions are available in appendix 7: Guidelines for the Achievement Tracker Process.

Chapter 5 – Deliverable requirements

5.1 Introduction

This section explains all deliverable requirements for the *3-year plans*.

5.2 Summary of requirements

A complete *3-year plan* submission consists of the following approved documents:

- *Planning tables*. Please find the template here and appendix 4 for detailed instructions on how to complete these and appendix 5 for the activity lookup tables.
- All required *supporting information*. Table 5.2.1 compares the deliverable requirements across the plans and indicates which ones have a template.

Please note that the submission must:

- Meet the objectives of SM 018 as per section 1.3.
- Follow any other relevant specific instructions. Table 5.2.2 provides an index for all other specific instructions.
- Appropriate evidence is provided for all work categories and work elements, including some means of prioritisation that could be applied (as per MMP).
- Be uploaded to the relevant folder in InfoHub
- Meet deadlines. Table 4.2.1 provides all deadlines.
- Use the templates provided with no modifications made to the template structure.
- All templates and any other guidance can be found in the SharePoint folder. When SM 018 is ratified, the documents will be moved to the Highway Information Portal.

⚠ **Modified templates will not be accepted as it creates data quality errors and import failures when consolidating plans.**

For investment direction, please refer to the SHIP and SHAMP. To emphasise some points of interest for plans 1-22:

- The renewals programme is expected to scale up as per table 5.7.1.
- Temporary traffic management must be factored into your plans as there will be no centrally held fund available for this in 2024-27.
- Integrated delivery model (IDM): Only a minor provision was made in the SHIP for IDM because there is too much uncertainty at this point. Assumptions and estimates will need to be developed as clarity emerges. If during the SHIP, you had not allowed for a contract negotiation or change then it is recommended that you estimate a lump sum provisional value because there will be no centrally held fund for this in 2024-27.
- Centrally held funds will remain for bitumen and escalations. Do not include in your estimates for your *3-year plans*.

Table 5.2.1 deliverable requirements

Specific to which Plans	Requirement	Templates provided	3-Year Plan (2024-27)	3-Year Plan Reviews	Ref.
1-41	Planning Tables	Yes	Yes	by Exception	Appendix 4 & Appendix 5
Supporting Information:					
1-41	Investment Statement (previously referred to as the Network Statement)	Yes	Yes	No	Section 5.3
1-22	Preliminary Net Present Value (NPV) for Work Category 214	Yes – one template for all types of NPVs	Yes (by 30 June'24)	No	Section 5.4.1
1-22	Provisional Net Present Value (NPV) for Work Categories 212 (only, where there is a change in treatment from chipseal to TAC) and 214	Yes – one template for all types of NPVs	Yes (for Year 1))	No	Section 5.4.2
1-22	Final Net Present Value (NPV) for Work Categories 212 (only, where there is a change in treatment from chipseal to TAC) and 214	Yes – one template for all types of NPVs	Yes (for Year 1)	Yes	Section 5.4.3
1-22	Maintenance Cost Curves	No	Yes	Yes	Section 5.5
1-22	Suppliers Condition Assessment with Rankings	No	Yes	No	Section 5.6
23-31	Structures Annual Plan Request forms (SAPRs)	Yes	Yes (for Year 1)	Yes	Section 5.9
1-22	10-Year Forward Work Plans	Yes	Yes	Yes	Section 5.13

Specific to which Plans	Requirement	Templates provided	3-Year Plan (2024-27)	3-Year Plan Reviews	Ref.
Following Plan Finalisation:					
1-41	Change Management Requests	Yes	Yes	Yes	Section 5.12

Table 5.2.2 additional information

Specific to which Plans	Requirement	Reference
1-22	Pavement & Surfacing: Network Quantities	Section 5.7
1-22	Regrade Unlined Surface Water Channel (USWC): Network Quantities	Section 5.8
23-32	Bridges & Structures	Section 5.10.1
1-32	Geotechnical Assets	Section 5.10.2
31-34	Journey Management	Section 5.10.4
1-41	3-Year Plan Review	Section 5.11

