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Special Report

## Sustainable Urban Mobility in the EU: No substantial improvement is possible without Member States' commitment



EUROPEAN  
COURT  
OF AUDITORS

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# Executive summary

**I** Sustainable urban mobility is one of the main challenges facing cities in the EU and a matter of concern for many EU citizens. There are strong links between more sustainable urban mobility and both economic growth and reduced environmental pollution.

**II** The main source of EU funding for urban mobility is the European structural and investment fund (ESIF), €16.3 billion in 2014-2020. In addition, the Connecting Europe Facility (CEF) for transport has provided over €200 million to a number of larger EU cities.

**III** Urban mobility is a topic that affects many EU citizens, who are sensitive to the time and money spent on travelling. The EU is investing substantial amounts to help cities improve their mobility and make it more sustainable. Our report should help the Commission, Member States and cities to use funds more effectively and efficiently in addressing the challenges involved, particularly in the context of the December 2019 'Green Deal' Communication of the Commission, issued after our audit.

**IV** Member States and their cities are responsible for managing urban mobility in a sustainable way. The Commission's role is limited, but in response to the importance of the issue, following its 2013 Urban Mobility package, the Commission has issued a range of policy documents and guidance, and has increased the funding it provides to projects in this area.

**V** We examined the extent to which the EU support was effective in contributing to improving urban mobility in a sustainable way. In particular, we assessed whether: EU cities have made progress towards improving sustainable urban mobility since the 2013 Urban Mobility Package; cities followed EU guidelines and targeted EU funding to achieve more sustainable urban mobility; and the projects we examined were based on sound strategies and proved effective.

**VI** We recognise that significant improvements in sustainable urban mobility may require more time to materialise. However, six years after the Commission called for a step-change, there is no clear indication that cities are fundamentally changing their approaches. In particular, there is no clear trend towards more sustainable modes of transport. Although cities have put in place a range of initiatives to expand the quality and quantity of public transport, there has been no significant reduction in private car usage. Some air quality indicators have slightly improved, but greenhouse gas

emissions due to road transport have been steadily increasing and there are still many cities exceeding EU safety thresholds.

**VII** In the absence of legislative compulsion, there was limited take-up of the Commission's guidance on the part of many Member States and cities – notably in terms of preparing 'Sustainable Urban Mobility Plans'. Neither is there a requirement for access to EU funding to be conditional on having these plans in place, although two of the Member States we visited have imposed this condition at the national level.

**VIII** Some Member States and cities did not complement EU funds effectively with appropriate resources to ensure the adequate operation and maintenance of their public transport network; costs can also rise because lines are not always technically interoperable. In addition, urban mobility policies at local levels were not always coherent with the aim of more sustainable urban mobility. We found examples of positive initiatives towards sustainable urban mobility; these tended to require considerable political leadership and communication efforts to win acceptance from citizens.

**IX** We found that projects in receipt of EU funding we examined were not as effective as intended, because of weaknesses in project design and implementation. These projects were not always based on sound urban mobility strategies, which often lacked fundamental data and appropriate analyses, relevant targets and coordination with both other plans and neighbouring municipalities.

**X** On the basis of these conclusions, we recommend that the Commission:

- o build on its previous experiences, to publish better data on urban mobility and the extent to which the EU's most important cities have sustainable urban mobility plans in place; and
- o link access to EU funding to sustainable urban mobility plans.

# Introduction

## Sustainable urban mobility and its importance

**01** Urban mobility in this report refers to the ease with which people can move between destinations in urban areas with the help of the transport network and services available. There are many factors that affect urban mobility patterns, such as demography, land-use, governance, the availability of public transport, car use, and the local economy.

**02** Managing urban mobility is an important challenge for urban areas. Planners and policy-makers, in addition to inevitable financial constraints, are faced with many, often competing demands: maintaining a high quality of life while also creating an attractive environment for businesses; and restricting traffic in sensitive areas while not curbing the necessary movement of goods and people<sup>1</sup>.

**03** Urban mobility faces many challenges, among which traffic congestion is one of the most difficult. There is considerable economic research indicating that the cost to society of congestion is high (estimated at €270 billion per year in the EU<sup>2</sup>) and that the more fluid the traffic in an urban area, the greater its likely economic growth. One study showed that moving to free-flow traffic could boost productivity of workers by as much as 30 % in highly congested regions<sup>3</sup>. As road congestion in the EU is often located in and around urban areas, this problem affects the majority of the inhabitants in the EU. However, experience has shown that increasing road capacity in urban areas leads to more traffic and thus congestion, so the solution has to be sought through other approaches.

**04** Many European cities suffer from poor air quality and regularly exceed the limit values for the protection of human health set in the Ambient Air Quality Directive<sup>4</sup>. As

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<sup>1</sup> European Commission (2013) *Planning for People*: Guidelines on developing and implementing a sustainable urban mobility plan.

<sup>2</sup> [https://ec.europa.eu/transport/themes/sustainable-transport/internalisation-transport-external-costs\\_en](https://ec.europa.eu/transport/themes/sustainable-transport/internalisation-transport-external-costs_en)

<sup>3</sup> David Hartgen and Gregory Fields (2009). Gridlock and Growth: The effect of Traffic Congestion on Regional Economic Performance. Reason Foundation policy study no 371.

<sup>4</sup> Directive 2008/50/EC on ambient air quality and cleaner air for Europe.

many as 96 % of EU citizens living in urban areas are exposed to levels of air pollutants considered by the World Health Organisation (WHO) to be damaging to health. In 2013, the European Commission (the Commission) estimated that the total health related costs of air pollution are several hundred billion euro per year. Pollution also has a negative impact on biodiversity. Recent studies also make reference to the lack of physical movement as a serious negative side effect of car travel.

**05** Road transport is one of the main causes of air pollution<sup>5</sup> and greenhouse gas emissions. For example, it is the largest source of mono-nitrogen oxides (NO and NO<sub>2</sub>) emissions, and the second largest source of carbon monoxide and particulate matter emissions. Urban areas account for 23 % of CO<sub>2</sub> emissions from transport. Besides air pollution and CO<sub>2</sub> emissions, transport is also responsible for noise nuisance.

**06** Given the impact of urban mobility on both economic growth and the environment, the EU promotes urban mobility that is sustainable. This is the development of strategies that stimulate a shift towards cleaner and more sustainable modes of transport, such as walking, cycling, public transport, and new patterns for car use and ownership<sup>6</sup>.

## The role of the Commission

**07** In line with the principle of subsidiarity, urban mobility is managed locally, and there are no EU regulations or directives addressing it. Nevertheless, given the importance of the issue, the Commission has issued several policy documents and has devoted considerable funds to urban mobility, mainly in the context of its transport policy. The main Commission directorates-general involved are:

- DG Mobility and Transport (DG Move) sets transport policies and finances transport infrastructure projects for the trans-European transport network (TEN-T);
- DG Regional and Urban Policy (DG Regio) provides financial support to Member States and regions which can be used for sustainable transport and urban mobility; and

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<sup>5</sup> Special report 23/2018: Air pollution: Our health still insufficiently protected.

<sup>6</sup> Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Together towards competitive and resource-efficient urban mobility, COM(2013) 913 final.

- DG Research and Innovation (DG RTD) provides funding for research on mobility concepts in the urban domain.

**08** Over the past decade, the Commission has issued several policy documents, illustrated in [Figure 1](#). In 2009, the first comprehensive support package on urban mobility was the “Action plan on urban mobility”, setting out a framework for EU initiatives in the area of urban mobility. In 2013, the Commission issued the Urban Mobility Package (see [Box 1](#)), with the aim of reinforcing support to European cities for tackling urban mobility challenges. In 2017 it issued the Communication “Europe on the move, an agenda for a socially fair transition towards clean, competitive and connected mobility for all”, comprising a set of initiatives toward modernising European mobility and transport. In December 2019, after our audit work had finished, the Commission issued a Communication in which it proposes a ‘European Green Deal’ with the aim of a climate neutral continent<sup>7</sup>, and including the objective of shifting towards more sustainable urban mobility.

### Box 1

#### The Urban Mobility Package

With its Urban Mobility Package, the Commission aimed to reinforce its support to European cities for tackling urban mobility challenges. It urged a step-change in the approach to urban mobility to ensure that Europe’s urban areas developed along a more sustainable path and encouraged Member States to take more decisive and better-coordinated action.

The package focused on the adoption of Sustainable Urban Mobility Plans (SUMPs) and asked Member States to consider ensuring that SUMPs were developed and implemented in their urban areas and integrated in a wider urban or territorial strategy.

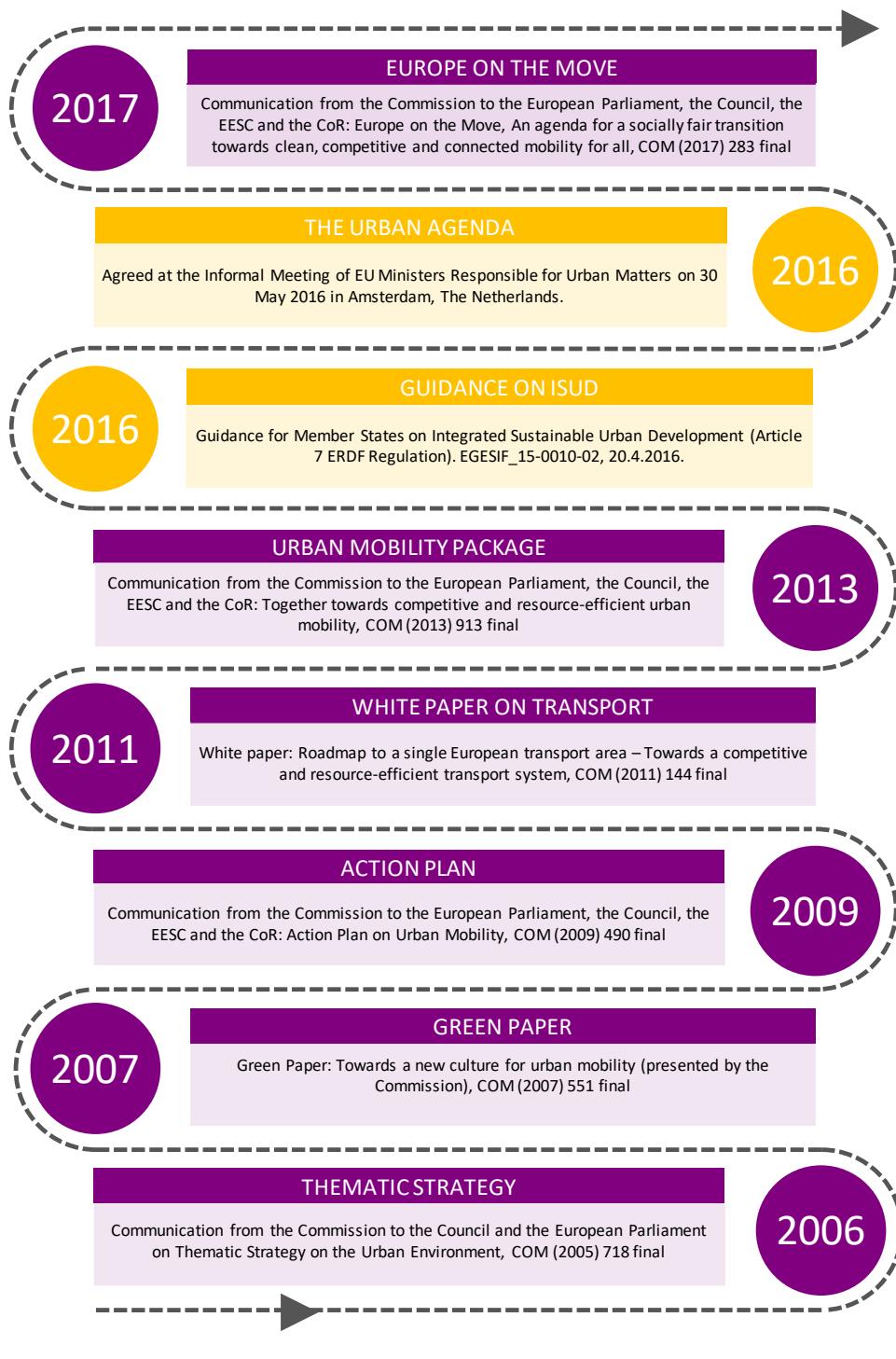
Furthermore, the Package called for smarter Urban Access Regulations and Road User Charging, for the coordinated deployment of Urban Intelligent Transport Systems and for increased road safety.

As at November 2019, the Urban Mobility Package was under evaluation, with a view to assessing whether it is fit for purpose and delivering as intended.

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<sup>7</sup> Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions “The European Green Deal” – COM(2019) 640 final.

**Figure 1 – Main policy documents adopted by the Commission**



Source: ECA.

## Available funds for urban mobility

**09** The main source of EU funding for urban mobility is from two of the five European structural and investment (ESI) funds, the European Regional Development Fund (ERDF) and the Cohesion Fund (CF). Other funds available are Horizon 2020 in the field of research and innovation, and the Connecting Europe Facility (CEF) for transport.

**10** The amount available for urban mobility through the ESI funds has increased from €11.2 billion in the 2007-2013 programme period to €16.3 billion for 2014-2020). This includes mainly funding for clean urban transport (2007-2013 €8.1 billion; 2014-2020 €12.8 billion), but also intelligent transport systems (ITS), cycle paths and multimodal transport. The projects supported by the ESI funds are co funded with national resources.

**11** Total funds for the TEN-T under the CEF are €24 billion in 2014-2020. For the current period, the CEF is being used to target ‘urban nodes’ – including the 88 cities around the EU which constitute entry points to the core TEN-T network<sup>8</sup>. At the time of the audit, the amount of CEF funding for urban nodes corresponded to €214 million (1 % of the total).

**12** Since 2014, the EIB has provided loans of €48.2 billion, including the European Fund for Strategic Investments, to finance projects in the transport sector as a whole, which includes rail, aviation, maritime and road projects as well as urban mobility. These loans are for projects with total investment cost higher than €25 million and are designed to be climate-friendly, safe, sustainable and innovative.

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<sup>8</sup> See Regulation (EU) No 1315/2013 of the European Parliament and of the Council on Union guidelines for the development of the trans-European transport network (OJ L 348, 20.12.2013, p. 1).

# Audit scope and approach

**13** In 2014, we published a report on the effectiveness of urban transport projects<sup>9</sup>. The objective of our current audit was to examine the extent to which the EU support is effective in contributing to improving urban mobility in a sustainable way. In particular, we assessed whether:

- (1) EU cities have made progress towards improving sustainable urban mobility since the 2013 Urban Mobility Package.
- (2) Cities followed EU guidelines and targeted EU funding to achieve more sustainable urban mobility.
- (3) The projects we examined were based on sound strategies and proved effective.

