



European
Automobile
Manufacturers
Association

ACEA Paper on
**Sustainable Urban
Mobility**

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EXECUTIVE SUMMARY

Efficient transport and mobility, based on a balanced mix of public and private transport depending on the characteristics of each city, is the backbone of **cities growth and competitiveness**. Trucks and vans deliver virtually all goods transported into cities and cars and buses are responsible for an important part of peoples' cities' journeys. The challenges of urbanisation open up for new opportunities regarding innovative technologies and business ideas which will bring growth and prosperity. Urbanisation means a need for intelligent new transportation concepts. Our industry is committed to continuing to shape future urban mobility and transport in a sustainable manner.

Sustainability has three pillars: economy, society and environment. Whereas environmental issues are very high on the urban mobility agendas, the criticality of transport to urban social and economic structure often has a less relevant position in the discussion. **All three aspects of urban sustainability must be treated with equal importance** and cannot possibly be overlooked at a time when public funding is scarce.

The future will bring a transportation landscape in which pedestrian, bicycle, private car, freight, rail and bus traffic will be woven into a **connected network**, saving time and resources, producing lower emissions and congestion, and promoting efficient land use and improved safety.

The European automobile industry's **investment in innovation** keeps it ahead of global competition. It is committed to maintaining its leadership in sustainable **low carbon propulsion, integrated vehicle safety and vehicle connectivity**. It is also committed to ensuring **affordability** for consumers and transport operators. Thanks to these continuous investments, European manufacturers are world leaders in innovative, increasingly diverse and adapted products and services for urban environments.

Preserving **technological neutrality** is key to supporting innovation. Knowing that technological developments are by definition not completely predictable, European automobile manufacturers believe that at this point **none of the technology options should be discarded**, and that no "winners" should be prematurely selected. Technological progress made by using one technology sometimes reduces the progress made in another. This reduces the potential for overall technological progress in the long run.

European automobile manufacturers have **always promoted an integrated approach to further improving cities road safety, environment and economic performance** rather than focusing on vehicle technology alone. Some of the lowest cost opportunities for emission reductions in transport have not been exploited so far: better use of CO₂-based taxation for vehicles, support for eco-driving, better road infrastructure, better use of tyres and the optimisation of freight logistics are just some examples. As far as safety is concerned, the continuous improvements to vehicle passive and active safety have resulted in an impressive decline in road casualties. Further reduction, however, requires not only even safer vehicles but also safer urban infrastructure, improved driver skills and behaviour, better enforcement of existing legislation and the interaction and networking between all of them.

The environmental and safety benefits from new technologies will increase as new vehicles progressively replace old vehicles on the streets. The European automobile manufacturers stress the fact that the **renewal of the current vehicle fleet** will contribute more significantly to the reduction of emission levels and safety than the prescription of new technology.

Urban infrastructure design is sometimes of poor quality leading to conflicting interfaces between motor vehicles and other road users. There is no doubt that **better engineering can improve urban road users' conditions** by making urban infrastructure safer, more convenient and more complete.

Connected vehicles, ITS and infrastructure can positively respond to the mobility challenges faced by cities: accessibility, congestion, energy efficiency, emissions and safety. However, connected solutions require that a supporting infrastructure is built and that the connected vehicle-related services are actually delivered. Cities should become part of this "eco-system" of new connected vehicles.

Many urban mobility **measures** exist that aim at balancing supply and demand, and they are implemented all over the world. Their cost and effectiveness depends on a case by case basis. In many cases, **simple solutions can be applied** to a problem without resort to complicated and expensive measures. It is invariably the case that these should be tried first before more complex solutions are invoked.

Cities need quality and effective **public transport systems** that can respond to the needs for increased mobility of businesses and citizens. These transport systems need to be **integrated and combining train, metro, tramway, the bus and cars**. Further support to pilot projects on integration private-public transport should be promoted. New concepts need to be developed that include **flexibility, quality, efficiency and affordability**.