5.3 Investment statements

Each *3-year plan* must be submitted with an *investment statement* (previously known as a *network statement*). These statements help NZTA understand the information you are presenting in the planning tables. Any changes in year 2 (2025/26) and/or year 3 (2026/27) compared to the *3-year plan* require a *change management record* to be completed, which provides the necessary understanding of deviations from *3 year plans*. In other words, i*nvestment statements* are only required once when the *3-year plans* are developed (as per template requirements in table 5.2.1).

The template must be used and can be found here.

5.4 Net present value (NPV)

All *network plans 1-22* must provide the net present value (NPV) for thin asphaltic concrete (TAC) (only, where there is a change in treatment from chipseal to TAC) and all rehabilitation treatments. There are three different NPVs measurements to reflect the stage and type of work. The template is the same for all of them and must be requested from the Senior Network Manager.

- Preliminary NPV
- Provisional NPV
- Final NPV

5.4.1 Preliminary NPV

Preliminary NPV's should be worked through collaboratively between suppliers, network teams and local AIA's to ensure there is a clear understanding of process and expectations. **Preliminary NPV's will not be required as part of the *3-year plan* submission but will need to be provided by the end of June 2024.**

Preliminary NPVs must be completed for work category 214 for treatments that are planned to occur in year 2(2025/26), year 3 (2026/27) and year 4 (2027/28). Preliminary NPVs will not be required again until the following *3-year plan* is developed. Preliminary NPVs are a simple assessment that will give an early indication of option economics and also allow assessment of the economic benefit of adopting an early intervention of preventative drainage and give indication of additional maintenance demand should treatments be deferred. This should also support the programme ranking.

The estimate should be kept simple. Many of the initial inputs can be transferred when estimating the provisional and final NPV.

The standard NPV template can be used to develop the preliminary NPV's but does require slight modification around terminology:

- The maintenance cost curves approved by the local Asset Investment Advisor must be used following reset treatments.
- "All Faults" data[1] must be used to programme maintenance needs up until rehabilitation is programmed, including estimates for all years prior to treatment.

[1] All suppliers have a list of all identified faults on the network from their inspections. These are prioritised by severity for repair.

- The costs for a preventative drainage should be included in the heavy maintenance option (captured as shoulder maintenance) where drainage works along with some pavement repairs could defer or negate the immediate rehabilitation need.
- Treatment options must be based on the previously provided catalogue design options (or network specific options if developed), and should consider low, medium and high risk, catalogue approaches. The base rates for these should come from the information column calculation (ICC) templates in JunoViewer.
- The 'do minimum option' should include a medium risk catalogue rehabilitation treatment. A heavy maintenance option should include a high-risk catalogue rehabilitation treatment.

5.4.2 Provisional NPV

Provisional NPVs must be completed for work categories 212 (only, where there is a change in treatment from chipseal to TAC) and 214 (all rehabilitation treatments) in 2024/25. Provisional NPVs provide confidence that the proposed treatments warrant going forward for investigation and detailed design, and that maintenance intervention strategies have been followed and continue to support the need for treatment. It is termed 'provisional' as it is needed to economically justify treatments for inclusion in the next (one year in advance) programme but usually prior to investigation and final design. It is acknowledged that following detailed design there may be changes to what was estimated for the provisional NPV when estimating the Final NPV and this may require changes of option due to changes in cost or risk.

A provisional NPV should be provided on the standard NPV template, the same template used for the final NPV.

5.4.3 Final NPV

Final NPV approved by the Network Manager must be provided for work categories 212 (only, where there is a change in treatment from chipseal to TAC) and 214 (all rehabilitation treatments) in 2024/25. This is a funding requirement to prove the economic benefit of the proposed treatment.

The f*inal NPV template* must be used.

