

# Zurich's Transport Planning for Quality of Living

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Situated at the end of the lake, the town of Zurich is the centre of a conurbation with more than 1 Mio. inhabitants. The town itself has 365'000 inhabitants and some 330'000 employees. 89 % are employed in the services sector.

The successful transport policy gives an important contribution to the overall quality of living. Since 2000, Zurich has been always on top of Mercer's worldwide Quality-of-Life Survey for some 215 cities.

What are the main points of Zurich's transport policy?

1. Speeding up public transport and keeping it attractive.

Let's have a short look back:

In the city of Zurich two major projects for underground solutions for short distance public transport have been rejected in referendums – one in 1962 and one in 1973. As an answer, in the same year a "people's initiative" was launched with the aim of providing 200 million CHF for projects to speed up trams and buses. This gave the important impulse that a majority of the population expressly agreed to a transport policy which gave priority to public transport.

In 1979 the City Council instructed the municipal authorities to give public transport priority in any conflict of interest in the transport sector. 10 years later, the instruction was supplemented with 2<sup>nd</sup> priority to pedestrians and cyclists.

In 1987 the City Council consolidated its five main goals in transport policy, especially to promote public transport and to reduce motor vehicle traffic.

The aim of the program for speeding up public transport then became to make the "Züri-Linie" (Zurich-line) fast and reliable. The programme focused on three objectives:

1. Routes unobstructed by private cars between intersections by creating dedicated tracks and separate bus lanes, including the abolishment of parking lots along the roads with trams and major bus-lines.
2. The public transport vehicle control system locates all vehicles within 10 m. So the control system – but also the driver on a cab display – is informed at any time of timetable changes and disturbances and it is able to intervene with prepared correctives and assistance measures. Punctuality and therefore regularity can thereby be considerably improved. 80 % of all the vehicles drive within 30 to 40 seconds deviation of the timetable. Worldwide probably the best system for trams and buses.
3. The SESAM system: Maximum priority for public transport vehicles at traffic lights.

According to the principle, that trams and buses do not need a long green light but do need a green light when they are approaching an intersection, Zurich has developed a control concept for traffic lights which advantages public transport.

The system can be used by every tram and bus at all intersections regulated by traffic lights and independently of the time-table.

The advantages of this control system are:

- Trams and buses obtain a green light when they really need it.
- If there is a series of traffic lights, the traffic computer usually actuates green all the way for public transport vehicles.
- When traffic lights are located directly after stops, the tram or bus signals its arrival at the stop. After 10 to 15 seconds the light switches green and stays on until the departure signal is given after the vehicle has passed.

Let's go on a level further:

The city of Zurich is one of the 171 municipalities in the Canton of Zurich. In the nineties, the parliament of the Canton defined the guiding principles for settlement structure: compacting as well as concentration in areas with good access to public transport.

With these guidelines the parliament reacted to the milestone on May 1990, namely the opening of the S-Bahn, the suburban railway. Approved by referendum, the investment amounted round about 2 billion CHF. The main part of the regional S-Bahn project was the construction of a four track through-station underground, combined with a new tunnel under the old city centre and the Zürichberg. This meant a doubling of capacity of the former bottleneck located by the central station and made it possible to introduce new connections and diametrical lines within the city. Thanks to this, a 420 km network of railways has been established serving the whole conurbation.

The S-Bahn system also includes a basic interval timetable, tariff agreement with free transfer between modes and the incorporation of the individual transport operators within the Zurich Transport Authority (ZVV). The attractive network runs in the whole Canton of Zurich. (Approx. 50 km north-south and 40 km east-west.) And it includes railways, trams, buses etc. as well as cable-cars, boats and riverboats.

Seating capacity was raised and since is being used by the passengers: today - 15 years later after introduction - double as much passengers cross the city border each day by train.

Development and transport planning is coordinated: The Cantonal Public Transport Act of 1988 and the relevant Transport Supply Order entail the provision of good public transport services for all continuous built-up areas with at least 300 inhabitants, jobs or trainees/students. „Good“ means that there must be a bus or tram stop in a catchments area within a distance of 400 m or a train stop within a distance of 750 m with at least one service per hour.

But notice: This is the standard for everywhere in the canton, even in the mountain area. In the city of Zurich, trams and buses run by 6-8 minutes headway and the walking distance to the stops is less than 300 m.

Next level:

In addition to the S-Bahn, the federal railway connect nationwide long-distance traffic between the Swiss cities based on the junction principle and with timetable intervals of one hour, on the main routes of 30 minutes. This requires accurate travelling

times between junctions. (Just before the full hour, all trains arrive at the major cities. Everybody can change the train. Just after the full hour, the trains leave the stations.) This „Bahn 2000-system“ is based on the motto „Not as fast as possible but as fast as necessary“ and went nationwide into service on Dec. 2004. In Zurich, the system is already running for more than 10 years.

All together, Switzerland has an almost perfect „service public“ in mass transport. Therefore, the social prestige of public transport for journeys of all lengths and purposes has traditionally been high and remained up until these days. Even bank directors and ministers of state can afford to travel by tram, bus or train – and they do! Central element in public transport is the construction of integral transport chains from local to transit transport, in form of nationwide, well-coordinated offers involving all available transport means. Including walks to stops and stations.

Now, how do we get the people on the public transport system, how do they become customers?

Infrastructure improvements are just the assumptions. Marketing and a self confident appearance on the Zurich transport market (“We are number one”, “We are the key to your quality of living”) contribute just as much to public transport: The rainbow card e.g. is a kind of a club membership card for public transport users. Another example: the price of public transport is included in the price of tickets for major sporting and cultural events; the transport operators act as co-sponsors of events.

