

## **MEDIUM-SIZED PUBLIC-TRANSPORT-CITY IN THE FUTURE**

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Public transport in Finland is at its most competitive in the Helsinki Metropolitan Area. In other cities, its share of motor vehicle journeys is much smaller. New product concepts and administrative structures are called for.

In the Helsinki region, 38 percent of motor vehicle journeys are made on public transport while the figure in other large cities (pop. > 120,000) is sixteen percent and only 9–14 percent in medium-sized cities (pop. 50,000–120,000). How might public transport services be kept available in medium-sized cities against a backdrop of increasingly fragmented urban structure and a growing rate of motorisation?

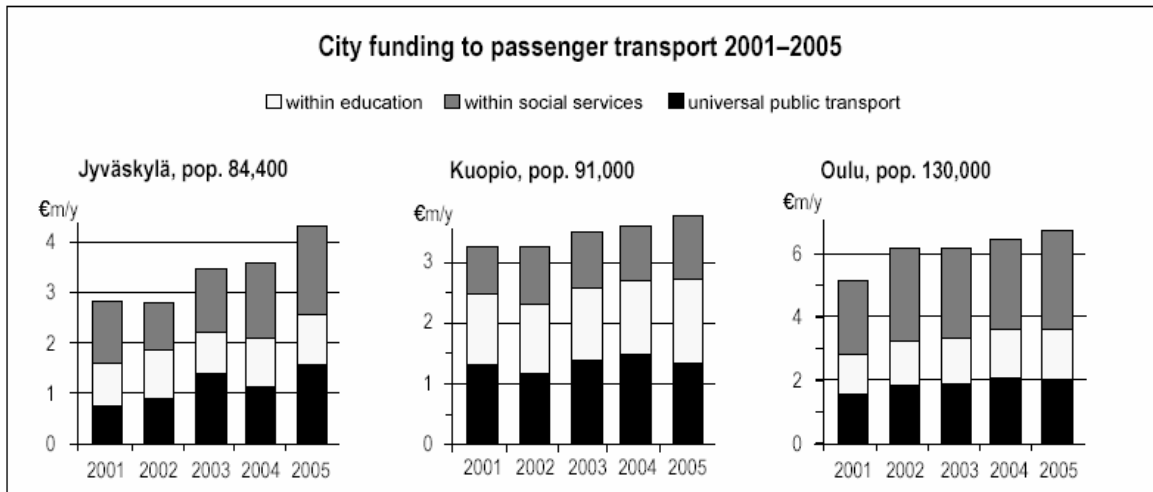
At the same time, the emphasis in peoples' attitudes is shifting more and more towards individualistic values. We need new product concepts that meet popular demand, but above all we need to analyse whether the existing administrative structures of the public transport system provide an adequate foundation for evolution so that the requisite changes can be made.

### **RESTRUCTURING IS REQUIRED**

Finland is currently overhauling its municipal structure to ensure that municipal services are provided in units of sufficient structural and financial strength. At the same time, a reform of national passenger transport legislation is being prepared on the basis of the public service contracts directive enacted by the EU Commission. The reforms currently underway offer a unique opportunity to examine the underlying structures of the public transport system. The problem in the development of public transport in medium-sized urban regions is perceived to be the excessive fragmentation of the system's administration and funding. Transport is planned and operated by transport operators, who also shoulder part of the financial burden in organising public transport services. Public transport thoroughfares, stops and terminals are managed by cities and the Finnish Road Administration. Cities are under no obligation to organise universal public transport while a statutory obligation applies to the provision of transport within education and social services.

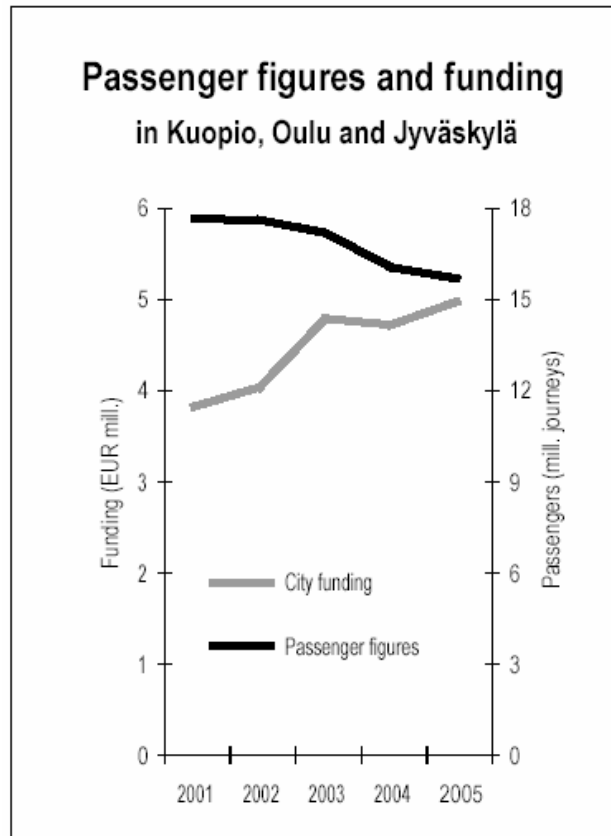
Passenger figures have seen a marked drop in medium-sized cities since the 1990s despite no substantial changes in the standard of service. The decrease in the years 2001–2005 has been 10–13 percent.

