

Australian Transport Assessment and Planning Guidelines

T6 Benefits Management



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ISBN 978-1-925401-59-2

INFRA-2925

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August 2016

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This publication is available in PDF format from the website <http://atap.gov.au/>

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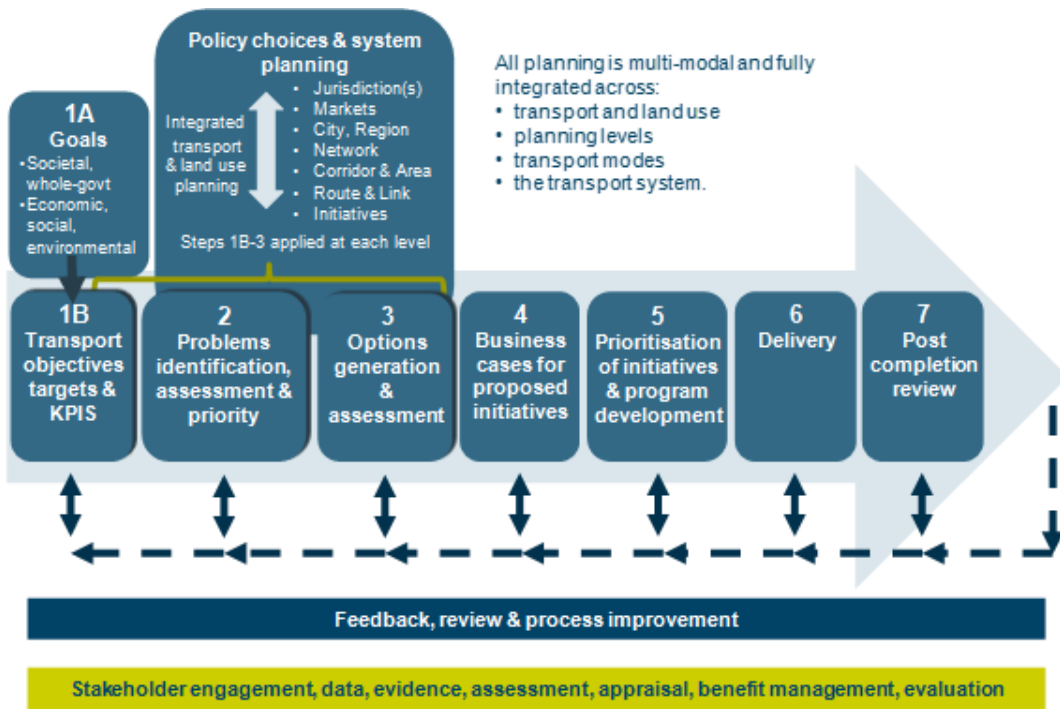
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Benefits management



At a glance

Benefits management is the process of properly identifying, defining, measuring, evaluating and reporting benefits in order to determine whether an initiative has achieved its intended outcomes and objectives once it is delivered. It is an end-to-end process that spans across the whole lifecycle of an initiative. It is a process to ensure that outcomes from an initiative are defined, aligned to transport system objectives and managed through to their achievement or realisation. It provides learnings to ensure continuous improvements in transport system benefit management processes.

The benefits management process consists of four elements: *benefits identification* (occurring during problems identification and options appraisal), *benefits planning* (occurring during options appraisal and Business Case development), *ongoing benefits monitoring* and *benefits evaluation* following delivery of an initiative.

Benefits identification and planning (ex-ante prior to commencing delivery of an initiative) seek to answer the following questions:

1. What benefits will arise from a specific initiative (aimed at overcoming a problem that is preventing transport system objectives from being achieved)?
2. How will these benefits be measured?
3. What KPIs should be used for benefits monitoring and evaluation?
4. Who will be responsible for measurement?

The outputs of benefits identification and planning consist of Benefits Profiles, a Benefits Register and a Benefits Management Plan.

Benefits monitoring should commence following the Business Case completion and involves the tracking and recording of benefits metrics until benefits evaluation to identify any risk to achieving the identified benefits.

Following delivery of the initiative, benefits evaluation can be undertaken to confirm that the benefits (as defined and agreed before delivery) are being achieved and that the implemented initiative is running smoothly.

Benefits evaluation (ex-post following delivery of an initiative) addresses the following:

1. Assesses whether initiatives have delivered expected benefits, including how well they have performed against performance measures
2. Explains any variation between actual results and expected benefits
3. Identifies any lessons learned that can be used to improve how future initiatives are implemented
4. Provides accountability for money spent on the public's behalf.

The outputs of benefits evaluation include an updated Benefits Management Plan and Benefits Register. Findings and lessons learned can be identified in an evaluation report.

