

UVAR pilots in 6 cities

(Bielefeld, Helmond, Padua, London, Vitoria-Gasteiz, Jerusalem)

8 Case studies



8 exemplary 'best' practice case studies: Barcelona (Ajutament de Barcelona), Ghent (city of Ghent), Mechelen (ReScape), Milan (ETSC), London (The Telegraph), La Rochelle (city of La Rochelle), Bologna (Parkimeter), Amsterdam (city of Amsterdam)
 More information: ReVeAL website (<https://civitas-reveal.eu>) or Urban Access Regulations website (<https://urbanaccessregulations.eu/>)

UVAR Development Process produced & piloted – aligned to SUMP process

UVAR Toolkit developed, including

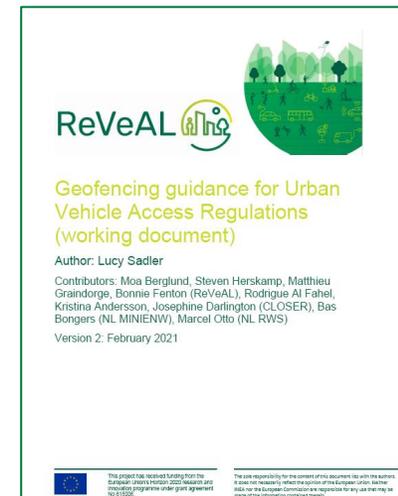
Guidance Notes on various UVAR aspects

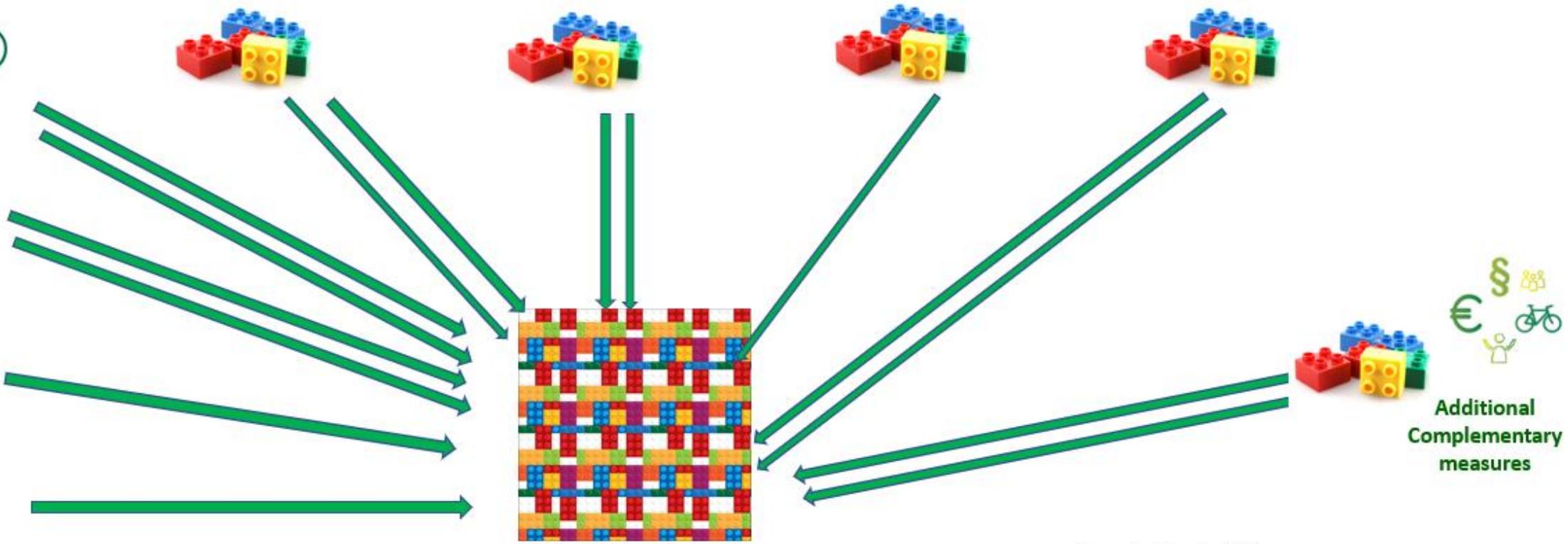
UVAR Building Blocks to combine to produce a tailored UVAR

UVAR Development Process

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Aim: To put advice to our pilot cities into a form for others to use



