FASTER AND CLOSER

OPPORTUNITIES FOR IMPROVING ACCESSIBILITY IN URBAN REGIONS

DECEMBER 2016

Rli
Council
for the Environment
and Infrastructure

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The Council for the Environment and Infrastructure (*Raad voor de leefomgeving en infrastructuur,* Rli) advises the Dutch government and Parliament on strategic issues concerning the sustainable development of the living and working environment. The Council is independent, and offers solicited and unsolicited advice on long-term issues of strategic importance to the Netherlands. Through its integrated approach and strategic advice, the Council strives to provide greater depth and breadth to the political and social debate, and to improve the quality of decision-making processes.

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CONTENT

The Dutch version of the advisory report contains an additional analytical section.

1

ACCESSIBILITY IN URBAN REGIONS DEMANDS NEW POLICY LINKAGES

Urban regions are the powerhouses of the Dutch economy and their importance is expected to increase in the future. It is therefore in the Netherlands' national interest that daily life in urban regions runs as smoothly as possible, and accessibility is vital to this. Changes within society, such as technological advances, shifting land uses, challenging climate targets and higher demands on individual flexibility, can have far-reaching consequences for accessibility within urban regions. Even though the exact effects are impossible to predict, it is clear that traditional divisions between policy areas and transport modes are blurring. This advisory report therefore addresses the following main question:

How can the government improve accessibility in urban regions by taking advantage of innovations and developments in society?

In this advisory report, the Council for the Environment and Infrastructure (Rli) concludes that current government policy and its associated instruments are insufficiently equipped to deal with developments in society. Transport policy needs to be reformed in order to safeguard accessibility in urban regions and secure their role in the Dutch economy and Dutch society over the long term. At present, transport policy focuses too much on facilitating mobility (speed of travel) and not enough on the location of facilities and activities (distance). Current transport policy is sectorally organised and segmented: each transport mode has its own legal instruments, financing and tax incentives. The different tiers of government also tend to pursue their own interests as defined by their legislative responsibilities, such as maintaining the national or provincial

road infrastructure, or as the public licensing authority for the national railway network or regional public transport. In order to effectively deal with developments in society and the blurring of boundaries, the Council argues for an integrated transport policy based on accessibility that gives people opportunities to carry out their activities sustainably and within a given time. This means making policy and investment decisions that balance spatial planning and transport solutions. The recommendations in <u>Chapter 4</u> contain what the Council feels is needed to improve accessibility in urban regions, some of which can already be carried out in the short term. The Council realises that the recommendations on legislative reform will take more time, but nevertheless feels that the current laws should be critically examined and a more flexible and integrated legal framework be created. This will necessitate a two-pronged approach: do what is possible within the existing legal framework (perhaps with some minor adjustments) while at the same time drafting legislation that can cope with systemic change.

1.1 Accessibility in urban regions is a national interest

Dutch urban regions are becoming the powerhouses of the economy and key factors in national competitiveness. Urban economies are more productive, grow faster and have more innovative potential (Raspe, 2012 in Rli, 2014). Moreover, the concentration of jobs, knowledge and services such as health care and culture draw people to urban regions. Migration to cities and the growth of most urban regions, both in size and importance, is expected to continue unabated in the decades to come. Urban regions are therefore unmistakably a national interest.

Box 1: What is an urban region?

The Council defines urban regions in terms of daily urban systems: the contiguous built-up area of a city (or cities) combined with the surrounding area where people carry out their daily activities. An urban region is where people live, work and use a wide array of services. Dutch urban regions vary greatly in size: Maastricht and Amersfoort have less than 200,000 inhabitants, while Amsterdam has over 1.5 million. Except in a few regions in population decline, the Dutch urban regions are growing and in some cases, they overlap. Many urban regions have a centrally located city at their core that is connected to others by motorways and intercity rail services. These connections have allowed Dutch urban regions to become part of a wider metropolitan network that competes with other metropolitan regions around the world.

The increasing size and importance of urban regions is a worldwide phenomenon. The significance of Dutch urban regions cannot be taken for granted: global competition between cities is fierce. Firms, and increasingly individuals as well, move freely between world cities and feel less bound to a single location. Depending on local circumstances and social norms, they consider urban regions to be largely interchangeable. Access to jobs, homes, services and other activities is vitally important for daily life in urban regions: people want to be able to do several activities in a single day. Accessibility is therefore a defining factor for the competitiveness of urban regions.

Box 2: What is accessibility?

