Sustainable Transport in Vienna

By Ralph Buehler and John Pucher
# Table of Contents

Table of Contents .......................................................................................................................... 2

Summary of Key Points .................................................................................................................. 3

What ............................................................................................................................................. 3

How ............................................................................................................................................... 3

Who ............................................................................................................................................... 4

Why ............................................................................................................................................... 4

Vienna in the Context of German-speaking Europe ................................................................. 5

Data Sources and Methods of Analysis ..................................................................................... 11

Overview of Vienna’s Transport History, Demographics, and Economy .......................... 11

Overview of Politics in Vienna ..................................................................................................... 13

Continuity of Social Democratic Rule, Transport Plans, and Transport Policies .......... 19

Making Transit Irresistible ............................................................................................................. 20

Parking Management ..................................................................................................................... 24

Other Policies Contributing to Declining Car Use ................................................................. 27

IMPROVING WALKING CONDITIONS .................................................................................... 27

IMPROVED CYCLING CONDITIONS ....................................................................................... 29

TRANSIT-ORIENTED DEVELOPMENT ................................................................................... 30

CAR-RESTRICTIVE MEASURES .................................................................................................. 30

The Role of Political Leadership ................................................................................................. 31

Sources ......................................................................................................................................... 35

APPENDIX A: Interviews and email correspondence with transport experts .... 41

APPENDIX B: Election results for Vienna City Council/State Parliament
(governing party(ies) in bold): ........................................................................................................ 43

APPENDIX C: Detailed listing of key goals of Vienna’s transport plans since 1980
.......................................................................................................................................................... 44

APPENDIX D: Spatial variation in car ownership rates within Vienna ....................... 47

APPENDIX E: Surveys of residents about their perceived parking problems .... 48

APPENDIX F .................................................................................................................................. 49

This case was written by Ralph Buehler and John Pucher for the project on “Transforming Urban Transport – the Role of Political Leadership,” at Harvard’s Graduate School of Design (GSD), with financing from the Volvo Research and Educational Foundations (VREF). Alan Altshuler, Distinguished Service Professor at Harvard emeritus, provided counsel and editing assistance. The authors are responsible for the facts and the accuracy of the information in the case, which does not necessarily reflect the views of VREF or GSD.

© 2016 The President and Fellows of Harvard College.
Summary of Key Points

What
Between 1993 and 2013 Vienna reduced the car share of trips from 40% to 27% while increasing public transport’s share from 29% to 39% and bike share from 3% to 6%, and keeping walking at 28%. The causes of these modal shifts appear to have been a set of reinforcing, integrated measures implemented by the City of Vienna and its component districts during this period. The two most important aspects of the policy package have been the improvement of public transport and implementation of parking management. Since completion of the basic metro (U-Bahn) network in 1984, it has been steadily expanded, with several extensions since 1993. In addition, the cost of annual transit passes (valid for unlimited transit travel in Vienna), was dramatically reduced in 2010, leading to a surge in ridership.

Parking management was first introduced in 1993 in the historic 1st District, and has gradually been extended to 16 of Vienna’s 23 districts (as of 2016). Parking management allows district residents, if they purchase an annual parking pass, to park in on-street spaces without charges or time limits, while imposing both on non-district residents. The price per hour of parking for those without resident passes has been increased three times since 1993.

How
These initiatives have been consistently supported by the Social Democratic Party (SPÖ), which has been the lead governing party in Vienna since 1946, providing both planning and implementation continuity. The Conservative Party (ÖVP) has been a long-time supporter of the U-Bahn, especially when it was part of the governing coalition with the SPÖ (1945-1973 and 1996-2001). The Greens, who joined the governing coalition in 2010, have pushed hard for accelerating and expanding the full range of sustainable transport policies previously developed and implemented by the Social Democrats and Conservatives.

Expanding and improving public transport service (especially the U-Bahn), and reducing fares, were relatively easy politically because 52% of Viennese use public transport daily, and 76% at least once a week. A 2014 survey reported that 98% of Viennese rate public transport as good or very good. Public transport is also a source of many local jobs, both in construction and operation, benefitting local workers and firms. The Austrian federal government has paid 50% of U-Bahn construction costs, providing an important financial inducement for local politicians.

Parking management has been far more controversial because each of Vienna’s 23 districts decides whether or not to adopt it. From 1993 to 1999, the inner districts took the lead in doing so, motivated by their severe and intensifying parking problems. The City of Vienna has encouraged expansion of parking management to other districts through information campaigns and technical assistance. Objections from businesses were overcome by offering exemptions from parking time limitations for company vehicles. Objections from residents were overcome by offering special residential parking permits—valid only for district of residence—exempting them from time limits and hourly fees for an annual charge. Parking revenues are dedicated to
funding improvements in public transport and construction of parking facilities adjacent to rail transit stations and major commercial areas. As a result of parking management, it has become much easier to find parking spaces in congested areas. There are also fewer vehicles cruising in search of parking spots, and thus significantly less congestion, air pollution, and noise.