**Cross-Cutting Themes****User needs / acceptance****Governance and financing****Ensuring Compliance**



Measure Fields



Cross-Cutting Themes



Mobility concepts



User needs / acceptance



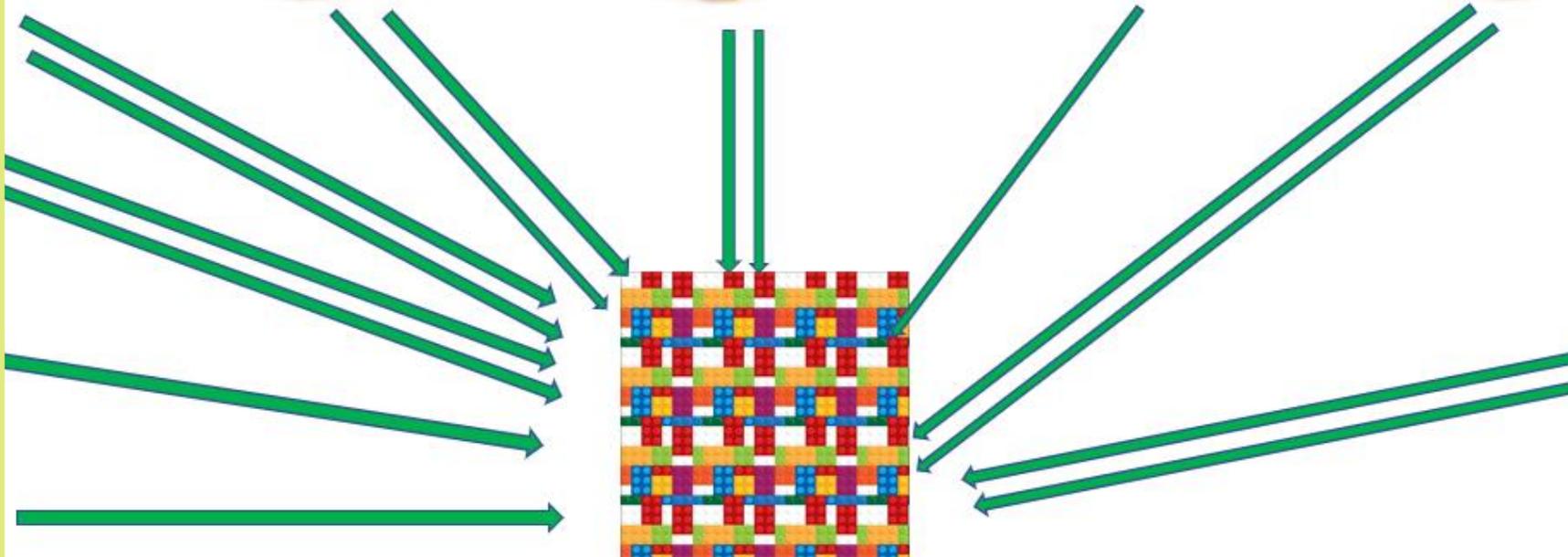
Governance and financing



Ensuring Compliance



Additional Complementary measures



Spatial Interventions	Pricing measures	Pathways to ZEZ/LTZ	Future options	Complementary measures
<ol style="list-style-type: none"> School street Cycling street Traffic filter Removing parking/road Cycle lane Pedestrian street Bus/tram priority lane Woonerf 	<ol style="list-style-type: none"> Congestion charge Pollution charge Parking charge Traffic flow management Urban logistics charge 	<ol style="list-style-type: none"> Regulation by emissions Regulation by vehicle type/dimension Regulation by trip purpose Scheme timescale Regulation by permit Regulation by other 	<ol style="list-style-type: none"> Enablers Indirect UVAR Promoting alternatives 	<ol style="list-style-type: none"> Financial incentives Exemptions Increased mobility options Individual solutions

Pathways to ZEZ/LTZ

- Regulation by emissions
- Regulation by vehicle type/dimension
- Regulation by trip purpose
- Scheme timescale
- Regulation by permit
- Regulation by other



