Guide to using the decision-led approach for project development

September 2025

First edition – draft version 2

For use on all NZ Transport Agency Waka Kotahi state highway projects

NZ TRANSPORT AGENCY WAKA KOTAHI

Te Kāwanatanga o Aotearoa New Zealand Government

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More information

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1 Overview of the decision-led approach

The Government Policy Statement on Land Transport (GPS) 2024 set clear direction that NZ Transport Agency Waka Kotahi (NZTA) must 'build a much more efficient business case process' that focuses 'on the core objectives of the project' and maintains 'a tight control on project scope and cost'. The decision-led approach to project development has been developed in response to ministerial expectations and the need for continuous improvement to ensure our project development processes are efficient and robust.

All NZTA state highway infrastructure projects are required to use the decision-led approach when developing projects. This approach provides a structured way of thinking, which project teams can use to ensure that the right work is undertaken at the right time and the right decisions are made. It enables a collaborative approach to project development with project team members, partners and stakeholders being able to contribute to integrated decision making.

Decision-led accelerates the development of investment cases and the delivery of projects, while ensuring they focus on value for money and affordability. It continues to use the 5-case model and aligns with NZ Treasury's Better Business Cases methodology and the investment lifecycle.

1.1 Concepts

There are 3 fundamental decision-led concepts:

- **Narrowing the spiral by making decisions early.** Making decisions earlier in the project lifecycle helps to narrow the set of potential solutions, refine the scope and frame the solution, resulting in a more efficient process. Figure 2 shows the concept of narrowing the spiral by making decisions early.
- **No revisiting decisions** when projects stay within expected project tolerances, which means project teams can move forward with confidence.
- **Presenting decision makers with genuine choices** at the most appropriate stage in a project, while clearly highlighting the potential consequences of each option.

1.2 Principles

The principles of the decision-led approach are:

- investing for benefits
- clarity of the project
- fit-for-purpose effort
- gathering information through informed discussion
- project development is decision-led.

1.3 Project lifecycle phases and checkpoints

The decision-led approach places greater emphasis on setting up a project for success in the early phases, with checkpoints to ensure the project is on track. This guidance covers the project initiation and investment case phases of project development.

Project lifecycle phases and checkpoints are shown in Figure 5**.**

1.4 Decisions process

Following the decisions process enables a collaborative approach to project development. The decisions process comprises 5 steps:

1. **Plan** – undertake early decision planning as a team to map out the decisions that need to be made, by whom and when.
2. **Do the work** – do the work needed to form a robust recommendation (for example option identification and analysis).
3. **Recommend** – make a recommendation, along with supporting information; share and test with the integrated project team.

4. **Decide** – decisions are made at a decisions confirmation meeting.
5. **Escalate if required** – the most significant decisions need to be escalated above the project team.

1.5 5-case model and project workstreams

It is expected that investment cases will be presented using the 5-case model, with project workstreams providing the evidence for the 5 cases (strategic case, economic case, commercial case, financial case and management case).

Project workstreams are established during the project initiation phase. Key decisions for each project workstream are identified and mapped during decision planning. Common workstreams include:

- governance
- project management
- Māori partnership
- communications and engagement
- investment and transport planning
- engineering and technical
- construction
- maintenance and operations
- environmental planning
- property
- commercial delivery
- procurement.

2 Introduction

2.1 Purpose of this guide

This guide provides information on how to apply the decision-led approach to the development of state highway projects. It focuses on the project initiation and investment case phases of the project development lifecycle. Guidance on other phases will be considered in future updates of this guide.

2.2 Who needs to use this guide?

All NZTA state highway infrastructure projects will use the decision-led approach to project development. This excludes maintenance and operations, and low-cost, low-risk projects.

The approach is not mandatory for use by other non-NZTA approved organisations, including local government. However, as the approach provides a structured way of thinking that can be widely applied, this guidance is being made available for use by all approved organisations and consultants who are assisting on transport projects.

The decision-led approach focuses on doing just the work required. If project development work has been undertaken using existing practices, then this will be considered by decision makers (that is, there is no requirement for rework); however, there will likely be value in adopting the decision-led approach for subsequent phases of project development.

All NZTA-facing project development guidance, systems, tools and processes will be updated in due course to align with the decision-led approach.

2.3 Why are we moving to the decision-led approach?

Land transport infrastructure projects are a big investment in time and money, and it is NZTA's responsibility to deliver value for money for the government and taxpayers. We have a commitment to continuously improve project development processes to ensure they are efficient and robust.

The decision-led approach is also a response to ministerial expectations in the Government Policy Statement on Land Transport (GPS) 2024 for NZTA to 'build a much more efficient business case process' that focuses 'on the core objectives of the project' and maintains 'a tight control on project scope and cost'.

Additionally, the approach aligns with wider NZTA business improvements, including shifting to a consistent application of a Portfolio, Programme and Project Management model (P3M).

By using the decision-led approach, NZTA expects the outcomes shown in Figure 1.

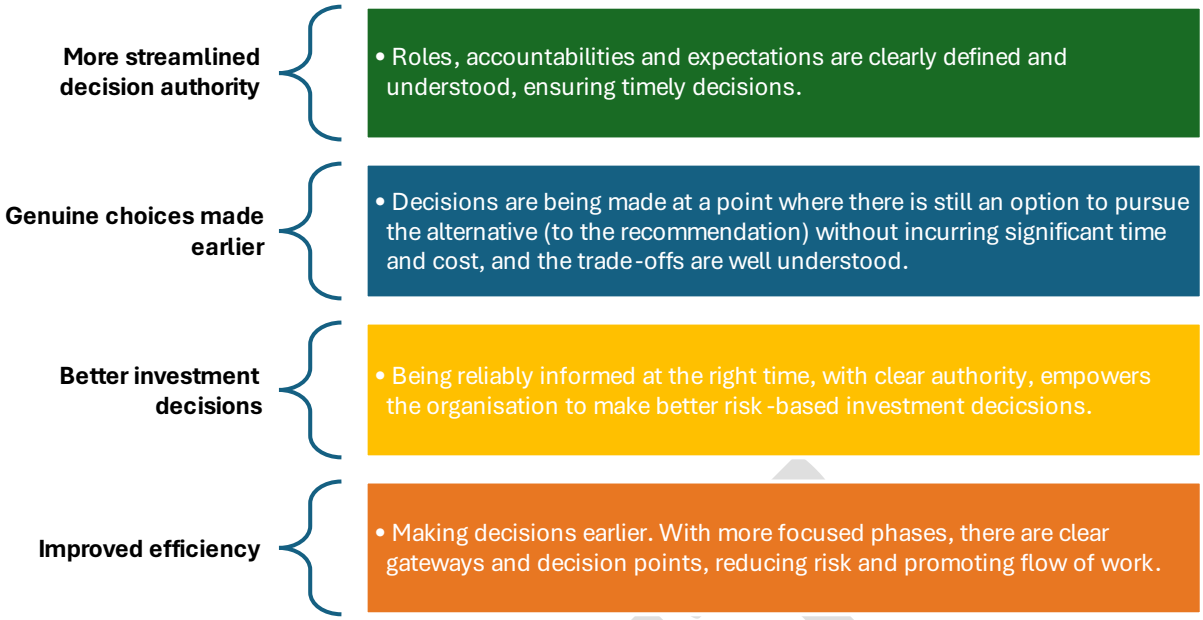

Figure 1: Expected outcomes of the decision-led approach

2.4 What isn't changing

The decision-led approach continues to use the 5-case model and still aligns with NZ Treasury's Better Business Cases methodology and the investment lifecycle.

These planning and investment considerations remain unchanged:

- legislative requirements under the Land Transport Management Act 2003 (LTMA) to approve funding of activities and compliance with environmental and property legislation
- investment principles and polices that provide the 'rules' for National Land Transport Fund (NLTF) investment
- NZTA delegations (internal NZTA link) for transport planning, funding, investment and reporting.

Appendix A maps Business Case Approach phases to the decision-led approach phases. This mapping can be used by project teams currently using the Business Case Approach to help them shift to using the decision-led approach. NZTA Business Case Approach guidance will be updated, in due course, to align with the decision-led approach.

3 Fundamental decision-led concepts

3.1 Narrowing the spiral by making decisions early

The decision-led approach focuses on making decisions earlier within the project lifecycle, which helps to narrow the set of potential solutions, refine the scope and frame the solution.

Solutions are developed by making **decisions** and narrowing the spiral (see Figure 2).

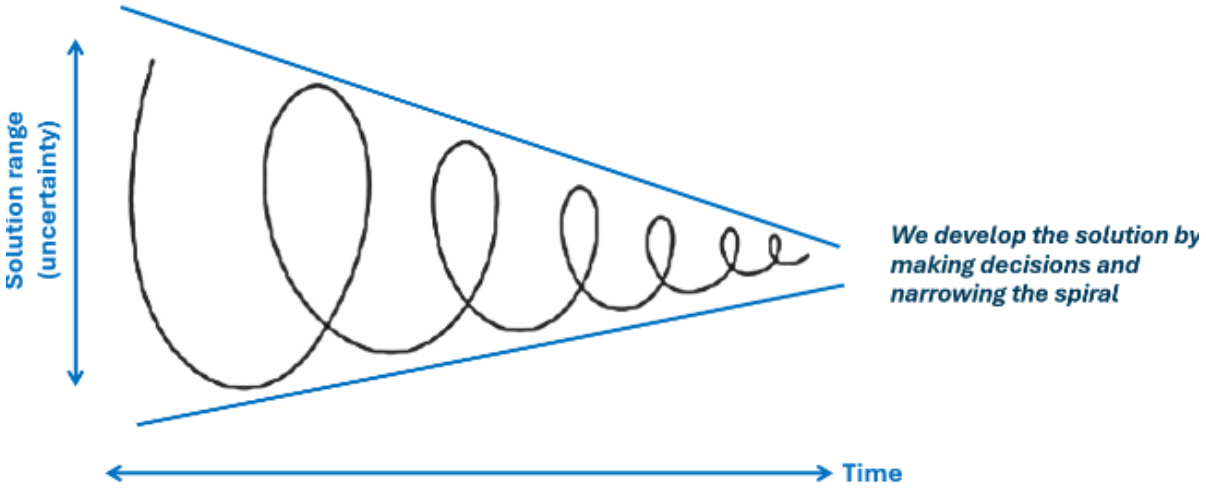

Figure 2: How the decision-led approach narrows the focus to develop the solution

During optioneering there is a focus on making decisions on options and their trade-offs sooner, which results in the preferred option (solution) being reached more quickly.

Potential solutions must be within project scope, align with the project aim and investment objectives, be affordable, provide value for money, and meet legislative requirements. An investment envelope may be signalled by decision makers during the initiation phase, and this should be used to guide an appropriate size of a potential solution. Investment envelopes become more certain and narrow as the preferred option becomes more defined.

3.2 No revisiting decisions

The decision-led approach reinforces that decisions made are not revisited when projects stay within expected project tolerances, including the investment envelope, which means project teams can move forward with confidence, which reduces the need for rework.[1]

3.3 Presenting decision makers with genuine choices

Decision makers should be presented with genuine choices, at the most appropriate stage in a project, while clearly highlighting the potential consequences of each option. Decision makers should be brought on the investment case journey and should not be presented with fait accompli solutions when endorsement and/or funding approval is sought at the end of the investment case phase. Project teams should have an awareness of what the project's trade-offs are and anticipate required discussions and approvals with decision makers.

[1] Funding approval can only be gained when sufficient funding is available from an appropriate funding source, and it is demonstrated that a project is a priority at a programme or portfolio level. Therefore, funding approval is a decision that is made following investment case development.

Consideration of trade-offs (for example design speed versus value for money) is an ongoing process throughout project development. In particular, the optioneering phase typically involves some form of trade-offs as there will rarely be one option that allows all the desired outcomes to be achieved with no downsides. Trade-off decisions provide opportunities for decision makers to provide direction.

4 Principles and behaviours of the decision-led approach

4.1 Principles

The principles of the decision-led approach, shown in Figure 3, have been built up from the Business Case Approach principles.

Applying these principles will guide the development of projects, and they should be used by project teams and decision makers across the entire project lifecycle.