**14** Urban mobility is a topic that affects many EU citizens, who are sensitive to the time and money spent on travelling. Over half of them consider congestion to be the most serious problem affecting mobility<sup>10</sup>. The EU is investing substantial amounts to help cities improve their mobility and make it more sustainable. Our report should help the Commission, Member States and cities to use funds more effectively and efficiently in addressing the challenges involved, particularly in the context of the December 2019 ‘European Green Deal’ Communication of the Commission.

**15** The audit covered the policy and strategy papers from 2013 onwards, when the Commission adopted the Urban Mobility package with the aim of reinforcing the support to European cities for tackling urban mobility challenges. We examined relevant documents made available by the Commission, as well as Member States, cities and third parties, performed interviews, analyses of reports and assessments of project data, including CEF-funded projects.

**16** We visited eight cities<sup>11</sup> in four Member States (Italy, Germany, Spain and Poland) between November 2018 and April 2019 to assess the availability and content of

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<sup>9</sup> Special report 01/2014: ‘Effectiveness of EU-supported public urban transport projects’.

<sup>10</sup> Special Eurobarometer 422a, Quality of Transport Report, December 2014.  
[https://ec.europa.eu/transport/media/news/2014-12-08-eurobarometer\\_en](https://ec.europa.eu/transport/media/news/2014-12-08-eurobarometer_en).

<sup>11</sup> Leipzig, Hamburg, Naples, Palermo, Warsaw, Łódź, Madrid and Barcelona. A range of criteria was used to select these cities, including congestion levels, population, geographical location.

Sustainable Urban Mobility Plans (SUMPs), and other local strategies and plans. We assessed 15 EU-co-financed projects<sup>12</sup> in the visited cities (see *Annex I*), 14 supported by the ESI funds and one by the EFSI. In addition, we carried out study visits to Copenhagen and Stockholm to explore the potential of congestion charges and cycling. We complemented our analysis with a survey to the 88 cities comprising the TEN-T network, with a response rate of over 30 %; and geo-spatial analyses made by Eurostat on our behalf, including use of big data analytics on congestion. Where relevant, we drew on the expertise of four external experts on urban mobility – in particular, on the latest developments in the field.

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<sup>12</sup> Projects were selected on the basis of those most likely to lead to more sustainable urban mobility, or to improve the efficiency of the existing infrastructure.

## Observations

### The step change in sustainable urban mobility has not materialised

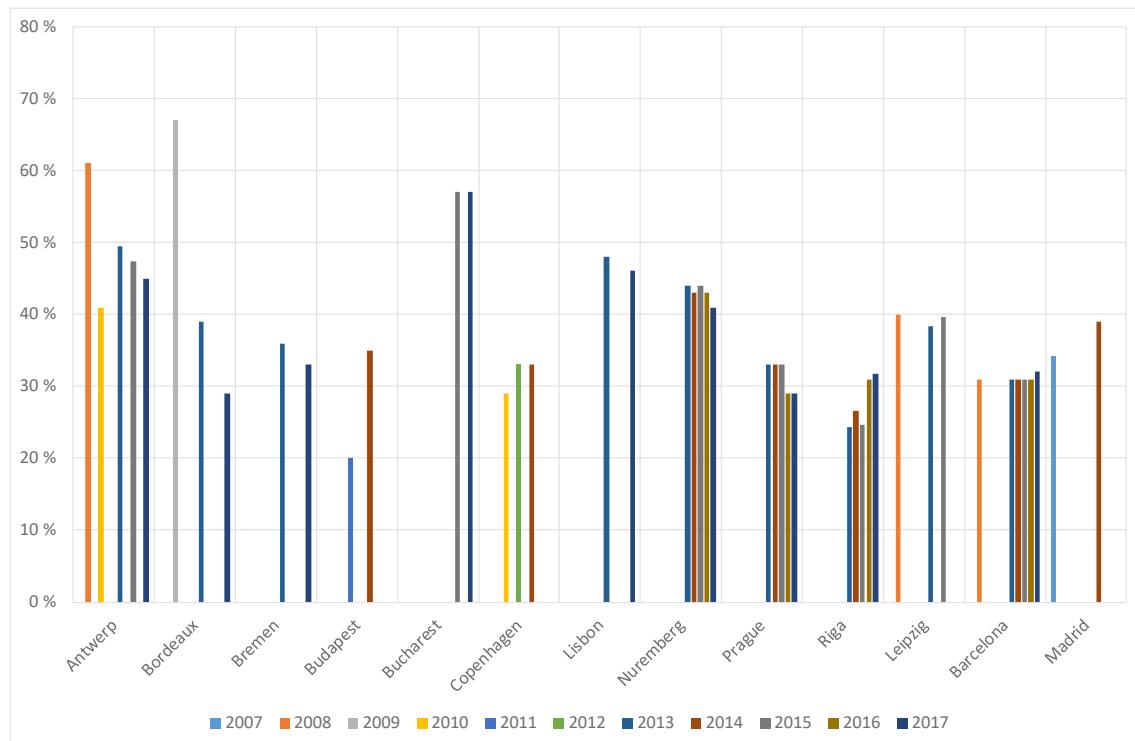
**17** To assess whether mobility has become more sustainable in line with the aspirations set out in the Urban Mobility Package, we examined the share of different types of transport; the pollution from transport; levels of congestion; and the coverage and accessibility of public transport in cities and their surrounding areas.

### There is no evidence of a clear trend towards more sustainable modes of transport

**18** The European Platform on Mobility Management (EPOMM) considers ‘modal share’ – the proportions in which different types of transport are used – to be the best indicator of the sustainability of a city’s mobility policy. In the absence of a source of comprehensive data on the modal share across the EU, we gathered evidence from the EPOMM website and complemented the analysis with more recent information from our survey and from our visits to eight cities.

**19** Only 27 of the 88 cities we surveyed provided data about modal share. An analysis of the modal share of 13 of these cities with comparable data over different years (see *Figure 2*) shows that in two of these cities – Antwerp and Bordeaux – private car usage dropped considerably, while in Budapest it increased by 80 %.

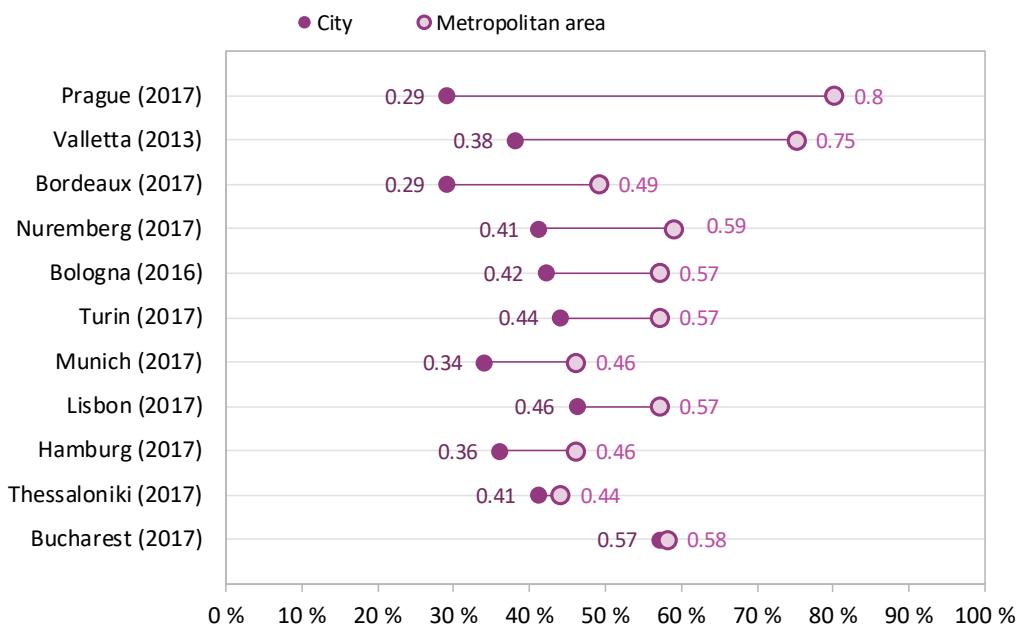
**Figure 2 – Modal share of private vehicles in 13 cities between 2007 and 2017**



Source: ECA analysis based on data provided by cities and EPOMM.

**20** The results of our survey also show that in the 14 cities that provided data on the topic, the modal share of private vehicles was in most cases considerably higher in the metropolitan area surrounding the city than in the city (see *Figure 3*).

**Figure 3 – Modal share of private vehicles in 11 cities and metropolitan areas surrounding cities**



Source: ECA based on replies to its survey on urban mobility.

### Air quality has improved in urban nodes, but pollution still exceeds safe levels

**21** Although greenhouse gas emissions decreased in the majority of sectors between 1990 and 2017, emissions caused by transport increased. Within this sector, road transport was the category whose emissions increased most. Between 2014 and 2017, road transport CO<sub>2</sub> emissions increased by 45 million tonnes, 5 %, and account for 25 % of all domestic CO<sub>2</sub> emissions<sup>13</sup>. Of the emissions attributable to transport, 23 % are in urban areas.

**22** Air pollution within cities continues to be harmful to human health. Overall there has been progress in reducing nitrogen dioxide (NO<sub>2</sub>) and particulate matter emissions. However, according to the European Environment Agency<sup>14</sup>, breaches of the standards set in Ambient Air Quality Directives continue to be widespread in EU cities.

<sup>13</sup> European Environment Agency, Annual European Union greenhouse gas inventory 1990-2017 and inventory report 2019, 27 May 2019.

<sup>14</sup> <https://airindex.eea.europa.eu/>.

**23** The eight cities we visited are all included in the EU infringement procedures<sup>15</sup> against the respective Member States. As at September 2019, all these cities apart from Leipzig and Palermo continued to exceed permitted levels of pollution.

### Urban mobility is deteriorating for road users due to congestion

**24** In the absence of a significant shift to other forms of transport, rising congestion (see *Box 2*) is an indication that urban mobility is deteriorating for road users.

#### Box 2

##### Congestion

Congestion is both a physical phenomenon relating to the manner in which vehicles impede each other's progression as demand for limited road space approaches full capacity, as well as a relative phenomenon relating to users' expectations vis-à-vis road system performance<sup>16</sup>. The most common indicator of traffic congestion is based on the difference in average speed between free-flow conditions (usually based on data recorded in the middle of the night) and those observed at different times of day, converted to an increase (absolute or percentage) in average travel time.

**25** According to TomTom<sup>17</sup> data, between 2013 and 2018, congestion worsened in 25 out of 37 urban nodes for which data was available. This trend was also observed in all the cities we visited. The map in *Picture 1* below illustrates how a 30 minute drive takes you less far in Barcelona than was the case in 2012. Similar maps for the other cities we visited are in *Annex II*.

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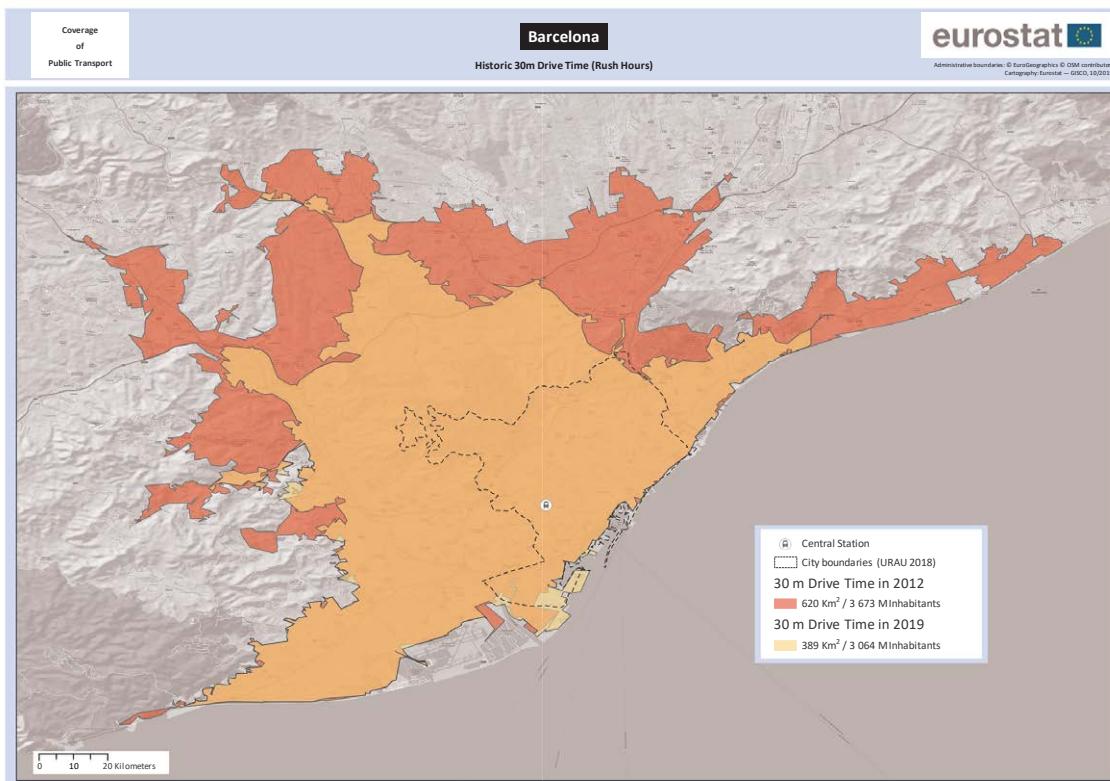
<sup>15</sup> Legal action against a Member State that fails to implement EU law.

<sup>16</sup> OECD (2007), Managing Urban Traffic Congestion.

[https://www.oecdilibrary.org/transport/managing-urban-traffic-congestion\\_9789282101506-en](https://www.oecdilibrary.org/transport/managing-urban-traffic-congestion_9789282101506-en).

<sup>17</sup> A provider of data on traffic.

