# A sustainable transport system: Congestion Charge and New Travel Habits

The City of Gothenburg is working to create a long term sustainable transport system based on increased cycling, walking and use of public transport, which is meant to lead to a better local environment and decreased energy consumption. As part of an overarching strategy for the West of Sweden region, the city has recently implemented two initiatives that complement each other and can be considered as lighthouse initiatives due to their integrated nature, support from stakeholders and potential for replicability in many other cities.

# Congestion Charge

A congestion charge was implemented at the beginning of 2013 for Swedish registered vehicles entering Gothenburg city centre. The aim is to give car drivers financial incentives to choose other means of transportation, and to finance investments in sustainable travel for the region, reduce traffic congestion and improve air quality, in order to create a more liveable city with more useable land.



Congestion Charge Tariff - Gothenburg

#### **New Travel Habits**

Recognising that financial incentives alone may not be enough to decrease car use, the City of Gothenburg is also focusing on changing values and attitudes among citizens via the 'New

Travel Habits' initiative. This consists of an on-going flow of events, family oriented activities, exhibitions and competitions, which are arranged as a way of creating structured dialogue and informing citizens on transport related issues. New Travel Habits is complementary to initiatives with an infrastructure focus, such as the congestion charge, in that it focuses on changes to norms, values and world views of citizens and other stakeholders.

The sections below set out how these two initiatives fulfil the key European Commission and STEP UP lighthouse criteria.

# Integration of energy, ICT, and transport

# **Energy and transport**

**Modal shift:** the congestion charge and New Travel Habits initiative aim to reduce car traffic in the city and encourage people to shift their mode of transport to zero or low carbon means. In this way both of the projects have a combined transport and energy focus. They are also seen by the local administration as crucial elements in reaching goals and visions connected to planning and infrastructure, as well as environment and economic development.

West Swedish Agreement: these two projects are part of the larger West Swedish Agreement ('Västsvenska Paketet'<sup>1</sup>) which has been implemented by the City of Gothenburg, together with different regional actors and the Swedish national government. The aim of this package is both to upgrade the transport infrastructure across the whole of western Sweden and to create a better environment.

# **ICT**

**Congestion charge:** connected to the congestion charge a number of different web based platforms have been set up as tools for informing and keeping dialogue with citizens. A metering system and digital monitors are used in order to keep track of car traffic and guide drivers towards the best routes and parking places.

**New Travel Habits:** within this project a web page and a Facebook page are two of the tools used to inform citizens about the issue of travel behaviour. Two smartphone applications have been created in order to make life easier for individuals who travel by bus and bike.

<sup>&</sup>lt;sup>1</sup> For more information in English see: <u>www.vgregion.se/upload/Regionkanslierna/regionutveckling/Kommunikation/Paketet/V</u> %c3%a4stsvenska%20paketet%20eng.pdf

#### Replication and scalability

Gothenburg used the experience of congestion charging in Stockholm to build its initiative, and the same company that developed the technological system used in Stockholm has further developed and implemented the system in Gothenburg. The project is also built upon cooperation between politicians and public sector actors in Gothenburg and Stockholm. This means that the congestion charge in Gothenburg is in itself a replication of the previous initiative in Stockholm, both when it comes to technology and policy. Inspiration has also been drawn from other cities in the world that utilise the same system, such as Singapore, Milan and Manchester. This shows that the system has already been replicated and therefore there are further opportunities for other cities to adopt the system, such as those of the STEP UP learning network. There are several other European cities that are already investigating the possibility of introducing a congestion charge and these could also learn from the Gothenburg initiative.

Gothenburg's congestion charge has existed for approximately one year. Rather than implementing it in certain parts of the city and then scaling up the system, it was implemented city wide from the beginning. This has had an impact on the whole transport system, with traffic volume decreasing by 15-20% since its implementation. This is an example of how innovation such as a congestion charge offers a way to deal with unsustainable traffic on a scale wide enough to affect the whole transport system in a city. However, for this to be achieved, a city also needs to achieve a transformation in the way city-wide policies and administrative routines function, as well as how these co-exist with similar policies and routines on a regional and national scale. This has been done in Gothenburg.

One further element that needs to be in place if a city wants to replicate these kinds of initiatives and achieve a long term transformation of its transport system is a change in values and world view among citizens and stakeholders. The importance of combining infrastructure projects, such as the congestion charge, with city-wide projects that deal with values and behaviour, is evident from the Gothenburg experience. The congestion charge has met resistance from some citizens and stakeholders, which led to a public referendum being held in 2014 on whether to keep the system or not. This is an important lesson for other cities that want to implement a congestion charge; it is likely that this process becomes more successful if early on in the project it is combined with stakeholder engagement and other activities related to changes in values and behaviours.