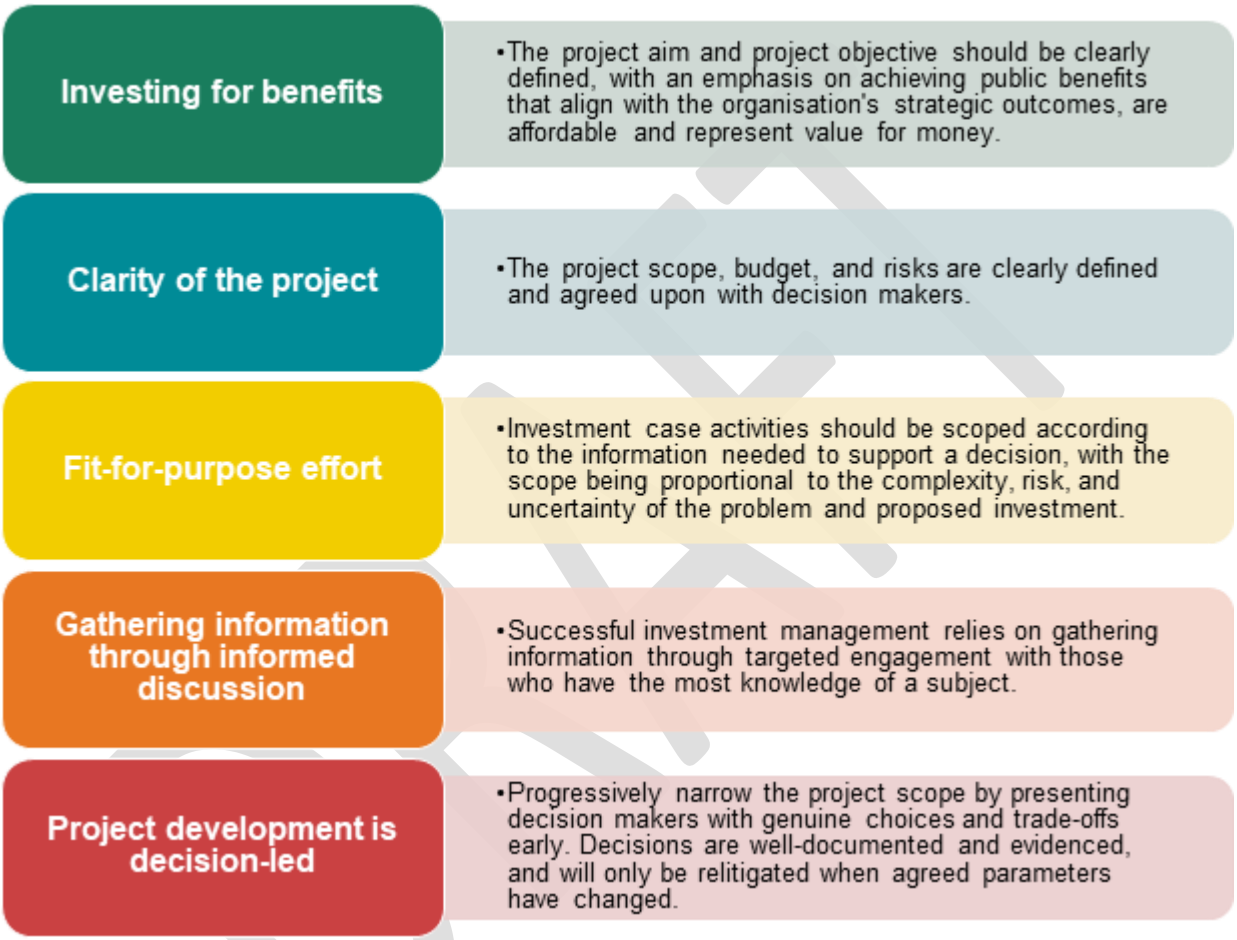

Figure 3: Principles of the decision-led approach

4.2 Behaviours

The behaviours show how the principles should be modelled, as shown in Table 1.

Applying behaviours that align with the core principles of the decision-led approach ensures consistency across projects. When these behaviours are applied, they help embed a decision-led approach way of thinking and create a collaborative and cohesive approach to every aspect of project development.

Table 1: Behaviours of the decision-led approach

Principles	Behaviour 1	Behaviour 2	Behaviour 3
Investing for benefits	Clearly define the anticipated benefits and indicative costs to the level of detail required for the next decision.	Identify the improvement in benefits that is being targeted, then seek the option that gets us closest to that outcome while still staying within the investment envelope.	Engage with partners and stakeholders, using insights to design and deliver the solutions.
Clarity of the project	Ensure the project scope, budget and risks are clearly defined and documented to the level of detail required for the next decision. Be clear on the outcome of the decision made.	Regularly monitor project parameters to ensure ongoing clarity and consistency across scope, budget, and risk throughout the project lifecycle.	Adopt a no-surprises approach to communicate (and escalate where appropriate) when significant changes are likely and do occur to the scope, budget or risk.
Fit-for-purpose effort	Evaluate investment case information requirements and identify the evidence base appropriate to the problems.	Optimise the effort needed to inform a decision by analysing the necessary effort, information and process steps to reach the decision point.	Deliberately consider the cost of completing an analysis against the expected benefit of that analysis.
Gathering information through informed discussion	Analyse and evaluate available data, points of view, needs of stakeholders and potential solutions before recommending relevant actions or decisions to decision makers.	Build effective relationships with partners and key stakeholders throughout the process to gain critical insights and develop effective options.	Gather critical insights, validate assumptions and inform decisions through targeted engagement with those who have the most knowledge of a subject.
Project development is decision-led	Analyse data, evidence and insights to guide the development of the investment case, clearly documenting each key process step. Identify working assumptions and their underlying rationale.	Deliver candid and straightforward advice, effectively articulate the value of proposed investment options to decision makers, including the necessary resources and potential impacts and trade-offs.	Revisit decisions only when agreed parameters change, allowing for better efficiency.

5 Project lifecycle phases and checkpoints

5.1 End-to-end development lifecycle

The transport investment lifecycle has been updated to simplify and accelerate the development of investment cases and the delivery of projects. Figure 4 provides a high-level summary of the end-to-end development lifecycle. Project development is progressively undertaken; however, it can be an iterative process, and phases may sometimes need to be revisited later in the process.

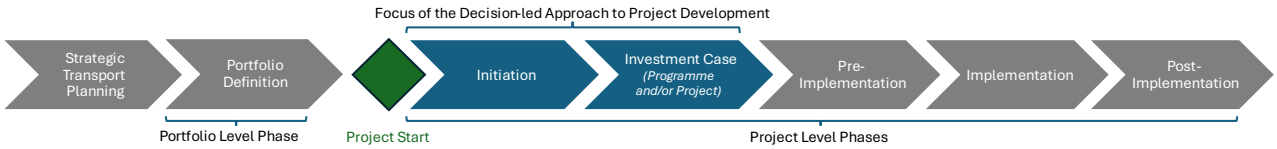

Figure 4: NZTA's end-to-end development lifecycle

For further detail on portfolio definition and approval of project starts please refer to the *Portfolio management guide* (currently in development). At project start a project mandate will be provided to a project team.

5.2 Project lifecycle phases

The decision-led approach places greater emphasis on setting up a project for success in the early phases. This section describes the project initiation and investment case phases of project development.

Initiation phase

Overview

The project initiation phase sets the project up for success. The preferred approach for the investment case is determined, and the resources required for the investment case phase confirmed. The governance, project management and decision-making approach is developed and project risks are defined at a high level.

The initiation phase starts with a decision to proceed (project start) in accordance with the portfolio plan and ends with checkpoint 1. The key decision at the end of the project initiation phase is whether to proceed (or not) with the investment case phase (checkpoint 1).

During the project initiation phase the project scope, project boundaries and constraints (such as natural hazards), and timing for the next phase established. These are summarised within the point of entry.

The level of certainty that is being sought through the investment case phase should be considered, documented and agreed through this phase.

Early decision planning is undertaken, project workstreams are established and high-level decision mapping.

Key decisions

- Agree refined project aim.
- Agree point of entry, which includes project scope and timing of next phase.
- Confirm scale and complexity and agree critical success factors.
- Confirm key risks.
- Agree project workstreams.
- Decide high-level decision mapping for each workstream.
- Decide governance framework for investment case phase.

- Decide roles and responsibilities and decide decision-making levels.
- Confirm resourcing requirements.
- Agree investment envelope.

A key output at the end of the project initiation phase is project setup in systems (Transport Investment Online (TIO), SAP, Planview and ARM).

Investment case phase

Overview

The purpose of this phase is to identify the best value for money and affordable option, agree it with decision makers, then scope the work needed to design and implement it.

It does this by:

- confirming the case for change using the 5-case model, including problems and benefits and setting investment objectives
- identifying opportunities and constraints
- optioneering to find the best value available option to achieve the investment objectives
- scoping the work needed for subsequent phases (pre-implementation, implementation and post-implementation).

By the end of this phase, the preferred option and pathway forward should be clear, with a robust evidence base to support decisions. The investment case will show if the preferred option meets the investment objectives while demonstrating value for money and delivering the most affordable option practicable.

Changes to scope should only be considered where there is a change in circumstances or information that necessitates the change – that is, adjustments to scope should be minimal, and reactive.

Key decisions

Before checkpoint 2

- Agree problem definition and the benefits from solving the problem.
- Agree investment objectives.
- Confirm key risks.
- Decide the framework and assessment criteria for assessing alternatives and options.
- Decide longlist of alternatives and options to be assessed.
- Decide shortlist options and trade-offs and emerging preferred.

Before checkpoint 3

- Decide preferred option.
- Confirm investment case and that it provides a robust case for change and uses the 5 case model (strategic case, economic case, financial case, commercial case and management case).
- Decide approach to pre-implementation.
- Confirm funding and financing recommendation.

5.3 Checkpoints

Checkpoints provide the ability to review whether the required level of work has been completed and to approve this before moving to the next phase. Checkpoints also provide the ability to take corrective action as needed (for example, a project could be stopped).

Under the decision-led approach it is important that all decisions are made at the relevant time by the right person, before the project moves on to the next phase. Figure 5 outlines key decisions for the initiation and investment case phases at each checkpoint.

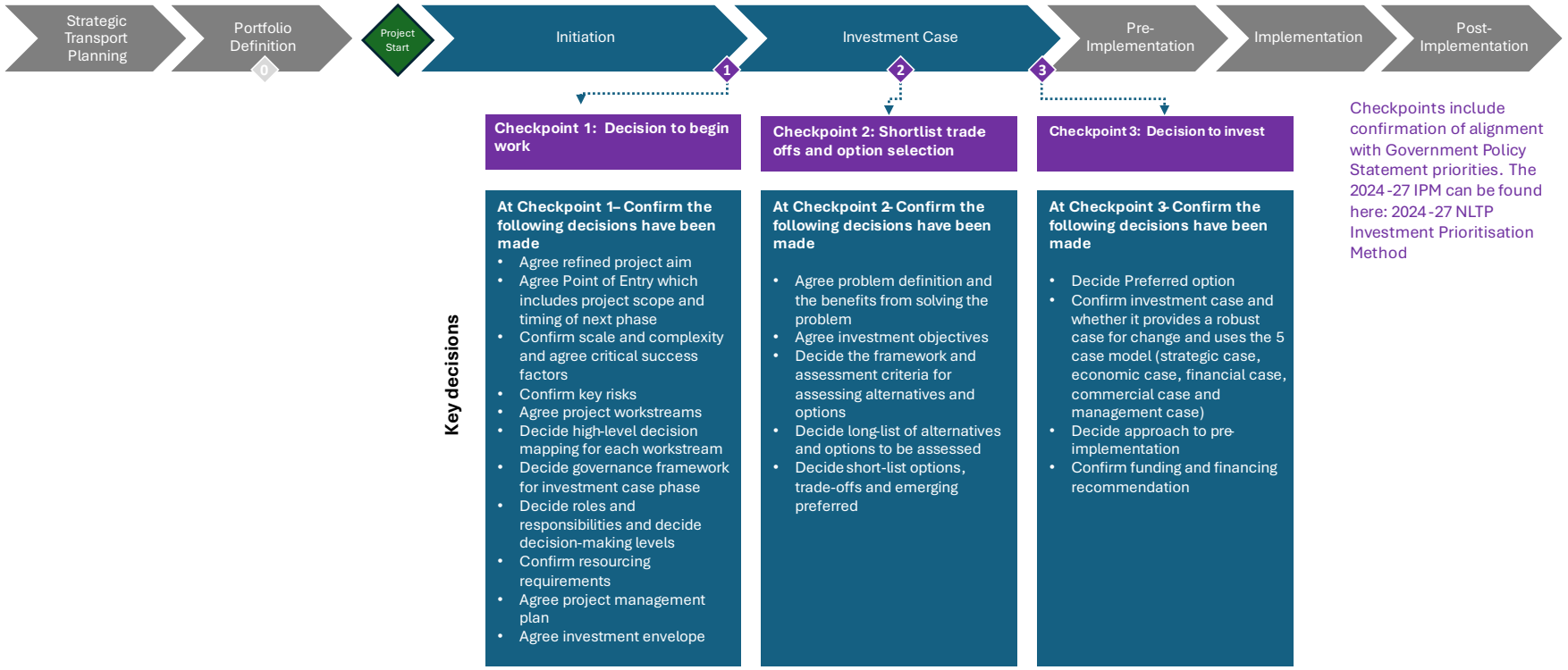

Figure 5: Initiation and investment case phases checkpoints

Each project will have unique characteristics, and therefore unique decisions. Who will make decisions at checkpoints should be planned for at the start of the project. All state highway projects should adhere to each checkpoint; however, who makes the decisions at the checkpoint will be related to the project's scale, risk and complexity (see section 6.4 Clarifying who makes decisions). Decision checkpoints will be held at the end of each phase to confirm, to the decision makers' satisfaction, that all key decisions have been made.