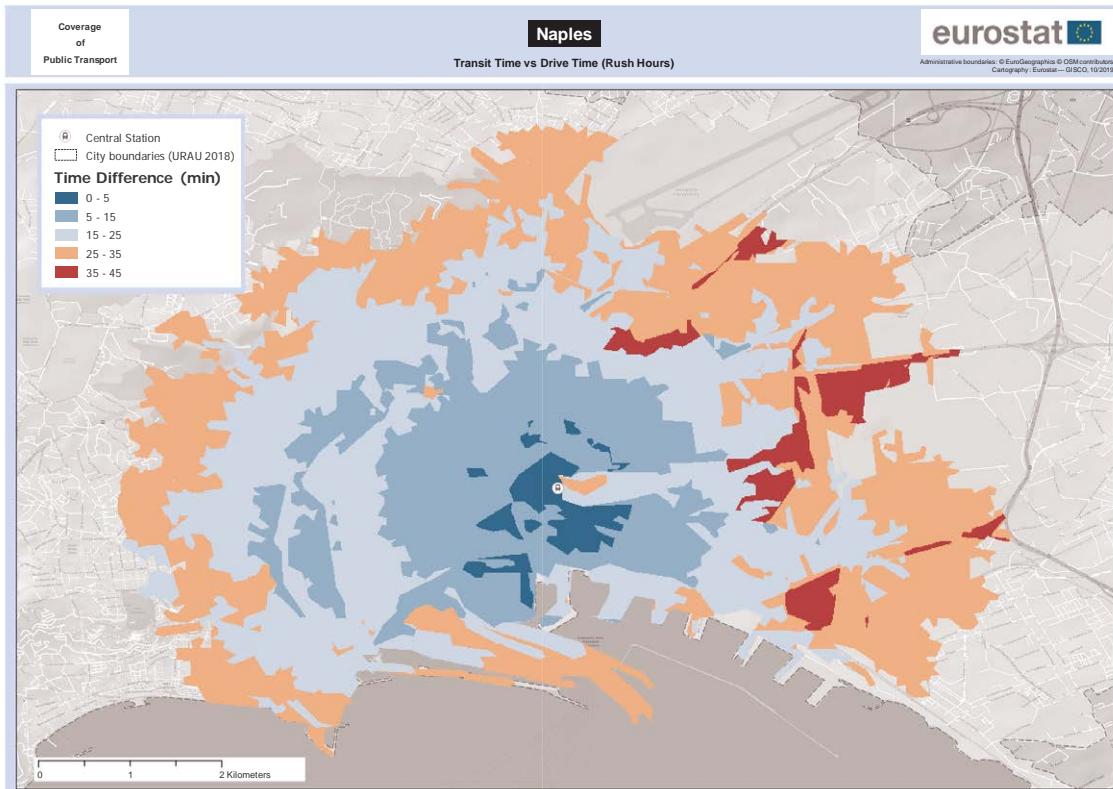
**Picture 1 – Accessibility within 30 minutes driving time during rush hours in 2012 and in 2019 – Barcelona**



Source: Eurostat analysis on behalf of ECA.

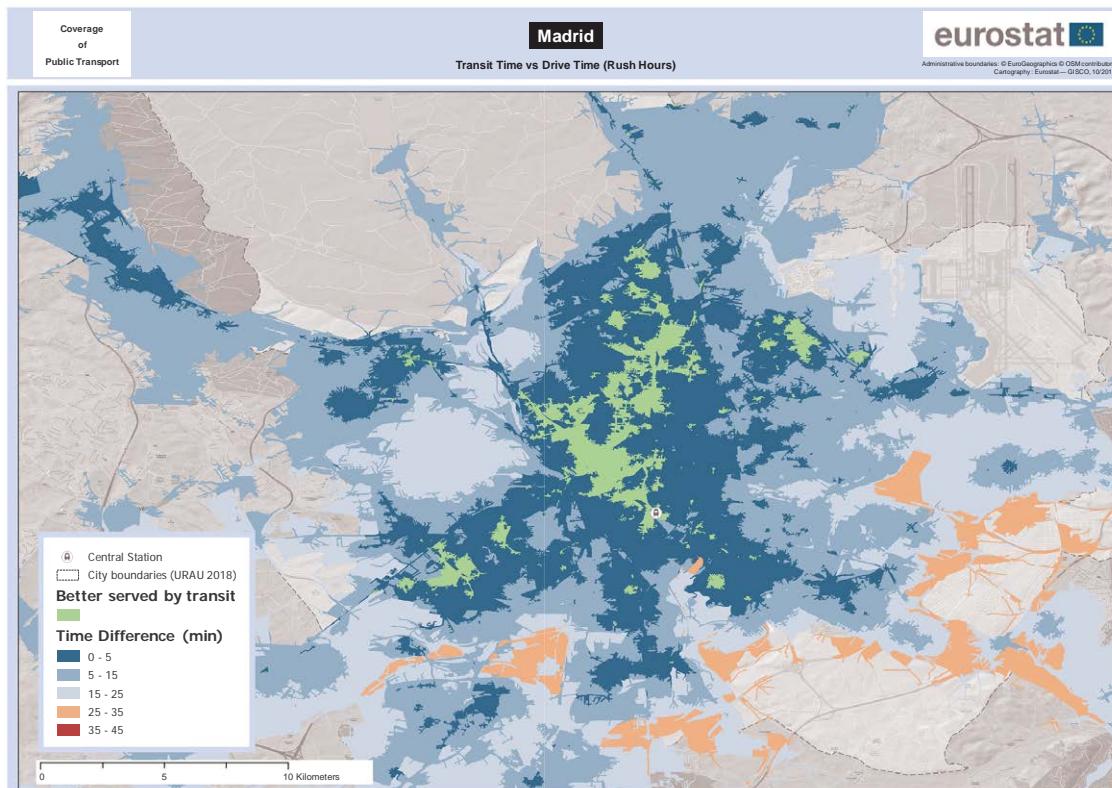
**26** We noted, however, that, while cost and convenience are also factors, in seven out of eight cities, it generally remains more time-efficient to use a private vehicle than public transport. *Picture 2* shows that it takes longer to get to Naples' central train station by public transport than by private car. Only in Madrid did we find some parts of the city where access to the Atocha station – one of the two main railway stations – was quicker by public transport – see *Picture 3*. Similar maps for the other cities we visited are in *Annex II*.

## Picture 2 – Comparative accessibility of Naples train station by car and by public transport



Source: Eurostat analysis on behalf of ECA.

### Picture 3 – Comparative accessibility of Madrid Atocha train station by car and by public transport (transit)



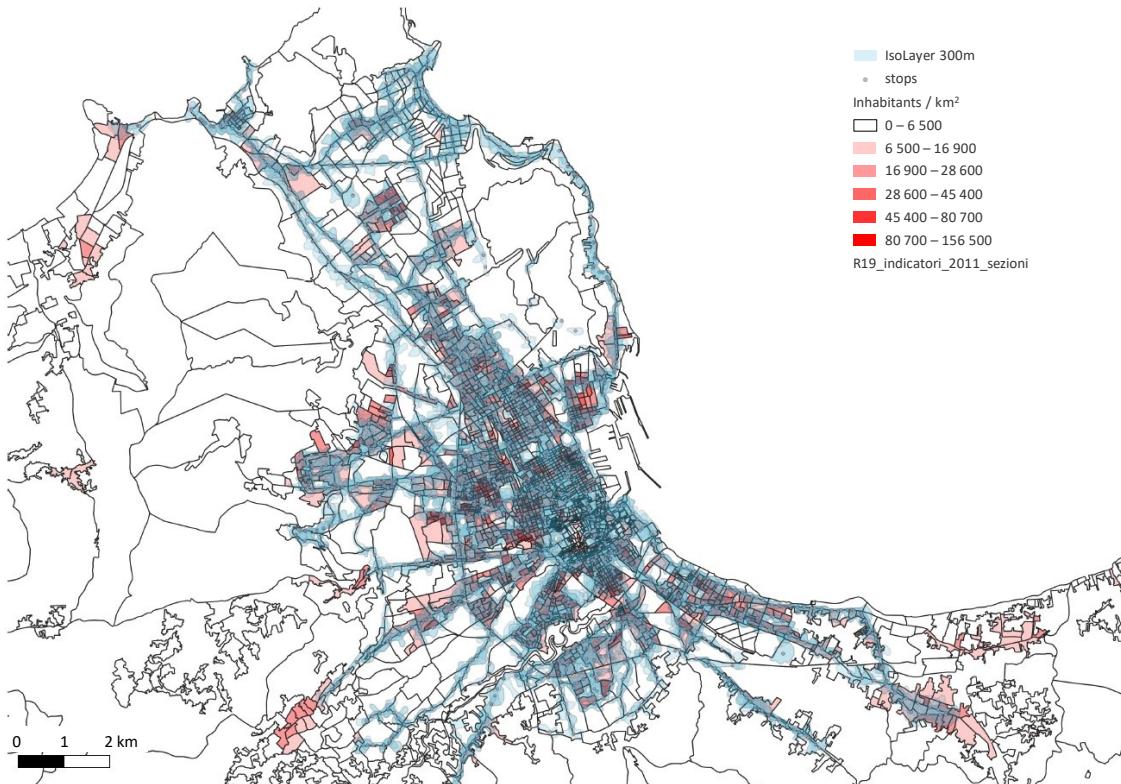
Source: Eurostat analysis on behalf of ECA.

**The coverage and accessibility of public transport within cities has been improving**

**27** Good public transport is key to sustainable urban mobility, as it provides – together with ‘active mobility’ (transport based on human physical activity, such as walking and cycling) – an alternative to the use of private cars. Good public transport requires, among other things, ease of access (having a large share of population within a short distance from a public transport infrastructure), frequency, speed and a high degree of connectivity to the network. Cities have been able to use EU funds to help expand their public transport networks through investments in metro and tram lines, and in rolling stock – see paragraph **36**.

**28** A 2019 OECD report shows that the percentage of population living in the proximity of public transport facilities is, in some cities, at very high levels (see [Table 1](#)). The levels in the peripheral areas are lower – see the example of Palermo in [Picture 4](#), showing significant parts of the population with little coverage by public transport.

#### Picture 4 – Population density and public transport coverage in Palermo



Source: ECA analysis based on data published by ISTAT and the Palermo municipality.

**29** However, as these cities attract commuters from the surrounding municipalities, the offer of public transport in the periphery and the ease of connections to the rest of the network in the city determines whether commuters choose to reach the city by private vehicle or by public transport, irrespective of the quality of public transport within the city.

**Table 1 – Public Transport Coverage**

Name of city	Inner city	Metropolitan area
Leipzig	99.9 %	70.7 %
Hamburg	99.9 %	99.5 %
Naples	53.5 %	48.5 %
Madrid	99.9 %	96.7 %
Warsaw	100.0 %	84.8 %
Average*	95.6 %	87.9 %

\* The average covers the 81 cities that had GTFS data, of the 121 cities covered by the International Transport Forum report.

Source: International Transport Forum, 2019.

**30** The lower coverage of public transport in the peripheral commuting zones and the fact that most lines in the periphery go to and from the centre while an increasing part of the trips are from suburb to suburb contributes to the higher modal share of private vehicles there than within cities (see *Figure 3*).

### The Commission intensified its support but a range of factors limited progress towards sustainable urban mobility

**31** We assessed the support the Commission provided Member States with in terms of policy documents and guidelines, and the extent to which Member States used them. In addition, we analysed the financial support provided by the Commission under the ESIF and under the CEF, to assess whether funds were used in line with the objective of moving towards more sustainable urban mobility.

### The Commission developed policies and issued guidelines, although these have not always been followed by Member States

**32** The Commission has issued a number of policy documents (see *Figure 1*). To support its policy aims, it has issued, and regularly updated, a range of guidelines. It has complemented them with relevant conferences and seminars to improve their adoption and raise awareness among EU cities on the need to set up an integrated approach to sustainable urban mobility.

**33** The Urban Mobility Package of 2013 reported slow progress towards implementing more sustainable modes of urban mobility and stated the need for a step-change. The measures it identified to reinforce the support to European cities consisted mainly of collecting and disseminating information and advice, research and experience-sharing initiatives. These measures are designed to tackle urban mobility challenges in the fields of traffic congestion, CO<sub>2</sub> emissions from transport, harmful exposure to airborne pollutants and road fatalities. The support activities included the following:

- Creation of the ELTIS platform<sup>18</sup>, which serves as urban mobility ‘observatory’ – i.e. data repository – and one-stop-shop for SUMPs;

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<sup>18</sup> The European Local Transport Information Service: <https://www.eltis.org>.

- Guidelines on SUMPs, which at the time of the audit were being updated, complemented by six SUMP conferences;
- Advice on funding opportunities;
- Support for testing and deployment of innovative urban mobility solutions through initiatives such as ‘CIVITAS<sup>19</sup>’ and ‘EIP Smart Cities and Communities<sup>20</sup>’.

**34** Data are uploaded to the Commission’s ELTIS, website on a voluntary basis and may not reflect the latest position. However, our survey confirmed the evidence from ELTIS that at the time of the audit, although a number of cities are working towards it, there were still many urban nodes that had not adopted a SUMP.

**35** Under the current legislation, environment is one of the most relevant areas in which the EU can exert direct influence on Member States. With its legislation in this field, the EU has created a strong incentive for cities to take action to avoid the risk of infringing environmental thresholds. Environmental legislation also includes the adoption of more stringent emission standards for road transport vehicles and ambitious targets for the public procurement of clean vehicles. These initiatives aimed to reduce the level of emissions attributable to transport and led, in isolated cases, to temporary closures of individual streets to diesel cars (Hamburg, see paragraph [51](#)).

### More EU funds were allocated to sustainable urban mobility in 2014-2020, but a SUMP is not usually a condition for funding

**36** To support the policy objective of making urban mobility more sustainable, ESI Funds 2014-20 for urban mobility increased, compared to the previous period by 46 % (see paragraph [10](#)). This indicated a clear change in focus since, for example, allocations for non-TEN-T roads decreased by 25 %, from €20.8 billion to €15.5 billion. The €12.8 billion for ‘clean urban transport’ in 2014-2020 is the largest allocation among the individual transport-related fields of intervention (see [Annex III](#)). Major projects targeting urban mobility consisted mainly of investments in metro or tram lines and in rolling stock.

**37** EU cities do not have to follow the Commission’s guidelines or to have SUMPs, or even a comprehensive national urban transport strategy for urban projects to benefit from EU funding. This is despite the fact that congested urban nodes can seriously

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<sup>19</sup> <https://civitas.eu/>

<sup>20</sup> <https://eu-smartcities.eu>

hamper the efficiency of the TENT network, supported by CEF funds throughout the EU.

**38** Two of the four Member States we visited have made SUMPs a condition for cities to be eligible for national or EU funds.

- In Italy, the national Ministry of Infrastructure and Transport issued a decree in 2017, requiring cities with more than 100 000 inhabitants to adopt SUMPs in line with the Commission guidelines before October 2019 (later extended by a year), in order to be eligible for national funds for public transport infrastructure. This resulted in an increase in the number of cities starting the SUMP adoption process.
- In Spain, the national administration made the adoption of SUMPs a condition for granting EU structural funds to the regional and local administrations for urban or metropolitan public transport for the 2014-2020 programme period. SUMPs have to be in accordance with the national strategy for sustainable mobility. According to the Spanish authorities, this led to most cities with more than 50 000 inhabitants adopting SUMPs.

**39** Making an adopted SUMP a condition for funding has thus proven to be a strong incentive for cities to develop urban mobility strategies in Italy and Spain. However, in none of the cities we visited in those countries was there external assessment of the quality of the adopted SUMPs. There is, therefore, a risk that the adoption process may become an administrative formality to get access to funds and that the SUMP may thus not be of the quality needed to drive improvements in urban mobility.