Over roughly the same period that parking management was implemented, Vienna increasingly traffic calmed its residential streets, with speed limits of 30km/hr or less on 75% of its streets by 2014. The two policies together have resulted in an ever greater dedication of local streets to neighborhood residents—both in terms of parking their cars and reducing through traffic by non-residents. In addition, Vienna has continuously improved conditions for walking and cycling, while restricting car use. These various policies have been integrated with each other into a complementary package of reinforcing policies, which facilitated a major modal shift.

Who

Although it took many decades to obtain political approval in 1968 for the initial construction of the U-Bahn, all three of the most recent mayors (SPÖ) have strongly supported further investment in it: Gratz (1973-1984), Zilk (1984-1994), and Häupl (1994-today). The Conservatives (ÖVP) and Greens have strongly supported the U-Bahn even when they were not part of the ruling coalition. The reduction in the price of an annual transit ticket (from €449 to €365) in 2011 was an initiative of Vice-Mayor Vassilakou (Greens), who is also minister of transport.

Mayor Zilk, Mayor Häupl, and especially Vice-Mayor Vassilakou have all been supporters of parking management, but decisions on whether to adopt it are reserved by law to the districts, whose leaders have therefore played crucial roles in their adoption of parking management. The Conservative-governed 1st District was the first to adopt parking management. By 2016 parking management had spread to 16 of Vienna’s 23 districts, 12 governed by the SPÖ, 2 by the ÖVP, and 2 by the Greens.

Why

The main incentive for implementing sustainable transport policies in Vienna was the dramatic increase in the problems caused by increasing car use in the 1970s: congestion, parking shortages, air pollution, noise, traffic deaths and injuries, deterioration of the historic central city, and loss of public spaces to the car. Increased car ownership and use were especially problematic in central portions of Vienna, which were historic and very compact, with few wide arterials and mostly narrow streets. The initial construction and subsequent expansion of the Vienna metro system (U-Bahn) was intended to speed up public transport by giving it its own underground right of way. The €365 annual pass introduced in 2011 was intended to encourage more public transport use, and less car use. Parking management was initiated and then expanded to deal with the extreme parking problem in the inner districts and the additional congestion, air pollution, and noise caused by cars cruising to find a parking space.
Vienna in the Context of German-speaking Europe

Germany, Austria, and Switzerland have been at the forefront of promoting sustainable urban transport through a range of innovative programs—especially at the local government level—to encourage more walking, cycling, and public transport while discouraging car use in city centers and residential neighborhoods (Hass-Klau, 2015; Newman and Kenworthy, 2015; Buehler & Pucher, 2011; Mees, 2009; Pucher & Buehler, 2008; TRB, 2001). These countries are home to almost 100 million residents and constitute an important core of Europe’s economy (Eurostat, 2015). Before selecting Vienna, the research team examined the three largest German cities (Berlin, Hamburg, and Munich), the largest Swiss city (Zurich), and the largest Austrian city (Vienna). These cities are similar in their transportation systems and land-use patterns, and have pursued roughly similar transport and land-use policies in recent decades. Smaller cities in Germany, Switzerland, and Austria have pursued similar urban transport policies as well.

The main policies implemented in the five cities are summarized in Table 1 (with all sources for this section of text listed at the end of that table). Perhaps the most important but politically most difficult policy category is the restriction of car use and parking in cities. At the national level, taxes on car ownership and use are high in all three countries, and driver training, testing, and licensing are difficult and expensive. While intercity networks of limited access motorways are extensive, motorways are rare within cities, which are mostly characterized by narrow streets with only a few arterials for through traffic. At the local level, most cities have limited the supply of parking, particularly in central areas, often including maximum off-street parking limits for privately owned buildings. Cities have also been reducing the supply of on-street parking, imposing higher charges, expanding car-free pedestrian zones, and implementing a wide range of traffic calming techniques (road modifications), particularly in residential neighborhoods.