1. Introduction

1.1 Purpose and location in ATAP Framework

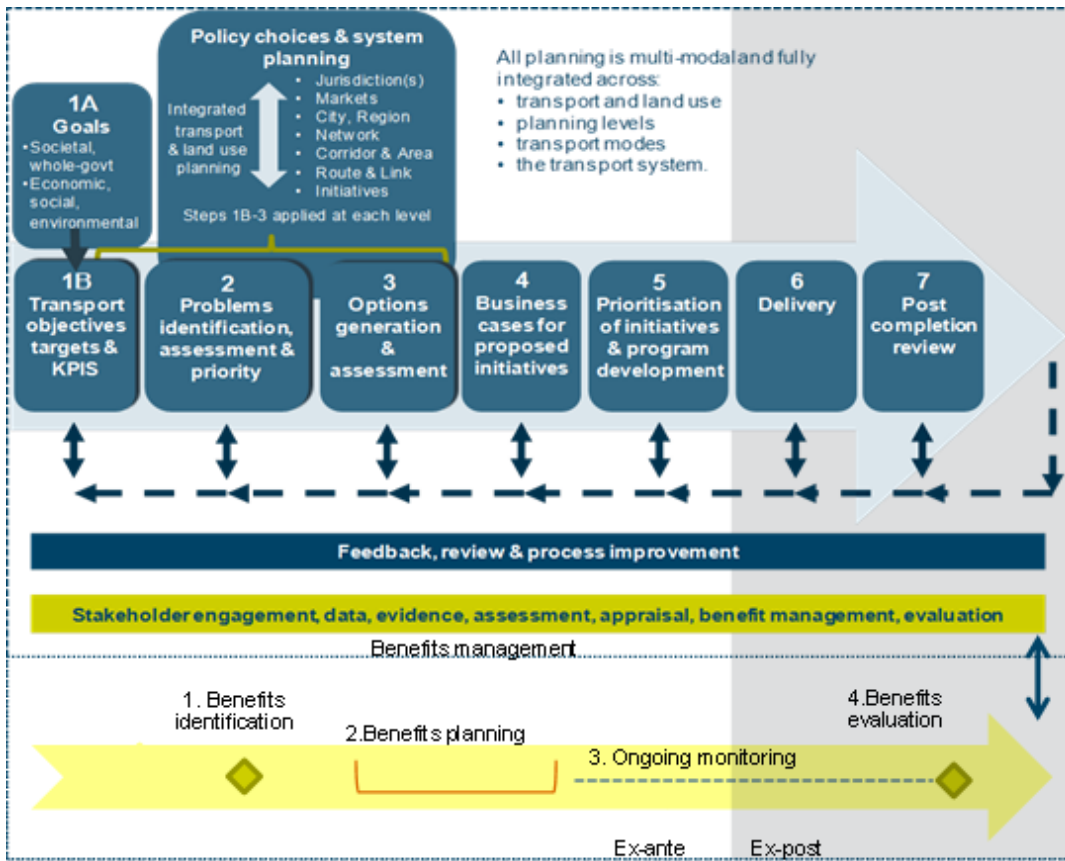
Benefits management is the process of identifying, defining, measuring, evaluating and reporting benefits in order to determine whether an initiative has achieved its intended outcomes and objectives once it is delivered. It is a process to ensure that outcomes from an initiative are defined, aligned to transport system objectives and managed through to their achievement or realisation.

Benefits management is a holistic end-to-end process. It occurs throughout the ATAP Framework by forming an integral aspect of the planning and delivery of initiatives. It embeds a culture of accountability and transparency throughout the ATAP framework in the consideration of benefits. Benefits management also provides a feedback mechanism to inform learnings for continuous improvement in benefit management processes in transport system management.

Throughout the ATAP Framework (see F2, F3 and F4), there are links to the benefits management process, ensuring that a mindset of accountability and structured approach towards achieving set benefits is embedded from the early stages of planning. Benefits management activities are undertaken both *ex-ante* (prior to commencing delivery) and *ex-post* (from delivery to end of an initiative's lifecycle).

Figure 1 below shows how benefits management occurs in relation to the ATAP framework.

Figure 1 ATAP Framework and Benefits Management



Benefits management comprises four elements:

- *Benefits identification* (occurring during problems identification and options appraisal)
- *Benefits planning* (occurring during options appraisal and Business Case development)
- *Ongoing benefits monitoring*
- *Benefits evaluation* (following delivery of an initiative).

Benefits identification provides a key input to benefits planning for establishing the activities to facilitate benefits evaluation. Good benefits identification and planning lead to reliable benefits measurement, which is required for benefits evaluation of an initiative.

Benefits identification and planning seeks to answer the following four questions:

1. What benefits will arise from a specific initiative (aimed at overcoming a problem preventing transport system objectives from being achieved)?
2. How will these benefits be measured?
3. What KPIs should be used for benefits monitoring and evaluation?
4. Who will be responsible for measurement?

Benefits evaluation is undertaken following the delivery of an initiative. The evaluation provides a comprehensive overview of both what an initiative has achieved and how this compares to what was expected.

Benefits evaluation responds to the following questions:

1. Were the expected benefits achieved?
2. What caused any variations between actual results and expected benefits?
3. How can benefits management be improved and what lessons can be used to improve future initiatives?

1.2 Benefits appraisal vs benefits management

As mentioned above, benefits play a central role in two key ATAP processes: appraisal and benefits management. It is important to understand from the outset that while benefits appraisal and benefits management are closely aligned, they have different purposes:

- Appraisal plays a primary role in identifying a preferred option for solving an identified problem, and demonstrating the justification of the preferred option - namely that benefits are greater than costs, resulting in net benefits.
- Benefits management, on the other hand, seeks to create a process to ensure benefits are monitored and achieved post-delivery.

Benefits identification is common to both appraisal and benefits management, and is undertaken in the early steps of the ATAP Framework. Following benefits identification, benefit considerations differ between appraisal and benefits management, as explained in Table 1. Appraisal is discussed in more detail in F3.

Table 1 Benefits management and appraisal roles in the ATAP Framework

ATAP Framework	Appraisal	Benefits management
Step 2 Problem identification, assessment and priority	<p>Benefits identification is common to both appraisal and benefits management. It seeks to identify and define potential benefits arising from addressing an identified problem (which in turn is preventing transport system objectives and targets from being achieved).</p> <p>Benefits are identified using various techniques such as investment logic mapping, benefits dependency mapping, desk-top investigations and stakeholder engagement. In these processes, links are explored between the problem, the related benefits of reducing the problem and the associated transport system objectives and targets (as set in Step 1: Goals, Transport System Objectives and Targets, see F1).</p>	
Step 3 Options generation and assessment	Appraisal plays a primary role in identifying a preferred option and demonstrating the justification of the preferred option - namely that benefits are greater than costs, resulting in net benefits. It uses the full list of benefits.	Benefits planning seeks to identify a subset of benefits from the full list of benefits for monitoring and to establish a governance process for benefits evaluation. Benefits planning should build on the information contained in the appraisal for accountability and transparency.
Step 4 Business cases for proposed initiatives	The Business Case is developed, including full documentation of: benefits identification, benefits appraisal of options and all the benefits of the preferred option.	The Benefits Profiles, Benefits Register and Benefits Management Plan are refined, validated and finalised in the Business Case.
Step 5 Prioritisation and program development Step 6 Delivery		An agreed subset of benefits is tracked and monitored.
Step 7 Post-completion evaluation	An ex-post CBA can be undertaken to identify how strong the justification for an initiative was in hindsight.	A benefits evaluation is undertaken to measure actual performance and identify any findings and lessons learned.

