

Summary:

# Stated Preference Study among Politicians and Decision Makers

## Alternative financing schemes for urban transport – Part 2

### Background and problem

This report has been written as part of the project "Alternative financing schemes for urban transport". The aim of the project is to analyse the cost and benefits of setting up different types of "Dutch treats" (financing partnerships) in Norwegian urban areas based on a combination of different funding schemes and revenue use.

As a part of this project, we have carried out a stated preference survey amongst local decision makers. The survey also forms part of a larger EEC research project, which deals with different ways of financing local public transport in Europe. This part of the project is funded through the REVENUE project.

The purpose of the survey is to chart the local decision makers' preferences for alternative forms of funding and different types of measures, and thus to find out more about trade-offs, priorities and the level of freedom for different policies. Based on the results from the survey, we want to find out the costs and benefits for the decision makers of the different types of funding. This may also be used as input for the model which is to be developed to analyse the consequences of alternative forms of funding.

The survey was limited to local decision makers in the five largest cities in Norway and deals with alternative forms of funding and measures for achieving better public transport service. This report describes the main results from the stated preference survey.

### The Stated Preference survey

The survey was carried out in the autumn of 2004 amongst local decision makers in the five largest urban areas in Norway; Oslo, Bergen, Trondheim, Stavanger and Kristiansand.

The questionnaires were tailor-made for each decision maker and the survey was carried out as a self-administered Internet survey. The stated preference method was used to find out the decision makers' preferences. The method is based on the interviewees making hypothetical choices between a numbers of different funding schemes.

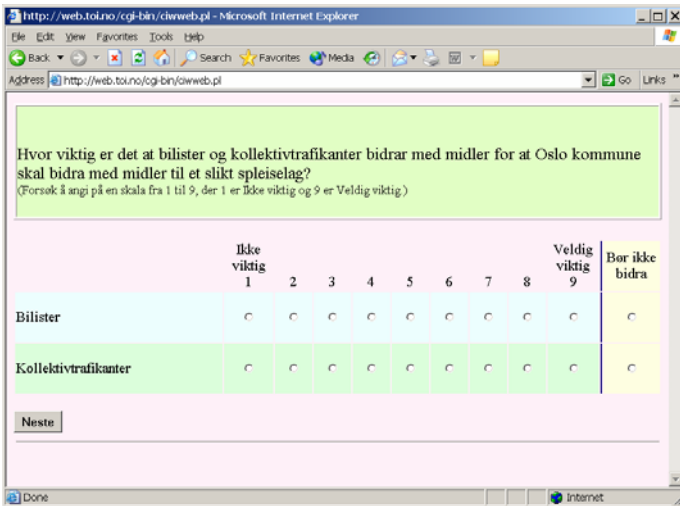
The survey also attempted to uncover the decision makers' preferences for different measures to encourage mode shift from car to public transport, as well as the probability of such measures being recommended. Increased toll ring fares, parking restrictions and reduced fares on public transport are examples of measures which were included in the survey.

In the majority of questions, with the exception of the stated choice sequences, the respondents could reply using a scale of 1 to 9. In this way, the respondent had a good chance of expressing his/her preferences. The data was analysed using linear regression and logistic regression.

### Design of the questionnaire

The different elements of the questionnaire are described under:

1. Respondent's knowledge/experience
2. Main political priorities
3. Preferences for different funding schemes
  - Who should be included?
  - Which measures should be included?
4. Preferences for different transport measures
  - The effectiveness on mode shift?
  - Priorities for implementation?
5. Stated choices
  - Different funding schemes
  - Different combined measures



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Figure S.1: Example of screen picture from the survey.

## Selection and recruitment

The target group were local decision makers in the five largest urban areas in Norway. Decision makers are defined as those who take part in the decision making process in a wide understanding of the phrase, i.e. county and municipal politicians, administrative staff in counties and municipalities and the road authorities. We have chosen to limit the survey to a selection of politicians and administrative employees.

The following five cities were included in the survey: Oslo, Bergen, Stavanger, Trondheim and Kristiansand. The decision makers were recruited by email with a hyperlink to the survey. The link contained hidden information about work place and geographical location. In this way, each respondent received a tailor-made questionnaire, depending on their geographical location and profession. In addition the levels in the questions about Dutch treats and measures varied randomly.

