

PUBLICATION DATA

Under the auspices of

Civil Engineering and Waste Management Department

Civil Engineering Office

Programme participants

Chancellery of the City of Zurich (Stadtkanzlei, SKZ) Office for Urban Development (Stadtentwicklung, STEZ) Finance Administration (Finanzverwaltung, FVW) Traffic Section (Dienstabteilung Verkehr, DAV) Environmental and Health Protection Service (Umwelt- und Gesundheitsschutz, UGZ) Office of Parks and Open Spaces (Grün Stadt Zürich, GSZ) City Planning Office (Amt für Städtebau, AfS) Energy Officer (Energiebeauftragter, DIB) Zurich Public Transport (Verkehrsbetriebe Zürich, VBZ)

Design/Photography: dreh gmbh, Zurich Photograph of Ruth Genner: Thomas Burla Photograph p. 26: Beat Bühler, p. 28: Civil Engineering Office Printing: City of Zurich, Print Shop RecyStar Polar

Circulation: 200 copies

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www.facebook.com/stadtverkehr2025 www.stadt-zuerich.ch/stadtverkehr2025

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Available only as a PDF on the Internet: www.stadt-zuerich.ch/stadtverkehr2025

Technical explanations of the indicators and measurement parameters Detailed description of measures in the plan of action

PREFACE



Until the 1970s, public spaces in Zurich were designed primarily to handle automobiles. The general public went along with this expansion of streets with the goal of creating an "auto-friendly city" as a symbol of progress.

City residents, however, then expressed their desire for more quality in the places where they lived and spent time – and still do so today. Starting in the 1980s, a fundamental change took place. Public transport was actively promoted and given preference in the urban network. The metropolitan rail system (S-Bahn) has been running since 1990. The City Council now faces the challenge of reconciling the large volume of traffic with high demands on the quality of life in a densely populated residential area and has focussed its traffic policy on this aspect.

With their votes in numerous referendums, city residents have shown that they support this strategy of the City Council. In September 2011, the previous goals were for the first time addressed in Municipal Code Article 2quinquies, specifically protecting residents from the negative impacts of traffic, providing for the expansion of public transport and the consistent promotion of pedestrian and bicycle traffic. In this way, it should be possible to respond to the growing needs for mobility in a manner which is in keeping with the best interests of the city. Expanding capacity for motorised private transport (MPT) is thus ruled out.

To accelerate and give priority to the implementation of the goals just mentioned, the City Council established the "Stadtverkehr 2025" programme and is giving added impetus to its previous traffic policy. The programme includes indicators pointing to the achievement of goals. These indicators show that Zurich has already made a very good start. In addition, the programme includes a plan of action with measures which will be addressed and implemented. This report marks the start of annual reporting about what the city is doing to achieve the goals related to public traffic policy set in the "Stadtverkehr 2025" programme.

Given the major challenges, it makes sense to approach these goals in a coordinated way. The City Council is convinced that this coordination must also be successful at the cantonal and federal level. A good start was made with the "Urban Mobility Conference" in which 15 Swiss cities developed an institutional framework and increased their collaboration.

The year indicated says it all: "Stadtverkehr 2025" is a programme which will continue to develop.

Member of the City Council Ruth Genner

The Urban Traffic Programme "Stadtverkehr 2025"

Zurich keeps moving ahead

In June 2012, the Zurich City Council launched the urban traffic programme "Stadtverkehr 2025" to tackle the challenges of traffic with specific measures and clear priorities.

The programme is based on the City Council's "Zurich Strategies 2025" and makes a significant contribution to the implementation of the new Article 2quinquies of the Municipal Code, which voters approved in September 2011 with the acceptance of the Urban Traffic Initiative. At the same time, the programme consistently further develops the previous urban traffic policy and thus builds upon existing strategies which are established in the overall regional traffic concept and in the programme for the greater municipal area. Moreover, the goals of the 2000 Watt Society and further upgrading of public spaces are integrated into the programme.

In all, the "Stadtverkehr 2025" programme pursues six goals:

- The modal split of public transport (PT), pedestrian and bicycle traffic is to be increased. The target is to increase the percentage of public transport, pedestrian and bicycle traffic within the overall volume of traffic in the City of Zurich by at least 10 percentage points within 10 years after Article 2quinquies of the Municipal Code has gone into effect.
- The availability and attractiveness of PT along with pedestrian and bicycle traffic are to be improved.
- The overall capacity of the vehicular traffic network for motorised private transport (MPT) will not be increased.
- The goals of the 2000 Watt Society as regards reducing energy consumption to 2000 watts per person and greenhouse gas emissions to one tonne of CO₂ equivalents per person per year by 2050 are to be implemented in the mobility area.
- Residents are to be protected from the negative impacts of traffic (including noise, pollutants, accidents).
- The quality of public spaces, in other words the design and functionality of streets and public squares, is to be increased.

Article 2quinquies of the Municipal Code:

- The City of Zurich will take measures to protect residents from the negative impacts of traffic.
- The City of Zurich places consistent focus on public transport, pedestrian and bicycle traffic and promotes in particular tangential connections of PT and a continuous network of bicycle paths along or parallel to main axes.
- The new construction and expansion of high-capacity and main traffic arteries is allowed only under the condition that this does not increase the capacity of the overall street network for motorised private transport. The city acts according to this basic philosophy within the scope of its legal options and advocates it in dealing with higher authorities.

Article 124 of the Municipal Code (transitional provision): The target is to increase the percentage of public transport, pedestrian and bicycle traffic within the overall volume of traffic in the City of Zurich by at least 10 percentage points within 10 years after Article 2quinquies has gone into effect; the relevant factor in this respect is the share of the routes travelled within the city limits as a proportion of the overall volume of traffic. The City of Zurich will take the necessary measures and publish an interim report each year.

5

Plan of action with key measures

The "Stadtverkehr 2025" programme includes a plan of action which establishes a deliberate focus as regards the numerous urban measures. It contains selected key measures whose implementation is central and contributes to achieving programme goals. The measures are anchored in other urban plans such as the Bicycle Master Plan and in the VBZ (Zurich Public Transport) network development strategy. They are further developed by the city with high priority and agreed with the involved decision-makers. The plan of action will be expanded in the coming years as a type of rolling plan.

Communication and awareness

As part of "Stadtverkehr 2025", the City of Zurich will intensify its communication, in particular making efforts to provide open, transparent information. Exploratory talks with various political figures are intended to create a shared understanding and increase acceptance for the implementation of the measures.

To achieve the goals of "Stadtverkehr 2025", the travel behaviour of everyone who moves about in the city is decisive. Numerous measures contribute to building awareness, for example consultative sessions and training for specific target groups along with countless sources of information and products, among others the "Züriplan" pedestrian and bicycle route planner and the "Zurich on Foot" city walks. In social media (Facebook, YouTube) the goal is to create a presence for the programme with useful information and opportunities for dialogue. In this way it will also be possible to get suggestions from the general public for the programme's further development.

Sustainable mobility - a political mandate in many cities

The City of Zurich is not alone in facing major challenges. The amount of traffic is increasing everywhere, the demands on quality of life in densely settled areas are high and the number of residents is growing.

At the "Urban Mobility Conference" on 12 November 2010, the City of Zurich and 14 other Swiss cities established an institutional framework describing how they could work together to coordinate their efforts in addressing basic goals and developing perspectives for sustainable mobility. This collaboration was intensified when in 2011 six Swiss cities brought the urban traffic initiatives of the "umverkehR" Association for sustainable mobility to a vote. The initiatives or counterproposals were accepted in all six cities.

CITY	GOALS	INDICATORS	LEGAL BASIS
Zurich	 Protect residents Promote PT, bicycles, pedestrian traffic For street expansions, no increase in MPT capacity Transitional provision: Increase the percentage of PT, pedestrian and bicycle traffic in overall traffic within ten years by ten percentage points. 	Indicator for the transitional provision: percentage of routes for PT, pedestrian and bicycle traffic in overall traffic, based on the 2010 micro census	Municipal Code
Basel	Reduce the overall amount of traffic due to MPT by 10 % by 2020 Credit line for pedestrians and bicycles: CHF 10 million 2011 to 2014	Vehicle kilometres, overall traffic without motorways; own surveys, index from 30 counting stations	Environmental Protection Act
St. Gallen	 Attractive offer of PT, pedestrian and bicycle traffic No growth in MPT 	Counted auto trips, permanent MPT counting stations	Regulations for sustainable traffic development
Winterthur	 Protect residents Reduce the percentage of MPT by 8 percentage points from 2005 to 2025 Promote PT, pedestrian and bicycle traffic 	MPT route percentage, in-city traffic and originating traffic, city residents older than 18, with driving licence	Strategic plan
Geneva	 "mobilité douce" Promote pedestrian and bicycle traffic Reduce the number of accidents 	Set up a network of bicycle lanes and pedestrian paths within 8 years	Strategic plan
Lucerne	The percentage of PT, pedestrian and bicycle traffic is being continually increased MPT is not to increase on the higher-level network		Goals will be established in the city traffic guidelines by the City Council

Overview of the implementation of the Urban Traffic Initiatives: Zurich sets the highest quantitative goal as regards increasing PT, pedestrian and bicycle traffic within overall traffic.