By accessibility, the Council means the degree to which people can carry out various activities (e.g. domestic, work, study, leisure) within a given time. Travel time is not determined by speed alone, but also by proximity, or, in other words, the location of activities with respect to each other and to transport networks. This gives accessibility a strong spatial component: the more people can carry out their activities within a particular area within a given time, the more accessible that area is. Accessibility can also mean staying put and doing it online. Accessibility is therefore a measure of the opportunities people have to carry out activities. Mobility is different: it concerns movement from A to B which, depending on the transport mode, entails a certain length of time and distance. Accessibility indicates the degree to which various locations for activities (A and B, but also C and D) can be combined in space and time. Accessibility can change when the location of activities or the transport system changes (see Figure 2). Good accessibility enables cities to remain economically competitive and allows people to fully participate in society.
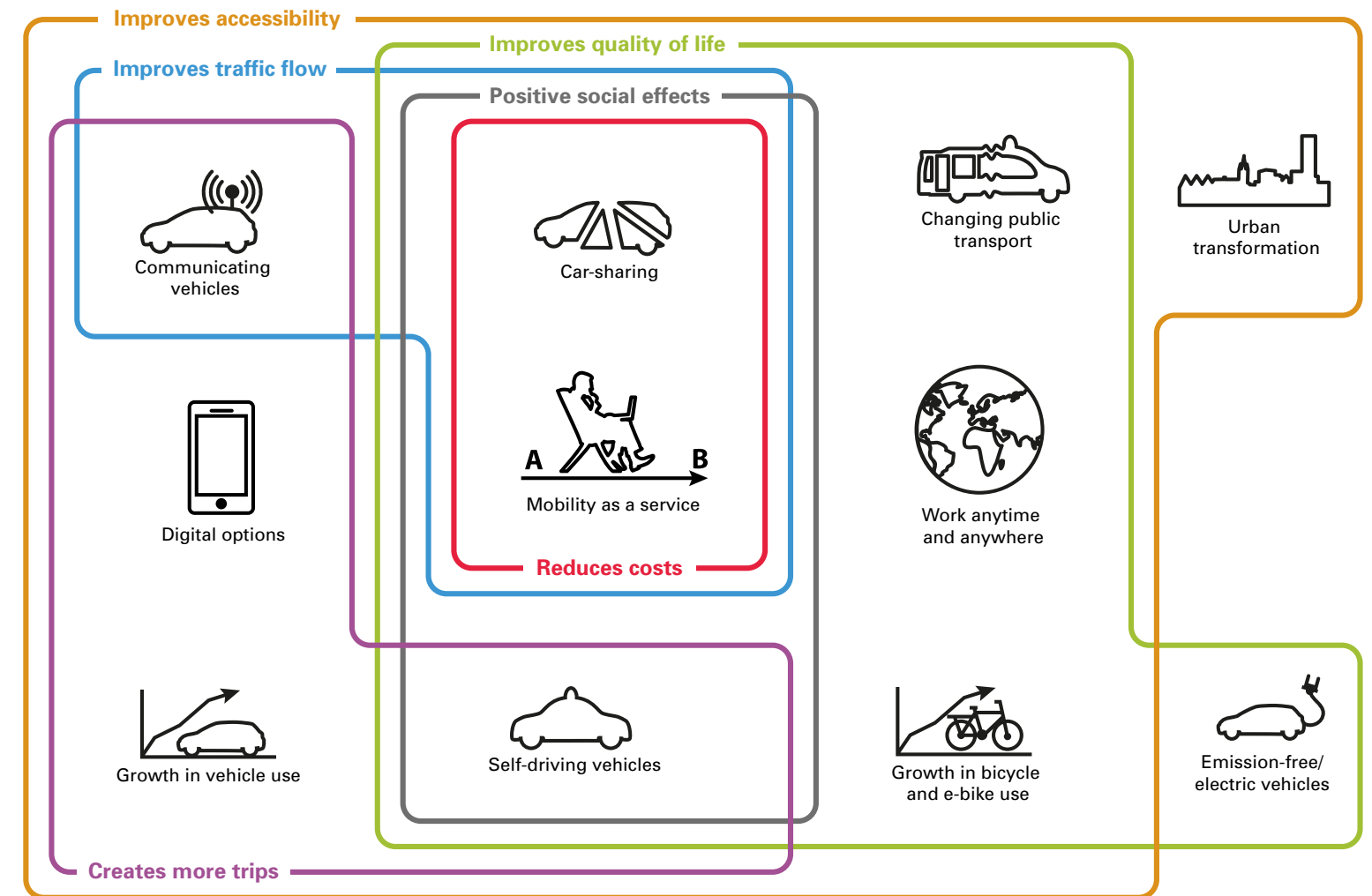
1.2 Social change greatly affects accessibility

While urban regions grow in importance, society is changing in all its aspects and this in turn has a considerable impact on accessibility (see Figure 1). Chapter 2 of Part 2 of this advisory report (only available in Dutch) contains an overview of relevant trends and developments. While

it is not exactly clear how these changes will play themselves out, some are inevitable. The era when people lived their entire lives in a single area and worked and shopped according to a fixed pattern is gone for good. Social networks have expanded and diversified. People combine more and more activities at different, often scattered, locations in a single day. Moreover, people's needs change as they age. There is increasing diversity in lifestyles (e.g. in families and households) and Dutch demographics will shift in the decades to come. Apps combining infrastructure networks with digital data processing create new opportunities for navigating and utilising urban regions, the internet allows us to shop anywhere, pop-up festivals are sometimes held in abandoned warehouses, and business meetings can take place via Skype, virtual reality[1] or telepresence.[2] New door-to-door services compete with traditional car ownership and public transport. In addition, wireless communication between cars and with infrastructure is improving, self-driving vehicles are no longer science fiction, and public transport is undergoing revolutionary change. These innovations, which are attuned to people's need for flexibility in their daily lives, create numerous opportunities.

Figure 1: **Eleven developments surrounding accessibility in urban regions and six important effects**

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1 A computer-simulated environment (audiovisually, but sometimes with smell and taste) that people may experience as real (Rli, 2015).
2 A collection of technologies that give users the impression of being somewhere else or which project their image to another location (Rli, 2015).

The Council observes that these developments have blurred traditional dividing lines between land uses and transport modes (see Chapter 2), and with it, the distinction between residential areas, industrial parks, office locations and public services and amenities. Close by and far away have become relative concepts and the introduction and emergence of technologies like e-bikes and self-driving vehicles are making transport

modes increasingly alike. At the same time, the distinction between public and private modes of transport is blurring, as is the distinction between goods and passenger transport. Transport is increasingly more about the ends (activities) than the means (travel).

1.3   Policy and instruments behind the times

Government policy and instruments such as laws and subsidies are still very much organised along sectoral lines and based on traditional boundaries between individual transport modes. These arbitrarily drawn boundaries fly in the face of the developments signalled above and the increased need for flexibility. Worse still, rules and regulations, funding schemes and tax facilities for transport all stand in the way of a coordinated approach to accessibility. Emphasis continues to be placed on the means (physical travel) rather than the ends (activities). Figure 2 shows that there are more options for improving accessibility than just facilitating travel. The lines in the figure show the movement between urban functions. The Council feels that the nature of policy should be changed to make it more responsive to developments and robust in the face of uncertainties. Changing the current policy framework will make it easier to seize opportunities for improving accessibility in urban regions, both now and over the long term.