**40** In 2019 the Commission started addressing the issue of urban mobility in its Country Specific Recommendations (CSR), as part of the European Semester process. Before 2019, there was only sporadic mention of urban mobility and congestion in CSRs (see [Table 2](#)). For the next programming period, the Commission proposed to strengthen the link between the use of EU funding and the CSRs<sup>21</sup>, but it is not clear whether this proposal, at January 2020 still under discussion in the legislative authorities, will be carried through into the final version of the legislation.

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<sup>21</sup> ECA Opinion No. 6/2018 on proposed Common Provision Regulations for the period 2021-27.

**Table 2 – Country Specific Recommendations addressing congestion, urban mobility and sustainable transport**

	2014	2015	2016	2017	2018	2019
<b>Belgium</b>	C/T	T	C/T	C/T	C/T	C/U/T
<b>Bulgaria</b>	N	N	N	N	T	T
<b>Czechia</b>	N	N	T	N	N	U/T
<b>Denmark</b>	N	N	N	T	N	C/T
<b>Germany</b>	N	T	N	N	N	C/U/T
<b>Estonia</b>	T	N	T	T	N	C/T
<b>Ireland</b>	N	N	T	N	C/U/T	T
<b>Greece</b>	/	/	/	/	/	T
<b>Spain</b>	T	T	N	N	T	T
<b>France</b>	T	N	N	N	N	N
<b>Croatia</b>	N	N	N	N	N	U/T
<b>Italy</b>	T	T	T	N	N	U/T
<b>Cyprus</b>	/	/	N	N	N	C/U/T
<b>Latvia</b>	T	N	N	N	N	T
<b>Lithuania</b>	N	N	N	N	N	U/T
<b>Luxembourg</b>	N	N	N	C	T	C/T
<b>Hungary</b>	T	N	N	T	N	C/U/T
<b>Malta</b>	T	T	C/T	C/T	C/T	C/T
<b>Netherlands</b>	N	N	N	N	N	C
<b>Austria</b>	T	N	N	N	N	N
<b>Poland</b>	T	T	T	C/T	C/T	C/T
<b>Portugal</b>	T	T	N	N	N	N
<b>Romania</b>	T	T	N	T	T	C/U/T
<b>Slovenia</b>	N	N	N	N	N	T
<b>Slovakia</b>	N	T	N	N	N	U/T
<b>Finland</b>	N	N	N	T	N	C/T
<b>Sweden</b>	N	N	N	N	N	T
<b>UK</b>	N	N	N	C	T	C/T

**N** - No  
**C** - Congestion  
**U** - Urban Mobility  
**T** - Sustainable Transport

Source: ECA Analysis based on Country Specific Recommendations issued by the Commission.

## Several factors affect the effectiveness of the Commission's support for more sustainable urban mobility

**41** We identified two important areas where cities face challenges that limit the effectiveness of the Commission's support: financing the demands of sustainable urban mobility; and developing coherent policies in the areas of parking, traffic-free zones and cycling.

## The financing needs of urban public transport

**42** An efficient and effective public transport network is a crucial condition for encouraging citizens to shift towards more sustainable modes of transport. The financial commitment involved extends beyond investments in public transport infrastructure and rolling stock – for which the EU can provide financial support - to operational and maintenance costs, which can be significant (see *Box 3*) and for which the EU does not provide any financial support.

### Box 3

#### The operational cost of public transport – examples from visited cities

In 15 years, the running costs of public transport in Barcelona more than doubled, from €646 million in 2003 to €1 373 million in 2017. During this period, the national contribution increased to €200 million in 2010 but has been decreasing since and, at the time of the audit, amounted to slightly above €100 million.

In Madrid, public transport running costs increased from €1 684 million in 2013 to €2 014 million in 2016, although they subsequently fell back to €1 842 million in 2017. In the meantime, contributions from the national authorities dropped considerably.

In Hamburg, the costs of public transport have been increasing, especially as a consequence of the extension of the fast tram. According to the Hamburg authorities, from 2020 these costs will be several hundred million euro a year. In order to cover part of the increase, fare ticket prices rose by more than 20 % between 2012 and 2016.

Leipzig also increased its monthly fare ticket prices, by more than 40 % between 2011 and 2018 in order to cover part of its growing running costs.

**43** Cities cover some of the running costs of public transport by charging for tickets. However, this covers only part of the costs. For the cities we visited, the proportion of costs covered by fares varied between 81 % in Hamburg and 8 % in Palermo<sup>22</sup>. The International Association of Public Transport provided us with data from 41 EU cities, showing that the ticket revenue of nearly two-thirds of the 41 EU cities they examined covered less than 60 % of running costs. Our survey came to similar conclusions.

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<sup>22</sup> Fare ticket evasion by travellers also has an effect. For example, according to its municipal transport company, fare ticket evasion in Naples amounts to around 33 %.

**44** The financial challenges involved are reflected in the age of the vehicle fleet ([Annex IV](#)). In Naples, for example, at the beginning of 2013 the average age of its 500 buses was 11.5 years, and reliability problems meant that less than 65 % were available for daily use. Although some buses had been replaced, average age had increased to 13.4 years by November 2018; the city authorities reported that this progressive deterioration in public transport service led to an increase in car use. Similarly in Palermo, only 71 % of the bus fleet, which an average age of over 12 years, was available for daily use.

**45** According to a 2019 Commission report<sup>23</sup>, the total cost of transport to society in the EU is estimated at €987 billion, comprising environmental (44 %), accident (29 %) and congestion costs (27 %). As regards passenger transport, private cars account for €565 billion, corresponding to €0.12/km of external costs, compared to €19 billion (€0.04/km) for buses or coaches. The charges from taxes (fuel and ownership) and tolls borne by private car users cover just under half of these costs, €267 billion. The report identified options for increasing the proportion of total costs borne by private car users, including the use of specific road charging schemes for urban areas in order to address the high costs of urban transport.

**46** Another factor contributing to increased costs is the lack of harmonised standards between different tram and metro lines, reducing competition in the market. In Naples, for example, this factor meant that only very few companies produced trains to the required standards, leading also to delays. In Warsaw, in contrast, the two metro lines have the same standards, which led to efficiency gains during the construction of the second metro line. For example, it is possible to use depots from the first metro line during this construction. The challenges involved for cities to change their current technical standards for EU-wide ones to reduce costs would be considerable and expensive to remedy. And there are also often political hurdles to overcome in terms of greater cooperation between different cities.

### Policy coherence

**47** We examined whether cities' urban mobility policies were addressing the need for improvements in sustainability in a coherent way, focusing on parking policies, the use of congestion charging and the provision of cycling facilities.

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<sup>23</sup> *Sustainable Transport Infrastructure Charging and Internalisation of Transport Externalities*, European Commission, 2019.

**48** The cities we visited adopted parking policies designed to discourage the use of private vehicles in cities, either by increasing parking fees or by decreasing the number of parking spaces. In Leipzig, for example, parking facilities for bicycles were installed in place of car parking spaces, thus reducing the availability of car parking and increasing the attractiveness of cycling (see *Picture 5*).

#### **Picture 5 – Leipzig –parking for bicycles replacing parking for cars**



Source: European Court of Auditors.

**49** There were, however, a number of cases where parking policies were not consistent with sustainable urban mobility policies:

- In Poland, and especially Warsaw, the fine for not paying for parking is lower than the fine for not paying for public transport.
- Also in Poland, even where parking at the side of the road is prohibited, it is still possible to park on the pavement (see *Picture 6*), reducing the space available to pedestrians.

**Picture 6 – Warsaw: The sign reads: “Parking ban does not apply to pavements”**



Source: ECA.

**50** Other ways of discouraging the use of private vehicles are the establishment of traffic-free zones and the use of congestion charging:

- In 2018, Madrid established a 472-hectare restricted traffic zone (Madrid Central – see [Box 4](#)). NO<sub>2</sub> pollution has fallen as a consequence.

**Box 4 - Madrid Central's contribution to pollution decrease**

Madrid Central became operational in March 2019. NO<sub>2</sub> data from May 2019 in *Plaza del Carmen* (the only measuring station in Madrid Central Area) show that NO<sub>2</sub> pollution decreased by 45 % compared with May 2018. NO<sub>2</sub> pollution reduced in the 24 stations in Madrid where it is measured, with an average decrease of 24 %. There has also been a reduction in noise pollution.

- Barcelona deprived cars of road space by creating ‘superblocks’. These cover nine residential blocks, with an area of 400m x 400m, surrounded by streets where traffic, including buses, is concentrated. In the inner streets, cars are banned or limited to low speed. The superblocks are an example of how cities can give

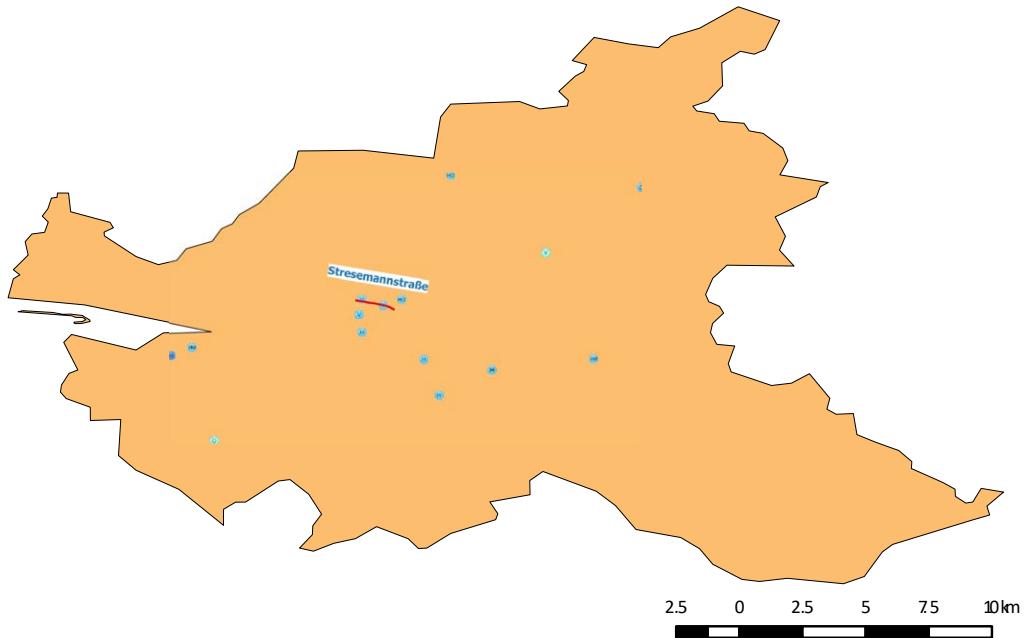
priority to walking and cycling by taking public space from parking and giving it to citizens.

- Palermo established a 4-hectare traffic-free zone and plans to double its size. It also intends to reduce the space available for cars in order to expand the tram network.
- Some cities, including Stockholm and Valletta, have applied congestion charges and reported that this helped to reduce congestion considerably, contributing significantly towards more sustainable modes of transport. The revenue from congestion charges also provided financial resources for improving public transport.

**51** We found, however, that the concept of congestion charges was not widely used, and there were cases in which limited traffic zones were not implemented in a consistent manner:

- Only very few cities applied congestion charges, despite their potential benefits in terms of reducing congestion, increasing sustainability and providing added income. This can be partly explained by the specific contexts of individual cities. For example, a city might be reluctant to consider a congestion charge if that made it less attractive to citizens and businesses compared to neighbouring cities without a congestion charge.

**Picture 7 – Street in Hamburg with temporary ban for older diesel cars**



Source: ECA based on data published by the Hamburg authorities. Map: © QGIS.

- In order to comply with air quality thresholds, Hamburg established temporary bans for older diesel vehicles in one street, close to where five of the city's 15 air quality measurement stations are concentrated (see map – *Picture 7*). These measures may improve the indicators, but they are unlikely to lead to a significant improvement in air quality in a large city.

**52** The potential of cycling to increase the sustainability of urban mobility is considerable. In Copenhagen, around 40 % of commutes are made by bicycle and both Antwerp and Bordeaux also achieved a considerable reduction of private vehicle use (see paragraph 19) owing to an expansion of their bicycle path networks<sup>24</sup>. Data from Leipzig show how both maintenance and investment cost for cycle paths are much lower than all other means of transport.

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<sup>24</sup> According to the 'Copenhagenize Index' ([www.copenhagenizeindex.eu](http://www.copenhagenizeindex.eu)), which ranks the most bicycle-friendly cities in Europe, Antwerp ranks 4th and Bordeaux 6th.

**53** Despite the potential benefits of cycling and the lower investment cost of cycling infrastructure, we observed that in many cities there was no clear commitment towards improving cycle paths:

- In many visited cities, cycling levels are low. For example, the length of cycle paths in Naples was under 20 km, and the modal share of cycling in Madrid and Barcelona was between 1 % and 2 %. The plan in Barcelona envisaged a 2.5 % modal share for cycling in 2018, while the Madrid 2008-2016 master plan for cycling mobility resulted in a final modal share of only 1.2 % in 2016. The plan was revised in 2016 with a new target of 5 % in 2025.
- Few of the cities we visited had targets for cycling in their plans. Those targets that did exist were sometimes combined with walking.
- Neither are there clear targets on the number or type of cycle paths to be built. In some cities, such as Madrid, the cycle paths are not fully separate from motorised traffic or from pedestrians on the pavement.

**54** The data provided by cities on modal share and the information gathered in the cities we visited, such as Madrid and Barcelona, show that there is considerable risk that increases in active mobility, such as cycling and walking, derive from a shift from public transport instead of from the use of private cars. In Antwerp, for instance, both private car usage and public transport decreased from 2013 to 2017, by 4.4 % and 2.8 % respectively, whereas the share of cycling increased by 7.3 % over the same time period; in Lisbon, public transport decreased from 34 % in 2013 to 22 % in 2017. The risk of more car use increases in periods of decreasing fuel prices. For example, in Hamburg and Leipzig fuel prices decreased considerably between 2012 and 2018 while ticket prices increased by up to 40 %.

**55** These examples illustrate the importance of not only making public transport and active mobility more attractive; it is also important to take effective steps to dissuade people from using their private cars.

**56** Many of the positive examples we found required considerable political leadership and effective communication to be implemented. Persuading citizens to leave the comfort of their cars for other forms of transport is often a challenge. For example, the introduction of the congestion charge in Stockholm required an initial test phase before it could be fully introduced. Although citizens were initially resistant to the idea, now they do not wish to go back to the initial situation without congestion charges. And both Barcelona and Leipzig highlighted the importance of effective

communication about the potential benefits of the proposed solutions before introducing superblocks and reduced spaces for private vehicles respectively.

## **Some projects we examined were not fully effective and some were not based on sound strategies**

**57** We assessed the effectiveness of the 15 EU projects we examined. We also assessed whether these projects were based on sound strategic approaches and whether the strategies at local levels were coherent with the strategy principles laid down by the Commission in its policy papers and guidelines.