Continuous reporting

The "Stadtverkehr 2025" programme consists of a host of measures which together contribute to achieving the goals. In addition, external factors such as population growth and the development of the number of workplaces can influence the achievement of goals. Progress will be measured based on goal-specific indicators and documented annually in a report. This report for 2012 is considered the starting point for future reporting.

ACHIEVING GOALS

Where are we today?

Documenting progress

Selected indicators (see the overview) make up the development of the "Stadtverkehr 2025" programme, and this in reference to the established goals. 2012, the year in which the new article in the Municipal Code went into effect, is considered the starting point for reporting. The further course of development will be indexed starting from this point in time.

©					
GOAL	INDICATOR				
Increase the modal split of PT, pedestrian and bicycle traffic	Amount of traffic in urban areas				
	2 Frequency of use of various means of transport				
	3 Modal split				
Improve the availability and attractiveness of PT, pedestrian and bicycle traffic	4 PT availability				
	5 PT on-time performance				
	New or newly designed pedestrian paths, city squares and meeting areas				
	7 Quality of the network of bicycle paths				
	8 Satisfaction with the quality of transport				
No increase in the capacity for MPT	Capacity of the vehicular traffic network				
	10 Availability of parking spaces				
Implement the 2000 Watt Society	11 Primary energy balance – detailed examination of traffic				
in the area of mobility	12 Greenhouse gas balance – detailed examination of traffic				
Protect residents from the negative	13 Reducing street noise by lowering the speed limit				
impacts of traffic	14 NO ₂ pollution (indirect indicator)				
	15 Traffic safety				
	16 Satisfaction with traffic safety				
Increase the quality of public spaces	17 Activities by the city to improve the quality of the cityscape				



Zurich is Switzerland's largest city with almost 400,000 inhabitants and almost just as many workplaces. The amount of traffic is correspondingly large, and forecasts assume further growth. To ensure that in future traffic can also be handled efficiently and in a way that does not harm the city or the environment, PT in particular but also pedestrian and bicycle traffic must take on an increasingly large percentage of the growing amount of traffic.

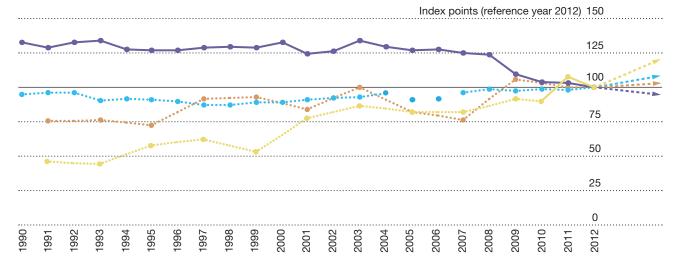




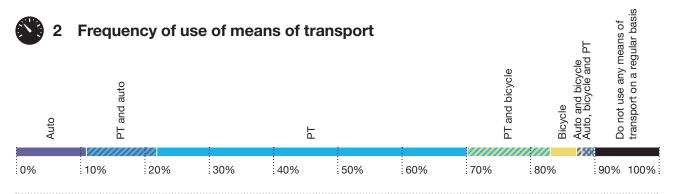
Amount of traffic in urban areas

Pedestrian traffic (manual counting)
 Bicycle traffic (manual counting)
 Tram/bus (calculated values)
 MPT (permanent counting stations)

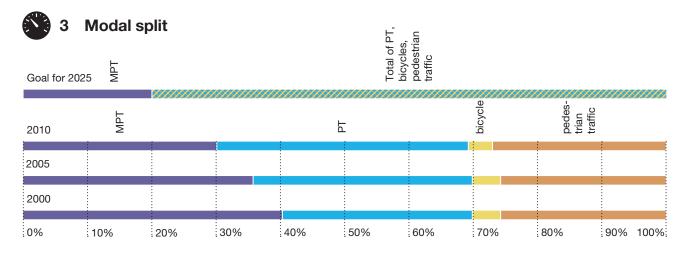
····► Target trajectory



While the amount of MPT has dropped significantly in the city limits since the opening of the Western Bypass in 2009 and the implementation of supplementary measures, the amount of traffic in trams and buses has increased along with pedestrian and bicycle traffic.



In 2009, three-quarters of Zurich's residents travelled with PT on a regular basis. The automobile and bicycle, in contrast, were regularly used by only one-quarter and one-fifth, respectively.



The modal split for trips travelled in the city shows that PT is the most popular means of transport.

Amount of traffic in urban areas

Because the amount of traffic in the overall city limits cannot be measured directly in absolute numbers, counting stations are used for various means of transport to survey the amount of use at selected points. Representative surveys of residents as regards the means of transport they select and about their travel behaviour enhance planning fundamentals.

The evaluation of counting station data for MPT shows a slight decrease up through 2008, followed by a significant reduction of traffic in 2009 and 2010. The latter is attributed primarily to the opening of the Western Bypass in 2009 and the implementation of supplementary measures on the western peripheral road. The goal in future is to further reduce the amount of traffic due to MPT.

The demand on the Zurich Public Transport (VBZ) network, in contrast, shows an overall slight increase. In the 1990s, the introduction of the metropolitan rail system initially resulted in a drop in the usage of buses and trams in the city. The consistent expansion of service availability and the growth in population then resulted once again in a greater volume of traffic. Demand for PT is expected to increase even further in future because the anticipated additional traffic (growth in population and shift away from MPT) must be absorbed primarily by PT.

In absolute terms, bicycle traffic makes up the lowest percentage of trips in the City of Zurich, but it is experiencing continual growth. The fluctuations which appear can be explained by the effects of weather. The programme's goal is to double the number of bicycle trips by 2025.

Pedestrian traffic shows a virtually constant trend. The fluctuations illustrated are related to the still low number of counting stations. More precise statements will be possible starting in 2014 only after the introduction of the new counting station network. Pedestrian traffic in future is expected to increase slightly.

Frequency of use of means of transport

● 2 In addition to the traffic counting stations, the residents
of the City of Zurich are surveyed regularly about their choice
of means of transport.

Public transport is by far the most regularly used (74%); 81% of the residents have purchased a PT pass. 26% of the people who use PT on a regular basis also travel often with other means of transport, roughly in equal parts with an auto or a bicycle. Only 11% of the residents travel exclusively by car.

Roughly half of all Zurich households do not own a car. Those who regularly drive their cars also travel to some extent with PT (13%). Those people who travel regularly exclusively with a bicycle constitutes a very small group at 4%. The remaining 10% of the residents do not use any means of transport on a regular basis or go by foot.

Modal split

Travel behaviour across Switzerland is surveyed every five years with the "Mobility and Transport" micro census. The latest figures come from 2010. This representative survey is the basis for measuring the quantitative goal established as a transitional provision in the Municipal Code. The guidelines dictate that the percentage of PT, bicycle and pedestrian traffic within the city limits (modal split) is to be increased by 10 percentage points within the next ten years. Considering the expected additional volume of traffic based on population growth, this would correspond to a decrease in MPT volume of 25 %.

The modal split indicator alone is not suited to measure progress towards achieving the goals of the "Stadtverkehr 2025" programme. For instance, the reduction in transit traffic, the lowering of street noise pollution and improved traffic safety are not reflected in this indicator. In addition, it is surveyed only every five years. For these reasons, a wide range of indicators was defined for measuring the achievement of goals.