These car-restrictive policies have been supplemented in all three countries by a wide range of measures to encourage more walking, bicycling, and use of public transport. The quantity and quality of public transport services have been greatly improved. Rights of way, stations, and vehicles have been thoroughly modernized. Equally important, Verkehrsverbünde (regional transit associations) have been established in almost all metropolitan areas, and sometimes entire states, to fully integrate the routes, schedules, and fares of all types of public transport. In most metropolitan areas, Verkehrsverbünde offer deeply discounted monthly transit passes and even more deeply discounted annual transit passes, as well as sharply reduced fares for students, seniors, and people with disabilities. Monthly, semester, and annual passes are so inexpensive and convenient that pass holders account for most transit trips.
Table 1. Overview of similarities in transport and land-use policies implemented in Berlin, Hamburg, Munich, Vienna, and Zurich (continues on next page)

<table>
<thead>
<tr>
<th>Policies that restrict car use</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Price of gasoline</strong></td>
<td>In 2014, roughly half of the retail price of gasoline was due to taxes: 56% in Germany, 49% in Switzerland, and 48% in Austria</td>
</tr>
<tr>
<td><strong>Traffic calming &amp; speed limits</strong></td>
<td>Most residential streets are traffic-calmed at 30km/h or less, with speeds reduced to 20km/h on shared streets, and to 7 km/h on some residential streets (home zones)</td>
</tr>
<tr>
<td><strong>Road supply</strong></td>
<td>Motorways rarely penetrate into city centers; most neighborhood streets discourage through-traffic by 30km/h speed limits and infrastructure modifications, such as narrowings, curves, diverters, chicanes, speed bumps, raised intersections, and artificial dead ends</td>
</tr>
<tr>
<td><strong>Parking</strong></td>
<td>All cities have reduced car parking supply in downtowns, increased parking fees, and imposed time limitations for on-street parking since the 1960s</td>
</tr>
<tr>
<td><strong>Driver licensing</strong></td>
<td>Strict and expensive driver training and licensing; probational licenses for young drivers</td>
</tr>
<tr>
<td><strong>Road revenues &amp; expenditures</strong></td>
<td>Revenue from roadway user taxes and fees are higher than roadway expenditures by all levels of government, providing an important source of general revenues</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Policies that promote public transport</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Quantity of service</strong></td>
<td>Large increase in the total amount of public transport service between 1990 and 2012 (as measured by place kilometers, e.g. +80-90% in Hamburg, Munich, and Vienna); increased operating hours and frequency of service</td>
</tr>
<tr>
<td><strong>Quality of service</strong></td>
<td>All systems have modernized their vehicles and stations; full coordination of schedules, fares, and routes across modes and operators; quicker and easier</td>
</tr>
<tr>
<td><strong>User information</strong></td>
<td>Online information about regional, state-wide, &amp; national routes, timetables, and fares; real-time information at most rail &amp; some bus stops, and on-board most trains &amp; buses</td>
</tr>
<tr>
<td><strong>Discounts</strong></td>
<td>Discounts for children, university students, and seniors; deeply discounted monthly and annual tickets available to all groups</td>
</tr>
<tr>
<td><strong>Region-wide integration</strong></td>
<td>Regional public transport authorities integrate fares, ticketing, operations, &amp; financing across operators and jurisdictions; state-wide coordination of schedules, fares, &amp; tickets</td>
</tr>
</tbody>
</table>
Table 1. Overview of similarities in transport and land-use policies implemented in Berlin, Hamburg, Munich, Vienna, and Zurich (continued from last page)

<table>
<thead>
<tr>
<th>Policies that make walking and cycling more attractive</th>
<th>Berlin, Hamburg, Munich, Vienna, and Zurich</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Car-free zones</strong></td>
<td>Most cities have pedestrianized large areas of their downtown that are off-limits for automobiles with parking garages at the periphery</td>
</tr>
<tr>
<td><strong>Traffic calming</strong></td>
<td>As noted above, residential streets discourage through-traffic and greatly reduce car speeds</td>
</tr>
<tr>
<td><strong>Pedestrian facilities</strong></td>
<td>Widening, curb cuts, and improved pedestrian amenities on sidewalks; pedestrian priority in car-free zones, traffic-calmed streets, and shared streets</td>
</tr>
<tr>
<td><strong>Bikeway networks</strong></td>
<td>Comprehensive, region-wide integrated networks of paths and lanes for cyclists, including special provisions at intersections (traffic signals, advanced stop lines); extensive bike parking on sidewalks, on-street bike-corrrals, and at public transport stations (including full-service bike parking stations)</td>
</tr>
<tr>
<td><strong>Integration with public transport</strong></td>
<td>Walking and cycling routes that lead to bus stops and rail stations</td>
</tr>
<tr>
<td><strong>Traffic education</strong></td>
<td>Comprehensive traffic and cycling training is offered in most schools; priority of non-motorized modes emphasized in driver's training and testing</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Land-use planning and policies that facilitate compact, mixed land-uses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Coordination with public transport</strong></td>
</tr>
<tr>
<td><strong>Planning process</strong></td>
</tr>
</tbody>
</table>

Sources: City of Berlin, 2015a; City of Hamburg, 2015a; City of Munich, 2015a; City of Vienna, 2015a; City of Zurich, 2015a; Hass-Klau, 2015; HVV, 2015; MVV, 2015; Newman and Kenworthy, 2015; VBB, 2015; VOR, 2015; ZVV, 2015; Buehler & Pucher, 2011; Mees, 2009; Pucher & Buehler, 2008; TRB, 2001.