5.5 Maintenance cost curves

Network 3-year Plans 1-22 and the *10-year forward work plans* must provide the suppliers maintenance activity cost model for pavements and surfacing that reflects the deterioration rate/maintenance demand leading up to and post renewal.

5.6 Suppliers condition assessment with ranking

For the 3-year period covered by the *3-year plan*, *network plans 1-22* must provide the supplier's condition rating assessment with rankings based on risk and criticality for the following asset types:

- Rehabilitation treatments
- Significant asphalt concrete works (>$100k)
- Large signs renewals
- Barrier renewals not on bridges
- Culvert renewals

The ratings will eventually be consistent between networks when the LAMPs are embedded. Until then it is expected that ratings may be inconsistent between networks. However, as per the objectives of SM 018 (section 1.3) within the network, the methodology for determining the condition of the asset is consistent where relevant.

5.7 Pavement & surfacing: network quantities

5.7.1 Specific to the 3-Year Plans for the Network Plans 1-22: Pavement & Surfacing

Each network will need to work with their Asset Investment Advisor to align the draft quantities set out in table 5.7.1 to quantify their regional variance with the NLTP model to produce a prioritised needs-based programme. This table contains the draft network quantities submitted to the SHIP that were modelled from dTimms. It is essential that we improve the way we give effect to the outcomes of the modelling work to ensure that networks are targeting the optimal levels of renewals within fiscal constraints. This means you must have strong rationale for the distribution of work across the appropriate functional classifications. Specifically, we need to ensure that:

- renewals target the right sites and high/medium/low volume classifications as per the one network road classification (ONRC)[2].
- that the treatment types (and costs) are robustly assessed to ensure that prioritized target lengths can be delivered within the budget available.
    - To enable this the pavement & surfacing *forward works programmes* (FWP) **must be sequentially ranked** for rehabilitations and significant asphaltic concrete renewals (significant means greater than $100,000).

[2] Note that we are still transitioning towards the *one network framework* (ONF).

Table 5.7.1 Surfacing & Pavement 3-Year (2024/25-2026/27) Quantities for the Networks as per SHIP bid

	3-Year Total (2024/25 to 2026/27) Quantities (lane km)			
	Surfacing		Pavement	
Network	Asphalt	Chipseal	Rehabilitation	Treatment Total
ASMA	333	33	18	384
BOP East	19	302	105	426
BOP West	59	75	24	159
Central Otago	9	347	52	408
Central Waikato	3	483	192	678
Coastal Otago	29	294	78	401
East Waikato	23	210	69	302
Hawkes Bay	8	358	55	421
Manawatu Whanganui	24	593	80	696
Marlborough	9	90	12	111
Milford		53		53
Nelson Tasman	18	145	45	208
North Canterbury	120	357	39	517
Northland	51	472	89	612
South Canterbury	11	294	12	317
Southland	24	447	95	565
Tairawhiti Roads	3	190	69	262
Taranaki	14	592	167	773
Wellington	103	45	9	156
West Coast	13	350	14	378
West Waikato	38	259	37	334
Grand Total	**912**	**5,988**	**1,261**	**8,161**

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North Canterbury	120	357	39	517
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Wellington	103	45	9	156
West Coast	13	350	14	378
West Waikato	38	259	37	334
Grand Total	912	5,988	1,261	8,161

The objective set out in the dTimms model was to:

- maintain condition on the high-class network (high volume and national)
- marginally improve medium class network (regional and arterial)
- maintain the low-class network (collectors).

Quantities will reflect this objective, with predominately the lower-class networks receiving less pavement renewal quantity compared to high-class networks.

A number of considerations should be kept in mind when reviewing these quantities:

- Quantities are based on the submitted data to the SHIP. We are still reviewing some of these quantities, but this is starting position till advised otherwise.

