

## Summary:

# Perceived quality and satisfaction with public transport in Nord-Jæren

## Background

Rogaland Kollektivtrafikk (RKT), the passenger transport authority and executive for the county of Rogaland, conducts periodic surveys of the population's perception of quality and satisfaction with public transport in Nord-Jæren. RKT has commissioned The Institute of Transport Economics to evaluate the current situation and recent development in perceptions of quality and customer satisfaction in 2003, based on the periodic surveys.

## Problem definition

The goal of this project is to provide answers to the following six questions:

- How satisfied is the population with the public transport?
- What is the population's perception of the quality of the public transport?
- To what extent does the population use public transport?
- What changes occurred in 2003?
- What are the differences between different groups of the population?
- Within which aspects of the service can an improvement of quality be expected to have the greatest impact on customer satisfaction?

## Method

The periodic surveys of perceived quality and customer satisfaction with public transport in Nord-Jæren make up the basis for this project. The data analysed comes from the surveys conducted during the following periods:

- November 2002 (1002 respondents)
- January to June 2003 (600 respondents)
- August to November 2003 (400 respondents)

The following indicators and background variables have been measured:

- Overall customer satisfaction
- Quality indicators (17 questions)
- Loyalty indicators (2 questions)
- Experienced improvement of the public transport system
- Public transport as a common good and responsibility (3 questions)
- Travel distance to/from work/school
- Frequency of usage (bus travels)
- Driver licence and car ownership/availability
- Age and gender

Most indicators have been measured on a five-point scale, from 1 "disagree completely" to 5 "agree completely". For every question we report the percentage that has answered the different alternatives offered. When presenting the percentage that has answered confirmatory on a five-point scale, the sum of those who have answered 4 "agree somewhat" and 5 "agree completely" is reported. For most indicators we also present an average score on an index from 0 to 100. Answering alternative 1 gives 0 points, alternative 2 gives 25 points, alternative 3 gives 50 points, alternative 4 gives 75 points, and alternative 5 gives 100 points.

Our comments are based on a significance level of 95%. This means that we can say with 95% certainty that two results are different from each other, e.g. that there has been a change from the first six months to the last six months or that men are different from women. It also means that there is a 5% probability that the difference is due to measurement error, and that there is no real difference. In general, we only comment on significant differences. If we don't state that there is a difference or change then there is no significant difference in the results.

The surveys have been conducted in the municipalities of Sandnes, Stavanger, Klepp, Gjesdal, Sola, Randaberg and Rennesøy with a sample representative of the population being 15 years of age and older. Compared to the population there is a small (approximately 5%) overrepresentation of older people

(50 years of age and older) and underrepresentation of younger people (15 to 29 years old) in the sample.

## How satisfied is the population with the public transport?

On average in 2003 47% of the persons interviewed are satisfied with the local bus services and RKT gets a score of 58 points on an index from 0 to 100. This result is better than the average of bus companies in the Norwegian county of Nordland, Oslo Sporveier and the Norwegian State Railways, but worse than the average of public transport companies in Sweden, Stor-Oslo Lokaltrafikk and several public transport companies in Europe. In sum we conclude that the population in Nord-Jæren is moderately satisfied with the public transport services.

## What is the population's perception of the quality of the public transport?

People are most satisfied with feeling safe when travelling by bus, short distance to the bus stops, polite bus drivers, comfort when travelling by bus, nice and clean buses, and that it is easy to purchase tickets and travel cards. People are least satisfied with the information regarding delays and halt in services, that the bus company does (not) listen to the views of the travellers, and information regarding changes in schedules and routes.

Compared to Swedish public transport companies RKT stands out in both positive and negative ways, but most positive. On as much as eight quality dimensions RKT achieves a result placing them among the five best companies compared to 24 Swedish public transport companies: Well-suited schedules, well-suited routes, comfort of travel, short travel time, travel safety, short distance to bus stops, bus stop maintenance, and polite bus drivers. On the negative side RKT is among the five worst companies on the following five dimensions: Information on schedules, information regarding changes in schedules and routes, information regarding delays and halt in services, that it is (not) easy to travel with the local bus service, and that the bus company does (not) listen to the views of the travellers.

