

Regulating Vehicle Access for improved Livability

ReVeALing Cities

Maria José Rojo. POLIS. 27 October 2020.



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Elevator pitch

Reveal avidto nelp cities transform their orban landscapes. Cities will become more livable by encouraging sustainable transport choices, and ultimately create a healthier more attractive urban space for every





A B C D E F G H I L M O P R S T U Z

Access regulation

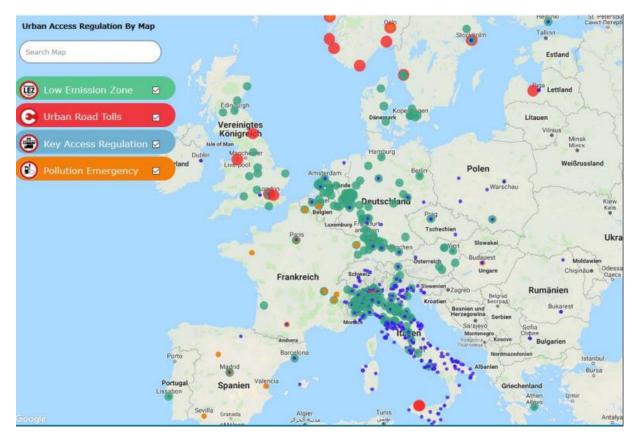
At the most generic level, access regulation is a 'measures to regulate vehicular access to urban infrastructure'. This definition is taken from the 2013 European Commission Staff Working Document on Access Regulations " A call for smarter urban vehicle access regulations" SWM (2013) 526, which was published to accompany the Urban Mobility Package. Examples of Urban Vehicle Access Regulation areas include Low Emissions Zones , Congestion Charges , Traffic Limited Zones . While it theoretically also includes Parking Regulations, ReVeAL does not include them in its definition. At a more conceptual level, an Urban Vehicle Access Regulation regulates under what conditions certain vehicles are allowed to access certain parts of a city. Such conditions can concern:



Why UVARs?

- Improving air quality
- Reducing congestion
- Increasing safety
- Increasing liveability

Over 700 UVARs in 24 European Countries



Source: <u>www.urbanaccessregulations.eu</u>



A variety of measures



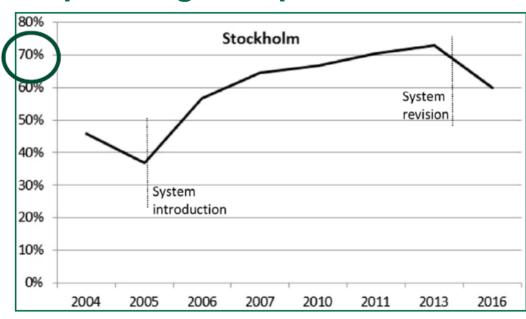




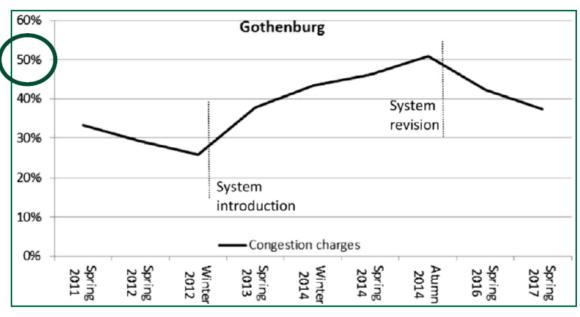




Replicating best practices is a 'science'!



Share of respondents in favor of CC. Repeated surveys conducted by city of Stockholm



Share of respondents in favor of CC. Repeated surveys conducted by city of Gothenburg

70% public acceptance

50% public acceptance

Börjesson, M., & Kristoffersson, I. (2018). The Swedish congestion charges: Ten years on. Transportation Research Part A: Policy and Practice, 107(October 2017), 35–51.