Many of the same policies restricting car use encourage walking and cycling. For example, car-free pedestrian zones and traffic-calmed residential streets have encouraged safer and more pleasant walking and cycling conditions. Walking has also been encouraged by wider and better designed sidewalks, more attractive pedestrian plazas, better intersection crossings and mid-block crosswalks, with median crossing islands, shorter wait times for the walk signal and longer crossing times for pedestrians. Curb cuts, ramps, and barrier-free walkways have also facilitated pedestrian movement, especially by people with disabilities.

Cities throughout the three countries have greatly improved cycling conditions by expanding and improving their networks of bike paths and bike lanes, installing special bike traffic signals and advance wait lines at intersections, and increasing the supply of bike parking, which is often sheltered. Over 150 train stations in Germany, Austria, and Switzerland now have full-service,
secure, sheltered bike parking facilities (Fahrradstationen), which greatly promote bike-and-ride with public transport. Bike parking has also been vastly expanded on sidewalks, public plazas, and in on-street bike corals (in place of car parking).

Another important policy is traffic safety training in all schools. Bike training is usually offered in elementary school, culminating in a final examination, usually supervised by a special traffic safety teacher, and often by a police officer for the on-road portion of the test. Motorist education is expensive and strict, emphasizing the crucial need to drive in a way that minimizes the risk imposed on pedestrians and cyclists, the most vulnerable of roadway users. In general, motorists are legally responsible for most collisions with pedestrians and cyclists, on the theory that the latter are most vulnerable to injury in any crash. Penalties for responsible motorists in such accidents include not just high fines but the possibility of license suspension and time in jail.

Real-time information systems and directional signage for cyclists, public transport users, and pedestrians have been vastly improved in most cities, including safe routes to school for children and best routes to public transport stops. Online information (accessible via smart phones) is provided in all large and medium-size cities on the best routes to chosen destinations, given the preferences entered by the user: type of street, on-street or off-street (e.g. through parks), type of cycling or walking facility (bike path or lane), proximity to bike parking, bike sharing stations, and public transport stations, overall speed and trip time, etc. Every Verkehrsverbund offers this kind of real-time information for public transport users.

Finally, national, state, and local governments in Germany, Austria, and Switzerland have coordinated systems of land-use planning which generally discourage low-density development of agricultural land, forests, nature preserves, and other undeveloped greenspace (Alterman, 2001; Schmidt and Buehler, 2007). Vienna, Munich, Hamburg, Berlin, and Zurich all have formal development plans which specifically encourage mixed-use, compact development focused around public transport lines and well supplied with walking and cycling facilities (City of Berlin, 2015a; City of Hamburg, 2015a; City of Munich, 2015a; City of Vienna, 2015a; City of Zurich, 2015a; Newman and Kenworthy, 2015; Mees, 2009; TRB, 2001). They include provisions for building up mixed-use neighborhood centers throughout the city that enable residents to fulfill most of their daily needs with short trips to nearby shops, schools, and offices. That especially encourages more walking and cycling, and with such neighborhood centers built around rail stations, longer trips to the city center for more specialized goods and services can be made by public transport. Each city also has undertaken specific development projects that coordinate land use and transport to ensure the convenience and safety of walking, cycling, and public transport while discouraging car use (through car-free zones, traffic calming, limited parking, etc.).

Due to space limitations, Table 1 does not provide specific examples or quantification of the many policies listed. There are more similarities than differences among the cities, however, and the most important take-away is that all five cities have developed and implemented a package of re-enforcing policies to encourage alternatives to car use.
As shown in Figure 1, Vienna has clearly been the most successful of the five cities in reducing the car share of trips over the past two decades (from 40% to 27%), roughly twice the reduction in Munich (40% to 33%), Zurich (29% to 22%), and Hamburg (48% to 42%), and four times the reduction in Berlin (35% to 32%). Moreover, Vienna has raised the public transport mode share five times more than Zurich (29% to 39% vs. 32% to 34%), while transit mode share fell in all three German cities. The annual number of public transport trips in the Vienna Verkehrsverbund region rose from 680 million trips in 1990 to 905 million trips in 2012 (VOR, 2015). Per capita ridership in Vienna (318) was much higher in 2012 than in Berlin (222), Hamburg (209), and Munich (239) (HVV, 2015; MVV, 2015; VBB, 2015). Only Zurich had higher per capita ridership (438) (ZVV, 2015).