With more than 300 million passengers a year, public transport predominates in Zurich's traffic. The aim is not only to maintain but also to improve this market position. And that means a lot of work: Every year about one fourth of all inhabitants move houses. So every year the Zurich Transport Authority has to acquire the same number of customers just in order to keep the status quo.  
(E.g. continuous campaigns with posters etc. are necessary.)

2. Traffic management by means of a dynamic control system. It is the aim to move or transport a high number of people, not metal boxes. The efficiency of the transport system as a whole is the key.
3. Parking space planning is meant to provide effective support for transport policy. The most important measures are therefore those which deal with parking on private property: the Parking Ordinance regulates in particular the number of mandatory parking spaces in new buildings and conversions as well as the maximum permissible number of extra parking spaces. In addition, where good or very good public transport services exists, more areas have been sorted out for further reductions. The designation of these areas is also related to clean air requirements.

Measures concerning on-street parking do come within the usual scope of action by the authorities, but in Zurich they play only a minor role in quantitative terms. On the qualitative side however, priority can be given to special user categories, in particular to the inhabitants in residential areas and to visitors and customers in the city centre.

In the city centre the number of parking places for visitors and customers is limited to the level of the year 1990. That means, when a new public parking garage opens, the same number of street parking places must be eliminated.

And still, in certain areas, especially in new development areas where we have a lack of spare capacity on the road network, we need severer parking restrictions or even new approaches. What we try to do at the moment is to implement a new

“access contingent” model, which gives more flexibility for owners in the use of their parking lots. This replaces the concept of fixing a number of parking places by specifying the number of in and out movements by car per day, with a daily average limit over a six month-period. Movements in excess of this limit will lead to action against the landowners

4. Good living conditions: Traffic calming in residential areas with town-wide speed 30-limits.
5. Good conditions for human powered mobility, walking and cycling: Remember, walking is the first and the last mile of the public transport chain. Every public transport passenger is also a pedestrian, so the waiting areas at stops and the walks to them must be attractive. Indeed, if people no longer leave their homes on foot, whether because of unattractive footpaths, detours, pollution, security problems or because they feel that, as pedestrians, they are not treated as participants in traffic in their own right, it will not be possible to promote the use of public transport instead of the car.

Walking is the glue of the transport system. And without pedestrians, the city is dead, the urban quality is lost. Therefore a vast number of minor improvements for everyday-walking are more valuable than single bigger objects for prestige.

Emotions are very important for cyclists. Therefore promoting cycling has to take care about this fact.

In Zurich we usually don't separate bike-traffic, but integrate it. This is also more compatible to urban design.

6. Soft policies for a sustainable mobility management: Information, e.g. the „Zurich mobil“- package for new residents (including facts about the car sharing-concept), Advisory board, public awareness and education, new offers in the mobility behaviour etc are other examples of mobility management.

The project “Mobilspiele/mobility games” was running during summer 2003. The aim of the project was to ask questions and to inform, but also to irritate people and to entertain. The follow-up campaigns were dedicated 2004 to cycling and 2005 to walking. (Also in 2005, the international conference WALK 21 took place in Zurich.) The campaign 2006 is dedicated to multimodal mobility.

7. A culture of networking and step-by-step politics: Project management staff from all departments ensures that all measures are implemented in the same direction. Even the smallest decision – irrespective of whether it concerns public transport, private car transport, parking policy, etc. – must be taken in the light of the overall plan. After about 30 years of intensive activity, the mobility policy of Zurich has for a long time shaped the thinking and action of all those working in local government. Pragmatically, advancing by smaller or larger steps, they have assembled the many components to form a whole.
8. And the backbone of all is having a consistent and sustainable policy.

In May 2001, the City Council of Zurich adopted a new mobility policy, designed to maintain the successful transport policy of the last decades while working towards sustainability. The guidelines are now:

1. To optimize and to combine the transport system: Active mobility management is to make the existing transport network more efficient, and the different modes of transport are to connect more closely to ensure efficient multimodal use.
2. To develop and to support new innovations: E.g. telematic applications or promoting other forms of mobility management, such as car sharing etc.
3. To complete - where necessary - the infrastructure. New road infrastructure must be accompanied by additional supporting measures to avoid negative effects.
4. True costs: The transparency of the transportation costs has to be increased.
5. To widen the thinking of people and the business world for a new urban mobility.

These new guidelines replace the five operative goals of 1987, the principles are now on a higher strategically level and therefore open for new challenges in urban transport planning. This overall mobility strategy is completed on an operative level with 18 sub strategies to topics as combined transport, mobility consulting services, public transport, walking, cycling, parking etc. In September 2005, the City Council consolidated the mobility strategy with the paper "implementation of mobility culture – the most important from 18 sub strategies".

All documents can be downloaded from [www.stadt-zuerich.ch/mobilitaetskultur](http://www.stadt-zuerich.ch/mobilitaetskultur)  
– only in German regrettably.

#### Conclusion:

In Zurich, promoting public transport and environment friendly traffic is not a question of paying lip service. We do it with all our hearts investing in infrastructure as well as in softer measures such as traffic management, mobility management and public awareness. The results show us, that we are on the right way. And that we have a high acceptance of the population with this policy.

And secondly, we network all our activities in the transport field and direct all planning and implementation, since a long time, straight towards the same principle goals. Mainly the hundreds of little measures dispose of success or failure of the overall policy.

And therefore, I hope, we will stay on top of the Mercer's survey – or at least in the Top 5.

Mobility is cult, is culture. Bring culture into the streets.

Zurich, 24.08.2006