



Why Urban Vehicle Access Regulations?

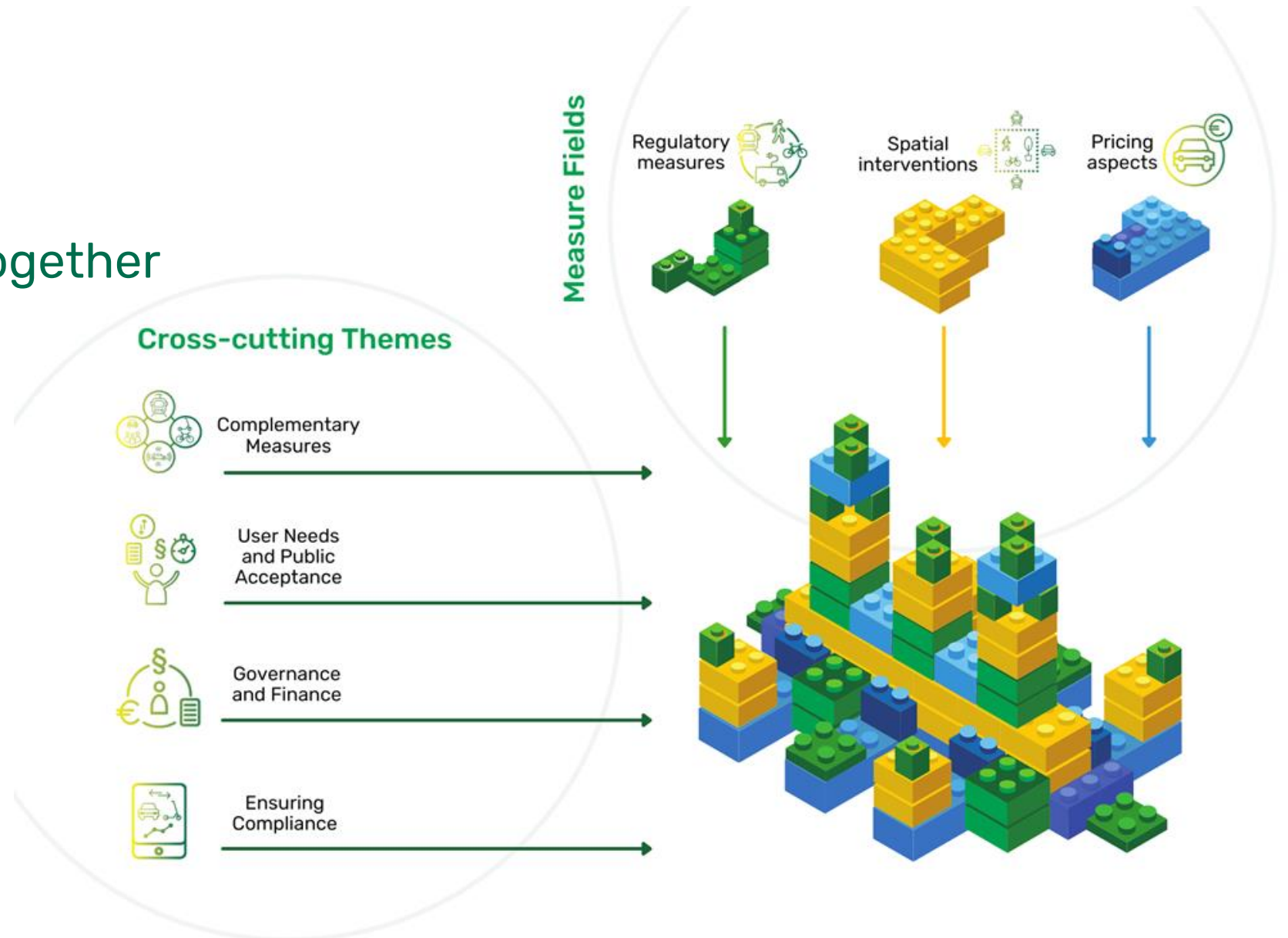
- Reduce urban congestion
- Reduce emissions
- Increase safety
- Increase liveability and attractiveness of the urban area
- Because carrots aren't enough



ReVeAL

Why ReVeAL?