Vienna was chosen for an in-depth case study analysis not only because it has been the most successful of the five German speaking cities in reducing car mode share since 1990, but it is also the least studied of the five cities. Zurich and Munich, in particular, have been examined in great detail by Cervero (1998), Mees (2009), and Newman and Kenworthy (1990 and 2015). Berlin is more than twice as large as the other four cities, making it an outlier. Moreover, Berlin’s unique history as a divided city from 1945 to 1990 makes it a special case that is not representative of German cities (Kalender, 2012), let alone other European cities. Zurich is also a special case, as it is much smaller than the other cities, only about a fourth the size of Vienna, Hamburg, and Munich, and has one of the highest per-capita incomes in the world.

Figure 1. Trend in percentage of daily trips by car, public transport, bicycle, or foot in Berlin, Hamburg, Munich, Vienna, and Zurich (1990-2013)

Note: City surveys only include residents of each city, excluding for example suburban residents in the same metropolitan area. Survey methods and data collection periods vary across cities. Moreover, the Zurich survey methodology used in 2010 captured more short trips than the 1990 survey. The low car share of trips reported for Zurich is largely due to the small geographic area of the city of Zurich itself, which accounts for only one-fourth of its metropolitan population. The other cities in Figure 1, by comparison, generally include over half of the metropolitan population. Thus, the car share of trips for Zurich is especially low because its city limits exclude virtually all car-dependent outlying areas.
As shown in Figure 2, Vienna has also reduced car dependence more than major cities in other parts of Western Europe. Since 1990 Vienna has reduced car mode share by 13 percentage points compared to reductions of 10 percentage points in Paris, 9 percentage points in Copenhagen, 8 percentage points in Amsterdam and London, and 7 percentage points in Stockholm. Thus, even on a broader Western European level, Vienna has done extraordinarily well—yet further justifying an in-depth analysis of its policies.

Figure 2. Trend in percentage of daily trips by car, public transport, bicycle, or foot in major Western European cities (1990-2014)

Note: These travel surveys only report trips made by city residents, thus excluding suburban residents as well as visitors to the city. Car use is considerably higher in the suburbs than shown here for city residents alone. Only approximate comparisons can be made among the cities because the available travel surveys vary in methodology and timing. The travel surveys only report the main mode of transport for a trip and not the short access trips by other modes. This especially under-estimates the share of walk trips in all cities. The low car share of trips reported for Paris is largely due to the small geographic area of the city of Paris itself, which accounts for only one-sixth of its metropolitan population. The other cities in Figure 2, by comparison, generally include over half of the metropolitan population. Thus, the car share of trips for Paris is especially low because its city limits exclude virtually all car-dependent outlying areas.

Sources: City of Amsterdam, 2015; Trafic, 2015; Transport for London, 2011, 2015; City of Copenhagen, 2015; Omnitrend, 2015; ONIL, 2011.
Data Sources and Methods of Analysis

The research team assembled information about transport policy and politics in Vienna from numerous articles, books, and online documents. The sources are listed in detail in the bibliography to this chapter and cited throughout the chapter as appropriate. Historical background was provided mainly by two books: “The History of Vienna” by Csendes and Oppl (2006) and “Plans for Vienna: The Theory and Practice of City Planning in Vienna, 1945-2005” by Pirhofer and Stimmer (2007). Publicly available documents accessed from the city’s website included both statistical information and detailed transport plans for 1980, 1993, 2003, and 2014 (City of Vienna, 1980, 1993, 2003, 2014). Additional unpublished information was obtained directly from the City of Vienna’s transport planning office and the Vienna transit system.

The written information obtained from these sources was supplemented by 32 in-person 60-to-90-minute interviews conducted in Vienna in May 2015 with elected city officials, political party representatives, and political appointees; city planners, transport planners, and regional planning directors; transit agency officials; transport consultants for the City of Vienna; federal transport and finance officials; non-governmental organizations (NGOs) and lobbying groups; transport journalists; and senior professors of transport at Vienna universities. Follow-up questions were posed when necessary, either in additional personal interviews or via email or phone. Appendix A includes a detailed listing of the interviewees and the organizations they represent. In instances where interviewees were the sources of specific information reported in the text, they are cited by their last names and included in the alphabetical listing of references at the end of the chapter. In many cases, the majority of interviewees provided similar information. In such cases, only the most important interviews are listed as sources. In the few cases where information was conflicting, follow-up questions were posed and additional sources consulted in order to clarify and/or resolve the differences.

Finally, self-guided site visits were made throughout Vienna in May 2015 to examine the various types of public transit, pedestrian facilities, cycling facilities, parking management, and transit-oriented developments. Those site visits provided a visual, qualitative perspective and personal experience to supplement the information supplied by other sources.