## Response rate

747 e-mails were sent to 547 politicians (73%) and 200 administrative staff (27%) in the five urban areas. A total of 362 replies were received, giving a response rate of 48.5 per cent. The response rate of politicians and administrative staff did not deviate much from the total sample and was 47 per cent and 52.5 per cent respectively.

The sample is weighted from the distribution in the original total sample.

## 80 per cent are in favour of Dutch treats

80 per cent were in favour of the idea of a Dutch treat between the authorities and passengers to finance better public transport service. 15.7 per cent were negative to the idea, while only 4.2 per cent were indifferent.

Of those who are negative about Dutch treats, 60% say that they do not want to impose higher costs on passengers and 49% say that developing public transport provision should be covered outside public budgets<sup>1</sup>.

Those employed in administration appear to be somewhat more positive about possible Dutch treats compared to the politicians.

## The central government is an important contributor in getting local public players to participate in Dutch treats

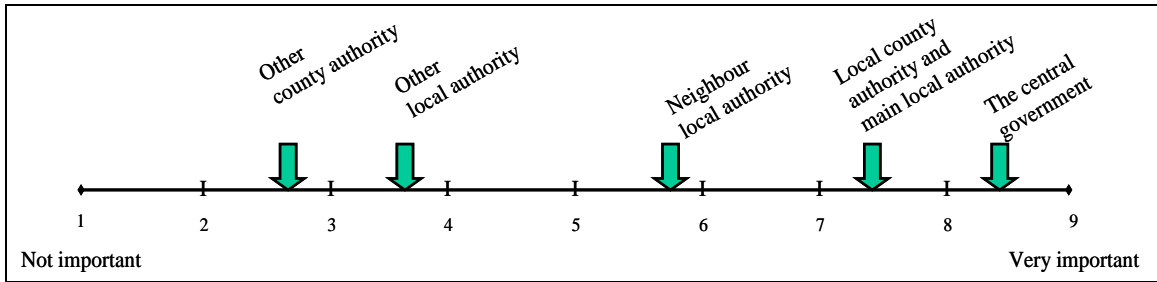
With regard to the question about the importance of other public players participating in this type of Dutch treats, we find that the central government must be a part of the funding. The local county and local authority are also important partners, while other county authority and local authority are less important (figure S.2).

The employees in the administration put greater emphasis on the funding from central government and local authorities contributing to this type of Dutch treats than politicians do.

There is a trade-off between funding from public authorities and funding from users. This means that the more important it is that the central government, county council or local authority are part of financing such a package of measures, the less important it is that car users/public transport users are part of the Dutch treat<sup>2</sup>.

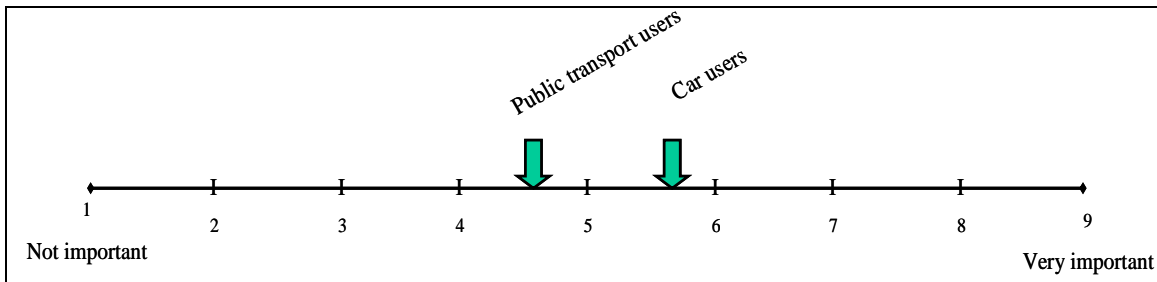
<sup>1</sup> Each decision maker could state more than one cause.

<sup>2</sup> The connection between the central government and public transport users is not significant.