- Put all the pieces together
- Guide the process
- Because sticks aren't popular



ReVeAL

Spatial Interventions



- Speed reduction
- Traffic filter
- Reallocating parking space
- Reallocating road space for pedestrians, for cycling, for public transport

Pricing Aspects



- Road charges/tolls
- Parking charges

Building block categories

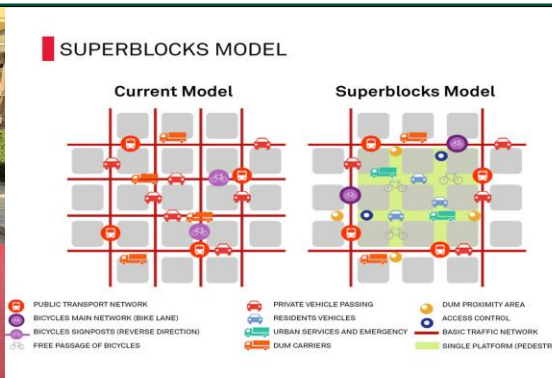
Regulatory Measures



- Regulation by emissions
- Regulation by vehicle type/dimension
- Regulation by trip purpose
- Regulation by permit



Ghent (City of Ghent)



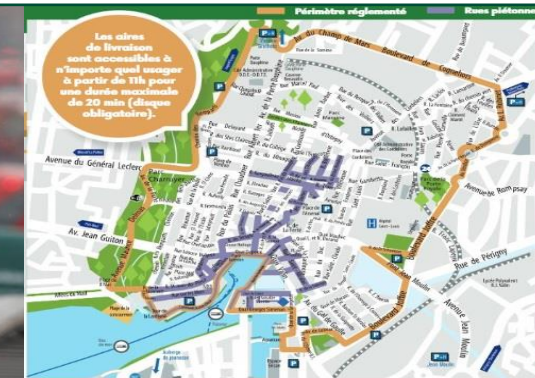
Barcelona (Ajutament de Barcelona)



Milan (ETSC)



London (The Telegraph)



La Rochelle (Ville de La Rochelle)