Public transport services are funded by cities and the State jointly. Most of the funding is allocated to subsidising the prices of tickets used by regular passengers on public transport. Transportation facilities to improve services to the ageing population and special groups are also purchased. The per capita figure of public funding to public transport comes to some 18 euros in medium-sized cities while in the HMA it is 170 euros and approximately 50–60 euros in other large cities.



**Figure 1: Development of passenger transport costs in the cities under review in 2001–2005. Source: State Provincial Offices, net, VAT incl.**

The cities under review – Oulu, Jyväskylä and Kuopio, population 84,000–130,000) spend more on statutory passenger transport to be provided separately than on universal public transport. Total funding has increased in the 2000s in the cities under review.



**Figure 2: Public transport services meet the mobility needs of the different groups of passengers.**

The fragmented operating environment hinders the preparation and implementation of public transport development plans. It has also resulted in only smallscale, individual and local improvements being implemented in the physical operating environment and services of public transport. Development guidelines with wider impacts are not laid down, as the individual parties in charge have neither the resources nor the power to take decisions concerning the wider whole.

A foundation better than the current system for developing public transport could be offered if a single responsible organisation were to be established in urban regions and charged with determining the service level of public transport, developing the supply of services and coordinating the funding of the entire region's passenger transport system. The comprehensive review of traffic and land use in the urban region's commuting area provides motivation for the development and utilisation of universal public transport. It would also ensure the more even-handed treatment of inhabitants in the region. A restructuring of funding so that all flows of money would be steered through a single responsible organisation to public transport and passenger transport alike would also improve the conditions for assessing the effectiveness of funding.

## **INTERACTION BETWEEN LAND USE AND PUBLIC TRANSPORT**

Growing medium-sized urban regions provide a viable passenger base for a functioning public transport system. The challenge lies in complementing the urban structure in a manner that allows the mobility and transport needs of new residents and functions to be efficiently met through public transport. As is the case in Kuopio, city planning must start out from the premise of expanding the "Walking and Transit Cities". The principle of distances to public

transport stops not exceeding 250 metres in areas of new development planned outside the Walking City, on the outskirts of the city, is observed in city planning. Mass transit cities can be planned in keeping with these principles if city planners, transport planners and public transport providers are able to work well together. Moreover, decision-makers and developers must have the will to concentrate development into units of sufficient size so as to ensure the front-loaded supply of good public transport services to residents in areas of new development. If the residents of new areas have time to grow accustomed to passenger car use because public transport is not yet available, changes in travel behaviour are much more difficult to effect at a later stage through improvements in public transport services. A heightened appreciation of environmental values is likely to require the future development of public transport. All alternatives for such development are costly ventures in a fragmented community structure, however.

## **THE VISION OF THE MASS TRANSIT CITY**

The mass transit city of the future is envisioned as a functioning urban region that offers its inhabitants attractive and reliable public transport services of a high standard as well as equal opportunities for mobility. A functioning public transport system strengthens the competitiveness of the urban region and of business. The car-free, urban lifestyle is held in the highest regard and offers an alternative to the hegemony of the car. The municipalities of the urban region as well as the operators in its various sectors engage in sustained cooperation towards the development of public transport.

The vision of the mass transit city consists of six separate visions depicting the various functions or perspectives yet the public transport system on the whole is clear and readily manageable. The use of public transport is facilitated by personalised information systems, accessible vehicles and pedestrian access, affordable fares and a user-friendly payment system. Transport companies provide the public transport services that consist of the traditional network of fixed-schedule routes complemented by demand-responsive public transport. The industry has attracted new operators whose services provide added value to travel.

