

Datasheet of the thesis

Name: Zoltán Gracza		Neptun code: J4SGGT
Course: Transportation Engineering		
Specialization:		
Level: BSc	Type: E-learning	
Semester: 2021/2022/2		
Title of the thesis: Collecting Travel-related Data and Providing Information for Passengers		
Summary (abstract): The paper discusses the opportunities for providing information for passengers, as well as the difficulties experienced within the information flow. To provide a historical context for the topic, it presents an overview of how urban structures were formed; when various interurban and intra-urban vehicle transport systems were created; what stages of development vehicle information systems have gone through; the process of overcoming technical difficulties and the challenges of mapping, up to the point when these no longer hindered the generation, processing, relaying and displaying of information as well as the underlying data. The paper highlights the need for shared languages that enable communication through the application of standards, regulations and recommendations regarding the relaying of data. It then provides an overview of the information requirements of various sectors and modes of transport; and discusses the observation of validity periods and related misunderstandings, as well as a range of possible solutions as regards static, semi-dynamic and dynamic data. The paper then proceeds to observe the process of data collection, detailing both opportunities and difficulties in gathering, relaying and storing such data, structured according to the place of data generation as well as to the types of data. Next, a possible method of data relaying – both static and real time – is presented through the analysis of a specific standard. The thesis goes on to detail the means of forwarding information to the end user, demonstrating both the categories of information that can be retrieved from a central database, from the infrastructure or from miscellaneous vehicles, and the tools which may carry such information to travellers. Finally, the paper outlines an ideal travel information system, enumerating the components as well as tools of such a system; describing an ideal network of information that is both required and provided by such a system; listing all related functions and objectives; and observing the applicability of the above.		