

**TECHNICAL  
NOTE N° 10**

---

# **COMPARATIVE ANALYSIS OF TRANSPORT POLICY PROCESSES**

## **VIENNA**

### **CREATE PROJECT**

**Congestion Reduction in Europe,  
Advancing Transport Efficiency**

---

**TECHNICAL NOTE PREPARED BY:**

Charlotte Halpern & Caterina Orlandi  
Sciences Po, Centre d'études européennes et de politique comparée (CEE), CNRS, Paris, France



CREATE has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N°. 636573

## THE CREATE PROJECT IN BRIEF

Transport and mobility issues have increased in relevance on political agendas in parallel with the growing share of EU population living in cities, urban sprawl and climate change. In view of the negative effects of car use, there is a renewed interest about the role that transport should play in the sustainable city.

The CREATE project explores the Transport Policy Evolution Cycle. This model is a useful starting point for understanding how this evolution took place, and the lessons that we can learn for the future. Within the CREATE project, the study coordinated by the Sciences Po, CEE team (WP4) explores the historical evolution of transport policies and processes – from ‘car-oriented’ to ‘planning for city life’ – in five European cities (Berlin, Copenhagen, London, Paris, Vienna). Paying attention to case-specific contextual factors, policy instruments and programmes and involved stakeholders, **this comparative analysis unveils the processes and the main drivers for change. This technical note focuses on Vienna.**

### DID YOU KNOW?

VIENNA'S TRANSPORT NETWORK IS:

#### ROADS



##### ROAD NETWORK

2.820 km, incl. 51 km of motorways



##### MOTORISATION

380 cars/ per 1.000 inhabitants



##### CYCLE LANES & PATHS

1.298 km

#### PUBLIC TRANSPORT



##### RAILWAY (REGIONAL)

9 suburban lines



##### METRO

78,5 km, 5 lines



##### TRAM

225 km, 29 lines



##### BUS

over 826 km, 115 routes

#### PLANNED PROJECTS



##### RAILWAY (regional)

3 network expansions (East-West axes)



##### METRO

network expansion (U1, U2, U5)



##### TRAMWAY

6 lines extensions/ new projects

AS OF 2015

## SUMMARY FINDINGS

Transport policies have evolved considerably in Vienna over the past six decades, as a result of an incremental process of policy change. Robust forms of urban governance mitigated the impact of external pressures for change, these ranging from the Oil Crisis to Austria joining the EU, and also featured increased levels of political competition. The long-term viability of the Vienna approach to car reduction primarily draws on the combination between two policy tools, i.e., parking management and high capacity and good quality public transport. Elaborated in the early 1990s, this approach was considerably enhanced and strengthened during the following three decades. Since 2010, the diffusion of the “Green alliance” concept has accelerated the introduction of sustainable transport initiatives further (Stage 3).

As of today, the Vienna approach faces a number of challenges in the context of population growth, a rapidly evolving political outlook, and uncertainties related to resources available for public transport in the future. Forms of urban governance are weakening, as reflected in the growing politicisation of transport issues, and this offers increased opportunities for a large array of stakeholders to champion alternative policy solutions, including car use and active modes. Furthermore, the mode shift away from car use has been particularly marked in the city's urban core, whereas the role of the car remains largely dominant at the city's fringes and beyond, thus resulting in increased commuting traffic flows. In this changed context, more efforts are needed in order to develop a metropolitan-wide comprehensive reappraisal of priorities for the road network.

## Car use as the backbone for the post-WWII city

The car-oriented city model emerged and rapidly expanded during the post WWII reconstruction period in Vienna. The city still relied on a pre-war compact urban footprint and legacy transport infrastructure routes. Yet the goal of developing a modern city increasingly clashed with efforts to preserve the historical city scape and architecture. Reconstructing the city offered an opportunity for successive generations of social-democrat leaders, technicians and policy-makers to reduce pressure on the inner-city while at the same time containing low density urban development in the outer districts.