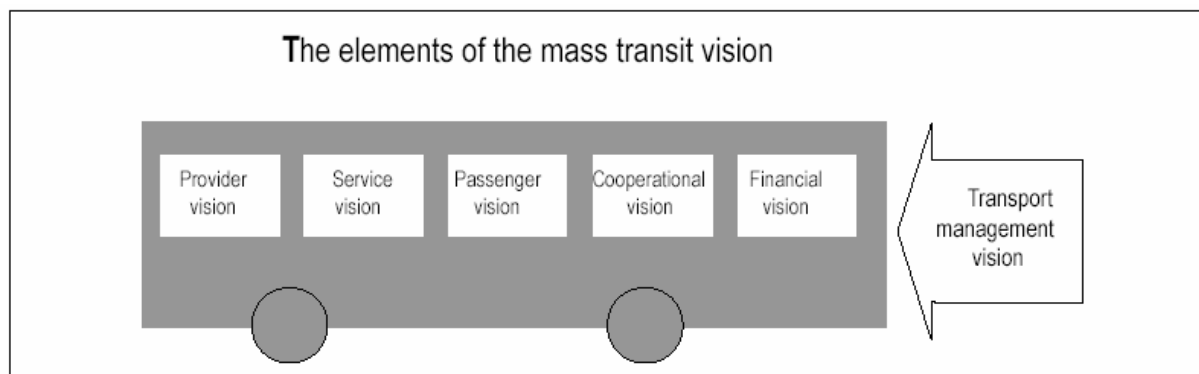
The vision of the mass transit city of the future can become a reality through the following policies:

- The national transport and environmental policy of sustainable development is made concrete by defining the objectives and actions for the State in public transport development.
- The public transport funding system is restructured.
- Alternative methods of organising the planning, development and administration of public transport are established in each urban region.
- The planning of public transport service levels, ticket and information systems and transport provision is managed by a new responsible organisation. Transport operators are in charge of transport planning.
- The vision and goals of public transport development and the integration of public transport and land use are decided as part of the development strategy for urban regions.
- Public transport effectiveness assessments are included in the land use and transport plans concerning the development of urban regions.

- The public transport development efforts undertaken in cities are continued in cooperation with the various actors as outlined in the urban region public transport strategy.
- A working and innovative operating environment should be arranged for the businesses providing transport services. The goal is for companies to focus on the cost-effective development and provision of transport services.
- The innovative development of public transport services also by parties other than traditional operators in the sector is made possible.