Passenger journeys, logistics and freight delivery are becoming increasingly complex in the post-industrial city as customer demands increase and price constraints bite more deeply. Local authorities have sought to respond to these changes with an array of mainly **un-harmonised access restriction schemes**, which are increasingly creating difficulties for citizens and for both local and international business. Measures should be reassessed to ensure maximum harmonisation, **simplicity, stability, integration and acceptability**. They have to be based on **objective criteria, be fair and justified**. In line with the principle of technological neutrality, compliance with existing emissions' standards should be the only criteria for Low Emission Zones (LEZs).

The **delivery and collection of goods in urban areas**, especially in cities within old centres, have a major impact on the economic power, quality of life, accessibility and attractiveness of the city. Changes in consumer demands result in changes in types of goods demanded, their quantitative and qualitative distribution and the organisation of deliveries. A better compliance with **parking rules, adapted infrastructure** and expanding delivery **time slots** contribute to optimise urban freight distribution. New solutions for urban freight distribution should be looked at.

KEY RECOMMENDATIONS

1. Acknowledge that efficient mobility and transport is a fundamental requirement of cities: policies should aim at **improving traffic fluidity** rather than at restricting it
2. Ensure that all proposed **policy initiatives are mode neutral, cost-effective and coherent** with other targets
3. **Implement and promote technologically neutral policies** in order to avoid market fragmentation and misallocations of resources; none of the technical options should be discarded in cities as this reduces the potential for overall technological progress
4. **Promote an integrated approach involving all stakeholders** (local governments, local business community, citizens, public transport providers, automotive industry) for a safer, cleaner and more efficient mobility
5. **Develop new interconnections with other modes, integrated with other public modes and innovative public transport concepts** that include flexibility, quality, efficiency and affordability
6. **Provide supportive local policy framework and private-public partnerships for companies** to launch innovative business models and new urban mobility technologies
7. Evaluate all the existing solutions – including the many simple, inexpensive ones – for **improving urban safety and environment**. Prioritise the most cost-effective
8. Encourage measures that **promote optimised vehicle use, including car-sharing**
9. **Encourage fleet renewal** for cleaner and safer vehicles while maintaining their affordability
10. **Reassess existing Access Restriction Schemes (ARS)** to ensure they are fair and justified and are based on maximum harmonisation, simplicity, stability, integration and acceptability
11. **Use the vehicle emissions standards in force as a basic criterion** for granting access or determining the size of fees where Low Emission Zones (LEZs) are in place
12. **Promote ITS** through harmonisation of systems and development of infrastructure
13. Define **common standards** to facilitate the introduction of new technologies and services

The rise of the modern city is built on mobility. Efficient transport and mobility, based on a balanced mix of public and private transport – depending on the characteristics of each city – is the backbone of cities growth and competitiveness: there simply would be no urban prosperity without transport.

CITIES: GENERATING WEALTH AND PROSPERITY

The economic and social role of urban areas is vital, as cities generate 85 % of the European Union's GDP. Globally, cities account for around 80% of global economic output. Some 150 of the world's largest metropolitan economies produce 41% of global GDP with only 14% of the global population.

An urban life allows citizens –both residents and commuters- for a better access to work, education and healthcare, and provides unique economic, cultural and social opportunities. That is probably why more than 74% of the EU population live in cities. Worldwide, the UN predicts that over 80 % of the population will live in cities and urban suburbs by 2050. Whereas mega-cities will continue to grow, a significant proportion of total mobility, including passenger and freight movements, will be concentrated in cities of less than 500.000 inhabitants.

The European automobile industry is a global leader in facilitating access to cities by supporting innovation in urban freight transport and the mobility of people through ongoing investments. Trucks and vans deliver virtually all goods transported into cities and cars and buses are responsible for an important part of peoples' urban journeys. The solutions the industry provides contribute to quality of life and economic growth. The industry is committed to continuing to shape future urban mobility and transport in a sustainable manner.

