



EUROPEAN CONFERENCE OF MINISTERS OF TRANSPORT

IMPLEMENTING
SUSTAINABLE
URBAN TRAVEL
POLICIES

Final Report

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Final Report



EUROPEAN CONFERENCE OF MINISTERS OF TRANSPORT (ECMT)

The European Conference of Ministers of Transport (ECMT) is an inter-governmental organisation established by a Protocol signed in Brussels on 17 October 1953. It is a forum in which Ministers responsible for transport, and more specifically the inland transport sector, can co-operate on policy. Within this forum, Ministers can openly discuss current problems and agree upon joint approaches aimed at improving the utilisation and at ensuring the rational development of European transport systems of international importance.

At present, the ECMT's role primarily consists of:

- helping to create an integrated transport system throughout the enlarged Europe that is economically and technically efficient, meets the highest possible safety and environmental standards and takes full account of the social dimension;
- helping also to build a bridge between the European Union and the rest of the continent at a political level.

The Council of the Conference comprises the Ministers of Transport of 41 full Member countries: Albania, Austria, Azerbaijan, Belarus, Belgium, Bosnia-Herzegovina, Bulgaria, Croatia, the Czech Republic, Denmark, Estonia, Federal Republic of Yugoslavia, Finland, France, FYR Macedonia, Georgia, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Moldova, Netherlands, Norway, Poland, Portugal, Romania, the Russian Federation, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine and the United Kingdom. There are six Associate member countries (Australia, Canada, Japan, New Zealand, Republic of Korea and the United States) and two Observer countries (Armenia and Morocco).

A Committee of Deputies, composed of senior civil servants representing Ministers, prepares proposals for consideration by the Council of Ministers. The Committee is assisted by working groups, each of which has a specific mandate.

The issues currently being studied – on which policy decisions by Ministers will be required – include the development and implementation of a pan-European transport policy; the integration of Central and Eastern European Countries into the European transport market; specific issues relating to transport by rail, road and waterway; combined transport; transport and the environment; the social costs of transport; trends in international transport and infrastructure needs; transport for people with mobility handicaps; road safety; traffic management; road traffic information and new communications technologies.

Statistical analyses of trends in traffic and investment are published regularly by the ECMT and provide a clear indication of the situation, on a trimestrial or annual basis, in the transport sector in different European countries.

As part of its research activities, the ECMT holds regular Symposia, Seminars and Round Tables on transport economics issues. Their conclusions serve as a basis for formulating proposals for policy decisions to be submitted to Ministers.

The ECMT's Documentation Service has extensive information available concerning the transport sector. This information is accessible on the ECMT Internet site.

For administrative purposes the ECMT's Secretariat is attached to the Organisation for Economic Co-operation and Development (OECD).

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Further information about the ECMT is available on Internet at the following address:

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Foreword

From 1998 to 2001, the ECMT in co-ordination with the OECD conducted a three-year study designed to identify why sustainable urban travel policy strategies have proven so difficult for countries to implement, and, more generally, how countries and cities can bridge the gap between policy recommendations and their implementation.

This project on Implementing Sustainable Urban Travel Policies was comprised of three principal parts: a series of workshops on particular themes related to sustainable urban travel; a survey of urban travel patterns and trends in over 160 cities, and a series of national urban travel policy reviews.

The starting point for this three-year project was the ECMT-OECD report *Urban Travel and Sustainable Development (UTSD)*,* presented to Ministers at their 1994 Council in Annecy and published in 1995, which set out a three-part integrated policy strategy promoting combined implementation of measures designed to bring about sustainable urban travel based on best practice, innovation, and pricing.

Ministers in Annecy asked ECMT to review country policies in several years' time in light of the findings of the report. Whilst the recommendations set out in UTSD have been well received, their implementation has proven easier said than done for a great number of cities and countries.

The project on implementation has shown that countries are making progress in developing policy schemes to confront congestion, urban sprawl and in tackling the environmental problems associated with unsustainable urban travel patterns. However the trends revealed in the survey and in the policy reviews show that serious difficulties persist in putting these policy plans to work and in seeing the impact of policy actions reflected in the data.

Drawing on the findings of the three principal elements of the project – the workshops, the survey of cities, and the national policy reviews – this report aims to examine how Governments, national governments in particular, can improve opportunities for implementation of integrated policy strategies for sustainable urban travel.

* ECMT-OECD (1995).

Acknowledgements

ECMT would like to sincerely thank the many organisations and individuals who contributed to this three-year body of work and helped to complete this final project report on Implementing Sustainable Urban Travel Policies.

First, ECMT is extremely grateful for the expertise, dedication and support of the members of the ECMT-OECD Steering Group on Sustainable Urban Travel, which was chaired by Mr. Wojciech Suchorzewski.

For providing fora for stimulating exchange of ideas, ECMT wishes to thank the organisers of the five thematic workshops held in Linz, Athens, Dublin, Paris and Madrid, and the many expert contributors to these discussions. ECMT also extends its sincere gratitude to the 13 countries that underwent either in-depth peer reviews or prepared “self” reviews of their sustainable urban travel policy, reviews which provided invaluable insight into the complexities of defining and implementing integrated urban travel policies. And for analysing the 168 responses to the Survey of Cities, ECMT is sincerely grateful to the transport institute CERTU of Lyon, France.

Jack Short and Mary Crass of ECMT oversaw the project and drafting of the report.

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Chapter 1

Introduction

With about three-quarters of the population of ECMT and OECD countries now living in urban areas, most transport-related environmental and health problems occur in cities and their surroundings. The structure and growth of urban regions are therefore crucial considerations in strategies for sustainable development. Although definitions of and criteria for sustainability differ among countries and cities, most have common objectives for quality of life in urban areas that include, clean air, quiet neighbourhoods, and economic prosperity without detrimental health and environmental impacts and depletion of finite natural resources.¹

How people and goods² move from one place to another in cities is a major factor in whether objectives for urban sustainability are met. Indeed, assuring that the growing numbers of urban and suburban dwellers in all socio-economic strata have access to the services and activities integral to their daily lives, while minimising the negative environmental, equity, economic and health impacts of travel, is the principal goal and challenge facing transport and land-use policy-makers at this time.

There is widespread agreement that in order to bring about sustainable travel in urban areas, integrated policy packages – comprised of a cross-sectoral mix of regulatory, pricing, and technological measures among others – are needed that send the right signals to both the supply and demand elements in urban land use and transport markets. Successful implementation of these policy packages aims to integrate land use and transport planning, manage private vehicle travel, optimise public transport use and promote walking and cycling in urban areas. These policy objectives were articulated in the ECMT-OECD report “Urban Travel and Sustainable Development” (UTSD),³ presented to Ministers at their 1994 Council in Annecy.

Implementing multi-sectoral, integrated policy packages has proven easier said than done, however, for a great number of cities in ECMT and OECD countries. Defining and effectively implementing sustainable policy strategies for urban travel involves reconciling the diverse and divergent interests of a great many actors in the urban transport system. These include national, regional and local levels of government, politicians, public sector transport and land use plan-

ning agencies, environmental authorities and pressure groups, private sector transport operators and other service providers, as well as real estate developers and the individual traveller, among others. Co-ordination and co-operation among these stakeholders is complex and often resource-intensive.

Best practice experience from ECMT and OECD countries shows that while many countries and cities are developing policy schemes to render urban travel more sustainable, translating these plans from words to action is often a much more difficult task.

The ECMT-OECD project on Implementing Strategies for Sustainable Urban Travel,⁴ which began in 1998 and is currently drawing to a close, has demonstrated that all levels of Government – National, Regional and Local – have important roles to play in assuring that effective policy options are identified and implemented. While most ECMT and OECD countries allocate the majority of responsibility for urban land-use and travel policies to regions and municipalities, there is growing recognition that National Government's role can be a determining factor in bringing about sustainability in urban areas. This role includes establishing a broad, sectorally integrated policy framework for regions and cities to build on and sending the right messages via targeted policy incentives and project financing for sustainable development to regions and cities.

Responding to a mandate of Ministers of Transport in Annecy to review country policies in light of the recommendations set forth in UTSD, the project has sought to better understand why integrated urban travel strategies such as those proposed in UTSD are proving so difficult for countries to implement, and, more generally, how countries and cities can bridge the gap between widely applauded policy recommendations and their implementation.

Drawing on the findings of the three principal elements of the project – a series of thematic workshops, a survey of over 160 cities and national policy reviews – this report aims to examine how Governments – National Governments in particular – can improve opportunities for implementation of integrated policy strategies for sustainable urban travel. The report is structured as follows: Chapter 2 sets the context for urban travel policy-making at present, describing the main trends in land-use and travel in urban areas, particularly as revealed in the project's Survey of Cities.⁵ Chapter 3 examines the policy approaches that some countries are taking to confront urban travel problems, relying particularly on the project's country reviews.⁶ Chapter 4 then identifies and explores the main difficulties countries are having in implementing integrated urban travel policies. Chapter 5 considers how Government – National Government in particular – can improve policy making so that the gaps between policy definition and policy implementation can be bridged.

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Box 1. **Urban Travel and Sustainable Development: The 1995 ECMT/OECD Strategy**

This strategy proposes a flexible, integrated approach based on three reinforcing strands of good practice, innovations and pricing to encourage sustainable urban development by reducing vehicle-kilometres travelled and fuel consumption. All three strands work towards these same goals, but the more progressive policy elements – those of Strands 2 and 3 – are intended to bring cities closer to achieving a reduction in congestion and energy consumption, improved access, higher environmental standards, as well as a reduction in costs. The strategy includes policies aimed at different levels of government. It also tries to account for the different needs of cities of different sizes. The idea is that the three parts of this policy strategy should be applied together, to ensure that a comprehensive, long-term approach to urban sustainability is undertaken. The report focuses on the impact of key policy tools, notably the:

- role of economic incentives and disincentives;
- role of land-use planning;
- potential of traffic management schemes;
- use of marketing, telematics and other innovations to improve public transport.

The main aspects of the ECMT/OECD policy approach are as follows.

- Strand 1, *Best Practice*, involves raising the effectiveness of current land-use planning and traffic management measures – such as parking control and provision and encouragement of other means of transport – to the level of those in the best-managed cities. This entails wider use of measures that have already been tried and tested in cities, along with the adoption of standards and targets pertaining to road safety, environmental quality and social welfare.

According to the report, cities that adopt only best practice measures will see rates of growth in congestion and car travel drop, but congestion would be only minimally impacted outside of city centres and car use would continue to grow.

- Strand 2, *Policy Innovations*, entails developing new policies to shape urban development into less car-dependent forms and applying congestion pricing to traffic management, the objective being to bring demand for car travel into balance with road capacity. The land use planning measures include those dealing with which types of settlements should expand and where new developments should locate. Integration of land use and public transport routes, roads, cycling paths and walkways is a principal aspect of these policies, as are tighter and more extensive speed limit controls on through roads and traffic calming in residential and school zones. The traffic management initiatives include congestion pricing, parking reductions in city centre areas, priority for buses, park and ride services and further investment in transit infrastructure. According to projections, as a result of

**Box 1. Urban Travel and Sustainable Development:
The 1995 ECMT/OECD Strategy (cont.)**

this second group of measures, congestion and pollution would drop substantially, with the exception of noise, and safety levels would be improved. Dependence on cars would be reduced as would growth of traffic in urban areas; however, overall traffic and CO₂ emissions would continue to grow.

- Strand 3, *Sustainable Development*, is comprised of repeated annual increases in motor fuel taxation to promote more economical vehicles, a shift in travel away from solo driving and greater use of environmentally friendly transport modes. This final aspect of the ECMT/OECD policy package holds what the report considers to be the key to reducing vehicle-km travelled and quantity of fuel consumed: a progressively increasing fuel tax. The report concludes that a 7% annual increase in real terms in the price of fuel over a 20-year time period would reduce vehicle km-travelled to around two-thirds of the level forecast for this period and the amount of fuel used to approximately half of its projected level. According to the strategy, this strand is the only one of the three to bring CO₂ levels down to climate change targets established at Rio de Janeiro in 1992. If the price increase were applied along with the measures outlined in Strands 1 and 2, the report says that based on preliminary analysis and allowing for some uncertainty, vehicle-km travelled would fall to approximately 85% and fuel consumption to about 60% of 1991 levels by 2015. Savings would come from an approximate 25% reduction in car trip lengths, slower growth in car ownership, modal shifting from car to public transport, increased cycling and walking, limited improvements in fuel consumption from driver behaviour improvements and enhanced vehicle fuel efficiency due to advances in engine design.

The fuel tax would also increase the effectiveness of land-use planning policies, increasing the costs of travel and thereby serving as an incentive for bringing jobs, homes and shopping closer together. Public transport systems, cycling paths and walkways would also see an increase in use because of the fuel tax.

The report concludes that all three strands of the policy package are necessary to reduce car travel – especially in cities – to achieve sustainable urban development. Together, the strategy suggests, they could substantially reduce the environmental costs of travel in OECD and ECMT countries.

Chapter 2

Trends in Urban Travel and Land Use and their Impacts

This section summarises the principal trends in urban travel and land use as reported in the responses to the ECMT-OECD Survey of Cities, undertaken in 1999 and 2000. A hundred and sixty seven cities in 32 ECMT and OECD countries responded to the Survey, a response rate of over 50% of the 328 cities originally targeted in the survey.

The objective of the survey was to obtain a large body of information from cities and urban areas about trends in urban travel and land use activity, as well as descriptions of the policy actions underway or planned.

Whereas the response rate and number of large cities responding to the questionnaire were positive features of the statistical base,⁷ there were nonetheless several weak aspects of the data received that must be kept in mind when considering the results. First, while some of the responses were meticulously completed and presented highly reliable information, many were only very partially completed, most likely reflecting lack of available data. Moreover, a certain number of responses contained errors in the data provided, perhaps due to a cursory reading of the information requested in the questionnaire; this was rectified to the extent possible by follow-up with the countries and cities for verification of information. In terms of the geographic distribution of the statistical sample, there were relatively few answers from North America – 1 from Canada out of 12 targeted and 6 out of 22 from the United States – whereas there was a 100% response rate from several countries, notably Japan (25) and Turkey (10). As a result, there is a certain degree of geographic distortion in the sample.