Overview of Vienna’s Transport History, Demographics, and Economy

Vienna has long been reluctant to adapt to the car. Most streets in the historic central city have remained narrow. The main exception is the monumental Ringstrasse, which encircles the oldest part of the city (District 1). Throughout its history, Vienna has been a compact, monocentric city with mixed-use development, generating many trips short enough to walk and placing most locations within easy walking distance of public transport (Sammer, 2015; Pirhofer and Stimmer,
It has also protected large areas from development, for use as parks, forests, and even working vineyards within the city (Schicker, 2015). As a result, the share of land area used for urban development and transport infrastructure has remained below 50%, by comparison with about 75% in Munich, Berlin, and Zurich (City of Berlin, 2015a; City of Munich, 2015a; City of Vienna, 2015a; City of Zurich, 2015a).

Increasing affluence from 1960 to 1990 led to a quadrupling in motorization rates, from 90 to 357 cars per 1,000 population (Pirhofer and Stimmer, 2007; Csendes and Opll, 2006). The result was worsening roadway congestion, parking problems, air pollution, noise, and traffic injuries and fatalities (Knoflacher, 2015). Transport plans from the 1960s and 1970s envisioned the construction of high-speed motorways (autobahns) in the city, but widespread public opposition—including anti-highway demonstrations in the 1970s and 1980s—blocked nearly all of these proposals (Sammer, 2015; ASFINAG, 2012; Pirhofer and Stimmer, 2007; Csendes and Opll, 2006). The main exception was the 18km Südosttangente, a cross-town motorway (A23) in the southeastern part of the city, which at its closest passes 5 km from the historic city center (ASFINAG, 2012). Starting in the late 1960s, preservation of the old town, with its extremely narrow roadways and historic squares, became a top priority—supported by the public and by the ruling coalition parties, the Social Democrats and Conservatives—leading to the city’s first car-free pedestrian zone there in 1974 (Pirhofer and Stimmer, 2007; Csendes and Opll, 2006).

Given this anti-highway sentiment, one might have expected a large investment in improved public transport beginning in the 1950s. In practice, however, Vienna continued to rely for decades on its outdated but vast streetcar network, which suffered from worsening congestion delays (Knoflacher, 2015; Schicker, 2015; Pirhofer and Stimmer, 2007). In the 1950s and 1960s, population decline was projected for Vienna, suggesting fewer transit passengers in the future (Schicker, 2015; Pirhofer and Stimmer, 2007). Moreover, the estimated cost of building a metro system seemed prohibitively expensive (Csendes and Opll, 2006).

Vienna’s population in fact did shrink from 1.63 million in 1961 to 1.49 million in 1990, before increasing to 1.80 million in 2015 (City of Vienna, 2015c). In 2015 the City of Vienna accounted for 70% of the 2.6 million residents of the metropolitan area (City of Vienna, 2015c). Part of the recent population growth has been due to immigration from other countries. As of 2012, according to official Austrian statistics, more than one-third of Vienna’s residents were of full or partial immigrant origin, including 460,000 with foreign citizenship (Statistics Austria, 2015). Over 90% of Vienna’s immigrants and foreign residents come from eastern and southeastern Europe, reflecting Vienna’s location southeast of Europe’s center and its historical ties to that region during Vienna’s days as capital of the Austro-Hungarian Empire (Statistics Austria, 2015). The influx of immigrants from eastern and southeastern Europe—with much lower rates of car ownership than Austrians—may have contributed to the growth in public transport use and cycling since 1993.

Once the capital of the huge Austro-Hungarian Empire, Vienna lost most of its Central and Eastern European hinterland in 1920. Austria was created with only about a tenth the area of the former empire (Herry, 2015; Riedel, 2015; Csendes and Opll, 2006). The Second World War brought a further loss of territory (South Tirol) and much destruction, primarily by Allied bombing raids, the Soviet offensive to capture the city from the Nazis in April 1945 (Csendes
and Opll, 2006), and the first two years of Soviet occupation, which were notorious for the Red Army’s pillaging in the city. Following a decade of occupation by the four main Allied powers, Austria was granted independence in 1955 subject to guarantees that it would remain neutral in the Cold War (Csendes and Opll, 2006). Vienna remained surrounded, however, on three sides by the Communist countries of Czechoslovakia, Hungary, and Yugoslavia (Pirhofer and Stimmer, 2007; Csendes and Opll, 2006), and both trade and travel across the Iron Curtain remained extremely difficult. On the other hand, its Cold War neutrality enabled Vienna to emerge as an important meeting place between East and West. Numerous international organizations also established regional or worldwide headquarters in Vienna, including the UN. The fall of Communism in Eastern Europe in 1990-1992 diminished Vienna’s special status as a neutral country bridging the East and West, but the city continues to serve as a leading site for international offices and meetings (Pirhofer and Stimmer, 2007; Csendes and Opll, 2006).

