



Cycling street

This ReVeAL building block fact sheet is one of a series of 33, each describing one Urban Vehicle Access Regulation (UVAR) building block and providing an example of its use in a city. The ReVeAL building blocks can be combined with one another to create a structured UVAR package for a city. Try out the ReVeAL online tool, www.AccessRegulationsForYourCity.eu, to receive suggestions of appropriate UVAR building blocks for your city as well as guidance in their implementation.

The EU-funded research and innovation project, CIVITAS ReVeAL, aims to add Urban Vehicle Access Regulations and associated policies and technologies to the standard range of urban mobility measures in cities across Europe. The project mission is to enable cities to optimise urban space and transport networks use to improve urban accessibility, sustainability, and liveability.

For more information, please visit: www.civitas-reveal.eu.

Spatial Interventions

Spatial interventions are where the road layout has been altered to favor more sustainable mobility and prevent vehicles entering. Examples of these are removing road and parking space taken for vehicles and using the space for sustainable mobility or amenities (bus lanes, logistics hubs, parklets, restaurants and more)

Speed reduction

Traffic filter:

- Recirculation of traffic
- Road block
- Capacity restraint

Reallocating parking space:

- Parklet
- Drop-off zone shared mobility
- Logistics bay (mini-hub)
- Kiss & Ride (K&R)

Reallocating road space for pedestrians:

- Widen pavement
- Pedestrian priority street or zone

Reallocating road space for cycling:

- Cycle lane
- Cycling street

Reallocating road space for public transport:

- Bus or tram priority lane

Pricing Aspects

Pricing aspects are when the entry to an area or to the entirety of the city is given a price tag to encourage more sustainable transport. Pricing aspects also include the (differential) levels of penalty fees to encourage (and enforce) compliance.

Road charges / tolls:

- Charge applied to a perimeter or an area (congestion charge)
- Charge applied to specific points
- Distance-based charge
- Time-based charge
- Permit charge
- Charge based on emission standards (pollution charge)

Parking charge:

- Dynamic price (real time)
- Fixed price
- Charge based on emission standards (pollution charge)
- Workplace levy
- From on-street to off-street parking

Regulatory Measures

Regulatory measures are those where there is a legal instrument that states who can and cannot enter an area. They could often also be called "bans" and include Zero Emission Zones, Low Emission Zones, and Limited Traffic Zones.

Regulation by emissions:

- Euro standard
- Zero-emission vehicles

Regulation by vehicle type and dimensions:

- Vehicle type
- Dimensions

Regulation by trip purpose:

- Delivery and logistics
- Through traffic ban

Regulation by permit:

- Permit to travel
- Parking permit
- Planning permit conditions



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Definition of the building block

Road space is converted to a non-segregated street with right of way for cyclists, who are the priority users. Cars are guests and can be forbidden or discouraged to overtake cyclists. Cycling streets are characterised by a custom coloured surface and/or road marking at the entrances of the street.

Timing, phasing, scaling and replication

It is often easier to start with a single or small number of cycle streets and then replicate. Upscaling may be a good option when a first test/smaller implementation proves successful, and other streets also have potential to become cycle streets. A city with existing cycle streets may be able to replicate the measure to create more. The time scale for expansion is context dependent but is often related to a political mandate.

Time windows

Time differentiated access is generally not used.

Enforcement options

- Manual enforcement through visual inspection
- Road sign

Gender and equity

Women are generally more concerned about safety when cycling than men are. Well designed cycle streets should help increase the feeling of safety, meaning more women are likely to cycle. more women are likely to cycle.

Future considerations

In a future with autonomous vehicles, cars could be coded not to overtake cyclists on stretches of cycling streets. In a future with geofencing, it could be possible to set a maximum speed limit for cars on cycling streets, not allowing vehicles to exceed a defined cycling speed.

Further guidance

- How to communicate the scheme
- Enforcement options



Red coating marking an access point to the Mechelen cycling zone. "First the bike, then the car. Cycling zone" (Het Nieuwsblad, 2020)

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Complementary measures

Exemptions

The types of exemptions will be different depending on the scheme type, but some examples are:

- Key exemptions for police, fire department, waste collection, etc.
- User needs exemptions, e.g. for people with disabilities with forced car dependency, taxis, classic car owners, residents, deliveries
- Exemptions for adapted vehicles (e.g., retrofitted or converted electric or hybrid vehicles)
- Limited numbers of purchased exemptions for entry (e.g., per day/month/year) to a specific zone
- Specified maximum amount of kilometre “credits” allocated to individuals or businesses

Increased mobility options

The types of increased mobility options will be different depending on the scheme type, but some examples are:

- Creation of mobility hubs
- Increasing/improving walking or cycling facilities
- Increasing/improving public transport
- Facilitating vehicle hire and/or car sharing
- Providing parking spaces in alternative locations (e.g., Park & Ride)