TOWARDS A SUSTAINABLE URBAN TRANSPORT

Sustainability has three pillars: economy, society and environment. Whereas environmental issues are very high on the urban mobility agendas, the criticality of transport to urban social and economic structure often has a less relevant position in the discussion. But all three aspects of urban sustainability must be treated with equal importance. It is the only way to treat the complex interrelationships and trade-offs that are involved in urban mobility. It is possible to devise measures to restrict traffic but one should not forget the implications for retailers and residents when choice declines and turnover falls.

Similarly, public transport, including bus transport, has a crucial role to play in urban transport and

it has to be designed in a way that matches the transport and mobility needs of citizens, which includes multimodality, choice of the most efficient mode for each mission (co-modality) and affordability. An efficient and sustainable mobility based on a balanced mix of integrated public and private transport is a prerequisite for urban and regional growth.

IDENTIFYING THE MEGATRENDS ...

Understanding the general drivers of urbanisation and their impact on accessibility and mobility is very important for the European automobile manufacturers. Megatrends are long-term changes that affect governments, societies and economies permanently over a long period of time. The driving forces behind megatrends are unique and complex. From an industry perspective, megatrends drive other trends in terms of sales, growth and innovation.



As much as driving forces behind megatrends are unique, each city is also unique. As unique is the behaviour of each transport user and his or her future needs and requirements. There are however some general trends that urban mobility stakeholders need to consider.

These include a population growth and increasing urbanisation, especially in emerging economies and to a lesser extent in developed countries, with an expected increased demand for passenger mobility and freight transport. In many parts of the world, population is ageing and car drivers are becoming more diverse in their needs. Cities have to accommodate this diversity in mobility needs. Also urban freight delivery systems have to adapt to this diversity. In mature economies, personally-owned transport will tend to be increasingly challenged. Also the environmental challenges are rapidly increasing and require enhanced innovation for low emission vehicles. Last but not least, new technologies are providing a substitute for physical mobility (leisure time spent differently, work hours more flexible, door to door goods delivery...). All these trends will shape the future mobility scenarios in cities.

...THAT WILL INFLUENCE FUTURE URBAN MOBILITY

A future in which new vehicles will be adapted to updated needs and requirements (infrastructures, technologies, dimensions, connectivity), both for freight and passenger transport. Passenger mobility will be safer, cleaner and affordable. A future where freight transport will need to cope with an increased demand for goods transport following changes in consumption habits that imply more and more frequent deliveries. Freight transport will have to adapt to new logistics trends and systems, based on a supply chain combining long haul and “last mile” elements, with logistics platforms on multimodal corridors, managed by ITS and organised for door-to-door deliveries.

Bus and rail transport will have to face the capacity and financial challenges that an increased demand and supply of services will bring with. The urban landscape will have to be designed for the next generation of collective transport, including bus transport corridor concepts based on intermodality and properly managed interoperability with full integration between cars, rail, bus and non-motorised mobility.

The future will bring a transportation landscape in which pedestrian, bicycle, private car, freight, rail bus traffic will be woven into a connected network to save time and resources, lower emissions and congestion, promote efficient land use and improve safety.

THE CONTRIBUTION OF THE AUTOMOBILE INDUSTRY

Innovation

The European automobile industry’s investment in innovation keeps it ahead of global competition. It is committed to maintaining its leadership in sustainable low carbon propulsion, integrated vehicle safety and vehicle connectivity. It is also committed to ensuring affordability for consumers and transport operators, and the competitiveness of manufacturing. R&D investment by the European automobile manufacturers meets consumer demands for more product variety adapted to mobility and transport needs in cities (vehicle design, technologies, IT applications, business models) for better performance, improved safety, reduced environmental impacts. Regulations based on cost-efficiency can also be a positive driver for R&D.

Thanks to these continuous investments, European manufacturers are world leaders in innovative, increasingly diverse and adapted products and services for urban environments.