Figure 2: Opportunities for improving accessibility
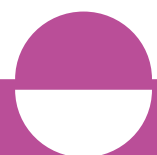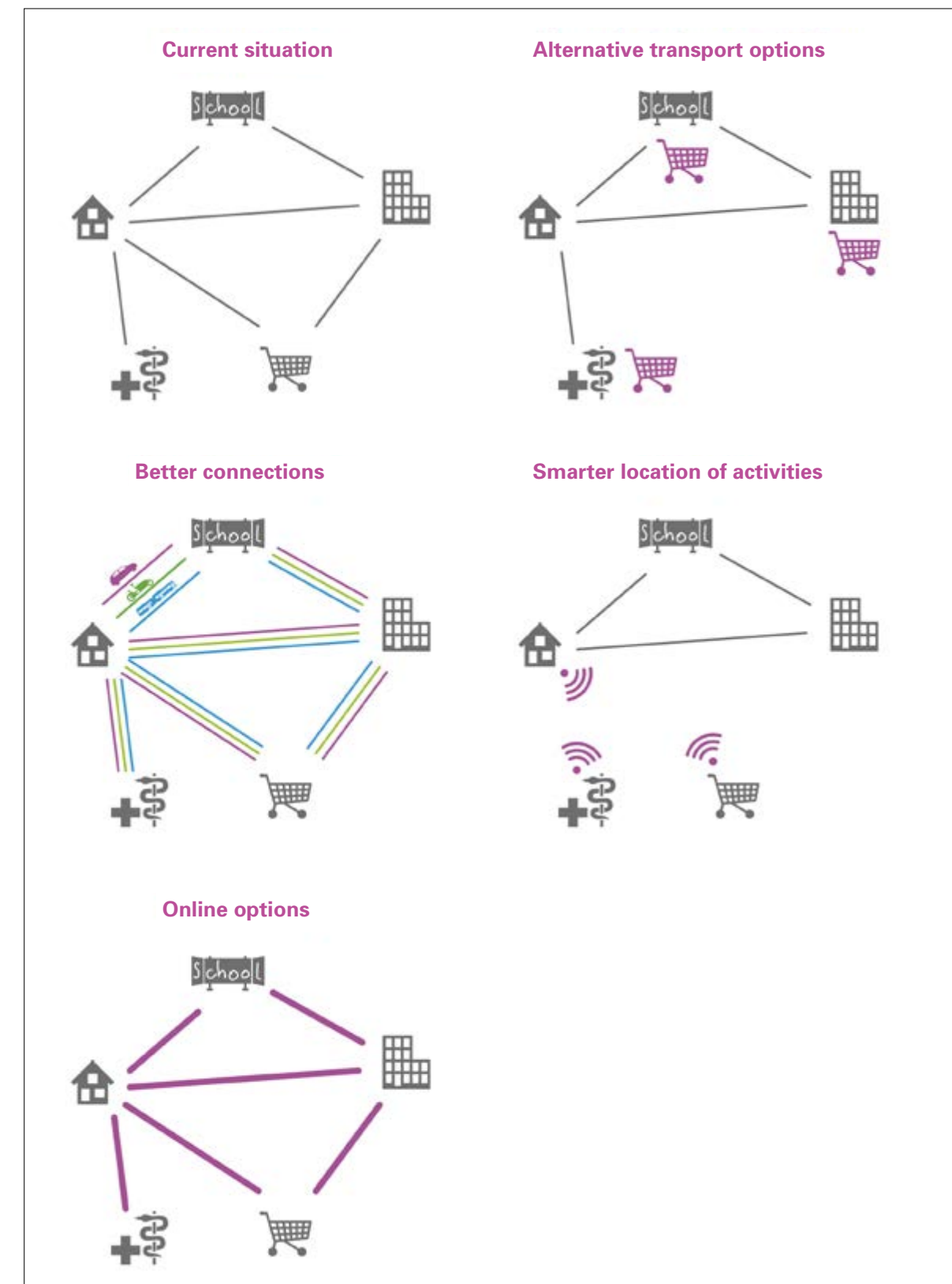
1.4 Scope of the advisory report

National government, provinces and municipalities

This advisory report is directed at the national government and subnational authorities (provinces, municipalities and transport regions). Municipalities are chiefly responsible for the accessibility of their towns and cities. The province also has an important role to play in sustainable urban development and regional accessibility, specifically as a network manager and public transport licensing authority. However, since well-functioning urban regions are a national interest, the Council believes that the national government shares responsibility as well. The Ministry of Infrastructure and the Environment (IenM, 2014) acknowledges this. Good accessibility requires a good match between the activities on offer and the networks needed to reach them. Public authorities have responsibilities as network managers, but they also have a responsibility to provide national, regional and urban accessibility. Accessibility within urban regions can be improved only if all levels of government make a concerted effort.

Accessibility within urban regions

For a long time, policy attention has focused mainly on connections between urban regions. The Council acknowledges that these still need to be improved, but given the growing importance of well-functioning urban regions, this advisory report focuses exclusively on accessibility within these regions. This is where major changes in living and working and in the use of urban space and services will take place. Urban regions are also where the main railway infrastructure and regional public transport networks converge and where the trunk road network feeds into the underlying road, cycle and pedestrian infrastructure, and it is these linkages that pose specific challenges to urban regions. It has also been observed that the gap between urban regions is widening (the PBL Netherlands Environmental Assessment Agency [PBL], 2016): they differ in their level of growth (or decline) and in their accessibility challenges. The specific problems of declining regions are not addressed in this report.

Passenger transport and medium to long term

This advisory report is limited to passenger transport. Freight transport has already been treated in "Dutch Logistics in 2040: designed to last" (Rli, 2013). That report observed an increasing number of trips in cities due to logistics, and argued for customised solutions.
This report covers the medium and long term.

1.5 Organisation of this report

The next chapter deals with the blurring of traditional boundaries between policy areas and transport modes due to the trends in land use within urban regions and the increasingly diffuse mobility patterns. Chapter 3 investigates the barriers to improving accessibility in urban regions created by the current policy framework and legislation. In Chapter 4, the Council provides recommendations for overcoming these barriers and allowing urban regions to exploit opportunities to improve their functioning and their international competitiveness.

2

BLURRING OF
BOUNDARIES

A number of boundaries in land use and transport are not as clear-cut as they once were. The developments causing this blurring are described below in brief.

2.1 Blurring of boundaries between home, work, services and amenities

Historically, demographic and economic developments determined the location of activities within urban regions. The ongoing development of digital applications has helped spur the relocation of activities and create new land uses. It used to be clear where a hotel or a shop was located or where a concert was being held, but these activities are now less bound to a single location and time. Homes are becoming provisional hotels via Airbnb, pop-up stores[3] appear in empty buildings and one-time-only outlet sales and concerts are held in vacant warehouses. In the Netherlands, more and more activities take place on water, such as floating 'urban farms' and hotels. We can find everything we need online (Van der Beek & Van Oostvoorn, 2015), activities have become footloose and the smartphone has become an accessibility tool. Not only is the availability of activities becoming more diverse and flexible, but people's daily routines are also changing as jobs are often temporary and flexible contracts are becoming more common (Chkalova et al., 2015), more people need to give informal care, and leisure time is changing. The way people organise their daily routines puts demands on the opening times of services and amenities.

