









Low Emission Zones, Congestion Charges and other Urban Vehicles Access Regulations (UVARs)







Source: www.urbanaccessreguations.eu











Low Emission Zones (LEZs)

- Bans for vehicles not meeting emissions standards, or charges for non-complying vehicles
- Can be large areas to small towns
- Hundreds in Europe
 - Increasing numbers elsewhere in world
- Can be the most significant single tool to improve air quality
 - 12-30% emissions reduction
 - Part of air quality & transport strategies
- Camera or manually enforced
- Phased in, & importantly tightened over time
- (Emergency Schemes)





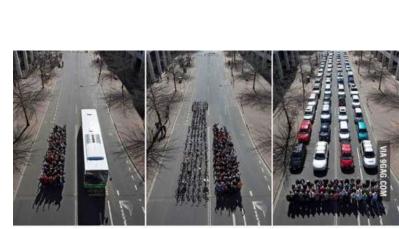


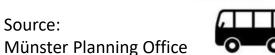




Congestion Charges

- London, Milan, Singapore, New York, Stockholm, Oslo ...
- Done where pain of not implementing > pain of implementing
- Enforced with cameras
 - Sometimes also with transponders
- The only UVAR to bring revenue
 - Ring-fence revenue for sustainable transport
- ~ 30% congestion reduction, 15% traffic reduction
 - For this to be possible: increase public transport
- Part of a strategy
- Moving people & goods, not vehicles





Source:













Sadler Consultants Europe GmbH Specialists in air quality policy

Limited Traffic Zone (LTZ)

- Only vehicles 'needed' can access a central area of the city
- Area accessible with various permits
 - Depending on residence, trip or vehicle type, potentially payment & emissions
- Camera or bollard & transponder enforced
- Can take the road-space and do something else with it















Zero Emission Zones

- Entry to non-combustion vehicles
 - Cycle, e-bike, foot, electric & fuel cell vehicles
- For Climate, also improve air quality
- Ideally an LTZ first, also phased from LEZ
- Many already in place and more planned
- Phased in
 - Delivery vehicles
 - Size of zone
 - Vehicles bought after 2025 must be ZEV
- Will be needed to achieve net zero



















Construction Schemes

- As road traffic emissions reduce, construction becomes more important
- Emissions standards on construction machines operating in an area –
 'Construction LEZ'
- Requiring cleaner machines or retrofit with diesel particulate filter
- Through planning permission, national law or air quality management strategy

More tomorrow!













Latin American odd-even schemes

- Used in Latin American cities for air quality & congestion
- Significant impact on use of the vehicle
- Most important to affect vehicles/drivers that enter every day
 - These make up the majority of traffic
 - Give them other alternatives
- Some EU cities had odd-even, most now LEZs
- In Europe air quality impact LEZs > traffic reduction
- CALAC+ Chile UVAR study looked at LEZ & Congestion Charge as alternative to odd-even



COLOR DEL ENGOMADO DEL VEHÍCULO	ÚLTIMO DÍGITO NUMÉRICO DE LA PLACA DE CIRCULACIÓN	LIMITACIÓN A LA CIRCULACIÓN			
		DÍA ENTRE SEMANA	HOLOGRAMA 1 SÁBADO	HOLOGRAMA 2 SÁBADO	
	5 0 6	LUNES	Dejan de circular conforme al último conforme al último place de circulación (A.SY.P.) Primer y tercer unidendo de circle mes AARES (A.SY.P.) Primer y tencer unidendo de circle mes AARES (A.SY.P.) Repureda y cuerto de cada mes HORARIO De las 5 a las 22 horas	TODOS LOS SÁBADOS	
	7 u 8	MARTES			
	3 o 4	MIÉRCOLES		HORARIO De las 5 a las 22 horas	
	1 0 2	JUEVES			
	9 0 0	VIERNES		HOLOGRAMAS 00 Y 0 están exentos de las limitaciones	
Vahígulas faránaas	•No circ	•No circula conforme a terminación de placa			











Many things to consider with UVARs

- Not a magic wand, but often largest significant tool in box
- Part of a strategy, together with
 - Increased public transport, cycling, walking, logistics consolidation
 - Parking regulation & strategy.....
- Best if based on data
- Take people with you
 - Stakeholder engagement, communication, 'marketing', the right message....
- Ensure that people and goods can still access the area
 - Even if not by their first mode of choice
- Complementary measures

























- www.urbanmobilitycourses.eu/courses/urbanvehicle-access-regulations
- ReVeAL Toolkit to help design UVAR
 - www.civitas-reveal.eu
 - https://civitas-reveal.eu/resourcesoverview/publications/guidance/
- UVAR Box digitising UVARs
 - www.uvarbox.eu
- UVARs in Europe
 - www.urbanaccessregulations.eu
 - www.urbanaccessregulations.eu/publicauthorities





Lucy Sadler
Sadler Consultants Europe GmbH
lucy.sadler@airqualitypolicy.eu
urbanaccessregulations.eu
+49 (0)7641 9375 335

- Lucy Sadler over 25 years in UVARs
- Head of air quality for the Mayor of London
- <u>urbanaccessregulations.eu</u> since 2007
- EU UVAR projects
- Guidance, advice, data on UVARs
- Advising countries around the world
- Known as the European expert on UVARs