Adapted Technologies

The European automobile manufacturers are developing and investing in many technologies at the same time. Most likely, the future will see a number of technological combinations entering the market, tailored for different uses, locations or circumstances and consumer preference.

It is possible that different solutions will prove to be appropriate for different segments of road transport such as heavy and light goods vehicles, buses and passenger cars as their use in cities is very different.

Alternative fuels are a further part in the jigsaw puzzle of sustainable urban mobility. Automobile manufacturers support a widely available, diverse range of low carbon and renewable energy sources and technologies that include biofuels, CNG, LPG, LNG, ethanol, clean diesel, hybrids, electricity and hydrogen (e.g. fuel cell vehicles). The energy sector needs to contribute by providing low carbon alternative fuels and energies as well as a refuelling and recharging infrastructure.

Alternative powertrains will make a useful and important contribution towards ensuring sustainable urban mobility and meeting the mobility and transport demands of the future. Electrification of the mobility and transport system is an essential part of the future urban mobility. But there is no silver bullet. Alternative powertrains bring many benefits for towns and cities, such as very low (or zero) tailpipe emissions. Additional mobility solutions might bring additional benefits. However the freedom for the consumers to select any technology should be guaranteed.

Realistic progress towards the electrification and other alternative powertrains of the vehicle is essential; the internal combustion engine using conventional fuels will remain the dominant source of power for at least the coming decade. Differences among member states, lack of implementing standardisation and insufficient investment in charging and refuelling infrastructure are hurdles to higher market uptake and create a high level of uncertainty for the industry. The automobile industry, expects it in the range of 2 to 8% of newly registered vehicles by the next decade for passenger cars.

New technologies generally first come in low volume and at a significant cost premium, which needs to be off-set by a positive public policy so that vehicles remain affordable and mobility and transport is guaranteed for people and goods.

Connectivity of vehicles and infrastructure

Connected vehicles and infrastructure can contribute to solving the mobility challenges faced by cities: congestion, energy efficiency, emissions and safety. They communicate wirelessly with each

other and with traffic-management systems and -for cars– find available parking spots and loading areas for commercial vehicles. Some parts of the transformation are already in place. Many new vehicles are already fitted with equipment that allows reducing congestion and emissions, improving efficiency of the transport system and safety.

In urban freight transport the importance of connectivity for increasing efficiency is essential, as it enables urban goods transport to respond to customer demands for just in time delivery by managing information and freight operations in an efficient manner.

However, connected solutions require that a supporting infrastructure is built and that the connected vehicle-related services are actually delivered, i.e. information on traffic requirements, remote access to vehicle data for road side assistance service providers, etc. Cities should become part of this “eco-system” of the new connected vehicles. So far, few cities are testing the potential benefits of connectivity, as implementation is often complex and many challenges need to be faced:

- enhancing cooperation or partnerships between public institutions and private actors
- creating political and public awareness and support
- evaluating costs and benefits, as well as the related regulatory or legal questions

Policy makers could use different means to support connectivity in cities, like for instance compiling inventories of applications for towns and cities, preparing good practice guides for developing connectivity deployment plans for cities, supporting the dissemination of good practise etc...

New business and mobility models and integration

Urban access mobility is a key challenge, particularly given the expected increase in transport demand and the extension of traditional mobility systems. Shared mobility is a clear trend. In addition to bus public transport, more vehicles are being shared in cities, both via peer-to-peer (P2P) and business to consumer (B2C) models, but many of those concepts have not yet managed to take off as providers are still testing different business models and in very diverging local contexts.

The majority of European cities are not equipped to cope with the mobility challenge ahead and the main cause is a lack of system-level innovation and collaboration. Implementation of new mobility concepts (i.e. shared mobility) is sometimes challenging due to the involvement of many and varied stakeholders.