### DID YOU KNOW?

#### MAIN TRANSPORT MEASURES 1945-1968

SPÖ majority & City of Vienna  
as transport authority



Wiener Stadtwerke-Verkehrsbetriebe  
Federal Railways company (ÖBB)  
Fare agreement (1961)

Federal Motorway plan (1961)



Stadtplan Wien (1955)  
Land use plan (1961)  
Verkehrskonzept Wien (1968)



Lower density housing,  
new urban centres,  
preservation of the historic urban core



Road building  
Arterial road system  
incl. inner-city motorways

Segregated, transformed  
roads for cars

Short-term parking (1959)  
in historic areas



Reconstruction of railway network,  
segments of Stadtbahn



Dismantling tram lines  
some replaced by bus lines



Dismantling cycling lanes

At first, the largest share of resources was allocated to reconstructing pre-war networks, and little room was left for implementing new ideas. But as the automobile emerged as a symbol for overcoming the effects of the war, the road network emerged as the pillar of the city's master plan. A strict differentiation was maintained between developments in the urban core, meant to preserve the heritage of national significance, and in the rest of the city, where the dream of a modern city justified the rapid development of car use. Priority was given to the construction of roads and parking places. An arterial road system including inner-city motorways was developed, with the first section of the inner-city motorway opened in 1970 (Südosttangente).

In this context, the use of cycling, and to a lesser extent, public transport, were considered to be transport modes linked with poverty and pre-modern city life. Alternative transport modes were accommodated insofar as they were compatible with the rapid development of car use. Their reconstruction benefitted from the Federal state's support and the context of cross-utility financing at city level. Large segments of the tramway system were dismantled in order to allow sufficient road space for car traffic. Some tram routes were replaced with bus services, and it was also suggested to transfer tram routes below ground in order to allow car traffic to flow more freely. Cycle ownership and use was only encouraged as part of leisure activities and sports.

## Over-ground vs. underground: the art of non-decision (1968-1991)

Post oil crisis, public transport initiatives benefitted from shifting federal transport policy priorities. These increasingly addressed issues related to the limited nature of fossil fuels and the negative externalities of transport (e.g., noise, air pollution). At the city level, even though Vienna's population was further diminishing (down to 1.5 million residents), increasing motorisation rates and daily incoming commuting traffic raised new concerns about the transport network's capacity to accommodate travel demand.

### DID YOU KNOW?

#### MAIN TRANSPORT MEASURES 1969-1991

Oil crisis, Green party in parliament (1986)  
National Transport Strategy  
Integrated approach, all transports included

Traffic mitigation  
Emissions regulation, safety  
(sulphur free, fleet renewal)



Symbolic car restriction measures



#### REGIONAL APPROACH TO TRANSPORT

1974 Cooperation platform on transport, VVO  
1984 VOR Regional transport association  
single tariff zone, integrated ticketing system



Stadtentwicklungsplan Wien +  
Verkehrskonzeption, 1980

Donau city  
Anti-flood initiative



3 new urban motorways  
Metro system, since 1978, (U1, U2, U4)  
Stadtbahn dismantled or  
transformed into Metro system



Traffic mitigation measures  
1975 parking charges  
Speed limit (30km/h)  
Focus on historic centre



Neighbourhood movements & Green protest  
ARGUS  
Gentle city regeneration  
Right to referendum (1973)



Small-scale cycling development  
Some pedestrianizations in historic centre

This justified the need to expand road space for car traffic and when possible, to relocate public transport below ground. Indeed, most transport investment during this period (new urban motorways, increased grade separation, etc.) were meant to create more space for traffic flows. This was particularly marked outside the inner-city. Yet public transport advocates also found new opportunities for pushing forward non-motorised transport solutions and renegotiated a status quo with pro-car advocates that was to last until the early 1990s. Remaining segments of the tramway system were converted into underground tramlines, allowing the upgrade of road space in order to speed up traffic flows. Tailor-made transport initiatives were introduced in the inner-city as part of the heritage preservation strategy.

The metro system soon emerged as the backbone of the city's transport network, carrying the majority of passengers and shaping new urban developments in terms of both workplaces and housing. This approach was also met with some resistance. Signs of greater civic engagement were visible among students, housing associations and the environmentalist movement. They opposed the idea of "gentle city regeneration" to large-scale urban developments and challenged hierarchic forms of urban governance and policy-making. These demands were accommodated by developing new forms of public consultation, and in transport, by strengthening road traffic mitigation, enhancing public transport, and to a lesser extent, developing cycling and reaching out to pro-cycling groups.

