

Münster, Germany

Cycling and Public Transport: The way forward

Münster, Germany is known as the German Capital for bicycling. The city has always been inspired by cycling and has made great efforts to improve its bicycling and public transportation facilities as a means to combat automobile dependence. The efforts now continue to meet the challenge of achieving a more than 50% modal share for bicycling in the next 10-20 years.

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Introduction

Münster is a city name that is synonymous with bicycling in Germany. With approximately 296,000 inhabitants and a cycling modal share of nearly 38%, Münster is often referred to as the bicycle capital of Germany. The modal split for residents for the year 2011 showed a high proportion of nearly 64% of trips attributed to the Environmental Network of pedestrian, bicycle, and public transit. Urban development has been promoted with the objectives of saving resources and ensuring environmental compatibility for decades to come. The evolved city structure – a compact and lively center, attractive district centers, and a virtually ideal green system – ultimately provides the ideal preconditions to this end, and demonstrates a firm commitment to the future. There are also many universities in Münster with outstanding international reputations, accommodating approximately 50,000 students. The city also hosts several headquarters of innovative centers in the fields of research and technology transfer.

The City of Münster takes an integrated and very citizen-oriented approach to urban development. In terms of mobility, this means that it makes efforts to accommodate a variety of modes of transport, with a structure and urban design that shape and impact the transport patterns. In contrast to Münster's compact urban design, large, sprawled cities have longer routes to consider when developing new and improved transport options. Providing for cycling and public transport in large cities is cumbersome and costly when compared to their more compact counterparts. Since it is relatively dense, Münster is therefore able to fulfill two environmental objectives: reducing emissions and protecting open countryside.

On a typical workday, approximately 1.43 million journeys take place within the city's transport network. Residents account for around 1.06 million of these trips, with visitors from out of town accounting for the approximately remaining 371,000. The 2007 modal split was 10.4% public transport, 15.6% pedestrians, 36.3% car, and the highest, 37.6% for bicycles. The driving goal is to reach a 50% modal share for cycling within the next 10 to 20 years.



Population

296,500 inhabitants (2011)

Land area

302,960 km²

Municipal Budget

959,463,360 Euro (2013)



Bicycles the symbol of Münster, Germany

Role of Cycling

Cycling can help reduce pollution and traffic congestion. Bicycles have low energy consumption and bring health to their users. They can also provide quick, affordable access to parts of cities that are more difficult to reach by public transportation, or large vehicles. In many cases, trips made by car are short enough to be substituted by bicycle. Making cycling and walking easy makes a city people-friendly rather than car-friendly.

Bicycle traffic is the embodiment of Münster's transport system. Bicycle traffic is a tradition both in the city and the Münsterland region. Since the 1950s, Münster has promoted cycling by means of planning and consistent implementation. And this strategy has always been based on a sound overall concept, rather than single measures: the success of an urban cycling concept depends largely on the design of an integrated system.

Bicycle traffic in Münster is divided into a core network that runs primarily in conjunction with the main roads (for the most part on dedicated cycling lanes), and an ancillary network characterized by routes removed from the roads, either along agricultural paths or as dedicated cycling lanes.

Attractive walking routes, together with open and inviting building facades that are designed at a human-scale height make the urban space of Münster feel more accessible for pedestrians and cyclists. Better signs and way-finding for cyclists and pedestrians also make it a more desirable place to pass through or access by these modes. These measures also serve to make public transport more accessible, as it allows non-motorized transport users to navigate their way to the nearest bus stop.



The underground bike park (3500 bikes) at the central station in Münster, largest bicycle parking facility in Germany

Bike parking facilities

Germany's largest bike parking station is situated close to Münster's central train station. It provides 3,300 places. In addition, it offers every imaginable service: a repair shop, a bike washing bay and rental outlet, lockers, and much more. Because of its great success (all the places are used), a second one will be built at the opposite end of the railway station. This will further encourage travelers to cycle to and from public transport.

Circular promenade

The city has a primary network for cyclists in the form a circular promenade encircling the old town, which helps

distribute bicycle traffic and which serves as a connecting link between the bicycle tracks along the main artery roads and the unobstructed thoroughfare through the old town. Additionally, all residential areas are 30 km/hr zones, thus promoting safety for cyclists when they share the streets with cars, even in the areas when there are the separated priority lanes for bikes. Sign posting for bicycle traffic along 245km of the network adds to the ease of use and links the network to

The EcoMobility Alliance

When it comes to urban mobility, every city has domains of accomplishments and fields where it faces challenges. Often, these areas of expertise differ from city to city, as do the challenges that they face. Thus, the sharing of knowledge and expertise among advanced cities can bring to light innovative ideas for all involved. This is the concept of the EcoMobility Alliance, launched by ICLEI and Changwon City in South Korea (see www.ecomobility.org). A network of ambitious cities led by innovators and visionaries, the Alliance is supported by experts and businesses keen to become international pioneers in eco-mobility.

Eco-mobility is travel through integrated, socially inclusive, environmentally friendly, and healthy transport options, including and combining walking, cycling, wheeling, and public transport. It improves citizens' quality of life, increases travel choices, and promotes social cohesion. Yet for eco-mobility to really make a difference, delivering seamless transport is crucial. If a city can offer a coherent, sustainable seamless transport system, the quality of life there will improve immensely.