1.3 Principles of benefits management

The high level principles that should underpin benefits management are described in Table 2.

Table 2 Principles of benefits management

Principles to help shape benefits management	Principles on how to approach benefits management	Principles on how to manage benefits management
<ul style="list-style-type: none"> • Benefits need to be understood as outcomes – justification for intervention in the first place • Benefits must be aligned with transport system objectives and performance measures • Benefits management is an end-to-end process during the full lifecycle of the initiative 	<ul style="list-style-type: none"> • Benefits are not automatic – delivery of desired benefits requires active monitoring • Benefits are dynamic; they need to be regularly reviewed and updated (where evidence-based) • Benefits can be monetised and non-monetised • Intermediate outcomes are needed to realise end benefits • Benefits should be measurable and reasonable 	<ul style="list-style-type: none"> • Benefits must be owned by appropriate sponsors and managers • Benefits and the measures used should be integrated with an agency's performance management systems. • The numbers of benefits identified for monitoring outcome performance should be limited to a manageable number • Benefit management needs to be integrated with all other aspects of the initiative's delivery • Benefits need to be communicated

Benefits management should:

- Ensure benefits are identified and defined clearly at the outset, and are linked to transport system objectives
- Drive the process of realising benefits, including measurement, tracking and recording of benefits as they are realised
- Ensure there is a commitment to realise defined benefits with assigned ownership and responsibility for adding value through the realisation process
- Provide alignment and clear links between the initiatives (its vision and desired benefits) and the transport system objectives
- Establish a process of final evaluation to communicate whether the initiative has delivered its expected benefits.

1.4 Critical success factors

The following factors underpin successful benefits management:

- Stakeholder buy-in
 - Senior management leadership and commitment
 - Early stakeholder engagement
 - Stakeholder consultation throughout the process
 - Operational ownership of benefits
- Management of information
 - Benefit Profiles and Benefits Management Plan are up to date
 - Alignment with project/program management systems
 - Dissemination and publication of evaluation reports and outcomes
- Embedded benefits achievement
 - Alignment of benefits to transport system objectives and jurisdictional goals
 - Governing bodies maintain a benefits achievement focus
 - Processes ingrained in organisations
 - Integration with program and change management, including any scope change or behavioural change required.

1.5 Importance of practical and measurable benefits

The availability of necessary data is critical for effective benefits management. The measurement of benefits is often a challenging process for practitioners and requires advanced planning of data needs and selection of appropriate measurement metrics. This will ensure that required data is available when benefits evaluation is undertaken. It may also require data collection before initiative delivery to ensure baseline data is available.

2. Benefits identification

Benefits identification is an initial activity that is common to both appraisal and benefits management. It seeks to identify and define potential benefits arising from addressing an identified problem (which in turn is preventing transport system objectives and targets from being achieved). The role of benefits identification is to create a culture of accountability and transparency with benefits achievement at the forefront.

A benefit is a measurable improvement in an outcome, perceived as positive by stakeholders, and contributes towards one or more transport system objective.

Benefits identification should commence early in the ATAP Framework. In Step 2 of the Framework, benefits can be explored through techniques such as investment logic mapping, benefit dependency mapping, desk-top investigations and stakeholder management. These processes can provide an initial 'line of sight' between a problem, the strategic rationale for addressing the problem, the associated benefits and the related transport system objectives (set in Step 1 of the Framework). In Step 3, benefits identification can be further refined.

Key questions to assist in benefits identification are:

- What is the problem and related transport system objectives driving the need for a potential initiative?
- What are the outcomes being sought and expected from an initiative?
- Who are the beneficiaries?
- When are the benefits obtained?
- What are appropriate measures to define outcomes/benefits?

The result is that benefits are identified as part of early assessment and documentation, leading to a list of benefits to be fully modelled for appraisal.

Table 3 below demonstrates potential benefits mapped against objectives (assumed to have been generated as part of Step 1 of the ATAP Framework).

Table 3 Examples of benefits aligned to strategic objectives

Objectives	Benefits
Prosperity and economic growth	Improve travel time
Public safety	Improve road safety

In identifying the benefits, the following principles should be considered:

- Capture all relevant benefits that may be used in Step 3 of the ATAP Framework (Options Generation and Assessment, see F3)

- Comprehensive identification of benefits, including benefits which cannot be monetised
- Practitioners should be made aware of the list of benefits and should take ownership of these outcomes.

2.1 Timing

Benefits identification occurs from Step 2 of the ATAP Framework (Problem Identification, Assessment and Priority, see F2) and provides key input to the appraisal process undertaken as Step 3 (Options Generation and Assessment, see F3) to identify a preferred option, and in benefits planning.

2.2 Mapping techniques to assist benefits identification

Mapping techniques such as investment logic mapping or benefit dependency mapping can be useful at this stage in the process to identify benefits. It is suggested that these techniques are undertaken in a workshop environment with the participation of key stakeholders, including a sponsor.

2.2.1 Investment logic mapping

An Investment Logic Map (ILM) is a one-page diagrammatic representation of the underlying rationale behind an initiative. The ILM focuses on the problems or issues that an initiative will try to address, the most effective responses and solutions to those problems, and measurable benefits achieved if the solution is successful.