3   A pop-up store is a temporary shop that suddenly appears in the urban environment, often in empty buildings or half-vacant commercial spaces.

The boundary between the public and private sphere is disappearing. Personal matters are not just dealt with at home, but have entered the public realm; at the same time, homes are increasingly used as workplaces. Our smartphones contain links to the pictures, addresses, emails and other documents we store in the cloud, and at home we are continually followed and monitored by tracking cookies, electricity meters and the like. These developments are also merging the public and private domains (Martijn, 2016).

2.2 Blurring of mobility boundaries

Far away and close by are relative concepts

People in cities have become increasingly mobile and their travel patterns have changed and become more complex, not just for work, but also in their free time (CROW-KpVV, 2016). Social networks used to be confined to family, church and work in the immediate vicinity. Now, digital networks have enabled us to maintain contacts all over the world, which explains the growth in the number of networks and contacts. Nevertheless, people still need and want face-to-face contact (De Waal, 2013). The expansion of social networks has led to a greater diversity of contacts. We buy things from all over the country via Marktplaats (a Dutch Craigslist), borrow things from our neighbours via Peerby (an item-sharing app) or taste their dishes via Thuisafgehaald (home-cooking take-away app). These platforms create mobility patterns that did not exist before.

Transport modes are becoming more alike

Much will change in the area of mobility in the decades to come. The private car has been the major mode of transport in the Netherlands for many years (Kennisinstituut voor Mobiliteitsbeleid [KiM], 2016). In Dutch cities, however, about half of all trips are made by bicycle or foot (KiM, 2015b). In fact, since 2005 cycling has increased for leisure, school and work (KiM, 2016), while public transport is often used to reach other cities (about 10–15% of trips on average, with a maximum of 35% in Amsterdam). In the four largest Dutch cities 5-10% of trips are made by public transport; the average in the other towns and cities is about 2% (KiM, 2015a). Transport by train has shown strong growth in recent years (KiM, 2016).

It is expected that the biggest disadvantages of cars (e.g. safety, pollution) will have more or less vanished by 2040. Advances in vehicle design make it safe to assume that many accidents can be prevented in the near future. Emission-reduction techniques will lessen the impact of road vehicles on local air quality. Except for the physical space they will continue to consume, the social cost of cars will be drastically reduced.

The private costs of car travel may also be reduced by new technology. Car travel will become even more widely available, but the cars themselves will change. As cars generate data and wirelessly communicate with infrastructure and other cars, motorists will be better informed, roads will be safer and traffic will flow more smoothly. Mobility services will arise offering comfortable door-to-door journeys. Other services will help people choose the best route by consulting data on different transport modes, current traffic information and data on users and their preferences. Car-sharing and carpooling will also be options (Van de Weijer, 2015). It is expected that all this will create a better mix of transport modes and bring people and activities in urban regions closer together, thus reducing road congestion (Neeskens, 2016). Public transport will assume a new role as it teams up with carpooling, self-driving vehicles and other innovations. In growing urban regions, the need for transport services capable of carrying large groups of people (e.g. trains, buses, trams and underground) will only increase. Passengers will demand more flexible, comfortable and worry-free travel from door to door. In lower density areas, demand for traditional public transport services will fall and new transport concepts will need to be developed. Both cars and public transport will increasingly be used as temporary workspaces.

Transport modes are becoming more alike due to the emergence of cleaner and safer cars, self-driving interactive vehicles, a variety of vehicle-sharing schemes and faster bicycles. The e-bike and high-speed pedelec (electric-assisted pedalling) are already filling the gap between car and bicycle while the shared car, on-demand bus services, neighbourhood bus, taxi and self-driving car are filling the gap between public and private transport. It is no longer clear whether a transport mode should be considered 'fast' or 'slow' or 'public' or 'private'. In the future, they will all be at our disposal and we will choose whatever is most suitable at the time.

Goods and passenger transport services will increasingly overlap

When shopping online, we no longer go to the shops ourselves (passenger transport), but instead receive packages from delivery services (goods transport). This not only has consequences for transport policy, but spatial planning as well. Physical shops will disappear from the high street, to be replaced by large logistical centres near major transport nodes, usually at the edges of cities (De Waal, 2013). Conversely, some goods transport will be replaced by passenger transport: 3D printing will allow products to be manufactured at home or at commercial print shops (Ruimtevolk, 2014). In other cases the goods/passenger distinction is less clear-cut. Digital platforms exist that offer both rides and deliveries: packages are picked up by either a delivery service or a private individual, sometimes in combination with passenger transport.

3

BARRIERS TO IMPROVING ACCESSIBILITY

The Council feels that current transport policy and its instruments do not do justice to the developments identified in Chapter 2. They create barriers to innovations which could improve accessibility in urban regions. Four of these are described below.

3.1 Planning solutions to improve accessibility are harder to implement than mobility solutions

In practice, the usual approach to improving accessibility is to improve mobility. Reducing traffic congestion and shortening travel times is still the standard policy approach. This is understandable given that both strategies are easy to measure and can be linked to tangible and familiar indicators. The tendency not to choose land use planning solutions, such as urban transformation, is partly due to the lack of suitable policy instruments. Urban transformation is hard to get off the ground and coercive planning powers are limited and expensive if landowners refuse to cooperate.

The fact that policy defines accessibility as travel time from door to door does not help either. Of course, measuring travel times (i.e. effort in cost and time) is important, but this figure gives insufficient insight into the current accessibility within urban regions; we still do not know if the activities (home, work, leisure) are well located. Moreover, travel patterns are far more heterogeneous than just door-to-door trips: accessibility is more about combining an entire array of activities within a given period of time. If travel times become unacceptable due to traffic congestion, simply adding new lanes is not always the most effective solution. It could make more sense to intensify urban development so that homes, jobs and shops are closer together. This would result in fewer trips or the use of alternative transport modes. Concentrating development in urban regions, at higher densities and in mixed land uses can help increase accessibility.