## DID YOU KNOW?

### MAIN TRANSPORT MEASURES 1991-2011

Fall of the  
Iron curtain



1995  
2004



**Federal level, Integrated approach**  
Intermodal transport masterplans (1991)  
Joint ministry Roads&Rails, 2000  
Traffic mitigation

#### Vienna as a hub

Cross-border cooperation  
VOR extended to Burgenland, 2002  
Airport extension, railways and highways  
extension, new Hauptbahnhof  
Metro & regional railways extensions



**Integrated approach:**  
**STEP 1994 / STEP 2005 & Transport plans**  
Densification  
Donau City, Seestadt Aspern

#### Systematic approach to parking management, since 1993

Short-term parking charges



#### Traffic mitigation & calming measures

Speed reduction. Urban design initiatives  
Focus on historic centre (UNESCO)



#### Public Transport reorganization, 1991

2001, Wiener Linien  
Capacity investments in metro & bus  
Night bus lines (1995), Night metro (2010)

#### Development of cycle networks

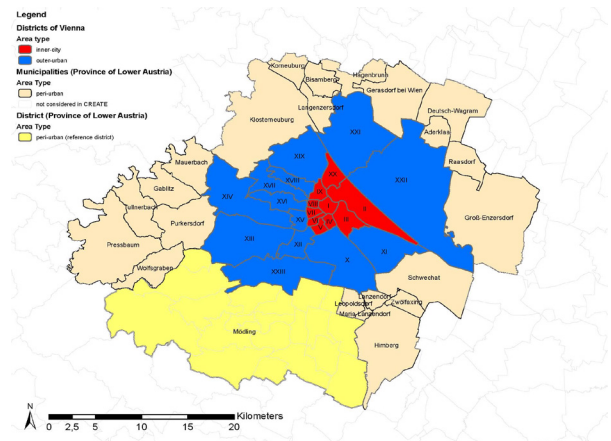
388 km in 2000, up to 1.298 km today  
Bike sharing 2003



**Congestion charge rejected**

## Limiting car traffic through the integrated approach (1991-2011)

Following the fall of the Iron curtain and in the context of pre-accession negotiations to the EU, transport policies evolved rapidly in Vienna. The capital-city benefited from capacity investments in national transport infrastructure aimed at increasing its attractiveness vis-à-vis other major European cities. An integrated approach to transport was developed at both federal and city levels in order to enhance public transport and reduce car traffic externalities. City planning priorities (e.g., STEP 1994 and 2005) and a changed transport strategy also reflected the city's changed role in an enlarged Europe.



Area types of the stage 3 city "Vienna" (2014).

Source: D3.2 Vienna report, 2016, p.8

In addition to the profound reorganization of the public transport sector, two flagship policy measures soon became the trademark for the city's efforts to ensure accessibility and reduce congestion. First a systematic approach to parking management was introduced in the inner-city area and progressively extended towards the outer districts. It was also used in order to develop off-street parking facilities, and in the urban core, to enhance green spaces, playgrounds, pedestrian areas and to revitalise historic places. The city also drew on federal legislation aimed at mitigating the impact of car traffic. Second, public transport emerged as Vienna's major transport priority. investment and extensions. The aim was for the public transport network to cover the whole built-up area, preferably through rail-based extensions (metro and regional railways). This shift was achieved through significant organisational reforms, notably the creation of the Wiener Linien, and the search for new funding sources. Together, these initiatives considerably enhanced the attractiveness of public transport in Vienna. On an average weekday the share of trips taken by public transport was 29 per cent in 1991. This rose to 35 per cent by 2010.

The suggestion to build a metro resurfaced in the late 1960s in a context of increased political competition within and outside the ruling majority. The metro was developed between 1968 and 1978, also resulting in rationalising remaining segments of pre-existing transport systems. It also opened new opportunities for on-street initiatives (e.g., pedestrian zones, reduced speed limits) in the vicinity of large U-Bahn stations in the inner-city area. Meanwhile, the city administration developed increased capabilities to design and implement large-scale urban projects over time.