These factors certainly impact the survey results and need to be taken into consideration when examining the information. In spite of its statistical limitations, however, the survey provided a large amount of very useful information on the transport and spatial development trends in urban areas, and the policies in place or envisaged to address urban travel and land use problems. The survey has also enabled identification of ways in which data collection and monitoring needs to be improved in the future.

Following is a synopsis of the principal messages on urban travel and land use emerging from the survey.

2.1. Urban development

2.1.1. Continuing suburbanisation of the urban population

A majority of the urban areas responding to the survey reported a continued “suburbanisation”⁸ of their urban population over the period 1990-2000 accompanied by a drop in number of city centre residents in a number of cases. This was notably the case in urban regions of the European Union, several accession countries such as Hungary (Budapest) and Romania (Bucharest), as well as the United States and Korea. A number of cities reported, however, a strengthening of the city centre relative to the rest of the urban area, particularly in Japan. A majority of capital cities reported significant population growth in the urban periphery.

The national policy reviews revealed some signs of reversal of the suburbanisation trend. Redevelopment of degrading inner cities appears to be luring some residents back from outer areas. And successful transport policies as well as measures to reduce noise nuisance in particular seem to be attracting some population back to the urban core; this was the case, for example, in France and Switzerland.

2.1.2. Urban density: overall decline

Urban density appeared to be thinning in large urban areas, and declining in medium-sized urban areas and small towns and cities.

2.1.3. Percentage of jobs in the Central Business District (CBD): generally stable

The survey revealed little real evolution in the percentage of jobs in the CBD relative to the whole built-up area. Several urban areas in the EU saw the percentage of jobs in the CBD increase slightly (Schwerin, Cardiff), while CBD employment dropped significantly in Lisbon and Trondheim, for example. A majority of cities in accession and other CEE countries signalled a drop in CBD jobs (Moscow, Ostrava), with the exception of Warsaw, which showed an increase. And the percentage of jobs in the CBD in other OECD cities responding declined overall, except for Toronto, which showed a 3% increase.

2.2. Car ownership: on the rise in virtually all countries

With the exception of cities in Finland and Sweden, per person car ownership in the EU has increased since 1990 in virtually all countries responding to the survey. Paris, Marseille, Rotterdam, Dublin, Thessaloniki, and Oslo showed

¹⁴

particularly sharp increases in per person car ownership. The average car ownership rate among EU cities responding for the “most recent year” was 0.40 cars/person, ranging from 0.60 cars/person in Geneva, Odense, and Weimar to a maximum of 0.30 cars/person in Athens, Seville, Dublin, and Amsterdam, for example.

Growth in car ownership levels in the EU appears to be slowing, however, thereby widening the gap with levels in cities in the United States.

Accession countries reported an average increase of more than 30% in per person car ownership, with double-digit percentage increases in virtually all cities – 50% increases in Bratislava and Pärnu, for example. The average car ownership rate was 0.29 cars per person, with two cities over 0.50 (Prague, Ljubjana). Other CEE countries showed the same increases – an average of 30%, with rates equal to or in excess of 50% in Moscow and four other Russian cities. Car ownership rates were significantly lower in these countries, however, with an average car per person ratio of 0.17.

Korea’s car ownership rate has skyrocketed from 0.09 to 0.21 cars/person. Denver has the highest car ownership per person rate – 1.07 – of all cities represented in the survey.

Of particular note is the average rate of car ownership in capital cities, 0.35 cars per person compared to overall average of 0.38.⁹

The National Policy Reviews showed that car ownership tends to be lowest in city centres where public transport is available and parking space is at a premium; it is highest in suburban areas poorly served by public transport. The costs of car ownership have continued to decline relative to incomes in the countries surveyed. Though the costs of car use have risen in some countries with increases in fuel taxation in the late 1990s – the United Kingdom is the most striking example – costs in real terms are below historic highs. In the United States, costs have continued to fall from levels already well below Europe. At the same time the average quality of passenger cars has improved in terms of comfort, durability and accessories, creating additional value for buyers and attraction for use over public transport.

Motorization is growing much faster than GDP in most CEE countries: as a result, car ownership rates per unit of GDP per capita are three- to four-times higher than in more developed countries.

2.3. Overall mobility (all modes) stable

2.3.1. Private car and motorised two-wheel

While overall number of trips per person per day (pppd) among all modes remained stable from 1990 to the “most recent year” reported, (3.52 to 3.55 trips pppd), Private car travel in urban areas soared in the 1990s in the European Union,

EU accession and other CEE countries, as well as in other OECD countries. Average car mobility in the EU in number of trips pppd went up 10% from 1.51 in 1990 to 1.66 in the “most recent year”. Per person car trips literally exploded in accession countries and in other CEE countries, with average car mobility jumping 70% from 0.66 in 1990 to 1.13 trips pppd in the “most recent year”. Car trips pppd tripled in Poznan, from 0.40 to 1.20 from over this period, and went from 0.71 to 1.92 trips pppd in Tallinn – a 170% increase.

The number of car trips continued to rise overall in the other OECD countries, as well, with urban areas in Canada, Japan, Korea and the United States all registering increases in car mobility.

The national policy reviews showed that growth in car use has been concentrated primarily in suburban areas, involving trips between suburbs and between cities in heavily populated regions.

2.3.2. Public transport

The Survey of Cities revealed an overall decrease in public transport trips during the 1990s, despite no registered changes among EU cities responding to the survey (0.48 trips pppd). The national self policy reviews confirmed these trends. In the second largest city in Europe, Paris, the trend is toward stability. In Switzerland rail ridership has grown strongly with improved services during the 1990s, but local bus trips vary among cities. Norway saw a decline in ridership in its main cities in the first half of the 1990s partly reversed in the second half in response to investment in public transport systems. Oslo accounted for much of the growth in ridership, which reached 20% of total passenger traffic in the capital city.

While a number of Russian cities reported increases in public transport trips, all urban areas in EU accession countries registered a drop in public transport trips – several quite significant decreases (1.24 to 0.89 in Krakow, 1.44 to 0.98 in Tallinn, and 4.10 to 3.20 in Craiova). In their national self policy review, the Czech Republic reported an “enormous shift” from public transport to cars in the last decade, down from 75% of total urban passenger traffic (90% of peak traffic) at the beginning of the 1990s to 60% at the end of the decade. The decline flattened out in the second half of the 1990s with currently a “stagnation” in ridership. The Czech review expresses fears that there is little scope to attract passengers back to public transport be it through pricing or improving the quality of service. Despite these often very significant declines, ridership levels in accession countries remain on average far above western European levels.

In the United States, mass transit accounts for only 4% of trips but grew 5% during the 1990s. Buses, the most widespread system, saw ridership decline slightly whereas light rail/tram systems increased from 15% to 20%, and rail rapid transit ridership increased 10% while commuter rail ridership increased 17%.

2.3.3. Non-motorised means

The National Self Policy Reviews revealed considerable variance in the share of pedestrian and bicycle trips among European cities, while the share of non-motorised means remains extremely low in the United States (6.5% of local trips, 0.5% of passenger-km). Norway and Switzerland, among others, reported a downward trend in the overall share of non-motorised movements in their self reviews.

Cycling

While the overall average number of cycling trips pppd appeared relatively stable among cities responding to the Survey (0.42 in 1990, 0.43 in the “most recent year” reported), substantial variations among EU cities were confirmed, where roughly half of the cities responding (10) reported increases in the number of trips by bicycle, the other half, no change or drops in cycling trips. The Netherlands has the highest number of cycling trips in Europe for distances of up to seven kilometres, and the number is slightly increasing (25% of all trips nation-wide, 7% of passenger-km.) Data on cycling was reported for only three cities in EU accession countries, revealing little change in trips pppd. Only four other OECD cities reported data, with increases registered in Korean cities, notably Seoul, and decreases in Toronto. Four out of five capital cities reported increases in cycling trips.

Walking

Walking is stable on the whole, but declining steeply in some cities. The average number of trips on foot dropped 10% from 0.84 trips pppd in 1990 to 0.77 trips pppd in the “most recent year” reported. In the European Union, walking dropped overall during this period from 0.86 trips pppd in 1990 to 0.82, despite a few exceptions, notably Paris (1.18 to 1.25 trips pppd) and Nantes (0.75 to 0.88 trips pppd). The same general downward slope in walking was seen in accession countries and other CEE countries responding to the survey, with the exception of Bratislava, which had an increase of 0.06 trips pppd, and Budapest, where walking accounts for 25% of all trips made.

An overall downward trend in walking was signalled from other cities in OECD countries responding to the survey.

2.3.4. Length of trips by car on the rise

Despite a relatively poor response rate and questionable quality of data with regard to length of trips, it nevertheless appears clear that length of car and motorised two-wheel trips has increased since 1990 in the large majority of urban areas responding. Twenty-four urban areas together registered an average increase in daily car and motorised two-wheeler trips of 3.7 km, representing an

approximate 20% increase in trip length. This increase appears to correlate with the observed “suburbanisation” noted earlier.

2.4. Public transport supply and demand

In large and very large urban areas, public transport supply and demand (all modes included) appears to have improved overall in the 1990s, while small- and medium-sized cities show less positive results, with passenger numbers possibly reflecting insufficient investment.

Out of 46 EU urban areas responding to the survey, 23 reported improvements in overall public transport supply from 1990 to the “most recent year” (measured in vehicle-km/year), including Berlin, Dublin, Lausanne, London, Paris, and Vienna; 18 showed stability in supply; and 5 (including Genoa, Schwerin, Lahti) reported declines. Efforts to improve supply in the EU are not always reflected in demand, however: 13 of the 23 cities registering improvements in public transport supply reported subsequent increases in public transport use, while demand in six of these urban areas (including Paris and Berlin) failed to follow suit.

Demand for public transport appears to be decreasing more rapidly than supply in most of the EU accession countries responding to the survey, most likely due to increases in car ownership. Patronage was stable despite network deterioration in other Eastern European countries. And public transport supply improved in several of the other OECD countries: 12 large urban areas including two US cities, Indianapolis and Tampa – reported increases in supply, while nine cities noted rising demand.

Some urban areas reported increases in demand for public transport despite lower supply. This was the case of Athens and Oslo in the EU, Posnan among accession cities, and two Russian cities including Moscow.

2.5. Congestion

Congestion is notoriously difficult to measure, and the yardsticks used vary greatly, even within a single country. Somewhat contradictory trends emerged from the Self Reviews: commuting and leisure trips by car have lengthened; the number of short trips by car substituting for walking have increased; average speeds have risen, whilst congestion is encountered more frequently. In some urban regions, congestion is reported to occur for increasingly long periods, as well as more frequently, for example in the Randstad. In other urban areas such as Paris, congestion appeared to decline slightly in the 1990s.

In many cities the worst congestion has moved from city centres to suburban radial access corridors and particularly to concentric suburb-to-suburb routes.

Cities in EU accession countries also reveal mixed trends in congestion. In wealthier cities, rapid growth in car ownership and use has resulted in severe congestion, most notably in Prague, Warsaw and central Moscow. Car traffic and parking management measures already widely developed in cities with a longer experience of high motorization would probably have a positive effect. While it is difficult to predict what the residual level of congestion might be, on the basis of city questionnaires it can be said that in EU accession other CEE countries, congestion is perceived as even more severe than in highly motorised OECD cities.

In its Self Review, Finland reports success in avoiding congestion in Helsinki through provision of public transport, which accounts for 70% of peak-hour passenger traffic. Switzerland notes success in managing traffic in Zurich via a policy of "homeopathic restraint" on access to the city centre through traffic light management, parking capacity restrictions and use of traffic calming measures. It has also extended bus and tram networks, provided separate lanes for them, and given buses and trams priority at junctions. The quality of public transport services has greatly benefited from these measures. Many of Switzerland's other cities show similar signs of congestion relief, despite expansion of suburban areas similar to patterns in many other mid-sized European towns, where congestion is often much worse.

2.6. Environmental and safety indicators¹⁰

2.6.1. Air pollution and noise nuisance

Ozone appears to be the most serious air pollution problem in urban areas reporting in the survey, with considerable improvements in emissions of sulphur dioxide, nitrogen dioxide, particulates and hydrocarbons, although the latter two appear to still pose particular problems in non-accession CEE countries.

Air quality is reported in the Self Reviews to have significantly improved in Finland, Norway, Switzerland and the United States. Several of the other reviews highlighted improvements in air quality, noise nuisance and accidents in response to policies aimed at improving sustainability.

The United States, among others, noted that gains from improved vehicle technologies and fuels and retirement of highly polluting vehicles have been partially offset by increased vehicle use and changes in consumer preference towards sport utility vehicles and mini vans with lower fuel economy. Despite overall improvement in air quality, Switzerland signalled continued widespread exceedance of ambient limits for particulates in urban areas and of NO_x close to major road arteries. This pattern may well be true for other cities too. Russia reported continuing poor performance with regard to both air pollution and noise.

Greenhouse gas emissions were mentioned only in the United States review, where it was noted that institutional responsibilities for this problem have yet to be defined. This overall lack of focus on CO₂ emissions at the urban level may reflect a perception that climate change is a national, rather than local issue. The fact that measures taken to address urban problems – including many air pollution, congestion and traffic management measures, along with those that influence driving style and vehicle maintenance – also have an important impact on CO₂ emissions¹¹ does not yet appear to have been assimilated. There is clearly a role for national climate change programmes to help shape urban transport policies – or perhaps conversely – for national programmes to take fuller account of the actions taken at the local level in urban areas.