### **Some projects were not as effective as intended**

**58** Not all audited projects were fully effective. We noted a number of examples in which projects reported lower usage than planned:

- The projects in Naples and Palermo which aimed to increase bus and tram use suffered – with the exception of the purchase of buses in Naples – considerable delays. Once the projects were completed, the actual number of passengers was significantly lower than planned.
- The projects in Warsaw and Łódź were completed as expected and improved the public transport available to citizens, but did not result in significant changes in the modal share. Following the implementation of the tram rolling stock project in Łódź, the tram network improved but the number of public transport passengers did not increase compared to 2014, when the project started (the target set at the time of project approval). In the meantime, congestion increased.
- In Barcelona, the construction of the Bus-HOV (high occupancy vehicle) lane suffered considerable delays and cost overruns and did not achieve its objectives in terms of the number of vehicles using it.

**59** The extension of the metro line 11 in Madrid assumed that traffic would increase as a result of the construction of a new commercial centre. This commercial centre was already close to other existing ones and closed shortly after the new metro line opened, with the result that user numbers were 45 % lower than planned. We found

several reasons that contributed to the limited effectiveness of the visited projects. These were shortcomings at both the project planning and implementation stages:

- The tram line in Palermo was conceived from the outset to depend on other transport projects run by other operators. This exposed the project to the risk of delays in the implementation of the other projects; this risk subsequently materialised. The effectiveness of the project was also hampered by the lack of ticket integration between the different operators involved, which meant that passengers have to purchase multiple tickets to reach the city centre by tram.
- The Bus-HOV lane in Barcelona consisted of an additional lane, in some sections constructed above an existing highway. The project provided time savings of around four minutes, but this did not constitute sufficient incentive for a private user to switch to the bus-HOV lane, which had been the objective of the project.
- In the case of the extension of the metro line in Naples, the local authorities did not procure new metro trains on time. This meant that the same number of trains had to serve the increased length of the line, resulting in lower frequency and lower service levels.

### **Projects were not always based on sound urban mobility strategies**

**60** We identified a number of cases in which EU-funded projects were not based on sound strategies, either SUMPs or other sector strategies. Weaknesses in the strategic approaches include a lack of comprehensive data and appropriate targets, and insufficient coordination with other plans and policies.

#### **Lack of relevant and reliable data**

**61** Every policy and strategy should start from a sound diagnosis, for which the collection of relevant, reliable data is necessary. However, there is no common set of indicators relating to urban mobility at the European level, and not all Member States systematically collect relevant data. Obtaining meaningful data from cities and Member States for this audit was a major challenge. The absence of good data makes it difficult for the Commission to have a reliable picture of the state of urban mobility in the EU and therefore also to develop appropriate policy initiatives.

**62** The Commission established, with ELTIS (see paragraph 33), an urban mobility observatory in which it collects examples of good practice and experience from EU cities. In addition, at the time of the audit, it was running a pilot project with around 50 EU cities intended to create a common set of urban mobility indicators to guide

data collection. According to information provided by the Commission, the project identified 21 indicators, which cities can use to evaluate their urban mobility policies in a standardised way.

**63** Some Member States, such as Italy, Germany and Spain, also started to establish urban mobility observatories and to collect meaningful data from cities, with guidelines and standards to make them comparable and consistent over time. However, we found that data provided by observatories do not always match those provided by municipalities.

**64** Only 30 out of 88 cities we surveyed provided some of the data we asked for, and no city provided the full set of data. Slightly more than half of the respondents provided data about the modal share in 2016 or 2017, while even fewer indicated data for previous years. Similarly, only very few cities provided relevant and detailed data about the levels of congestion.

**65** In addition, we found that some cities did not make full use of the geographic information system tools that are now available for analysing their urban transport networks. Often, they limited their analysis to basic details (for instance the ‘distance to the nearest public transport stop’), without a full analysis of demand. Full analyses should take account, as a minimum, of flows and frequencies of public transport, and the accessibility of key destinations such as hospitals, schools and workplaces by different modes of transport.

#### **Lack of quantified targets and operational plans to implement the strategies**

**66** In several cases, the strategies did not identify any objectives or targets in terms of results or modal share. Of the eight cities visited, three set specific targets for modal share:

- The city of Leipzig set targets for modal share in its transport plan of 2015 for all environmentally friendly transport modes, and used them in its development of different scenarios.
- Similarly, the city of Barcelona identified three possible intervention scenarios and set specific targets for its chosen option, including targets for active mobility. It assessed progress at regular intervals.
- The city of Madrid identified both a generic target of a 6 % reduction in traffic, and specific targets in terms of modal share for private vehicles, public transport and active mobility.

Other cities did not have targets at all or just have targets for some modes of transport:

- The city of Hamburg set targets only for cycling, not for other modes of transport.
- The city of Warsaw identified operational targets in terms of inhabitants' satisfaction rates with the quality of public spaces and of natural environment within the city, but no specific targets in terms of modal share.
- In Naples, Palermo and Łódź there were no specific targets in terms of modal share. The Urban Traffic Plan of Palermo has the generic objective of moving to less polluting ways of transport, and with a lower specific energy consumption, but did not identify specific targets to achieve. In Łódź, the analysis carried out by the transport authority to identify the modal share included bicycles and motorcycles in the same category, despite their inherent differences in terms of sustainability and use of public space.

**67** Often, cities had adopted relevant strategies but there were weaknesses in their plans to implement them, including unclear indications of the priorities, costs and sources of funding.

- In Palermo, the Strategic Plan on Sustainable Mobility envisaged interventions in the short, medium and long-term and included a timetable for the works and the anticipated costs. It also included a prioritisation for medium-short term and medium-long term, based mainly on economic needs.
- In Naples, the strategic plan was based on outdated sectoral plans. This plan was not complemented by a delivery plan and did not specify how different actions would be prioritised.
- In Leipzig, the plan includes the overall planning principles and targets, but does not include, for example, a list of measures with associated financing or timelines. Instead, it refers to measures for specific sectors presented in other plans.
- The city of Hamburg developed a number of possible actions ("Themenspeicher"), but did not provide any information about priorities or how measures might be selected.
- The city of Madrid developed a detailed strategy composed of eight strategic lines, 15 areas of intervention and 95 specific actions, but it did not include information on how the implementation of its SUMP would be financed.
- Neither Warsaw nor Łódź have an implementation plan for their strategies.

**Insufficient coordination with other plans and of consideration for the periphery**

**68** Effective integration with surrounding areas, involving different modes of transport and liaison with urban planning, is key for more sustainable urban mobility. With the exception of Barcelona, in none of cities visited were urban mobility plans integrated with the surrounding area. In Barcelona there was active coordination between different municipalities in favour of a more integrated public transport. An administrative body covering 36 municipalities has been created for that purpose. This body was, at the time of the audit, drafting a mobility plan for the purpose of putting together the individual 36 municipal mobility plans. Copenhagen, although not visited in the course of the audit, provides a positive example (see *Box 5*).

**Box 5 Copenhagen: Innovative approach to urban mobility planning**

Copenhagen effectively combines urban mobility planning with urban planning. As an example, office and working spaces with more than a given number of employees can only be established close to a major public transport station.

**69** In contrast, only 37 % of the city of Warsaw is covered by spatial development plans, which reduces the tools available to ensure that the city's urbanisation develops in a controlled manner and in coordination with urban mobility plans.

## Conclusions and recommendations

**70** To make urban mobility in the EU more sustainable, coherent action from all stakeholders is crucial. Since its 2013 Urban Mobility package, the Commission has issued a range of policy documents and guidance, and has increased the funding it provides to projects in this area. We recognise that significant improvements in sustainable urban mobility may require more time to materialise. However, six years after the Commission called for a step-change, there is no clear indication that cities are fundamentally changing their approaches.

**71** There is no clear trend towards more sustainable modes of transport. Although cities have put in place a range of initiatives to expand the quality and quantity of public transport, overall there has been no significant reduction in private car usage. Although some air quality indicators have slightly improved, there are still many cities exceeding EU minimum air quality standards. Greenhouse gas emissions due to road transport have been steadily increasing. Travel by public transport often takes more time than by private car.

**72** In the last decade, to help cities address the challenges involved, the Commission has issued a range of policy documents, together with guidelines. In line with the subsidiarity principle, Member States and their cities are not obliged to follow this guidance, and there was limited take-up – notably in terms of preparing SUMPs. To support its sustainable mobility policy objectives, the EU has made available significant amounts of funds. There is no EU requirement for access to funding to be conditional on SUMP preparation, although some Member States have imposed this condition at the national level. In very recent years the Commission has increased the political pressure it can bring to bear on sustainable urban mobility through the European Semester process. However, without a clear link between the CSRs and Member States' use of EU funding this pressure will be limited.

**73** Some Member States and cities struggled to complement EU funds with appropriate resources to ensure the adequate operation and maintenance of their public transport network; costs can also rise because lines are not always technically interoperable. In addition, a number of urban mobility practices at local levels were not coherent with the aim of more sustainable urban mobility. We found examples of positive initiatives towards sustainable urban mobility; these tended to require considerable political leadership and communication efforts to win acceptance from citizens.

**74** We found that the projects in receipt of EU funding we examined were not as effective as intended, because of weaknesses in project design and implementation. These projects were not always based on sound urban mobility strategies, which often lacked fundamental data and appropriate analyses, relevant targets and coordination with both other plans and neighbouring municipalities.

**75** On the basis of these conclusions, we make the following recommendations which we invite the Commission to consider in the light of the December ‘European Green Deal’ aspirations:

### **Recommendation 1 – Publish data on urban mobility**

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Building on its experience in setting up the ELTIS observatory and its pilot project on developing a set of common indicators on urban mobility, the Commission should:

- (a) Having carried out an impact assessment and subject to the positive outcome of this process, propose legislation requiring Member States to collect and submit regularly relevant data on urban mobility and on the adoption of SUMPs in all EU urban nodes of the core and comprehensive TEN-T networks, including their surrounding areas.
- (b) Based on the data that Member States are required to submit, report regularly on the progress made by Member States and urban nodes in making urban mobility more sustainable.

**Timeframe: (a) by 2022 and (b) by 2024.**

### **Recommendation 2 – Link funding to SUMPs**

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- (a) For ERDF and CF, the Commission should ensure that programmes make access to funds for urban mobility conditional on the existence of a SUMP (or commitment to adopt a SUMP within a reasonable deadline), as well as on the assurance about the availability of sufficient funding for operational and maintenance costs.
- (b) When approving programmes, ensure that relevant Country Specific Recommendations are reflected in a meaningful way, regardless of whether this is a legislative requirement.

**Timeframe: (a) & (b) for the programming period 2021-2027.**

- (c) For the CEF, the Commission should give higher priority to those projects proposals at urban nodes, which are backed by a SUMP in the relevant city.

**Timeframe: beginning of the MFF period 2021-2027.**

This Report was adopted by Chamber II, headed by Mrs Iliana Ivanova , Member of the Court of Auditors, in Luxembourg at its meeting of 5 February 2020.

*For the Court of Auditors*

Klaus-Heiner Lehne  
*President*

# Annexes

## Annex I List of projects assessed

Country	City	Fund - Operational programme	Project name and description	Total planned cost (million euros)	Planned EU support (million euros)
Italy	Naples	ERDF - 2007IT161PO009	Works on line 1 of the underground in Naples (major project 2009IT161PR020)	573	430
		ERDF - 2014IT16RFOP007	Purchase of bus fleet (projects 18014BP000000002 and 18014BP000000004)	14	10.5
	Palermo	ERDF - 2007IT161PO011	Construction of the tram in Palermo (major project 2008IT161PR002)	137	103
		ERDF - 2014IT161M2O004	Purchase of bus fleet (projects D70D16000020006 and D70D17000000006)	11	8.25
Germany	Hamburg	ERDF - 2014DE16RFOP006	iPlanB – Interactive Big-Data Analysis for the Planning of roadworks (Interaktive Big-Data-Analysen für die Planung von Baumaßnahmen)	0.6	0.06
	Leipzig	ERDF - 2007DE161PO004	Mobility stations (small on-site information centres that combine Leipzig Transport Authority's (LVB) mobility services with at least two additional transport modes and providers, such as car sharing, city bike station, or e-charging station)	7.8	5.5
		<b>ERDF - 2014DE16RFOP012</b>	<b>Purchase of bus fleet: 11 new articulated busses</b>	<b>3.7</b>	<b>1.5</b>
Spain	Madrid	ERDF - 2008ES162PR002	Extension of line 11 of Madrid Metro (major project)	100	50
		EFSI - supported EIB loan	Metro de Madrid infrastructures upgrade	402	396
	Barcelona	ERDF - 2007ES162PO006	“Reserved lane for buses and high occupancy vehicles on the C-58 highway (2008ES162PR001) (major project)	78	39
			“construction project of the Diagonal interchange” (PO011876)	17	8.5

Poland	Warsaw	CF - 2007PL161PO002	II Metro line in Warsaw - preparatory work, design and construction of the central section together with the purchase of rolling stock POIS 07.03.00-00-007/10	1 049 <sup>25</sup>	839 <sup>26</sup>	
			Service of northern areas of Warsaw tram communication in connection with the expansion of the metro network and the purchase of rolling stock POIS 07.03.00-00-009/10	145 <sup>27</sup>	116 <sup>28</sup>	
	Łódź		purchase of new tram rolling stock in order to increase the competitiveness of public transport in Łódź (project number POIS.07.03.00-00-046/14)	31.5 <sup>29</sup>	25 <sup>30</sup>	
			Multimodal node at Łódź Fabryczna railway station (project number POIS.07.03.00-00-016/11)	78 <sup>31</sup>	63 <sup>32</sup>	

Source: ECA.

<sup>25</sup> PLN 4 501 605 421.

<sup>26</sup> PLN 3 601 284 336.

<sup>27</sup> PLN 620 980 799.

<sup>28</sup> PLN 496 784 639.

<sup>29</sup> PLN 135 219 799.

<sup>30</sup> PLN 108 175 839.

