Sandnes is a Norwegian municipality of about 56,000 inhabitants, part of the region of Nord-Jæren, a continuous conurbation of about 200,000 inhabitants comprising four different municipalities and running alongside a fiord. The capital of the region is Stavanger with 110,000 inhabitants.
Sandnes is centrally located in the region. The town centre lies at the bottom of the fjord with steep hillsides - a challenging topography for development. Forests and mountains close to the town are attractive for all kinds of outdoor activities. A coastline of about 100 km is an excellent recreation area for all inhabitants of the region. The municipality is expanding very fast, with an annual population growth rate of nearly 2.0%. Sandnes is a communication centre in the region. The main roads through Nord-Jæren, E39, Rv.44 and Rv.13, are all running through the town, and from it the roads split to different parts in the district. This is both an advantage and a challenge for the town.

Healthy Cities Movement and Sandnes
Sandnes joined the Healthy Cities Project in 1991, at first as an integrated part of the municipal administration, and later in 1994 as a separate Healthy City Office. Since 1998 and during phase III Sandnes Healthy City has again been an integrated part of the administration. To day the office has 3 fulltime employ, and there is board and a forum.

Many initiatives and projects aimed at improving health and environment protection have been carried on since 1991, both at regional and local level.

Sandnes Bike City
Early in the nineties the municipality of Sandnes joined a national project launched by the Norwegian Ministry of Environment involving the ten largest city-regions, which had a clear connection with healthy city planning, the main objective being
- Reducing total amount of traffic
- Encouraging cycling, walking and public transport and the reducing private car traffic

The project’s main strategy was to promote sustainable development through a plan process in which land-use and transportation were seen in connection on a long-term perspective for the whole region. On the basis of the results of the project, funding was granted the region and the municipalities for implementing road safety initiatives, public transport lanes, cycle- and pedestrians paths.

It is within this context the Norwegian Ministry of Environment decided to start a 4-year pilot bicycle project in order to reduce car traffic and Sandnes was chosen to be one of two pilot towns. The main goals of the project were:

- to make the town more friendly for cyclists
- to make more people use the bicycle
- to promote use of bicycle as main means of transport for as many inhabitants as possible

In 1994 the municipality decided to prolong the project in Sandnes, and as a result there has been spent about 100 mill. Nkr. (12.5 mill. Euro) in the construction of new bicycle lanes and roads and about 10 mill. Nkr. (1.25 mill. Euro) to carry out campaigns over the last 10 years (1991 – 2002).

Administration and politicians at all levels have been involved in different projects such as:
- Planning and building the main cycle path system for the city centre and for the outer neighbourhoods.
- Planning and building parking stands for cyclists. - Making a cycle map for Sandnes and the region
- Numberless campaigns for use of cycle
- Planning recreation routes for cyclists
- Planning and carrying through a free city bike system.

All the projects has had an environmental protection component and a health component. The health component is in terms of more daily motion, less car-accidents and less air pollution.

**The City Bike project**

As part of the campaign scheme, a public bike system was introduced in Sandnes starting in June 1996 as the first City in Norway. The overall aim of this initiative was to reduce the amount of motorised traffic giving a healthier and cleaner town.

Three systems of city bikes were tested:
- Free or the open system (using a coin to open a lock)
- Subscriber system (the subscriber has a special key)
- Rental system (paying a rental cost or deposit)

As Copenhagen in Denmark, Sandnes also introduced the free or open City Bike System using a 20 Nkr coin to open the lock. The City Bike was an ordinary bicycle with a special green colour. This system was, however, a vulnerable system and it did not function in Sandnes. The public did not deliver the bikes back into the stands after use and the ordinary bikes were too weak. Also parts or units were stolen from the bikes since it was an ordinary bike.

**The City bike as part of a transportation chain.**

In 2001 The Sandnes City Bike Foundation launched a full scale program in the centre of Sandnes using 225 city bikes (1 pr. 250 inhabitants) with gears and 30 new city bike stands containing 350 parking spaces. Up to now there are installed 75 brand new city bikes with 4 gears, 15 brand new stands containing 125 spaces for parking. The full scale plan will be finished in 2004. Our customers or subscribers (hopefully 2000) will be working people or school pupils using the system as part of the transportation chain (train and bike, bus and bike, car and bike), tourists visiting our city and inhabitants for shopping reasons. Negotiations will be held with the Norwegian Railway Company and local bus companies in order to cooperate in selling monthly or yearly pass to regularly passengers or customers. In this way the regular passenger will get both a bus or train pass and a City Bike key. In such a way the passenger will be more flexible in his journey to and from work or school by combining bus, train and a public City Bike.
Evaluation

For the City Byke Project results obtained from data stored in the stands are presented twice a year. After the first test period in 2000 (June, July and August) some of the results were as follows (the seasons 2001 and 2002 have more or less had the same figures:

The (subscribers) or users are:
- 66% male and
- 34% female.

Age of users:
- 3% (6-10),
- 21% (11-15),
- 11% (16-20),
- 45% (21-45),
- 19% (46-70)

Time used:
- 66% (0-1 hour),
- 26% (1-4 hours),
- 8% > 4 hours.

Weekdays:
- 11% Monday,
- 15% Tuesday,
- 17% Wednesday,
- 19% Thursday,
- 24% Friday,
- 13% Saturday,
- 1% Sunday.

As a result of 10 years work and money spent, there has been an increase in cycle traffic of about 10%. The use of helmets have increased from 10% up to 46%.

In our district the percentage of cycle traffic is 5% (wintertime) and 12% (summertime) of the overall traffic. Today Sandnes has the best facilities for cyclists in Norway.

About 70 km cycle lanes are built.

400 parking stands with approx. 400 cycle parkings are built.

Sandnes was the first town in Norway starting up with free city bykes in 1996. We constructed a special byke and a special electronic lock system and we have now 225 city bykes spread around in the town centre in 40 racks.

Through the implementation of measures to facilitate bicycling in the urban area, Sandnes has gained experience that could be useful to other European towns. Sandnes is participating in a separate project (SAVE II) under the direction of WHO and EU, where the municipality will work closely with one or two European towns wishing to prioritise the facilitation of an increased use of bicycles.

Marco Zanussi
Sandnes, 27.10.03