14. Regulation by emissions

15. Regulation by vehicle type/dimension

16. Regulation by trip purpose

17. Scheme timescale

18. Regulation by permit

19. Regulation by other

- Vehicle type
- HDV/LDV
- Vehicle weight
- Vehicle length

- Delivery
- Residents and specific users

- Programmed time window
- Reactive operation
- Phasing

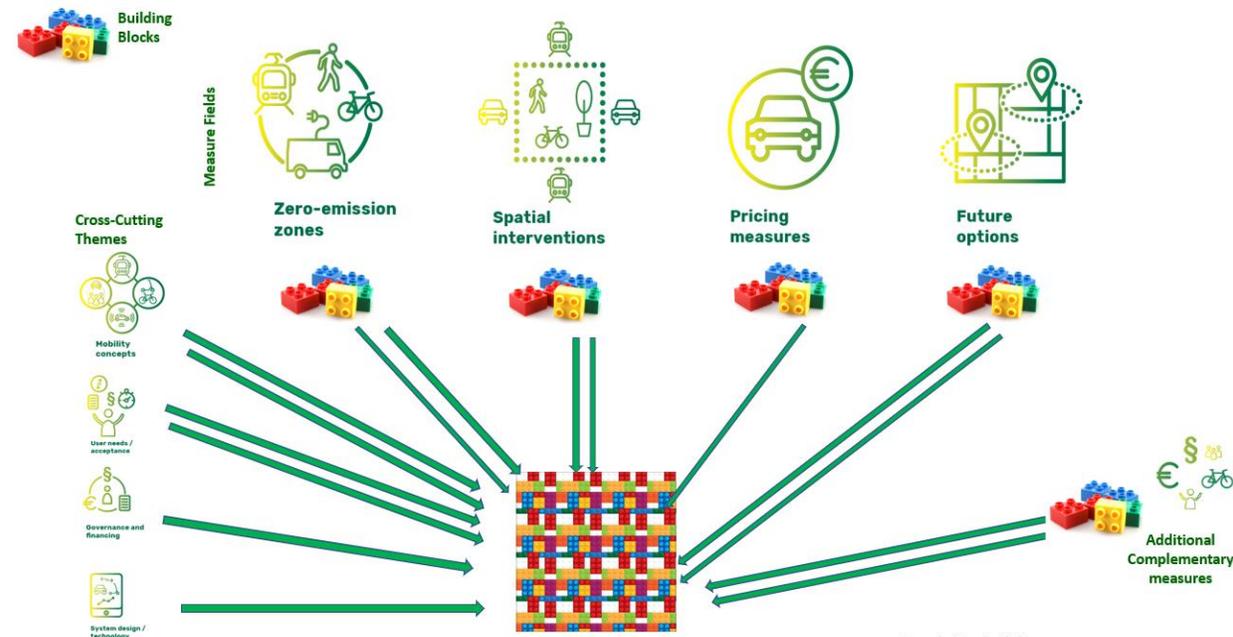
- Permit to travel
- Car park or ownership permit
- Permit to build car park space

- Load factor
- Vehicle safety features
- Company size
- Removing road space

Choose the relevant Building Blocks
With the Cross-Cutting Themes
Add complementary measures to make it possible

To get an UVAR that works for your city
meeting the city's goals

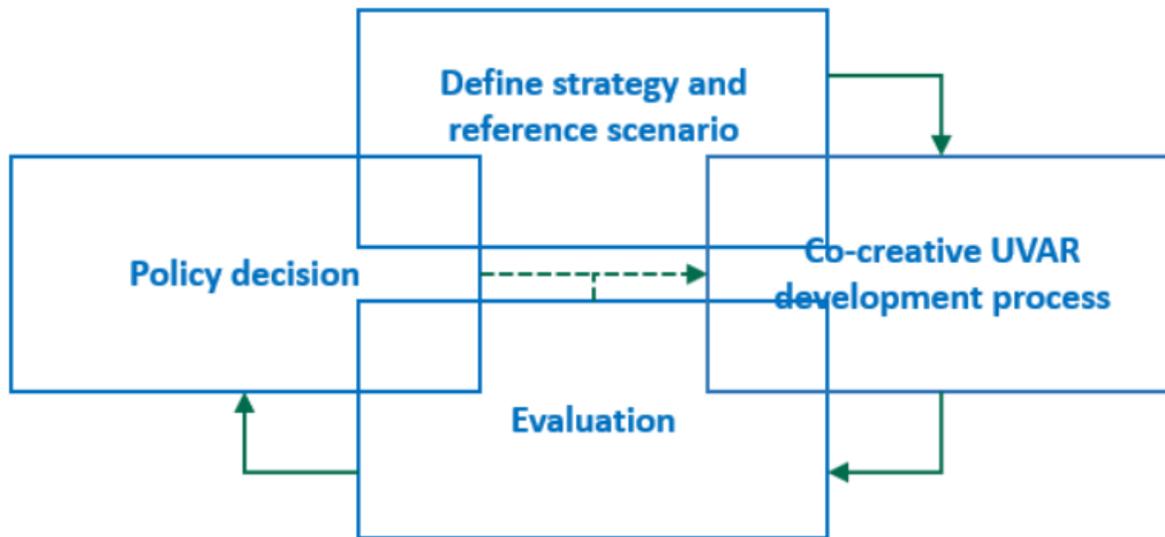
ReVeAL UVAR Development Process
is under Development !