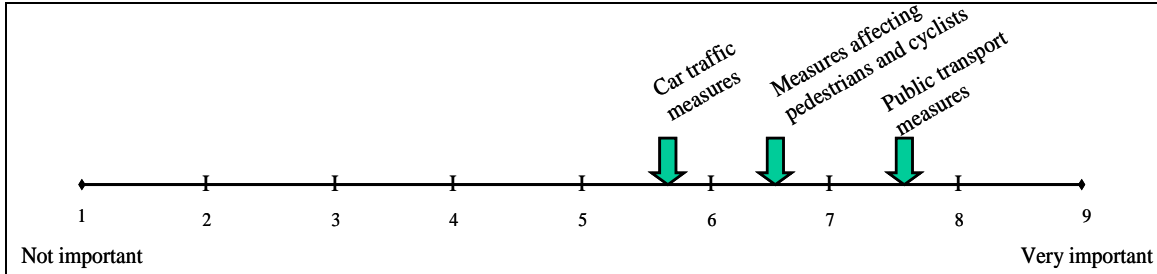
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Figure S. 2: How important is it that other public players contribute to the Dutch treat so that each municipality/county council respectively would contribute to the Dutch treat? Average score. N=324.



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Figure S.3: How important is it that road users and public transport users contribute to the Dutch treat? Average score. N =316.



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Figure S.4: What types of measures are important to implement within a Dutch treat? Average score. N=305.

### More important that car users contribute to the Dutch treat

It appears to be more important to include revenue from car users rather than public transport users, in order for local authorities to be part of the Dutch treat (figure S.3).

The administration is more positive to the idea of car users contributing to the joint funding than politicians are.

The local decision makers in Oslo feel that it is more important for car users to contribute to Dutch

treats compared with the local decision makers in the other cities<sup>3</sup>.

### Important to implement public transport measures within the Dutch treat

With regard to the question of which type of measures the decision makers see as being important to implement within Dutch treats, public transport measures are given a higher average score than car traffic measures (figure S.4).

<sup>3</sup> The connection is only significant for Bergen and Kristiansand.

The administration thinks that it is more important that measures affecting pedestrians and cyclists are included in a Dutch treat between passengers and authorities than the politicians do.

If there is a positive attitude from the start to Dutch treats between authorities and passengers, then public transport measures will also be regarded as more important than if the attitude to Dutch treats is not so positive from the start<sup>4</sup>.

## Seven concrete measures

Each respondent was offered seven different types of measure:

1. Increasing road tolls
2. Increasing road tolls during rush hour
3. Reducing the number of parking places in the city centre
4. Increasing parking fees in the city centre
5. Vehicle-free city centres (only residents and goods deliveries may use vehicles in the centre)
6. Better public transport with more departures
7. Better public transport with reduced fares

These measures were evaluated on a 9-point scale where 1 is "Not probable" and 9 is "Extremely probable".

Three questions were linked to each measure:

- How probable do you think it is that this measure will lead to increased use of public transport?
- How probable do you think it is that this measure will reduce the number of cars driving into the city centre?
- How probable is it that you would recommend such a measure?

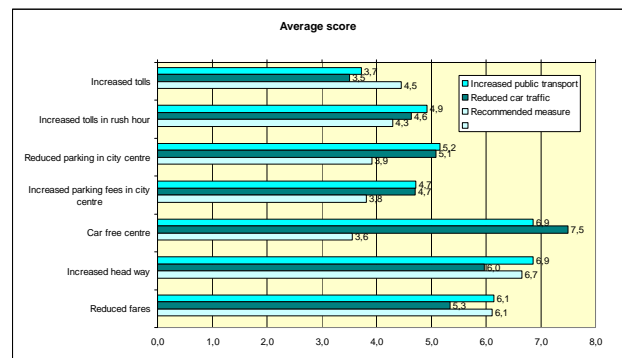
## Car-free city centres have a major effect but are not recommended

When we look at the average score, we see that the car-free city centre is the measure which the decision makers think has the highest probability of affecting public transport provision and car traffic, while at the same time it is the measure which has the lowest score with regard to the probability of decisions makers recommending that it be adopted.

<sup>4</sup> The fact that we find a significant link between the attitude to Dutch treats for public transport measures and not for car traffic measures and measures for pedestrians and cyclists may be connected with the fact that the question on attitudes to Dutch treats was based on Dutch treats to achieve better public transport provision.

Compared with the other measures, it appears as though the decision makers think that the public transport measures, such as increased headway and reduced fares, will have an effect while at the same time it is probable that they would recommend such measures. This is linked to the fact that the two public transport measures are the only two in this package which can be regarded as positive for the population. The other five measures must be defined as restrictive measures.