The EcoMobility Alliance has the unique feature of pursuing a holistic approach through which cities combine their expertise in certain domains of eco-mobility with other Alliance Cities, thus strengthening their skills and advancing in other domains. With self-set targets and numerous opportunities to interact and collaborate, the Alliance Cities constantly share information and are advised by world-renowned expert entities. The cities reflect on their progress at regular intervals and decide on their future plans. These peer-to-peer exchanges enhance the progress and insights of each city in terms of their own goals for improving mobility and road safety.

neighborhoods and public transport.

To further assist with way-finding, a bicycle city map is available in shops throughout the city.

Infrastructure – upgrading & maintenance

Within the realm of cycling, Münster is currently focusing especially on the upgrade and maintenance of bicycle traffic infrastructure, road safety, and information services. This includes good provisions for cycling infrastructure at early stages of development in new residential areas. Within the context of the EcoMobility Alliance (see box), Münster aims to increase cycling in the city by up to 50% and gain perspectives on implementing and increasing other modes of eco-mobility. Identifying and taking advantage of synergies between eco-mobile modes such as bicycling and public transport is one approach. This will not only encourage regional travelers who must cover distances that exceed an easy cycling range to bike to a bus stop and take the bus to their destination (or vice versa), but will also increase the overall convenience of each mode independently.



A circular bike path encircles the city providing a safe and attractive route.

Cycling & public transport in Münster

Public transport is the core of a transport system in any city. Public transport that is arranged in networks is more efficient than a single corridor arrangement. Ideally, pedestrian and bicycle networks should feed into the public transport system, forming a synchronized intermodal whole. Münster exemplifies this ideal through local and regional bus transport complementing its ever-growing network of cycle lanes.

Local public bus transport in Münster is based on a city bus system, and a regional bus system (called ÖPNV). The former consists of a total of 19 lines running at approximately 20-minute intervals, or less than 10 minutes on the major traffic arteries during peak hours, and covers the entire city area, including the more removed outer-lying districts, connecting all of those areas with the city center. The regional bus system covers both the rail line connections and the transport links with the surrounding region. Also noteworthy, are the express bus lines that provide high-quality transport in areas further removed from rail line connections.

Münster prioritizes very early implantation of cycling provisions and public transport in new residential areas. Having good cycling and public transport infrastructure early on means that residents are provided with viable alternatives to the car right from the start. Consequently, they can adopt sustainable transport behaviors as soon as they move in, rather than having to change existing habits, which is usually much more difficult.

In order to persuade commuters in Münster to consider public transport, the so-called 'Public transport promotion programme' was set up and developed by the city council in 1993. This includes improving the speed and reliability of buses through mechanisms such as bus priority lanes, and measures to increase passenger comfort. Furthermore, bike & ride and park & ride facilities have been implemented at all rail stations and key bus stops.



Priority is given to the bicycles in Münster.

Citizens in the loop

The city of Münster makes a conscious effort to inform citizens and visitors about choosing an environmentally and climate-friendly mode of transport. For this purpose, the 'Mobilé' mobility center was set up together with the communal transportation company, Stadtwerke Münster. Here customers are provided with information on the best travel options, as well as on potential alternatives. The mobility services also include providing information on road and rail traffic in the region, reduced tariffs for commuters and students, buses and trains that can all be used within the

integrated public transport system, and traffic education, and thus create greater awareness of the environmentally friendly transport choices available at a very early stage.

Lessons: By foot, on wheels

Cities aspiring to be more like Münster in terms of transport would be advised to start by accommodating both cyclists and pedestrians. In order to do so, they need to complete the public space network by linking up pedestrian routes, and by making bike lanes continuous and coherent. Reformatting existing roads to accommodate bike lanes is a crucial first step for increasing bicycle ridership. In many cases, multi-lane roads can spare a lane to be separated for cyclists, or street parking can be reduced to accommodate one. Bike lanes that are physically separated from car traffic are often safer, especially on streets with a thoroughfare speed of



over 30km/hr. For rapid planning purposes, the lanes can be initially indicated by street signs and painted road markings; and the physical barrier to cars swerving into the lane can be implemented afterwards to improve quality.

Furthermore, beyond appropriate lanes and roads, installing proper bike parking facilities at various destinations is a quick and effective way of encouraging uptake of cycling. Such techniques do not require overhauling existing transport infrastructure, but rather merely adapting it to be more accommodating of sustainable modes.

When cyclists are prioritized in a city, and when this approach is combined with an effective public transport system, cycling and public transport become more viable options than driving. Cycling becomes the optimal choice for short trips, as does combining cycling with a bus ride for longer journeys.

In Münster every one use a bike in front of the historic town hall, even the lord mayor Markus Lewe himself.



Münster sets an example and proves that any city with right transport priorities in place can achieve great results

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Münster in the EcoMobility Alliance

Münster was among the first cities to participate in the EcoMobility Alliance, helping pioneer the project of knowledge sharing among advanced cities. Münster hosted the second EcoMobility Alliance city workshop in 2013, during which cities and expert partners gathered in Münster to focus on how the city can further its efforts to be bicycle friendly and harmonize its ambitious cycling goals with other forms of EcoMobility.

The City of Münster shared the city's methods of bicycle traffic promotion and explained the city's process of planning of the bike path system, as well as future ambitions for incorporating e-bicycles. Participants discussed traffic safety solutions, with special emphasis on bicycle safety, and explored how bicycle use can help increase public transport ridership at both city and regional levels.

Münster's case example and the analyses of guest experts offered practical as well as visual tools for anyone who wants to know and understand the kind of infrastructure and planning that needs to be put in place to create a bicycle-friendly city.

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