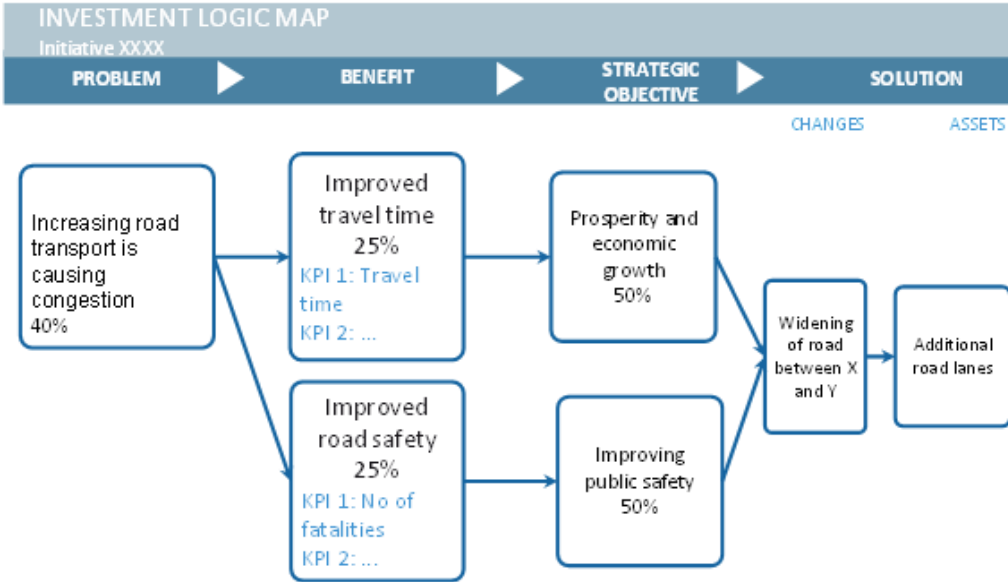
The purpose of an Investment Logic Map is to clearly and honestly communicate the case for an initiative. The ILM links the problem/need for an initiative to the strategic objectives of the relevant jurisdiction. The ILM can consist of three columns (Problem-Benefit-Strategic objective) or five columns (Problem-Benefit-Strategic objective-Changes-Assets).¹

¹ See VicRoads (2015), Benefits Management Framework and Department for Transport UK (2010), Logic mapping hints and tips for additional guidance on ILMs

Figure 2 Example of Investment Logic Map (ILM)

Investment name (title)

Subtitle



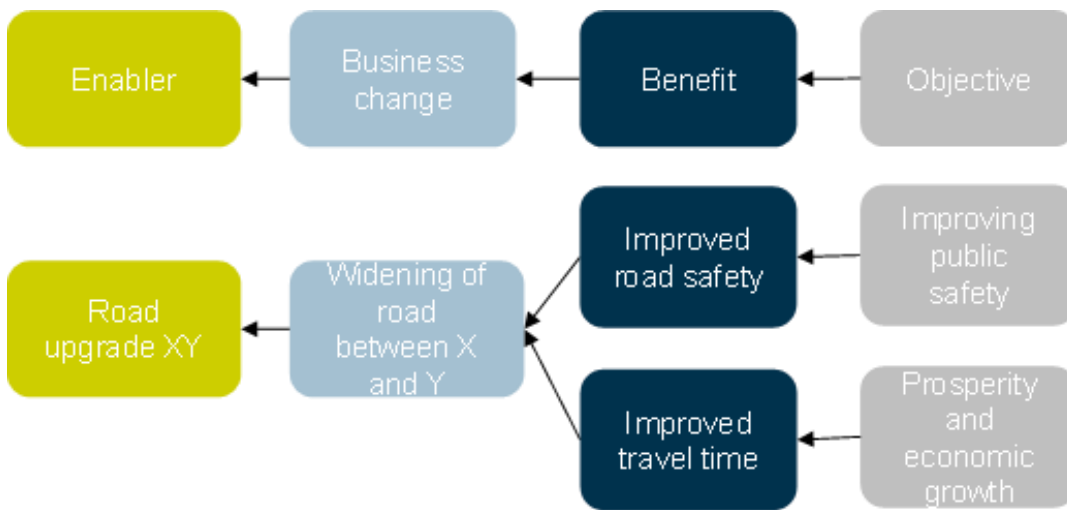
2.2.2 Benefits dependency mapping

It is important that benefits reflect the strategic direction of the relevant jurisdiction. A benefits dependency map can be used to identify benefits that fulfil particular objectives of the jurisdiction, and allow the expected outcomes of an initiative to be defined with stakeholders. This involves diagrammatically linking strategic objectives with expected benefits, and the enabling initiative that achieves these outcomes.

Using Figure 3 below as an example, an *ex-ante* approach to developing a benefits dependency map begins from right to left. First the objectives are outlined, followed by the proposed benefits that will arise from an initiative (aimed at solving a problem); then the anticipated change that will occur from the initiative is described; and finally, the supporting enablers are identified as specific outputs/solutions to be delivered. This provides a diagrammatic rationale for an initiative. Note that the benefits dependency map in Figure 3 does not reflect the ATAP Guidelines terminology and is used here for illustrative purposes to draw out the link between transport system objectives and benefits.

An *ex-post* view of reading the map from left to right demonstrates the progression from delivering the initiative, realisation of benefits and the achievement of stated objectives.

Figure 3 Example of benefit dependency map



3. Benefits planning

Benefits planning lays the groundwork for the monitoring and evaluation of benefits and specific outcomes from a proposed initiative. It consists of the following two broad areas:

- Developing Benefits Profiles
- Establishing a governance process for benefits evaluation.

Benefits planning starts during Step 3 of the ATAP Framework (Options Generation and Assessment, see F3) and is further refined and finalised in Step 4 of the Framework (Business Cases for Proposed Initiatives, see F4).