The percentage of MPT has dropped sharply in the period from 2005 to 2010. Compared to other cities, the MPT ratio in Zurich of 30% is somewhat low (Basel and Bern are also at roughly 30%/Lucerne, St. Gallen and Winterthur are each above a 40% ratio of MPT). This strong reduction can be accounted for above all by the rerouting of traffic due to the Western Bypass opened in 2009 and the associated supplementary measures. Planning of parking areas, the expansion of PT availability plus more conscious travel behaviour have likely also contributed to the reduction. The decrease of the MPT ratio has been absorbed by PT, as has already happened in previous periods of time. Its ratio increased by 5%.



In terms of PT, the City of Zurich has already reached a very high standard. This is also true for pedestrian traffic. For bicycle traffic, though, improvements are necessary, specifically as regards the infrastructure making up the network of bicycle paths.

To ensure that the increasing volume of traffic does not result in an increase in MPT but rather can be absorbed by PT, pedestrian and bicycle traffic, the availability and attractiveness of these means of transport must be high and continually improved.



Expansion of the availability of PT

Since the 1980s, PT in the City of Zurich has been consistently promoted and expanded. Today the city region has a comprehensive offer with a dense network of stops for the metropolitan rail system, trams and buses. Most people can find the next stop within 300 metres of their home or where they work. Even in peak periods almost every passenger waiting at a stop can find a place on the next tram or bus. Noticeable improvements in availability for passengers have been achieved through larger vehicles, new lines and the extension of existing lines and increased frequency.

With the PT timetable change in December 2008, the VBZ expanded the frequency from 6.5 to 7.5 minutes in peak times so as to improve the on-time performance and stability in the network. At the same time, the frequency in non-peak times after 8 p.m. was increased, which overall led to an increase in availability. The VBZ thus responded to changing leisure-time needs and flexible working-time models. The urban society is increasingly moving about around the clock. In the last few years, the availability was further expanded with Tram Line 10 to the airport and the introduction of the Zurich West tram line. By itself, the Zurich West tram line increased the number of available route kilometres by 2 %. With the planned short- and

mid-range measures as part of the VBZ network development strategy, the availability of trams and buses in the City of Zurich should be expanded by another 5%.

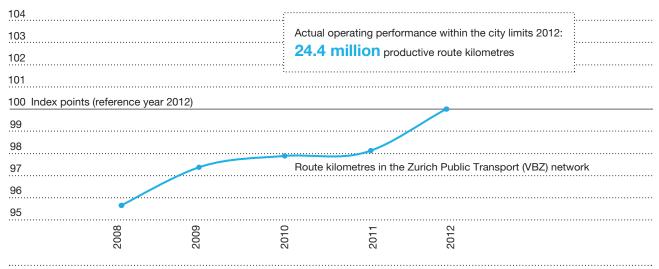
On-time performance and attractiveness of PT

⑤ 5 In addition to the density of the routes and frequency, on-time performance is decisive for making PT attractive because only in that way can routes be planned and destinations be reached reliably and on time. Today, 84% of the VBZ passengers arrive at their destination on time. Even with delays of up to five minutes, the most important further connections can be for the most part ensured. Only 2.2% of the PT users must deal with a delay of more than five minutes. The goal is, despite the increasing complexity of the overall traffic network, to maintain this high level of performance.

Comfort and simple accessibility likewise contribute to making PT even more attractive. As a result, among other things the curbs at stops were raised so people with physical disabilities and those travelling with baby prams can easily get on and off. On heavily travelled routes, articulated trolley buses with higher capacity and more seats are being used.



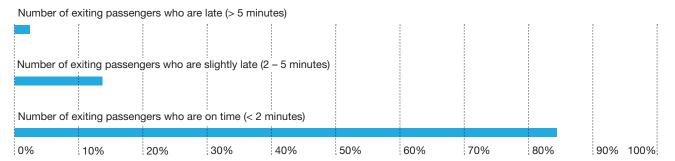
4 PT availability



The availability of tram and bus lines within the city has been continually expanded in the last few years.



5 PT on-time performance



The VBZ operates at a high level as regards on-time performance. In 2012, only 2.2 % of the passengers arrived significantly late.



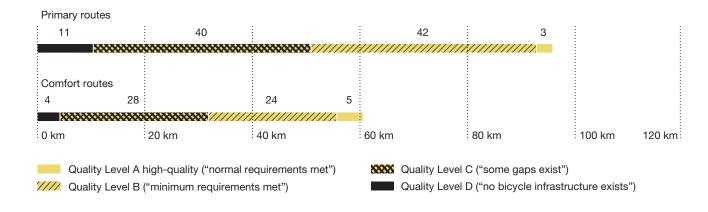
6 New or newly designed pedestrian paths, city squares and meeting areas

In 2012, the following infrastructures for pedestrians were newly erected or redesigned:

- 1.2 km of new pedestrian paths, among these the Emil-Spillman-Weg
- 4 redesigned city squares or upgraded neighbourhood centres: Brupbacherplatz, Anny-Klawa-Platz, Bullingerplatz and the pedestrian path connection at Gotthardstrasse with the pedestrian crosswalk across Alfred-Escher-Strasse (Tessinerplatz neighbourhood centre)
- 10 new meeting areas: Oerlikon marketplace, Brunnwiesenstrasse, Rebhügelstrasse/Wiedingstrasse, Tuschgenweg, Langweid, Pfarrhausstrasse, Fichten-/Veilchenstrasse, Georg-Baumberger-Weg, Im Wyl, Magdalenenstrasse



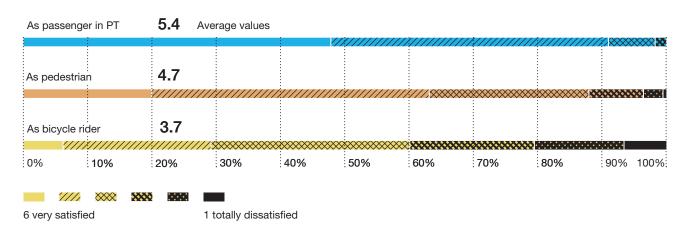
7 Quality of the network of primary routes and comfort routes for bicycle traffic



The network of primary routes and comfort routes defined in the Bicycle Master Plan still had some clear gaps in 2012. However, almost half of the routes already met the targeted minimal requirements of Quality Level B, and roughly 5% even the normal requirements for the network of primary routes and comfort routes.



8 Satisfaction with the quality of transport



In the 2009 survey of the residents, public transport got the highest marks. There is clear potential for improvement as regards bicycle traffic.

Anyone who is walking within Zurich can use direct connections and generally find safe, attractively designed paths which can for the most part also be used with walking aids and baby prams.

The infrastructure for pedestrians is being further expanded. In 2012, among the additional pedestrian paths created were the Emil-Spillman-Weg, and new or newly designed city squares such as Brupbacherplatz, Anny-Klawa-Platz and Bullingerplatz are part of the supplementary measures for the Western Bypass. The pedestrian path connection at Gotthardstrasse with the crosswalk across the Alfred-Escher-Strasse creates a key connection for pedestrians within the neighbourhood and enhances the attractiveness of the Tessinerplatz neighbourhood centre. In 2012, ten new meeting areas were also created such as in the centre of Oerlikon South, where pedestrians can move about while having equal priority with other street users. Around the Oerlikon railway station, in the next few years additional open areas, neighbourhood links and through connections underneath the tracks will be built. The groundbreaking for the expansion of the railway station took place in 2012. Construction is also taking place south of Zurich Main Station. There a new city section is arising, for which the Europaallee, with two new city squares - Europaplatz and Gustav-Gull-Platz - will be making up its backbone. There, too, in the upcoming years new open areas to meet and spend leisure time will be created for pedestrians.

Improvements for bicycle traffic

In the past years, individual infrastructure measures designed especially for bicycle traffic have been implemented. The Bicycle Master Plan provides for the realisation of a continuous basic network of primary routes and comfort routes that supplement each other. The primary routes enable moving forwards quickly with a bicycle in the city, while on the comfort routes the intent is that those with less practice such as families with children should be able to travel safely with their bicycles.

▼ Today, 45 kilometres in the primary route network and 29 kilometres in the comfort route network meet the quality requirements defined in the Bicycle Master Plan: by 2025 the intent is to have all sections in the network of primary routes and comfort routes at least at Quality Level B, as much as possible at Quality Level A. These quality levels are defined differently for the networks of primary routes and comfort routes because both networks must satisfy different requirements.

As part of the supplementary measures associated with the Western Bypass, bicycle riders have already seen significant improvements in 2012, for example along Weststrasse and Sihlfeldstrasse. In addition, dangerous sections have been painted red in existing bicycle routes so that the bicycle lane is clearly visible for everyone on the road (e. g. Bahnhofquai, Zollstrasse and Bucheggplatz).

