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## SOCIAL ASPECTS OF URBAN MASS TRANSPORTATION

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**Abstract:** *The basic theoretical data of urban mass transportation social aspects. Wider and closer social presuppositions of its realization. Demands and criteria of urban mass transportation quality in regard of social functions.*

**Key Words:** *Social aspects, urban mass transportation.*

### INTRODUCTION

Public personal transport, including urban mass transportation, presents an important social problem since its unsatisfactory operation negatively influences the total standard of our living. At present in the Slovak Republic we can see tendency towards increasing especially road freight and individual automobile transport whilst the suburb bus and urban mass transportation are decreasing. In the former times penetrative increase of especially individual automobile transport was not considered during designing the roads in towns and villages. This reality results in negative impacts. Drivability of the roads is decreasing, passengers care is stagnating as well as the total transport quality. Time and speed of removal is extending to a certain measure. This unfavourable development in transport increasingly contributes by the exhaust emission and motor-vehicles noise to deterioration of the environment and residential zones, too. Urban mass transportation presents complicated phenomenon from various aspects. This paper tries to indicate some social problems.

### 1. BASIC THEORETICAL STARTING POINTS FOR COMPLEX JUDGEMENT OF THE PROBLEM

Personal transport and especially transport ensuring mobility of inhabitants in greater towns

performs many functions. Social function is one of the most important functions. We have in mind that fact that formation and development of the personal transport is dependent on expansion and deepening social relations that are given in the requirement for inhabitants' mobility.

Formation of big agglomerations caused that their inhabitants do not meet their social needs only within their habitations but they expand the space for their fulfilment in dependence on possibilities of their achievement in adequate time and comfort and acceptable economical and price conditions.

**Urban mass transportation (UMT)** has become an important phenomenon that not only ensures inhabitants transportation but it is also important socio-economic, political, cultural and ecological factor. Its organization and used means are factors that create living conditions in towns and specifically shape their character.

Urban mass transportation is developing and realizing in the wide range of social connections. These connections have different weight variable in time and space. We will try to present them as mutually interconnected system.

- UMT is realized in **wider societal connections** that create the framework of its realization.

We have in mind connections as follows:

- **political**, resulting from priorities of ruling political parties and groups and public administration bodies in the field of UMT ensuring,
  - **demographic**, connected with changes resulting from the increase in number of inhabitants, with change of social structure in towns, with changes of their social preferences,
  - **economical**, that reflect link UMT with creating economical, production and shopping centres, their mutual interconnection and link with residential zones,
  - **environmental**, that are connected with natural conditions in which the UMT is realized and UMT impacts on natural environment.
- **Closer social assumes** are also important for UMT because they directly underlie processes connected with formation, changes and tasks of the particular forms of UMT and their mutual interconnection and organization. They include:
    - **social demands of inhabitants**, resulting from awareness and endeavour to meet the social needs specific for the group of inhabitants,
    - **differentiated social interests** of single elements of social structure in towns and their mutual relations, whereby we have in mind e.g. different interests of inhabitants, economic subjects and public administration bodies that did not have to be contradictory but they are based on different priorities,
    - **urbanization**, as the state and process of forming city way of living that is connected with inhabitants concentration at relatively small area and with creation of specific cultural- civilizing pattern of inhabitants life and their behaviour,
    - **population trends**, presenting changes in social and age structure not only in towns as such but also in their particular parts what results in changes of passengers behaviour in term of their traffic direction and also time concentration eventually requirements for travelling comfort,
    - **creating production-industrial and administrative centres**, that
- significantly influence not only UMT tendency but also its extent of utilization during the day. Possibility of transportation to work place is the basic condition of UMT,
- **building shopping and cultural centres**, that concentrate purchasing activities and also some cultural activities especially in the afternoon and during week-end and holidays, whereby there is a trend to locate these centres outside historical downtown and inhabitants can use especially private cars,
  - **services development in their broad spectrum**, their use especially in terms of availability and time that is suitable for customer with various needs and economic potentials,
  - **conditions for tourism and sport**, that are connected especially with use of leisure time and attendance of mass sport actions,
  - **education and system of schools**, that significantly influence especially requirements and possibilities of students of secondary and high schools in effective use of UMT.
- Cohesion of above mentioned social connections and assumes with UMT system has many **social impacts**:
    - enhancing human relations;
    - higher mobility of labour;
    - higher availability of shopping centres;
    - education possibilities in longer distances;
    - better possibilities of sport and cultural realization;
    - broader possibility and availability of using the services;
    - decreasing of ecological destruction caused by sharp rise in private car transport especially in the downtowns,
    - **consequently enhancing the quality of life in the towns.**

## 2. REQUIREMENTS FOR URBAN MASS TRANSPORTATION QUALITY FROM VIEW OF ITS SOCIAL FUNCTIONS

Problems of UMT are very important since its unsatisfactory operation negatively influence standard of living of inhabitants. If its functions

including the social one are to be fulfilled it must achieve required quality parameters.