3.1 Timing

Benefits planning spans across Step 3 of the ATAP Framework (Options Generation and Assessment, see F3) and Step 4 of the Framework (Business Cases for Proposed Initiatives, see F4). Benefits planning ties in with the appraisal and assessment of options to identify a preferred option for an initiative.

3.2 Develop Benefits Profiles

Following the identification of the preferred option in Step 3 of the STAP Framework (Options Generation and Assessment, see F3), a subset of benefits is selected and agreed with key stakeholders for monitoring and evaluation, based on the preferred option. Usually, the benefits with the highest value or worth will be selected during this phase.

Once agreed, the Benefits Profiles can then be refined further to be consolidated into a Benefits Register (see sections 6.1.1 and 6.1.2 for description and details of Benefits Profiles and the Benefits Register).

Benefits profiling should ideally be started during Step 3 of the Framework and can be further developed during development of the Business Case for the preferred option. An example of a Benefit Profile is provided in [Appendix B](#).

A Benefits Profile will typically require the following steps:

- Benefits classification
- Benefits measurement.

3.2.1 Benefits classification

Benefit measures are classified to demonstrate the strategic alignment of initiatives and to aid the aggregation of benefit performance from initiative to program to portfolio. Each jurisdiction may develop their unique approach to classifying or categorising benefit measures. Typically, a benefits classification approach could be linked to the jurisdiction's transport system objectives. Other common approaches include:

- Monetised and non-monetised benefits
- Triple bottom line – Economic, social, and environmental
- Balance scorecard – Financial, customer, internal business process, learning and growth.

The benefits classification approach should be linked with a system of key performance indicators. This enables benefit measures to be consistently identified and outcomes to be fairly compared and assessed, based on agreed and available key performance indicators.

3.2.2 Benefits measurement

Benefits measurement should ideally commence in the early stages of initiative development and options generation and assessment (Step 3 of the ATAP Framework). These measures are further detailed and linked to a preferred solution that is being proposed as part of the development of a Business Case.

Benefits are measured to prevent any bias from overstating what can be achieved from a proposed solution. Benefits must be evidence-based. Baseline and actual measures should be captured to provide a clear comparison of performance improvement between when a problem is identified and after a solution has been delivered.

Benefits measurement involves the following tasks:

- Confirm Key Performance Indicators (KPIs)
- Determine benefit metrics
- Measure baseline performance
- Set target measures
- Confirm and validate measures.

Confirm Key Performance Indicators

A key performance indicator (KPI) is a measure that enables monitoring of performance in terms of progress towards a specific, defined outcome. In benefits planning, KPIs are set to measure benefits achieved.

Steps, goals, objectives and targets are set early in the ATAP Framework. Problems are identified and the rationale for addressing a particular problem is defined. Following the selection of a preferred option, the targets can be revised and KPIs assigned to each benefit that will be monitored. The KPIs identified for each Benefit Profile will be inherently linked to the transport system targets identified in Step 1 of the Framework (Goals, Objectives and Targets, see F1).

Table 4 provides an example of how benefits can be linked to KPIs to allow for tracking and subsequent measurement.

Table 4 Example of KPIs for benefits identified

Objectives	Benefits	KPI
Prosperity and economic growth	Improve travel time	KPI 1.1 Travel times
Public safety	Improve road safety	KPI. 2.1 Fatalities

Determine benefit metrics

For each KPI, a ‘tangible’ measure should be identified where reasonable and practical. The metric should be specific, measurable and relevant. For instance, a KPI metric value may be determined as a percentage that increases over time.

The source data required to estimate each metric should be clearly identified and reflected by benefit to facilitate data collection. Examples of data sources include surveys, public sector agencies datasets, etc.

Table 5 provides an example of how initiative benefits can be translated into KPIs and, in turn, how benefit metrics can be developed to assess the extent to which objectives have been achieved.

Table 5 Example of benefit metrics

Objectives	Benefits	KPI	Benefit metric
Prosperity and economic growth	Improve travel time	KPI 1.1 Travel times	Time savings between key points on the network
Public safety	Improve road safety	KPI 2.1 Fatalities	Fatality rate on corridor Z

Measure baseline performance

Benefit measures need to be evidence based. They need to be validated and clear criteria for collecting data and measuring performance agreed with the benefit owner and its stakeholders. Once agreement is obtained, the approach must be documented completely to enable the same methodology to be used when evaluating benefit performance after initiative delivery.

In benefits planning, data is collected on the baseline metric for each benefit. Actual outcomes will be compared to this baseline measure during benefits evaluation. In order to demonstrate that an initiative has delivered the expected benefits, it is important to know what the situation was before the change commenced. The approach to be undertaken for data collection and analysis, as well as determination of the findings and lessons learned, should be discussed with the key project stakeholders.

Baseline measures provide the means to capture current situational (or base level) data that can then be used to compare various performance measures before, and after, initiative tasks have been progressively implemented. If baseline measures are not taken and validated at the beginning of an initiative, it is very difficult to objectively demonstrate the achievement of initiative benefits throughout its lifecycle.

Table 6 Example of baseline measures

Objectives	Benefits	KPI	Benefit metric	Baseline measure
Prosperity and economic growth	Improve travel time	KPI 1.1 Travel times	Time savings between key points on the network	Y mins between X and Y in 2015
Social Public safety	Improve road safety	KPI 2.1 Fatalities	Fatality rate on corridor Z	X number of fatalities in 2015

Set target measures

A target represents a desired level of performance for a specific outcome. For example, if travel speed is the specific outcome, the target might be 40 kms/hr. Measurable and realistic targets, albeit ones that are still challenging, need to be set during benefits planning.

Table 7 describes possible targets that can be assigned for identified benefits and KPIs.