Further measures to improve bicycle traffic are well in the planning stages and will be implemented in the near future. Among them is the new pedestrian and bicycle path on Rosengartenstrasse between Röschibachstrasse and Hönggerstrasse, which in 2013 will close the gap between the neighbourhood and Wipkingerplatz as well as Escher-Wyss-Platz. In 2013, the plan is to implement various additional, continuous bicycle paths, for example along Birmensdorferstrasse, Rotbuchstrasse and Kasernenstrasse. As part of another project, existing bicycle routes are continually being made more visible with signs and markings.

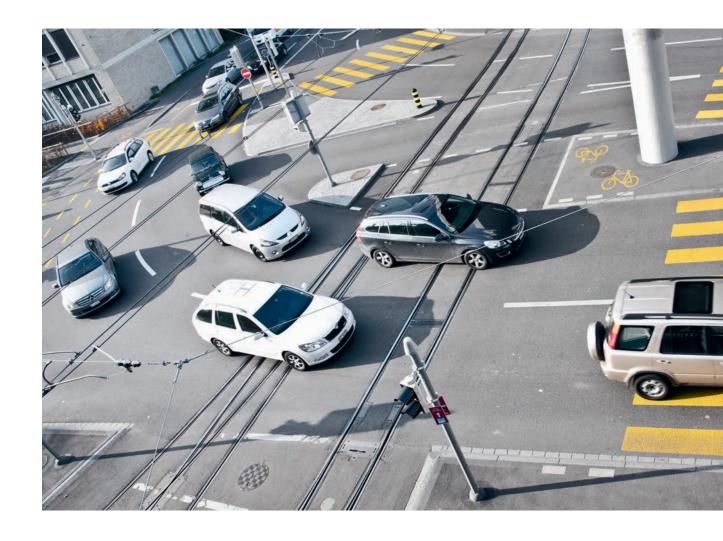
Satisfaction with the quality of transport

The City of Zurich examines how satisfied residents are with the availability of PT, pedestrian and bicycle traffic. From 2013, this aspect will be included in the surveys of the residents in the City of Zurich conducted every other year.

■ 8 In the 2009 survey, PT got the highest marks. With an average mark of 5.4 points out of a maximum of 6 points, satisfaction is very high. Satisfaction with the traffic situation for pedestrians is likewise quite good (4.7 points). The lowest marks were given to what is available for bicycle riders. With an average mark of 3.7, the rating by the residents falls below Mark 4 "adequate".



MPT is of great importance for Zurich as a place to do business, but it is less suited for the efficient handling of larger volumes of traffic. In addition, with MPT there are always negative repercussions for the environment, residents and urban life. Thus, despite the growing number of residents and workplaces, capacity for MPT should not be increased, which is to be achieved by avoiding an expansion of the vehicular traffic network plus the corresponding parking policies and management of traffic.



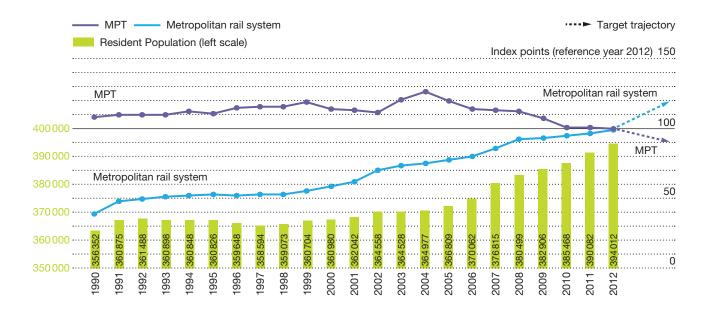
Capacity of the vehicular traffic network

In 2012, **no** new high-capacity roads or major arteries were built and none were expanded. Nothing was changed to the concept of regulating access. The capacity of the vehicular traffic network for MPT was **not increased**.

● 9 With the opening of the Western Bypass in 2009, it was possible to achieve a marked relief from transit traffic. The street areas were adapted to meet local, urban requirements and capacity was correspondingly reduced.

The long-term development of the amount of MPT and the number of passengers in the metropolitan rail system at the city limits illustrate these facts. Since the opening of the lines on the metropolitan rail system, the number of passengers at the city limits has continually increased in volume. In contrast, MPT has been declining since 2004 and has been at a roughly constant level since 2010.

The construction of the cross-city rail line will create new capacity for PT and make it possible to handle additional volumes of traffic. The 9.6 km long connection between the railway stations at Altstetten, Löwenstrasse and Oerlikon is expected to be opened in mid 2014 (Altstetten) and the end of 2015 (Löwenstrasse) after a construction period of roughly six years.



Traffic studies at the city limits reveal that the capacity of the vehicular traffic network has not been increased for MPT. While the MPT counting stations have seen continually dropping volumes of traffic since 2004, the number of passengers in the metropolitan rail system has steadily grown.

Parking

In total, there are approximately 270,000 parking spaces in the City of Zurich, of which however only 25% are located on public property. The latter of these are primarily the visitor and customer spaces in white zones and found in the city centre or in neighbourhood centres, and the parking spaces in the blue zones for short-term parking and for long-term parking for local residents. It is possible to effectively control traffic demand with the supply and management of these parking spaces. In addition, by eliminating or relocating parking spaces, the areas freed up can be used to implement measures for the benefit of other means of transport or for upgrading public spaces.

Of the approximately 220,000 parking spaces on private property, only roughly 18,000 of them are accessible to the public. These are primarily parking spaces in car parks. While the number of privately accessible parking spaces has tended downwards since the end of the 1990s following strong rates of growth in the 1970s, the number of parking spaces accessible to the public on private property has increased significantly.

The city can influence the supply of private parking spaces in conjunction with approvals as part of new construction or upgrades (Parking Space Ordinance).

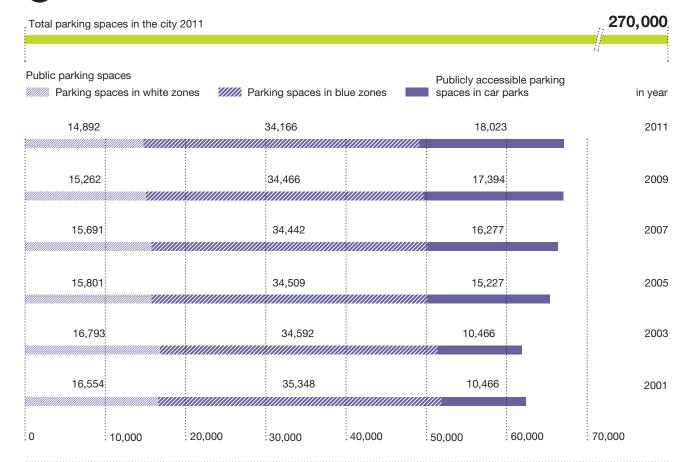
▶ 10 The illustration shows the development in the number of parking spaces in white zones, in blue zones and in car parks accessible to the public. Parking spaces for private use are not studied regularly. The number of parking spaces in white zones has dropped by 10 % since 2001. Within the city

centre, a corresponding number of parking spaces were compensated for in car parks according to the historic compromise. That compromise stipulates that the number of parking spaces intended for visitors and customers (fee required, white zones) in the city centre (District 1) and in districts close to the city centre must be maintained at the level back in 1990. This concerns the total of parking spaces accessible to the public, in other words street parking and car parks, and affects a total of 7622 parking spaces. With the opening of the Gessnerallee car park in 2003, one of the first major steps towards replacing surface parking spaces with those in car parks was made. In May 2012, the opening of the Opéra car park (299 spaces) led to a compensation for street parking spaces in white zones, among others on Theaterplatz and on Utoquai and Limmatquai.

Since 2001, the number of parking spaces in blue zones has dropped by 3 %. The reasons for this are primarily the upgrading as part of street projects, for example the establishment of bicycle lanes, measures to improve traffic safety and planting rows of trees.

The number of publicly accessible spaces in car parks has continually increased since 2001. In 2011, the number of available spaces was some 70 % higher than in 2001. In addition to the compensation mechanisms in the city centre, this increase reflects in particular the strong development of construction in the private sector in the last decade.

10 Availability of parking spaces



Overall, there are 270,000 parking spaces in the City of Zurich, and of them roughly 67,000 are open to the public. While the number of parking spaces in white zones (pay parking meter) and spaces in the blue zones (parking disc required) has changed little in the last few years, the number of spaces in car parks has increased.