From an economic perspective, the fall of Communism opened up Vienna to its former hinterland in Eastern and Southeastern Europe, fostering trade and tourism (Pirhofer and Stimmer, 2007). Vienna has since become the western headquarters for many eastern European firms, and it has received substantial numbers of immigrants from eastern and southeastern European countries, mainly seeking work and a higher standard of living. Austria’s admission to the European Union in 1995 further facilitated trade, tourism, and immigration from other EU countries. The fall of Communism did not, however, generate a sudden economic boom for Vienna. In real, inflation-adjusted terms, Vienna’s economy grew by 28% from 1977 to 1988, by 25% from 1988 to 1997, and by 20% from 1998 to 2008, before declining slightly during the Great Recession (City of Vienna, 2015c).

Overview of Politics in Vienna

Vienna has a special governmental status as both a city and federal state, with a unicameral parliament serving both as city council and state legislature. The mayor of the city is also the prime minister of the state (City of Vienna, 2015d; Pelinka, 2013). Vienna is also the capital of Austria and seat of the Austrian federal parliament.

All mayors of Vienna have been Social Democrats since 1945, and all transport ministers were Social Democrats until 2010, when a Green became transport minister and vice-mayor (City of Vienna, 2015d). In the 16 elections since 1945, the Social Democrats have always won the highest percentage of votes, but they formed coalition governments with the Conservative Party (ÖVP) from 1945-1973 and from 1996-2001, and with the Green Party since 2010 (City of Vienna, 2015d). As part of the coalition negotiations in 2010 and 2015, the Greens won control of the Ministry of Transport (indeed the only ministry they control), with Maria Vassilakou appointed both Minister of Transport and Vice-Mayor. (See Appendix B for further details on election results and the governing coalitions).
The two broad-based political parties, the Social Democrats and the Conservatives, attracted 90% of the local electorate as late as the election of 1983. That share fell to 49% in 2015, with two-thirds of the disaffected voters switching to the Freedom Party, which first emerged in the 1950s, and roughly one-third to the Greens, who first became a factor in the election of 1987. A new anti-establishment party, the Neos, emerged for the first time in the 2015 election with 6% of the vote (See Appendix B).

When the Social Democrats and Conservatives were overwhelmingly dominant and often in a governing coalition, controversies were usually resolved behind closed doors, seeking internal consensus before public political discussion. Many key decisions are still made behind closed doors before they come up for a vote in the city parliament (Faast, 2015; Gansterer, 2015; Rohracher 2015; Wetz, 2015). Consensus is achieved in most cases by including all key stakeholders (e.g. unions, chambers of commerce, neighborhood groups) at the very start of discussions about policies being considered, long before any official votes (Herry, 2015 and 1997).

Vienna’s system of government is corporatist as well as democratic (Pelinka, 2013). Where consensus has been elusive or tentative, measures have commonly been adopted in steps, with latitude for adaptation or reversal along the way, to avoid serious failures and minimize political risk (Herry, 2015; Sammer, 2015). This consensual decision-making process can take a long time and has delayed the implementation of projects such as the metro system (U-Bahn) and parking management (Blum, 2015; Schicker, 2015). It may, however, go far toward explaining how the Social Democrats have continued to prevail electorally for six decades.

The rise of the Freedom (FPÖ) and Green parties starting in the late 1980s and the emergence of the Neos in 2015 have posed a growing challenge to this traditional way of doing politics in Vienna (Knoflacher, 2015). They take more extreme positions than the broader-based SPÖ and ÖVP (Authried, 2015; Faast, 2015; Rohracher, 2015), and often prefer debating in public to doing so exclusively behind closed doors. The Greens, for example, have pushed their SPÖ coalition partners to implement sustainable transport policies faster, and at times using more controversial methods (such as restrictions on car use) than the SPÖ has in the past (Vassilakou, 2015; Maresch, 2015; Sammer, 2015). They have also been eager to try out new ideas such as shared streets, before consensus on their desirability existed. At the other end of the political spectrum, the FPÖ has appealed to the public mainly with anti-immigrant and anti-foreigner rhetoric. The Neos have publicly accused the Social Democrats of nepotism, corruption, and secrecy in their political decisions.