Table 7 Example of target measures

Objectives	Benefits	KPI	Benefit metric	Baseline measure	Target measure
Prosperity and economic growth	Improve travel time	KPI 1.1 Travel times	Time savings between key points on the network	Y mins between X and Y in 2015	5 mins time savings between X and Y by 20XX
Social Public safety	Improve road safety	KPI 2.1 Fatalities	Fatality rate on corridor Z	X number of fatalities in 2015	10% reduction in fatalities from crashes by 20XX

Once the above information is derived for each benefit, a Benefit Profile can be built.

In setting target measures, timeframes for the achievement of targets should consider the scale of initiatives and realistic timeframes for the ramp-up of benefits - for example, as land use changes occur.

Confirm and validate measures

During benefits planning, benefit owners and stakeholders who are likely to be responsible for endorsing the collation and reporting of benefit data should be engaged to ensure appropriate metrics are available, the proposed approach for evaluating benefit performance is valid, and the likely costs for collecting the data, evaluation and reporting benefit performance are in line with the scale of the initiative.

Benefit owners will need to confirm and endorse that identified benefits measures are appropriate and ensure that any agreed new measures can be integrated with performance management systems.

3.3 Establish governance process for benefits evaluation

Following the undertaking of benefits planning, it is important to note that consideration should be given to facilitating the undertaking of benefits evaluation, including:

- Determining roles and responsibilities in conducting a benefits evaluation
- Refining the target audience for presenting benefits evaluation findings
- Determining the timing to conduct benefits evaluation and reporting
- Using the same approach for data collection, measuring, evaluation and reporting
- Validating data collection, performance measurement and evaluation
- Reporting content and structure
- Developing a succession plan to handover the Benefits Management Plan and responsibilities to benefits owners.

4. Ongoing monitoring

Benefits monitoring forms an integral aspect of benefits management. It involves the tracking and recording of benefits metrics until benefits evaluation. Any risk to benefits achievement is flagged and escalated, which could necessitate implementing actions and interventions.

The objective of benefit monitoring is to determine if planned benefits continue to be achieved or are matching expected improvements. Any deterioration or shortfall in benefits achievement can provide a basis for corrective actions, as well as lessons learned for future initiatives.

4.1 Timing

Benefits monitoring occurs from finalising the Benefits Management Plan through to conducting benefits evaluation and may continue further for any unrealised benefits.

5. Benefits evaluation

Following the delivery of an initiative, benefits evaluation can be undertaken.

Benefits evaluation is important because:

- It helps to confirm that the benefits established and defined in the initiative's development stage are being achieved and that the implemented initiative is running smoothly.
- It measures the extent to which the initiative achieves the outcome(s) sought (as described in the Business Case) and to what extent further justified actions are required to achieve and/or enhance benefits.
- It provides information that may be used to help inform future decisions.
- It provides a level of transparency and accountability for past initiative decisions.
- It provides learnings for future planning, assessment and decision-making.

The key activities undertaken in benefits evaluation include:

- Collecting, analysing and comparing benefits data
- Identifying key findings and lessons learned
- Disseminating the findings and lessons learned
- Updating the Benefits Management Plan and Benefits Register.

An agreed Benefits Management Plan guides the implementation of the benefit evaluation process. It confirms the scope and purpose of the review, enables an organised approach to timing and conducting the evaluation, implements the roles and responsibility of stakeholders involved in the evaluation process, and guides the benefit handover process to the benefit owners.

It should be noted that benefits evaluation is broader than a post-completion review as it encompasses planning actions necessary for the full realisation of project benefits, such as undertaking complementary projects or altering land use plans. These actions are frequently outside the direct control of the project proponent, so the Benefits Management Plan has to address how the responsible parties can be influenced to ensure their actions are aligned.

A benefit evaluation report may be prepared to document findings and lessons learned as part of this process.

5.1 Timing

Benefits evaluation should be conducted after an initiative has been delivered, at periodic intervals reflective of the timing and ramp-up of benefits (depending on the scale and associated behavioural change from an initiative). This allows for evaluations as benefits are fully materialised. This means that:

- Initial potential disruptions and business processes do not affect the evaluation results.

- Statistically significant collection of measurement data can be undertaken.

Benefits evaluation can also be undertaken as part of a post-completion review and findings from the evaluation process will help inform a post-completion review. Further guidance on post-completion review can be found in F7.

5.2 Collecting, analysing and comparing benefits data

5.2.1 Data collection

The approach for benefits data collection should follow the same methodology identified during baseline measurement in benefits planning. Data collection should be targeted. Since the benefits evaluation is explicitly linked to the benefits planning process, the methods outlined below should deliberately seek data and information that elucidate whether the benefits outlined in the initial plan have been achieved.

In addition to existing information about the initiative (i.e. Business Case, Benefits Management Plan and Benefits Profiles) and reports, information collection techniques may include the following:

- Questionnaires/surveys
- Interviews (structured or semi-structured and based upon issues developed for each stakeholder)
- Observation (i.e. of the service or asset)
- Collection of operational and service outcome data from the relevant agency or service provider
- Focus groups and workshops.

All data collected before or during delivery that will be used are reviewed and a decision made about what new data are needed. This requires specifying the characteristics of the data so that what is collected is useful and comparable to other datasets that are used. This may include:

- Specifying dates and times for data to be collected
- Specifying levels of accuracy of data and collection equipment
- Specifying volumes of data or sample sizes
- Other specifications particular to a type of data.

It is important to consider the availability and reliability of data to support the evaluation of benefit performance. The time and the cost of capturing the data should be relative to the scale of the benefits and initiative.

5.2.2 Compare and analyse data

Analysis of the information gathered will involve comparing what actually happened against what was predicted (as outlined in the Benefits Management Plan and supporting Benefits Profiles). This includes analysis of:

- Outcome performance (i.e. actual vs target)
- Realisation date (i.e. ahead of schedule/on time/lag and including reasons)
- Dependencies (i.e. cross-referenced to other benefits internal and/or external to the project)
- The justified actions required to realise the benefit
- Stakeholders impacted by the benefit
- Assumptions (i.e. about probability and/or value of benefit)
- Outstanding risks to future benefit realisation and corrective actions that can be taken to mitigate the risks
- Costs associated with benefits measurement
- Effectiveness of benefits management approach.

