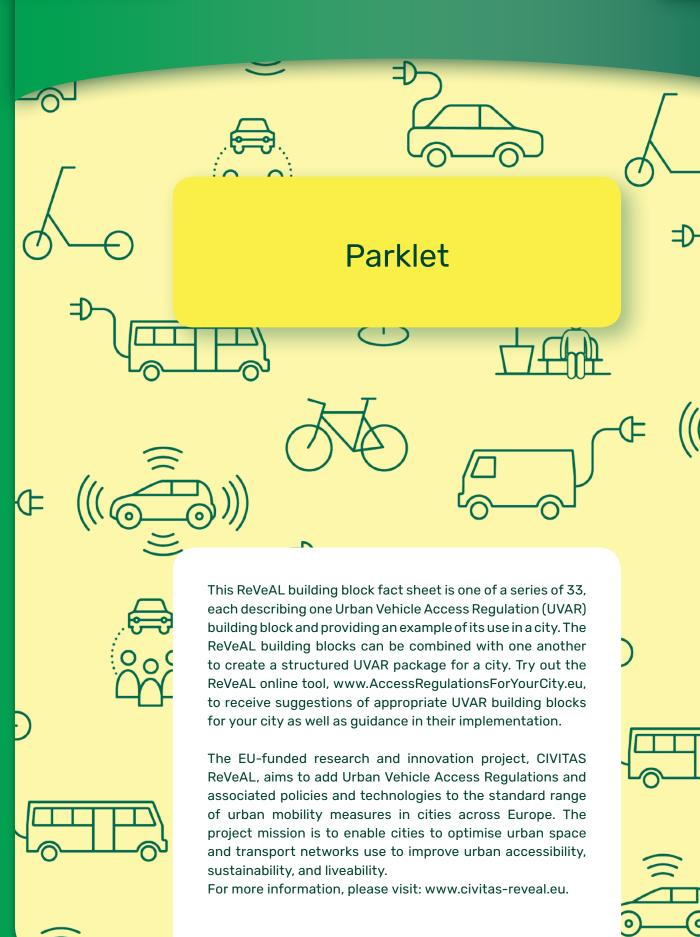


UVAR building blocks **Spatial Interventions** 







## **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:

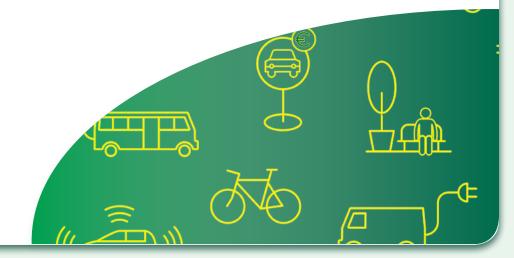
- Vehicle type
- Dimensions

## Regulation by trip purpose:

- Delivery and logistics
- · Through traffic ban

#### Regulation by permit:

- Permit to travel
- Parking permit
- Planning permit conditions





### Definition of the building block

Parking space is converted to a small, public space or green space as a public amenity on or alongside a pavement.

## Timing, phasing, scaling and replication

This building block has no-timing related issues requiring specific attention.

#### Time windows

- · Allowing seasonal vehicle access
- Having no time differentiated vehicle access

#### **Enforcement options**

- Manual enforcement through visual inspection
- · Physical barriers

#### Gender and equity

Parklets are particularly helpful for the elderly if combined with increased seating.

#### **Future considerations**

No specific effects are foreseen for this building block from future technologies.

## Further guidance

How to communicate the scheme

## Complementary measures

### 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**

Reallocating road space for pedestrians:

- Widen pavement
- · Pedestrian priority street or zone

Parklets are often put in place in combination with a range of other spatial interventions.

## **Pricing Aspects**

Parking charge:

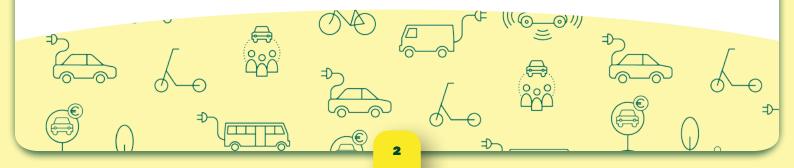
From on-street to off-street parking

**Regulatory Measures** 

Regulation by permit: Permit to travel



A parklet in Oslo (Figg, 2021)





## Example: Car-free liveability programme, Oslo, Norway

## Description

The City of Oslo launched the 'Car-Free Liveability Programme' in 2017, following an initial plan to reallocate street spaces in 2015. The new programme entailed the removal of 760 on-street parking spaces in the city centre, with the exception of spaces for deliveries and parking spaces for people with disabilities. More room has been given to walking, cycling and public amenities, such as playgrounds and green areas. In 2019, the city council made a declaration on further development of the car-free liveability programme.

#### **Enforcement methods**

No information available

#### Time windows

In effect at all times

#### Phasing and upscaling

- 2015. Plan to reallocate street spaces
- 2017. Launch of the Car-Free Liveability Programme
- 2019. Municipality's declaration of interest for the extension of the programme

## Other building blocks put in place

#### **Spatial Interventions**

Traffic filter: Recirculation of traffic

Reallocating parking space: Logistics bay

Reallocating road space for pedestrians:

- Widen pavement
- Pedestrian priority street or zone

Reallocating road space for cyclists: Cycle lane

#### **Pricing Aspects**

#### Road charges/tolls:

- · Distance-based charge
- Time-based charge

#### **Regulatory Measures**

Regulation by emissions: EURO standard

Regulation by vehicle type and dimensions:

- Vehicle type
- Dimensions

#### Regulation by trip purpose:

- Delivery and logistics
- Through traffic ban





Car-free livability programme, Oslo, Norway

## Complementary measures

#### Increased mobility options

Cycling: 48 kilometres of new bicycle lanes

Electric charging: New municipal charging stations for electric cars



A street open to pedestrians. From *Oslo Byliv, Kirkegata*, by Christoffer Krook, in Lundkvist, 2021

#### Additional information

The plans received opposition from business owners and the city trade association, who were afraid that the programme would lead to "a poorer city with less life" but opposition was overcome through their direct involvement in the planning process. As of April 2021, the car-free city programme had achieved overall success. A survey conducted by the municipality of Oslo reported that more than 50 percent of the inhabitants of Oslo see a city centre with less cars positively.

#### References

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