Consider combining with:

Spatial Interventions

Speed reduction

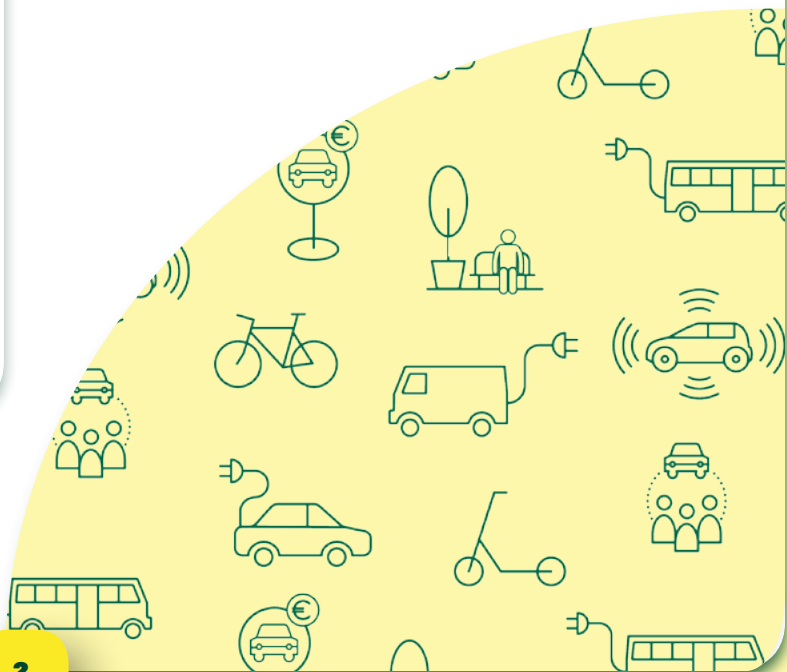
Traffic filter: Capacity restraint

Pricing Aspects

Road charges/tolls:

- Charge applied to a perimeter or an area (congestion charge)
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Parking charges:
From on-street to off-street parking



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*Example: Mechelen, Belgium*Description

The entire city center of Mechelen is a cycle zone, where cyclists have priority and motor vehicle are guests. The area consists of a network of 179 cycling streets, connected to each other, and extending for 30 kilometers. Motor vehicles must stay behind the bikes, and the speed limit is 30km/h (with the exception of emergency vehicles). The access to the cycle zone is marked by gateways with a red road surface and road signs that read "Auto te gast", or "Cars are guests".

Enforcement methods

Design of the road space using raised pavement and different coloured surfaces

Time windows

No time differentiation for access

Phasing and upscaling

- 2019. Introduction of the cycling zone
- 2020. More road signage along the cycling routes

Other building blocks put in placeSpatial Interventions

Speed reduction

Traffic filter: Recirculation of traffic

Complementary measuresIncreased mobility options

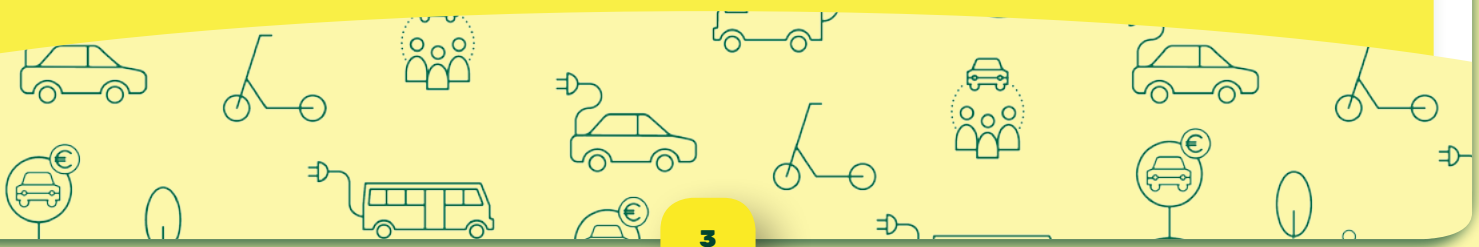
Free shuttle for shopping and errands on Saturday and Sunday, between a car park outside the city centre and the main open market in the city centre.

Shared mobility:

- Bikes and cargo bikes
- E-scooters
- Cars

Financial incentives

Subsidy to local entrepreneurs for the purchase of cargo bikes



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Cyclists on a cycling street in Mechelen city centre. The sign on the road pavement shows a cyclist against a car on the background "Cycling street, cars as guests" (Stad Mechelen, n.d.)

Additional information

From April to June 2022, the municipality ran an experiment of vehicle sharing at the neighbourhood level. Thirty families of the Nekkerspoel district left their own cars home for 60 days, using instead the available options for shared mobility and public transport.

References

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