

Auckland Smarter Transport Pricing: Evaluation approach

An approach to evaluation has been developed as part of the Auckland Smarter Transport Pricing Project that investigates into whether to introduce pricing for demand management purposes in Auckland.

This provides a holistic approach to assess the relative benefits and costs of different pricing options and describes the range of information we will be seeking to use.

Project objective

The Terms of Reference state that the primary objective of pricing is:

“to improve the performance of Auckland’s transport network, in particular through improved congestion results.”

In doing so, consideration must be given to:

- economic, social and environmental effects,
- distribution of impacts,
- effectiveness and efficiency,
- flexibility and adaptability,
- transparency of revenue use, and
- National and regional impacts.

How the evaluation approach will be used

Phase I

The purpose of Phase I is to establish the base case and do-minimum scenarios. The evaluation framework will be used as a guide for the collection of baseline data and background information required.

Phase II

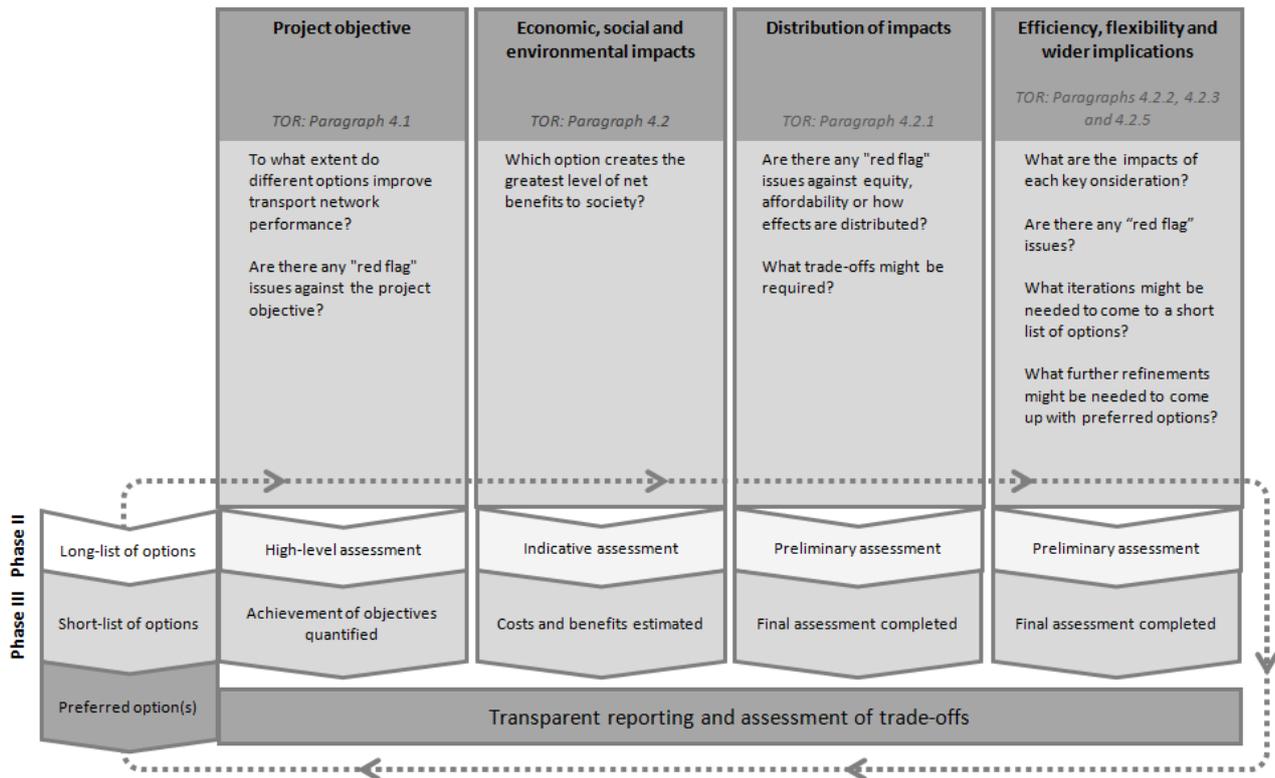
The purpose of Phase II is to identify and analyse a long-list of potential options. The evaluation framework will be used to analyse these options to create a short-list of options for progressing further in Phase III.

