# Technical Notes on Project of the Database of Czech Transportation

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ABSTRACT: A centralized database of transport data is missing in the Czech Republic. This paper points to an example of the budget of the State Fund for Transport Infrastructure that is necessary to create such a database of data which impacts the economy of the whole system and to gradually convince state institutions, regions, municipalities, transporters and other involved parties to support this project with their opinions and provided data.

KEY WORDS: Database, transport, State Fund for Transport Infrastructure, Czech Republic

#### 1 INTRODUCTION

The problems of the economy have been increasing pressure on the economic efficiency not only in the transport sector. Its infrastructure is one of the domains with a large difference between needs and possibilities, which is true not only of the Czech Republic. The ministers of transport have been trying to make conceptions, ("Super") strategies and transport policies determining the direction for and goals of transport development, but these documents lack the definitions of basic parameters and indicators of the transport system, describing the actual state of the quality of railway tracks, roads, bridges, crossings, stops, etc.), and it is primarily very laborious to get the relevant time series showing development trends. The total conceptions are unfortunately vague and so it is difficult to plan the resources.

#### 2 SFDI BUDGET IN FOCUS

The expenses of the State Fund for Transport Infrastructure (SFDI) dramatically decreased year-on-year. This brought about negative effects in the lower benefits from European subventions and also negatively influenced the economy of building companies. Not only through lower revenues, but also the lower use of contracted or purchased production capacities, which will result in the level of calculated prices of construction works. The question is whether state savings will have the desired effect. The cutbacks of the SFDI expenses negatively influences the unit prices of construction works and the economy of building companies and also state tax revenues (VAT, income tax, etc.) It is necessary to know the total amount and also the structure of the expenses of the SFDI. This structure shows that the national revenues account for approximately only one third of total revenue from which "uncertain" sums, such as state subsidies, dividends, and privatisation revenues, also account for approximately one third of the total budget.

For finding the respective trends one can use, for example, the SFDI yearbooks, but the problem is the data for the revenue structure (divided according to foreign and domestic sources or according to the particular categories) and the expense structure (divided according to the type of transport infrastructure, according to investor organisation or according to the character of the expense on the investment, repair, (winter) maintenance, according to the regions etc.). These data are, of course, available, but the possibility

of their acquisition and analysis can be complicated for the users (professionals, schools, clerks, and media) from both a time and factual viewpoint.

Economic data such as infrastructure expenses are important, but so are the technical parameters of the transport network (e.g., the network length) and not only the quantitative, but also the qualitative factors. For instance, bridge constructions are assessed on a scale from 1 to 7 (7 being the worst). The transport policy should be based on economic calculations, using both quantitative and qualitative factors. The authors feel there is a lack in the state transport planning of such an approach with clear and verifiable goals.

#### 3 ABSENCE OF A CENTRALIZED TRANSPORT INFRASTRUCTURE DATABASE

In the Department of Economics and Management of the Transport and Telecommunications of the Faculty of Transportation Sciences of the Czech Technical University in Prague we try to give the students an idea of the economic laws in transportation and we are conscious of the aforementioned facts (the unavailability of relevant data and the lack of a systematic use of efficient indicators) in everyday teaching, especially when seeking some statistical data connected with the topics being taught. We therefore decided to create a database of indicators that influence the economy of the whole system, and that we will try to convince state institutions, regions, municipalities, carriers, and other subjects to support this project through use of their data and opinions.

Our goal is to enable users online access to a database of a series containing data now available at various institutions (the Ministry of Transport, SFDI, Road and Motorway Directorate, Railway Infrastructure Administration, the Czech Statistical Office, the Police, Regional administrations, ČESMAD BOHEMIA-the association of road transport operators, etc.) and to enable a simple data export in both table and graphical form. This database could help with the discussion of indicators that should lead in the long run to a conceptual and stabilized situation in transport, and to long term efficient transport infrastructure funding.

### 4 CONCLUSION

The intention for the creation of an online database of transport has been in existence in the Faculty of Transportation Sciences of the Czech Technical University for many years, and, since last year, it has gained more actual contours thanks to the students of the faculty, the enterprise Capsa.cz, and the support of the Ministry of Transport of the Czech Republic. The aim is to create on the web an interactive environment that would easily enable access to all the main transport relevant time series, as well as to display and to analyse them. It would enable managing organisations to analyse system development trends, and to simplify their decision making.

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