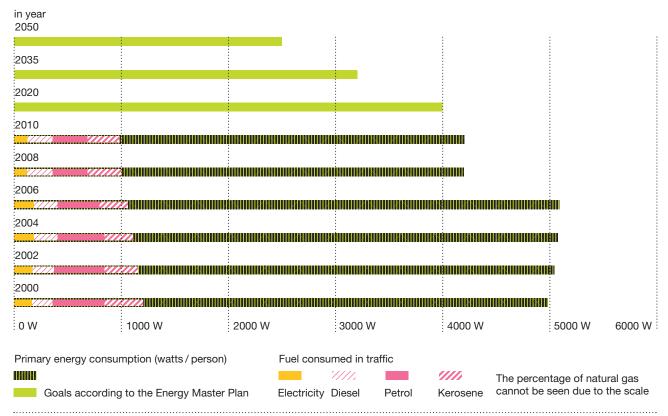
In 2008, the voters of the City of Zurich decided to establish within the Municipal Code the sustainable development of the city into a 2000 Watt Society – in other words, to strive for energy efficiency at every level, to reduce greenhouse gas emissions and promote the use of renewable energy. Primary energy consumption is to be reduced to 2000 watts per person, and greenhouse gas emissions to one tonne per person per year by 2050.

Traffic is also intended to make a contribution to achieving these goals. Key components consist of increasing the efficiency of motor vehicles, the switch to environmentally friendly means of transport and less mobility.



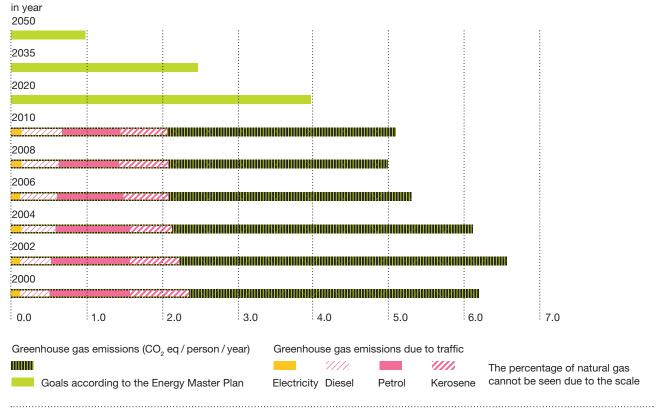


11 Primary energy balance - detailed examination of traffic



It has been possible to reduce the consumption of petrol somewhat in the last ten years. Further measures are necessary to achieve the goal of the 2000 Watt Society.

12 Greenhouse gas balance – detailed examination of traffic



Until now, it has been possible to reduce greenhouse gas emissions by only a small amount. Further efforts are necessary so that in 2050 the goal of one tonne per person is not exceeded.

In 2010, roughly 23% of primary energy consumption and almost 40% of greenhouse gas emissions in Zurich were attributable to traffic. It thus represents an important part of how to achieve the goals of the 2000 Watt Society.

The measures in the "Stadtverkehr 2025" programme deal exclusively with land-based traffic because the city has no ability to influence air traffic. As regards the goals of the 2000 Watt Society, air traffic however plays a large role.

Primary energy

The concept of the 2000 Watt Society considers primary energy as the total energy which is contained in the original energy carrier plus the energy which must be expended to extract, process and use it. In this, the primary energy requirement only takes into account the energy used directly for energy-related purposes, in other words fuel such as diesel, petrol or electricity used for traffic but not the energy required for manufacturing vehicles such as automobiles, buses, trams and bicycles nor the grey energy which is included in the traffic infrastructure. The percentage of primary energy consumption for MPT and PT can currently be shown only as a total.

has gone down overall and has stabilised in the last few years. The increase in efficiency in motor vehicles shows up in lower petrol consumption, while the slight increase in diesel can be accounted for by the increasing percentage of diesel-fuelled vehicles in the overall fleet in the City of Zurich. The large contribution to the reduction of primary energy consumption in the PT sector can be attributed to the use of electricity from renewable sources and to conservation efforts at the VBZ (Zurich Public Transport).

Greenhouse gas balance

According to the 2000 Watt methodology, the greenhouse gas balance (detailed examination of traffic) in the City of Zurich is calculated from the end energy consumed by traffic. This also takes into account those greenhouse gas emissions which are caused by the manufacture, transport and processing of the energy carriers.

● 12 For a long period of time, it was possible to reduce greenhouse gas emissions of land-based traffic by only a small amount. In the last few years, in contrast to the Swiss average, in Zurich it has nonetheless been possible to achieve almost a stabilised level. In view of the paramount goal of 1 tonne of greenhouse gas emissions per person per year by 2050, however, the next few years will need clear efforts to reduce energy consumption and to replace fossil energy carriers, to which traffic must also make a contribution.



The high amount of urban traffic leads to heavy noise and air pollution as well as traffic accidents. This has a negative impact on the quality of life and time spent in the city plus the health of residents. To mitigate these negative effects, a reduction in the speed limit has proven a suitable measure.



Reducing street noise

Triggered by the reduction guidelines which the Environmental Protection Act and the Federal Noise Abatement Ordinance (LSV) require, the City of Zurich has since 1987 launched a total of five street renovation programmes which consist primarily of the installation of sound-insulating windows at roughly 100 street sections and seven public squares. In addition, the meeting areas and 30 kmh speed limit zones established in the last 25 years, which affect more than half of the communal street network (approximately 54 %), support the reduction of noise pollution thanks to lower vehicle speed limits and at the same time improve traffic safety and quality of life for residents.

Despite these measures, today approximately 130,000 residents of the City of Zurich are still subject to noise pollution which exceeds the ambient limit value set by the Noise Abatement Ordinance. Thus, there exists further need to deal with noise pollution. The deadline for reducing street noise runs out in 2018.

The pilot project at Kalchbühlstrasse in late summer of 2009 illustrated that the introduction of a 30 kmh speed limit represents an economical and very effective measure to fight exces-

sive noise. In addition, according to the ordinance, top priority must be placed on implementing measures at the source such as reductions in the speed limit, lowering the volume of traffic and installing low-noise street surfaces. A speed limit of 30 instead of 50 kmh results in a noise reduction for residents which acoustically corresponds to roughly cutting the amount of traffic in half.

▶ 13 The City of Zurich will increasingly implement measures at the source. For instance, in May 2012, the introduction of a 30 kmh speed limit on an additional 39 communal street sections was announced by the City Council. Roughly 7000 people who today live in buildings with excessive ambient noise limit values will profit from this. Further reductions in the speed limit and other measures to cut street noise pollution such as sound-insulating walls are in the planning stages.

The upgrading of the rolling stock of the VBZ (Zurich Public Transport) also makes a contribution to noise reduction. Compared to the Tram 2000, the Cobra tram is perceptibly quieter. Low-noise street surfaces are also an option, whereby there are as yet no empirical values regarding the long-term effectiveness in the urban area. The City of Zurich is participating in various studies with its own test sections.



13 Reducing street noise by lowering the speed limit



The decision was made to lower the speed limit to 30 kmh along 39 communal street sections. Roughly 7000 people who today live in buildings with excessive ambient noise limit values will profit from this.

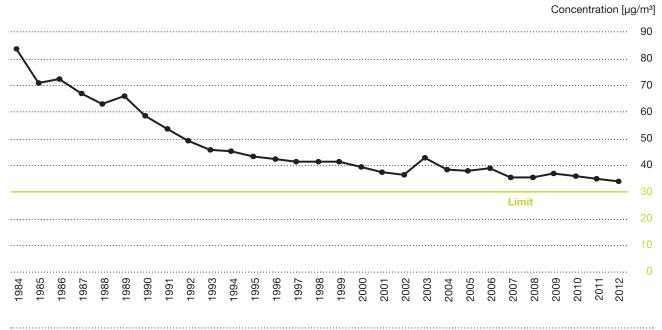
Air pollution

● 14 The overall situation as regards air pollution in the City
of Zurich has significantly improved since the 1980s. In the
last few years, though, it has been possible to make only a few
small advances. The limits for nitrogen dioxide and particulate
matter (PM10) are still being exceeded, in particular along primary traffic arteries. Air pollution due to ozone is also above
the limits.