- Treatment length segmentation was extracted from JunoViewer in August 2022, any changes since should be minor. Quantities include the full NZSH network as at August 2022 thus including all principal risk and/or improvement/capital sites. This means they may over-represent the quantity available to some networks.
- Input data for the model was extracted from RAMM in August 2022 (2021/22 high speed data survey).
- Strength and cracking data was extrapolated from 2019 modelling analysis.
- The 2022/23 and 2023/24 forward works programmes, based on JunoViewer extraction in August 2022 have been locked into the model.
- Model is based on 'like for like' treatment renewal logic. For example, a chip seal surface will only ever be replaced by a chip seal in the model. This will not always be appropriate.
- Quantities are preservation only and do not include SCRIM treatments.
- Quantities have been compared to the pavement master FWPs (May 2023 extract) in JunoViewer, with good overall alignment at a national level for total renewal length. However, regionally there are some significant variances that will need to be modified.

5.7.2 Aligning the Pavement_Master FWP to the NLTP Model

Each network has an NLTP model FWP in JunoViewer available for reference:

NLTP_XX_350M_24_27

(XX = network name as per Pavement_Master)

The Pavement_Master FWP is to be kept up-to-date and accurate as it is the official source of truth for the pavement & surfacing programme.

- The AIA, SNM and Supplier's must work together using the *JunoViewer comparison report* to identify the gaps between the modelled output used for the SHIP and the Pavement_Master
- All changes to the FWP must be made in either the virtual FIT or offline FIT, no spreadsheets are to be uploaded independently.
- The Pavement_Master final output quantities should give effect to the GPS and have alignment with the drafted total quantities as per table 5.8.1 and as agreed with the AIA.
- The final Pavement_Master should ensure the condition of the existing transport system is efficiently maintained at a level that meets the current and future needs of users and is best for network.

As at time of publication the SHIP renewal funding has also not yet been finalised therefore the allocation of renewal quantities cannot be confirmed; however, NZTA will be using a ranking system for rehabilitations to prioritise the renewals programmes to meet the funding allocation. This is because rehabilitation sites have the highest cost impact, this includes structural AC and significant AC sites.

- Any deferred sites from the 21-24 NLTP should be considered highest priority and are expected to be programmed in 2024/25 (year 1 of the NLTP). There may be some exceptions to this upon the agreement of the AIA and SNM.
- All rehabilitation sites **must be ranked sequentially** across the minimum of 3 years based on the year of treatment, e.g. year 1 (24/25): sites 1-10. Year 2 (25/26): sites 11-15 etc
    - The ranking will need to be assigned to each site within the Pavement_Master FWP

- The ranking system should take into account:
  - Safety implications
  - Road classification (H/M/L)
  - Customer impact
  - Alignment with NLTP model output
  - Alignment with maintenance cost curves
  - Alignment with any relevant contractual or committed levels of service
  - Reputational risk
  - Efficiency opportunities – SIP, Capital Improvements, other work categories
  - Deliverability

Once the Pavement_Master is ranked and submitted, the Team Lead – Maintenance Portfolio will allocate final funding and the preparers of the plans must defer any sites that cannot be afforded out of the *3-year plan* into the *10-year plan (2027-2034)*.

- Any sites deferred out of the 24-27 NLTP must have a maintenance plan developed to maintain the level of service as specified in the contract. This should be in line with the assessed maintenance within preliminary NPVs or maintenance cost curves.
- NZTA expects rehabilitation sites to meet 25-year design lives based on catalogue design approach. However, higher risk treatment options identified in the NPV may be considered.
- To achieve the most cost-effective whole of life option for the sites proposed, pavement rehabilitation should remain as area wide treatments
  - Transferral between WC214 and WC111 will not be permitted unless the pavement strengthening is agreed by AIA as it is a part of rehab strategy sites will not be changed to a maintenance only option.

If there are any JunoViewer related issues please contact JunoViewerSteeringGroup@nzta.govt.nz.

If there are any other issues relating to these instructions for the pavement and surfacing programmes, please contact the relevant AIA.