The decision-led approach introduces a new decision checkpoint during the development of the investment case to enable decision makers to be provided with genuine choices on shortlist options and trade-offs. At this checkpoint project teams will provide decision makers with evidence on shortlist options to inform decisions on which option is preferred. The decision maker for this checkpoint will be relevant to the size and risk of the project, for example for a small project with limited options and low risk this could be a project sponsor.

Checkpoints will reduce the need for investment case rework by ensuring the project aligns with the project aim and investment objectives, is right-sized to respond to the scale of the problem, whether it needs to be delivered at this time, and is affordable.

Checkpoints include confirmation of alignment with GPS priorities. The 2024–27 Investment Prioritisation Method (IPM) can be found here: 2024–27 NLTP Investment Prioritisation Method

What happens at checkpoints?

Project teams will present evidence to the relevant decision maker to support the checkpoint decisions being made.

Most infrastructure projects (excluding low-cost, low-risk and maintenance) will go to the Value, Outcomes and Scope (VOS) for endorsement before going to a decision makers, as set out in the NZTA delegations (internal NZTA link). The purpose of VOS is to provide advice and assurance to support the NZTA Board and delegated decision makers to select the right things at the right time, ensuring that they are set up for success right from the start.

Checkpoints 1, 2, and 3 all have different requirements, as they reflect where in the project development cycle the project is at. Project teams are responsible for leading and preparing the paperwork for VOS: VOS page (internal NZTA link). Decisions that go to VOS for endorsement are recorded within TIO.

Project teams need to reflect checkpoint decisions, conditions and actions within subsequent project development work.

6 Applying the decision-led approach to your project

6.1 Decisions process

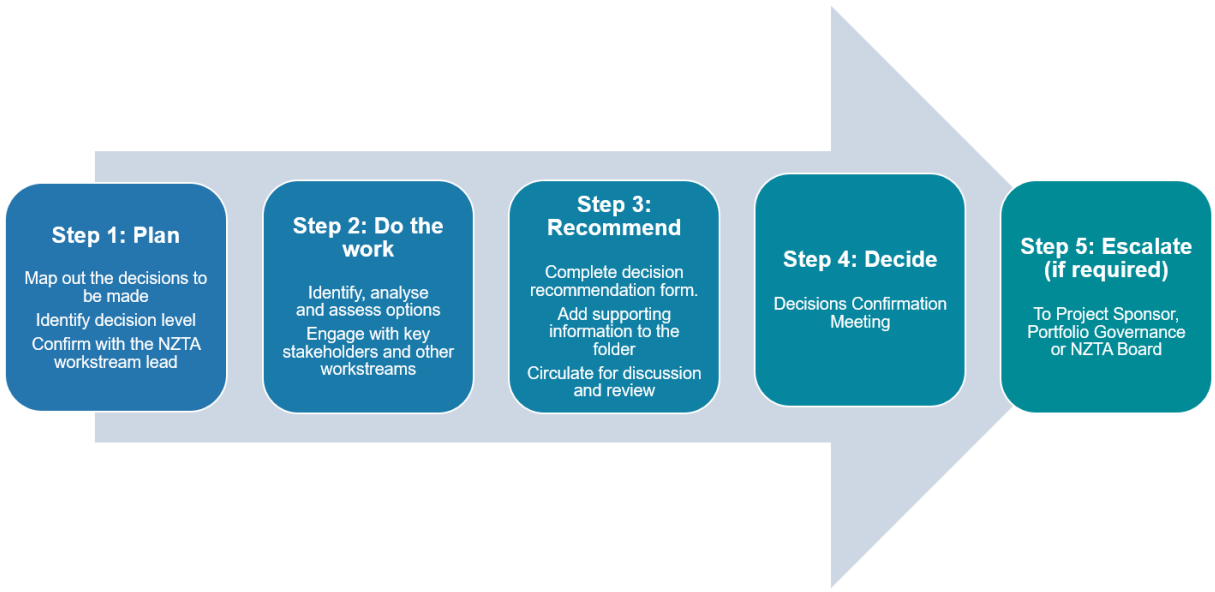

Figure 6: Key steps when making decisions

The decisions process comprises 5 steps:

1. Plan
2. Do the work
3. Recommend
4. Decide
5. Escalate (if required).

Step 1: Plan

Decision planning is integral to the decision-led approach and is a crucial part of the project initiation phase. Early in the process project teams should identify and plan the decisions to be made, who needs to make them, and when, so decisions are made at the right time, in the right order, by the right people, with the right amount of evidence and analysis.

Step 1 involves mapping out the decisions to be made and who needs to make them and when (in what order). A post-it note planning workshop can be a useful team exercise to plan the key decisions. Workshop outputs can be documented in a decisions roadmap, showing the decisions needed for each workstream (see 6.2 Documenting decisions).

Decision planning should start at the project initiation phase, prior to commencement of the investment case; however, it can be undertaken at any time during the project lifecycle.

Project workstreams are established during the project initiation phase. (Section 8 Project workstreams provides more detail about each workstream). Key decisions for each project workstream can be identified and mapped at a high-level during decision planning. The scope and scale of evidence required to support each decision can be agreed with the relevant workstream, and appropriate resource allocated. Figure 7 provides an example template for how the key decisions are mapped for each workstream and Appendix C provides examples of key decisions for each workstream.

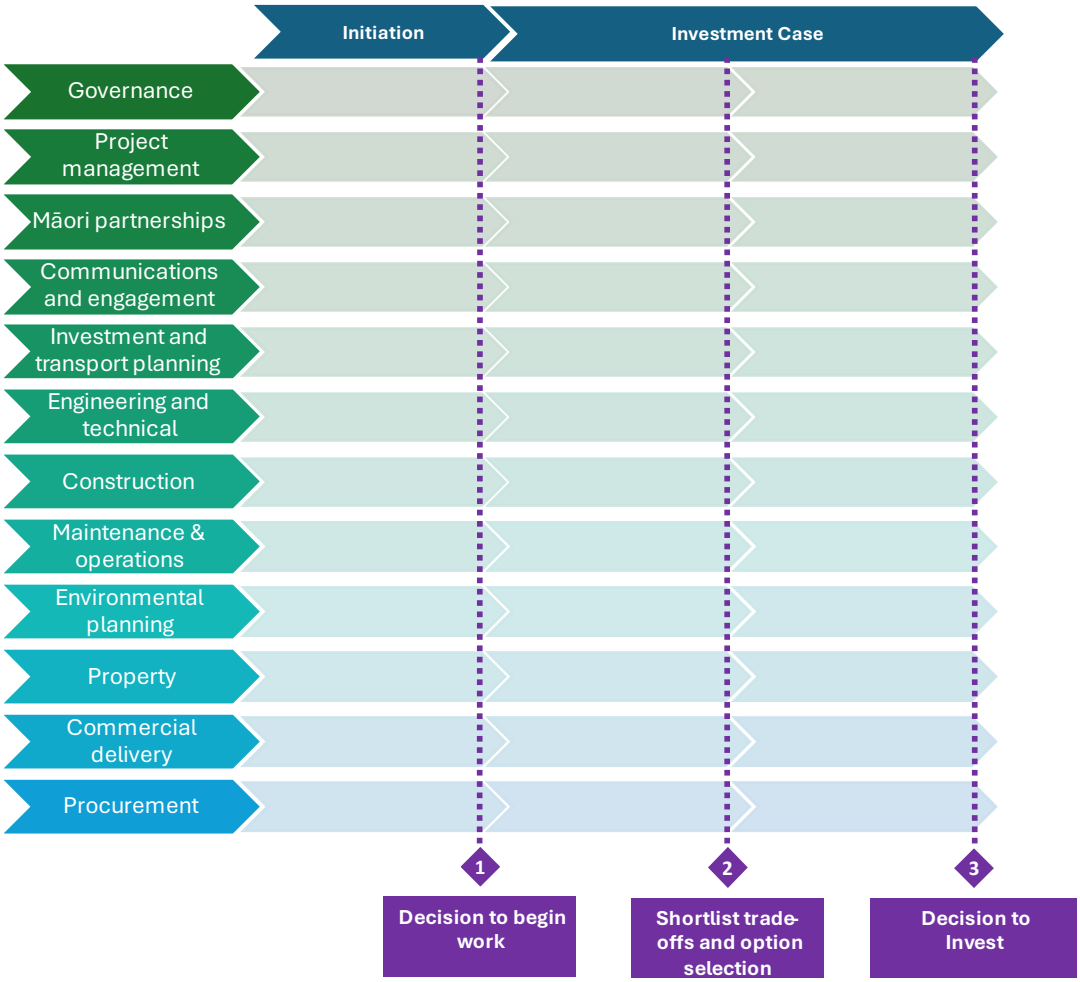

Figure 7: Workstream decision mapping example template

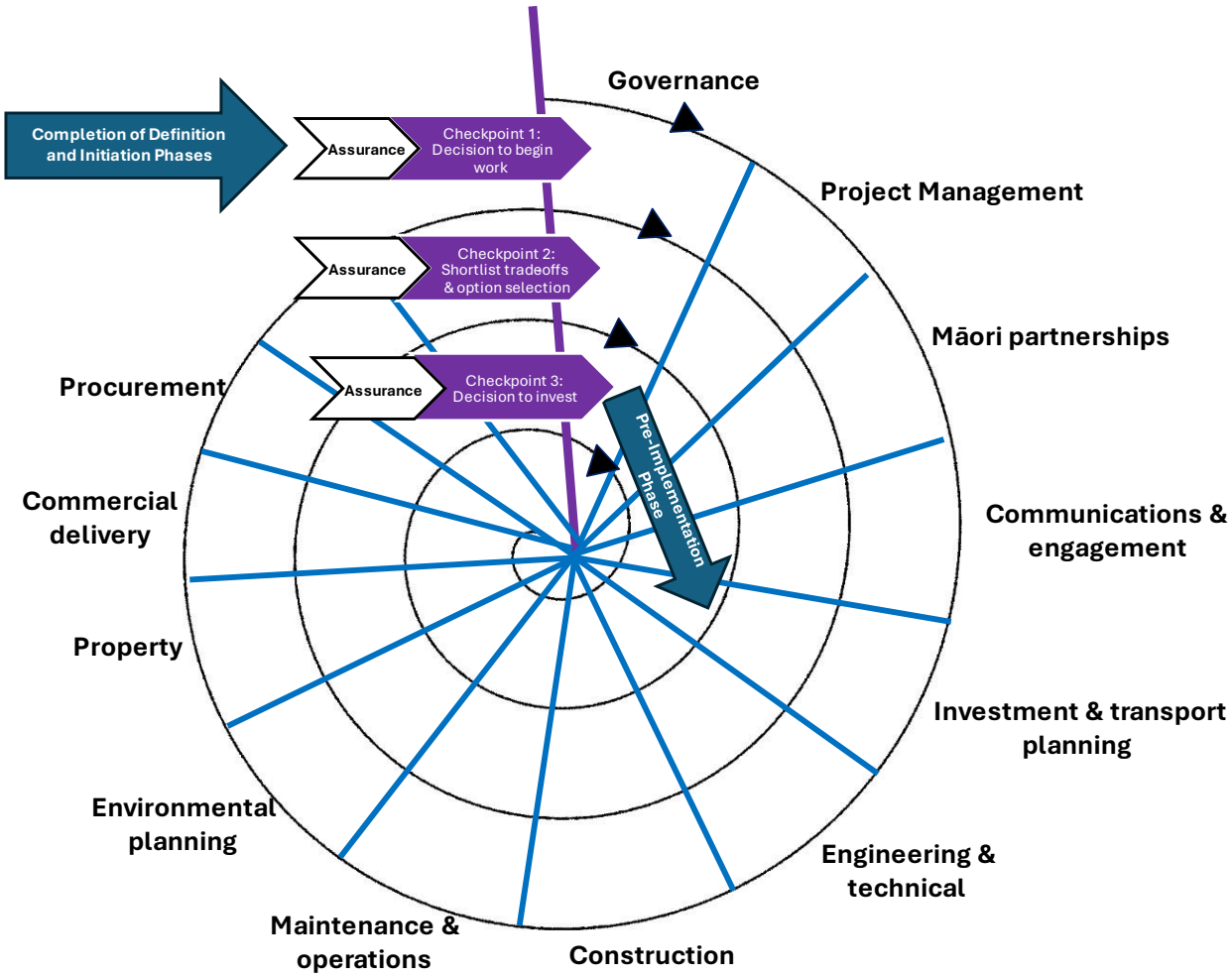

Figure 8: Workstreams' spiral progression through the project lifecycle

Figure 8 illustrates the application of the spiral – with increased focus as decisions are made throughout the project lifecycle – with different project workstreams and checkpoints within the decision-led approach. Assurance is undertaken at each checkpoint.

Top tips for effective decision planning

1. Get the decisions in the right order – make the big decisions first, followed by medium and small decisions. For example, making decisions on a corridor location needs to come before more detailed alignment decisions.
2. Allow adequate time and resource for decision planning (could be included as a 'planning phase').
3. Clearly identify and agree roles and responsibilities for team members.
4. Establish what has already been decided and what the key assumptions are.
5. Base required decisions on risks and opportunities (not compliance).
6. Identify major decisions required for checkpoints at the end of each phase and map out all the key decisions in between.
7. Allow time for decision makers, partners and stakeholders to review and input to the plan.
8. Finalise the decision plan and decision-making process before proceeding to subsequent phases.

