



## Why is equity important for the implementation of road user charging?

Equity relates to the distribution among different groups in society of the costs and benefits resulting from the implementation of a scheme or policy intervention. The groups of interest, often referred to as impact groups, can be defined in a range of ways reflecting their economic status, their demographic status, their geographical status or their current use of transport facilities.

The primary objective of introducing an urban road user charging scheme is usually to improve efficiency, to enhance the environment, or to generate revenue. The issue of equity, and maintaining the balance between equity and overall efficiency, will be an important constraint on achieving any of these objectives. Urban road user charging (URUC), by its very nature, is an economic instrument of policy, and its proponents need to be seen to be striking a balance between the fundamental principles of economics: economic efficiency and social equity. Concern over inequity was frequently cited as one of the main reasons for rejecting many early road

user charging proposals. More recently, equity appears to have been less frequently mentioned as an issue.

## What is currently known about the impact of road user charging on equity?

There is limited evidence, from studies or implemented schemes, on the scale of inequities which a road user charging scheme might be expected to introduce, but it is clear that the range of impacts will depend critically on the design of the scheme, the demography of the area and the current patterns of travel. Despite predictions to the contrary, it does appear that "horizontal" inequities, involving demographic, geographic or transport status, are likely to be more significant than "vertical" inequities involving economic status. In other words, adverse impacts of road user charging are more likely to be related to the travel needs of an individual than to their ability to pay to travel.

It is important to understand the scale of any inequity that might result from a proposed urban road user charging scheme, and this will require a disaggregated

analysis by person type, income level, journey type and specific person and journey characteristics. In time it may be possible to assess these impacts based on empirical research. In the meantime, decision-makers will have to rely on the results of predictive studies using disaggregated models. It can be particularly problematic, using these methods, to predict the impacts on narrowly defined groups such as disabled drivers, or of special treatment such as rebates. Instead, such assessments will need to be based largely on professional judgment.

Once the potential impacts of a scheme are understood, and any problems with the distribution of these impacts are identified, then any necessary mitigating measures need to be designed. These can include redesign of the scheme to reduce its impacts, modifications to charge levels generally or for specific users, and complementary measures. Redesign can most usefully focus on the location and timing of charges, which will be most likely to reduce geographic and some transport inequities. Charges can be reduced overall, and rebates and exemptions can be provided for readily identifiable classes of user. However, the former may reduce the effectiveness of the scheme, while the latter will add to its operating costs. Complementary measures can include the enhancement of alternatives to car use and the avoidance of adverse side effects, such as rat running. Both can be financed by hypothecating at least some of the surplus revenues. Evidence suggests that the judicious use of hypothecated revenues is likely to achieve a greater improvement in equity than simply reducing the overall charge level.

### What further research is needed?

More sophisticated ways are needed for assessing the impact of different types of URUC scheme on different sectors of the population. Such assessments should enable trade-offs to be made between monetary costs to different users; impacts resulting from changes to travel times, environmental improvements and enhanced quality of life; and benefits arising from the distribution of revenues raised from URUC (such as improvements to public transport, improvements to walking and cycling facilities, and tax rebates). A better understanding of how different people are affected will make it easier for scheme promoters to identify potential sources of concern among the affected population, and to include mitigating and compensatory measures, where required.

Evidence from both predictive and empirical research will continue to be important. Based on that evidence, clearer guidance can be provided on ways of designing schemes to reduce inequities.



### What can we conclude at present?

While definitions of equity vary, they all involve defining groups of potential winners and losers from URUC. The starting point in any consideration of equity effects is thus to define the impact groups of interest. Some broad types of impact group can be readily identified. The main categorisations are likely to include groups based on economic status, demographic status, geographical status and on transport use (or status). It is important to stress that these categorisations are not mutually exclusive.

#### DOs

Consider who will be affected by the introduction of the URUC scheme. Identify impact groups in terms of their economic, demographic, geographical and transport status

Assess carefully the likely impacts on each of these groups

Where adverse impacts are expected, consider reducing them by modifying the scheme design, introducing exemptions and/or implementing complementary policies

Demonstrate that the revenues are being used to mitigate the negative effects of inequity

#### DON'Ts

Do not design a URUC scheme without considering who will be affected

Do not guarantee equal opportunities for everyone when introducing URUC.

Do not assume that poorer members of society will be adversely affected

Do not propose exemptions if they will add unnecessarily to the costs of the scheme