Irrespective of these results, the ruling majority's transport strategy met with some criticism, which culminated during the 2010 municipal election campaign. Parking management was widely acknowledged as a tool aimed at addressing road congestion, but its effect on car use reduction was questioned. The City of Vienna – and the inner-city districts in particular – were criticized for shifting congestion and other negative externalities of car use towards the outer districts and the neighbouring province. The disconnect between, on the one hand, increased efforts to engage a wider range of stakeholders and the public in the setting of policy goals, and on the other hand, a perpetuation of the former corporatist form of policy-making at implementation stage, with the city administration linking through its utilities companies with business groups, workers' representatives and users' groups was highlighted. Pro-cycling organisations claimed insufficient efforts were being made to develop cycling and to reduce car-use.

## DID YOU KNOW? MAIN TRANSPORT MEASURES since 2011

**Red-green coalition (2010)**  
**Mobilitätsagentur (2011)**



**Austrian Spatial Development Concept (ÖREK 2011)**

**Liveable and Smart city agenda (2012)**

Parking management  
Tech solutions to optimize traffic flow  
Urban design initiatives



**Integrated mobility management approach**  
**Road traffic regulations**



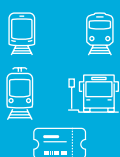
**Transport strategy at metropolitan scale**  
**Stadtentwicklungsplan 2025 (2015) Urban**  
**Mobility Plan Vienna**

**Green alliance**

**Fields of mobility, 50 measures**

**Strengthened public transport**

capacity investments metro/tram  
Night traffic in metro  
Priority to public transport  
Segregated lanes  
"1€ per day" annual ticket (2012)



**Parking management scheme**  
**greener and extended**



**Flagship urban design initiatives**

Pedestrianization and priority  
for walking, "Encounter zones"



**Active modes**

Communication tools, streetlife festivals,  
international events  
(Walk 21 Conference 2015)  
Comprehensive cycling programme



Overall, these claims confirmed the prominence of transport politics in Vienna and highlighted the ruling majority's growing difficulties in integrating this large variety of claims through existing forms of governance.

## Current and future challenges: implementing the sustainable urban transport agenda (since 2011)

Following the election of Red-Green political majority in 2010, adjustments were made to transport policies and tools. A comprehensive sustainable transport agenda was introduced in the light of population growth forecasts to 2030 - a yearly increase of 25.000 people and 10.000 housing units. Revised city and transport planning principles clearly state that building new roads is not a priority anymore. Furthermore, the focus is not solely on public transport, but on strengthening cooperation between non-motorised transport modes: together, public transport, walking and cycling (i.e., the "Green Alliance") are to reach a mode share of 80/20 by 2025.



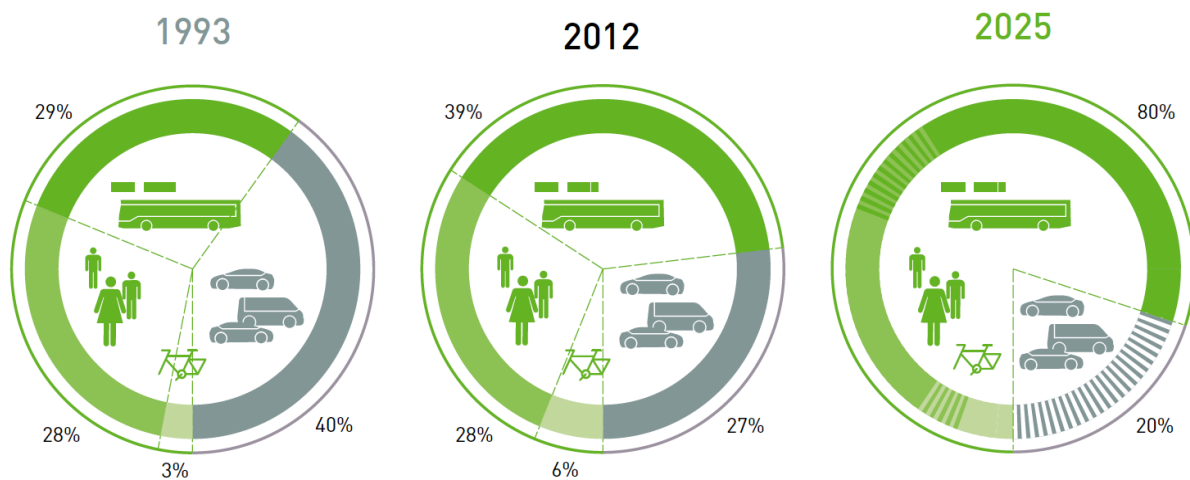
Bicyclists and people shopping in Marienhilferstrasse