Step 2: The work

Step 2 involves doing the work needed to get to a robust recommendation – the bulk of the effort will be spent here. The work required will depend on the nature of the decision and the methodology for developing a recommendation. It could involve option identification, analysis, option assessment and iteration. Interested parties (such as iwi partners, key stakeholders, relevant NZTA subject-matter experts) will be involved throughout this step and their inputs taken into consideration.

Step 3: Recommend

Once the work has been done, a recommendation will be made to decision makers along with supporting information.

An example of a decision recommendation form template is available here: Decision recommendation form.

Top tip

Circulate the draft decision recommendation and supporting information to attendees of decision confirmation meetings (and other key project team members) in advance, so any comments or concerns can be resolved prior to the meeting.

Step 4: Decide (decisions confirmation meeting)

The purpose of the decisions confirmation meeting is to review the recommendations for key decisions and either confirm the decisions or support the decisions and escalate further (if required). If a decision isn't made, follow up actions may be required so it can be brought back.

There is also the option of making a working assumption when we're not ready to make a decision yet, but the team needs to make an assumption to make progress.

It is important that decisions are documented and circulated, promptly to the project team and partners and stakeholders (when appropriate).

An example of a decision meeting agenda is available here: Decision meeting agenda.

An example of a decision meeting minutes is available here: Decision meeting minutes.

Step 5: Escalate if required

The most significant decisions need to be escalated above the project team – that is, level 1 decisions (see section 6.4 Clarifying who makes decisions).

An example of record of decisions made outside the project team is available here: Record of escalated decision.

6.2 Documenting decisions

Documenting decisions is an important part of the decision-led approach and should be made with the future reader in mind.

It is important to document:

- what decision was made
- if the decision was approved, not approved or carried forward as a working assumption
- who made the decision and when
- the reasoning for why the decision was made, including supporting evidence.

In instances where a decision made needs to be updated, it is best practice to update the decision form noting that this is an updated decision – don't create a duplicate or new decision record. Creating duplicates will only lead to confusion by those accessing records into the future.

An example of a decision register is available here: Decision register template.

Top tip

For small projects a decision register will be adequate to capture recommended decisions, document decision made and by whom (that is, no further forms or templates are required).

6.3 Collaborative team working

Following the decision process enables a collaborative approach to project development. Project team members get to contribute to integrated decision making where it relates to their role.

A key aspect of the decision-led approach is that it enables great project team communication and awareness of where the project is at. This strengthens the team culture, because everyone knows what is going on and people are less likely to feel out of the loop. Strong communication also improves efficiency by reducing rework and churn.

Upcoming decisions are circulated for discussion and review, and decisions are discussed in project team meetings and workshops before they are confirmed. This enables team members to identify issues and achieve cross-workstream alignment before decisions are made.

Following a decision confirmation meeting it is important that confirmed decisions are quickly shared with the project team and other key people, so everyone knows what is going on and can proceed with confidence.

Depending on the type of decision, a range of people may need to be communicated with, from those working on a workstream to the wider project team, partners, key stakeholders, NZTA subject-matter experts and the project steering committee. Decisions can be communicated through various channels such as team meetings, email updates, monthly reports, SharePoint sites and office decision walls. Some teams celebrate their decision making by ringing a bell.

6.4 Clarifying who makes decisions

The project decisions framework forms the basis for decision-led project development by structuring the order in which decisions get made and providing guidance on who makes decisions.

The decision-led approach groups decisions into two main levels, as shown in Figure 9.

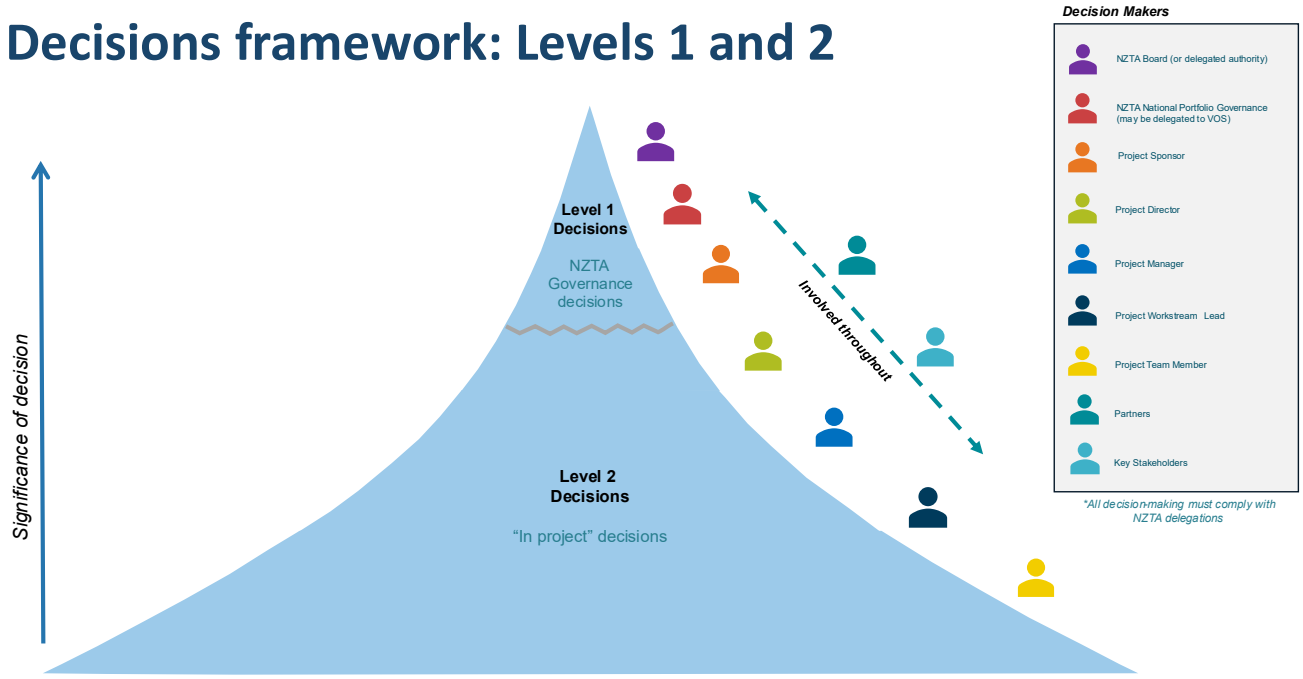

Figure 9: Decisions framework: levels 1 and 2

Level 1 decisions are governance decisions. Many are mandated and standardised for all state highway projects.

Level 2 decisions are 'in-project'. They are project-specific and are determined on a project-by-project basis.

The appropriate level for specific decisions will depend on several factors, including the scale of a project, contract model, the level of potential risks and impacts, and whether the decision may have broader project, programme, portfolio or system level impacts.

A key issue is working out what tier a decision should be at, and therefore who has the authority to make it. The decisions framework provides some guidance around at which level a decision should be made. This will be iterative, and guidance will be provided by the project director and project sponsor as the project develops. Who makes decisions on a project may also depend on where a project is at within the project delivery cycle. It is important to agree which person is responsible for which decision during the decision planning stage.

The decision framework is appropriate for use for all projects (both big and small). Figure 10 provides further detail on NZTA governance decisions, and Figure 11 provides an example of how in-project decisions could be determined for a large project, but will be a lot simpler for a smaller project.

For small-scale projects most decisions will likely be in-project decisions, but level 1 decisions still apply for the checkpoints, as per the NZTA business delegation's schedule. These may not always warrant a Value, Outcomes and Scope Committee (VOS) discussion, and instead the committee could be informed through the VOS process (on a case-by-case basis). See section 6.5 Applying the decision-led approach to small projects for more information.

Appropriate input from technical standards and the NZTA delegations take precedence, as set out in the NZTA delegations schedule (internal NZTA link).

