10 Pre-assessment of Outcomes and Impacts

Figure 10.1: Pre-assessment of outcomes and impacts within the STTRIDE Evaluation Process

Pre-assessment

In order to plan an evaluation it is important to obtain the best possible understanding of the nature and scale of likely outcomes and impacts before designing the evaluation in detail. This information can then be used to determine which measurements are taken and how many, during the data collection phase of the evaluation.

There are some fundamental uncertainties in the domain of influencing single car use on inter-urban networks by introducing new technologies. Primarily these concern the extent and nature of the impact of new technologies on modal shift and the potential for connected and multi-modal journeys.

The logic map created earlier in the evaluation process (in the 'Describe Intervention Logic' module on the STTRIDE web site) will have set out the types of short and medium term outcomes and long term impacts that are expected and this information can be used as the starting point here. The potential unintended consequences of the intervention should be included among the likely impacts considered, as well as the intended impacts.

Pre-assessment: Augmented Reality

A predicted outcome for augmented reality (AR) is that it provides rich content and visualisation for travellers on foot and in vehicles. Vehicle-based AR is provided in a controlled environment and the content it can provide is easier to access and manage by the content provider. Using mobile devices or special AR equipment, people may access this rich content during their journey.

The most probable outcome is for navigation to become easier as routes can be shown through the AR, as well as service locations and points of interest. Especially in the case of tourists and visitors, AR promises to provide help for people who are confused or lost.

Pre-assessment: Traffic Management Systems

Traffic management systems can benefit all modes by smoothing traffic flow and making journeys shorter and more predictable. But if private car journeys benefit as much or more than other modes, the impact on mode shift away from single occupancy car use can be neutral or even negative.

Pre-assessment: Electric Vehicles

Wider availability of electric bicycles and infrastructure for using them may encourage multi-modal journeys; cycling to public transport stops or stations and then using public transport for the longer inter-urban leg of the journey.

It is helpful to summarise the outcomes and impacts which are expected for each type of user or stakeholder, and the likely qualitative or quantitative magnitude of the impact in a table. Evidence from other cases of similar interventions could be reviewed to inform this. An example is shown in Table 10.1. A table such as this can be used to make a final selection of the outcomes and impacts that will be included in the assessment. A template for it is available on the STTRIDE web site.

Table 10.1: Example expected outcomes and impacts

Outcomes and impacts expected	Type of user/ stakeholder	Scale and direction of impact
Increase in number of products/ services available	Local authority Road authority Travellers	++
Change in other systems/ services	Local authority Road authority Transport operator Service provider Travellers	?
Increase in level of sharing/ occupancy for existing trips	Local authority Road authority Travellers	+
Reduction in vehicle use	Local authority Road authority Travellers	-
Reduction in distance travelled in vehicles on existing journeys	Local authority Road authority Travellers	-

10. Preassessment of outcomes and impacts

Outcomes and impacts expected	Type of user/ stakeholder	Scale and direction of impact
Increase in journeys by cycle/ bus/ walk	Local authority Road authority Travellers	+
Change in number of multi-modal or connected journeys	Road authority Local authority Transport operators Service providers Travellers	++
Increase in frequency of service use	Road authority Local authority Transport operators Service providers Travellers	++
Improved journey efficiency by car and/ other modes	Local authority Road authority Travellers	+
Improved journey quality	Local authority Road authority Transport operators Service providers Travellers	+

10. Preassessment of outcomes and impacts

Outcomes and impacts expected	Type of user/ stakeholder	Scale and direction of impact
Improved accessibility to facilities	Government Local authority Road authority Transport operators Travellers	+
Reduction in environmental impacts	Government Local authority Road authority	-
Improvement in safety	Government Local authority Road authority Travellers	+
Improved health	Government Travellers	+
Improved well-being	Government Travellers	+
Improved social inclusion	Government Local authority Travellers	+
Increased profitability of transport services	Local authority Transport operators Service providers	++

10. Preassessment of outcomes and impacts

Outcomes and impacts expected	Type of user/ stakeholder	Scale and direction of impact
Potential unintended impacts	Government Local authority Road authority Service providers Travellers	?