3.2 Public finance system inadequate to meet the common accessibility challenges in urban regions

In order to improve accessibility in urban regions, it is vital to link land use policies to mobility policies for the underlying road network as well as for the main road network. Each urban region faces its own challenges and has its own national and regional significance. The national interest embodied by urban regions necessitates that different tiers of government become involved. What is required is a concerted effort and investment that goes beyond the individual powers and responsibilities of each tier of government. Box 3 provides an overview of the current distribution of powers and responsibilities.

Box 3: Powers and responsibilities (www.government.nl)
The Minister of Infrastructure and the Environment is responsible for the planning, construction, management and maintenance of the main rail and trunk road networks. To this end, the ministry draws up policy, carries it out and ensures compliance with the law. The minister also bears responsibility for the planning system. The Spatial Planning Act requires that the national government adopts a spatial strategy that

outlines its priorities. The National Policy Strategy for Infrastructure and Spatial Planning (Ministerie van IenM, 2012) states that the national government should decentralise tasks as much as possible and confine itself to promoting the interests of the Netherlands as a whole, particularly with respect to urban regions and the accessibility of the mainports (i.e. Schiphol Airport and the Port of Rotterdam), Brainport Eindhoven and the greenports (major agricultural clusters).

Provinces and transport authorities award regional transport contracts. Provinces are also responsible for provincial roads, provincial cycle paths and local rail infrastructure. The Spatial Planning Act (Wro) mandates that provinces draw up a provincial spatial strategy. Some do this in conjunction with a transport strategy while others keep these two policy documents separate. Provinces draw up rules for land use plans by means of a provincial ordinance. In regions with transport authorities, the province is only responsible for spatial policy.

Municipalities are responsible for physical developments within their jurisdiction and must weigh up and balance the different land-use interests, such as housing, nature conservation, transport, water management and the economy, when making their decisions. The Wro mandates that municipalities draw up a municipal spatial strategy. They draft land use plans that contain precise land-use designations and allocate land for homes, jobs, services, green spaces, roads and the like. Municipalities are also responsible for the construction, management

and maintenance of the roads in their jurisdiction that do not fall under the responsibility of the province or the national government. They are also charged with conducting a comprehensive and operational transport policy.

The current method of financing (see Box 4) hampers not only such a concerted approach but also a balanced consideration of the most effective and efficient means to improve accessibility in urban regions. Funds for the construction and maintenance of infrastructure (road, rail and water) are strictly separated from funds for new land-use development. The majority of the Multi-Year Programme for Infrastructure, Spatial Planning and Transport (MIRT) is financed through the Infrastructure Fund, which is exclusively intended for investments in road, rail and water infrastructure.[4] There is hardly any budget at all at the national level for land use or other interventions to improve accessibility. Moreover, because the Infrastructure Fund sets a minimum threshold for project costs, the system encourages the scaling up of regional or local projects. Resources that were meant for large-scale road or rail infrastructure cannot easily be reallocated to smaller interventions for improving accessibility. Both the current MIRT system and the Infrastructure Fund seem to stimulate competition between subnational authorities for projects. Finally, the Infrastructure Fund gives the national government the power to decide how its funds are used. As a result, decisions reflect national priorities in the area of road

4   Although the law specifically refers to infrastructure, in practice other transport solutions may also be considered.

and rail infrastructure – even for predominately city/regional accessibility issues that would be better served by a different approach. The inter-ministerial policy study on flexibility in infrastructure planning (Werkgroep IBO Flexibiliteit in infrastructurele planning, 2016) and the government's response to it (Tweede Kamer, 2016a) address the financial framework of the Infrastructure Fund and the MIRT and suggest measures to enhance their flexibility.[5]

In theory, provinces are free to decide how to use the provincial fund. However, part of the fund (the former Multiple Targeted Subsidy Schemes, BDU) is based on transport-related indicators (e.g. public transport type and kilometres of roads). In practice, provinces try to be as inclusive as possible when considering potential transport solutions. Responsibility for and the funding of spatial policy has been entirely decentralised from the national government to provinces and municipalities.

Box 4: Financial framework

Funding is available at different levels of government to implement tasks related to infrastructure and spatial planning. The text below describes the budgets at the national, provincial and municipal levels (the European level is excluded here).

At the national level, expenditures for spatial development are a small fraction of those for infrastructure. Most national expenditures on infrastructure (rail, road and water) are carried out via the Infrastructure Fund (€5.8 billion in 2016). Of this, €2.4 billion is earmarked for management, maintenance and replacement and €2 billion for construction. The Infrastructure Fund is allocated by means of the MIRT. The money in the Infrastructure Fund is drawn from the national budget, while national expenditure for spatial development (€112 million in 2016) comes from the Ministry of Infrastructure and the Environment's budget. About half of this is spent on soil decontamination; the rest is allocated to the cadastre and geo-information.

The provincial level reveals a similar picture: spatial development comprises a small fraction of total infrastructure expenditures. The largest source of income at the provincial level is the provincial fund (derived from the national budget) and vehicle tax surcharges. The size of the provincial fund is based on transport indicators like public transport type and kilometres of roads, while the surcharges depend on the level of car ownership in the province. Provinces are free to decide how they spend this money. In 2016, the provinces spent 34% of their budget (almost €3 billion) on transport and 2.5% (€221 million) on spatial planning and housing.[6]

In 2016, the two regional transport authorities (Stadsregio Amsterdam and Metropoolregio Rotterdam Den Haag) received €970 million in national funding for transport projects.

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5   The discussion in the House of Representatives was still ongoing when this advisory report was completed.

6   CBS, Statline.

At the municipal level, more money is spent on spatial planning and housing than on transport. Municipalities receive money from the national government through the municipal fund. Together, they spent an estimated €4.3 billion on transport and € 6 billion on spatial planning (Tweede Kamer, 2015; CBS, Statline).