ReVeAL: The Ambition

- Tools to support a systematic and coordinated way to develop best practices,
- innovation with regards to governance,
- to highlight different UVAR technologies and services,
- to provide a better understanding of how to look at user needs and acceptance,
- to structure the way in which the mobility system accompanying access regulations should be approached,
- Ways of future proof UVAR





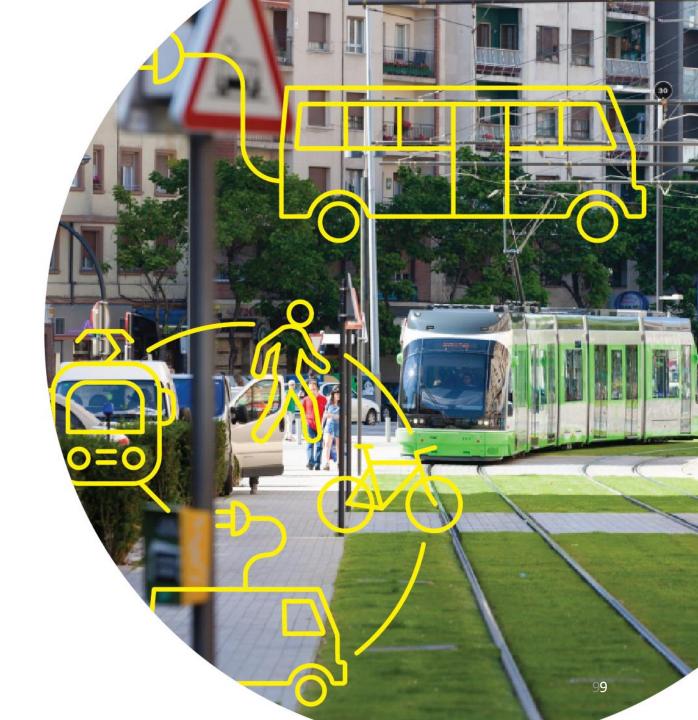
ReVeAL: the methodology

- Action research project
- Combines desk research on international good practice with empirical data and expert knowledge
- With on-the-field testing in 6 pilots
- Through impact assessment and process evaluation

>> Tailored UVAR support and guidance for cities.