5.8 Regrade unlined surface water channel (USWC): network quantities

5.8.1 Specific to the *3-year plans* for the n*etwork plans 1-22*: USWC

Each network will need to work with their Asset Investment Advisor to align the draft quantities set out in table 5.8.1 to quantify their regional variance with the NLTP model to produce a prioritised needs-based programme. This table contains the draft network quantities submitted to the SHIP. It is essential that we improve the way we give effect to the outcomes of the modelling work to ensure that networks are targeting the optimal levels of renewals within fiscal constraints. This means you must have strong rationale for the distribution of work across the appropriate functional classifications. Specifically, we need to ensure that:

- Renewals target the right sites and high/medium/low volume classifications as per the o*ne network road classification* (ONRC)[3].
- That the treatment (and costs) are robustly assessed to ensure that prioritized target lengths can be delivered within the budget available
- To enable this the *USWC forward works programmes* (FWP) should show a relationship to the p*avement and surfacing forward work plan* and life extension objectives and must be sequentially ranked.

[3] Note that we are still transitioning towards the *one network framework* (ONF).

Table 5.8.1 Regrade USWC – recommended annual renewal length for the networks as per SHIP bid (to be delivered each year of the 3-year block)

Contract Area	Estimated Unlined SWC Length (km)	Recommended Annual Renewal Length (km)	Current Budgeted Annual Renewal Length (km)
West Coast (NOC)	1,720	138	34.4
Northland (NOC)	1,680	134	33.6
Central Waikato (NOC)	1,342	107	26.8
Southland (NOC)	1,290	103	25.8
Otago Central	1,012	61	20.2
Manawatu-Whanganui (NOC)	1,207	72	24.1
Nelson-Tasman (NOC)	679	41	13.6
Taranaki (NOC)	1,087	43	21.7
Coastal Otago	1,437	57	28.7
North Canterbury	1,641	66	32.8
South Canterbury (NOC)	1,064	43	21.3
East Waikato (NOC)	925	37	18.5
West Waikato (NOC)	938	38	18.8

Contract Area	Estimated Unlined SWC Length (km)	Recommended Annual Renewal Length (km)	Current Budgeted Annual Renewal Length (km)
Hawkes Bay (NOC)	975	39	19.5
BOP East (NOC)	985	20	19.7
Wellington (NOC)	478	10	9.6
Auckland Alliance	816	16	16.3
Tairawhiti Roads Northern (NOC)	373	7	7.5
Milford	206	4	4.1
Marlborough (EC)	475	10	9.5
Tairawhiti Roads Western (NOC)	253	5	5.1
BOP West (NOC)	391	8	7.8
Total	**20,976**	**1,059**	**420**

5.9 Structures annual plan request forms (SAPRs)

All *structures plans 23-32* must provide completed *structures annual plan request* forms (SAPRs) for all three years for 2024-27.:

- All projects which exceed $20,000.
- Planned design works.
    - Design works may be identified ahead of construction as programme and budget allow.

SAPRs include justification, methodology, and an assessment of the residual risks for various options considered. All completed *SAPRs* must be identified in the planning tables.

The following assurance processes must be applied where relevant:

- *SAPR* forms are produced for all required proposed works.
- *SAPR* approval meetings are held to agree on the maintenance requirements and proposed interventions and to re-evaluate the priority of projects if necessary.
- Annual technical/asset management review meetings are held to discuss issues such as compliance, risk, backlog, within the region.

Projects where a *SAPR* could not be completed in time and judgement was used instead must be identified in the planning tables.

SAPRs are not required for:

- projects less than $20,000. Instead for these projects, supplementary information must be provided for the justification, methodology and an assessment of the residual risks for various options considered.
- any lump sum activities such as those that receive network outcome contract payments (e.g., WC114A) and structure maintenance consultant contract payments (C151). These also need to be identified in the *planning tables*.

