

FOCUS

A UITP POSITION PAPER

Developing public transport in low density areas through appropriate fare systems

Regional public transport covers all collective passenger transport services excluding long-distance intercity transport and public transport within cities and urban centres. Various interpretations are possible in this respect.

The boundaries are however flexible and depend upon differing prerequisites in individual countries. For example, in a dense small country, regional transport could be mixed with intercity or suburban transport. In large agglomerations, regional transport services usually end up intermingled with urban traffic, in particular in the case of rail services. Moreover, often 50% and more of road users in urban zones are from the region. This means there is a close correlation between traffic problems in built-up areas and those in the region.

This paper covers public transport in rural and low density areas which represents an important component of regional public transport. It aims at formulating recommendations on pricing and fare setting to ensure viable public transport in low density areas.

Specificity of public transport in low density areas

Regional public transport is generally operated in rural areas where population density is low. It is often characterized by lower and more heterogeneous demand; it serves fewer people dispersed over a larger area; and it is determined by peak patronage in the morning and in the evening. The operation of regional public transport in many countries is mainly focused on school transport, and is fairly irregular. It also increasingly tends to be demand-responsive. Within regional public transport, different levels of the transport network can be identified: connection between main and smaller cities, via straight lines; connection between villages and smaller cities; connection between the centre of a municipality with its outskirts and surrounding villages.



This is an official position of UITP, the International Association of Public Transport. UITP has over 2000 members in 80 countries throughout the world and represents the interests of key players in this sector. Its membership includes transport authorities, operators, both private and public, in all modes of collective passenger transport, and the industry. UITP addresses the economic, technical, organisation and management aspects of passenger transport, as well as, the development of policy for mobility and public transport world-wide.



If financing is not easy for public transport, it is an acute problem for regional public transport and more specifically in low density areas. Because the market available is sparse and demand is low, it is unlikely to be able to provide public transport, without the strong intervention and financial backing of the organising authorities. The limited number of passengers and the necessity to keep affordable tariffs prevent the market from providing a profitable service, or even to secure a high degree of cost coverage. This means that not only remuneration or compensation by the organising authorities but strong financial support is necessary.

Public transport is a public service and therefore represents one of the sectors where public intervention exists by the means of regulation. This intervention aims primarily to define the role of actors and to guarantee public service obligations, being in a liberalized market or not. In this context, setting and controlling transport price levels represent tools for the public administration to pursue its social and political goals.

Setting fare in public transport in low density areas

The definition of price levels reflects several important considerations and the aims of economic policy: the efficient allocation of resources; the reduction of financial burdens on public expenditure; the achievement of regional equilibrium and the support of some economic activities. The greatest challenge for public administration is to determine a tariff structure that reconciles the user's need of an affordable public service with the commercial interests of the operators.



In order to better know practices in the field of pricing and draw recommendations, the UITP Working Group on pricing in regional transport carried out a survey to collect relevant information and data. The questionnaire covered a wide scope of issues including objectives, characteristics and change policy of fare systems and price levels as well as policy for concessionary fares. The survey results are compiled in a separate report ¹. Hereafter are the main conclusions.

The allocation of responsibility for decisions on pricing between authorities and operators varies according to the country and in some cases to the served area, the transport mode or the type of service. Generally speaking, there are three main different situations:

1. Authority decision: the authority decides, the operator has no formal role or only has the right to be consulted.
2. Operator proposal: fares are decided on the operator's proposal, this proposal requires the approval of the authority.
3. Operator decision: the operator decides, the authority has no formal role. This situation is particularly observed in open market regimes.

Analyzing the proportion of fare box revenues in the total income shows that in general operating costs are not fully covered by the revenue from fares. The difference in revenues is covered by compensation of concessionary fares, other commercial revenues (e.g. advertisement), further remuneration required from the public authority to enable the required levels of service to be achieved and third party payers (e.g. employers). The survey shows that when tariffs are the responsibility of operators, the coverage of operational expenses by fare revenues is higher. Nevertheless, the survey does not give any information on public transport patronage in these cases.

¹ UITP Report "Pricing in regional public transport", May 2005

Different tariff systems are used. However, the zonal fare system is the most used system followed by the flat fare system. In addition, there are many reasons for choosing such systems but most public transport networks put forward their simplicity for the user and the operator, and the historical reasons. However, there is no clear connection between the aims that a public transport system wants to achieve and the used tariff system itself.

It is often accepted that whether revenue increases or decreases as a result of a fare increase depends on the functional relationship between fares and patronage as represented by the demand curve. Usually, this is expressed by the concept of price elasticity, defined as the quotient of the demand change in % and the price modification in %.

The “standard” value of the public transport fare elasticity is 0.3. It should be noted that elasticity values are often higher in rural areas than in metropolitan areas, reflecting the lower levels of captivity to public transport and the greater feasibility of using private transport as an alternative. However, a price increase does not necessarily lead to a decrease in demand, but could induce a change in the passenger behaviour by optimizing the use of the different fares, as experienced in the Copenhagen region. It is the so-called cross-price elasticity.



Recommendations

Citizens living in regional areas have the same right of mobility as those in urban areas. Due to their low density, these areas are characterized by higher efficiency of private modes and a value of road space less important than in urban areas. They have higher car ownership rates which make travellers less captive to public transport. Therefore, regional public transport has to face strong competition from individual modes. All these parameters influence fare setting. In this context, UITP formulates the following recommendations:

1. Regional public transport contributes to keeping people in rural areas and prevents urban drift which could lead to urban sprawl. In this respect, UITP calls on competent authorities for an approach integrating transport development with town and country planning policies.
2. There is a variety of fare systems likely to be applied in regional public transport. Whatever the adopted system, it must reconcile public service objectives defined by public authorities with the commercial interests of transport operators.
3. Regional public transport has a major role to play in avoiding social exclusion and isolation of remote and rural areas. To this end, pricing policy should reflect the social role of regional public transport by offering reduced fares to specific groups of passengers as it is the case for urban areas.
4. When fares are defined by the Authority, transport undertakings must be compensated adequately for carrying specific groups of passengers at reduced fares.
5. The rural trip is often a first part of a journey and thus has a feeder role for the whole public transport network. Therefore, UITP recommends developing integrated transport solutions offering door-to-door fare and ticketing systems.

6. When conventional public transport systems are not financially justified, UITP recommends developing demand-responsive solutions² or finding synergies with individual transport modes and taxis. In this case, pricing systems should integrate the whole mobility chain, including parking fees.
7. In addition to basic services defined by the Authority, public transport operators in low density areas are encouraged to develop special services of which fares are set on a commercial basis.
8. In order to reduce the burden on public funds, UITP recommend considering supplementary funding sources, in particular by making those who benefit from a service meet its costs (“Beneficiary pays principle”)³. In this respect, public transport routes serving shopping centres or leisure/tourist sites in remote areas should be financially supported by their developers. Similarly, contribution could be asked from developers of new erected properties whose value increases when served by public transport.

In conclusion, UITP underlines the necessity to maintain and develop public transport in low density and rural areas and calls on public authorities to provide the necessary financial support in order to ensure sustainable mobility.

2 See UITP Core Brief « Why is it essential to develop public transport by low demand ? », November 2004

3 See UITP Focus Paper « The Financing of public transport operations », April 2003



Focus Paper prepared by the Working Group “Pricing in regional transport”.