3.3 Current rules and regulations make it hard to take advantage of developments and innovations

The current rules and regulations on passenger transport date from a time when the government was responsible for providing infrastructure and for organising and funding public transport. This explains why a clear distinction is made between public transport, taxis and private vehicles. The Passenger Transport Act (Wp2000) makes a clear distinction between public transport and taxis, while the Road Traffic Act designates traffic regulations, including vehicular access to public roads. Recent developments blur the distinction between transport modes: ride-sharing apps like Blablacar or Togethr cannot be considered taxi services, but are not private transport either.

Box 5: Legal framework
The primary legal framework for spatial policy is the Spatial Planning Act (Wro). This allocates responsibility and defines instruments for the spatial allocation of housing, jobs, recreational amenities, transport provision, water bodies and waterways, and protected areas. The Act provides the legal framework for municipal land use plans. In 2019, the Environment and Planning Act will enter into force. This new Act consolidates and revises dozens of laws and hundreds of regulations in the areas of planning, housing, infrastructure, environment, nature conservation and water management. The Public Transport Act regulates passenger transport by public transport, coaches (buses, shuttles and tourist coaches), and taxis (including licensing). The Road Traffic Act regulates road traffic, including the conditions for vehicular access to public roads. A law is being prepared (Experimenteerwet zelfrijdende auto's) to enable experiments with self-driving cars.

The opportunities and prospects for improving accessibility offered by these developments are being unfairly restricted by existing rules and regulations. The increasing flexibility and convenience of transport services provides an opportunity to meet people's needs, but means that they do not fit into the traditional division between transport modes. For example, one of the aims of public transport is to limit the environmental impact of accessibility and mobility. According to the Passenger Transport Act, a transport mode can only be considered 'public transport' if there is a scheduled service by car, bus, train, underground, tram or other guided vehicle system. In urban regions, innovations like transport services and sharing schemes can contribute to these same objectives while potentially meeting the needs of passengers better, but they do not conform to the official definition of public transport. These innovations are not readily apparent when issuing licences because the process focuses on the

efficient use of public transport modes (bus, underground, tram and train) and service provision and not on accessibility. As a result, licensing dictates supply. Although the licensing process does provide some scope for new flexible transport systems, public transport remains the default in the Act. Consequently, the task of innovating is delegated to public transport operators, even though the biggest developments seem to come from elsewhere.

Another example is the regulation of bicycles and mopeds. The advent of e-bikes and high-speed pedelecs can enhance accessibility in urban regions. However, these new transport modes do not always fit nicely within the Road Traffic Act's categories determining whether a licence or a particular helmet is required and at what age and under what conditions a vehicle may be operated. The law considers e-bikes with pedal support up to 25 km/hour as normal bicycles and above this speed as a light or regular moped. In 2017, high-speed pedelecs will no longer be treated as light mopeds (which have no helmet requirement and can be ridden on bicycle paths for example), but as regular mopeds. What this will mean for their continued popularity is uncertain.

3.4 Unequal fiscal treatment and subsidy schemes are not conducive to improving accessibility

Infrastructure, public transport and other transport facilities are usually financed from the national government budget or from provincial and municipal budgets. This money is generated through taxation. The current tax code and subsidy schemes treat different transport modes differently. The road tax applies to motorcycles, but not to high-speed pedelecs. Public transport is subsidised while taxis pay VAT. Different VAT rates apply to bicycle and car repair, and taxes are levied for using company cars, but not company bicycles. As motorists, we pay for both ownership (road tax) and use (fuel taxes), while we just pay to use taxis (VAT and excise duties). This unequal treatment is the result of fragmented legislation and the fact that taxes on transport serve two primary aims: raising revenue and reaching climate change targets – not to improve accessibility. This explains why the various innovations in the area of transport are on an unequal footing, financially or otherwise. The system ignores the blurring of transport modes and the fact that use is overtaking ownership. Car-sharing is treated very differently from public transport, even though the accessibility impacts might be identical.

4

CAPITALISING ON
NEW DEVELOPMENTS

This chapter will indicate how the barriers identified in <u>Chapter 3</u> can be surmounted so that the innovations mentioned in <u>Chapter 2</u> can fully contribute to improving accessibility in urban regions. The recommendations in sections 4.1 to 4.3 concern the nature and content of a potential accessibility policy, while sections 4.4 to 4.6 propose policy instruments for achieving this.

4.1 Accessibility goals should be set for decision-making on spatial planning and transport in urban regions

Recommendation 1 to the Minister of Infrastructure and Environment: Require an 'accessibility check' for all relevant spatial planning and infrastructure plans and decisions. This check should articulate the accessibility goals and how the balance between spatial planning and mobility was achieved with respect to sustainability. The third step of the sustainable urbanisation procedure should be retained until the accessibility check is implemented.

For urban regions to function well, accessibility within and between these areas must be given policy priority. The aim is to optimise the ability of people to carry out activities (see <u>Box 2</u>). Putting accessibility first entails a fundamentally different approach than optimising travel: it means that policy choices and investment decisions have to strike the right balance between spatial solutions, transport solutions and other solutions. The need to improve linkages between spatial planning and transport is

acknowledged in national policy and by subnational governments, but in practice it is difficult to opt for spatial planning solutions. As a result, the most common approach to improving accessibility is to reduce traffic congestion and reduce travel times. Of course, municipalities do sometimes opt for spatial planning solutions, but this is done not to improve accessibility, but for other (i.e. economic) reasons.

The Council feels that carrying out a well-argued assessment of spatial planning interventions versus infrastructure works or mobility measures can help bring about the most efficient and effective accessibility solutions in urban regions. In such an assessment, different urbanisation alternatives could be considered and MIRT studies could explicitly include matters like urban design and the transformation and redevelopment of underused urban areas (Van Uum & Meurs, 2015). This aim can be achieved by mandating an 'accessibility check', analogous to the water assessment (*Watertoets*), for all important spatial planning and infrastructure plans and decisions made by the national government, provinces and municipalities. The accessibility check should not be restricted to mobility aspects, but assess the impact on accessibility for each area, land use and socioeconomic group, using sustainability as a guiding principle. The aim is to consider the accessibility impacts of each spatial planning or infrastructural decision at an early stage. In addition, the Council emphatically advises being open-minded about innovative ideas when seeking spatial planning solutions, even if they seem unfeasible at first.