5.10 Additional requirements for specific plans

5.10.1 Plans 23-32: Bridges & Structures

For plans 23-32, proposed investment in bridges and structures must:

- be based on specifically identified maintenance projects to meet specified or implied performance standards.
- apply the definition for a 'project' as a work item on an individual structure, collated work items of similar nature on an individual structure, or collated work items of the same nature on multiple structures.

Note that:

- While Waterview Tunnel has its own plan, all other tunnels must be covered under the respective network plan (i.e. the Homer Tunnel will be included in Plan 22.
- Investment for work categories 216 and 322 will be managed separately.
- The *3-year plan 38 property* will cover the investment for premises associated with structures.
- As per all other *3-year plans*, please refer to the SHAMP for investment direction and priorities.

5.10.2 3-year plans 1-32: Geotechnical assets

For plans 1-32, any ongoing geotechnical asset maintenance needs must be considered as part of your *3-year plan*, including any ongoing prescribed works such as scaling. Whereas any one-off new projects for installation of geotechnical assets, including rock scaling and fencing, must be excluded from your *3-year plan*, and instead included in your low-cost low-risk programme as part of resilience funding.

To identify what occurs in plans 1-22 compared to 23-32 please refer to S6 and S7 which stipulate what is included in plans 23-32.

The Rockfall Hazard Rating Instructions must be applied and can be found here.

5.10.3 3-Year plans 1-32: LCLR Resilience

For plans 1-32, applications for risks where LCLR Resilience funding is being sought must be made through the National Resilience Assessment Tool

5.10.4 3-year plans 31-34: Journey management

There are specific requirements for determining which activities are in scope of the *3-year plans 33-37* compared with *3-year plan 35*. For activities that are connected to operations (journey management) and the associated asset is controlled by the transport operational centres (TOCs), then the TOCs will manage, maintain, and plan the renewal of that asset. The only exclusions to this requirement are several assets identified in the memorandum of understanding for the Auckland System Management Alliance and also for the Wellington Transport Alliance networks – those assets remain the responsibility of each alliance respectively.

An additional requirement is that those preparing *plans 33-35* must work collaboratively with their cross-functional activities to deliver on a safe system approach to journey management.

5.11 3-year plan review

The *3-year plans* are reviewed annually for confirming allocations for year 2 and year 3. These are light touch reviews meaning that: the *3-year plans* submitted and approved in 2024 (as per this guide) should only require revised information to update the *3-year plan* by exception.

If *3-year plans* are revised, an approved version must be uploaded to the three-year plan folder in InfoHub and clearly identifiable by following the guidance in appendix 8.

A sound and diligent approach should be taken for the reviews, while also preventing unnecessary rework or churn. Key considerations include:

- Review the *3-year plan* to adjust for actual delivery from year prior. For example, perhaps there is unexpected carry-over as delivery was constrained in the current year.
- Refresh your forecasts for cost fluctuations, growth and variations.
- Carefully consider whether your reviewed *3-year plan* will be delivered given sector capacity constraints and any emergency response or recovery work etc.
- Your total 3-year request must not exceed your total 3-year allocation unless additional funding has been approved via the change management request (CMR) process.
- Where the change is outside of the DFA of the approver then it will need to be escalated to the appropriate DFA.
- Significant variances from the *3-year plan* requires a detailed description within the summary table and must be supported by a CMR and/or variation. A significant variance is defined as: 5% of the original value for 200 series, and an increase of at least $50k or 105% of the original value for 100 series.
- Requests for additional allocations or transferring allocations from renewals to maintenance work categories will require a CMR to be approved and endorsed by the relevant approver and cannot be assumed in the preparation of 3-year plan review. The relevant approver can be identified using the information included on the CMR form “info” tab, see also section 5.12.
- Where you identify funding allocation is in excess of forecasted need, you must declare this as surplus.
- If there is no change or deviation from *3-year plan*, we only require advise (approved as per guidelines) to that affect to be sent to Team Lead – Maintenance Portfolio.
- Specific to the *network plan* (Plans 1-22):

- Ensure that your revised *3-year plan* maintains the same funding split between maintenance (100 series) and renewals (200 series) as your 3-year approved allocation or would deliver the same expected outcomes that the original investment had proposed to deliver.
- Where the quantity delivered on renewal activities is programmed for less than available funding (by WC), an explanation should be provided in the summary table.