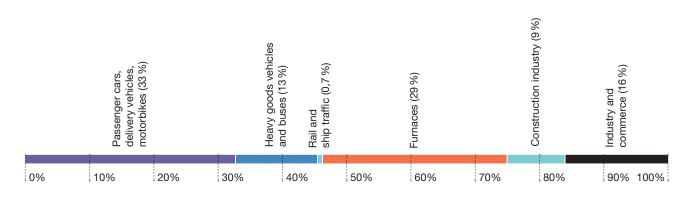
The measured types of air pollution make up the total level of pollution. This is influenced by local emissions of motorised street traffic, by emissions from building heating systems, industry and commerce plus transregional emissions as a type of base pollution. Measures in all areas have contributed to a reduction of air pollution (figure regarding the sources of NO_x emissions). The impacts of measures can be seen most clearly based on the trend of annual average values of nitrogen oxide, NO_2 . In particular the continual tightening of exhaust guidelines for motor vehicles plus the upgrading of heating systems have made significant contributions to the downward trend of NO_2 pollution and over time will bring further improvements. Due to the overlap of stationary sources of pollutants, locally limited measures in traffic often result in only a very limited change in local air pollution levels.



14 NO₂ pollution (indirect indicator)



Despite great success in reducing nitrogen dioxide emissions, annual average values of NO_2 are persistently above the limit. In addition, since 2000 the downwards trend has flattened out considerably.



The primary source of NO_x emissions is motorised street traffic at roughly 45 % (2010, Canton of Zurich, Office of Waste, Water, Energy and Air). Furnaces in households are, together with industry and commerce (construction sites), responsible for more than half of all emissions.

Traffic safety

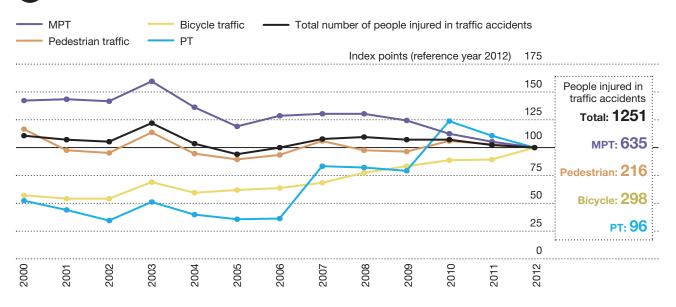
▶ 15 In the past years, the number of people in the City of Zurich involved in accidents due to street traffic has remained virtually constant at approximately 1400 persons who are injured or killed per year. In the recent past there has been a slight downward trend, although only as regards those with minor injuries. This is to be considered a partial success given the continually growing volume of traffic. Things that have contributed to this include measures to improve the road infrastructure, training and awareness, automotive engineering, legislation and the high quality of medical first aid.

The slight downward trend in the number of injuries in recent times applies mostly to MPT, while the number of injuries in pedestrian traffic has remained relatively constant in the period under observation. There has been an increase in the number of injuries on public transport. Based on the relatively low absolute numbers (2012 = 96 injuries), the fluctuations in the index points for PT from year to year are comparatively high. In addition, the volume of people on PT has increased above average in the past years

The constant increase in the number of bicyclists who get injured is of more concern. For the most part, this can be explained by the larger number of bicycle riders in the same timeframe. In future, it is planned that improvements in the bicycle infrastructure along with supporting awareness measures will help lower the number of accidents.

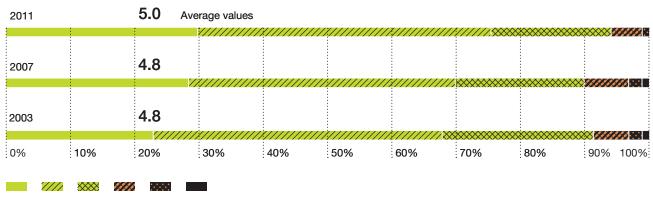
▶ 16 Evaluation of traffic safety in neighbourhoods gets predominately good marks from the residents. Compared to evaluations from earlier years, it is possible to establish a parallel trend in the number of people suffering injuries in MPT: since 2003, traffic safety has received continually slightly better marks.

15 Traffic safety



Although safety in MPT has improved, the number of people suffering accidents while riding bicycles has gone up.

16 Satisfaction with traffic safety



6 very satisfied 1 totally dissatisfied

Residents gave traffic safety in neighbourhoods good marks, and it has improved compared to earlier years.



In step with the growing density in the city – more apartments, workplaces and mobility – the various demands on usage in public spaces are increasing. These areas are taking on growing importance as places to meet and spend time.

New infrastructure projects are also presenting opportunities to place new emphasis and to meet growing demands on usage requirements.



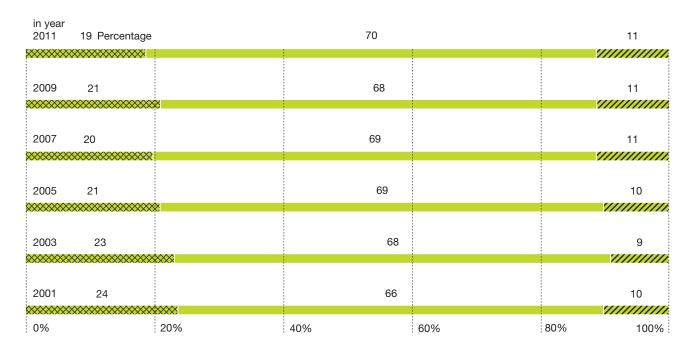
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Zurich is known for its attractive public urban areas. Public squares and streets create identity and recognition at the international, regional, city, district and neighbourhood levels.

Public spaces are used in conjunction with various means of transport, with bicycles, MPT and PT but also pedestrian traffic. This means that public spaces, which are becoming increasingly scarce, must meet various demands and have appropriate traffic speed limits. Importance is therefore attached to enhancing what is called the integral quality of urban spaces with consensus-based planning of new public squares and streets which take into consideration as many demands on usage as possible.

● 17 The majority of Zurich residents are satisfied with city activities to design the cityscape and public spaces. The evaluation of the representative survey of the residents, conducted every other year, shows a very balanced picture. When selected construction projects involving new buildings or renovations of public squares or street sections are completed, in each case detailed surveys are conducted as regards quality and usage. In 2012, this affected Brupbacherplatz on Weststrasse, the newly designed public transport hub at the Stettbach railway station as a result of the Glatttalbahn rail line, and the redesigned Seefeldstrasse. A majority of pedestrians expressed a high level of satisfaction with all three projects. At Seefeldstrasse, this is true for more than 90 % of the pedestrians

17 Activities by the city to improve the quality of the cityscape



Evaluation by residents of measures to design the cityscape and public spaces

too little just right //// too much

In the last ten years, it has been possible to slightly improve satisfaction with the activities by the city to design the cityscape and public spaces to enhance the quality of urban spaces.





Above, Brupbacherplatz before the conversion.

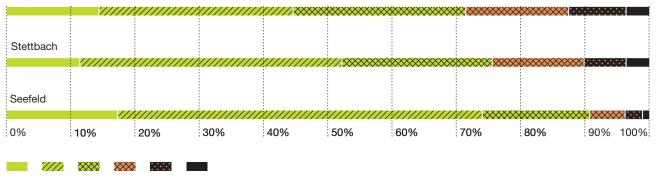
Below, the newly designed and bustling square.

urban spaces. Prior to the opening of the Western Bypass, Weststrasse was part of the transit artery and was one of the most heavily travelled streets in the city. After the opening of the Üetlibergtunnel, it was possible for Seebahnstrasse to absorb the remaining traffic in the opposing direction, and as part of supplementary measures Weststrasse was rezoned into a neighbourhood street. One result was Brupbacherplatz, which was created in 2012, and which is surrounded by block perimeter construction and now has the form of a protected neighbourhood square. Asked spontaneously, pedestrians enjoy the trees and benches as well as the overall design of the square. They are pleased with the low volume of traffic plus the peace and quiet. Overall, only a few people expressed any negative thoughts. They criticised among other things the (still) too small trees, the messiness and lack of cleanliness, the paving and how barren the square seems. A deeper investigation showed that the physical qualities of the square are presently generally perceived as austere. The square is described as rather sterile. However, everyone admits that this new square has enormous potential for development as regards its design and atmos-



6 very satisfied

phere.



A majority of pedestrians expressed a high level of satisfaction with the newly designed public squares and street sections.