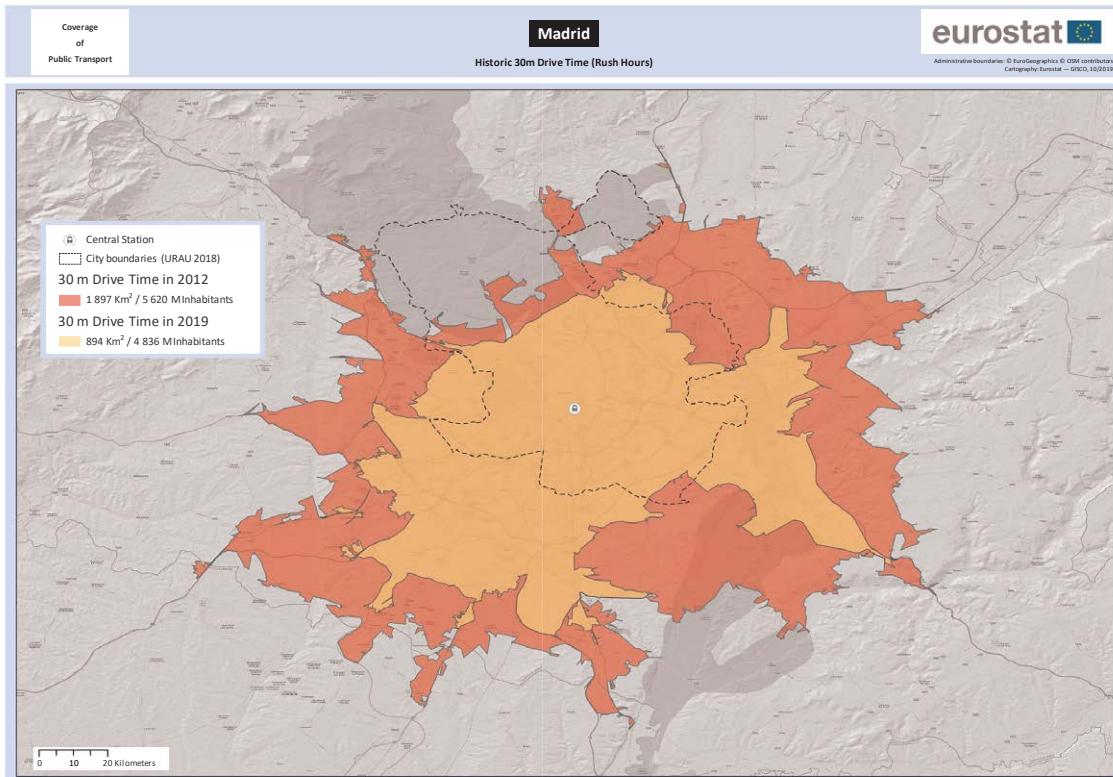
<sup>31</sup> PLN 335 951 061.

<sup>32</sup> PLN 268 760 848.