Is under development....

Watch out for the UVAR Development Toolkit when it comes!

www.civitas-reveal.eu



Important:

Co-creation

Involve (internal/external) stakeholders

Several iterations

The BBs open up other options





Building Blocks chosen by our 6 cities

Building block category		Pilot city					
		Bielefeld	Helmond	Jerusalem	London	Padua	Vitoria-Gasteiz
Spatial interventions	School street	E		P	E	E/P	E/C
	Cycling street	E/C	E/C	P	E/P	P	
	Traffic filter	P/C	E/P/C	E	E/P	E/P	E/P
	Removing parking/road	C	C		E/P	E/P	E/C
	Cycle lane	C		E	E	E/P	E
	Pedestrian street	E	P	E	E/P	E	E
	Bus/tram priority lane	E/P		E/P	E	E/P	E
	Woonerf		E				P
	Pricing measures	Congestion charge				E	
Pollution charge				E/P	E		
Parking charge					E	E/P	E
Traffic flow management							
Urban logistics charge							
Pathways to ZEZ/LTZ	Regulation by emissions		P	E/P	E/P	P	
	Regulation by vehicle type			P	E/P	C	
	Regulation by trip purpose	C	P		E/P	E/P	E
	Scheme timescale			P	E	E	E
	Regulation by permit	C	P		E	C	E
	Regulation by other				E	C	E/P
Future options	Enablers		C	P	C	P/C	
	Indirect UVAR		C	E/C	E/C	P	C
	Promote alternatives	P	C	E/C	E/C	E/P	

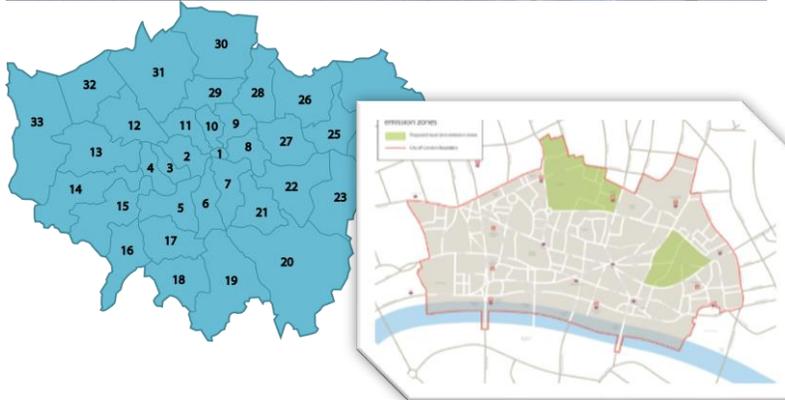
Existing (E), planned (P) and considered (C) UVAR measures in the six ReVeAL pilot cities

3 ReVeAL cities with Zero Emission Zones 5 cities emissions aspects in UVARs

Helmond



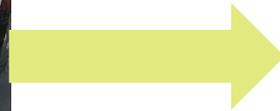
London /City of London



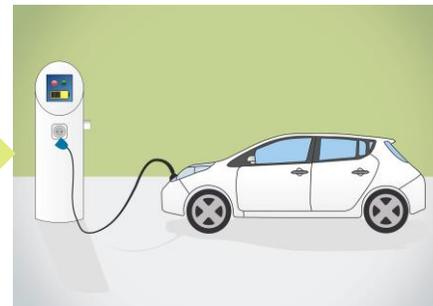
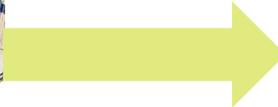
Jerusalem



Remove the Vehicles



Remove the Combustion Engine



Spatial interventions: physical changes to the roads to prevent access/use



Limited Traffic Zone: banning entry, penalties for infringement, requirements to enter



