Local Authority Carbon Tool

Assessing your intervention

A form to help you record the impacts, research and assumptions for your proposal.

In House Analytical Consultancy

December 2010

Department for Transport

GORS
Government Operational Research Service

1: How to use this form

The form is intended to help you record the likely impacts of your intervention by

- Asking about direct and indirect consequences of your intervention;
- Allowing you to record details of which transport modes will be affected - directly and indirectly;
- Giving you space to record assumptions and details of any calculations made, and the evidence you have used in making those assumptions and calculations.

Please ensure that you save a copy of this document [using File|Save Copy As…] to your own hard drive/network before making any amendments.

A separate User Guide to the tool is available from the Main menu of the tool.

Notes:

Direct and indirect impacts: It is more important to identify all the impacts than to strictly define them as direct and indirect impacts.

Scope/boundaries: The current national indicator (NI186) applies to traffic within your authority area, and you should normally consider your intervention's impact within your own area. But this tool will allow you to assess impacts wherever they occur, should you wish to.

Mode switching: Switch from one mode of transport to another e.g. car to bus.

2: Thinking through the impacts

2.1 Consider the direct transport impacts of your scheme

2.1.1 Mode

- What transport mode(s) does your scheme **directly** apply to?

List here:

Details

- Is your scheme likely to lead **to mode-switching**?

Yes / No

- **Which modes** are likely to be switched to as a consequence of your scheme?

List here:

Details

2.1.2 Demand

- Is your scheme likely to lead to increased or decreased **demand for travel** overall? [i.e. fewer people travelling or shorter distances]

Yes/No

Details

2.1.3 Speed

Is your scheme likely to lead to increased or decreased **speed of travel** for any of the modes identified?

Yes/No

2.1.4 Efficiency

Is your scheme likely to lead to more **carbon-efficient vehicles**: for example replacing part of your bus fleet with more modern vehicles.

Yes/No

If yes, then you should try to consider this as a more detailed type of “mode-switch” using the closest data available.

Details

2.1.5 Peak and off peak

Consider how your scheme might affect mode, demand and speed during **peak time, off-peak** and any **inter-peak periods**.

This is because using an average speed across all time periods tends to produce incorrect results. More carbon is emitted at low speeds (e.g. in traffic queues), and at very high speeds than in free-flowing traffic at a moderate speed.

Also, the impact of your scheme might be greater at particular times of day.

Details

2.2 Consider any indirect transport impacts of your scheme?

This set of questions considers whether your scheme might have knock-on impacts elsewhere.

For example, if take up of your scheme means that peak-time congestion is significantly eased, then those vehicles whose route is less congested will be travelling faster. There may be a further knock-on effect on the likelihood of people wishing to drive, but a subsequent increase in congestion and fall in speed.

You may need to do some more detailed modelling or research into the impacts.

2.2.1 Mode

- Is there likely to be any **mode-switching** as an indirect consequence of your scheme?

For example, if you have added a new bus route, does it now connect better with other routes, leading to a switch from cars on other routes?

Details

2.2.2 Demand

- Is your scheme likely to lead to increased or decreased **demand for travel** overall? [i.e. fewer people travelling, or people travelling shorter distances]

For example, if you have added a new bus route, will it affect where people choose to go for work or leisure? Might they travel a longer or shorter distance?

Details

2.2.3 Speed

Is your scheme likely to lead to increased or decreased **speed of travel** for any of the modes identified?

For example, if take up of a scheme means that peak-time congestion is significantly eased, then those vehicles whose route is less congested will be travelling faster. There may be a further knock-on effect on the likelihood of people wishing to drive, but a subsequent increase in congestion and fall in speed.

Details

2.2.4 Efficiency

Is your scheme likely to lead to changes in the efficiency of vehicles not captured earlier as a direct impact?

Yes/No

Details

2.2.5 Peak and off peak

The indirect effects may be different at different times of day.

For example a scheme that has the indirect effect of reducing congestion may only do so at peak time, and may have no additional indirect effects outside that time period.

2.3 Consider any indirect non-transport impacts of your scheme?

Non-transport impacts are not calculated in this tool, but some schemes may have knock-on impacts on carbon emissions from other activities.

For example, if a scheme were introduced to encourage home-working one day a week for all your employees, this would lead to less travel, but more fuel used at home for heating, lighting etc.

Details:

Peak

Off-peak

Interpeak

2.4 Other comments

Use this space to record any other assumptions or further details.