Source: Shutterstock.com

Pre-existing transport policy tools are increasingly combined with sustainable and technical-led initiatives. Public transport services and infrastructure are being optimised and major efforts being made to incentivise demand through fares (e.g., € 1 per day season ticket). The extension of the parking management scheme to the outer districts also benefits from continued attention from the ruling majority. So far, socio-political resistance justified its incremental extension through micro-level political management at district and neighbourhood level. The city also strengthened its regulatory role in the context of rapidly developing new mobility services, including private-led initiatives. Lastly, the "fair streetshare" strategy highlighted the shift towards 'planning for city life' policies. Emblematic roads (e.g., the Marienhilferstrasse) were pedestrianized and/or opened to cyclists. Traffic calming measures were applied in these areas to car drivers and public transport. As part of their agenda for sustainable transport, the Green Party also prioritized the need for increased policy resources (e.g., knowledge, expertise, awareness-raising, etc.) as a necessary step towards mode shift. A Mobility Agency aimed at promoting the development of cycling and walking through added capacity building and a dedicated communication strategy was created to this effect.

Nevertheless, the Viennese approach also highlights old and new challenges. Political competition increased the role of micro-level political management at the implementation stage, opening a large avenue for influence-seeking groups to obtain exemptions and maximise their own benefits. The number of transport controversies is expected to increase in future and to offer new opportunities for pro-car interests, as observed recently in discussions about the Lobautunnel project, and ways to address growing demand for commuting travel at regional level.





Modal shift goals for 2025: The Green alliance.  
Source: retrieved from Urban Mobility Plan Vienna, 2015, p.6.

## INDICATIVE REFERENCES

### NB. Technical note n°5 introduces the analytical framework and the methodology for this study.

- Becker J., Novy A. (1999), „Divergence and convergence of national and local regulations“, European Urban and Regional Studies, 6(2), p.127-143.
- Buehler, R., Pucher, J., Altshuler A., (2017). Vienna's path to sustainable transport. International Journal of Sustainable Transportation, 11(4), p.257-271.
- Hachleitner B., Marschik M., Müllner R., Zappe M., (hrsg.), (2013), Motor bin ich selbst. 200 Jahre Radfahren in Wien, Metroverlag, Wien.
- Kostal, T., Micalitsch, V., Obermann, G. (2014). Local Public Transport in Vienna by Wiener Linien - Governance and Provision of Services. CIRIEC Working paper, n° 17.
- Pirhofer, G., Stimmer, K. (2007). Theorie und Praxis der Wiener Stadtplanung von 1945 bis 2005. Vienna: Stadt Wien, MA18.
- Roider O., Klemensitz R., Spiegel N., (2016), D3.2 technical city report for Vienna. Quantitative analysis of travel. The CREATE project, 53p.

*This note reflects only the authors' view and the agency is not responsible for any use that may be made of the information it contains.*

### THIS SUMMARY IS BASED ON:

D4.2. TECHNICAL REPORT FOR STAGE 3 CITY:  
VIENNA (APRIL, 2018),

BY CHARLOTTE HALPERN AND NICOLE BADSTUBER



---

## CONTACT

[www.create-mobility.eu](http://www.create-mobility.eu)  
<http://www.sciencespo.fr/centre-etudes-europeennes/fr/node/6495>  
Charlotte Halpern | [charlotte.halpern@sciencespo.fr](mailto:charlotte.halpern@sciencespo.fr)

@create\_mobility  
@SciencesPo\_CEE

---