Norway reports some improvement with regard to noise. Noise nuisance in Switzerland has tended to shift from local roads to highways, where it should generally be possible to use noise walls to reduce nuisance in the future. Even if the problem is less widespread on more minor roads, dealing with nuisance on smaller arteries is more difficult, largely due to the expense of noise walls relative to traffic flow. Several countries recorded recent progress but noted concerns for the future (*e.g.* the Netherlands). Noise reduction is a priority area for future attention in most of the countries reviewed.

2.6.2. Road safety

Two major trends in road safety were revealed notably in the national policy reviews:

- In EU countries, trends in traffic accidents were decoupled from trends in car traffic. The Netherlands, Italy and Switzerland reported real improvements in road accidents, whilst Italy noted pedestrians, bicycles and powered two-wheels as the main risk groups.
- In some EU accession countries, the number of traffic accidents is rising in proportion to increases in car traffic (Czech Republic), and accident rates (*e.g.* number of fatalities per 100 million v-km) are much higher overall than in western countries. This is primarily due to insufficient safety awareness and driver education, but poor condition of cars and roads are also factors. In the Czech Republic, Hungary and Poland the situation is in flux with perspectives for the coming years not yet clear.

Norway and Finland report fluctuating trends in the number of accidents and fatalities. In Norway, whereas the number of accidents and of injured persons decreased from 1995 to 2000 by 4%, the number of people killed in traffic accidents increased by 11%.

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2.6.3. Perceptions of environmental and traffic problems

In this more subjective part of the survey questionnaire, congestion was seen as getting worse – particularly in large cities – and was the problem of most concern. By contrast, there appeared to be little preoccupation with trends in noise disturbance and to an even less extent with air pollution. Size of the city seems to be an important factor in perceptions of these problems: pollution and congestion are seen as more serious in larger cities and much less of a problem in medium and small urban areas.

Chapter 3

National Policy Responses to Urban Travel Problems

Faced with the persistent pressures from urban travel and land-use patterns described above, many ECMT and OECD countries are working to develop policy solutions designed to encourage more sustainable travel patterns in urban areas. Despite many difficulties faced in implementing policies, there are nonetheless positive steps forward since the 1995 UTSD report.

3.1. Implementing the ECMT-OECD strategy

While few countries/urban areas appear to have actually set out to implement the 1995 ECMT-OECD Strategy in its entirety,¹² the survey of cities and the national policy reviews carried out during the project suggest that most countries have developed, or are in the process of defining policy approaches based on elements of the strategy, particularly best practice (Strand 1). Countries and cities more-experienced with sustainable urban travel policies appear to be experimenting with innovative approaches (Strand 2), including integration of land-use and transport policy, tight parking restrictions and park and ride, and use of telematics in public transport. A small number of countries are working to find ways to integrate congestion pricing and other types of pricing measures into their policy packages. Though many ECMT-OECD countries have high levels of fuel taxation, particularly in Europe, few have adopted annual real increases in fuel prices such as described in the Strategy. The United Kingdom's fuel duty escalator in place from 1993 to 1999 comes perhaps closest to the fuel pricing approach set out in Strand 3.

While the strategy states that implementation of all three parts of the package is necessary to bring about long-term reductions in car travel and sustainable development in urban areas, much can be achieved early on through implementation of a package of best practice policies that sends the right signals to transport system clients and stakeholders.

3.2. Sustainable urban travel policies: what countries are doing¹³

3.2.1. Decentralisation and national-local government relations

Emerging from a number of the national policy reviews as an area of policy success is the decentralisation of power and responsibility for urban transport and environment management, by matching responsibilities with the scale of the problems to be addressed. Several EU accession and other CEE countries, however, reported continued problems in the decentralisation process, citing failure to transfer resources or revenue raising powers concomitant with the newly devolved responsibilities for urban transport to local authorities; as a result, they are extremely short of resources for, among others, public transport.¹⁴

Planning relationships have traditionally defined national and local government interfaces in many countries. The Netherlands reports a developing approach to institutional interactions involving *negotiation* rather than *planning guidance*, with national, regional and local governments drawing up common strategies for sustainable transport in tandem.

The importance of specific national policies in guiding local transport policy was emphasised by several countries – particularly the national framework for taxes and charges relating to transport, and clean air laws that place specific responsibility on local authorities, cited by the United States and Switzerland. In the planning arena, the recent development of requirements imposed by National Government on regional and local authorities to jointly produce urban mobility plans – for example in France, Italy and Belgium – are proving to be a powerful tool for bringing sustainability to the forefront of urban transport decision making.

3.2.2. Integration of transport and land use planning

Urban mobility plans should contribute to improving the integration of transport and land use planning, a key factor in achieving sustainable urban travel patterns. Norway and the Netherlands report the strongest traditions here, although efforts to attract business to locate in certain areas have led municipalities to compete by offering derogations to planning requirements. Proliferation of large out-of-town shopping malls – major generators of traffic – in the 1990s was symptomatic of a failure to adequately integrate land use and transport planning and has resulted in some countries imposing blanket bans on developments of this kind until more effective policy options are formulated.

More generally, urban sprawl is viewed by many as indicative of a failure to adequately consider the impact of planning decisions on transport networks. This poses a major challenge both for infrastructure project assessment procedures and for integrated government policy making. There are powerful forces driving the expansion of urban areas, including: the value many individuals place on liv-

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ing in low density areas; the desire for local authorities to attract business to increase the local tax base, particularly in peripheral residential areas with modest tax resources; the willingness of business to pay for location along radial trunk roads that initially provide high capacity access; and social policies to promote home ownership that provide finance for low-cost housing, often in peripheral greenfield zones. Redeveloping central city areas and inner suburbs to make them more attractive to (higher income) residents has proved a successful counter-policy in some European cities, reversing the trend for depopulation of city centres. Redeveloping brownfield sites for business, though expensive particularly where land is contaminated from past industrial activity, has also resulted in some notable successes, for example the London Docklands.

3.2.3. Consultation

Improving procedures for public consultation is a policy priority in many of the countries surveyed. Switzerland has a particularly successful tradition of sophisticated public consultation, reflected in the amount of qualified persons employed in running carefully structured discussions with the public. Consultation is also seen as far more binding on decision-makers than in other countries. In France, some of the urban mobility plans prepared have innovated in this area although cost is a limiting factor – consultation on the urban mobility plan for the Paris region cost euro 1.8 million. Public consultation and transparency in decision-making are important national themes in the United States, where both the Transportation Equity Act for the 21st Century (TEA-21) and the Clean Air Act encourage active public involvement throughout all stages of urban transport planning.

It is increasingly recognised that a policy of sustainable transport requires more than government action, and the need for behavioural change makes involvement of the actors themselves essential. In the United States, several States have seen the emergence of creative public-private partnerships to co-ordinate land use development and transportation. Many communities are creating transport management associations whereby employers organise reductions in employee commuter travel by car by providing public transport passes, ride-sharing programmes, flex-time and telecommuting options. Switzerland has also pioneered negotiation with commercial business, employers and private housing corporations to plan for more efficient use of transport infrastructure and reduced environmental impacts. Some renowned large firms are actively re-examining environmental aspects in their transport policies, both for freight and commuter traffic. In Poland some local governments, including in the capital Warsaw, have decided to use a “Canadian style” multi-stakeholder process to cope with complex transport problems.

3.2.4. *Quality public transport*

High-quality public transport systems characterise many Swiss, Dutch and French cities. Urban areas in Italy, Germany and Finland, among others, also score well in this area. Frequency of service, high-quality vehicles, and integrated ticketing systems for all public transport modes play an important role in most of these cities. In Switzerland, convenient, no-wait connections between train and bus services are being introduced throughout the country. In Japan a similar approach has been applied with success for decades. In the Survey of Cities a majority of cities – particularly in EU accession and other CEE countries – report giving priority to measures to improve public transport during the 1990s. The responses also suggest that assuring improved public transport services will remain a top priority in the coming decade.

National policies providing fare subsidies for urban rail and bus services can be critical. Cities that have been granted powers to raise their own revenues through specific local transport levies have generally been able to keep fares low whilst improving services and attracting ridership, at least on rail, metro and tram services (results have often been slower to emerge on buses). For reference, public transport in the Paris region is funded one third from the fare box, one third from an earmarked local business tax and one third from general taxation. There are plans for UK cities to be given funding powers through transport charges earmarked for expenditure on transport. Other city authorities rarely have the resources to subsidise fares, and National Government intervention could have a major impact in breaking downward spirals of falling ridership, increasing deficits, rising fares and declining services. Recent experience suggests re-directing financial support to a more local level is productive. The experience of France, Germany and Switzerland in regionalising rail expenditures is significant. Replacing National Government transfers to national railways with transfers to Regional Government to purchase services from the regional divisions of the rail companies has generally resulted in improved services and additional investments in regional rail services.

Switzerland has developed various innovative forms of mobility management that aim to increase the share of public transport by developing co-operative linkages between enterprises, transport operators and local governments. Hotels located in ski stations for example, or the organisers of major sports and music events, provide free public transport passes to clients and compensate rail and bus companies under joint marketing agreements.

The other side of the financial coin is the control of costs. The British (outside London) and Swedish experience with introducing competitive tendering and privatisation in bus services has proved very successful, and other countries – notably the Netherlands and Italy – are following a similar path, albeit more gradually.

3.2.5. *Traffic management*

Managing on-road parking capacity has been the bedrock of traffic management in numerous cities in western Europe for many years. The most effective examples of tight parking policy are found in the centres of some major urban areas in Europe such as London, Vienna, and the Randstadt, as well as in Swiss cities, where stringent parking policies have been applied in much smaller urban areas. Essential to the success of these policies in reducing traffic is ensuring a coherent fee structure and availability of parking throughout the controlled area. Also important is creating successful incentives/responsibilities for effective enforcement. In Tokyo cars can not be purchased until proof of a rented or owned off-road parking space is provided. Some Swiss local governments are now even negotiating with the owners of buildings in some locations to reduce capacity and introduce charges for off-street parking.

Intelligent management of traffic lights is another important tool. Many cities are introducing systems that give buses and trams priority at intersections with lights that recognise them. Traffic lights can also be programmed and street layouts designed to discourage access to sensitive areas and direct flows in optimal patterns for managing congestion and pollution. Intelligent signs warning drivers of congestion and proposing alternative routes can be a useful addition. And electronic signs at bus stops indicating time of arrival of the next bus can have a major impact in improving quality of service and attracting ridership. Many cities use elements of such "intelligent" traffic management, with Turin demonstrating an effective set of measures documented in detail by the ECMT.¹⁵ Initiatives of this kind were reported among a significant number of cities in the Survey of Cities, with additional cities noting a wish to develop such systems in the future. Only Russia and other Eastern European countries showed somewhat less activity in this area.

3.2.6. *Road and congestion pricing*

No European or American city has yet introduced road pricing to manage urban traffic. London is perhaps closest to adopting a scheme for a limited number of central districts, although the main congestion problems are in the inner and outer suburbs, radial access roads and circular trunk roads. The Dutch Government has been developing plans for urban/interurban road pricing for a number of years. There have been difficulties in gaining acceptance by local authorities, but progress has been made in achieving more widespread political acceptance by tying tolling or more generalised road pricing to financing local transport investments. Earmarking revenues to the funding of local transport investments also stimulated interest in road pricing in several provincial cities in the United Kingdom in 1999-2000, but subsequent allocation of National Government funds to such investments has somewhat reduced the incentive.

Norway uses cordon charging on urban roads to raise resources for heavy road investments. These tolls have recently been differentiated to manage peak traffic. More widespread congestion charging systems are under consideration and would replace existing cordon tolls. Italy has adopted a legal framework for introducing electronic control of access to town centres and several cities have begun to develop cordon-pricing systems. Implementation has been delayed while the outcome of legal challenges to their introduction is resolved. Technically, systems in Rome and Bologna are ready for operation. There is some experience with various forms of road pricing in the United States. Time-of-day tolls for bridges and tunnels are widespread and there is some construction of new highway lanes with limited access for “high” occupancy vehicles and drivers prepared to pay a charge for single occupancy access. These initiatives are primarily for financing, rather than congestion management purposes.

3.2.7. Climate change policies

Reducing greenhouse gas emissions was one of the principal concerns raised in the 1995 ECMT-OECD sustainable urban travel strategy, with the recommendation to raise fuel taxes in real terms year on year as part of the package to address the issue. However, few responses to the 2001 review addressed the issue. The United Kingdom did introduce a “fuel price escalator” in the 1990s, which increased the real price of petrol and diesel substantially in real terms, but ended in 2000 in the face of protests over high fuel prices. As the escalator ended, complementary incentives for more fuel-efficient cars were introduced by differentiating vehicle excise duty – first according to engine capacity, and subsequently according to CO₂ emissions recorded on the Type Approval test cycle.

The general lack of focus on CO₂ emissions at the urban level probably reflects a view that climate change is a national – or international – rather than local issue. The fact that measures taken to address urban issues, including many air pollution, congestion and traffic management measures and especially measures that influence driving style and vehicle maintenance, also have an important impact on CO₂ emissions¹⁶ does not yet appear to have been assimilated. There is clearly a role for national climate change programmes to make inroads in shaping urban transport policies – or perhaps conversely for national programmes to take fuller account of the actions taken at the local level in urban areas.

3.2.8. Policy targets

The Survey of Cities revealed trends in the objectives for sustainable development set by local authorities. The principal preoccupation in all regions was preventing pollution and environmental degradation. A large number of cities reported measures taken in this area during the 1990s. Next came promoting pub-

lic transport and reducing car traffic, which were cited throughout Europe as priority – just as often as preventing pollution – but figured low in the statistics for North America and Japan. Traffic management, better planning, management of sprawl, mobility management and development of road infrastructure followed in frequency as issues of priority throughout the cities surveyed, but a step behind the first three issues. Promoting cycling and walking figured quite weakly in the statistics, and managing parking hardly at all. One priority that stands out for Russia and other Eastern European Countries is the creation of urban green space and greenbelts.