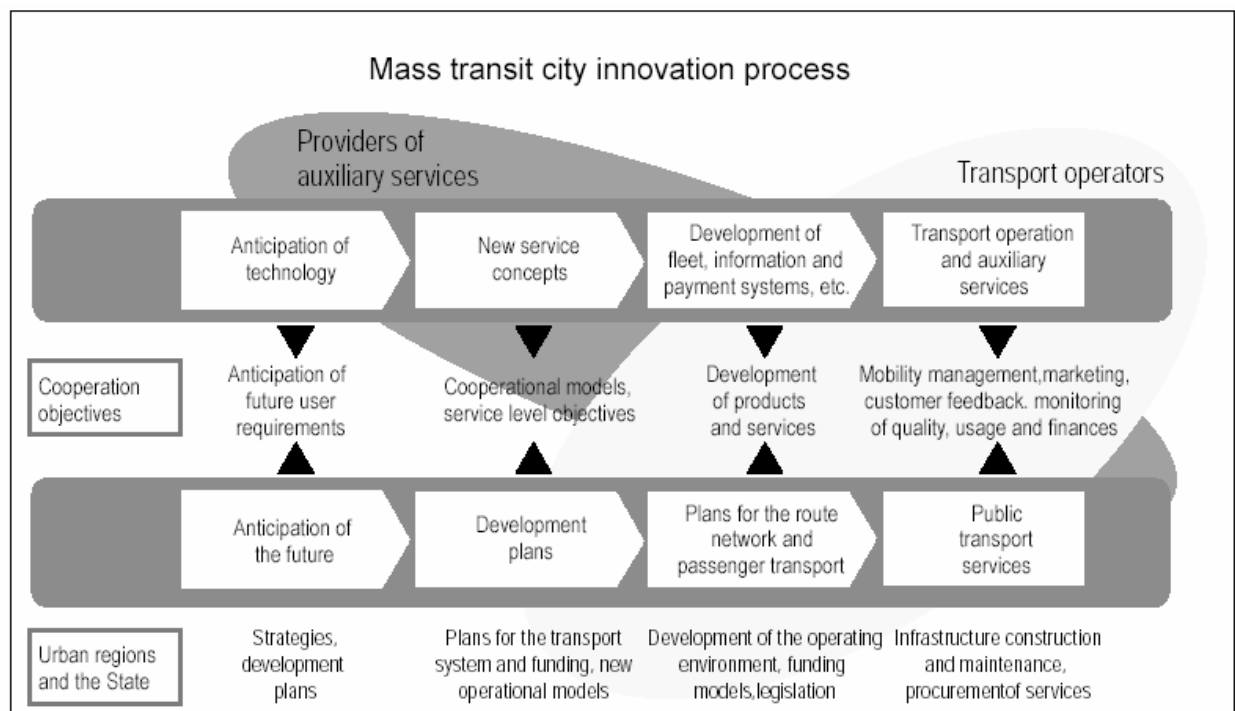
## THE INNOVATION PROCESS IN PUBLIC TRANSPORT DEVELOPMENT

The realisation of the vision may be depicted as an innovation process in which the various actors each play their respective significant roles. Public transport objectives are defined in the shared visions and strategies that are implemented in all activities in the urban region, from city planning to financial planning and urban development. An innovative operating environment should be created for the development of private sector services. This shared innovation process, where the objectives for cooperation between public and private sector have distinct roles, is illustrated in Figure 3. The process advances from ideas and plans based on user requirements and anticipation of technology through new product concepts to the deployment and monitoring of new services and modes of operation. Monitoring seeks to obtain information about e.g. matters relating to passenger approval of measures and effectiveness of development efforts.



**Figure 3: The elements of the mass transit city vision.**

The role of the State in the innovation process is to formulate the strategy and strategic intent for the development of the public transport system. The strategic intent may be grounded e.g. in goals aiming further sustainable development and retard climate change. Legislation concerning passenger transport should be amended so as to introduce sustained and transparent funding to public transport that also encourages its goal-oriented development. Legislative reform furthermore involves the development of new operational models and responsible organisations to organise, plan and develop public transport and the transport of passengers. The national principles serve as the basis for determining the standard of service of public transport in urban regions in keeping with the objectives of each region's urban policy and transportpolicy.



**Figure 4: Mass transit city innovation process**

The closer the process advances to passenger service, the more important the role played by transport operators and businesses providing auxiliary services. They are responsible for transport planning, the implementation of payment and information systems in public transport, transport operation and the development and provision of auxiliary services.

## CONCLUSIONS

In the mass transit city of the future, the car-free urban lifestyle is held in the highest regard. Residents, culture and tourism play the key roles in the development of mass transit cities, which gain further vitality from the interaction between city dwellers, art and business. A functional public transport system that meets the needs of residents forms the backbone of the entire urban region.

Will these visions remain a pipe dream or can they actually be made a part of everyday life in Finnish cities? If the existing system is not changed, the answer must be no. Development of the public transport system must be made a spearhead goal of transport policy in both national decision-making and decision-making in urban regions. New operational models must be introduced. A responsible organisation encompassing the entire urban region must be created to implement a consistent and attractive public transport system. The State and municipalities must allocate sufficient human and financial resources to the development and maintenance of a system responsible for passenger transport throughout the region. Competitive tendering models in transport must be exhaustively examined prior to transition to the new system, taking into consideration that the operational conditions and expertise of both transport organiser and transport operator are utilised in the best possible manner. In other words, visions can be turned into reality as long as there is a genuine desire and decision to change.

Once the new operational system has been established, it enhances our opportunities to build on public transport services to attract new passengers. Land use planning and planning of the network of public transport services must be concurrent. The planned public transport services

must be implemented in areas of new development in a front-loaded manner so that the number of new residents committed to passenger cars may be kept as low as possible. Attention to the maintenance of public transport services in existing housing districts also calls for cooperation with city planning. Changes in population structure must be met both through development of local services and functions and modification of public transport supply to correspond to demand and changing customer requirements.

Advances in ICT offer new opportunities to improve the competitiveness of public transport. We should aim for time spent on public transport not being perceived as “lost time” but rather time that may be put to use for work or relaxation with entertainment available on public transport. This constitutes a substantial advantage over the competing alternative of travel by passenger car. Advances in smart phone technology also facilitate the provision of up-to-date information on the availability of public transport services, provided that the technology is comprehensively deployed when developing the information system for all public transport. Mobile technologies could be exploited in the development of payment systems to generate new methods of payment and service packages combining public transport tickets and other services of interest to customers. Technological development also increases the number of actors in public transport and may expand the funding base, which shall be taken into account in the development of the new public transport system.

The ability to rely on a functioning public transport system fosters the competitiveness and availability of labour of industry in urban regions and improves the equality and security of residents in respect of mobility. The mass transit city saves urban space from passenger cars and allows it to be used for functions and environments that enhance the enjoyability of the city. Above all, the mass transit city exerts a positive influence when considering the tools available in urban development to reduce greenhouse gas emissions and retard climate change.

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