(Pricing out the engines)

Even the most 'extreme UVAR'; a pedestrian zone; may need street cleaning vehicles, large deliveries etc



1) Reduce the vehicles

2) The see that the vehicles that need to enter are zero emission



ZEV refuse collecting vehicles



ReVeAL pilot, City of London Zero Emission Zone

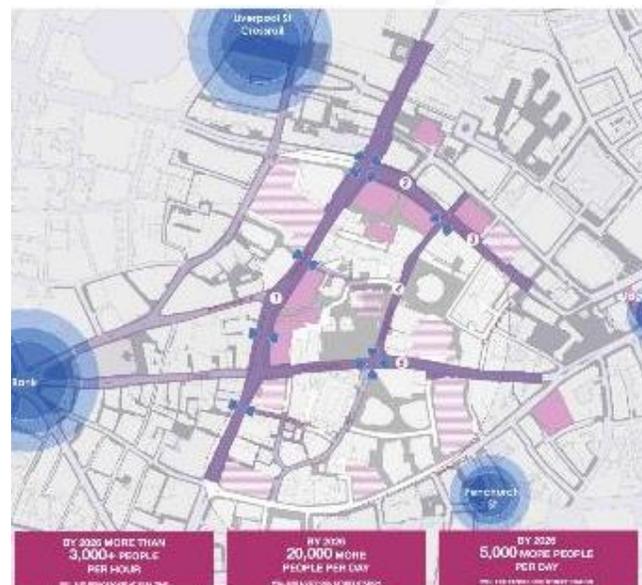
Problems, at peak pedestrian/commuting times:

- **Traffic flows**
 - **Emission & pollution levels**
 - **Loading activity**
-
- More space and ease of movement for people walking
 - Fewer vehicles.
 - Better air quality
 - Maintaining essential access to buildings



90%

of on-street journeys that start or finish in the City are entirely or partially walked, including walking to and from public transport



BY 2025 MORE THAN 3,000+ PEOPLE PER HOUR

BY 2030 20,000 MORE PEOPLE PER DAY

BY 2025 5,000+ MORE PEOPLE PER DAY

Pictures: City of London

ReVeAL

Actions in place so far

- Restrict motor vehicle access
- Supporting measures

Actions planned / considered to be phased in

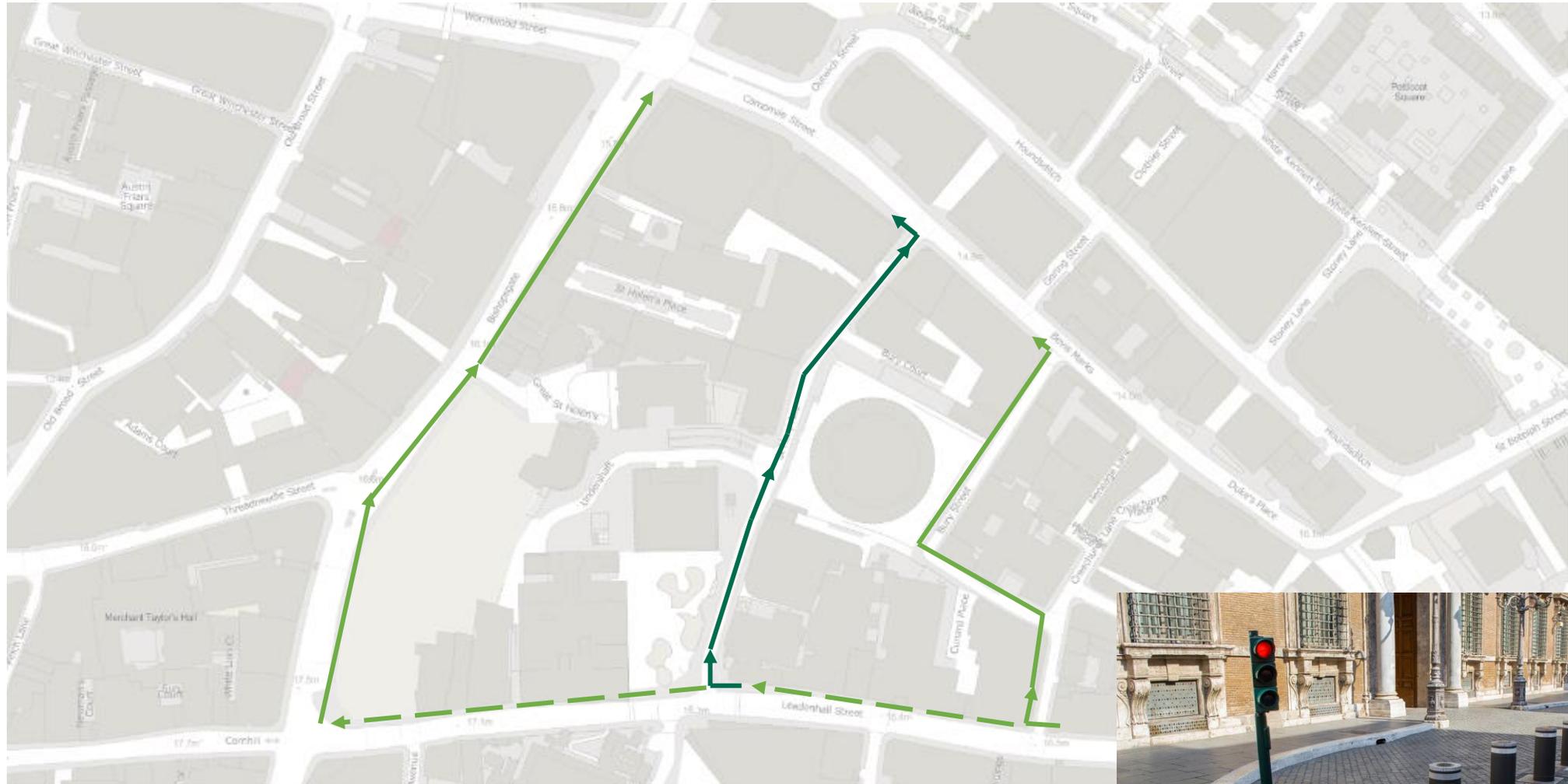
- Those vehicles allowed in require ZEZ
- Geofencing