Chapter 4

Challenges to Implementing Sustainable Travel Policies in Urban Areas

It is clear from the previous chapter that countries are making progress in developing policy schemes to confront congestion, urban sprawl and in tackling the environmental problems associated with unsustainable urban travel patterns. However the trends revealed in Chapter 2 show that serious difficulties persist in putting these policy plans to work and in seeing the impact of policy actions reflected in the data.

Based on the experience shared by many countries throughout this project during workshops, policy reviews and via the project's Steering Group¹⁷ this chapter highlights some of the main challenges to implementation of sustainable urban travel policies revealed and examined during the project.

4.1. General comments

Implementation problems are not the same, nor are they experienced in the same way in all countries. Particular economic and political structures, as well as region-specific social and cultural factors, can engender particular implementation problems. While many difficulties in implementing policy strategies are shared throughout ECMT and OECD countries and cities – opposition to pricing measures and wavering political will, for example, are common implementation barriers in many regions around the world – some implementation problems are experienced more acutely in certain countries and regions. Central and Eastern European countries, for example, are encountering a variety of institutional barriers involving incomplete or in some cases excessive decentralisation of institutional powers defined under years of Central Planning.¹⁸ These institutional weaknesses are part of the reason CEE countries are having such a difficult time tackling high growth in car use and congestion and improving their public transport systems. These problems are in no way exclusive to those regions; they are, however, characteristic of their experience at this time.

Similarly, the size and economic configuration of cities and urban areas have a lot to do with how policy strategies are designed and implemented. Finland, for

example, is a large country with a relatively small, dispersed population. There are few large urban areas and cities and towns are too small for comprehensive public transport systems. The Finnish “profile”, however, comes in contrast to that for instance, of the Netherlands: a small, densely populated country with a large urban “megalopolis” in its western half, and a highly developed urban and interurban public transport system. Dutch urban travel and land use strategies, therefore, will necessarily be configured, and implemented differently from those in Finland. This perhaps bears mention when examining how and why certain policies are/are not implemented in different urban areas and countries.

Part of the complexity involved in implementing strategies seems to stem from difficulty in *getting consensus on what the particular problems are*. There is considerable debate, for example, as to what an acceptable level of congestion is and therefore how hard to squeeze private car use in and around cities. Similarly, there is no clear agreement on the benefits and disadvantages of sprawl. While it is apparent from recent trends that traffic problems are most acute at this time outside of city centres (policy seems to be tackling congestion in city centres relatively effectively in ECMT and OECD countries), the extent to which growth on the urban fringe should or should not be permitted is a source of debate.

There is relative agreement, however, on what a sustainable urban travel strategy does involve: maximising public transport use, managing use of private vehicles in urban areas by means of integrated traffic and mobility management, minimising sprawl through integration of land use and transport planning. The environmental by-product of these initiatives is better air quality, a reduction in fuel and CO₂ emissions, and less noise nuisance.

With these objectives in mind, the first real barrier to implementation of sustainable urban travel policy packages may be getting some degree of consensus among policy-makers, the public, and other stakeholders in the transport system as to *what is unsustainable* about the system and *what to do about it*. Pro-active, consistent and well-managed involvement of all actors in the urban travel system – governmental and non-governmental, including partnerships with private and other public organisations – is proving to be an essential element in understanding what the problems are and in defining effective implementable policy solutions. There are exemplary best practice cases of consensus-building exercises on a national level. The Netherlands, for example, have for many years used a comprehensive, integrated planning and consultation procedure for developing framework strategies for transport, environment and land use that involves all levels and sectors of government.¹⁹

A well thought-out strategy *does not guarantee* that it will be implemented, however. Part of the reason for this may be that factors involved in implementation – be they institutional, financial, or political in nature – are often not adequately

considered when the strategies are defined. In this way, implementation problems are really a reflection of inadequate policy-making.

4.2. Implementation challenges frequently encountered

4.2.1. Lack of a national policy framework for sustainable urban travel

The need for a flexible, supportive national policy framework for land use and urban travel has clearly emerged from the findings of the project. A number of ECMT and OECD countries participating in the project submitted that National Government had little to do with urban travel issues – that these were the exclusive jurisdiction of municipal or regional institutions. Urban travel policies indeed are, by their nature, local. And as suggested earlier, they must be tailored to fit the “profile” and context of the particular urban area. Moreover, they are, as a result, generally best implemented at the local and regional levels. However, the long-term impact and effectiveness of policies and measures implemented on a local and regional level – for example initiatives for limiting development of large commercial retail centres on the urban periphery or development of greenbelt zones, improvements to local public transport, or pricing measures to manage car use such as congestion pricing – can be compromised, if on a national level, the policy framework for national spatial planning, national financing and investment and pricing schemes do not accommodate and support these local policy initiatives.

A national policy framework for urban land-use and travel policy-making can also establish *links* between national objectives for transport, environment and health and those in regional and municipal areas. In so doing, the ways in which urban policies for spatial and transport planning contribute to, for example, the attainment of national policy objectives dealing with greenhouse gases and climate change policy, acid rain, and land fragmentation, among others, become more clear.

4.2.2. Poor policy integration and co-ordination

Sustainability requires that policy-making for urban travel be viewed in a holistic sense: that planning for transport, land-use and the environment no longer be undertaken in isolation one from the other; that policies targeting particular transport system elements and modes be considered as an ensemble, their relative impacts determining the “right” policy combination for the sustainable policy package.

Without adequate policy co-ordination, the effectiveness of the whole package of measures and their objectives is compromised. A combined “push-pull” policy strategy is needed to dissuade or “push” individual travellers from excessive car use through parking management measures and fuel or congestion pricing, for example,

and attract or “pull” them to other travel means via measures for a safe and efficient public transport system, improving conditions for walking and cycling and limiting or abolishing car use in sections of the city centre.²⁰ The “pull” measures such as improvements to public transport alone generally do not bring about the congestion reduction sought, although some countries and cities continue to hope for the contrary. An accompanying restraint mechanism on private car use is usually necessary to bring about the shifts in modal share that are desired.

The kind of policy co-ordination just described is subject to a number of implementation barriers, more or less formidable depending on the country's *institutional framework and policy-making structure*. Policy integration and co-ordination requires a certain transparency in policy-making, allowing the objectives of the urban travel system to be evaluated as an ensemble. It necessitates an *objective view* of what the problems are and how they relate to each other; and an *understanding of the impacts* of different types of policy tools (*e.g.* pricing, regulatory, voluntary) and their potential for effectiveness when implemented together. It also requires *unwithering political commitment* to ensure that the less-popular – but nonetheless essential – parts of the policy package (often the pricing instruments) are implemented alongside the more politically palatable policy elements (*e.g.* public transport enhancement, improvements to walking and cycling, etc.). For implementation to happen, resources – financial and otherwise – must be identified and committed with the whole package of measures in mind. This is one of the reasons why some degree of *agreement on the objectives* at the outset seems essential.

4.2.3. Inefficient or counterproductive institutional roles and procedures

One of the biggest challenges to implementing sustainable urban travel strategies is that of overcoming institutional and organisational barriers.²¹ Co-ordination and co-operation among different branches and levels of government, as well as efficient consultation and communication between government and the public can determine if policies are/are not implemented. This co-operation is essential to ensure that packages of complementary policies designed to promote sustainability – rather than “isolated measures” – are implemented.

On a national level: inadequate or lack of ministerial co-ordination

Many countries still lack an institutional framework that allows the development and implementation of comprehensive, integrated plans addressing all related aspects of urban travel (spatial planning, public transport, traffic, parking, etc.) As a result, *unclear and/or inconsistent messages* from National Government due to lack of co-operation among different Ministerial branches (*e.g.* Environment, Transport, Land use, Finance) are often sent to local areas regarding policy priorities and procedures.

Part of the difficulty is that planning takes place at different levels of government depending on the sector, so co-ordination can be complex. For example, transport planning involving urban areas is undertaken at local, regional and national levels (depending on the type of project or investment), while urban land-use planning remains to a large extent a local issue, although there is growing recognition that strategic spatial planning must occur at a national level.

New organisational arrangements may be required to facilitate communication and co-ordination among transport, land-use and environment planners and practitioners. The United Kingdom has, for example, taken the step on a National Government level to integrate the government institutions responsible for environment, transport and spatial planning into a single organisation, the Department of Environment Transport and the Regions. Likewise, Switzerland has created the Department of the Environment, Transport, Energy and Communications including the Federal Office for Spatial Development, the Federal Office of Transport and others.

Incomplete decentralisation: too little or too much National Government involvement

In a number of countries, notably (but not exclusively) in Central and Eastern Europe, decision-making power for urban travel has been transferred from National Government to regional and local levels of Government, often without corresponding control over the sources of financing. As a result, some national governments have stepped away from responsibility for urban transport problems, often citing regulatory reform brought about by the transition process, while local and regional governments are actually unable to assume full responsibility for the problems because financial sources available are too limited.

The virtually complete withdrawal of National responsibility for urban transport has taken a severe toll on urban transport systems in a number of these countries. In both Poland and Hungary, for example, since the transition period began, the policy vacuum on a national level has seriously compromised efforts to maintain and enhance urban public transport systems and roads. With no legal/regulatory provisions for National support of local transport projects (except for a few large urban public transport projects, *e.g.* the Warsaw and Budapest metros); and insufficient local capacity to raise funds to compensate for the loss of National subsidies and investments, urban public transport systems have been fighting a losing battle to ever-increasing car use in urban areas.

While an institutional problem, decentralisation usually entails further reform to fiscal and regulatory structures as well. So it is not a simple situation to remedy. On the other hand, it is a fundamental barrier to implementation of the major improvements needed in urban travel in these countries. Initiatives are underway in both of the countries cited earlier to re-define a constructive role for National Government in urban transport.

On the other hand, incomplete decentralisation can also take the form of an *excessive and often counter-productive involvement of National Government* in local transport areas that are most efficiently overseen and implemented by local authorities, *e.g.* local parking policy and walking and cycling policy or in public transport operations.

National Government support to urban public transport companies, for example, via high operational subsidies can serve as a disincentive to cost efficiency in public transport operations. Further, National Government imposition of fare price ceilings without commensurate compensation to public transport organisations (especially in CEE countries) can also aggravate often-desperate financing difficulties.

Whereas National Government has a clear role to play in setting an overall policy framework, as mentioned earlier, definition of specific policies and measures on a municipal level is often better left to the local and regional authorities, who are well-placed to take advantage of the greater opportunity and scope for local initiative. In some countries, responsibilities for policy-making are defined and attributed from the “bottom-up”, that is to say based on local and regional decision-making. In Switzerland, for example, institutional roles and powers have traditionally been attributed from the “bottom-up”, the lower levels of government allocating specific power to the National level.

On a local or regional level: absence of an integrated planning framework

On a local or regional level, lack of a co-ordinated planning process for all transport (road and public transport), land use, and environmental considerations can lead to a mode- and sector-segmented approach to policy-making, preventing the development and implementation of comprehensive, integrated plans addressing all related aspects of urban travel.

In addition, lack of co-ordination on urban travel and land-use policy among constituent municipalities in a metropolitan area can lead to serious organisational problems and inefficiencies in, for example, provision of public transport services. Parking policy is another area in which lack of co-operation among local governments in a given urban region can lead to competition for business, which can in some cases engender economic losses to areas implementing high parking fees in an effort to discourage private vehicle use.

Creation of a single entity may go a long way to furthering institutional co-operation, not only among planning agencies, but also with other municipal institutions such as local police for enforcement of, for example, parking and traffic policies. A number of urban areas around the world are looking to new co-ordinated structures for solutions to tackle their travel problems, among them, Atlanta and Dublin.

4.2.4. *Public, lobby and press resistance to policies*

Winning support for sustainable urban travel policies from the public – including, lobby and interest groups, the press, and individual travellers – is often a complex and politically delicate undertaking. Poor understanding of the rationale behind/ or benefits of certain measures can engender resistance from these segments of the public. This is often due to inadequate communication of policy strategies and insufficient or inefficient public involvement.

The variety of points of view represented in this diverse and divergent constituency means that communication of the objectives behind the policies, as well as explanation of the strategies themselves can sometimes take a long time and involve considerable resource expense.

Involving these groups in the various stages of problem and strategy definition as well as during the policy implementation phase can both facilitate, and in many cases, complicate implementation, the latter particularly when restraint measures such as pricing mechanisms are involved. It is clear, however, that the large body of citizens and businesses affected by the policies must be brought into the policy planning and implementation process in an effective way if implementation stands a chance of actually happening.

Required in many countries for policy development and project implementation, public involvement can, if carried out effectively, help identify the right urban travel and land use policy choices for a local area. Indeed, by giving voice early on to the concerns of citizens and businesses subject to the impacts of a policy, and by ensuring that public consultation takes place in a transparent and well-conceived framework, implementation of urban travel and land use policy packages can, in fact, be facilitated.²²

Switzerland, among other countries, has a long tradition of public consultation and stakeholder involvement that goes from the problem identification and objective-setting stages, through strategy definition and policy implementation. This outward-reaching, inclusive approach to policy-making and implementation has enabled the resolution of conflicts – often based on natural differences in perspective among diverse stakeholders in the urban travel system – that otherwise would have crippled possibilities for policy implementation.

Public-private partnerships to co-ordinate land-use and transport planning that involve planning agencies, merchants, employers and commercial and residential land developers, can provide an efficient and long-term vehicle for successful policy implementation. These “partners” to government need to have “bought into” the policy objectives early on, however, in order for them to recognise themselves as beneficiaries of the results. Partnerships such as these are proving effective in many urban areas in ECMT and OECD countries such as the United States, Switzerland, France and Poland.

The importance of effective and consistent information on and communication of sustainable travel policies should not be under-estimated as it often is by policy-makers. Changing travel patterns and behaviour – *e.g.* convincing private vehicle users to use public transport – is difficult under the best circumstances, that is to say, in countries where there is a strong tradition of public transport use. It is even more difficult if the public – the clients of the transport system – are left in the dark about the objectives behind the policies and the benefits sought. Working with the transport system stakeholders and in the context of partnerships, creative solutions can be found for communicating the benefits of sustainable urban travel strategies.