Given the above, the Council finds it unfortunate that the Minister of Infrastructure and the Environment plans to abolish the third step of the sustainable urbanisation procedure in the draft amendment to the Spatial Planning Decree (Tweede Kamer, 2016b).[7] The requirement to consider multimodal accessibility in this third step only applies to urbanisation outside the existing built-up area and only to legally binding decisions (and so not to spatial strategies). The reason given for abolishing this step is that other parts of the explanatory notes of land use plans can deal with issues such as access to the plan site and other aspects of the development. The Council feels that this offers insufficient assurance that accessibility goals will be given due consideration, something that an accessibility check would ensure. The accessibility check as understood here is less discretionary and more wide-ranging than the sustainable urbanisation procedure.

4.2 Accessibility policy should be responsive to developments and uncertainties

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Recommendation 2 to the Minister of Infrastructure and the Environment and subnational authorities:
Enable adaptive accessibility policy.

It is not known how and at what rate developments will occur, what impacts they will have on urban regions and what else might be encountered. In the face of this uncertainty, enhancing the adaptability of policy and legislation will allow multiple development paths to be harnessed accurately.

An adaptive accessibility policy should meet the following requirements:

- Set clear accessibility goals and indicators. It is important that these relate to peoples' ability to carry out their activities and to link these to the accessibility check (recommendation 1). Do not specify how the goals should be achieved. The selected indicators should not only provide insight into congestion and travel times, but also the location of activities and travel patterns. Moreover, the Council feels that the indicators should also measure the potential level of social participation of certain social groups. Naturally, both goals and indicators can vary between urban regions.
- Set clear standards within which accessibility goals can be achieved, such as those for the environment (e.g. noise and air quality), energy consumption and health. The Rli also wishes to call attention to privacy and security issues regarding the use of data to solve accessibility problems. The government will need to take a position on the collection and processing of personal data for public and private ends. This stance on privacy goes beyond accessibility and also concerns domains like health care, law enforcement and banking.
- Schedule projects and programmes oriented to accessibility. Build in sufficient flexibility into the process as well as fixed times for discussion or making interim adjustments, while at the same time ensuring this does not lead to erratic policies or arbitrariness. For example,

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7   The third step of the procedure requires plans for urban development outside existing urban areas to describe the current or potential multimodal accessibility.

flexibility can be built into public transport concessions by making it easier for public transport authorities and operators to adapt to changing circumstances, technologies and customer needs during the contracting period (Rli, 2015). Furthermore, infrastructure and transport management – both roads and public transport – can focus more on facilitating developments. Municipalities, Rijkswaterstaat (the national agency for public works and water management) and private parties acknowledge this point and are seeking solutions.

- Develop a system to monitor how policy assumptions and relevant developments evolve. Identify tipping points to indicate when assumptions are no longer valid.
- Adapt policy and legislation to allow for alternative solutions to accessibility problems. One way is to enable experimentation, for example to resolve conflicts between peer-to-peer concepts and the taxi market, or to investigate the feasibility of constructing major infrastructure projects for 'a limited time' rather than 'for ever'.
- Enable investment decisions to be reconsidered by allowing transfers to occur within investment programmes. The government's reaction to the inter-ministerial policy study on flexibility in infrastructure planning (Tweede Kamer, 2016a) can be considered a first step towards a more adaptive MIRT process.

4.3 Effective accessibility policy demands a multipronged approach

Recommendation 3 to the Minister of Infrastructure and the Environment and subnational authorities:
Take (or continue to take) a multipronged approach to improve accessibility in urban regions. This approach should include the intensification of urban land use, strengthening multimodal nodes, making schedules more flexible, developing excellent mass transit within urban regions, and the long-term management and maintenance of infrastructure.

A multipronged approach is imperative for improving accessibility in urban regions. Many authorities are already doing this, and should continue to do so. Elements include the following:

- Intensifying land uses in urban regions with a varied supply of housing for different social groups to increase the proximity of activities. This can be achieved by bundling activities within urban regions, increasing urban densities, promoting mixed-use development, and through urban land readjustment.
- Developing policy aimed at flexible schedules of services and facilities (e.g. longer or different opening hours to reduce congestion).
- Strengthening multimodal nodes. In order to increase the proximity of activities, more advantage needs to be taken of the spatial potential

(place value) created by connecting transport systems (node value).[8] Developments in housing, work and transport need to reinforce one another even better.

- Developing the capacity, reliability and comfort of public transport on high-demand corridors. The corridors within and between urban regions must have or retain the capacity to handle large passenger volumes.

- Drawing up long-term strategies for infrastructure management and maintenance (e.g. on the basis of preventive maintenance) in each region. These should include a lifecycle approach (designs that consider management and maintenance).

4.4 A coherent accessibility policy requires comprehensive legislation

Recommendation 4 to the Minister of Infrastructure and the Environment: Draw up a new legal framework that allows for a demand-led approach to accessibility and that breaks down boundaries between policy areas and transport modes.

The Minister of Infrastructure and the Environment wants to make the Netherlands more accessible by linking mobility issues to regional and economic development in a more demand-led approach (Ministerie van IenM, 2014). Policy will in future place less emphasis on infrastructure and transport subsystems and more emphasis on a coherent accessibility system that puts people first. The Council applauds this aspiration, but also observes that the current legislation offers insufficient incentives to seize opportunities for improving accessibility and pursuing a demand-led policy. The current legal framework is geared to optimising the supply of transport subsystems (taxi, public transport, private vehicles, etc.) even though the boundaries between these are blurring and it is precisely the interaction between these systems that offers opportunities for a more demand-led approach. Moreover, the current legal framework hampers the making of trade-offs between modes or between transport planning and spatial planning.

The Council therefore recommends revising the legal framework to grant the necessary flexibility for harnessing new developments without compromising legal certainty. One way would be to draw up an 'Accessibility Act' along the lines of the Environment and Planning Act to replace the plethora of laws now in place in this area. In other words, better coordination between the components of accessibility (transport, spatial planning, environment, etc.), general rules instead of micromanagement, and more latitude for subnational authorities and other parties to interpret the law for themselves.

According to the Council, the new legal framework should be based on the following principles:

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8   Both the VROM-Council advisory report *Acupunctuur in de hoofdstructuur* (2009) and the Rli advisory report *The Future of the City* (2014) stress the importance of linking together the node value (transport modes) and place value (spatial potential) at multimodal locations. It is precisely the combination of these two values that determines whether multimodal locations achieve their desired functionality.