In sum we conclude that the public transport in Nord-Jæren has high and in several aspects very high quality. The exception is information, which in general is considered poor.

## To what extent does the population use public transport?

In the 2003 surveys on average 27% reported that they travel by bus once a week or more often, whereas 47% travel by bus more seldom than once a month or not at all. This represents a moderate travel frequency compared to Swedish counties. Based on results from Sweden we conclude that 30% constitutes a high number of frequent travellers (using public transport once a week or more often), whereas 20% constitutes a low number of frequent travellers.

## What changes occurred in 2003?

There were several changes in people's attitudes towards public transport in 2003. The only thing that did not change was the travel frequency. Thirteen indicators improved during the year, but five indicators got worse. Six indicators got worse during the first six months, but improved during the last six months. In sum we conclude that the population experienced far more quality improvements than quality reductions.

Four indicators improved in both the first six months and the last six months of 2003: Value for money, well-suited schedules, well-suited routes, and "politicians' believe investing in public transport is good for society".

Seven indicators improved during the first six months and remained unchanged during the last six months: Bus stop maintenance, nice and clean buses, polite bus drivers, travel comfort, short travel time, "society should put priority on public transport rather than private cars", and "investing in public transport is good for society".

Two indicators were unchanged during the first six months, but improved during the last six months: Intention to travel by bus in the future and perceived improvement of the public transport system.

Six indicators got worse during the first six months, but improved during the last six months: Overall customer satisfaction, information on schedules, "it's easy to purchase tickets and travel cards", information regarding changes in schedules and routes, information regarding delays and halt in services, and "will recommend others to use the bus services".

Four indicators got worse during the first six months and remained unchanged during the last six months: Distance to bus stops, travel safety, "the bus

company listens to the views of the travellers”, and “it’s easy to travel with the local bus service”.

The indicator “buses are on time according to schedule” was unchanged during the first six months, but got worse during the last six months.

## What are the differences between different groups of the population?

The largest differences are between those who use public transport often and those who seldom or never travel by bus. Those who use public transport often are generally more positive towards the bus services compared to those who seldom or never travel by bus.

There are also large differences between those who have access to a car and those who have not, and between different age groups. Those who do not have access to a car are generally more positive toward the bus services and travel by bus more often than those who have access to a car. Persons less than 30 years of age and those who are 50 years or older are generally more positive toward the bus services than persons between 30 and 50 years old. The two first age groups also use the bus services more often than the last age group.

There are only minor differences between men and women, and between persons with different travel distance between home and work or school. However, the fact that persons with travel distances between 1 and 10 km travel by bus more often than persons with travel distances less than 1 km or more than 10 km is an important difference.

## Within which aspects of the service can an improvement of quality be expected to have the greatest impact on customer satisfaction?

Three quality dimensions have strong effect on customer satisfaction: “It’s easy to travel with the local bus service”, well-suited schedules, and well-suited routes.

Nine quality dimensions have a moderate effect on customer satisfaction: Information on schedules, value for money, short travel time, “the bus company listens to the views of the travellers”, short distance to bus stops, information regarding delays and halt in services, information regarding changes in schedules and routes, bus stop maintenance, and “buses are on time according to schedule”. Five dimensions have a small effect on customer satisfaction, but none of the 17 quality dimensions should be considered of marginal importance.

Decisions about what dimensions to prioritise for quality improvements should be made on the basis of expected impact on customer satisfaction as well as potential for improvement. Among the dimensions that have a large or moderate effect on customer satisfaction the following three dimensions have a large potential for improvement: “The bus company listens to the views of the travellers”, information regarding delays and halt in services, and information regarding changes in schedules and routes.