4.2.5. *Unsupportive legal or regulatory framework*

Without clearly defined legal and regulatory rules and procedures, successful integration of land-use and transport policies, for example, or effective involvement of private entities in public transport services is not possible. Sustainable urban travel strategies that propose policy actions such as these may require some degree of national regulatory reform or further legislation.

Clear objectives and procedures regarding public service obligations and competitive tendering are indispensable for successful implementation of schemes involving private sector participation in public transport provision. Many countries are pursuing these avenues in search of greater efficiency and higher quality in public transport services and operations. Difficulties have arisen when the legal framework does not clearly define the roles and responsibilities of the respective public and private sector entities. The European Union is currently reviewing legislation on public tendering and contracting which should provide some guidance on these issues.

Initiatives to restrain growth in car use, manage demand for travel, and encourage walking and cycling should also be supported and encouraged by the national regulatory and legal framework.²³ In addition to economic incentives to reduce car use such as road and congestion pricing and fuel taxation, which need to be implemented in an economy-wide context to avoid distortions, other transport demand management tools such as car sharing schemes, employer mobility plans, and telecommuting need the support of national law and regulation to be effectively implemented on a local level. These policy tools entail, among others, private sector involvement, and social and labour policy, in addition to transport policy so national co-ordination is essential.

The regulatory framework should also embody technical standards for vehicles and fuels and provide for the rigorous monitoring of their implementation in the public and private fleets. Likewise air quality, noise and other environmental targets should be fully adopted in transport and land-use policy, and monitored.

A solid national legal and regulatory structure should, however, be flexible and encourage municipalities and regions to find innovative solutions to their particular urban travel problems. Legal and juridical limitations on a national level may require specific enabling legislation, as is the case in some highly centralised systems, in which power can be delegated to lower levels of government only in this way. Areas in which flexibility for local or regional initiative is appropriate (and necessary) should be defined (*e.g.* parking policy, some local road/congestion pricing schemes) and accommodated in the regulatory framework.

4.2.6. Weaknesses in the pricing/fiscal framework

Closely related to the previous barriers is the lack of a comprehensive pricing and fiscal structure that sends the right messages to decision-makers – individuals and firms – about where they locate and how they travel or promote travel in and around cities.

Lack of a co-ordinated approach to fiscal and pricing policy for land use (real estate) and transport markets – across sectors and levels of government – can, for instance, encourage interjurisdictional competition among towns and cities for tax base and employment, and thereby hinder attempts to reduce or prevent commercial, retail and residential development on the urban periphery.

Additionally, in some countries, particular fiscal policies for real estate and housing can, in certain circumstances, implicitly encourage individuals to live outside of urban areas, thereby conflicting with strategies to reduce congestion and sprawl.

An example of this involves mortgage interest tax deductions. In simplified terms, these deductions, while encouraging individuals to become owners of their residences, may in doing so encourage them to locate in larger, single-family homes on the urban periphery, which in some markets are considered to hold their property value better than smaller residences in multi-unit buildings in the urban centre.²⁴ In this way, the tax deduction may actually function as a catalyst for urban sprawl. The same distortion can apply to tax deductions on building depreciation for property owners, which can engender the same effects on urban sprawl.

Another distortion, perhaps more common to some European countries, involves tax deductions for commuting costs, which subsidises employees who live far from their place of work.

These examples show how land- use and transport pricing and fiscal policies can have perverse effects when they encounter each other. They illustrate the need for a holistic view of policies in both sectors, to discern areas where measures reinforce incentives for sustainable decision-making, and where policies collide, engendering undesired decisions.

Public transport financing

How to finance improvements to public transport is a key preoccupation of Government at national, regional and local levels, and a major factor in implementation of a national strategy for sustainable urban travel.²⁵ While there is no one model on how to do this, determining how to finance necessary capital expenditure and operations, and from which sources (*e.g.* National Government, Regional or Local Government funds, private enterprise, the user) is a common problem in most countries.

The “user pays” principle is widely accepted by many policy-makers and operators (not surprisingly less so by “users”) as a basis for covering the costs of public transport operations, and under certain circumstances, capital costs. Actually balancing financing needs, however, with what the “user” can or will pay, along with public funding and, in some cases private sources of financing, is a frequently cited difficulty in implementing public transport enhancement schemes.

National Government’s involvement in local and regional public transport is a key factor in how these schemes are implemented. National participation, for example, in the coverage of not only capital costs, but also operational costs for local public transport may, as mentioned earlier, provide in certain cases an incentive to public transport operators in terms of revenue-generation, but perhaps less of an impetus for cost efficiency.

In addition, public service obligations, *i.e.*, reduced fares and other concessions as part of a social policy, need to be carefully examined in order to avoid distortions in competition and economic prejudice to public transport organisations.

Taking a wider view of the “user” to include not only clients of the public transport system but also those using other aspects of the urban mobility system may bear some consideration. An “integrated pricing approach”, whereby resources from other parts of the system (*e.g.* road user charges, integrated public transport fares, parking charges, environmental protection funds) could be earmarked for public transport financing may offer some solutions to funding problems.

Other sources of public transport financing via direct and indirect taxation (*e.g.* fuel taxation, tax on businesses) need to be carefully studied to ensure that there are no economic distortions, and that they are equitable and socially justifiable.

4.2.7. *Misguided financing and investment flows*

Poorly channelled financial streams can frustrate implementation of policies designed to improve sustainability in urban travel. This problem is linked to both the institutional and the legislative/regulatory framework and the fiscal structure

discussed earlier. It is also intrinsically tied to strategic planning for sustainable urban travel on national, regional and local levels of government.

Examples of this include directing revenues from pricing schemes such as road or congestion pricing, parking, etc. away from the jurisdiction in which they are applied, thereby confusing public understanding of the reasons for the measure and frustrating incentives for reducing car use. Also, unbalanced allocation of funding (investments or other) among different travel modes – often due to poor co-ordination among mode-specific planning agencies – can create inefficiencies in the performance of the urban transport system. And National Government investment and financing – often focused in capital cities – is sometimes carried out to the detriment of funding needs in secondary and tertiary cities. It is, to a certain extent logical that National funds are mostly directed to capitals given the strategic importance of these cities. Indeed, National Government investment in and subsidies to urban and regional rail systems, for example, – primarily found in very large or capital cities – means that there can be a *de facto* higher level of National funding in these urban areas. However, excessive concentration of these National government funds in capital cities can engender inefficiencies in the use of these resources and opportunity costs for improvements in other important urban areas.

4.2.8. Analytical obstacles

The pursuit of sustainability in urban areas has caused policy analysis to become more complicated. As a result, decision-making based on the analysis has become more complex as well. Widely used analytical tools and procedures designed to assess infrastructure investments and other policy actions in urban areas are now being used to take into consideration a variety of externalities such as environmental impacts, urban sprawl and social and economic factors linked to urban growth. These methodologies, such as cost-benefit and multi-criteria analysis, however, appear inadequate in their current form to capture the long-term, cross-sectoral policy priorities for cities that are articulated in the principles of sustainability.²⁶

An example of this involves analysis regarding urban sprawl. Assumptions in methodologies used for infrastructure investments in urban areas, particularly concerning the benefits of time savings, may sometimes house a positive bias toward urban sprawl. Road infrastructure designed to increase the average speed of trips may not, in fact, reduce time of travel as perhaps supported by analysis, but instead – given assumptions in travel time budget – contribute to urban sprawl by encouraging locations further outside of the city.

Moreover, these analytical tools have difficulty measuring the impacts of integrated policy packages.

Weaknesses in these methodologies should not, however, overshadow appreciation of their ability to produce analysis that gives “right” answers with regard to sustainable development but that happen to be inconvenient or uncomfortable for decision-makers.

4.2.9. Poor data quality and quantity

Both the 1992 and 1999 surveys of cities have demonstrated that urban travel and land use data are insufficient in both quantity and quality, and are often not available in useful form to National Governments. This is a key impediment to understanding trends in urban travel patterns and the forces behind the trends. Several factors are no doubt involved; among them: data collection methods are often inconsistent within and among cities; measurements and definitions are divergent from one city to the next and often do not fit those requested in statistical inquiries; and in some countries, private public transport operators are not communicating key public transport traffic trends citing privacy rights. The result is that opportunities for monitoring the impacts of policies based on transport and land use statistics are seriously compromised and comparative exercises such as benchmarking virtually impossible.

4.2.10. Wavering political commitment

Last in this list of key implementation barriers, but in no way of least importance, is the fatal blow that faltering political commitment can cast on policy strategies designed to improve sustainability in urban travel.

Fear of political repercussions often leads political authorities to commit to only those parts of the policy package that are “politically palatable” – those that pose little political risk. These may include “enhancement” policies such as those for public transport or walking and cycling infrastructure, as opposed to more politically hazardous measures such as pricing and fiscal mechanisms.

Often cited as an example of waning political fortitude is the lack of commitment to land-use restrictions, such as when large commercial developers wanting to locate in peripheral greenbelt areas propose employment opportunities and other benefits (*e.g.* tax revenue) to often resource-needy municipalities. Once granted, a relaxation of development restrictions quickly becomes standard procedure and marks the end of effective greenbelt policy.

Commitments made on a national or international level (*e.g.* relative to environmental targets, national mobility objectives) that do not take into consideration actual possibilities for implementation in regions and cities are difficult to meet and often dropped at some point.

Adequate consultation and consensus among the concerned government branches on policies such as fuel taxation, which involves fiscal, energy, transport and environmental policy, is essential. Without long-term, inter-sectoral commitment to these difficult fiscal measures, they may not withstand pressure during periods of short-term “duress”; a case in point is the September 2000 fuel price “crisis”, when fuel taxation measures in a number of ECMT and OECD countries did not withstand the pressure of fluctuations in the market price of oil.

Commitment to the whole package of policies and measures for urban travel – not just those that are less politically risky – is what will ultimately bring about the desired steps toward environmentally, economic, and socially sustainable urban travel.

Recommendations for National Governments on Improving Implementation of Sustainable Urban Travel Policies

Following are a number of proposals brought forth in the project on how National Governments can improve opportunities for successful implementation of sustainable urban transport policies.

- **Establish a supportive national policy framework**

- **Develop a national policy framework for sustainable urban travel** that supports and influences national, regional and local goals for land-use, passenger and freight transport, health and the environment. It is important that this national policy framework be “internally coherent” – that is to say, within the transport sector – with integration of transport investment, traffic management and demand management policies, and “externally coherent”, with integration among transport policies and those in other sectors such as land use, environment, and finance.

Moreover, there are important *links* between local policies for urban travel and land use, and national transport and planning policies. These links must be identified so that policies on all levels – local, regional and national – are mutually supportive. Urban and regional land-use planning, for example, needs guidance from national spatial planning parameters. Improvements in the quality and efficiency of urban public transport often require financing/investment from National Government. The participation of private sources in public transport schemes requires a framework for competition defined in national law. And economic incentives designed to restrain private vehicle use and manage congestion such as fuel taxation and congestion pricing need to be implemented in the context of an economy-wide framework to ensure their efficacy and to avoid distortions.

- **Improve institutional co-ordination and co-operation**

- **Co-ordinate national policy approaches on urban land-use, travel, health and the environment**

Co-ordination *vertically* among all levels of Government, as well as *horizontally* among land-use, transport, environmental and health sectors, is essential to realise the objectives for sustainability. Co-ordination among land-use, transport, and environmental actors *horizontally* on all levels of government is necessary to ensure integration of policy objectives and strategies. This is key for National governments so that inconsistent messages on priorities for sustainability are not handed down on a sectoral basis. *Vertical* co-ordination among levels of government enables national-level objectives for sustainable development to be effectively communicated to regional and local governments. For example, National governments can encourage cities to factor the objective of reducing regional air pollution into their local transportation decisions.

Priorities and objectives defined on local and regional levels can also be communicated from the “bottom-up”, to ensure that national policies adequately account for priorities on lower levels. Involvement of all stakeholders in the urban travel system – be they private sector entities, real-estate developers or environmental advocacy groups – is becoming an increasingly important factor in policy development and implementation for sustainable urban travel.

- **Decentralise responsibilities when possible; centralise when necessary**

Responsibilities must be commensurate with resources for implementation to occur. When decision-making power for urban travel is transferred from National Government to regional and local levels of Government, corresponding control over the sources of financing must be as well so that local and regional governments are able to assume full responsibility for the problems.

As part of decentralisation efforts, National Governments in a number of countries have successfully encouraged the creation of new inter-communal organisations with responsibility for urban transport planning in a given region.

- **Provide a consistent, integrated framework for National Government financing and investment** in regional and local transport and land-use actions while ensuring adequate flexibility for local innovation. (See Legal, regulatory and fiscal framework).

- **Consider all modes of travel, in particular environmentally sustainable modes, as well as land-use priorities when allocating National Government funds** to the local level.

- **Encourage effective public participation, partnerships and communication**
 - **Involve the public** (*e.g.* press, advocacy groups, and individual clients of the transport system) early in the strategy design process and provide for their active involvement throughout implementation and monitoring.
 - **Seek partnerships with different stakeholders in the transport system** (businesses, employers, residential and commercial land developers and associations). Successful implementation of sustainable urban travel policies requires more than government action. Necessary changes in travel patterns and behaviour make early and consistent involvement of these important actors in the transport system essential.
 - **Inform and communicate with transport system clients. They must understand and buy into the policy objectives before any behavioural change can occur.** Effective communication is particularly important in winning public support for demand management policies.
- **Provide a supportive legal and regulatory framework**
 - A legal and regulatory framework that provides *guidelines for Government action* on all levels and *parameters for involvement of the private sector* in public transport provision is essential for effective implementation of sustainable urban travel policies.
 - **Ensure that rules and regulations for public transport** clearly specify the relative roles of public and private sectors in service and infrastructure provision and financing.