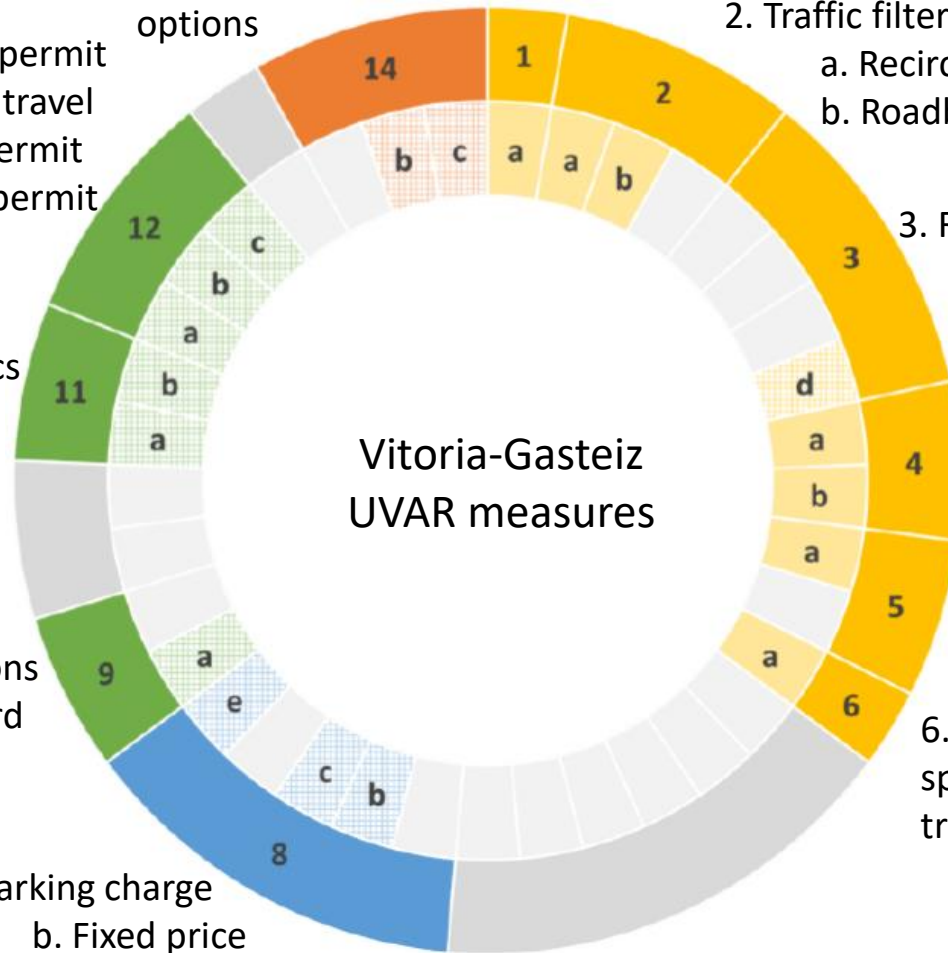


Example: Vitoria-Gasteiz



- 12. Regulation by permit
 - a. Permit to travel
 - b. Parking permit
 - c. Planning permit conditions
- 11. Regulation by trip purpose
 - a. Deliveries and logistics
 - b. Through-traffic ban
- 9. Regulation by emissions
 - a. EURO standard

- 14. Complementary measures
 - b. Exemptions
 - c. Increased mobility options
- 1.a. Speed reduction
- 2. Traffic filter
 - a. Recirculation
 - b. Roadblock



- 8. Parking charge
 - b. Fixed price
 - c. Charge based on emissions standards
 - e. From on-street to off-street parking

- 3. Reallocating parking space
 - d. Kiss and ride
- 4. Reallocating road space for pedestrians
 - a. Widen pavement
 - b. Pedestrian priority street or zone
- 5. Reallocating road space for cycling
 - b. Cycling lane

- 6. Reallocating road space for public transport
 - a. Bus-tram priority lane





Cross-cutting aspects: What every good UVAR needs to succeed





Complementary Measures

Ensure access of people, goods and services, while:

- Maintaining the goals of the UVAR
- Easing compliance
- Facilitating the best adaptation to the new reality
- Minimising equity issues or undesirable impacts

Cross-cutting aspects



ReVeAL



Governance and Finance

Governance

- Who decides what
- Legal framework
- Inclusion in SUMP
- Relevant EU legal aspects

Financing

- Sufficient resources
- Ring-fencing any income for mobility

Cross-cutting aspects



Stakeholder meeting in Helmond



144,96 €/year

**(4400 residents
1185 permits)**

Parking permits in Padua

ReVeAL



**Ensuring
Compliance**

Making people aware of the scheme

- Communication

Ensuring people comply with it

- Enforcement options
- Technology choices
- Permit mechanisms

Cross-cutting aspects



Reallocated street space in London



Congestion charging in London

ReVeAL

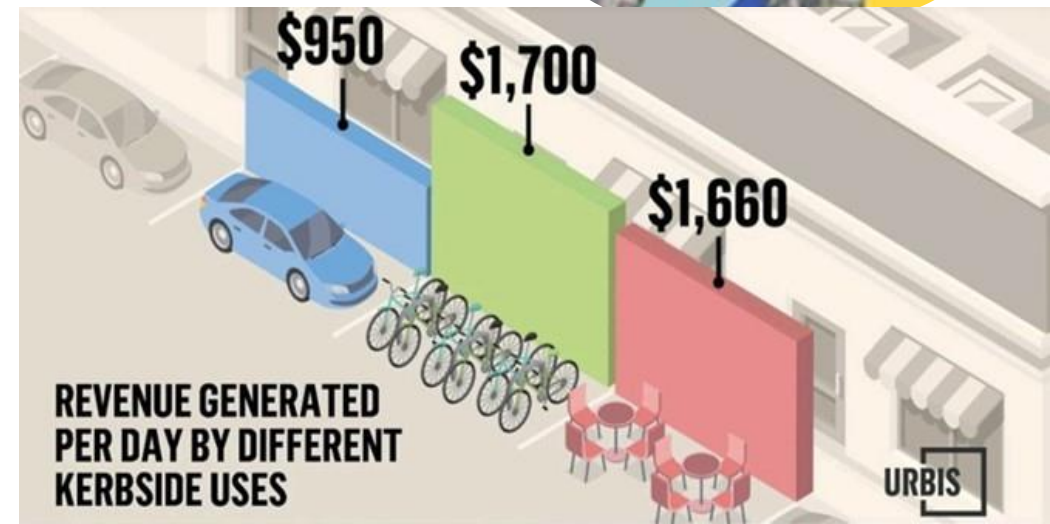


User Needs and Public Acceptance

Why engage?