## Annex II Maps of the visited cities

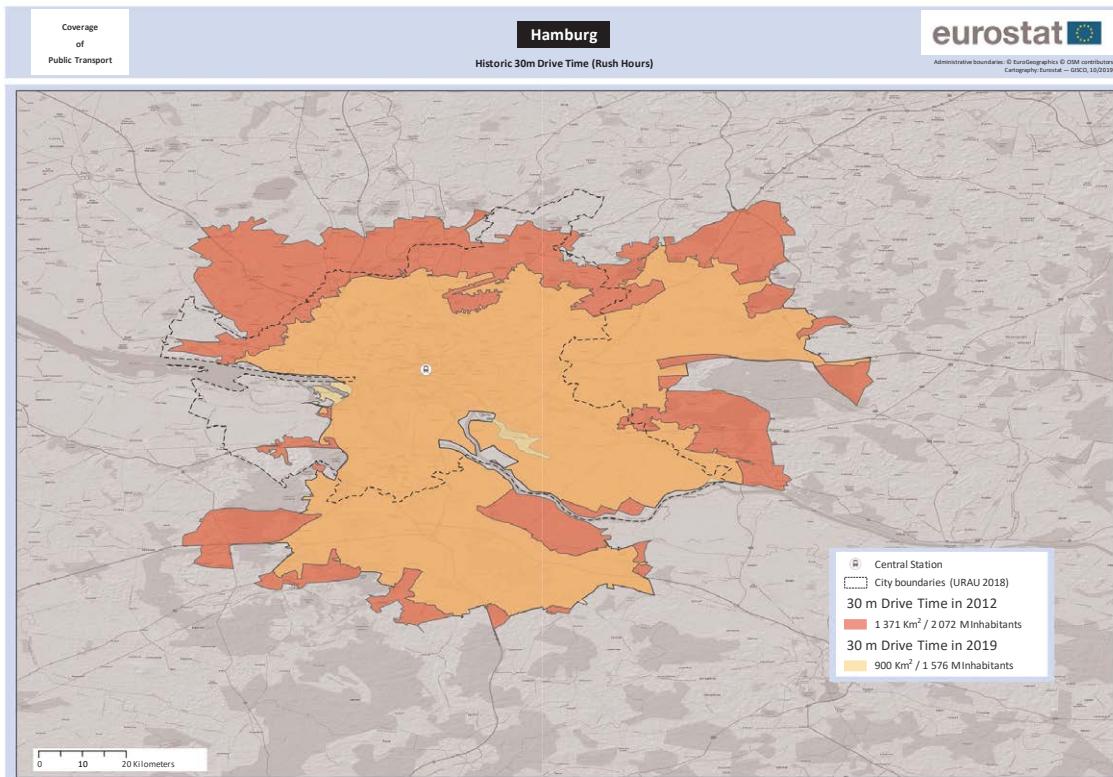
### Madrid

**Accessibility within 30 minutes driving time during rush hours in 2012 and in 2019**

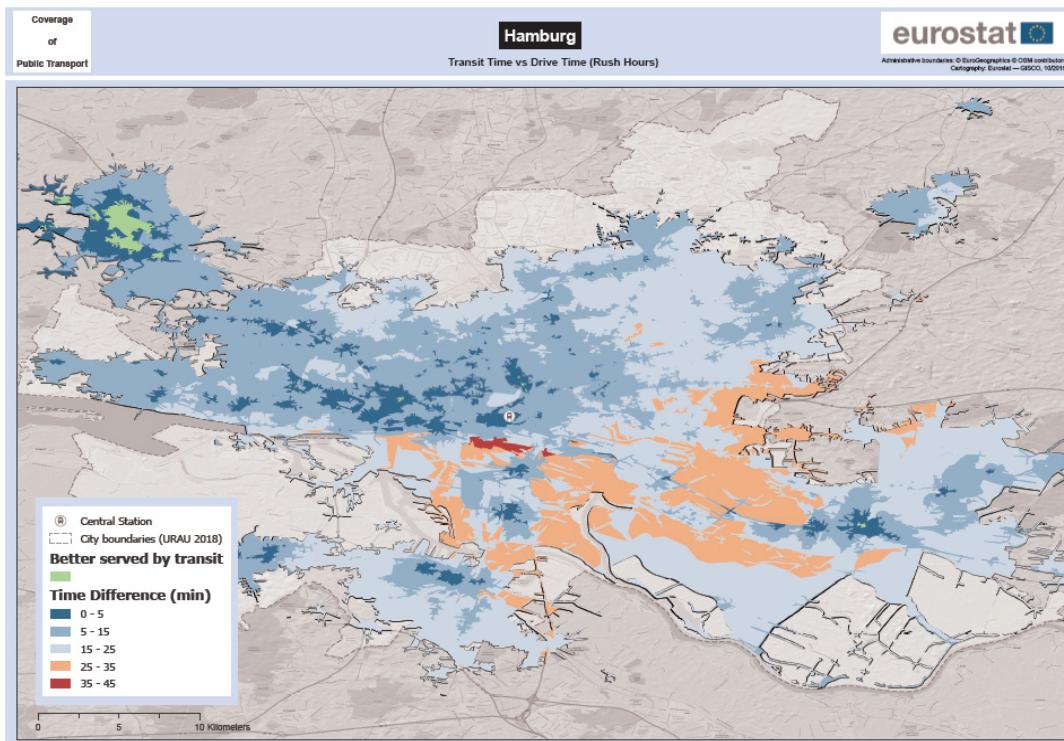


## Hamburg

**Accessibility within 30 minutes driving time during rush hours in 2012 and in 2019**

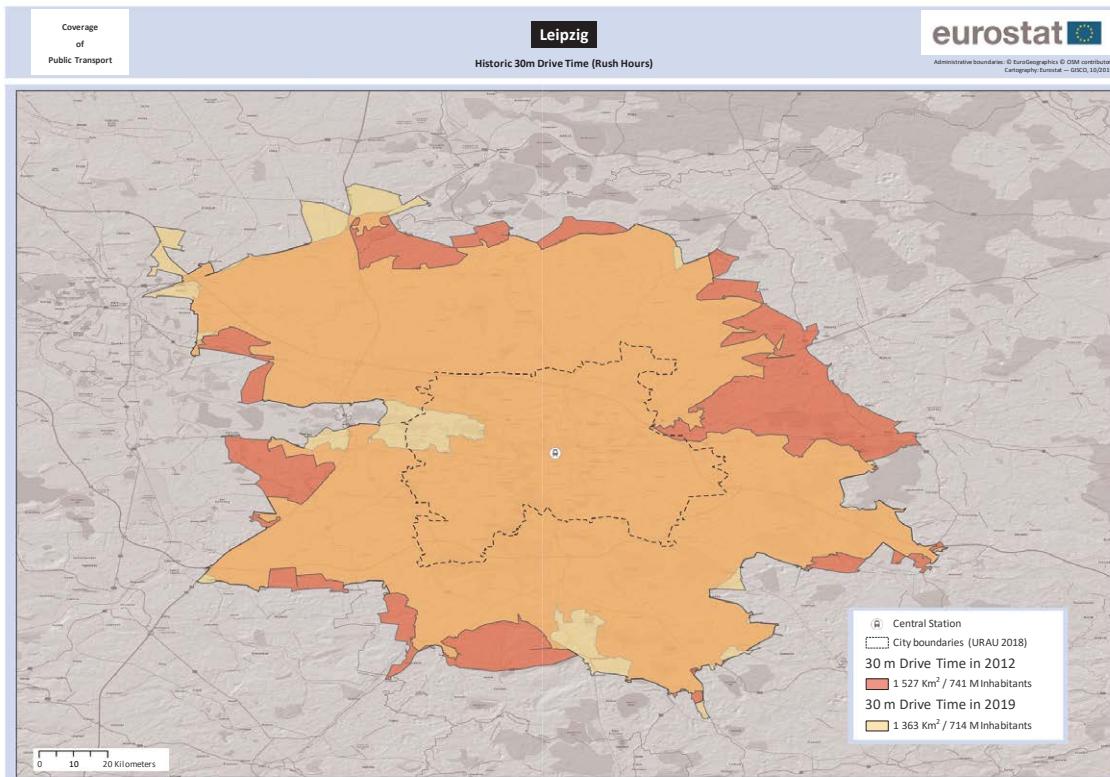


## Comparative accessibility of main train station by car and by public transport during rush hours

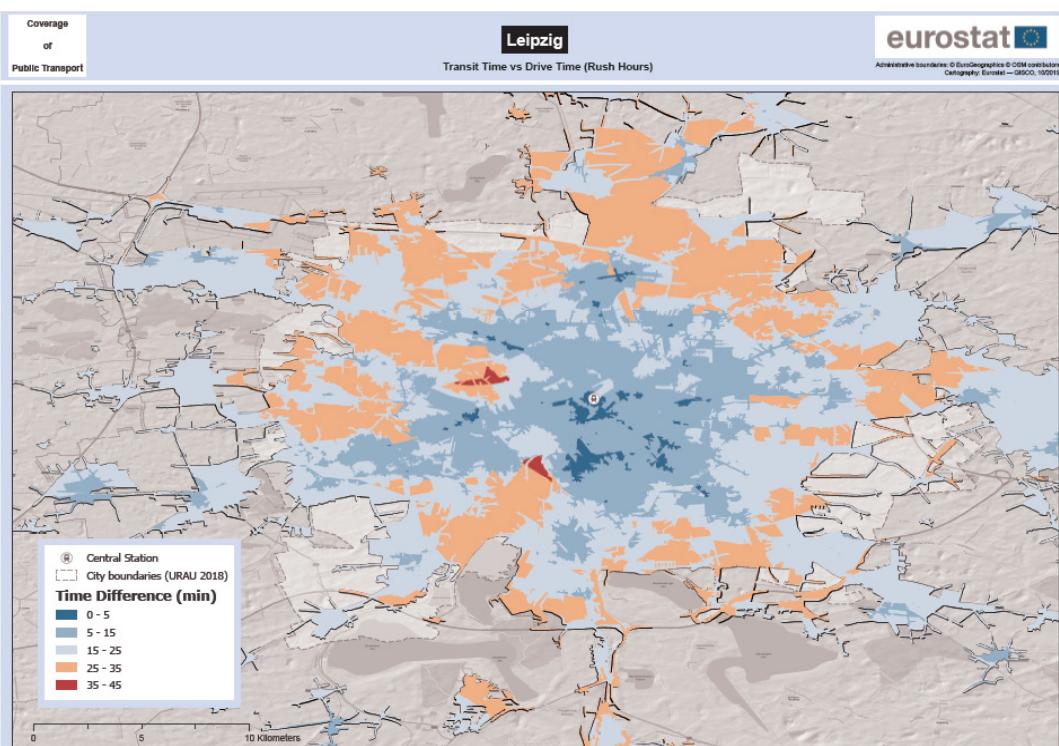


## Leipzig

**Accessibility within 30 minutes driving time during rush hours in 2012 and in 2019**

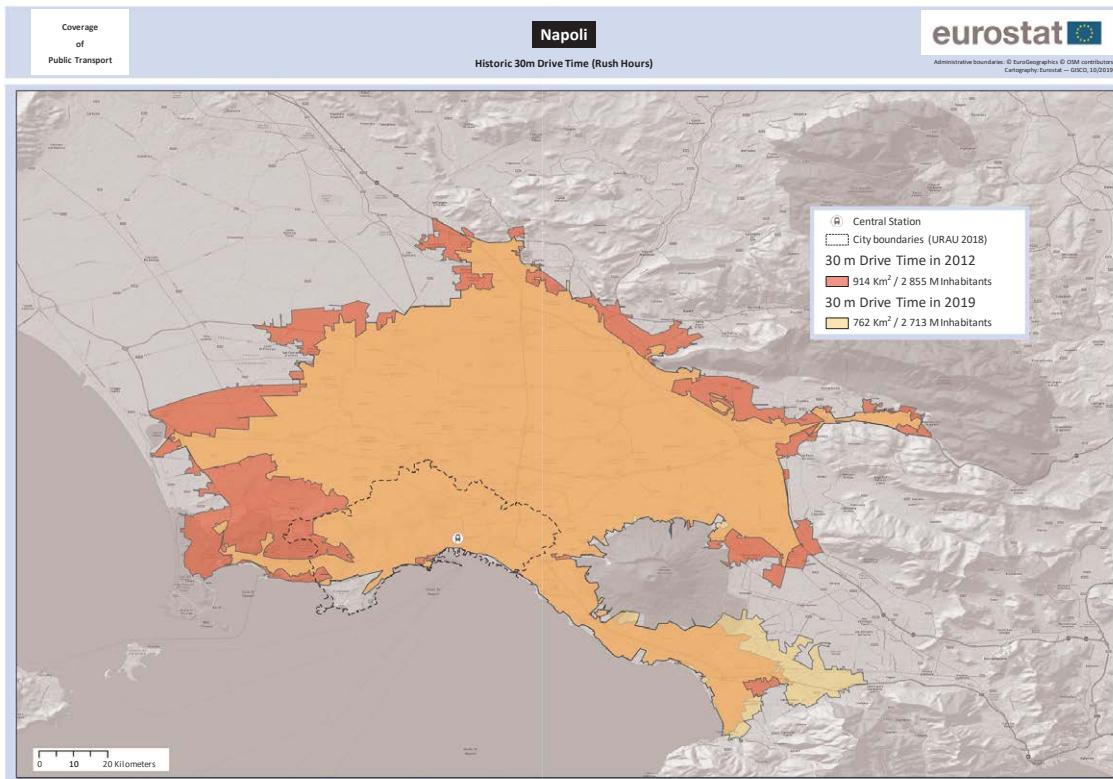


**Comparative accessibility of main train station by car and by public transport during rush hours**



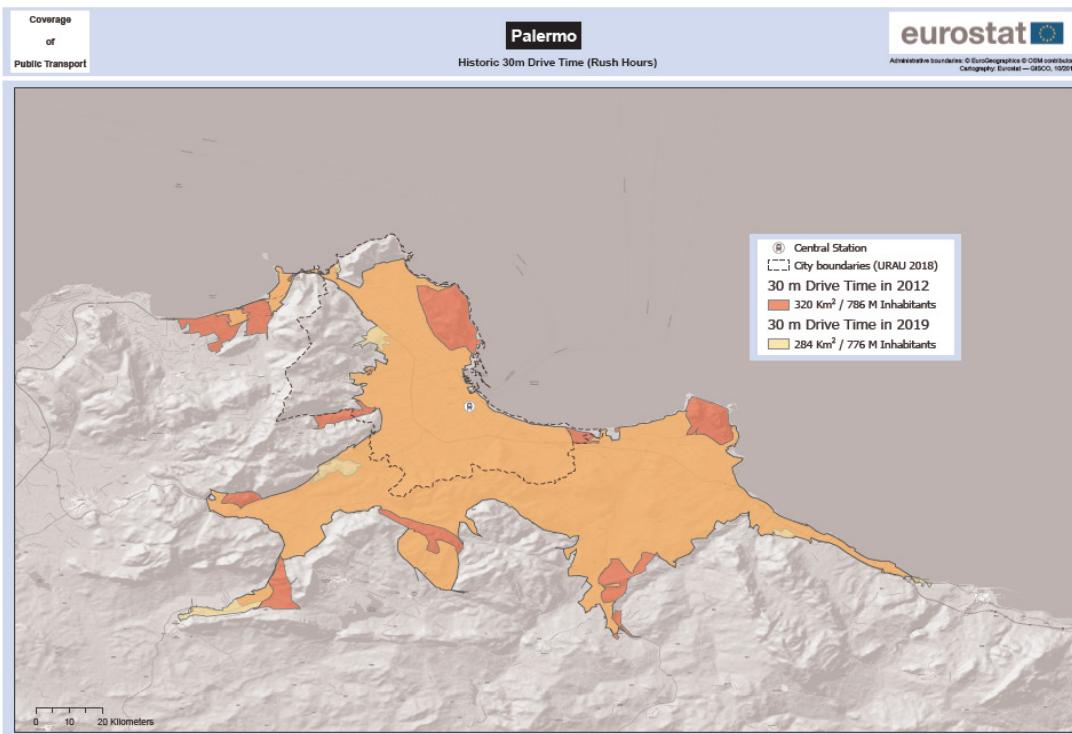
## Naples

**Accessibility within 30 minutes driving time during rush hours in 2012 and in 2019**

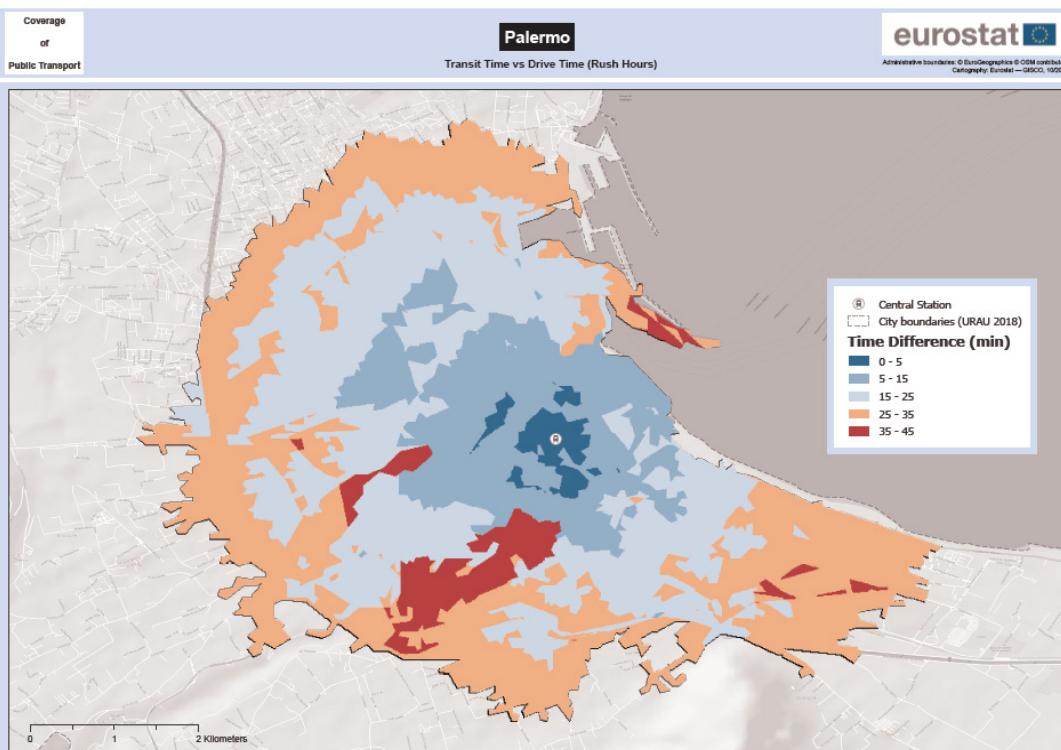


## Palermo

**Accessibility within 30 minutes driving time during rush hours in 2012 and in 2019**

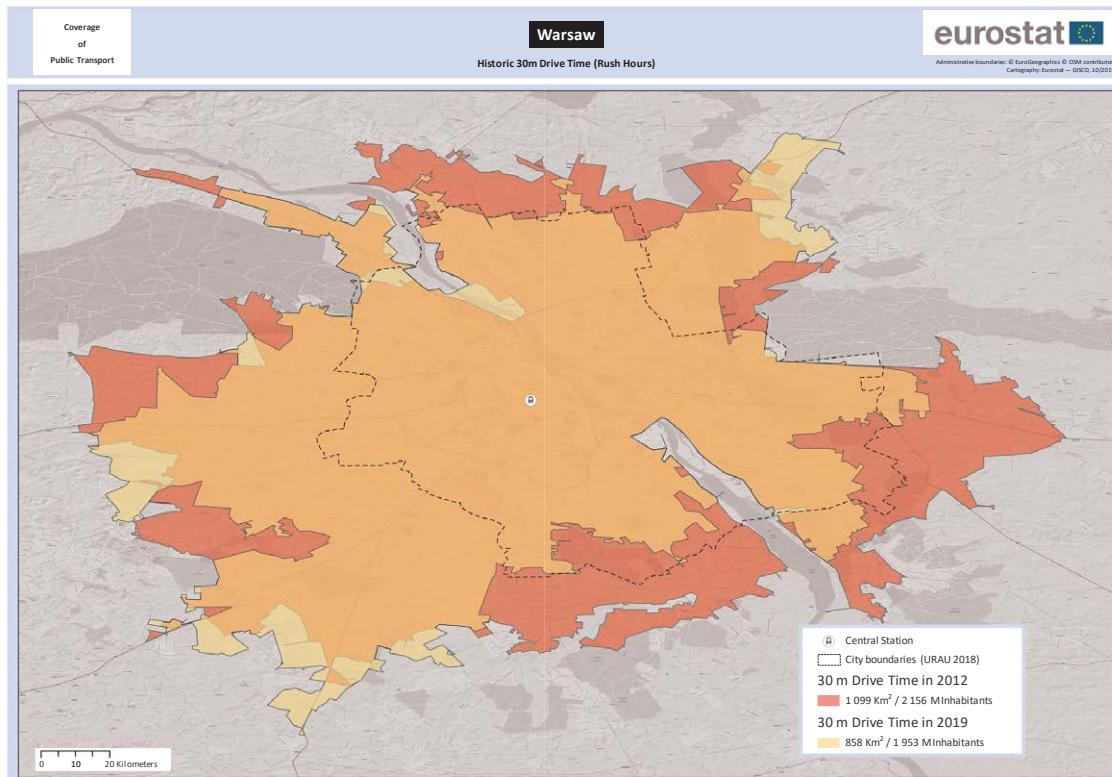


**Comparative accessibility of main train station by car and by public transport during rush hours**

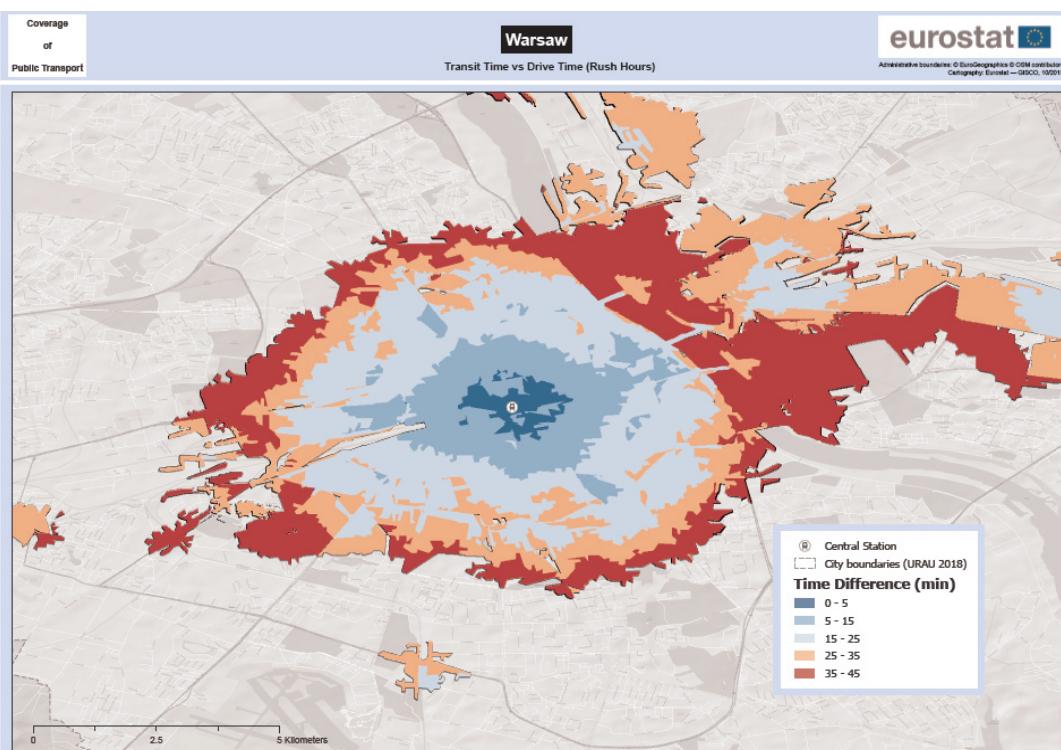


## Warsaw

**Accessibility within 30 minutes driving time during rush hours in 2012 and in 2019**

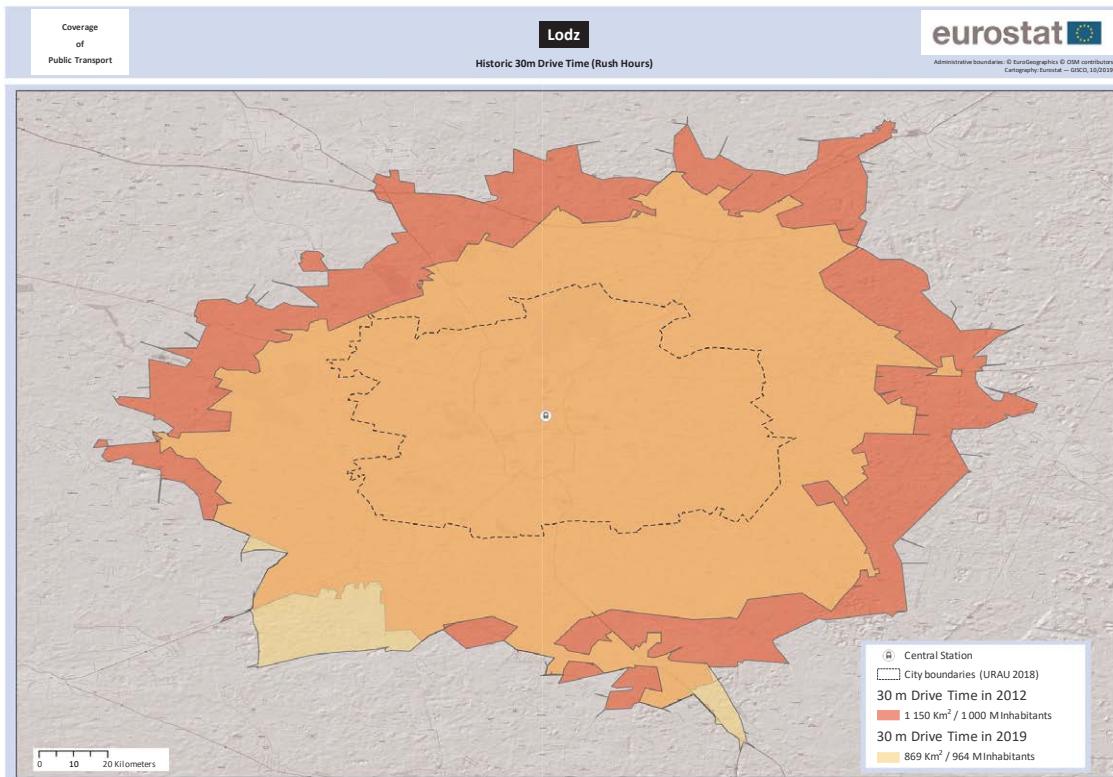


**Comparative accessibility of main train station by car and by public transport during rush hours**

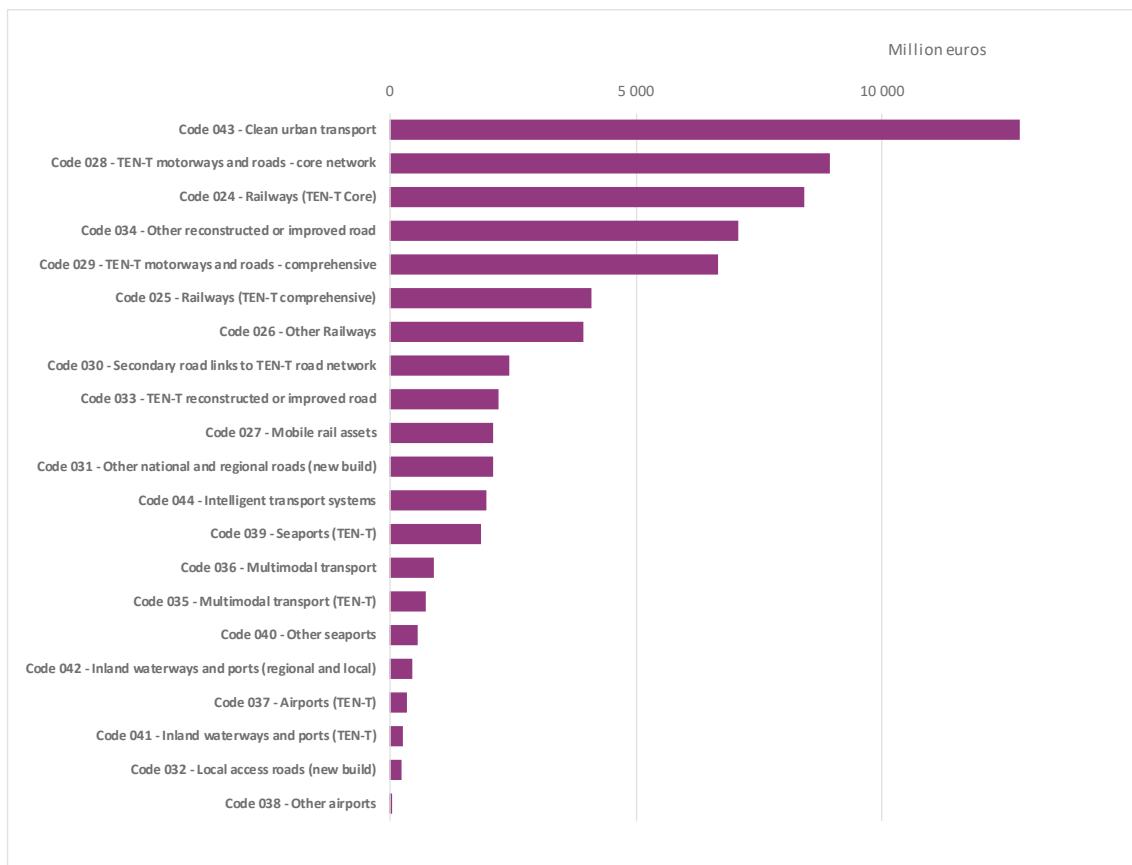


## Lodz

**Accessibility within 30 minutes driving time during rush hours in 2012 and in 2019**



### Annex III ESIF Allocations 2014-20 by field of intervention



Source: ECA analysis based on Commission data (Infoview).

#### Annex IV Average age of buses in the visited cities

City	2013	2014	2015	2016	2017	2018
Madrid	5.5	6.0	6.6	6.9	6.7	
Barcelona					9.0	9.0
Hamburg	5.9	5.9	6.4	6.7	5.9	
Leipzig	4.9	5.1	6.1	6.1	6.9	7.3
Naples	12.1	12.7	13.5	13.9	14.2	13.4
Palermo	10.3	10.8	11.2	10.4	11.4	12.4
Warsaw	6.3	6.6	6.7	6.4	6.6	6.6
Łódź	7.2	7.1	6.6	6.8	7.7	8.7

Source: European Court of Auditors based on data provided by the respective cities.

# Glossary, acronyms and abbreviations

**Active mobility:** a form of transport that only uses physical activity. The most common forms of active mobility are walking and cycling.

**CEF:** Connecting Europe Facility. It is an EU funding instrument for the period 2014 to 2020 aiming at supporting the development of high performing, sustainable and efficiently interconnected trans-European networks in the fields of transport, energy and digital services.

**CIVITAS:** a network of cities for cities dedicated to cleaner, better transport in Europe and beyond. Since it was launched by the European Commission in 2002, the CIVITAS Initiative has tested and implemented over 800 measures and urban transport solutions as part of demonstration projects in more than 80 Living Lab cities Europe-wide. The knowledge garnered through these practical experiences is complemented, and supported, by a number of research and innovation projects, also run under CIVITAS. These research projects look at ways of building a more resource efficient and competitive transport system in Europe.

**CSR:** Country specific recommendations. These are documents prepared by the European Commission for each country analysing its economic situation and providing recommendations on measures it should adopt over a period of 12 to 18 months.

**EIP Smart Cities and Communities (EIP-SCC):** The European Innovation Partnership on Smart Cities and Communities (EIP-SCC) is a major market-changing undertaking supported by the European Commission bringing together cities, industries, SMEs, investors, researchers and other smart city actors.

**ELTIS:** the European urban mobility observatory, supported by the European Commission, and whose main role is to facilitate the exchange of information, knowledge and experience in the field of sustainable urban mobility in Europe. It also collects data on sustainable urban mobility in Europe, e.g. on the adoption of SUMPs by European cities.

**EPOMM:** European Platform on Mobility Management. It is an international non-profit organisation, a network of governments in European countries that are engaged in mobility management.

**ESIF:** European structural and investment funds. These funds are: European regional development fund, European social fund, Cohesion fund, European agricultural fund for rural development, European maritime and fisheries fund. They are jointly managed by the European Commission and the EU countries.

**European Semester:** a cycle of economic and fiscal policy coordination within the EU. It is part of the European Union's economic governance framework. Its focus is on the 6-month period from the beginning of each year, hence its name - the 'semester'. During the European Semester the member states align their budgetary and economic policies with the objectives and rules agreed at the EU level.

**Functional urban area (FUA) or Metropolitan Area:** These terms refer to the entire urban continuum that includes the city and the commuting zone, as per the EU-OECD definition.

**Horizon 2020:** It is the EU Research and Innovation programme for the period 2014 to 2020, with nearly €80 billion of funding available.

**HOV:** high occupancy vehicle

**Infringement procedure:** Legal action taken by the European Commission against an EU country that fails to implement EU law. The Commission may refer the issue to the Court of Justice, which in certain cases can impose financial penalties.

**International Transport Forum:** The International Transport Forum is an intergovernmental organisation with 59 member countries. It acts as a think tank for transport policy and organises the Annual Summit of transport ministers. ITF is the only global body that covers all transport modes. The ITF is politically autonomous and administratively integrated with the OECD.

**Micromobility:** a category of modes of transport that are provided by very light vehicles (of a gross weight of less than 500 kg) equipped with an engine. It includes, among others, electric scooters, skateboards and bicycles, as well as solowheels.

**SUMP:** Sustainable urban mobility plan. It is a planning concept applied by local and regional authorities for strategic mobility planning. It encourages a shift towards more sustainable transport modes and supports the integration and balanced development of all modes.

**Urban Node:** An urban area where the transport infrastructure of the trans-European transport network, such as ports including passenger terminals, airports, railway stations, logistic platforms and freight terminals located in and around an urban area, is connected with other parts of that infrastructure and with the infrastructure for regional and local traffic.

# **REPLIES OF THE COMMISSION TO THE SPECIAL REPORT OF THE EUROPEAN COURT OF AUDITORS**

## **“SUSTAINABLE URBAN MOBILITY IN THE EU: NO SUBSTANTIAL IMPROVEMENT IS POSSIBLE WITHOUT MEMBER STATES’ COMMITMENT”**

### **EXECUTIVE SUMMARY**

#### **I. Common Commission reply to - paragraphs I-V.**

The Commission acknowledges the importance of sustainable urban mobility and the identified factors affecting it.

For the period 2014-2020, the EU financial support has been increased by 50%, and deployed mainly through the European Structural and Investment Funds and the Connecting Europe Facility. This was one of the commitments of the 2013 Urban Mobility Package, which also identified the need to cooperate between local, national and European governance levels in tackling the challenges faced by cities when it comes to local transportation.

VI. The Commission acknowledges that further improvement is necessary regarding the uptake of mobility plans at local level in accordance with EU guidance. It stresses that the Member States have an important role to play in this respect.

X. First indent - The Commission partially accepts the recommendation. See replies to Recommendation 1.

Second indent - The Commission partially accepts the recommendation, but the success of linking EU funding and sustainable urban mobility plans depends on the cooperation of the Member States during the discussions on partnership agreement and programme. See replies to Recommendation 2.