Level 1 Governance Decisions Outside the Project Team

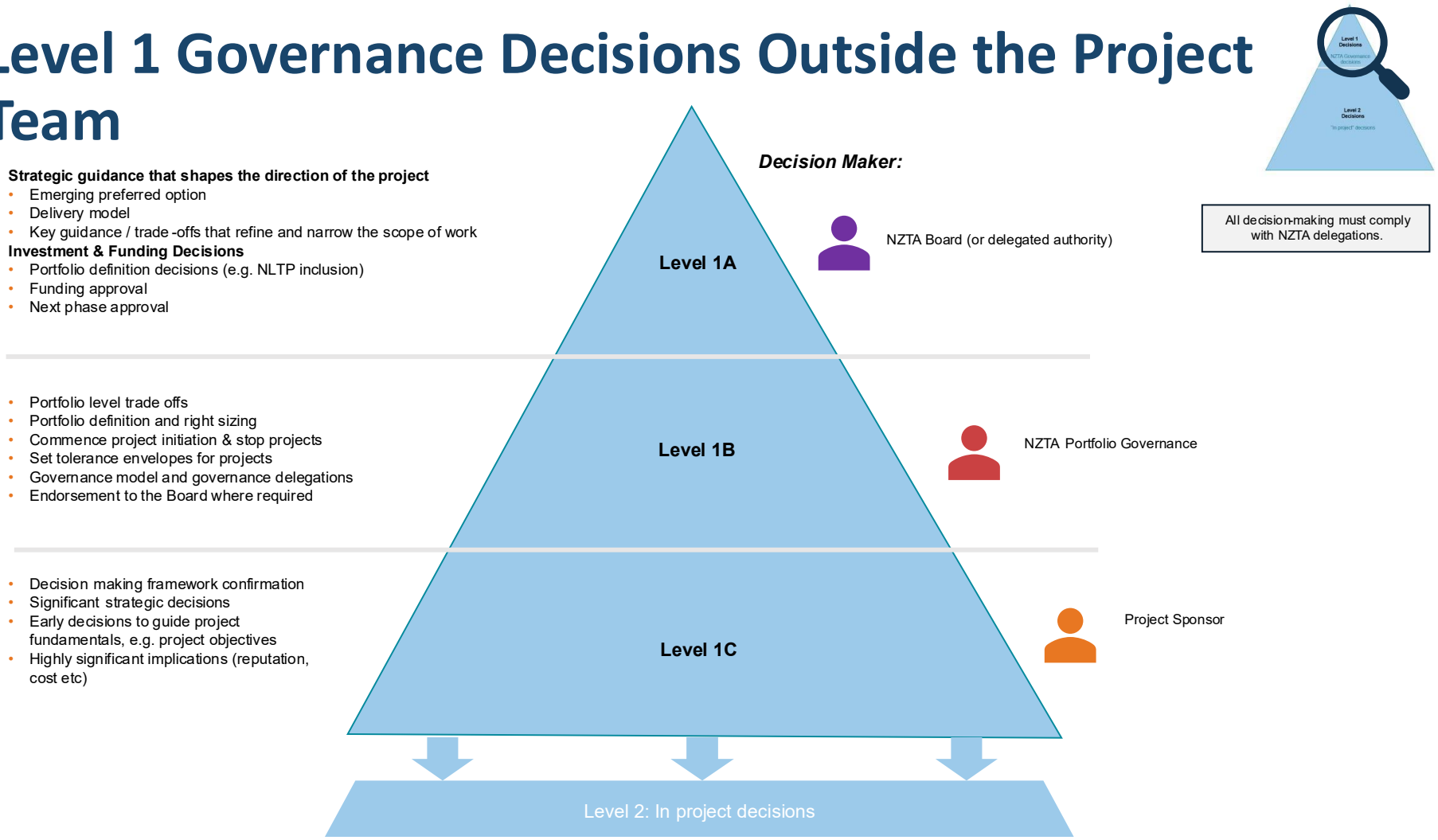

Figure 10: Decisions framework level 1: NZTA governance decisions

Example of Level 2 In Project Decisions

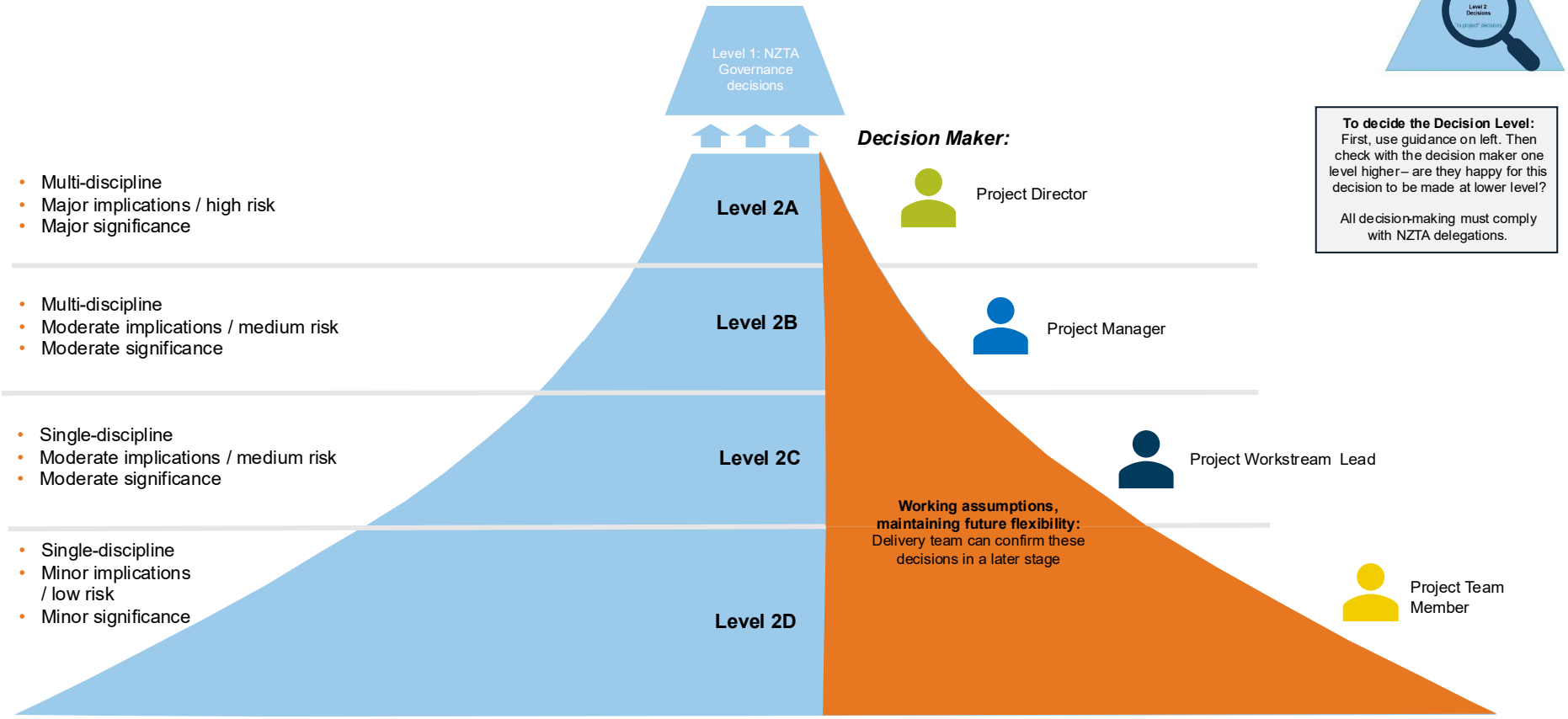

Figure 11: Example of level 2: in-project decisions

For small projects the above can be tailored to be fit for purpose, not all the above levels will apply.

Technical advisors play a key role in decision making. For example, lead technical advisors can make technical decisions that are compliant with guidance for lower-level decisions. For non-standard or technical aspects non-compliant with guidance, these are supported by the lead technical advisor and referred to the Departures Committee (2B). Following this, if a decision can't be made, technical trade-offs can be tested with the Chief Engineers Advisory Group (2A).

Using RAPID to decide decision-making roles

Project teams should use RAPID (recommend, agree, perform, input, decide), NZTA's decision-making and accountability framework, to help identify the right decision makers. It allows project teams to identify who makes the decision, who needs to be involved, and when and in what capacity to support the quality of decision making. The strength of the framework is being clear upfront who is the **decider**, with the other four roles supporting them to make a sound decision.

RAPID has a specific focus on decision making. Once a decision is made, you can use a framework such as RASCI (responsible, accountable, supportive, consulted and informed) to determine who's responsible for delivery and performing an agreed decision.

Further information on the RAPID decision-making framework can be found on OnRamp (internal NZTA link).

Figure 12 shows the process for following RAPID (note that the steps in the framework are not completed in the same order as the letters in the title).

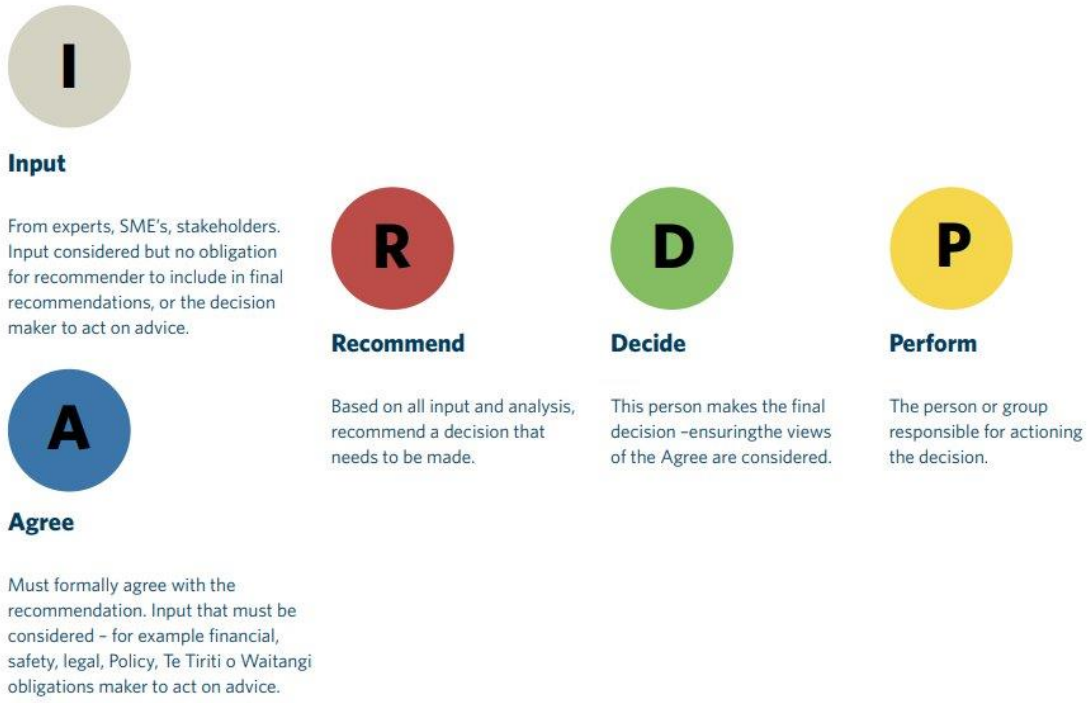

Figure 12: RAPID framework for decision making

6.5 Applying the decision-led approach to small projects

Because the decision-led approach is a flexible, principles-based method, it can be applied to small projects in a fit-for-purpose way. The scope of work required for decisions and checkpoints is expected to be significantly reduced for smaller projects based on scale, complexity and risk, and this would be confirmed during the project initiation phase.

Small improvement projects (typically over $2 million and under $15 million) require critical thinking to ensure the effort is right-sized. Starting the project should include a focus on analysing the necessary effort, information, and process steps to optimise the effort needed to reach the required decisions and checkpoints.

For smaller projects, an appropriately scaled decision register should be established to focus on essential decisions that need to be made early and throughout the project to guide the project efficiently.

Many smaller projects have originated from low-cost, low-risk and may have already completed certain aspects required to inform a decision, such as optioneering and design work. It is essential to collaborate

with your investment advisor to identify the remaining gaps in information required for a decision. For example, an activity may just need updated cost estimation and a value-for-money assessment to inform a decision to invest if the other information requirements have recently been completed and are sufficient for an investment quality assurance document to be completed.

For smaller projects, apply the decision-led approach by:

- **Scaling effort**: match the level of detail and effort to the size, complexity, and risk of the project.
- **Simplifying documentation**: focus documentation on the essential information needed to make an informed investment decision.
- **Creating a concise investment case**: ensure the investment case is less detailed but still robust enough to justify the investment; focusing on key benefits, costs, and risks without extensive documentation.
- **Targeted stakeholder engagement**: while stakeholder engagement remains important, streamline the process to ensure key stakeholders are informed and supportive without extensive consultation.

This ensures that smaller projects are efficiently managed and deliver the right outcomes within the available investment envelope.

6.6 Assurance

Assurance at NZTA plays a vital role in strengthening decision making by providing advice, reviews, and evaluations of transport projects to ensure public funds are used effectively.

Checkpoints in the project development process provide assurance that necessary decisions have been made as part of that phase before progressing to the next phase. There will be an assessment of the impacts of the recommended decision as part of the assurance process for decision makers. This should include setting out any parameters within which the decision cannot be revisited.

Table 2 outlines at a high level the overall assurance aims by project development phase and the relevant assurance teams involved. Project teams should engage with the investment assurance partners throughout the project's development, starting from project definition, in particular when decisions are sought from decision makers, including checkpoints.

For project specific information, contact your investment advisor. Further information on requirements for investment decisions is available on the Planning and Investment Knowledge Base.

The project management plan template is available here: Project management plan template for Transport Services projects (internal NZTA link).

Table 2: Overall assurance aims by project development phase

Project initiation	**Investment case**	
Checkpoint 1: Decision to begin work	**Checkpoint 2: Shortlist trade-offs and option selection**	**Checkpoint 3: Decision to invest**
Review and agree on the decision register, including decision makers for each checkpoint and assurance planning (to be included within the project management plan). Confirm appropriate governance, project management, and decision-making frameworks are well thought out. Evaluate the point of entry (PoE) including summarised project scope. Confirming work and evidence required to inform requirements. Assess readiness to proceed, including resource planning and risk tolerance. Assurance activities scaled based on project complexity.	Assess the robustness of the information available that has informed the optioneering. Help inform the trade-offs across options to decision makers. Has the preferred option been correctly identified. (Is it the best option?) Articulate the risks and uncertainties regarding the decision.	Evaluate strategic, economic, financial, commercial, and management cases. Confirm that the preferred option is the most efficient and effective response; if not, explain the rationale. Ensure robust options analysis, cost–benefit appraisal, and risk assessment. Validate alignment with GPS, affordability, and funding availability. Investment quality assurance (IQA) reviews are critical at this stage to support a decision to invest.

7 The 5-case model

NZ Treasury's Better Business Case methodology, including the 5-case model, continues to be fundamental to developing investment cases that demonstrate investment logic and cover what is needed to make investment decisions. It is expected that investment cases will be presented using the 5-case model, as set out in this section.

NZTA Business Case Approach guidance will be updated, in due course, to reflect the decision-led approach. In the meantime, the following sections give a high-level overview of each of the 5 cases, together with examples of the tasks, decisions and outputs that may be needed to support decision-making at each checkpoint.

Project workstreams will provide the input into the cases. Section 8 Project workstreams provides more detail on the specific decisions needed for each workstream, at each project phase.

7.1 Strategic case – the case for change

The case for change includes 5 key actions, which together define the strategic case:

- Define the problem(s) that the project needs to address and the benefit(s) that are expected to result.
- Determine the strategic context within which the project is being developed, including alignment to strategic priorities.
- Undertake an initial assessment of risks and uncertainties.
- Develop the project aim to set project direction.
- Develop investment objectives that will inform decisions about the best-value option.

Table 3 provides examples of typical tasks, decisions and outputs relevant during each project phase.

Table 3: Example strategic case workstream decisions

	Project initiation	**Investment case**	
	Checkpoint 1: Decision to begin work	**Checkpoint 2: Shortlist trade-offs and option selection**	**Checkpoint 3: Decision to invest**
Tasks	Initial problem definition based on available evidence. Initial benefit definition, using Land Transport Benefits Framework (benefit cluster, draft measures) based on available evidence. Establish indicative benefits envelope.	Review initial evidence and address gaps Refine problems and benefits against evidence and adjust as appropriate. Develop SMART investment objectives to inform multi-criteria analysis (MCA) criteria. Use strategic context to inform selection of other MCA criteria as appropriate, for example key constraints, interdependencies or uncertainties.	Confirm preferred option aligns with: • problem definition • benefits • investment objectives • strategic alignment • project aim.
Decisions	Confirm scale and complexity and agree critical success factors Confirm problems based on available evidence. Confirm benefits based on available evidence. Confirm GPS alignment (eg refer to the Investment	Agree investment objectives. Recommended option consistent with strategic case and is the best value way to achieve objectives. Reconfirm GPS alignment	Funding priority (based on stage 2 IPM assessment).

	Project initiation	Investment case	
	Checkpoint 1: Decision to begin work	**Checkpoint 2: Shortlist trade-offs and option selection**	**Checkpoint 3: Decision to invest**
	Prioritisation Method (IPM)).		
Outputs	Indicative investment envelope and GPS alignment.	Investment framework.	IPM assessment. Scope for next phase.

7.2 Economic case

The economic case is the second of the cases from the 5-case model and it builds on the foundation created in the strategic case. The strategic and economic cases are the most fundamental of the 5 cases, as they play a key role in setting the direction of the investment.

The purpose of the economic case is to find the best value-for-money approach to effectively address the issues identified in the strategic case. It must show how the problems will be addressed and how the benefits will be achieved. It must also do this in a way that fits with the strategic context for the investment.

Table 4 provides examples of typical tasks, decisions and outputs relevant during each project phase.