Financing of public transport should be reviewed to ensure that efficiency in operations is maximised. *Public service obligations* should include oversight of service and network quality, reduced fares and other concessions as a part of social policy – the latter properly designed so as to avoid distortions in competition and adverse consequences to public transport organisations, and passenger security. Parameters for *private sector involvement* should be clearly specified including rules for competition and procurement, as well as service and quality obligations.
 - **Ensure that measures to promote walking and cycling** in urban areas as well as **transport demand management tools**, such as employer mobility plans, car sharing schemes and telecommuting are supported in the legal and regulatory framework.
 - **Fully integrate air quality, greenhouse gas, noise and other environmental targets** into transport and land-use policy and **adopt technical standards for vehicles and fuels and rigorously monitor** their implementation in the public and private fleets.

- **Ensure a comprehensive pricing and fiscal structure**

- **The pricing and fiscal structure** should send the right messages promoting sustainable urban transport across sectors. Inconsistencies in fiscal policy among sectors can pose problems for implementation, particularly for transport and land-use planning integration. *Competitive pressure* among neighbouring towns and cities for fiscal revenue and employment opportunities can hinder efforts to discourage location of large businesses in fringe areas. In addition, policy “interferences” can result in the wrong signals being sent to decision-makers – individuals in particular – about how they travel in and around cities. National policies for housing and real estate, for instance, can induce decisions about where to live that conflict with strategies to reduce congestion and sprawl.

- **Rationalise financing and investment streams**

Revenue flows from pricing measures, investment and other types of funding should be directed so that opportunities for policy implementation are enhanced. Poorly channelled financial streams, such as described below, can frustrate application of policies designed to improve sustainability in urban travel.

- **Channel revenues from pricing initiatives (e.g. road or congestion pricing, parking fines, etc.)** so that benefits can be felt by those bearing the costs. While earmarking of revenues from pricing schemes is seen in many countries as compromising economic efficiency, in some cases, directing revenues from pricing measures to local and regional levels can enhance political support for and facilitate implementation of “unpopular” pricing initiatives. Channelling revenues away from the immediate jurisdiction can sometimes compromise incentives for reducing private car travel, confuse public perception of the rationale behind the measures and impede acceptance of what might otherwise be very effective schemes.
- **Allocate funding (investments or other) in a balanced way** among different travel modes to maximise efficiency in the performance of the urban transport system and avoid development of one mode to the detriment of another. Funding decisions should be made based on assessment of the relative environmental, economic and equity impacts of particular modes. Further, infrastructure investment decisions should fully take into consideration objectives for travel demand management.
- **Weigh national investment and financing in capital cities** against funding needs in secondary and tertiary cities as well. Excessive concentration of national government resources in capital cities risks inefficient use of funds, and perhaps more importantly, missed opportunities for promoting real improvements to transport systems in other key urban areas.

• **Improve data collection, monitoring and research**

Sound and reliable data are the empirical basis for good policy-making and serve as the inputs to the analytical process. More importantly, they provide insight into urban travel trends and the forces behind them – necessary to evaluate what combinations of policies are best for the problems observed. Urban data are in many cases not easily accessible to National Governments. As a result, potentially helpful benchmarking exercises are difficult to carry out.

- **Improve data collection.** As revealed in the 1992 survey of cities and confirmed in the 1999 exercise, urban data, particularly as concerns urban travel and land use and their interactions, remain sparse, inconsistent and often of overall poor quality. Data are not collected in a consistent way among cities and collection methods are often subject to modification within a given city. National governments can take initiatives or support on-going activities to improve consistency of data collection. It would be valuable to develop a consistent methodology at international level that can be used in all such inquiries.
- **Carry out consistent monitoring** of implementation of urban travel and land use activities and their links to health and environmental objectives. Communicate results of this monitoring to elected officials and the public to promote transparency in decisions and accountability.
- **Organise and finance research, development, and testing of potential solutions** to promote sustainable urban travel and land use. Encourage exchange of best practice among actors at local, national and international levels. Promote further development of alternative energy sources for vehicles.

Conclusions

With nearly three-quarters of the population in ECMT and OECD countries living in urban areas, the structure and impacts of urban travel and land-use are of concern to virtually all sectors of economic activity, all levels of government, and not the least, individual travellers themselves. Indeed, evidence from studies such as the current ECMT-OECD Project on Implementing Sustainable Urban Travel Policies and its predecessor Urban Travel and Sustainable Development (UTSD 1995), as well as recent work undertaken in the OECD and other organisations clearly demonstrate that urban travel and land use problems are not just *urban* problems: their economic, social and environmental impacts extend well beyond the geographic jurisdictions of cities and towns to regions and to countries as a whole. The policies designed to shape travel and land use patterns to maximise the benefits of transport while minimising their negative impacts likewise go beyond the policy portfolio of Local governments to that of Regions and National governments as well.

Given the broad spectrum of economic sectors and actors potentially impacted by urban travel and land use activity, a package of complementary policy instruments needs to be developed that provides clear and well-targeted incentives to reduce the impacts of urban travel and land use activities. This involves better integration of land-use and transport planning – both on a strategic national level, and on regional and local levels. It involves finding ways to manage growth in car use – veritably skyrocketing in many urban areas throughout ECMT and OECD region – and ensuring that alternative modes of travel to the car – that is to say, public transport, walking and cycling – are promoted so that there are alternatives available to the individual traveller. These are some of the main lessons of the 1995 OECD-ECMT strategy. Fiscal and pricing instruments, legal and regulatory tools, currently available technology, and public information are some of the main policy tools available.

As described above, this inherently multi-sectoral, integrated approach is certainly easier discussed, than implemented. The complexities involved in actually implementing integrated policy strategies for sustainable travel – be they

institutional, legal, regulatory, or fiscal in nature – can be formidable. Many ECMT and OECD countries, however, are working to identify how to better structure their policy-making frameworks so that better integration of policies – brought about by improved upstream co-operation among institutions and sectors, – can happen. In the meantime, implementing tried and tested best practice policies can be a step in the right direction.

Though government action in isolation is decidedly not enough to bring about the kinds of changes needed for sustainability in cities, a policy framework that embodies *clear long-term objectives for urban travel* – defined in concert with public and private stakeholders – can provide the essential parameters for implementation of integrated sustainable urban travel policies. In order for co-ordinated action to happen, however, there must be *solid long-term political commitment*. And government on all levels must continue to work with political actors to see that this particular implementation challenge is met.

Notes

1. These goals are consistent with those set out in the 1995 ECMT-OECD report *Urban Travel and Sustainable Development*, and in the OECD Environmentally Sustainable Transport project (EST). They also reflect the objectives articulated on a broader scale in the Declaration and Programme of Joint Action of the UN-ECE Regional Conference on Transport and the Environment, held in Vienna in November 1997, and the WHO Charter on Transport, Environment and Health signed in London in June 1999.
2. For a detailed examination of urban freight transport, please see ECMT Round Table 109: Freight Transport and the City (1997).
3. ECMT-OECD (1995) Please see Box 1 for a description of the project on Urban Travel and Sustainable Development (1992-1995).
4. Please see Annex 1 for a description of the current project and its methodology.
5. For a complete analysis of the questionnaire responses, please see the Draft Synthesis Report of the Survey of Cities [CS/URB(2001)2].
6. Please see the Draft Synthesis Report of Self-Reviews of Urban Sustainable Travel Policies [CS/URB(2001)3].
7. There were 35 more cities responding to the 1999 questionnaire relative to the 1992 exercise, and a better representation of larger cities – two of the objectives of the current survey.
8. Percentage growth of the urban area exceeds that of the city centre.
9. Some caution is called for with regard to this figure, however, as Eastern European capitals are disproportionately represented among capital cities.
10. In the Survey of Cities, data on noise showed significant differences in standards among urban areas and different measurement parameters. The particular lack of coherence on this level among cities presented serious problems for the survey analysis to the extent that no conclusions were available to be drawn on noise. Some of the National Self Policy Reviews, however, did provide information on noise. With respect to safety, national definitions for fatal accidents were used in the analysis, and significant differences in the number of accidents and the way accidents were accounted for and monitored.
11. See, for example, ECMT/ACEA/OICA Turin Conference on Smart CO₂ Reductions.
12. Some cities, however, have used the three-part Strategy as a guide to what should be done. Warsaw, for example, based the development of its draft Transport Policy (1995) on the recommendations of the Strategy.

13. This section is a summary of country policy experience as reported by the countries themselves based on the Synthesis Report of Self-Reviews of Urban Sustainable Travel Policies [CS/URB(2001)3] and the Synthesis Report of the Survey of Cities [CS/URB(2001)2].
14. Please see Section 4.2.3 – Inefficient or counterproductive institutional roles and procedures.
15. ECMT/ACEA/OICA Turin Conference on Smart CO₂ Reductions
www.oecd.org/CEM/topics/env/CO2t_urin.htm.
16. See for example ECMT/ACEA/OICA Turin Conference on Smart CO₂ Reductions, *ibid*.
17. Please see Annex 2 for a list of Steering Group members.
18. Please see Section 4.2.2 – Poor policy integration and co-ordination.
19. An in-depth examination of urban travel in the Netherlands *Implementing Sustainable Urban Travel Policies: National Peer Review – The Netherlands* was published in the context of this project in January 2001.
20. It should be noted that “push” and “pull” are not always used in this way. Switzerland, for example, among other countries, uses “push” for promotion of public transport (*i.e.*, one “pushes” something forward), while “pull” is used for car restraint measures (*i.e.*, one “pulls” or “holds” cars back).
21. For further examination of this issue, please see the papers and conclusions of the ECMT-OECD workshop on “Overcoming Institutional Barriers to Implementing Sustainable Urban Travel Policies”, 13-14 December 2000, Madrid. www.oecd.org/cem/UrbTrav/Workshops/InstBarriers/index.htm
22. For further examination and case studies of the role of public consultation and participation, please see: “Engaging Citizens: Public Consultation and Participation in Urban Transportation Planning, Project Approval and Implementation” (Session 4 of Madrid workshop, December 2000). Papers available at: www.oecd.org/cem/UrbTrav/Workshops/InstBarriers/madriidoc.htm
23. The papers and proceedings of the ECMT-OECD Workshop on “Managing Car Use for Sustainable Urban Travel”, www.oecd.org/cem/UrbTrav/Workshops/Carscities/index.htm, 01-02 December 1999, explore these topics in detail.
24. Whether or not this distortion is produced depends greatly on the characteristics of the housing market in a given country, *i.e.*, it may be true for the US market but perhaps less so for the French or Dutch markets.
25. For further discussion of public transport financing and other issues related to enhancement of public transport strategies, please see the conclusions and papers from the Workshop on “Implementing Strategies to Improve Public Transport for Sustainable Urban Travel”, held in Athens, 3-4 June 1999. www.oecd.org/cem/UrbTrav/Workshops/PublicTr/index.htm
26. The Workshop on “Evaluation Methodologies for Infrastructure Investments and Urban Sprawl”, held in Paris 29-30 June 2000, examined this issue in detail. www.oecd.org/cem/UrbTrav/Workshops/UrbSprawl/index.htm

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- SPERLING Daniel and SHAHEEN Susan, Institute of Transportation Studies, University of California, Davis, USA, "*Carsharing: Niche Market or New Pathway?*".
- VESSILIER Béatrice, CERTU, France, "*In Town Without My Car?: Can a One-day Event Change Mobility Behaviour?*".
- WICKHAM James, Employment Research Centre, Trinity College, Dublin, "*Contextualising Car Dependency*".

D. *Implementing Strategies to Improve Public Transport for Sustainable Urban Travel*

Athens, 3-4 June 1999

www.oecd.org/cem/UrbTrav/Workshops/PublicTr/Athdoc.htm.

- ABA Botond, General Director, Budapest Transport Ltd., Hungary, "*Financing the System – Not Just the Mode: Prospects for and Problems with Implementing an Integrated Financing Plan for Public Transport*".
- AMAR Georges, Director, Innovation in Services, RATP, Paris, "*How to Implement Global Approaches (Intermodality, Multiservices) in Transport Systems: From Coordination to Innovation*".
- BASTOW Keith, Strategy and Development Executive, ARRIVA Passenger Services, UK, "*Using Market Forces and Competition to Improve Sustainability in Public Transport: Where Does the Market Help? Where Does it Hinder? The Private Sector – Delivering Sustainable Public Transport*".

- ECMT Secretariat, "Discussion Paper: Using Advanced Technology to Achieve Sustainability in Urban Transport".
- GIANNOPOULOS G.A., Aristotle University of Thessaloniki, Greece, "Conclusions of the Workshop".
- LICHTENEGGER Michael, Head of Public Relations, Wiener Linien, Austria, "Communicating and Co-operating with the Client: Implementing Public Communication and Information Strategies to Enhance Public Transport".
- PETERSON Bo, Associate Professor, Lund Institute of Technology, Sweden, "Eliminating Institutional and Organisational Barriers to Implementing Integrated Public Transport Strategies".
- SUCHORZEWSKI Wojciech, Professor, Warsaw University of Technology, Poland, "Implementing Urban Public Transport Strategies in Central and Eastern Europe: Case Studies of Budapest and Warsaw Transportation Policy for the Capital City of Warsaw".
- VIEGAS José, CEO, Transportes Inovação e Sistemas, Lisbon, Portugal, "Public Transport in the Sustainable Urban Transport Policy Package: Taking an Integral Policy Approach".
- VOUGIOUKAS Manos, Director, Euro Trans Consulting Ltd., London, "Implementing Fair and Efficient Pricing and Subsidy Policies".