**UMT quality** as the part of transportation system presents generally complex of anticipated properties that meet anticipated and specified needs. These properties are quality requirements and also its criteria. **The quality credo is to ensure maximum transportation requirements with minimum effort at required quality level.**

The quality criterion is based on **eight categories: [Surovec 2007]:**

- availability, i. e. range of service offer in space, time, interval and capacity,
- accessibility, i.e. access to system of public transport and interconnections in system,
- sufficiency of information, i.e. provision of information about transport,
- time and speed of transportation,
- care of customer ,
- comfort,
- security in transport, i.e. sense of security, measures for protection of lives, health and property,
- ecological impacts on natural environment.

Said by other words, the UMT quality depends on meeting the **transportation requirements**. Travelling community requires the system of UMT to be **speedy** (little time losses in regular transport), **reliable, exact, prompt, spatially accessible, with sufficient transport capacity, minimum number of changing stations, short attendance distances to UMT stopping places, interconnection of stopping places by walking** in the downtowns.

**Social requirements** are also important quality elements. They include preference **societal interests** to individual or local interests, **social accessibility** (solidarity – equal conditions for access to public services), **adequate travelling expenses** (reflecting social character of public service even at the price of subsidy, discounts), protection of so-called **vulnerable persons** (seniors, disabled persons, children in buggies, etc.), **total security of passengers, their adequate comfort, hygienic conditions, culture and aesthetics of transportation**.

**Ecological requirements** for UMT present also plumbless quality conditions. Especially decreasing of harmful impacts on natural

environment as the **noise, exhaust emissions, vibrations and quakes, high dustiness and increasing quantity of solid wastes**. The aim is to **secure natural environment and human health**.

**At present, the individual automobile transport (IAD) is the biggest competition of the UMT.** IAD achieves more and more growth as a result of higher standard of living that makes easier the access to automobile and its ownership. IAD has advantages as better satisfaction of transportation need of the passengers from viewpoint of the space (also there where are no the transport lines), time (independency on timetable), relative comfort (avoiding travelling in overcrowded means of transport), personal comfort (the minimum walking) and also sense of being one of wealthier people.

IAD, with regard to its growth and impacts, becomes problem of our towns and it is possible to say that it becomes also all-society problem. Weaknesses of IAD include decreasing of road carriageability in towns, higher expenses for users, parking problems, time losses, greater security threat and increasing negative impact on natural environment.

In societal interest, that is the interest of all of us, there is necessary to more expressively use propagation of UMT strengths especially in competition and make every effort to increase its quality. It is necessary to activate the societal interest in this kind of transport, offer more transport services and increase the number of customers. Propagation should emphasize especially these strengths (in comparison with IAD):

- ability to transport large number of persons in given time and space,
- low requirements for carrying charges and parking areas,
- saving money in comparison with fuelling price, amortization of personal motor car and other charges for motor car operation, e.g. insurance.
- no problems with parking, (bad situation with parking at habitations and downtowns), no parking charges,
- protection of natural environment , less exhalations, noise and dustiness ( in calculation on one person),
- higher security, risk reduction in traffic accidents and death injuries, no problems with

- traffic accident, insurance, police, transport of damaged car, responsibility for material damages and injuries,
- certain comfort (if the means of transport is not overcrowded), passengers can read, listen to music, no stress with driving, enter in social contacts, etc.)

That means that presentation of UMT should be concentrated on acquiring hesitating passengers, to support them in rightness of the UMT use. The aim is not to fight against IAD but to attract new UMT users especially from the family of drivers. In big cities to propagate support parking and make more attractive combined travelling by car and by UMT. To compensate negative picture about UMT, to change the contribution of advertising campaign realized in favour of IAD, to strengthen the passengers trust in quality of transport services and to learn them to travel correctly, securely and advantageously. To present advantages of its regular using.

### 3. CONCLUSION

From the above mentioned facts and arguments follows that in the all-society interest it is necessary to prefer mass transportation against individual one for the reason of more effective utilization of the resources and care of the natural environment. Organization and development of mass transport has to be solved completely with perspective in the future. It is necessary to ensure

that the UMT development is in accordance with the needs of living style of citizens, natural environment, and planned development of towns and coordinated within the whole transport system. It is necessary to **enhance** management, planning, organization, tariff and investment activities and technical development. This everything in accordance with principles of the SR Transport Policy and White Paper "European transport policy for 2010: time to decide", issued by the European Commission. Only in this way, the social aspects of UMT, aimed at enhancing the life quality of inhabitants, will be met.

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## СОЦИАЛНИ АСПЕКТИ НА МАСОВИЯ ГРАДСКИ ТРАНСПОРТ

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**Резюме:** Разгледани са основни теоретични данни за социалния аспект на масовия градски транспорт, по-широкото и по-близко представяне на неговата реализация, търсенето и критериите за качество на масовия градски транспорт по отношение на социалните функции.

**Ключови думи:** социални аспекти, масов градски транспорт.