Table 4: Example economic case workstream decisions

	Project initiation	Investment case	
	Checkpoint 1: Decision to begin work	**Checkpoint 2: Shortlist trade-offs and option selection**	**Checkpoint 3: Decision to invest**
Tasks	Outline possible responses to the problem. Indicate possible additional tools that may support the project aim (eg time/variable tolling as a means of demand management). Outline potential range of alternatives and option(s) to be considered through the investment case phase.	Evaluate the longlist of options (do-nothing, do-minimum, optimised, do-max and other options) to arrive at the shortlist of options. Undertake economic analysis on shortlist options to inform cost–benefit analysis (CBA) and highlight value for money and affordability trade-offs. Detailed evaluation of options using MCA, the MBCM, CBA and other tools.	Identify and agree the preferred option. Undertake IPM assessment. Undertake detailed CBA. Understand the risk profile, environmental constraints, constructability and assumptions (see other workstreams for detail on this).
Decisions	Decide macro scope	Decide shortlist of options, trade-offs and emerging preferred.	Decide form and function. Decide preferred option.
Outputs		Options report	Options report

7.3 Commercial case

The commercial case should demonstrate that the preferred option is able to be procured in a viable way both for the public sector and for the service providers. This requires:

- an understanding of the marketplace
- knowledge of what is realistically achievable by the supply side
- research into the procurement routes that will deliver the best value for both parties.

Put simply, the commercial case should test whether the proposed procurement is commercially attractive and deliverable, and that the delivery mechanism allocates risk fairly.

Table 5 provides examples of typical tasks, decisions and outputs relevant during each project phase. See relevant workstreams in section 8 Project workstreams for further detail.

Table 5: Example commercial case workstream decisions

	Project initiation	Investment case	
	Checkpoint 1: Decision to begin work	**Checkpoint 2: Shortlist trade-offs and option selection**	**Checkpoint 3: Decision to invest**
Tasks	Identify the appropriate procurement approach to the investment case, following the Procurement manual, based on the scale of the project (eg $5m or $5bn). Identify and evaluate trade-offs between models and approaches – especially if using an agile approach to the investment case.	Develop the procurement methodology for the design and development, and implementation phases in the procurement strategy, including outcomes, in alignment with NZTA practices (*Procurement manual*). Identify possible revocation and property acquisition requirements for each option. Outline market capacity to deliver (or constraints). Outline the approach and evidence base required to obtain necessary statutory approvals. This includes a detailed understanding of likely investigations, costs and monitoring timeframes required to inform decisions. Prepare property strategy, including property acquisition and access as needed.	
Decisions		Indicative property, procurement, consenting and revocation approaches for option evaluation process.	Confirmed property, procurement, consenting, and revocation strategies for preferred option.
Outputs			Property strategy. Procurement strategy. Consenting strategy. Revocation plan.

7.4 Financial case

The financial case determines the affordability of the investment proposal. It outlines the whole-of-life costs and funding requirements of the recommended option, taking into account all potential funding sources, risks and uncertainties.

A fit-for-purpose financial case will give decision makers confidence that they are committing to an option and delivery pathway that is affordable and unlikely to create unforeseen impacts on limited funding sources or to force significant trade-off decisions during implementation.

Table 6 provides examples of typical tasks, decisions and outputs relevant during each project phase. See relevant workstreams in section 8 Project workstreams for further detail.

Table 6: Example financial case workstream decisions

	Project initiation	Investment case	
	Checkpoint 1: Decision to begin work	**Checkpoint 2: Shortlist trade-offs and option selection**	**Checkpoint 3: Decision to invest**
Tasks	Determine affordability. Estimate costs for investment case phase. Identify funding need for the investment case phase. Identify potential benefits to inform the investment case (non-exhaustive).	Confirm affordability and potential funding options. Develop a funding plan (for example where multi-funding sources are involved Detail approach to tolling if relevant	Detail whole-of-life cost – capital and operational costs, including property acquisition, and costs to obtain consents (including mitigation costs), if relevant. Identify and detail proposed source(s) of funding, including any possible use of tolling or of alternate funding and financing arrangements.
Decisions	Confirm investment envelope.	Agree funding options.	Agree funding and financing for preferred option.
Outputs		Funding option analysis.	Financial case.

7.5 Management case

The key purpose of the management case is to put in place appropriate arrangements for the successful delivery of the business case and its constituent projects, both now and in the future. It plays an important role in helping to refine the recommended option, together with the financial and commercial cases.

Table 7 provides examples of typical tasks, decisions and outputs relevant during each project phase.

Table 7: Example management case workstream decisions

	Project initiation	Investment case	
	Checkpoint 1: Decision to begin work	**Checkpoint 2: Shortlist trade-offs and option selection**	**Checkpoint 3: Decision to invest**
Tasks	Consider the scale of the proposed project. Define the governance and assurance process for the investment case. Develop the risk and assurance frameworks and consider when and how risks will be managed through the project lifecycle. This relates to the acceptable level of risk at subsequent project phases. Develop stakeholder map for future phases. Agree level of design, cost and constructability certainty required for the investment case phase.	Defining delivery, monitoring and evaluation. Agree a risk management plan. Maintain a risks, issues and uncertainties log. Identify reputation and performance factors (refer to Z44 Risk management practice guide) – these span from technical, legal, consents, compliance, through to health and safety, and environmental, among others. Develop stakeholder engagement strategy and plan. Develop and agree change management plan (if required). Agree investment assurance processes.	Agree the governance and assurance process for the design and development, and implementation phases, including role of partnerships. Identify dependencies and constraints on design and development, and implementation phases. Agree the monitoring plan, and benefits realisation plan. This includes project monitoring and subsequent environmental monitoring. Agree stakeholder and engagement strategy for pre-implementation phase Update project plan

	Project initiation	Investment case	
	Checkpoint 1: Decision to begin work	**Checkpoint 2: Shortlist trade-offs and option selection**	**Checkpoint 3: Decision to invest**
	Describe any parameters for procurement of design or delivery, if any. Develop project management plan that includes assurance planning.	Update project plan.	
Decisions	Agree governance process. Agree assurance process. Agree risk and uncertainty registers. Agree stakeholder map. Agree project management plan.	Agree delivery, monitoring and evaluation framework	Agree inputs to pre-implementation phase (governance, engagement, dependencies, monitoring)
Outputs	Risk and uncertainty register. Stakeholder map. Project management plan.	Delivery, monitoring and evaluation framework.	Project plan for pre-implementation.

8 Project workstreams

An important part of the decision-led approach is that all project workstreams are established at project initiation and are developed progressively through the project lifecycle. As a project progresses through the project lifecycle, the level of detail and key decisions for each workstream are progressively developed to the level appropriate for each phase. No workstream gets left behind.

Increasing certainty for all workstreams provides increasing levels of confidence in the scope, cost and deliverability of the project. This increased confidence in all workstreams supports decision makers to make informed decisions whether to proceed to subsequent phases, and ultimately to delivery.

The following sections provide guidance on typical decisions likely to be required during each project phase, for each checkpoint, in some common workstreams. It is acknowledged that every project has a different context and emphases, and the first step in decision planning should be to identify and agree the workstreams relevant to the specific project.

Common workstreams include:

- governance
- project management
- Māori partnership
- communications and engagement
- investment and transport planning
- engineering and technical
- construction
- maintenance and operations
- environmental planning
- property
- commercial delivery
- procurement.

Note: this guidance focuses on project initiation and investment case phases. Content for other project phases is under development.

8.1 Governance

To set the project up for successful decision making, it is important to establish the project governance framework during project initiation. This should be aligned with the NZTA P3M governance model within the Portfolio Management Guide (currently in development). includes ensuring the systems and processes required to support the framework are agreed and understood.

Table 8 provides examples of decisions relevant during each project phase.

Table 8: Example governance workstream decisions

	Project initiation	**Investment case**	
	Checkpoint 1: Decision to begin work	**Checkpoint 2: Shortlist trade-offs and option selection**	**Checkpoint 3: Decision to invest**
Decisions	Decide governance framework for investment case phase. Decide roles and responsibilities and decide decision-making levels.		Decide governance framework for future phases.

8.2 Project management

Establishing effective project management practices at the outset of a project is key to setting it up for success. Further information on project management can be found in the Project management guide (SM011).

Example project management workstream decisions are set out in Table 9.

Table 9: Example project management workstream decisions

	Project initiation	Investment case	
	Checkpoint 1: Decision to begin work	**Checkpoint 2: Shortlist trade-offs and option selection**	**Checkpoint 3: Decision to invest**
Decisions	Confirm project management plan for investment case phase. Decide assurance approach. Agree project workstreams and decide high-level decision mapping for each workstream. Agree point of entry, which includes a summary of project scope and timing of next phase. Confirm resourcing allocated to the project team.	Decide detailed decision mapping for each workstream.	Decide project management approach for future phases.

8.3 Māori partnerships

It is vital that Māori are meaningfully included in the decision-making process to ensure we comply with our obligations in the Land Transport Management Act 2003 and other relevant legislation. This involvement ensures all decisions are shared and iwi and/or hapū perspectives are included.

The role of iwi/hapu could have variations across regions and projects, and as such, decisions on their role and their level of influence will need to be made during project initiation. Key tasks may include:

- identify iwi and/or hapū with interest in the proposed area
- understand iwi and/or hapū capability and capacity needs
- establish delivery partnership between iwi and/or hapū with project team
- review cultural values assessment/cultural impact assessment by iwi and/or hapū.

Table 10: Example Māori partnerships workstream decisions

	Project initiation	Investment case	
	Checkpoint 1: Decision to begin work	**Checkpoint 2: Shortlist trade-offs and option selection**	**Checkpoint 3: Decision to invest**
Decisions	Agree affected iwi/hapū to be included within project. Agree role of iwi/hapū.	Agree delivery partnerships. Confirm iwi/hapū input into optioneering. This will include identification of areas of cultural significance including utilising previous cultural assessments. Confirm initial Māori resources cost estimations.	Confirm funding model and envelope for cultural expression, monitoring, inductions and resourcing requirements.

8.4 Communications and engagement

The decision-led approach promotes greater visibility and transparency of the key decisions that are made on projects, and why they were made. This clarity of decision making has a potential flow-on benefit to the way we manage our external relationships and how we ensure effective engagement with our partners, stakeholders and communities throughout the project's lifecycle.

Involvement of Engagement and Partnerships staff, primarily the Director of Regional Relationships (DRR), communications and engagement leads from project initiation onwards, is imperative to ensure

project teams understand who we need to engage with, when we need to consult, and differing levels of influence external stakeholders have in informing our project decisions.

Table 11 provides examples of typical decisions relevant during each project phase.

Table 11: Example communications and engagement workstream decisions

	Project initiation	Investment case	
	Checkpoint 1: Decision to begin work	**Checkpoint 2: Shortlist trade-offs and option selection**	**Checkpoint 3: Decision to invest**
Decisions	Agree roles and responsibilities of partners and stakeholders. Decide communications and engagement framework for the investment case phase.	Confirm partners and stakeholders have been engaged in decisions to inform trade-offs and option selection.	Confirm partners, stakeholders and affected parties have been informed of preferred option/solution and engagement approach has been defined for pre-implementation phase. Confirm whether public consultation is required in the next phase (either for statutory purposes or on a negotiable project element).

8.5 Investment and transport planning

The following section sets out key decisions made as part of the investment and transport planning workstream. This section aligns and repeats content included within section 7 which outlines the 5-case model, including developing the case for change, assessing alternatives, economic evaluation, and benefits realisation. Decision-led approaches to funding and financing, affordability and value for money are covered within this section.

Case for change

Table 12: Example case for change workstream decisions

	Project initiation	Investment case	
	Checkpoint 1: Decision to begin work	**Checkpoint 2: Shortlist trade-offs and option selection**	**Checkpoint 3: Decision to invest**
Decisions	Confirm scale and complexity and agree critical success factors Confirm problems based on available evidence. Confirm benefits based on available evidence Confirm GPS alignment (eg refer to the Investment Prioritisation Method (IPM)). Confirm project aim.	Agree investment objectives. Reconfirm GPS alignment.	Agree monitoring and benefit realisation plan. Reconfirm GPS alignment.

Affordability and value for money

Affordability and value for money are both important concepts when developing and delivering projects. Briefly, **affordability** is about whether there is or will be funds available to complete a project, while **value for money** is about getting the best results for the funds spent.

Affordability and value for money are critical considerations throughout the project lifecycle, with whole-of-life cost being an input into both (see separate workstream advice on cost in section 8.11). The focus of this workstream is to examine project cost in terms of affordability and value for money, and to ensure that

decisions on scope and delivery explicitly reference cost. Table 13 provides examples of typical decisions relevant during each project phase.

Table 13: Example affordability and value for money workstream decisions

	Project initiation	Investment case	
	Checkpoint 1: Decision to begin work	**Checkpoint 2: Shortlist trade-offs and option selection**	**Checkpoint 3: Decision to invest**
Decisions	Confirm investment envelope.	Confirm that shortlist options meet value for money and affordability criteria.	Confirm cost of emerging preferred option is within investment envelope.

Funding and financing

The GPS 2024 directs that projects should consider all relevant funding and financing and delivery models. The funding and financing workstream addresses these considerations, starting with the NLTF, before considering alternative funding and financing opportunities.