In examining the outcomes, consideration should be given to what caused any variances between what was expected and what was achieved. The recommendation may be to modify aspects of the initiative in question (if justified) so as to increase the likelihood of achieving the expected benefit or to take the observed variances as expected due to changes in the baseline.

5.2.3 Document findings and lessons learned

Findings and lessons learned arising from the analysis of benefits data should be consolidated and reported to inform:

- The ongoing operation of the service or asset (which is the final output of the initiative)
- Future initiatives.

In addition to understanding if the intended benefits of the initiatives have been fully realised, benefits evaluation should assess:

- What was done well and contributed to achieving expected and additional benefits
- What opportunities for improvement exist?

Lessons learned may include:

- How practical problems were overcome with strategic assessments, Business Cases, funding models, procurement processes, project knowledge management, effectiveness of benefits management and risk management
- Unexpected benefits that emerged

- Experiences of stakeholders and staff that provide useful insights for future initiatives
- Improvements to a jurisdiction's benefits management practice.

5.3 Disseminate the findings and lessons learned

For benefits evaluation to have a positive impact, the results must be communicated to practitioners and stakeholders involved in planning and evaluating the initiative, and those involved in the management or operation of the initiative. The information gathered during a benefits evaluation can be used to inform planning and project management practices. An evaluation report may be prepared to document findings.

Those required to evaluate similar options in future will be able to use the information gathered to inform their decisions. Thus the benefits evaluation process creates a feedback mechanism through which evaluation practices can be improved.

A communications plan for the findings can be agreed with the benefit owners and key stakeholders to facilitate dissemination of the findings and report.

5.4 Update Benefit Management Plan and Benefits Register

Once benefits evaluation is completed, any changes to the Benefits Management Plan and Benefits Register should be agreed with the benefit owner and the changes made as appropriate.

Benefits evaluation may involve periodic updates to the Benefits Management Plan and Benefits Register with findings shared and documented.

6. Outputs and Responsibilities

6.1 Outputs of benefits planning

A number of outputs are produced as part of the benefits planning process. The outputs are summarised below:

- Benefits Profiles
- Benefits Register
- Benefits Management Plan.

The outputs of benefits planning can be prepared as early as Step 3 of the ATAP Framework (Options Generation and Assessment, see F4) and can be further refined during Step 4 of the Framework (Business Cases for Proposed Initiatives, see F4).

6.1.1 Benefits Profiles

Individual Benefit Profiles document each benefit to define and describe the benefit and inform the Benefits Management Plan and Benefits Register. A profile should include (see example in [Appendix B](#)):

- Relevant transport system objectives
- Benefit description
- KPI for each benefit
- Benefit metric - how progress will be tracked
- Baseline measurement - including date taken
- Target measure – e.g. percentage improvement from baseline to target measure
- Data source - where the measurement information will come from
- Target measure date - date the expected result is to be realised
- Benefit owner.

An example of a Benefit Profile is shown in [Appendix B](#). The content of a profile is expanded upon below in section 6.1.2, as it provides a key input to a Benefits Register.

6.1.2 Benefits Register

A Benefits Register is a living document initially developed in the benefits planning phase. The register is designed to be updated following an initiative's completion and in preparation for undertaking the benefits evaluation

The Benefits Register is generally attached to the Benefits Management Plan.

The register should contain the following key information, which is based on the information derived from benefits profiling:

- Benefit description
- KPI for each benefit
- Benefit metric - how progress will be tracked
- Measurement source - where the measurement information will come from
- Baseline measurement - including date taken
- Target measure - percentage improvement from baseline to target measure
- Target measure date - day the expected result is to be realised
- Benefit owner
- First tracking date - day tracking of the benefit began
- Last review date - day the status was last reviewed
- Next review date
- Status commentary - comments regarding the latest review including any actions taken
- Action to be taken.

Each benefit owner will be required to update the Benefits Register at an agreed frequency. The Benefits Register should be validated to ensure:

- The benefit is realistic and achievable as a result of the initiatives
- Stakeholders who are scheduled to receive the benefit and those accountable for its realisation are appropriate and have 'bought in'
- Target measures for the benefit are achievable and owned.

6.1.3 Benefits Management Plan

A Benefits Management Plan specifies the benefits of a proposed initiative. It outlines timeframes in which benefits will be realised and describes the most suitable metrics to be used to measure them. In addition, the plan defines who is responsible for the monitoring and delivery of benefits, and how and when they will be reported. This plan is produced using outputs from the Benefits Profiles. The plan should facilitate the realisation of expected benefits and any handover activities and responsibilities following benefits evaluation.

However, the Benefits Management Plan is more than an action plan that outlines the timeframe in which benefits will be realised. It also includes the proposed approach for realising benefits, including governance arrangements, risk and issue management, assumptions and details of a structured continuing process that will be followed to ensure that benefits are sustained and that returns from an initiative are maximised (if justified).

The plan should also highlight interdependencies with other initiatives. A further purpose is to support the initiative's Business Case and to ensure benefits are realised on time as documented in the Business Case.

Appendix C describes a suggested table of contents for a Benefits Management Plan. It is noted that a Benefits Management Plan can also be referred to as a 'Benefits Realisation Plan'.

6.2 Outputs of benefits evaluation

6.2.1 Summary statement

The summary statement outlines the initiative and its achievements, future actions and lessons learned from the experience.

The potential recipients (e.g. owner, service/asset owner, central agencies, policy makers, designers, review organisations, other government agencies) should be confirmed to ensure issues relating to privacy and confidentiality are addressed.