In the near future, innovative mobility services will be driven by improvements in the integration of

vehicles into the whole transport system. There is a clear customer need and there are emerging business models (i.e. car-sharing, parking-sharing...). In order to make it happen it needs vision, creativity, courage, and entrepreneurship – as well as a certain level of standardisation – to turn the mobility paradigm towards full integration.

THE SUSTAINABLE CITY

The uniqueness of each city

Each city has developed its own unique spatial structure and transport system to provide access to people and goods. Urban areas around the world differ very much as they reflect the geographical, historical, political, economic and social diversity of the region they belong to. The transport and mobility needs of these diverse urban environments are equally different and what is important for expanding cities in emerging economies can be of little relevance in mature cities in developed economies.

Urban transport is organised differently in every country, with different allocations of policy responsibility, administrative structures and financial responsibilities. Concrete answers to urban transport questions are by the nature of this diversity, local.

One-size-fits-all solutions do not exist in urban mobility

One-size-fits-all solutions do not exist in urban mobility, but success factors for mobility solutions do, which includes having a vision that is led by the right people following a clear process. In such a **vision**, inclusion and participation are important targets for successful urban project programmes. This avoids the polarisation between the urban elite and those in low income areas. As far as the **people** factor is concerned, there are always inspiring leaders behind successful urban mobility initiatives. Citizens should be empowered through active participation to create a sense of ownership and commitment, and it is important to foster participative environments that facilitate and stimulate business, the public sector and citizens to contribute. This is the **process** success factor that facilitates coordination of ideas, projects, stakeholders and beneficiaries.

Supply and demand measures

Many urban mobility measures exist that aim at balancing supply and demand, and they are

implemented all over the world. Their cost and effectiveness vary on a case by case basis.

In many cases, simple solutions can be applied to a problem without resort to complicated and expensive measures. It is invariably the case that these should be tried first before more complex solutions are invoked. Such solutions include:

- introducing and enforcing parking policies for all types of vehicles (cars, trucks buses, bikes and motorcycles) and traffic calming measures to optimise the use of streets
- steering mobility demand through financial incentives and better synchronised supply and demand
- developing competitive position of public transport, including bus transport, by focussing on customer and quality
- deploying smart traffic management systems including vehicle routing and tracking and optimising traffic flows through the introduction of traffic light synchronisation
- encouraging integrated multimodal transport (smart tickets, multi-modal travel, travel information and routing, sharing)
- redesigning networks including traffic intersections and signs to balance throughput on the basis of sound data
- co-ordinating road works so that utilities and other organisations carry out necessary work at the same time and with minimum disruption
- use of multiple function lanes allowing different activity at different times of day (bus lanes, general traffic lanes, freight lines, loading/unloading areas for commercial vehicles or residents' parking)
- implementing park-and-ride schemes that will allow travelling to urban centres by public transport, linked with large car parks on the outskirts and rail stations
- redesigning urbanisation schemes to address long term traffic flows

Supporting innovation: preserving technological-neutrality

Knowing that technological developments are by definition not completely predictable, European automobile manufacturers believe that at this point none of the options should be discarded, and

that no “winners” should be prematurely selected. Technological progress made by using one technology sometimes reduces the progress made with another one. This reduces the potential for overall technological progress.

A supportive local policy framework is needed for companies to innovate and successfully launch the new urban mobility technologies. A sufficient infrastructure is indispensable for new technologies as well, for instance when new fuels are required. Public charging or refuelling facilities, as much as privately-owned stations at home and office, require further development.

Adopting an integrated approach to further improving cities road safety, environment and economic performance

Average CO₂ from new passenger cars has come down by close to 20% in 13 years, and fuel consumption from today’s heavy duty vehicles is down at least 60% since 1965, both thanks primarily to technical measures. In order to continue making significant CO₂ reductions, it will be imperative to address all CO₂ reduction potentials using an integrated approach, rather than focusing on vehicle technology alone. Some of the lowest cost opportunities for emission reductions in transport have not been exploited so far: better use of CO₂-based taxation for vehicles, support for eco-driving, better road infrastructure, better use of tyres and the optimisation of freight logistics are just some examples

European automobile manufacturers have always promoted the integrated approach to road safety as well as the most efficient and sustainable way to achieve positive results. In spite of a further strong increase in road traffic, the continuous improvements to vehicle passive and active safety have resulted in an impressive decline in road casualties. Further reduction, however, requires an integrated approach. This requires not only even safer vehicles but also safer urban infrastructure, improved driver skill and behaviour, better enforcement of existing legislation and the interaction and networking between all of them.