NLTF funding

The decision-led approach recommends developing a structured and analytical methodology to evaluate and quantify the potential scale of funding options available for a project, and the extent to which NLTF funding is available. This should include consideration of the benefits to those who would be paying the charge and whether the charge would be affordable to them. This enables early socialisation with decision makers to secure support for the process.

Alternate funding, financing and delivery opportunities

Public private partnerships (PPPs), concessions and other alternate delivery options are to be considered for all projects. Specifically, it is expected that NZTA should consider tolling to construct and maintain all new roads, including the Roads of National Significance. Decisions will need to be made about the suitability of different funding and financing methods for the type of project under consideration.

Table 14 provides examples of typical decisions relevant during each project phase.

Table 14: Example funding and financing workstream decisions

	Project initiation	Investment case	
	Checkpoint 1: Decision to begin work	**Checkpoint 2: Shortlist trade-offs and option selection**	**Checkpoint 3: Decision to invest**
Decisions	Decide government funding and alternative funding options to be considered. Agree high level funding and financing roadmap.	Decide funding and financing options to progress.	Confirm project funding and financing recommendation.

Revocation

Revocation of a state highway constitutes the road as a ‘local road’ for the purposes of the Land Transport Management Act 2003 (LTMA) and any other legislation. This will in effect transfer ownership, control and funding responsibility of the road to the future RCA (or potentially multiple RCAs where the section of state highway to be revoked crosses council/jurisdictional boundaries). Section 103 of the LTMA empowers NZTA, with the consent of the Secretary of Transport, to revoke a state highway.

Revocation of the existing state highway should be considered as part of the investment case for a new state highway project. Considering revocation during the investment case enables a whole-of-network approach when developing options. The costs of revocation should also be considered as part of the investment case phase for the improvement project.

The key decisions to be made through revocation are outlined in Table 15.

Although revocation should be considered as part of the Investment Case of the main Capital Improvement project, the guidance note also provides a pathway for progressing revocation works through the Implementation phase in case it was not originally progressed.

Table 15: Example revocation workstream decisions

	Project initiation	Investment case	
	Checkpoint 1: Decision to begin work	**Checkpoint 2: Shortlist trade-offs and option selection**	**Checkpoint 3: Decision to invest**
Decisions	Decide whether revocation is potentially applicable to the project. Decide the key principles for revocation.	Decide whether to stop, revoke or retain the state highway under NZTA management. Decide future function of the existing road as part of the transport network.	Decide forward works programme to meet level of service and future function. Confirm the revocation assessment.

8.6 Engineering and technical

The focus of the engineering and technical workstream is to develop design options that address the identified problems and objectives, while being mindful of constraints and value for money. Explicitly deciding project design requirements early in the project lifecycle helps to establish the basis for value for money, trade-offs, and decisions as the design solution evolves. Having an agreed set of design requirements provides a basis for efficient design and mitigates the risk of schedule delays due to re-design.

Table 16 provides examples of typical decisions relevant during each project phase.

Table 16: Example scope workstream decisions

	Project initiation	Investment case	
	Checkpoint 1: Decision to begin work	**Checkpoint 2: Shortlist trade-offs and option selection**	**Checkpoint 3: Decision to invest**
Decisions	Decide macro scope.		Confirm investment case scope.

Table 17: Example option workstream decisions

	Project initiation	Investment case	
	Checkpoint 1: Decision to begin work	**Checkpoint 2: Shortlist trade-offs and option selection**	**Checkpoint 3: Decision to invest**
Decisions	Confirm high-level constraints.	Confirm do minimum Decide the framework and assessment criteria for assessing alternatives and options. Decide longlist of alternatives and options to be assessed. Decide shortlist options, trade-offs and emerging preferred.	Decide function and form. Decide preferred option.

Table 18: Example design workstream decisions

	Project initiation	Investment case	
	Checkpoint 1: Decision to begin work	**Checkpoint 2: Shortlist trade-offs and option selection**	**Checkpoint 3: Decision to invest**
Decisions		Decide key design criteria. Decide safety in design approach.	Decide design departures (if required).

8.7 Construction

The construction workstream is traditionally not developed in detail until later phases in the project lifecycle. However, the decision-led approach highlights the importance of early, high-level consideration of key elements of this workstream to ensure successful delivery of the recommended option, and to manage project risks.

Table 19 provides examples of typical decisions relevant during each project phase.

Table 19: Example construction workstream decisions

	Project initiation	Investment case	
	Checkpoint 1: Decision to begin work	**Checkpoint 2: Shortlist trade-offs and option selection**	**Checkpoint 3: Decision to invest**
Decisions	Confirm construction considerations to inform optioneering. Confirm critical constraints to inform optioneering.	Confirm constructability of options.	Confirm constructability of preferred option.

Staging

The focus of staging is to develop and agree an approach to the timing and sequencing of delivery of the project over time. Projects are often staged when they are large and complex, or when funding and resources are limited. Making decisions about staging at the right time allows for a phased approach, breaking down a project into smaller, manageable parts that can be completed sequentially. This can be beneficial for managing risk, optimising resource allocation, and potentially accelerating the overall project timeline.

Early considerations to inform staging decisions should include project scale and complexity, potential for funding, or market constraints, as well as opportunities for acceleration. The decision-led approach recommends that early consideration is given to this workstream, so that it can be used to inform option development and option evaluation, and how options are best constructed over time.

Table 20 provides examples of typical decisions relevant during each project phase.

Table 20: Example staging workstream decisions

	Project initiation	Investment case	
	Checkpoint 1: Decision to begin work	**Checkpoint 2: Shortlist trade-offs and option selection**	**Checkpoint 3: Decision to invest**
Decisions	Decide factors for determining the optimal staging.	Consider staging approach for options.	Decide staging.

8.8 Maintenance & operations

Similar to the construction workstream, the maintenance and operations workstream is traditionally not developed in detail until later phases in the project lifecycle. However, the decision-led approach highlights the importance of early, high-level consideration of key elements of this workstream to ensure successful delivery of the recommended option, manage project risks, and enable efficiencies for whole-of-life asset maintenance, renewal and operational costs.

This workstream also includes early consideration of maintenance and operational elements, to the extent that they can influence the design and functional requirements of the design solution, taking account of whole-of-life costs. Decisions concerning the future maintenance approach and the operating models for public transport projects, Intelligent Transport Solutions (ITS) and freight requirements (for example) are important for guiding design development, enabling robust evaluation of likely operational costs and ensuring confidence that the system is deliverable and will provide the expected benefits. These considerations should be captured in early concept of operations and maintenance planning documents alongside key maintenance and operations stakeholders/partners.

Table 21 provides examples of typical decisions relevant during each project phase.

Table 21: Example operations and maintenance workstream decisions

	Project initiation	**Investment case**	
	Checkpoint 1: Decision to begin work	**Checkpoint 2: Shortlist trade-offs and option selection**	**Checkpoint 3: Decision to invest in design and development**
Decisions	Confirm whole-of-life maintenance and operational considerations within project scope. Confirm maintenance and operational requirements for M&O stakeholder/partner agreements and operational performance (if required to inform optioneering).	Confirm M&O stakeholder/ partner agreements and operational performance requirements. Confirm options assessed against operational performance requirements.	Decide preferred option maintenance approach and performance monitoring framework. Decide preferred option for operations approach.

8.9 Environmental planning and consenting

The consenting strategy is the guiding document for the environmental planning and consenting workstream during early project phases. The decision-led approach recommends developing a roadmap at project initiation that sets out the steps to work collaboratively with the project team, inform options assessment, preferred option development and identifies risks and opportunities to inform a recommended consenting pathway for the project.

The key steps in a consenting roadmap can include:

- Identify constraints and input into options assessment (MCA).
- Identify the consenting pathways.
- Identify risks and opportunities to inform strategy and design development.
- Consider packaging – staging and sequencing.
- Consider project property boundary and consents.
- Deliver preliminary consenting strategy.
- Deliver final consenting strategy for the investment case.

Table 22 provides examples of typical decisions relevant during each project phase.

Table 22: Example environmental planning and consenting workstream decisions

	Project initiation	Investment case	
	Checkpoint 1: Decision to begin work	**Checkpoint 2: Shortlist trade-offs and option selection**	**Checkpoint 3: Decision to invest in design and development**
Decisions	Confirm known and potential issues and considerations.	Confirm consenting pathway options for consideration.	Decide consenting strategy.

8.10 Property

The property strategy is the guiding document for the property acquisition programme. In most cases, with the possible exception of smaller projects, it is necessary to acquire property to build land transport infrastructure projects on. The nature of linear infrastructure means it is not always easy to move the alignment once a preferred option has been selected. Therefore, it is important to identify any property constraints, including fatal or potentially fatal flaws, associated with the options being considered.

NZTA's property acquisition process is led by the Transport Services Property team and is conducted within the framework of the Public Works Act 1981 (PWA). Toitū Te Whenua Land Information New Zealand (LINZ) has the statutory responsibility for making decisions under the PWA, including purchasing land on behalf of the Crown for public works.

This section outlines how the Property team can support users of the decision-led approach through the project development phases. It is critical that the Property team are involved as early as possible in the project initiation phase.

The key aspects in the property workstream include:

- Identify property constraints and/or opportunities for each option.
- Provide property input into options assessment (MCA).
- Identify fatal and potentially flaws to inform strategy and design development.
- Develop property acquisition cost estimate for the preferred option.
- Deliver property strategy for the investment case.

Table 23 provides examples of typical property workstream decisions during each project phase.

Table 23: Example property workstream decisions

	Project initiation	Investment case	
	Checkpoint 1: Decision to begin work	**Checkpoint 2: Shortlist trade-offs and option selection**	**Checkpoint 3: Decision to invest in design and development**
Decisions	Confirm considerations relevant to property acquisition.	Decide property inputs to option evaluation process. Decide when landowner engagement needs to commence.	Confirm indicative property required for preferred option. Decide property strategy. Decide property acquisition cost/funding required.

A key decision is when to start landowner engagement. A key part of pre-acquisition engagement is to let those directly impacted (owners and occupiers primarily but also project neighbours) know about the proposal or decision ahead of broader community engagement and communications. A LINZ accredited supplier will become involved from this point and be involved in all landowner discussions and negotiations throughout the acquisition process, as they formally undertake negotiations as the Crown's representative. Landowner meetings can provide valuable feedback that may help influence the design.

8.11 Commercial delivery

Commercial delivery of the entire project, as opposed to just the investment case, is covered in this section. Key considerations include the delivery schedule, cost estimation, risk management, and third-party agreements.

Delivery schedule

Early decisions on the delivery schedule for the preferred option should commence during the investment case phase. Understanding how the project will be delivered and how long it will take is a key input to the commercial, financial, and management case components of the investment case, and will influence the overall cost of the project.

Table 24 provides examples of typical delivery schedule decisions during each project phase.

Table 24: Example delivery schedule decisions

	Project initiation	**Investment case**	
	Checkpoint 1: Decision to begin work	**Checkpoint 2: Shortlist trade-offs and option selection**	**Checkpoint 3: Decision to invest in design and development**
Decisions	Decide factors for determining the optimal schedule.	Decide outline schedules to inform option assessment.	Decide indicative delivery schedule for the preferred option to inform the investment case.

Cost estimation

Improving the accuracy and reliability of infrastructure cost estimates is critical for ensuring effective project allocations, funding and value for money. Robust and accurate costs also support decision makers to make effective investment choices and reduce the need for price level adjustments (PLA).

SM011 provides detail of cost estimation requirements relevant to the investment case phase, including consideration of operating, maintenance and other whole of life costs: Project management guide (SM011).

Table 25 provides examples of typical cost workstream decisions during each project phase

Table 25: Example cost estimation workstream decisions

	Project initiation	**Investment case**	
	Checkpoint 1: Decision to begin work	**Checkpoint 2: Shortlist trade-offs and option selection**	**Checkpoint 3: Decision to invest in design and development**
Decisions	Decide cost estimate roadmap.	Confirm cost estimate scope and exclusions. Confirm costs to inform option assessment.	Confirm cost estimate. Confirm whole-of-life costs including operations and maintenance. Decide contingency values. Confirm project cost is within the investment envelope.

Risk management

Risk refers to the probability of an event having an impact on project delivery (in terms of cost, time or scope), or on the outcomes of the investment.

Uncertainty refers to a specific type of risk that usually affects the case for change and is typically driven by external factors that lie outside the project team's control. Uncertainties are often associated with

assumptions or predictions of future trends, for example population growth rates. If realised, uncertainties can affect whether:

- the proposed option still represents best value for money
- the proposed timing for implementation is still appropriate, or
- whether the investment is still needed.

Project teams should begin thinking about risk and uncertainty tolerances within the project initiation phase and identify risks, issues and uncertainties across reputation and performance factors. These range from technical, legal, consents, compliance, through to health and safety, and environmental, among others.

It is important to set up registers to track risks and uncertainties from an early stage in the investment case, with the risks and uncertainties identified during the project initiation phase being used as a starting point. Agreement on risks and their controls is a key part of the decision-led approach that may inform option assessment and selection, and how the preferred option is managed.

Table 26 provides examples of typical risk and uncertainty workstream decisions during each project phase.