Public release of the summary statement should also be considered, subject to privacy and confidentiality matters being addressed

6.2.2 Benefits evaluation report

An evaluation report should use a standardised reporting structure, which can be adapted to suit initiative requirements. The standardised reporting structure should include the following:

- Executive summary outlining the overall findings
- Introduction - provides information about the initiative and outlines the purpose of the evaluation
- Methodology - outlines data collected and analysis process used. The methodology should also identify who (all internal and external stakeholders) has been involved in the evaluation
- Evaluation findings
- Summary of key learnings and recommendations
- Appendices - includes any Investment Logic Maps or data collection tools used in the evaluation.

Evaluation reports and the research that informs them should be placed in the public domain unless there are good reasons, in terms of security or commercial confidentiality, for not doing so.

6.3 Responsibilities

6.3.1 Benefits planning

In benefits planning, a number of key roles are important to ensure overall success.

Key roles are recommended to be assigned in the benefits planning process as described in Table 6 below. It is noted that tasks may be shared or delegated to other individuals.

Table 8 Roles and responsibilities

Role	Description
Benefits manager	<ul style="list-style-type: none"> • • Owns the Benefits Management Plan, Benefits Register and Benefits Profiles • Supports key stakeholders with the adaptation and implementation of the benefits management process to align with their operating environment • Provides objective challenges of benefits, dependencies, measures, targets and the defined approach to benefits management • Ensures Benefits Management Plan aligns with the Business Case(s) • Produces a Benefits Register • Reports periodically on benefits realisation status • Escalates any issues relating to benefits realisation to the relevant governing body •
Benefit owner(s)	<ul style="list-style-type: none"> • • Accepts responsibility for realising assigned benefits • Identifies and maps benefits with the benefits manager • Identifies how the benefits are distributed between the stakeholders • Identifies suitable benefit measures and targets with the benefits manager • Confirms and validates benefit measures • Approves the Benefit Profile(s) • Measures and monitors the progress of realising the benefit, ensuring the Benefit Register is kept up to date • Encourages workplace behaviour to support benefit realisation • Ensures the financial budgeting planning includes the expected outcomes of the realisation of each benefit

6.3.2 Benefit evaluation

When identifying who will undertake the benefits evaluation, the following should be considered:

- *Level of independence* - A key consideration at the planning stage of the evaluation is the level of independence required. For instance, evaluations that are conducted to demonstrate accountability often need a higher degree of independence in order to maintain credibility and neutrality.
- *Avoiding bias* - To avoid positive bias, evaluations should generally not be conducted by the same group or person who plans or delivers the initiative. However, it is not necessary for the evaluator to be external to the department or government. The evaluator could be someone who is capable and competent, but simply external to direct involvement in the planning and delivery of the initiative being evaluated. In other instances, such as when an evaluation is being conducted for learning and development purposes, initiative staff can be closely involved in benefits evaluation including at the planning, implementation and review stages of the evaluation.
- *Team composition* - The evaluation team may be comprised of internal and/or external evaluators. Internal evaluators bring a deeper understanding of the initiative and allow for organisational learning. Conversely, external evaluators provide increased credibility.

7. Checklist

This checklist provides a brief summary of benefits management deliverables and products that gauge how comprehensively the phase has been undertaken. The checklist should be completed in conjunction with the development of the Business Case and after undertaking benefits evaluation to ensure that the requirements for benefits management have been satisfied.

Table 9 Checklist of documents

Document	Completed
Benefits Register	<input type="checkbox"/>
Benefits Management Plan	<input type="checkbox"/>
Summary statement	<input type="checkbox"/>
Benefit evaluation report	<input type="checkbox"/>

Appendix A Key terms

The ATAP Guidelines contain a Glossary of terms used. The following terms are important to benefits management.

Benefit: A measurable improvement in an outcome perceived as positive by stakeholders and contributes towards one or more transport system objectives.

Benefits management: Benefits management is the identification, definition, tracking, optimisation and realisation of benefits. Benefits management forms an integral aspect of the planning and delivery of initiatives. It has two key elements: benefits planning and benefits evaluation.

Benefits planning: Process to identify and define benefits from an initiative, and plan for benefits evaluation. It can also be referred to as 'ex-ante benefits realisation planning' or 'ex-ante benefits planning'.

Benefits evaluation: Process to confirm that the benefits established and defined in benefits planning are being achieved and that the operational service or asset is running smoothly. It can also be referred to as ex-post benefits evaluation.

Ex-ante: Period relating to before commencement of delivery of an initiative.

Ex-post: Period from delivery of an initiative to end of service/life of an initiative

Appendix B Sample Benefit Profile

Objectives	Benefit	KPI	Measure	Baseline value	Target measure	Data Source	Responsible for reporting	Benefit owner
Social Public Safety	Improved safety in the transport system in State Y	Fatalities	Fatality rate on corridor Z	X number of fatalities in 2015	10% reduction by 2025	Australian Bureau of Statistics	John Smith	Agency X

Appendix C Proposed table of contents for Benefits Management Plan

Section	Summary
Initiative or program description	Describe the initiative or program, its scope and objectives including alignment to transport system objectives and any workshops carried out to enable completion of the Benefits Management Plan
Overview of benefits	<p>Summarise benefits identified and agreed, using Benefits Profiles as references or guides</p> <p>Describe any techniques used to identify benefits, such as benefits mapping or investment logic mapping</p>
Governance approach	<p>Identify the benefit owner(s) who will be accountable for achieving and realising the benefit</p> <p>Describe any key steps to realise benefits, and alignment to key milestones</p> <p>Identify resources, budget and timeframe for benefits evaluation</p> <p>Define any risk, assumptions and dependencies to achieving benefits</p> <p>Ascertain how benefits will be monitored, including frequency, data sources and responsibilities</p> <p>Summarise any handover process and responsibilities</p>
Baseline and performance measurement	Describe baseline performance for each recorded benefit and approach to data collection
Appendices	Any supporting documentation such as benefits profiles, benefits register, business case

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