- Dialogue fosters understanding and a shared commitment
- People cannot comply with an UVAR they are not aware of
- How an UVAR is communicated will affect how it is perceived
- Understanding the purpose of the UVAR makes people more willing (or at least less resistant) to adapt their behaviour

Cross-cutting aspects





AccessRegulationsForYourCity: UVAR decision support tool





Inputs

- 15 short questions

What's the population of your city?

and, if you are thinking about a specific part of your city... (optional)

Are you looking for UVARs for...?

Characteristics of the area

Which of the following vehicle access regulations are already in place in the area in question?

- Spatial intervention (small), eg carpark
- Spatial intervention (large), eg superblock, circulation scheme
- UZ
- UZ2
- Charging stations
- Regulated parking

What are the main activities in the area?

What is the general income level in the area of interest?

What are the main purposes for motor vehicle traffic in the area?

- working (train, airports, hotels, etc.)
- residents of the area
- commuters to the area
- through traffic
- heavy traffic (logistics / retail)
- deliveries to the area (mainly light duty)

Are the streets in the area predominantly narrow? (e.g. historic city centres)

Mobility services already in place

Does the area provide good and accessible alternatives to individual car use (e.g. working infrastructure, bicycle lanes and/or access to public transport)?

Do you have sustainable delivery options (e.g. urban consolidation centres, cargo bike delivery, micro cargo vans) in the area?

Where do trams and/or buses travel in the area?

What kind of parking facilities predominate in the area?

How would you estimate the level of use of each of the following transport modes in the area?

- Walking
- Public transport
- Cars/vans
- Heavy-duty vehicles
- Motorcycles
- e-bikes/moped (small)

Objectives for the area

Do you consider decision makers in the area generally willing to take active measures to improve sustainable mobility?

What are the most mobility-related objectives in the area? (Please select up to 5 objectives)

- create more livable space
- reduce parking
- avoid local retail
- address delivery issues (e.g. congestion / delivery hours)
- reduce air quality emissions (e.g. PM_{2.5}, NO_x)
- reduce climate emissions (e.g. CO₂)
- reduce noise
- reduce road wear
- reduce road safety
- reduce near-of-road traffic
- reduce through traffic
- reduce congestion
- reduce fatalities/injuries

How constrained is the budget to implement sustainable mobility measures in your city?

Outputs

- Prioritised set of building blocks
- Building block-specific fact sheets
- UVAR implementation guidance

PRIORITY	BUILDING BLOCK
1	Cycle lane
2	Permit to travel
3	Capacity restraint
4	Permit charge / toll
5	Through traffic ban
6	Pedestrian priority street or zone
7	Road charge / toll applied to a perimeter or an area
8	Parking charge: from on-street to off-street parking
9	Road charge / toll based on emission standards
10	Distance-based charge / toll



How to regulate vehicle access in urban areas

This guidance page summarises the learning and cumulated expertise from the European Research & Innovation project CIVITAS ReVeAL.

1. Introduction

1.1. About the ReVeAL project

» More

1.2. What are UVARs?

» More

1.3. Why UVAR?

» More

1.4. About this document

» More

2. ReVeAL explained

An UVAR can be a simple or a complex measure. In the ReVeAL project, we break each UVAR down into its component building blocks, to allow an UVAR to be developed that suits your city.

2.1. ReVeAL building blocks and cross-cutting themes

» More

2.2. Complementary measures

» More

2.2.1. Complementary sustainable mobility measures

» More

2.2.2. Financial or in-kind incentives

» More

ReVeALations: ReVeAL recommendations



ReVeALations

Recommendations from the
EU ReVeAL project for cities
considering access regulations



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 815008.



Recommendations



Be sure your UVAR is a means to achieve a goal, not to make money (and is communicated as such)



Engage with those who will be affected



Use incentives to enable compliance



Make exemptions clear, fair and limited



Use data and measure the difference between before and after

Thank you for your attention

Bonnie Fenton, Rupprecht Consult



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 815008