- Specific to structures plans (plans 23-32)
  - Funding requested through these plans is for professional services and physical works overseen by the regional consultant or alliance. Do not include any maintenance contractor projects.
  - For SMC managed projects, *SAPR* forms are required to be submitted and approved. *SAPR's* are required for work category 114 and 215 projects over $20k in value.

5.12 Change management requests (CMRs)

Following the approval of the *3-year plan*, baselines are established in September each year for:

a) Financial baseline – the Portfolio and Performance Team will allocate approved funding to project WBS elements in SAP as per allocation tables (anticipated release August each year), following this the allocation must be distributed across the financial year to reflect anticipated monthly spend in line with programme.
b) Programme achievement baseline – draft programmes are imported from the submitted *3-year plan* and any revised *3-year plans* as presented in InfoHub. There is an opportunity in August to review and finalise your detailed programme ahead of the programme baseline being set 15 September each year.

Any adjustment to Work Category funding will need to be submitted via the CMR form.

Any adjustment to treatments, lengths, lanes, deferrals or new sites for programmes renewals listed below will need to be submitted via the CMR form also as these are critical performance measures for NZTA.

- Pavement resurfacing
- Pavement rehabilitation
- SCRIM resurfacing
- Drainage renewal
- ATP renewal
- Structure component renewal

More details are available in the Template: Change Management Record.

5.13 10-year forward work plan

The intent in developing *10-year forward work plans* is that the investment is linked to asset condition underpinning the need for work. These plans support the argument that without the proposed investment, the effects of asset condition deterioration will create adverse outcomes. The *10-year plan* must be reviewed annually and extended by 1 year with each 3-year plan review. This on-going 10-year plan is needed to show the long-term understanding of the network need. These plans must be endorsed by the Asset Investment Advisor. The template can be found here and additional guidance in appendix 6.

In accordance with the contract documents and as part of the suppliers MMP, suppliers are required to produce a *10-year forward work plan* for each asset group as an input into the SM 018 process.

The MMP process was required to cover:

- Linkage to prioritisation, risk assessment and other tools used to tension short term programmes to match investment capability.
- Linkage with the annual planning process, network classification etc,
- Detail on how current performance and target outcomes will drive investment.

While it is expected that an optimisation over a longer timeframe (for example 30 years) will be required to ensure that the 10-year forecast represents the most cost-effective whole of life strategy, suppliers need to provide a forward view of the network need over a 10-year planning period.

To enable NZTA to understand the current condition and need of the network, asset types listed below will require data to be provided in accordance with the supplied spreadsheet templates to enable aggregation of data to help support national prioritisation. Any other work categories that the supplier has that can demonstrate a 10YFP in accordance with MMP can also be provided.

- WC 113 Drainage Maintenance – Regrade Unlined Surface Water Channels
- WC 113 Drainage Maintenance – Regrade Side Drains
- WC 212 Sealed Road Resurfacing – Reseal
- WC 212 Sealed Road Resurfacing – Thin Asphalt Concrete (TAC)
- WC 213 Drainage Renewals – Culvert Renewal
- WC 214 Sealed Road Pavement Rehabilitation
- WC 215-F Guardrail Component Replacement (Barriers) not on Bridges
- WC 222 Traffic Service Renewals – Large Signs

⚠ **Each asset type listed above (excluding WC 212 sealed road resurfacing - reseal) will require a ranking (in line with MMP or as agreed with network teams) of each asset treatment length or point asset, to be reported on within the submitted spreadsheet.** Sites must be prioritised and ranked sequentially across the minimum of 3 years based on the year of treatment and ideally 10 years or across the full asset list.