E. Land-Use Planning for Sustainable Urban Transport

Linz (Austria), 23-24 September 1998

www.oecd.org/cem/UrbTrav/Workshops/LandUse/LinzDoc.htm

- DEAKIN Elizabeth, University of California, Berkeley, USA, "Land-Use for Sustainable Urban Transport: An Assessment of Problems and Options".
- ECMT-OECD: "Summary of Workshop".
- FLEISSIG Will, Continuum Partners and University of Colorado, Boulder, USA, "A Developer's Perspective: How Transit, Infrastructure and Amenities Influence Private Investor Decisions".
- FRIEDBERG Jan, Municipality of Krakow, Poland, "Transport and Land-Use Policy Integration in Poland".
- GEBHARD Michaela, Landesplanungsamt Stadtentwicklungsbehörde, Hamburg, Germany, "Country Experience: Germany" (panel presentation).
- GILBERT Richard, Centre for Sustainable Transportation, Toronto, Canada, "Action for Sustainable Urban Transport".
- GORHAM Roger, ECMT "Land Use Planning and Sustainable Urban Travel: Overcoming Barriers to Effective Co-ordination".
- JASPER Christiane, Federal Environment Agency UBA, Germany, "Living Without the Car in Existing Residential Areas in Halle/Salle".
- KAUFMAN Chip and MORRIS Wendy, Ecologically Sustainable Design Pty. Ltd., Australia, "Country Experience: Australia".
- KIENITZ Roy, Surface Transportation Policy Project, USA, "Country Experience: United States" (panel presentation).
- KNOFLACHER Hermann, Technical University of Vienna, Austria, "Country Experience: Austria" (not available).
- KOCH Helmut, Trafico Consulting, Gmunden, Austria, "Country Experience: Austria".
- LANGSCHWERT Gabriele, Federal Ministry for the Environment, Youth and Family Affairs, Austria, "Country Experience: Austria" (panel presentation).

- LAWRENCE J. Gary, University of Washington, USA, “Country Experience: United States” (panel presentation).
- NAESS Petter, Aalborg University, Denmark, “*Policy Tools and Barriers to Less Car-Based Land-Use Planning in Cities*”.
- NIJKAMP Peter, Free University of Amsterdam, Netherlands, Review of “Urban Travel and Sustainable Development” Report, Policy Recommendations and Current Best Practice (panel presentation).
- ONISHI Takashi, Research Center for Advanced Science and Technology, University of Tokyo, Japan, “Country Experience: Japan”.
- PAGDEN Chris, Department of the Environment, Transport and the Regions, UK, “Country Experience: United Kingdom” (panel presentation).
- PETERSON Bo. E., Lund Institute of Technology, Sweden, “Country Experience: Sweden”.
- SAREC Ales, Ministry of the Environment and Physical Planning, Slovenia, “Country Experience: Slovenia”.
- SUCHORZEWSKI Wojciech, Technical University of Warsaw, Poland, “Country Experience: Poland” (panel presentation).
- VAN REISEN Alfons, Transport Research Center AVV, Rotterdam, Netherlands, “Country Experience: Netherlands” (panel presentation).
- WILLIAMS Roger, Oxfordshire County Council, UK, “Country Experience: United Kingdom” (panel presentation).
- ZECH Sybilla, Consultant, Austria, “Country Experience: Austria” (panel presentation).

II. National policy reviews

A. National in-depth Peer Review

Implementing Sustainable Urban Travel Policies

National Peer Review: the Netherlands, ISBN 92-821-1328-0, February 2001.

Implementing Sustainable Urban Travel Policies

National Peer Review: Hungary (under completion).

B. National Self Reviews of sustainable urban travel policies

Country Reviews – Synthesis of Self Reviews CEMT/CS/URB(2001)3 (available in draft form on OLIS and ECMT protected site).

Self Policy Reviews: Czech Republic, Finland, France, Germany, Italy, Norway, Poland, Portugal, Russian Federation, Switzerland, United States.

III. Survey of cities

A. Draft Synthesis Report CEMT/CS/URB(2001)2/PART1 (Quantitative section)

CEMT/CS/URB(2001)2/PART2 (Qualitative section on policies and measures), forthcoming ECMT publication, *Implementing Sustainable Urban Travel Policies: Survey of Cities*.

B. Questionnaire: Urban Travel: Implementation of policies for sustainable development

www.oecd.org/cem/UrbTrav/Survey/Ques.pdf

C. Sample of Cities

www.oecd.org/cem/UrbTrav/Survey/sample1.pdf

www.oecd.org/cem/UrbTrav/Survey/sample2.pdf

IV. Other project references

www.oecd.org/cem/UrbTrav/publications.htm

Changing Patterns of Urban Travel by F.V. Webster, P.H. Bly, R.H. Johnston, N. Paulley and M. Dasgupta (TRL, United Kingdom) ECMT.

Sustainable Transport in Central and Eastern European Cities, March 1996. ECMT/OECD Workshop, Bucharest (Romania), 28-30 June 1995.

Urban Travel and Sustainable Development OECD/ECMT, 1995.

V. Related work

ACEA – ECMT – OICA Joint Conference, “Smart CO2 Reductions – Non-product Measures for Reducing Emissions from Vehicles”, Turin 2-3 March 2000. www.oecd.org/cem/topics/env/CO2turin.htm.

CO₂ Emissions from Transport, ISBN 92-821-1225-X, ECMT (1997).

ECMT Round Table 102, Changing Daily Urban Mobility: Less or Differently?, 1996.

ECMT Round Table 109, Freight Transport and the City, 1999.

ECMT Round Table 110, Traffic Congestion in Europe, 1999.

Efficient Transport for Europe: Policies for Internalisation of External Costs, ECMT, 1998.

OECD: Synthesis Report, “est! Environmentally Sustainable Transport – Futures, strategies and best practices”, Vienna, Austria, October 2000.

Links: www.oecd.org/cem/UrbTrav/links.htm.

Other environment sites: www.oecd/cem/sites/env.htm.

Annex I

Methodology of the ECMT-OECD Project “Implementing Sustainable Urban Travel Policies” (1998-2001)

1. Scope and structure of project

This project was designed as a follow-up to work undertaken in ECMT and OECD in preparation of the report *Urban Travel and Sustainable Development*, published in 1995. It responds to a mandate from Ministers of Transport handed down at their Council meeting in Annecy in 1994 to review country policies in light of the recommendations set forth in this report.

A meeting of experts held in Paris in November 1997 defined the priorities for and structure of the project. A format for the project was agreed based on three principal parts: a series of workshops on particular topics; a survey of cities, and a series of national urban travel policy reviews. The work was to focus on implementation of sustainable urban travel policies in ECMT and OECD member countries.

2. Workshops

The workshop series focused on implementation problems in a number of areas identified as particularly central to sustainable urban travel: integrating land-use and transport, enhancing public transport, managing car use in cities, evaluation methodologies for infrastructure investments, and institutional and public consultation issues.

Workshops undertaken in the course of the project are detailed in the table below.

The papers and conclusions of the workshops have served as inputs to this report. They are available either from the ECMT web site at: www.oecd.org/cem/UrbTrav/index.htm or from the Secretariat.

3. Survey of cities

A comprehensive Survey of Cities was carried out in 1999-2000 with the collaboration of the French transport institute CERTU (Lyon). The survey provided a wide breadth of information about travel activity in ECMT and OECD cities and implementation of sustainable urban transport policies.

The survey involved revisiting the 132 cities surveyed in the first round of work (1992-1995) to assess progress made in the development and implementation of sustainable urban transport policies since that time. The sample was broadened from the initial 132 cities to improve representation in Member Countries, notably in ECMT's Members of

Workshops held during the project

Topic	Hosted by	Date and venue
"Land-Use Planning for Sustainable Urban Travel: Implementing Change".	Federal Ministry for the Environment Youth and Family Affairs and Office of the State Government of Upper Austria.	23-24 September 1998. Austria (Linz).
"Implementing Strategies to Improve Public Transport for Sustainable Urban Travel"	Athens Urban Transport Organisation (OASA).	3-4 June 1999. Greece (Athens).
"Managing Car Use for Sustainable Urban Travel".	Dublin Transportation Office (DTO).	1-2 December 1999. Ireland (Dublin).
"Evaluation Methodologies for Infrastructure Investments and Urban Sprawl".	Direction Régionale de l'Équipement d'Île de France (DREIF).	29-30 June 2000. France (Paris).
"Overcoming Institutional Barriers to Implementing Sustainable Urban Travel Policies".	Ministry of Public Works and Infrastructure.	13-14 December 2000. Spain (Madrid).

Central and Eastern Europe and the former CIS. In total, 167 cities from 32 countries responded to the survey out of a total initial sample of 328 cities, of which 274 were actually surveyed.

The questionnaire was based on that sent out in the context of the previous project and re-configured to try to improve response rates on certain questions and put emphasis on policy implementation. The questionnaire was sent out to country contact points in the Fall of 1999. Country contacts distributed the questionnaires to cities, and then received and returned the completed responses to the ECMT.

Analysis of the questionnaires was carried out by the CERTU. A draft synthesis report has been prepared, and will be published upon its completion.¹

4. The national urban travel policy reviews

In the context of this project, ECMT and OECD countries were invited to undertake a review of their urban policies according to two options: an in-depth peer review or a "self-review" process.

In-depth peer reviews:

- The first review took place 23-25 June 1999 in the Netherlands and was organised by the Ministry of Transport, Public Works and Water Management. The review team was comprised of three peer experts nominated by their countries from Switzerland, Sweden and the United Kingdom accompanied by two members of the ECMT Secretariat. The review report was published in January 2001.²
- The second review was held 21-23 June 2000 in Hungary under invitation of the Hungarian Ministry of Transport. The review team again was comprised of three peer experts, this time from France, the Netherlands and the United Kingdom. Two ECMT Secretariat members also participated in the review. The report is now under completion.

“Self reviews”:

- Countries not undergoing an in-depth peer review were requested to carry out a so-called “self-review” of their urban travel policies. At the time of the drafting of this report, 11 countries had completed self reviews: Czech Republic, Finland, France, Germany, Italy, Norway, Poland, Portugal, Russian Federation, Switzerland and the United States.³
- With an overall focus on implementation, the reviews provided participating countries with the opportunity to identify strengths and weaknesses in their policy and administrative processes that impact the implementation of sustainable urban transport policies.

5. Steering group

Throughout its three-year course, the work was overseen by a Steering Group of experts representing transport, environment and spatial planning ministries and local agencies from ECMT and OECD countries. This Group was enlarged in the final phase of the project in preparation for review of the project findings by Ministers. (Please see list of Steering Group members in Annex 2)

6. Web site

A project web site was set up early in the project to provide information on project development and make available all papers and proceedings from the workshops. The web site address is: www.oecd.org/cem/UrbTrav/index.htm

Notes

1. Forthcoming ECMT publication, *Implementing Sustainable Urban Travel Policies: Survey of Cities*.
2. *Implementing Sustainable Urban Travel Policies: National Peer Review – The Netherlands*, ECMT, January 2001.
3. Forthcoming ECMT publication, *Implementing Sustainable Urban Travel Policies: National Self Reviews*.

Annex II
Steering Group Members

Chair: Mr Wojciech SUCHORZEWSKI
Warsaw University of Technology, Poland

Austria

Mr. Robert THALER
Federal Ministry for the Environment (BMU) – Youth and Family Affairs – Vienna

Belgium

Mr. Henry MAILLARD
Federal Ministry of Transport, Building and Housing – Brussels

Czech Republic

Mr. Ivan NOVAK
Ministry of Transport and Communications, Prague

Denmark

Mr. Aske Wieth KNUDSEN
Ministry of Transport – Copenhagen

Finland

Mr. Mikko OJAJARVI
Ministry of Transport and Communications – Helsinki

Mr. Risto SAARI
Ministry of Transport and Communications – Helsinki

France

Ms. Chantal DUCHENE
Direction Régionale de l'Équipement d'Ile-de-France (DREIF), Paris

Mr. François POUPARD
Direction Régionale de l'Équipement d'Ile-de-France (DREIF), Paris

Germany

Mr. Bernd TÖRKELE
Federal Ministry of Transport, Building and Housing, Berlin

Greece

Mrs. Stella MNIMATIDOU
Ministry of Transport and Communications, Athens

Mr. Stratos PAPADIMITRIOU
Athens Urban Transport Organisation (OASA)

Hungary

Ms. Katalin TANCZOS
Budapest University of Technology and Economics

Ireland

Ms. Orla CORRIGA
Department of Public Enterprise, Dublin

Mr. John HENRY
Dublin Transportation Office (DTO)

Italy

Mr. Fabio CROCCOLO
Ministero dei Trasporti e della Navigazione, Roma

ANPA, Roma

Mr. Mario CONTALDI
Mrs. Roberta PIGNATELLI

Netherlands

Mr. Ambrosius BAANDERS
Ministry of Transport, Public Works and Water Management (AVV), Rotterdam

Mr. Pieter BOOT
Ministry of Transport, Public Works and Water Management, The Hague

Mr. Henk PAUWELS
Ministry of Transport, Public Works and Water Management, Rotterdam

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Mrs. Tone AUSTESTAD
Ministry of Transport and Communications, Oslo

Mr. Jarle JENSEN
Ministry of Environment, Oslo

Mrs. Brita JORDE
Ministry of Environment, Oslo

Portugal

Mrs. Sarah MANILHA
Ministère de l'Équipement Social, Lisbonne

Ms. Filomena MATIAS
Ministère de l'Équipement Social, Lisbonne

Russian Federation

Mr. Vadim DONCHENKO
State Scientific and Research Institute of Road Transport (NIIAT), Moscow

Slovenia

Mr. Ales SAREC
Ministry of Environment and Physical Planning, Ljubljana

Spain

Mr. José Luis RUIZ RUESCAS PRADERA
Ministère du Développement (FOMENTO), Madrid

Sweden

Mr. Stefan ANDERSSON
Ministry of Industry, Employment and Communications, Stockholm
Mr. Hakan JANSSON
Ministry of Industry, Employment and Communications, Stockholm