The consensual, back-room approach still applies to most internal party politics of the SPÖ (Lindenmayr, 2015; Zabrana, 2015). This complicated the research for this case study—especially the in-person interviews. Politicians, agency directors, and government bureaucrats were generally accessible but unwilling to talk about conflicts, controversies, mistakes, and the inevitable give-and-take of the political process of implementing policies. It was difficult to elicit criticisms of any kind. This was less true of the Greens, even though they are now part of the governing coalition (with the Social Democrats). The Freedom Party repeatedly ignored our interview requests. It has not hesitated, however, to sharply criticize the policies of the governing coalition through conventional media, social media, and on-line videos.
Social Democrats (SPÖ) have been strong, long-time supporters of labor, social housing, and public transport (Lindenmayr, 2015; Schicker, 2015; Zabrana, 2015). Their core base of support has been the working class and labor unions. The Greens (part of the governing coalition since 2010) have been most committed to environmental protection and promoting bicycling, public transport, and walking (Jens, 2015; Maresch, 2015; Vassilakou, 2015). They have also strongly favored restrictions on car use and parking, about which the Social Democrats have been far more hesitant for fear of losing working class votes (Blum, 2015; Gansterer, 2015; Rohracher, 2015). The role of the Greens has recently been crucial in transport policy, and they have sometimes proposed extreme policies to push their Social Democratic partners at least in the Green Party’s preferred policy direction (Maresch, 2015; Vassilakou, 2015). The Social Democrats have sometimes used the Greens as a lightning rod for criticism of unpopular policies while taking credit for these policies if they later win broad acceptance (Wetz, 2015). Even in 1994, long before the Greens became part of the governing coalition (2010), the current mayor Michael Häupl made concessions to the Greens to obtain their support in the city parliament for his first-term candidacy (Lindenmayr, 2015; Grüne Wien, 2002).

The Conservative Party (ÖVP), supported the construction of a metro system (U-Bahn) already in the 1950s and 1960s, long before the Social Democrats voted for the metro in 1968, and has been supporting its expansion ever since (Pirhofer and Stimmer, 2007). Parking management was first implemented in Vienna’s 1st District, which was led by Conservatives at the time (Schmitz, 2015; Herry, 1997). Especially in the late 1970s and 1980s, the ÖVP had a strong environmentally-oriented wing that opposed construction of more autobahns, supported public transport, car-free zones, traffic calming, parking restrictions, protection of greenspace and favored inner city restoration and re-development over new developments on the urban fringe (Csendes and Opll, 2006).

Lower Austria, the state surrounding Vienna, has been governed by the ÖVP (Conservatives) for over 50 years (Zibuschka, 2015). Unlike the Conservative Party in Vienna, however, the party has invested heavily in autobahns and supported few public transport investments, with the latter targeted to benefit commuters from Lower Austria to Vienna (Blum 2015; Russ, 2015; Sammer, 2015). Lower Austria is overwhelmingly rural, with an overall population density only 2% of Vienna’s (86 vs. 4,437 residents per km²) and with 97% of its land area devoted to agriculture and forests. Most of its population is scattered throughout the state in villages and small towns where the car is necessary for most daily trips. This explains, in particular, the lack of support for public transport investments in Lower Austria.

The Freedom Party (FPÖ), populist and right wing in its orientation, increased its share of the Vienna vote from 5% in 1983 to 31% in 2015 (City of Vienna, 2015d; Neuwahl, 2015). The large increase in the FPÖ’s share of the vote in 2015 was based mainly on the contentious issue of immigration and acceptance of refugees. The FPÖ campaigned almost exclusively on this issue, which became even more important in summer and autumn 2015 due to the influx of refugees passing from the Middle East through the Balkans to Europe (New York Times, 2015). Thus, the fall in the SPÖ’s and Green’s share of the vote cannot be interpreted as voter disapproval of the coalition’s transport policies.
The FPÖ’s transport policy views have varied over time, but in general it has strongly opposed any restrictions on car use (including traffic calming and on-street parking fees) while supporting expansion of the metro system (Knoflacher, 2015). The FPÖ is not considered a serious contender to become part of Vienna’s governing coalition in the near future because it is ostracized by the other parties. Nevertheless, if its share of the vote continues to rise, its policy views may become more influential.

The recently emerged Neos, with 6% of the vote in 2015, are mainly concerned with fighting corruption, improving education, reducing debt, and ending what they consider the many decades of nepotism and secrecy under the SPÖ. The Neos generally support policies to improve the quality of public transport and conditions for walking and cycling. Thus, their transport policies are mostly consistent with those of the governing coalition.

Table 2 provides a chronological overview of key politicians in Vienna over the past five decades and their specific roles in the evolution of Vienna’s transport policies. The listing starts with Mayor Bruno Marek because it was under his leadership that the construction of the metro system was finally approved in 1968. The table ends with the current coalition government of Social Democrats and Greens lead by Mayor Häupl.