1 totally dissatisfied

Further measures to improve the quality of urban spaces are in the advanced planning stages or are already being implemented. The redesign of Sechseläutenplatz was started in 2012, and it is planned for completion in 2014. A redesign and upgrade are also planned for the public squares and connection paths around the Oerlikon railway station; these include the new Max-Frisch-Platz, the square on the south side of the railway station and the neighbourhood connection on the east side. The plan is to make Münsterhof car-free in 2014. It will then be available to the residents for everyday use, and it can also be used for events and public markets on a temporary basis.

30

PLAN OF ACTION

What do we plan for the future?

The "Stadtverkehr 2025" programme includes a plan of action which sets specific priorities as regards the numerous urban measures. It contains selected key measures which make a large contribution to achieving programme goals. The measures are anchored in other urban plans such as in the Bicycle Master Plan and in the VBZ (Zurich Public Transport) network development strategy. They are further developed by the city with high priority and agreed with the involved decision-makers. In addition, financing by the city, canton and federal government must be ensured. The plan of action will be expanded in the coming years as a type of rolling plan. The current plan of action consists of 21 effective measures, which cover all goals within the entire city limits.



VBZ network development strategy and trolley bus strategy

Handle future demand for transport (an additional 60 million passengers by 2025), develop neighbourhoods, make them more attractive and reduce emissions.



City centre traffic concept and upgrading of urban areas in neighbourhood centres

Make public spaces more attractive for pedestrian traffic and implement improvements for bicycle traffic.



Bicycle Master Plan

Increase bicycle usage thanks to a continuous, safe network of bicycle paths. Training and increase awareness of traffic participants.

Plan of Action "Stadtverkehr 2025"



Mobility consulting and education

Reduction of automobile trips and increase in the number of households without cars through advice and education.



Reducing street noise

Protection of several thousand residents by means of an above-ground park and reducing the speed limit on numerous street sections. Elimination of dividing effects and improvement in the quality of areas where people spend time.

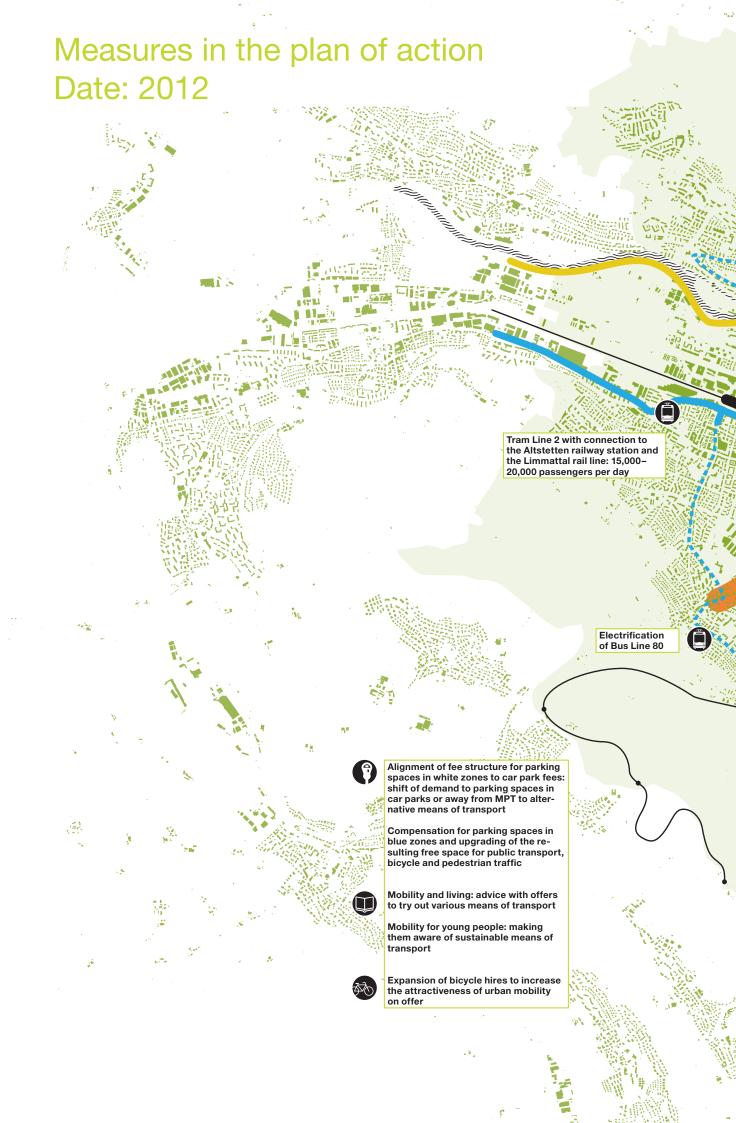


Parking area planning and management

Reduction in the number of automobile trips plus the use of street surfaces which are freed up for other needs and upgrading of public spaces.

"Stadtverkehr 2025" plan of action (detailed information about the measures in a separate annex)

		POSITIVE	CONTRIBU	ПО	N TO T	HE GOALS				
		Improve a iveness of PT	vailability and		ract- cycle	Do not increase MPT capacity	Imple- ment the 2000 Watt So- ciety in mobility	Protect residents	Increase the quality of public spaces	Increase the moda split of PT, ped- estrian and bicycle traffic
	VBZ network devel- opment strategy and trolley bus strategy									
)	City centre traffic con- cept and upgrading of urban areas in neigh- bourhood centres									
	Bicycle Master Plan									
)	Parking area planning and management									
	Reducing street noise									
)	Mobility consulting and education									
		COST ES		•••••	NOTE	s				
)	VBZ network devel- opment strategy and trolley bus strategy	Approximately CHF 600 million		Total investment for the Affoltern tram, the tram connection at Hardbrücke including access to the metropolitan rail station, Tram Line 2 to Schlieren and electrification of Bus Lines 69 and 80.						
	City centre traffic con- cept and upgrading of urban areas in neigh- bourhood centres	CHF 45 million			Total costs for upgrading the neighbourhood centres in Albisrieden and Morgental, redesign of the Riviera area and upgrading of the pedestrian zone at Sihlstrasse/Bahnhofstrasse.					
	Bicycle Master Plan	ı			Sum of additional infrastructure costs according to the Bicycle Master Plan. Not included are costs for bicycle hires and bicycle stations at Zurich Main Station.					
)	Parking area planning and management			The financial implications of realising the measures for parking area planning and management have not yet been determined. As regards the fee increase for parking spaces in white zones, the additional income from parking fees must be contrasted with the additional expenses for implementation, management and controls. Reducing the number of parking spaces in blue zones would lead to a reduction in revenues.						
	Reducing street noise	CHF 300 million			Total costs for an above-ground park (roadway enclosure at Schwamendingen) plus implementation of 39 30-kmh sections on communal streets.					
)	Mobility consulting and education	1 1			Annual costs for the "Mobility and living" and "Mobility for young people" programmes.					





CONCLUSION AND OUTLOOK

The next steps

Successes achieved by urban traffic policy and new challenges facing it

Traffic policy in densely settled and lively city areas always involves balancing various interests and requirements. The goals of the City of Zurich as regards traffic policy have, for roughly two decades, been focussed on ensuring accessibility and in doing so promoting PT, pedestrian and bicycle traffic along with no further increases in capacity for MPT. The measures taken frequently make contributions to improving the quality of life and time spent there as key aspects to making the city attractive. These also include measures for minimising current and potential future noise and particulate pollution as well as increasing traffic safety. The measures taken as part of traffic policy have contributed to maintaining accessibility and the flow of traffic in the city, and they have also had a marked impact on the composition of means of transport (modal split): between 2005 and 2010, according to the micro census, the percentage of MPT within the city has dropped by six percentage points, while in the same timeframe the percentage of PT has risen by five points and the percentage of pedestrian and bicycle traffic by one point. It was possible to achieve a clear reduction in transit traffic with the opening of the Western Bypass and the associated supplementary measures in the City of Zurich. When it starts operating in 2014, the cross-city rail line will further increase the percentage of PT.

Despite these successes, there remain numerous challenges as regards traffic policy. Today, some 130,000 residents still face excessive noise pollution. The 2000 Watt Society remains an ambitious long-term goal. The number of residents and workplaces is growing. Associated with this is an increase in demand for transport and in requirements on viable future traffic solutions, on the quality of public spaces and on the quality of life for the residents. The measures in the plan of action are targeted to meet these challenges.