#### **Integrated building blocks**

The principal building blocks that have been combined for Gothenburg's sustainable transport system are changes in infrastructure and new technology (congestion charge) and initiatives that aim to change citizens' attitudes and behaviour (New Travel Habits), as together these are seen to have greater synergy effects. Over time, other building blocks have also been added to the city's work on sustainable transport. A new train tunnel (Västlänken), a new bridge, an upgraded tram and bus system and an EU project on increased cycling among citizens (Karma) are among the projects that are today connected to the congestion charge and New Travel Habits. As a result, several different ways of working with transport issues are together contributing to the city's goal of increased sustainable transportation.

This does not mean that transport based on fossil fuels is not still a major part of the Gothenburg transport system. However, the amount of car traffic has decreased in the city, and cycling and public transport is increasing (for more information see monitoring and reporting below). This has the potential to create long term synergy effects which could contribute to a major restructuring of the transport system.

### Monitoring and reporting

The City of Gothenburg closely monitors most, but not all, changes in its traffic system. The congestion charge project has been monitored from the beginning. Soon after the system was implemented in January 2013, the city saw a decline in car traffic of approximately 15-20%, which has been constant ever since. It is therefore likely that this decline is due to the congestion charge, meaning that the project has, in a little more than a year, contributed to changes in the traffic system as well as to the EU 2020 climate and energy targets.

The impacts of the New Travel Habits project, however, have not been monitored. The reason for this, according to the City of Gothenburg, is that reductions in  $CO_2$  emissions and other climate impacts are very hard to estimate for communication campaigns or for projects that focus on changes in values. There has been an increase in public transport use in Gothenburg by 25% during the period 2008-2012, and there is a possibility that this is because of changed norms among citizens caused by the New Travel Habits project, in combination with many other factors, but there is no data to show this. That being said, the City of Gothenburg believes that norm-changing projects such as New Travel Habits should

be seen as one of many types of initiatives that are needed in order to change the transport system in a city.

### **Key winning elements of success**

### Political leadership with a long term approach

The transformation of the Gothenburg transport system is organised around a long term consensus over political borders, both on a local and a regional level. The congestion charge covers investments planned until the year 2027, and is organised around a partnership with the national government of Sweden, as well as the regional political leadership in Western Sweden and nearby municipalities. The New Travel Habits project also builds on a long term partnership with the Göteborg Region Association of Local Authorities (GR), which involves several municipalities in the nearby area. This wide political consensus, together with the long term approach, has been key to making investments of this size possible in Gothenburg.

### Collaboration and dialogue with all stakeholders

The importance of communication, and of connecting this communication to concrete activities and investments that impact citizens' everyday lives, is clear in these initiatives. The New Travel Habits project has engaged local citizens and private companies in various activities, such as events, competitions and dialogues, as a way of giving them new tools for changing their own travel behaviour. Furthermore, the project has given personal support to companies in Gothenburg to help their employees change their travel habits.

When it comes to the congestion charge however, there was a lack of communication and dialogue activities in the earliest phases of the project, which may have led to discontent with the project among some stakeholders. Since communication activities are important in order to build trust and mutual understanding, this is a winning element of the New Travel Habits project that the congestion charge can learn from.

## Contribution to multiple policy objectives

EU 2020 climate and energy targets

By reducing car travel in the city, both initiatives are reducing carbon emissions and energy consumption in the city. Since the congestion charge's introduction in January 2013, traffic volumes have decreased by 15-20% and air quality has improved.

A good living environment and conditions for growth

An attractive, easily accessible city core creates improved conditions for people to live and work throughout the whole region. Infrastructure initiatives also contribute to slowing down the negative effect of traffic on the environment and reducing the vulnerability of infrastructure.

#### **Business models to attract investment**

Good partnership working is key to the success of these initiatives. Overall, the West Swedish Agreement is being financed by 50% state funding and 50% local, municipal and regional funding. The regional co-financing includes the congestion charge, and this is a precondition for it being possible to finance the whole package. Between January and June 2013, the scheme generated approximately € 110 million in revenue, with costs of €32 million; overall it will be cost neutral.

Using the money that the City of Gothenburg receives from the congestion charge, additional investments in more sustainable forms of transportation are being made, which has the potential to lead to further sustainability improvements in the city. Without the congestion charge it would not have been possible to implement the wider sustainable transport strategy in such a short space of time.

#### Promotion of the initiative

Given the arguably unpopular nature of a congestion charge, the need for communication of the plans and purpose of the scheme was recognised early on. Based on the experiences of Stockholm, the City of Gothenburg and the Swedish Transport Administration put substantial effort into communicating the reasons for introducing the scheme and the way that it would work. This has been combined with the communication and promotion of public transport and cycling.

Communication about the scheme has consisted of information and special editions in newspapers, radio commercials, meetings with citizens in public squares, festivals and many other forms of communication. Participating organisations behind these activities are the City of Gothenburg, the Swedish Transport Administration, the Public Transport Company Västtrafik and the Region of Västra Götaland. By coordinating efforts it is believed that the impact and number of citizens reached will be maximised.

Representatives of the city have also presented the initiatives at conferences outside of Sweden, but the main part of the communication has focused on Western Sweden and the rest of the country.