Increased traffic difficulties in some cities have contributed to the success of two-wheelers and non-motorised transport, which are recognised for their flexibility. However, their growing share in accidents and their interaction with other road users calls for growing attention in terms of visibility, driver support systems and protection.

The environmental and safety benefits from new technologies will increase as new vehicles progressively replace old vehicles on the streets. The European automobile manufacturers stress

the fact that the renewal of the current vehicle fleet will contribute more significantly to the reduction of emission levels and safety than the prescription of new technology. Imposing costly requirements on new vehicles is not necessarily the right way forward. The affordability of new vehicles is at stake.

Urban infrastructure design is sometimes of poor quality, leading to conflicting interfaces between motor vehicles and other road users. There is no doubt that better engineering can improve urban road users' conditions by making urban infrastructure safer, more convenient and more complete. Examples of road safety engineering techniques for improving the safety of vulnerable road users are the provision of safer routes through segregation, separation and physical traffic-calming measures, such as roundabouts, road narrowing and road humps.

Access Restriction Schemes (ARS): fair, justified and based on objective criteria

The structure of cities has changed substantially and these changes are being reflected in the transportation of passengers and freight delivery systems just as much as in any other activity.

In the case of transport these changes are not just local. They are in fact part of international and global transformation in logistics and transport networks. Time factors are becoming increasingly important in the supply chain. Passenger journeys, logistics and freight delivery are becoming increasingly complex in the post-industrial city as customer demands increase and price constraints bite more deeply.

Local authorities have sought to respond to these changes with an array of mainly un-harmonised measures, which are increasingly creating difficulties for citizens and for both local and international business. As incentives are always more effective than restrictions, measures should be reassessed to ensure maximum harmonisation, simplicity, stability, integration and acceptability. They have to be based on objective criteria, be fair and justified.

It is rarely the case that any of these restrictive measures' types can guarantee acceptability and fulfil their objectives effectively. Similarly none of the restriction methods can be condemned outright as wholly unacceptable or ineffective. It very much depends on the detail of the scheme and how it is put into practice.

The above mentioned objective criteria, fairness and justification imply that:

- the measure is not used to avoid necessary and appropriate infrastructure improvement or provision

- the measure does not increase the overall burden of taxation
- detailed information about the working of the scheme is widely and easily available
- safe, secure, clean, acceptably priced alternatives are provided and access to mobility is maintained
- no undue burden is placed on those living, working or doing business in the area
- the scheme is clear, transparent and easy to use and understand
- the measure is technologically neutral and not discriminatory

There are five main types of ARS: licences or permits, vehicle masses and dimensions, vehicle emissions, time restrictions (permanent and part time) and charging pricing mechanisms. Low Emission Zones (LEZs) are one type of restriction and it is often based on vehicle emissions' type. In Europe, current Euro standards classify vehicles depending on their environmental performance. A large proportion of existing LEZs use the Euro standards as a basic criterion for granting access or determining the size of the fee. In order to respect the neutral approach to technology, local authorities should take them into account when devising LEZs. Investments made by consumers and by operators should be protected and cities should refrain from using LEZs to exclude certain technologies from accessing cities. The only valid criteria should be the vehicles' compliance with existing emissions' standards. Since technology implemented in vehicles brings environmental benefits once the new vehicles actually replace the older ones, policies encouraging fleet renewal need to be prioritised.