In developing the *3-year plans* both supplier and network teams should look for opportunities to:

- Improve productivity in delivering WC 212 and WC 214 treatments,
- Unlocking value for money when doing pavement and surfacing renewal in conjunction with other work activities,
- Delivering on Levels of Service, and
- Take a “whole of network” approach.

Once final allocations are approved for the *3-year plans*, each of the *10-year forward works plans*, must be updated to account for the deferral of any sites that cannot be afforded out of the *3-year plan* into the 10-year state highway maintenance & renewal plans (2027-2034).

5.13.1 WC 113 drainage maintenance – regrade unlined surface water channels

The plan for *regrade unlined surface water channels*, should show a relationship to the *pavement and surfacing forward work plan* and life extension objectives. Suppliers are therefore required to rank and submit a *regrade unlined surface water channels master plan*.

5.13.2 WC 113 drainage maintenance – regrade side drains

Side drains usually convey water away from or along the roadway and are usually part of a wider drainage flow path scheme. Waterways in the corridor must be able to handle both the discharge from upstream catchments and water accumulated within the road reserve. To maintain the adequacy of the water transfer system, programs should be developed that consider rainfall intensity and catchment characteristics and maintain the structural integrity of the drainage asset.

Suppliers are therefore required to rank and submit a *regrade side drain master plan*.

5.13.3 WC 212 sealed road resurfacing – reseal

Once the *Pavement_Master* is submitted, the *10-year forward work plan for sealed road resurfacing – reseal* will be extracted from Juno to enable a clear 10-year view of future need.

5.13.4 WC 212 sealed road resurfacing – thin asphalt concrete (TAC)

Once the *Pavement_Master* is submitted, the *10-year forward work plan for sealed road resurfacing – thin asphalt concrete (TAC)* will be extracted from Juno to enable a clear 10-year view of future need.

5.13.5 WC 213 drainage renewals – culvert renewal

It is expected that the *drainage renewals - culvert renewal 10-year forwards work plan* will be linked to and justified by asset performance and network resilience. Suppliers are therefore required to rank and submit a *culvert renewal master plan*.

5.13.6 WC 214 sealed road pavement rehabilitation

Once the *Pavement_Master* is ranked and submitted, the *10-year forward work plan for sealed road pavement rehabilitation* will be extracted from Juno to enable a clear 10-year view of future need.

5.13.7 WC 215-F guardrail component replacement (barriers) not on bridges

The over-arching principle is that barrier systems should remain functional, meaning they can assist in redirecting or containing an errant vehicle, improve the safety of the road, and contribute to road to zero.

The prioritisation and programming of renewal candidates must be guided by the supplier's MMP considering:

- Updated condition/integrity data
- Levels of service
- Unlocking value for money when doing barrier renewal in conjunction with other work activities
- Timing of other activities that override the need to renew barriers, such as impending capital works upgrades.

Suppliers are therefore required to rank and submit a *guardrail component replacement not on bridges master plan*.

5.13.8 WC 222 Traffic Service Renewals – Large Signs

NZTA's signs are categorised into large signs (≥2.025) and small signs.

Signage assets can be classified into the following two categories:

- Functional: sign can be read, (day and night) and components are structurally sound.
- Non-functional: sign cannot be read (day or night) and/or not structurally sound

NZTA expects suppliers to create a renewal package that first considers replacing components, rather than just defaulting to a full sign renewal.

Suppliers are therefore required to rank and submit a *large signs renewal master plan*.

The ranking and programming should consider:

- Component replacement
- Asset condition
- Achieving levels of service
- Sign type and road class, with the safety of road users being prioritised above other considerations like tourism
- Environment/location
- Unlocking value for money by doing signage renewal in conjunction with other work
- Timing of other activities that override the need to renew signs, such as impending capital works upgrades.