- **Started out wanting a ZEZ**
- **Realised that first need to reduce the number of vehicles**
- **More pedestrian etc space**
- **Then require those allowed to be Zero Emission**

Combining bans with bollards = Spatial Interventions

Also used spatial interventions to achieve a better goal



One way streets and point closures on key roads allow to control the zone
reduce traffic & congestion, improve flow



Pictures: City of London & Pixabay

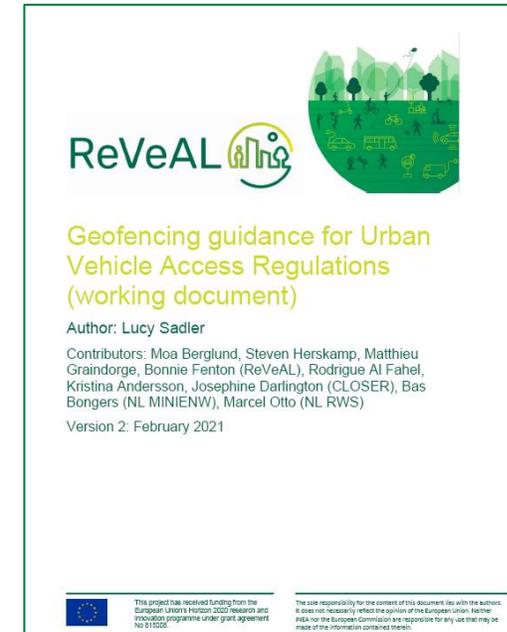
- Geofencing with Intelligent Speed Assistance (ISA, trialled in ReVeAL) to limit speed
- Geofencing for automatic switch to electric mode for plug-in-hybrid vehicles at zone boundary
- Trial geofencing for e-scooters to ensure they are parked in designated bays

First two voluntary to start, as current powers do not enable geofencing enforcement



ReVeAL Guidance on Geofencing & UVARs

www.civitas-reveal.eu/resources-overview/publications/guidances



ReVeAL Webinar on Ensuring Compliance with ISA presentation

Webinar recording available from Monday

www.civitas-reveal.eu/events/ensuring-compliance

ISA report will follow in few weeks

Watch reveal website

www.civitas-reveal.eu/news-events/news/



The slide features the ReVeAL logo and the title "V-tron Intelligent Speed Assistance (ISA) System". It includes a bulleted list of features: ISA either prevents speeding or warns when speeding; ISA will be required soon on new vehicles; and it uses data from a smart camera and a digital HD map. Three images illustrate the system: a camera mounted on a vehicle, a road with a 30 km/h speed limit sign, and a white car with the V-tron system installed.