Phase III

The purpose of Phase III is to undertake more detailed and comprehensive analyses of the short-list of options to identify the preferred option(s). The evaluation framework will be applied more rigorously to help selection of the preferred option(s).

As a crucial component of the project, this provides a consistent and transparent approach to the analysis of different pricing options throughout the process.

Figure 1: Evaluation approach schematic



Note: The evaluation requires conducting the assessment iteratively to take into account new information emerged throughout the process. Where appropriate, options are refined to deliver better transport outcomes.

The key components

We will evaluate the following:

- **Project objective** – this assesses the degree to which the project objective is met.
- **Economic, social and environmental impacts** – this includes assessment of conventional costs and benefits, as well as wider economic impacts.
- **Distribution of impacts** – this assesses the variance of transport impacts across different social groups and geographical areas.
- **Efficiency, flexibility and wider implications** – this assesses the following additional factors as outlined in the Terms of Reference:
 - efficiency,
 - flexibility and adaptability, and
 - national and regional implications.

The extent of the assessment varies slightly between Phase II and Phase III. As illustrated in Figure 1, the assessment in Phase II is largely indicative and high-level. However, as it progresses to Phase III, the assessment will be more rigorous, quantifying respective benefits and costs. Table 1 shows a sample of the performance measures applicable at each component of the assessment.

It is expected that the use of any net revenue to be raised by any pricing options for demand management purposes will be explained for the options analysed.

Table 1: Evaluation approach and potential performance measures

Component	Impact	Measure (note 1)
Project objective <i>(TOR 4.1)</i>	Network performance	<ul style="list-style-type: none"> • Reduced travel time • Improved average speed • Increased traffic throughput • Improved capacity utilisation (eg vehicle occupancy) • Increased public transport where it impacts on congestion
	Improve congestion	<ul style="list-style-type: none"> • Reduced travel time delay • Improved travel time reliability
Economic, social and environmental impacts (note 2) <i>(TOR 4.2)</i>	Economic impacts	<ul style="list-style-type: none"> • Impacts on business and freight users • Agglomeration impacts • Labour market impact (including access to employment) • Other wider economic impacts
	Social impacts	<ul style="list-style-type: none"> • Benefits to transport users (time, vehicle costs etc) • Safety and security • Health impacts • Quality of services • Access to services
	Environmental impacts	<ul style="list-style-type: none"> • Vehicle emissions impact • External impacts (eg noise, air quality and water quality)
Distribution of impacts <i>(TOR 4.2.1)</i>	Distribution of impacts across social groups (note 3) and geographical areas	<ul style="list-style-type: none"> • Affordability • Impacts on household • Social inclusion and equity • Distribution of impacts (costs and benefits) by social groups and geographical areas
Efficiency, flexibility and wider implications <i>(TOR 4.2.2, 4.2.3 & 4.2.5)</i>	Efficiency	<ul style="list-style-type: none"> • Financial efficiency (eg cost of implementation, operation and compliance) • Operational efficiency (eg ease of implementation, operation and compliance)
	Flexibility (adaptability to changing circumstances)	<ul style="list-style-type: none"> • Pricing flexibility • Technology flexibility • Procurement flexibility
	National and regional implications	<ul style="list-style-type: none"> • Alignment with land use plans • Impact on existing land transport funding system

Notes:

1. A list of key performance indicators (KPIs) has been developed and will evolve over the course of the project to ensure the most appropriate KPIs are used for assessing each criterion.
2. In the final assessment in Phase III, it is anticipated that the economic, social and environmental impacts assessment would identify the absolute and relative net benefit between options.
3. Social groups may include different income groups, age groups, ethnicities, private versus business users and people with disabilities.