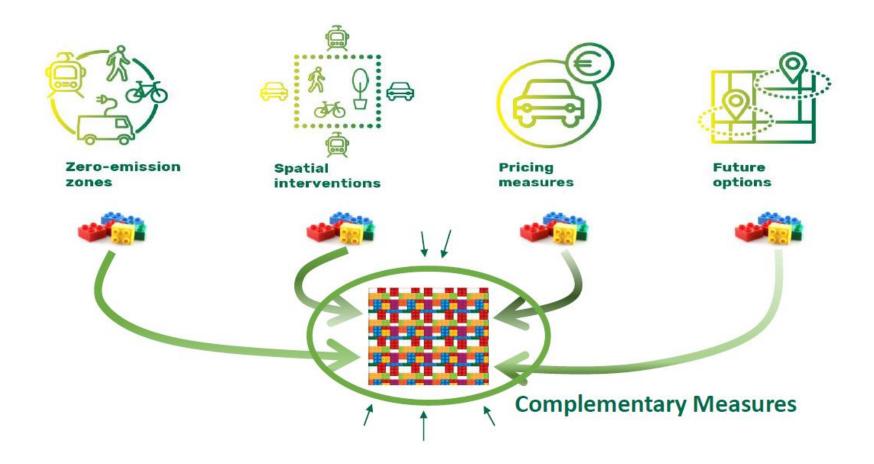


The UVAR Transition Framework

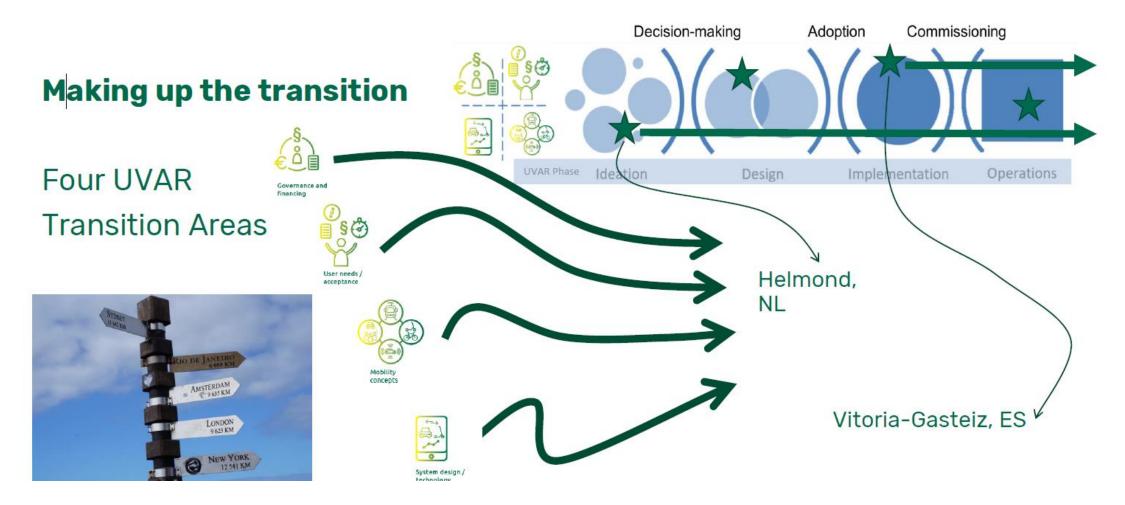




Breaking up the puzzle









UVAR Options and building scenarios







The UVAR Options Database

Eight city cases:

- Barcelona, ES
- Bologna, IT
- La Rochelle, FR
- Amsterdam, NL

- London, UK
- Ghent, BE
- Milan, BE
- Mechelen, BE



Breaking up the puzzle: Circulation Plan of the City of Ghent



Zero-emission zones

Permits for residents (2017)

Use of introductory warning letters during test period (2017)



Spatial interventions

Road blocks as traffic filter (2017)

Visual traffic filters(2017)

Implementation of extra cycle lanes (2017)

Implementation of mixed-use pedestrian streets (2017)



Pricing measures

LEZ with pollution charge in city center (2020)

Updated parking scheme (2016)



Future options

Dynamic traffic signaling in relation to parking plan (2016)



Free public transport first Sunday of the month (2019)

Park & ride + shuttle service (2017)

Pedestrian bus (electric) (2017)























IDEATION (2009-2015) DESIGN (2015-2016) IMPLEMENTATION (2016-2017)

OPERATION (2017-now)

ACCEPTANCE MOBILITY PLAN (Sep. 2015) PRESENTATION CIRCULATION PLAN FINAL DRAFT (Oct. 2016) PERIOD
(May 2017)



40 events in the process of the Circulation Plan of the City of Ghent

Circulation Plan City of Ghent



10/28/2020

15



Pilot implementation and testing







Our ReVeAL cities

- Helmond, NL. Speed adaptation + zero emission zone
- Vitoria-Gasteiz, ES. Superblocks
- London, UK. Zero-emission zone.
- Bielefeld, DE. Spatial intervention.
- Jerusalem, IL. Low emission zone.
- Padova, IT. Limited traffic zone + superblock.



Impact assessment and process evaluation







Impact assessment and process evaluation

- The ReVeAL Evaluation framework
- Qualitative and quantitative data
- Detect patterns
- Draw empirically founded conclusions
- Identify transferable lessons
- Recommendations for practitioners and policy makers





ReVeAL: The Methodology

- The UVAR transition framework and change management
- The reviewing of UVAR options and building scenarios
- Pilot implementation and testing
- Impact assessment and processes

>> Tailored UVAR support and guidance for cities.



Our story so far: www.civitas-reveal.eu

- Breaking up measures into a UVAR menu list of 68 measure building blocks over 4 categories;
- Describing the impact in its different aspects in 41 impact indicators over 7 clusters;
- Future-proofing measures against 13 classes of trends and future technologies;
- Describing the transition of a city from idea to operation by managing governance, user needs, technology and mobility services.



Our partnership































In collaboration with





Thank you for joinig us!

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