- ISA either prevents speeding or warns when speeding
- ISA will be required soon on new vehicles
- Uses data from a smart camera and a digital HD map

	ReVeAL Guidance Document Topic	Status
1	Governance and finance	Published
2	Mobility concepts	Published
3	Ensuring Compliance	Published
4	User needs and public acceptance of UVARs	Published
5	Data and monitoring	Expected Autumn 2021
6	Geofencing	Published
7	Permits and exemptions	Published
8	Stakeholder involvement	Expected Autumn 2021
9	Communication, awareness raising (incl. digitising UVARs)	Expected Autumn 2021
10	Privacy and Camera enforcement and privacy issues	Expected Autumn 2021
11	Foreign vehicle enforcement	Expected Autumn 2021
12	General – What to think about when planning an UVAR?	Expected Autumn 2021
13	UVAR Development Process	Expected Autumn 2021



ReVeAL Webinars

Cross-cutting Theme Webinars every Tuesday in June at 16:00 CET

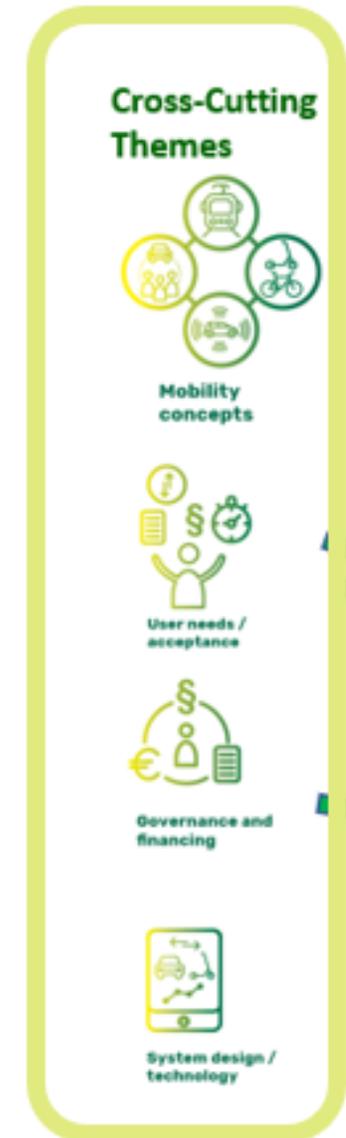
(UVAR Development ReVeALed 18 May)

Presentations & Recordings on the ReVeAL website from Monday

www.civitas-reveal.eu/webinar/join-us-online-reveal-spring-webinars-are-here/

Join the ReVeAL Webinars

From May 18 onwards - all the way, until Summer 2021!





www.UVARBox.eu

Digitising UVAR = Navigation tools (=compliance) & ITS

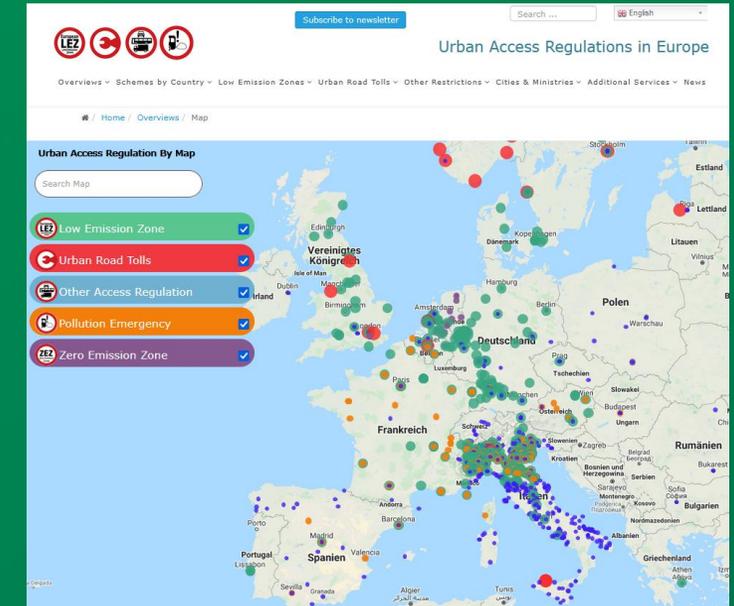
Lucy Sadler, Sadler Consultants - lucy.sadler@airqualitypolicy.eu



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 815069



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