Challenging implementation process

The "Stadtverkehr 2025" programme has been launched, and the high-priority measures have been formalised with the plan of action. The plan of action has rolling planning, clear priorities and explicit controls and thus provides the City Council with an opportunity to accelerate the implementation of the traffic policy goals as required. Thus, a first key interim goal has been reached.

The goals formulated in the "Stadtverkehr 2025" programme and the plan of action are not only extremely ambitious but also depend on a large number of factors which can to some degree be controlled by the city. The realisation of many projects requires close collaboration between the canton and the city. Only by working together as regards public policy and finances will it be possible to reach the goals. This applies to the large PT expansions of trams and buses just as much as for the redesign of individual street sections to promote pedestrian and bicycle traffic. In the City of Zurich, some of the loans in question have yet to be approved, and the individual projects could be delayed due to legal appeals. Major efforts are needed at the political level and also in the city administration to implement the measures in the established timeframe. In addition, external factors such as economic developments or energy prices could have a significant impact on how things develop. With the rolling planning, though, the implementation can be reviewed periodically, and priorities can be adapted as needed. Even so, particular attention must be paid to implementing the plan of action to the fullest extent possible because only the interactions among the various measures will achieve the intended effect.

Ambitious transitional provision

The measures in the plan of action, taken together, will lead to achieving all the programme goals. The transitional provision established in the Municipal Code, however, remains an ambitious goal. With consistent implementation of the measures adopted in the targeted timeframe, a further reduction of the percentage due to MPT (modal split) can be achieved. This can happen only if overall growth in traffic – triggered among other things by an increase in population and the growing number of workplaces – can be absorbed by PT, pedestrian and bicycle traffic and if at the same time the number of MPT trips drops. With the "Stadtverkehr 2025" programme it will be possible to achieve marked improvements; the quantitative transitional goal according to Article 124 of the Municipal Code, though, can be achieved only with more extensive, drastic measures.

Advancing the plan of action

The plan of action will now be advanced by identifying and examining additional packages of measures which will lead to the achievement of goals. For example, it will be clarified how a further reduction of transit traffic in the city can be implemented and thus increase the protection of residents from the negative effects of traffic. Further, concepts to improve access to railway stations and to stabilise the timetable and thus accelerate tram and bus traffic are being worked out. In addition, the potential and impact of mobility pricing will also be investigated.

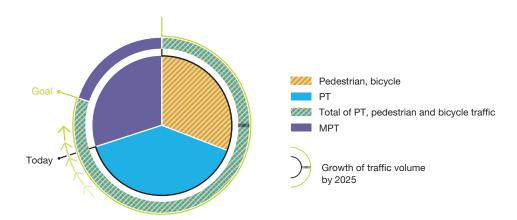
For a successful implementation of the measures and to achieve the intended effect of the traffic policy measures of the City of Zurich, dialogue with neighbouring municipalities, the canton and the federal government as well as raising awareness of those who are travelling are all of great importance. In future, the plan is to align traffic policy measures more strongly across city boundaries and with each other. Meetings with various political figures are being sought out as regards a common traffic policy and the implementation of measures. Similar to the "Future of urban mobility" project, further dialogue with representatives from the business world and associations will be conducted in a suitable format.

In autumn 2013, a meeting of an advisory board with experts from the traffic, urban development and city planning

sectors will be convened. This will be able to introduce further innovative suggestions and enhance the "Stadtverkehr 2025" programme with future-oriented ideas and methods in a way consistent with the rolling planning. As part of a suitable participative process, city residents will be invited to voice their concerns and offer suggestions.

Actively involve travellers

City residents, commuters and commercial interests in the city take on a key role as part of the "Stadtverkehr 2025" programme. All those who move about in the City of Zurich make regular decisions about when, how far and how frequently they travel, which routes they take and at which times of day they travel. Thus, providing information to travellers and building awareness among them about their travel behaviour and any resulting individual contribution which leads to the success of the "Stadtverkehr 2025" programme are of paramount importance in achieving the ambitious goals.



With the consistent implementation of the measures in the "Stadtverkehr 2025" programme, the percentage of PT, pedestrian and bicycle traffic as it relates to overall traffic can be further increased. The provision established in the Municipal Code which provides for an increase of 10 percentage points in ten years, however, remains an ambitious goal.

GLOSSARY/ABBREVIATIONS

TERM	EXPLANATION
2000 Watt Society	see www.stadt-zuerich.ch/2000-Watt-Gesellschaft.
Metropolitan area programme	The metropolitan area programme is a planning instrument which enables the coordination of cross-sector topics within one metropolitan area. It is based on the horizontal cooperation (between partners within the metropolitan area) and vertical cooperation (federal government, cantonal and metropolitan levels). It is intended to ensure the coordination and implementation of projects in metropolitan areas.
Meeting area	With a meeting area, the space allocated to traffic in residential and commercial zones is now made available to pedestrians over the long term for various uses (walking, strolling, games and sports). Pedestrians have right of way over vehicular traffic, but they may not unnecessarily block vehicles. The speed limit is 20 kmh.
City of Zurich survey of residents	Since 1999, the City of Zurich has been conducting a survey of its residents every other year regarding residential and living quality in the city.
Population forecast for the City of Zurich	The residential population of the City of Zurich will, according to the latest projected calculations by the City of Zurich Statistics Office, continue to grow during the next 15 years in particular as a result of the brisk rate of construction. Based on approximately 385,000 people in 2010, the scenarios considered for 2025 have a range of from 426,300 to 468,200 people.
CO₂ eq	${ m CO_2}$ equivalent states how much of a fixed amount of a greenhouse gas contributes to the greenhouse gas effect compared to carbon dioxide.
AADT	Annual average daily traffic (24 hours) corresponds to the annual average and is calculated by taking the annual total of vehicles at a specific street cross section and dividing it by 365.
Transit traffic	Non-residential traffic which neither originates nor has its destination in the reference area.
AWT	Average weekday traffic is made up of the average volume of 24-hour traffic for all weekdays (Monday-Friday) without bank holidays.
Emissions	Release of disruptive factors such as noise or pollutants into the environment
MC	City of Zurich Municipal Code
Overall traffic concept	Instrument for coordinating various means of transport
ALV	Ambient limit value
Ambient effects	Impact of disruptive factors such as noise or physical pollutants coming from the surroundings
NAO	Federal Noise Abatement Ordinance

Bicycle Master Plan	See www.stadt-zuerich.ch/stadtverkehr2025.
"Mobility and Transport" micro census	The federal government's statistics programme prescribes that a survey of travel behaviour of the Swiss residential population be conducted every five years – a "Mobility and Transport" micro census. In this, a representative sample of households and individuals is contacted through computer-supported telephone interviews to get their views about various aspects of travel behaviour.
МРТ	Motorised private transport includes automobiles, lorries, delivery vehicles and motorbikes.
Modal split	Distribution of traffic volume by the individual means of transport: parameter about the percentage of each means of transport relative to overall traffic.
NO ₂	Nitrogen dioxide
PT	Public transport
Primary energy consumption	The 2000 Watt methodology defines primary energy as the total energy which is contained in the original energy carrier plus the energy which must be expended to extract, process and use it. In this, the primary energy requirement only takes into account the energy used directly for energy-related purposes, in other words the fuel such as diesel, petrol or electricity used for traffic, but not the energy required for manufacturing vehicles such as automobiles, buses, trams and bicycles nor the grey energy which is included in the traffic infrastructure.
Urban Traffic Initiative	Popular initiative "To promote public transport, pedestrian and bicycle traffic in the City of Zurich". This has been submitted in a number of Swiss cities in various forms, and thus it is known in the abbreviated form as the "Urban Traffic Initiative". The voters of the City of Zurich approved the popular initiative on 4 September 2011.
Strategies for Zurich 2025	See www.stadt-zuerich.ch.
Transit traffic	Traffic travelling through Zurich which originates and has its destination outside the City of Zurich.
Greenhouse gas	According to the 2000 Watt methodology, the greenhouse gas balance of traffic in the City of Zurich is calculated from the end energy consumed by traffic. This also takes into account those greenhouse gas emissions which are caused by the manufacture, transport and processing of the energy carriers.
ЕРА	Federal Environmental Protection Act
VBZ	Zurich Public Transport
Bicycle station	Weather-protected parking area for bicycles at railway stations, often with additional services (surveillance, repairs, etc.).
Destination/originating traffic	Trips whose destination and/or place where they originate are located within the area under study.
ZVV	Zurich Transport Network