Table 26: Example risk workstream decisions

	Project initiation	**Investment case**	
	Checkpoint 1: Decision to begin work	**Checkpoint 2: Shortlist trade-offs and option selection**	**Checkpoint 3: Decision to invest in design and development**
Decisions	Decide risk management approach and framework.	Confirm project constraints and identified risks. Confirm risks and controls to manage risks with respect to options.	Confirm risk profile, controls and contingencies. Decide risk mitigation strategies for next phase.

Although they are closely related, risks and uncertainties are typically managed in different ways. For further information, see the following links:

- Z44 Risk management practice guide
- Risk and uncertainty in the five-case model
- Uncertainty register template

Third-party agreements

A key decision is whether third-party agreements are required to progress implementation of the project, for example, if KiwiRail's agreement is needed as the project crosses a railway designation. The need for potential agreements should be identified at the options shortlist stage, and confirmation of agreements needed at the preferred option stage.

Table 27 provides examples of typical third-party agreement workstream decisions during each project phase.

Table 27: Example third party agreement decisions

	Project initiation	**Investment case**	
	Checkpoint 1: Decision to begin work	**Checkpoint 2: Shortlist trade-offs and option selection**	**Checkpoint 3: Decision to invest in design and development**
Decisions		Decide what third-party agreements may be required.	Confirm approach for agreeing third-party agreements. Agree third-party agreements where required to endorse investment case.

8.12 Procurement

The procurement strategy is the guiding document for the procurement workstream during the investment case. In most cases, it is necessary to plan the procurement of professional services or physical works for subsequent project phases well in advance. The nature of infrastructure projects means these contracts are often substantial in scale, duration and technical complexity. Therefore, it is important to identify scope, constraints, relevant skills and experience requirements and methodology considerations early, relevant to the options being considered.

This section outlines how the Procurement team can support users of the decision-led approach through the project development phases. The key aspects in the procurement workstream include:

- Identify procurement constraints and/or opportunities for each option.
- Identify fatal and potentially flaws to inform strategy and design development.
- Provide procurement input into options evaluation, as required.
- Develop procurement strategy for preferred option.
- Deliver a procurement strategy for the investment case.

Table 28 provides examples of typical procurement workstream decisions during each project phase.

Table 28: Example procurement workstream decisions

	Project initiation	**Investment case**	
	Checkpoint 1: Decision to begin work	**Checkpoint 2: Shortlist trade-offs and option selection**	**Checkpoint 3: Decision to invest in design and development**
Decisions	Confirm factors to determine optimal procurement pathway.	Confirm procurement strategy options and recommend an approach.	Decide procurement strategy.

For further information regarding procurement, please see the Procurement manual.

Appendix A: Mapping Business Case Approach phases to decision-led approach phases

Existing Business Case Approach phase	Decision-led approach phase
Strategic planning	Strategic transport planning
NLTP/RLTP development	Portfolio definition
Point of entry	Initiation
Programme business case Indicative business case and detailed business case Single-stage business case	Investment case (programme and/or project investment case)
Pre-implementation	Pre-implementation
Implementation	Implementation
Monitoring and evaluation	Post-implementation (monitoring and evaluation)

Appendix B: Glossary of terms

Term	Definition
Affordability	Whether sufficient funding is or will be available to deliver, operate and maintain a proposed project.
Business case	See investment case.
Checkpoint	A structured milestone where progress is reviewed, key decisions are made, and the project's readiness to advance to the next stage is assessed. It acts as a control point to ensure that objectives, decisions, risks and dependencies are understood and managed effectively.
Constraints	Factors or conditions that restrict or influence how the project is planned, designed, delivered, or operated. Constraints can be multi-faceted and arise out of a variety of factors including physical and environmental, land and property, regulatory and legal, finance and funding, engineering and technical, time, and stakeholder and partnership requirements.
Decision	A deliberate choice made by project teams, key stakeholders or governance to progress the project towards its objective. Decisions can take various forms including, but not limited to, strategic, technical, operational, risk-based and stakeholder decisions.
Decisions framework	The framework that sets out the level at which a decision should be made – that is, who in the project and governance structure should make certain decisions.
Decision register	A register to set out and plan what decisions need to be made, when and by whom; and to document the outcome of decisions made for an individual project. The decision register is an important project artefact.
Decision-led approach	In this guide, the decision-led approach to project development is a methodology where, early in the development process, project teams identify and plan what decisions will need to be made and who needs to make them, so decisions are made at the right time, in the right order, by the right people, with the right amount of evidence and analysis.
5-case model	The 5-case model provides an effective framework around which an investment case is progressively developed. The 5 cases are: • Strategic case – is there a need for investment? • Economic case – does the investment offer value for money? • Commercial case – is the investment viable? • Financial case – is the investment affordable? • Management case – is the investment achievable?
Implementation phase	The phase where a project is delivered. If the project includes construction, this takes place during the implementation.
Investment case	A document, also called a business case, that sets out the reasoning and justification for investing in a change, project or programme. It describes the case for change; explains how to achieve best public value; considers commercial viability; and recommends a preferred option that is affordable and achievable.
Investment envelope	An investment envelope is an indicative range of costs and benefits set by decision makers to guide scope and option development. It helps keep proposed solutions realistic, fundable, and appropriately scaled to match the size and nature of the problem being addressed.
Investment objectives	Investment objectives specify the intended outcomes or goals of an investment – what the investment is aiming to achieve. They are SMART: specific, measurable, achievable, realistic and time-bound. Setting good investment objectives is a critical part of an investment case and informs the later assessment of potential options.
Macro scope	Macro scope outlines the high-level intent of what the project will achieve without detailing specific deliverables. It sets the overall concept and geographical extent and aligns with strategic transport planning.

Term	Definition
P3M	P3M is an acronym for the best practice 'Portfolio, Programme and Project Management' model. It is an internationally recognised framework widely adopted in New Zealand both within and outside of government.
Point of entry	This is part of the project initiation phase, where the project is scoped, objectives and risks are defined at a high level, the preferred approach for the investment case is determined, and the resources required for the investment case phase confirmed. This is documented in a record of point of entry.
Pre-implementation	The phase when everything is set up for successful implementation, including the consenting, property and detailed design phases of a project.
Project aim	A clear upfront statement of the overarching intended outcome or outcomes from the project, which is used to set project direction. There is a single project aim for each project. A project aim is at a higher level than the investment objectives. It is informed by strategic planning and may be further refined within the initiation phase. This is a new term introduced as part of the decision led approach.
Project development	The process of initiating, planning and preparing a project or programme, from its initial concept through to delivery. The activities completed in project development confirm that the project delivers value for money, is viable and is set up for successful delivery.
Project boundaries	Project boundaries represent the physical extent of the project location. In the early stages of the project this may be referred to as a study area. As the project becomes clearer and its extents more refined, the project boundaries may be represented by a designation.
Project lifecycle	The project lifecycle sets out the phases a project goes through as it is developed, from initiation to post implementation. The activities carried out before the project lifecycle commence are referred to as Portfolio Definition.
Project scope	The project scope sets out what the project should include, and therefore what it doesn't include. This will include a geographical area of focus, or specific state highway extents to be addressed by the project. The project scope should also cover budget and schedule.
Project objective	Project objectives are those objectives specific to the preferred solution. These are important from a Resource Management Act 1991 (RMA) perspective as they will be required to support the designation and consenting phase, and are the objectives against which a consent application or notice of requirement is evaluated. The project objectives will be strongly informed by the project aim and investment objectives and, while the purpose, framing and focus of investment and project objectives are different, they should not significantly diverge. You should seek planning and legal input on project objectives to ensure they are pitched correctly and reflect relevant case law.
Value for money	Refers to the efficiency and effectiveness of realising benefits relative to the cost of the project delivered and is about getting the best results or benefit for the funds spent.
Working assumption	A working assumption makes use of the available information at the time a decision is to be made. Working assumptions allow a project to move forward in the absence of complete information. This assumption may be updated later as more information becomes available. Decisions can also be updated as confidence in information increases.

Appendix C: Workstream decision mapping example

Project workstream		Initiation phase The project initiation phase sets the project up for success.	Investment case phase The purpose of this phase is to identify the best value for money and affordable option, agree it with decision makers, then scope the work needed to design and implement it.	
		Before Checkpoint 1: Decision to begin work	**Before Checkpoint 2: Shortlist trade-offs and option selection**	**Before Checkpoint 3: Decision to invest**
Governance		Decide governance framework for investment case phase. Decide roles and responsibilities and decide decision-making levels.		Decide governance framework for future phases.
Project management		Confirm project management plan for investment case phase. Decide assurance approach. Agree project workstreams and decide high-level decision mapping for each workstream. Agree point of entry, which includes a summary of project scope and timing of next phase. Confirm resourcing allocated to the project team.	Decide detailed decision mapping for each workstream.	Decide project management approach for future phases.
Māori partnerships		Agree affected iwi/hapū to be included within project. Agree role of iwi/hapū.	Agree delivery partnerships. Confirm iwi/hapu input into optioneering. This will include identification of areas of cultural significance, including utilising previous cultural assessments. Confirm initial Māori resources cost estimations.	Confirm funding model and envelope for cultural expression, monitoring, inductions and resourcing requirements.
Communications and engagement		Agree roles and responsibilities of partners and stakeholders. Decide communications and engagement framework for the investment case phase.	Confirm partners and stakeholders have been engaged in decisions to inform trade-offs and option selection.	Confirm partners, stakeholders and affected parties have been informed of preferred option/solution and engagement approach has been defined for pre-implementation phase. Confirm whether public consultation is required in the next phase (either for statutory purposes or on a negotiable project element).
Investment and transport planning	**Case for change**	Confirm scale and complexity and agree critical success factors. Confirm problems based on available evidence. Confirm benefits based on available evidence. Confirm GPS alignment (e.g. refer to the Investment Prioritisation Method (IPM)). Confirm project aim.	Reconfirm problems and benefits. Agree investment objectives. Reconfirm GPS alignment.	Agree monitoring and benefit realisation plan. Reconfirm GPS alignment.
	Affordability and value for money	Confirm investment envelope.	Confirm that shortlist options meet value-for-money and affordability criteria.	Confirm cost of emerging preferred option is within investment envelope.
	Funding and finance	Decide government funding and alternative funding options to be considered. Agree high-level funding and financing roadmap.	Decide funding and financing options to progress.	Confirm funding and financing recommendation.
	Revocation	Decide whether revocation is potentially applicable to the project. Decide the key principles for revocation.	Decide whether to stop, revoke or retain the state highway under NZTA management. Decide future function of the existing road as part of the transport network.	Decide forward works programme to meet level of service and future function. Confirm the revocation assessment
Engineering and technical	**Scope**	Decide macro scope.		Confirm investment case scope.
	Options	Confirm high-level constraints.	Confirm do-minimum. Decide the framework and assessment criteria for assessing alternatives and options. Decide long-list of alternatives and options to be assessed. Decide short-list options, trade-offs and emerging preferred.	Decide function and form. Decide preferred option.
	Design		Decide key design criteria. Decide safety in design approach.	Decide design departures (if required).
Construction	**Constructability**	Confirm construction considerations to inform optioneering. Confirm critical constraints to inform optioneering.	Confirm constructability of options.	Confirm constructability of preferred option.
	Staging	Decide factors for determining the optimal staging.	Consider staging approach for options.	Decide staging.
Maintenance & operations		Confirm whole of life maintenance and operational considerations within project scope. Confirm maintenance and operational requirements for M&O stakeholder/partner agreements and operational performance (if required to inform optioneering).	Confirm M&O Stakeholder/ partner agreements and operational performance requirements. Confirm options assessed against operational performance requirements.	Decide preferred option maintenance approach and performance monitoring framework. Decide preferred option for operations approach.
Environmental planning		Confirm known and potential issues and considerations.	Confirm consenting pathway options for consideration.	Decide consenting strategy.
Property		Confirm considerations relevant to property acquisition.	Decide property inputs to option evaluation process. Decide when landowner engagement needs to commence.	Confirm indicative property required for preferred option. Decide property strategy. Decide property acquisition cost/funding required.
Commercial delivery	**Delivery schedule**	Decide factors for determining the optimal schedule.	Decide outline schedules to inform option assessment.	Decide indicative delivery schedule for the preferred option to inform the investment case.
	Cost estimation	Decide cost estimate road-map.	Confirm cost estimate scope and exclusions. Confirm costs to inform option assessment.	Confirm cost estimate. Confirm whole-of-life costs including operations and maintenance. Decide contingency values. Confirm project cost is within the investment envelope.
	Risk management	Confirm key risks and uncertainties. Decide risk management approach and framework.	Confirm project constraints and identified risks. Confirm risks and controls to manage risks with respect to options.	Confirm risk profile, controls and contingencies. Decide risk mitigation strategies for next phase.
	Third-party agreements		Decide what third-party agreements may be required.	Confirm approach for agreeing third-party agreements. Agree third-party agreements where required to endorse investment case.
Procurement		Confirm factors to determine optimal procurement pathway.	Confirm procurement strategy options and recommend an approach.	Decide procurement strategy.