Increased road tolls are the only measure where the decision makers feel that the probability is higher that they would recommend such a measure than that such a measure would have an effect on public transport or car traffic. This might reflect the funding element of the toll rings in Norway, where the main objective is to raise revenue and not restrictions on car use.



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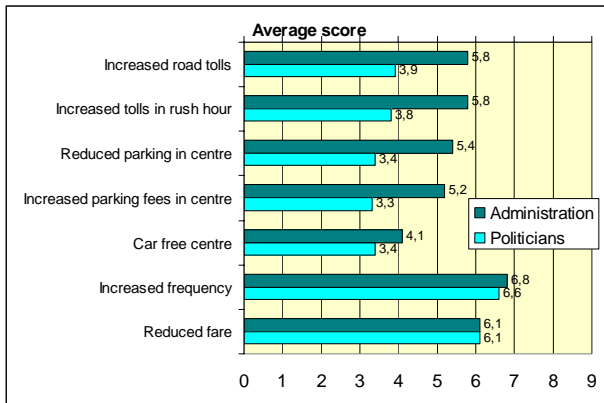
Figure S.5: How probable is it that the following measures will lead to an increase in the use of public transport and reduced use of cars and that you would recommend this type of measure. Average score. N=304.

## "The administration" is more willing to recommend restrictive measures

Those working in public administration are more positive to restrictive measures, compared with politicians. There are no significant differences regarding the two public transport measures, increased frequency or reduced fares.

The employees in the administration have stronger confidence in restrictive measures compared with politicians, but the effect is only significant for parking restrictions and car-free city centres<sup>5</sup>.

<sup>5</sup> The effect of increased road tolls in rush hour also has a significant effect on reduced car usage.



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Figure S.6: How probable is it that you would recommend such a measure. Politicians and public administration employees.  $N=304$ .

## The level play less important role than expected

One of the main objectives of this survey was to investigate the relative importance of different financial instruments. One of the interesting findings from this survey is that the expected effect of restrictive measures will depend on the level, but not the probability to recommend such measures.

However, for the positive public transport measures, there is a connection. Increased public transport fares and frequency will increase the probability of a positive recommendation.

## Different funding schemes

In the first two stated choice sequences, the decision makers had to choose between different funding schemes to achieve extended public transport investments. Funding from the central government and local public authorities were all part of all the finance models, but one other local source of funding varied from choice to choice. The other sources of funding which are included in the survey are annual licence fee for cars, road pricing, local company tax, PP-funding, increased public transport fares and increased road tolls.

### Prefer road tolls to increased fares

When choosing between road tolls and road pricing, the probability of choosing one rather than the other is not high, with 44 % choosing road tolls and 56 % choosing road pricing. Support for road tolls rather than increased fares are however, high with 75 % choosing road tolls in this model.

## Combinations of different transport policy packages of measures

In the other stated preference sequence, the decision makers had to choose between different combinations of measures. The packages were designed so that the central government would contribute extraordinary funding for public transport measures if the authorities were willing to introduce a restrictive measure on car traffic, which can be justified to a larger extent by local commitments linked to state financing.

### Increased road tolls in the rush hour and increased parking charges are better than a general increase in road tolls

Of the restrictive measures, decision makers regard increased road tolls in the rush hour and increased parking charges in the city centre as significantly better than increasing road tolls across the whole 24-hour period. Reducing the number of parking places in the centre and taxing free parking at the work place are not significantly different from increased road tolls throughout the whole day. The difference between taxing free parking at work and increased road tolls in the rush hour only, however, is significant.

### Operation and accessibility are prioritised above investment in new rolling stock

For the public transport measures, we see that all three of the elements which are analysed in this model are significantly better than investing in new rolling stock. The three public transport measures are increased headway, reduced fares and priority measures. The three elements are valued approximately equally in relation to investing in new rolling stock.

### 20 per cent more would choose a package which includes higher headway

20 % more would chose an alternative which includes higher frequency by public transport as part of the package, no matter what the other elements of the package may be. Increased support for a package with reduced fares or priority measures is around 17 %.

Support for packages which include taxing free parking or a reduced number of parking places is low. The probability of choosing packages with increased parking fees and increased road tolls in the rush hour, however, is somewhat higher (around 11 %).