Switzerland

Mr. Peter GÜLLER
SYNERGO, Zürich
Mr. Alexander RIST
Federal Office of Spatial Development, Bern
Ms. Caroline SCHNELLMANN
Federal Office of Transport, Bern

United Kingdom

Mr. Peter Mc CARTHY
Department of the Environment, Transport and the Regions, London

United States

Mr. William LYONS
US Department of Transportation/Volpe National Transportation Systems Center,
Cambridge, MA
Mr. Ed WEINER
US Department of Transportation, Washington DC

EEA – European Environment Agency

Mr. Michele FONTANA

World Bank

Mr Kenneth GWILLIAM
Washington D.C., United States

ECMT

Mrs. Mary CRASS
Mr. Stephen PERKINS
Mr. Jack SHORT

OECD

Mr. Philippe CRIST, STI/DOT
Mr. Toshihiro HAYATA, TDS/UA
Mr. Josef KONVITZ, TDS/UA
Mr. Peter WIEDERKEHR, ENV/PC

Recent and Forthcoming Documents and Publications

Implementing Sustainable Urban Travel Policies

National Self Reviews

Forthcoming publication

Implementing Sustainable Urban Travel Policies

Survey of Cities – Synthesis Report

Forthcoming publication

Implementing Sustainable Urban Travel Policies

National Peer Review: Hungary

Forthcoming publication

Implementing Sustainable Urban Travel Policies

Key Messages for Governments

(75 2002 05 1 P) ISBN 92-821-1370-1. ECMT (2002). Free brochure

Implementing Sustainable Urban Travel Policies

National Peer Review: The Netherlands

(75 2001 02 1 P) ISBN 92-821-1328-0. ECMT (2001)

Freight Transport and the City

Report of Round Table 109, Paris, 11-12 December 1997

(75 1999 08 1 P) ISBN 92-821-1247-0. ECMT (1999)

Sustainable Transport In Central And Eastern European Cities

1996. Available on the ECMT website

Urban Travel and Sustainable Development

1995. Available on the ECMT website

Changing Patterns of Urban Travel

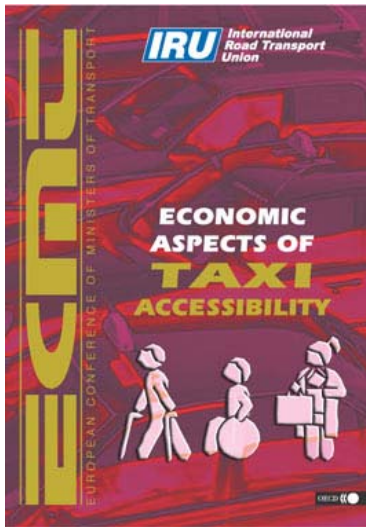
1985. Available on the ECMT website

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E-mail: sales@oecd.org

OTHER RECENTLY PUBLISHED ECMT PUBLICATIONS

Economic Aspects of Taxi Accessibility



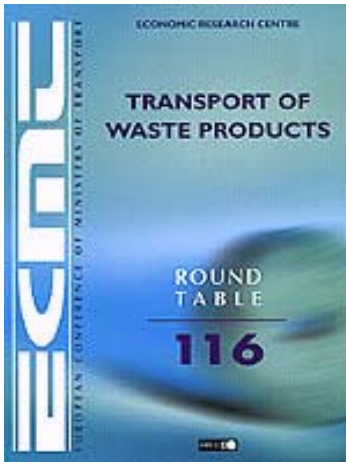
Taxi transport is a vital part of the modern transport system providing door-to-door services around the clock. In line with trends in other forms of transport, taxis too need to improve their accessibility for older and disabled people. This report is a result of dialogue between governments and the taxi profession and includes data from 14 countries on national taxi services, looking at the structure of the taxi trade, the use of taxis by disabled and older people and cost implications of accessible taxis.

This report sets out a range of actions to be taken by governments and the taxi profession so that this mode of transport can, in a profitable way, provide accessible affordable transport for all.

(75 2001 151 P) ISBN 92-821-1366 3, November 2001, 72 pages.

ROUND TABLE 116

Transport of Waste Products



With the treatment of waste set to increase -- since the volume of waste is closely related to economic growth -- waste transport will be a major challenge in the future. This raises several issues. Should transport regulations be made more stringent and their implementation reviewed? Should the proximity principle -- incorporated in the regulations in the interests of environmental protection -- be questioned, since it prevents the consolidation of flows in sufficient volume to make the most environmentally-friendly modes of transport viable?

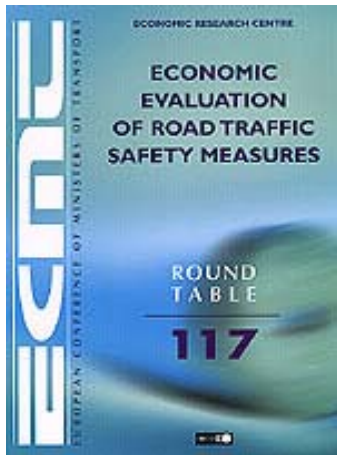
The environmental performance of waste transport can be established only within the framework of an overall approach which incorporates all waste treatment routes. We must indeed be wary of seemingly good ideas such as "waste transport must be restricted" or "recycling is the best solution". The closure of landfills or reprocessing could well lead to a large increase in waste transport.

The Round Table picks up on these issues and uses the cases of different countries to examine, in turn, developments in the waste transport sector and the statistical problems encountered in trying to understand them, the regulations applicable to the modes of transport used and their environmental performance, focusing closely on the difficulties created by the current modal split in this sector.

(75 2001 131 P) ISBN 92-821-1364-7, November 2001, 188 pages.

ROUND TABLE 117

Economic Evaluation of Road Traffic Safety Measures



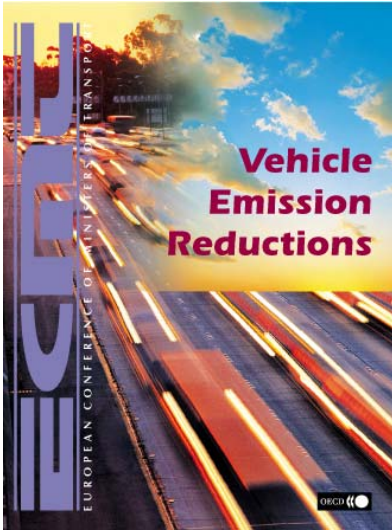
In economic appraisals of road safety measures, determining which method to use for valuation is critical. Of the two main methods open to us, one accurately measures a non-relevant concept (the human capital method), while the other measures the correct parameter, but not very accurately (the willingness-to-pay method). The Round Table examined the many complementary aspects of the two and found that what is needed, above all, are practical guides for each method.

The Round Table noted that governments should take charge of safety with the same forcefulness whatever the mode of transport. It also found that spending on road safety was generally adequate, but that the money was often not 'wisely' spent. One of the more unconventional proposals put forward by this Round Table was that difficulties in producing major changes in driver behaviour signalled that more attention should be paid to educational measures and infrastructure investment.

This publication reviews road safety policies and their economic evaluation. At a time when the authorities in many countries are beginning to set still more ambitious targets for those policies, the Round Table highlights the need for measures that are effective over the long term and economically efficient.

(75 2001 141 P) ISBN 92-821-1365-5, December 2001, 176 pages.

Vehicle Emission Reductions

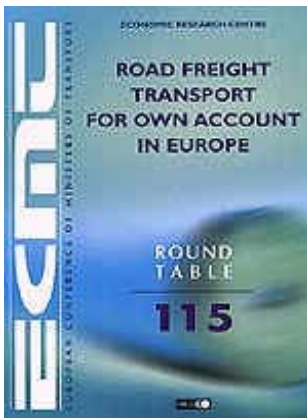


This report reviews vehicle emissions standards in Europe, Japan and the United States, providing the reader with valuable comparisons. It also examines incentives for sulphur free fuels - which can contribute to reducing both conventional air emissions and carbon dioxide. It describes emissions control technologies and the impact of emissions on health and the environment and assesses the adequacy of emissions limits for new passenger cars and heavy duty diesel engines.

(75 2001 101 P) ISBN 92-821-1363-9, August 2001, 128 pages.

ROUND TABLE 115

Road Freight Transport for Own Account in Europe

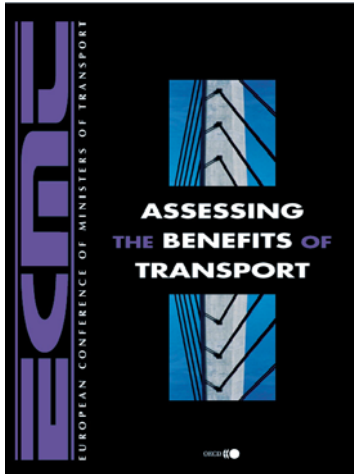


Road freight transport for own account represents a major share of inland transport in Europe and, depending on the country concerned, accounts for two to five times the tonnage carried by rail. Despite its importance, however, own account transport tends to be overlooked since it is not regarded as a logistics activity, whereas it is, in fact, a vital transport function that is changing radically as firms increasingly outsource their distribution activities to commercial hauliers.

The scale of road freight transport for own account, the impact of regulatory changes and the future of the sector are the themes addressed in the introductory reports and the experts' discussions outlined in this publication.

(75 2001 081 P) ISBN 92-821-1361-2, May 2001, 136 pages.

Assessing the Benefits of Transport



This book discusses the full economic benefits - and costs - of transport infrastructure and explores ways to make good estimates of the full impact of planned investments on regional and national economies. It argues for proper account to be taken of all relevant economic weaknesses -- those the project is designed to address such as local monopoly pricing, those associated with use of the infrastructure such as environmental externalities, and possible unintended consequences such as impacts on local labour markets. Care must also be taken to verify that net benefits are likely to accrue to those that the project was intended to benefit.

Building on recent groundbreaking work in the United Kingdom this publication suggests ways to improve traditional cost-benefit assessments, overcoming reservations that have inhibited the use of CBA in many countries.

The main report is completed with examinations of transport project assessment approaches in France, Germany, the United Kingdom and across Europe together with a discussion of an approach to determining optimal levels of investment in transport infrastructure for maximising socio-economic welfare.

(75 2001 091 P) ISBN 92-821-1362-0, April 2001, 216 pages.

ROUND TABLE 114

Regular Interurban Coach Services in Europe



Although deregulation is well under way in the transport sector, regular coach services are still largely regulated. Governments see them as potentially competing with rail transport services. However, in countries that have had some experience with deregulation the outcome has clearly been positive (except for local short-distance services).

The Round Table began with a review of regular interurban coach services based on case studies in countries which had adopted an original approach. This report shows the industry in a totally new light. One of its main findings is that there is a specific market for customers that have no other means of transport. Opening up this market would benefit the most economically disadvantaged sectors of the population. But that is not the only lesson to be learned from this Round Table.

(75 2001 031 P) ISBN 92-821-1262-4, March 2001, 152 pages.

Short Sea Shipping in Europe

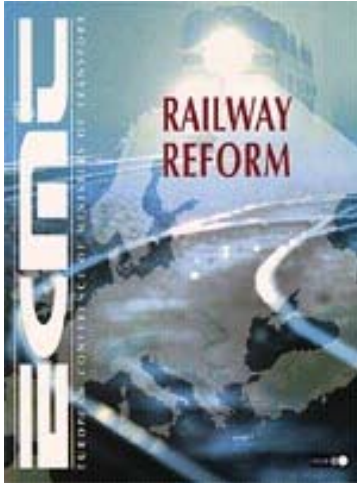


For some years now, short sea shipping (SSS) has benefited from a number of government initiatives aimed at promoting its development. The aim has been to promote a more balanced modal split in transport in Europe while also reducing the impact of transport on the environment, ensuring greater European cohesion and promoting a sustainable transport system.

Up to now, SSS has aroused interest at policy level mainly as an alternative to road transport, the predominant mode in Europe. Yet, is SSS only an alternative to road transport? Can it be seen as a separate component of an integrated transport network in its own right? This book shows what role SSS can play in the context of modal complementarity and what challenges European policy makers will be presented with.

(75 2001 051 P) ISBN 92-821-1269-1, February 2001, 76 pages.

Railway Reform

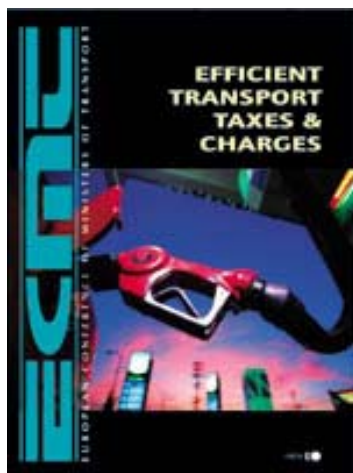


This report examines the form regulation should take in rail freight markets to promote efficiency in railways and the wider economy. It analyses issues of monopoly, scale economies, competition, mergers, ownership and the structure of the rail industry. Experience in North America, Australia, Japan, the European Union and countries from eastern and western Europe is reviewed.

The need for regulation differs by market and, together with political constraints, this means that regulatory models can not be transferred wholesale from one continent to another. However, each region provides important lessons for reforms currently under consideration in all ECMT and OECD countries.

(75 2001 011 P) ISBN 92-821-1272-1, January 2001, 144 pages.

Efficient Transport Taxes & Charges



How do taxes and charges for transport in, for example, France compare with those in Germany? Do hauliers in one country pay more than in the other, and what impact does this have on the profitability of haulage in each country? Is the impact of an increase in tax on diesel the same in each country or are differences in the taxation of labour more significant? Do these differences distort the international haulage market?

This book provides a framework for international comparisons and discusses the economic principles for efficient systems of taxation. The work provides a basis for addressing the questions "what is the right level for transport taxes" and "what kinds of charges should be used".

(75 2000 181 P) ISBN 92-821-1270-5, January 2001, 90 pages.

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(75 2002 01 1 P) ISBN 92-821-1368-X – No. 52385 2002