URBAN FREIGHT TRANSPORT

The delivery and collection of goods in urban areas, especially in cities within old centres, has a major impact on the economic power, quality of life, accessibility and attractiveness of the city. While traffic and its impacts in urban areas has received attention in recent years, much of this attention – not always with successfully – has been directed at public passenger transport and private car traffic, and relatively little attention has been paid to urban freight transport.

New consumer demands

Current socio-economic trends include the growth in older population and the use of new technologies and e-commerce. Changes in societal composition and habits lead to changes in consumer behaviour, resulting in changes in markets. These affect the types of goods demanded,

the quantitative and qualitative distribution of goods and the organisation of deliveries. Customers increasingly expect products focused on their demands combined with flexible delivery systems.

Sufficient and adapted urban freight transport infrastructure

Freight vehicles in many cities encounter the problem of not having the infrastructure necessary to function properly. Accessibility and congestion problems encountered by urban freight transport are often caused by insufficient urban freight transport infrastructure.

As a result of growing restrictive parking policies, there is a serious lack of parking places in general and in particular of places dedicated for freight vehicles that can be used for loading or unloading. Even where such places exist, other vehicles often occupy them, since restrictions allowing only freight vehicles to use such places are rarely enforced. This results in freight vehicles being forced to double-park on roads when they stop for delivery, aggravating congestion, causing disruption of traffic and safety problems.

Improving freight traffic flows with stable and harmonised rules

Access restrictions on freight vehicles have been widely implemented in various countries. These restrictions aim to maintain the living environment in certain areas and restrict movements of freight vehicles in city centres according to time, size, technology, weight of vehicles etc.... As a result, operators of goods transport are forced to adjust their logistic systems to deliver goods to such areas within the imposed timeframes and/or to use smaller vehicles: such restrictions differ among different municipalities and are often not sufficiently explained to drivers.

These factors cause grave difficulties for operators trying to organise nation-wide supply chains while responding to increasingly stringent customer demands for frequent, reliable, just-in-time deliveries. Regulations need to be relatively harmonised, clear and viable. Such a harmonisation can also facilitate the consolidation of freight between shippers and transporters.

Innovative urban freight distribution systems

New solutions for urban freight distribution should be looked at. Urban consolidation centres have to be further promoted and alternative systems for traditional freight deliveries should be further considered and supported. They are usually cost-effective measures that have a positive impact both from an economic and environmental point of view.

URBAN PUBLIC TRANSPORT

Cities need quality and effective public transport systems that can respond to the needs for increased mobility of businesses and citizens. These transport systems need to be integrated and combining train, metro, tramway and the bus. Further support to pilot projects on integration private-public transport should be promoted.

Just as there are demands for innovative organised goods transport in cities, there are demands for innovative organised passenger transport, and public transport must be focused and further developed. New concepts need to be developed that include flexibility, quality, efficiency and affordability.

Bus manufacturers have developed solutions that contribute to a large extent to the growing success of public transport. BRT schemes are good example of such new concepts. However, in the scope of sustainable mobility, it is important to recall that each mode of transport needs to be carried out in an effective and complementary way and that each mode has to bear its own costs.



European
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ABOUT ACEA

ACEA's members are BMW Group, DAF Trucks, Daimler, Fiat Chrysler Automobiles (FCA), Ford of Europe, Hyundai Motor Europe, IVECO, Jaguar Land Rover, Opel Group, PSA Peugeot Citroën, Renault Group, Toyota Motor Europe, Volkswagen Group, Volvo Cars, Volvo Group. More information can be found on www.acea.be.

ABOUT THE EU AUTOMOBILE INDUSTRY

- Some 12.7 million people - or 5.8% of the EU employed population - work in the sector.
- The 3.1 million jobs in automotive manufacturing represent 10.3% of EU's manufacturing employment.
- Motor vehicles account for €388.8 billion in tax contribution in the EU15.
- The sector is also a key driver of knowledge and innovation, representing Europe's largest private contributor to R&D, with €32.3 billion invested annually.

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