- Continuous improvement of accessibility in the Netherlands, particularly in urban regions. This should occur in conjunction with environmental objectives, including targets for emissions of hazardous materials and climate change, and goals for the social aspect of accessibility (i.e. segments of the population requiring policy attention).
- An integrated approach towards accessibility that includes both transport and spatial planning and which enlarges the scope for decision-making across transport modes. This means promoting development through adaptive policy (see recommendation 2), breaking down barriers to innovation in the transport market and incorporating incentives for new ideas. Examples include relaxing the criteria for awarding concessions or replacing this policy instrument, partly or entirely, with a permit system or a free-market approach.

The legal framework must clearly lay down the responsibilities of the various public authorities (e.g. regarding subsidies and infrastructure), the conditions to be met by transport operators, mobility service providers and social transport initiatives (concessions, permits, exclusive rights) and the standards (e.g. safety, environment) that apply to vehicles and subsystems. This may also mean removing obstacles within the current regulatory framework.

4.5 Collective challenge with cohesive funding

Recommendation 5 to the Minister of Infrastructure and the Environment and subnational authorities:
Pool resources to tackle accessibility challenges in the public interest. Guiding principles should include: cohesion between spatial planning and transport planning, a demand-led orientation, flexibility and coordination between investments and operational budgets.

Recommendation 6 to the Minister of Infrastructure and the Environment:
Reserve space in the Ministry of Infrastructure and the Environment's budget to enable integrated investments in accessibility (cutting across all levels of government and using the broad definition of accessibility).

Each urban region has its own challenges and national and regional significance. Urban regions regularly extend across municipal boundaries, necessitating a customised approach such as that now being taken in the Regional Agendas (but using the broad definition of accessibility). Emphasis should be placed on common accessibility challenges, not on local concessions or infrastructure issues. This means taking a broader view that transcends local jurisdictions and responsibilities. It would make sense for provinces to take the lead in coordinating activities to improve accessibility, given their prime responsibility for sustainable urban development, regional accessibility and regional economic development. They should work with the municipalities and the national government to identify the accessibility challenges in urban regions and translate

them into concrete measures. A first step has already been taken in this direction in the government's letter of 14 October 2016 on the results of the MIRT administrative consultation (Tweede Kamer, 2016c), which argued for an integrated area-based approach. To this end, the national government wants to tackle common challenges that can be effectively resolved through a mix of concrete short-term and long-term measures. The letter also states that this could entail the construction or modification of infrastructure, adopting non-infrastructural solutions or a combination of both. The programmes will be given an adaptive character, in line with the government's response to the inter-ministerial policy study on flexibility in infrastructure planning (Tweede Kamer, 2016a). This means examining, region-by-region, what the best solution is for a given problem at a given time: is it still relevant and are the measures still suitable? Challenges can be affected by future developments and extra measures and resources can be added to programmes. The programmes will be monitored and, if necessary, updated (Tweede Kamer, 2016a).

The Council feels that a concerted effort to address accessibility challenges in urban regions will necessitate some form of collective investment, preferably from a common fund. This is nothing new as public authorities already make collective investments. The Council feels that the following principles should be followed:

• All aspects of accessibility should be eligible for funding from the budget, whereas at the moment a considerable part of the budget is devoted to management and maintenance. The budget should also offer the freedom to choose between different types of investments, such as mobility and infrastructure (including behaviour modification, spatial planning, timing of activities or combinations of these).

• The budget should allow for demand-led investments (from the perspective of individuals) in public transport, cars or other transport modes and in switching between modes.

• Investments in infrastructure, spatial developments and public transport services should be coordinated.

• The budget should offer sufficient flexibility to reconsider investment decisions and capitalise on new developments and changing demands.

At the national level, the Infrastructure Fund could be broadened to become an accessibility fund, as proposed by the inter-ministerial policy study on flexibility in infrastructure planning (Werkgroep IBO Flexibiliteit in infrastructurele planning, 2016). In the 2017 national government budget, the Minister of Infrastructure and the Environment indicated that flexibility is being pursued in the Infrastructure Fund precisely to allow for new developments and innovation. In its response to the inter-ministerial policy study on flexibility in infrastructure planning (Tweede Kamer, 2016a), the government stated that it would investigate the pros and cons of an accessibility fund. At present, however, a large part of the Infrastructure Fund is taken up by legal requirements and political commitments, which reduces the scope for flexibility.

The Council notes that another option would be to create space in the national budget to support coordinated action in urban regions along the lines of the former urban development funds.

4.6 Align financial incentives for transport with accessibility objectives

Recommendation 7 to the Minister of Infrastructure and the Environment and the State Secretary for Finance:
Investigate the feasibility of policy instruments other than monetary incentives for transport and allow municipalities to conduct experiments to make accessibility policy more dynamic and demand-led.

In order to improve accessibility in urban regions by harnessing new developments in transport, the Council feels it is imperative that the price of transport matches regional conditions and preferences. At present, prices are determined by a complex system of taxes, surcharges and subsidies, which are often targeted to a single transport mode across the entire country. This fails to address the blurring of transport modes and the local or regional context.

The Council concurs with Corwin et al. (2015) that the tax and subsidy system for transport should become more dynamic and demand-led. Prices should be linked to physical travel and not vehicle ownership. Sustainability, environmental quality and social objectives in urban regions are factors that require a customised approach at the regional level. Accessibility can be improved by adjusting prices according to time of day, market demand, routes, urban environment, distance, comfort and transport mode. The Council feels that additional research is needed to determine which price incentives are the most suitable. The report by the CPB Netherlands Bureau for Economic Policy Analysis and the PBL Netherlands Environmental Assessment Agency (2016) provides an initial overview of policy measures and their effects. However, the Council realises that charging personal transport is easier said than done. Which vehicles should pay for what infrastructure? Should taxes be levied for car-sharing but not public transport? Who will determine whether cars are being shared and how can this be measured? Can cities like Utrecht and Amsterdam impose congestion charges for bicycles on certain routes? And how do you prevent investments in infrastructure from undermining policy to reduce CO_2 emissions? The answers to these questions should become part of the process towards legal reform (see recommendation 4).

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APPENDICES

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