



Bus or tram priority lane

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



Bus or tram priority lane

Definition of the building block

Road space is converted to a lane designated for bus or tram movement, resulting in priority for public transport (therefore ensuring that traffic delays do not impact public transport circulation).

Timing, phasing, scaling and replication

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

Time windows

- Allowing vehicle access at particular times of day
- Allowing vehicle access on given days of the week (e.g., weekends)
- Having no time differentiated vehicle access

Enforcement options

- Cameras with Automated number plate recognition (ANPR)
- Manual enforcement through visual inspection
- Road sign

Gender and equity

Women are significant users of public transport; bus or tram priority lanes should increase the reliability and ease of use of public transport, making it beneficial for women.

Future considerations

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

Further guidance

- Communicating the aim of the scheme
- How to communicate the scheme
- Enforcement options

Consider combining with:

Spatial Interventions

Traffic filter:

- Recirculation of traffic
- Capacity restraint

Reallocating road space for cycling:
Cycle lane

Pricing Aspects

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:

From on-street to off-street parking

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

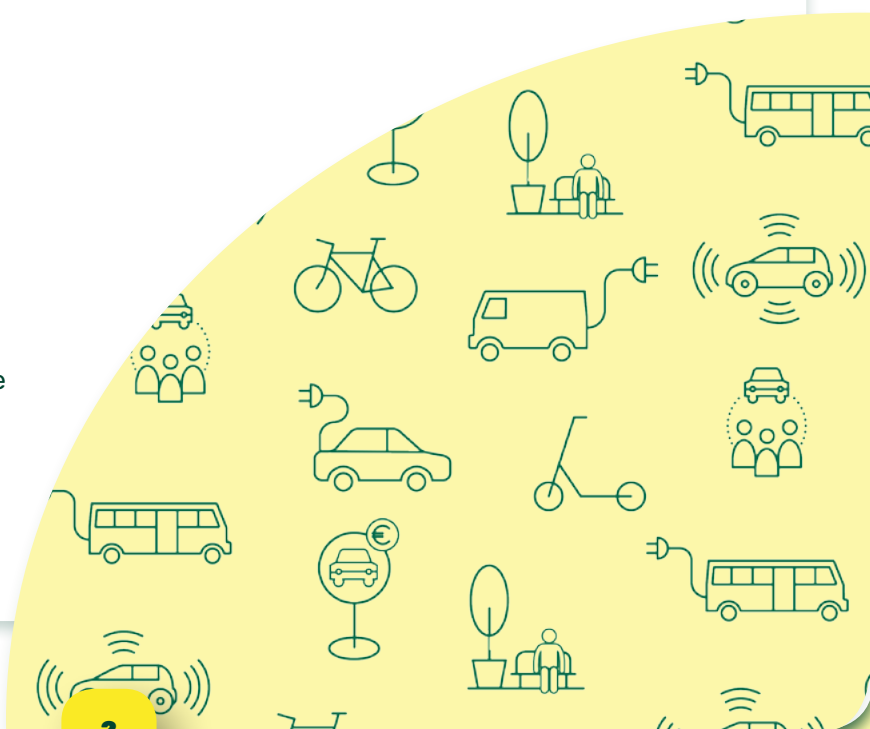
The types of increased mobility options will be different depending on the scheme type, but some examples are:

- 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)

Financial incentives

These will differ depending on the planned UVAR measures, but some options include:

- Financial incentives for fleet renewal, e.g., for the purchase, renting or leasing of greener vehicles (including tax exemption)
- Membership or vouchers for sustainable mobility options (e.g., public transport and shared mobility services) such as discount cards, free rides or annual passes for public transport or consolidation centres
- Monetary incentives for cycling trips (e.g., for bike-to-work) or for (e-)cycle or (e-)cargobike purchases
- Grants towards retrofits (e.g., diesel particulate filters, new engine or fuel conversion)
- Compensation for scrapping an old vehicle (either financial or through a voucher), often differentiated by emission standards, vehicle type or owner income.



Bus or tram priority lane

Example: Separated bus lane (Couloir bus protégé), Paris, France

Description

The city of Paris has a large comprehensive bus lane network, with lanes usually running parallel to general traffic. There are 34 km of bus lanes separated by main traffic through raised kerb, while another 29 km are indicated by painted border. They are in most parts accessible to cyclists, but motorcyclists are not allowed to enter. Delivery vehicles can park on the kerbside inside marked spots for loading and unloading. Residents can cross the bus lanes to access their properties.

Enforcement methods

- Manual enforcement
- Bus-based cameras
- Stationary cameras

Time windows

In effect at all times

Phasing and upscaling

- 1964. First separated bus lane, for 1 km
- 1970s. Exponential growth in bus lanes
- 2008. 8.5 km of new protected bus lanes, separated from general traffic by raised kerbs
- 2019. 1.5 km new protected bus lanes

Other building blocks put in place

Spatial Interventions

Reallocating road space for pedestrians:

- Widen pavement
- Pedestrian priority street or zone

Reallocating road space for cyclists:

Cycle lane

Pricing Aspects

Parking charge: Fixed price

Regulatory Measures

Regulation by emissions:

- EURO standard
- Zero-emission vehicles

Regulation by vehicle type and dimensions:

- Vehicle type
- Dimensions

Bus or tram priority lane

Separated bus lane, Paris, France

Complementary measures

Exemptions

- Emergency vehicles
- Police
- Cyclists (in most cases)
- Residents reaching their homes
- Deliveries for loading and unloading in marked delivery parking spots



A separated bus lane in Rue de Rivoli, Paris (Transport Paris, 2020)

Additional information

The choice of the City of Paris of installing separated bus lanes during the summer holidays in 2001 generated some critics. After that, the planning commission started to be more inclusive of stakeholders. From 2020 the central Rue de Rivoli has a dedicated cycle lane and a separated bus lane. There are contrasting opinions on the success of the measure.

References

- Paris Data. (n.d.). *Réseau des itinéraires cyclable*. Retrieved May 27, 2022, from <https://opendata.paris.fr/explore/dataset/reseau-cyclable>
- Sadler Consultants Europe GmbH (2022). *Paris*. <https://urbanaccess-regulations.eu/countries-mainmenu-147/france/paris>

Transport Paris. (2020, March 18). *La rue de Rivoli sans voitures (ou presque)*. <http://transportparis.canalblog.com/archives/2020/05/18/38301174.html>

Ville de Paris. (2022, January 3). *Le Plan vélo de Paris (2015-2020)*. <https://www.paris.fr/pages/paris-a-velo-225>

Ville de Paris. (2022, January 31). *The entire rue de Rivoli reserved for pedestrians and cyclists*. <https://www.paris.fr/pages/la-rue-de-rivoli-reservee-aux-pietons-et-aux-velos-7792>

Ville de Paris. (2021, November). *Mobility: Paris is accelerating to better regulate the public space*. <https://www.paris.fr/pages/mobilites-paris-accelere-pour-mieux-reguler-l-espace-public-19830>

Weinstein Agrawal, A., Goldman, T., & Hannaford, N. (2012). *Shared-Use Bus Priority Lanes on City Streets: Case Studies in Design and Management*. In Mineta Transport Institute. https://nacto.org/docs/usdg/shared_use_bus_priority_lanes_on_city_streets_agrawal.pdf