### **INTRODUCTION**

#### **Box 1 The Urban Mobility Package**

The evaluation of the 2013 Urban Mobility Package is still ongoing and its results will only be available once the evaluation is finalised in the second quarter of 2020.

### **OBSERVATIONS**

38. Although Sustainable Urban Mobility Plans (SUMPs) are not always a condition for cohesion policy support, often programmes require the existence of other strategic frameworks. This is the case in the programmes of the two other Member States visited:

- In Saxony, the programme references the region’s energy and climate plan, the region’s development plan, the region’s transport plan and the region’s cycling concept.

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- In Poland, the condition for receiving EU support for investments in sustainable urban mobility is the preparation and compliance with appropriate planning documents, such as territorial strategies, low emission economy plans, sustainable urban mobility plans or other documents.

39. Compliance with the SUMP concept requires following internal quality assurance mechanisms in line with the EU guidelines. See Annex I of the Urban Mobility Package Communication.

External quality assurance mechanisms exist in some Member States/regions, such as Sweden and Flanders.

40. The Commission has proposed in 2021-2027 legislation a clear link between the Council's country-specific recommendations (CSRs) and funding from Cohesion policy. This proposal would obliges the Member States for both the partnership agreement and the programmes to take into account the relevant CSRs and the Commission would be obliged in its approval on those documents to assess whether the partnership agreement and programmes take into account relevant CSRs. While the negotiations on the Commission's proposal for the Common Provision Regulation are still ongoing, the partial provisional common understanding reached between the co-legislators on 10 December 2019 retained these elements.

62. The Commission points out that the pilot project on sustainable urban mobility indicators (SUMI), referred to in paragraph 62, is expected to finish in the first quarter of 2020. The Commission intends to assess relevant measures as regards indicators in light of the result of this pilot project.

## **CONCLUSIONS AND RECOMMENDATIONS**

70. The Commission acknowledges that the sustainable urban mobility in the EU is a key challenge and there is a room for improvement.

It stresses that the local authorities are predominantly responsible for this area and that Member States have an important role to play in this respect.

71. The Commission notes that the evaluation of the 2013 Urban Mobility Package is ongoing. Once completed, it should allow grasping a fuller picture of the situation.

72. The Commission has proposed in 2021-2027 legislation a clear link between the Council's country-specific recommendations (CSRs) and funding from Cohesion policy. This proposal would obliges the Member States for both the partnership agreement and the programmes to take into account the relevant CSRs and the Commission would be obliged in its approval on those documents to assess whether the partnership agreement and programmes take into account relevant CSRs. While the negotiations on the Commission's proposal for the Common Provision Regulation are still ongoing, the partial provisional common understanding reached between the co-legislators on 10 December 2019 retained these elements.

73. For the period 2014-2020, the EU financial support has increased by around 50%, and deployed mainly through the European Structural and Investment Funds and the Connecting Europe Facility. This was one of the commitments of the 2013 Urban Mobility Package, which also identified the need to cooperate between local, national and European governance levels in tackling the challenges faced by cities when it comes to local transport.

### **Recommendation 1 – Publish data on urban mobility**

- a) The Commission accepts the recommendation.
- b) The Commission partially accepts the recommendation, as it cannot prejudge the outcome of the legislative process.

### **Recommendation 2 – Link funding to SUMPs**

- a) The Commission partially accepts the recommendation.

The Commission cannot prejudge the outcome of the ongoing legislative negotiations.

The success of this depends on the cooperation of the Member States on the discussions on partnership agreement and programme.

The elements to be considered during the selection of individual operations are established at the level of the programmes, under the responsibility of the managing authorities and would need to follow the requirements set out in Article 67 of the proposal for a Common Provision Regulation.

- b) The Commission partially accepts this recommendation, in as much as it is in line with the legal framework proposed and the partial provisional common understanding reached between the co-legislators on 10 December 2019.

However, the Commission can only act insofar as there is a legal base for its actions as negotiated and agreed by the co-legislators. Therefore, as a matter of principle, any recommendation going beyond the legal framework ultimately adopted by the Union co-legislators in relation to the interaction between Member States' proposed programmes and the country-specific recommendations adopted by the Council needs to be addressed to the Member States.

- c) The Commission accepts the recommendation.

It took initial steps in that direction in the 2019 CEF call for urban nodes. The Commission is committed to continue with this approach in CEF II.

# Audit team

The ECA's special reports set out the results of its audits of EU policies and programmes, or of management-related topics from specific budgetary areas. The ECA selects and designs these audit tasks to be of maximum impact by considering the risks to performance or compliance, the level of income or spending involved, forthcoming developments and political and public interest.

This performance audit was carried out by Audit Chamber II Investment for cohesion, growth and inclusion spending areas, headed by ECA Member Iliana Ivanova. The audit was led by ECA Member Iliana Ivanova, supported by Mihail Stefanov, Head of Private Office and James Verity, Private Office Attaché; Niels-Erik Brokopp, Principal Manager; Enrico Grassi, Head of Task; Paloma Munoz Mula, Paolo Pesce, Angelika Zych and Mariya Byalkova, auditors.



*From left to right:* Paloma Munoz Mula, Paolo Pesce, Angelika Zych, James Verity, Iliana Ivanova, Mihail Stefanov, Enrico Grassi, Niels-Erik Brokopp and Mariya Byalkova.

# Timeline

Event	Date
Adoption of Audit Planning Memorandum (APM) / Start of audit	24.10.2018
Official sending of draft report to Commission (or other auditee)	4.12.2019
Adoption of the final report after the adversarial procedure	5.2.2020
Commission's (or other auditee's) official replies received in all languages	25.2.2020

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**Sustainable Urban Mobility** is one of the main challenges facing cities in the EU and a matter of concern for many citizens. Road transport is one of the main causes of air pollution and greenhouse gas emissions in urban areas, and the costs of congestion to society are around €270 billion a year.

In 2013, the Commission issued an Urban Mobility Package and provided more funding for clean urban transport – around €13 billion for the 2014-20 period - with the aim of making it more sustainable.

On the basis of audit work at the Commission and eight different cities in Germany, Italy, Poland and Spain, we found no indication that EU cities are fundamentally changing their approaches and that there is no clear trend towards more sustainable modes of transport.

We recommend that the Commission should collect more data on urban mobility from Member States and publish it, and should link access to funding to the existence of robust urban mobility plans.

ECA special report pursuant to Article 287(4), second subparagraph, TFEU.



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