

Title of the whole course: Traffic Modelling and Forecasts

Modelling and data analysis

Name of the Educational Test Site

HUT: Helsinki University of Technology

Objective of the whole course

- theoretical background of modeling and forecasts
- travel demand models
- transport economy
- mobility surveys

Content of the whole course

The emphasis of the study is on travel and mobility surveys, travel demand models and forecasts, and partly also some aspects of transport economics. The study projects have dealt with the transferability of travel demand models for urban areas, quality of mobility surveys, and estimation of the value of time. The temporal and spatial transferability of travel demand models has been studied since 1994. The aim of the research is to examine the possibilities to update mode choice and trip distribution models and to transfer them between different cities. Pilot studies have been made using the Helsinki metropolitan area data and models as well as the data gathered in the Oulu and Turku regions. The value of travel time has been studied since 1992 using both RP (Revealed Preference) and SP (Stated Preference) data. The most recent studies concern value of transport time and delays of freight transport by rail and by road.

Which parts of PORTAL (project results) were taken up? One lecture as a presentation of results of portal

Which PORTAL material was used? Written material was distributed to the students

Separate / <u>existing course</u>	Existing
Optional / compulsory course	Optional
Name of the corresponding curricula	Modelling and forecasts
Participants' level	professionals
Type of input	Lecture
Number of participants	10
Timing	October, 2002
Exercises	None
Language	Finnish

Title of the whole course: Transport economics and pricing

Pricing

Name of the Educational Test Site:

Tallinn Technical University

Objective of the whole course : The students should get overall knowledge about the theory of transport pricing. They get the overview from the last EU transport projects, as PETS, UNITE etc. The students get the base to develop their skills on the transport pricing.

Content of the whole course

- General overview of the transport pricing
- Overview of the transport expenditures (internal and external)
- Overview of the transport externalities (congestion, accident and environmental damages)
- Main pricing methods (based on marginal and average costs)
- Main principles of infrastructure charging.

Which parts of PORTAL (project results) were taken up?

KT 6, pricing

Which PORTAL material was used?

KT 6, pricing

Title of the whole course: Public Transport and Freight Transport

Mobility Management and Travel Awareness

Name of the Educational Test Site:

**Budapest University of Technology and Economics,
Department of Highway and Railway Engineering**

Objective of the whole course:

- To give an overview on the transportation system for the students
- To present the individual needs and motivations for mobility
- The students should learn methods, tools and measures to influence the modal choice of transport users
- The students should get impression (or practice) how measures affect on the transportation system
- The students should get to know the system of freight transport

Content of the whole course:

- Concept of public transport, role of PT in the urban transport
- Characteristics of public transport, financing
- Demand management in urban transport
- Tools for demand management, “hard policy” – “soft policy”
PLUTO (Planning Urban Transport Options), Mobility Management
- Traditional freight transport on railways
- Multimodal freight transport

Title of the whole course: Transportation Ecology I/II

Environment, Energy & Transport

Name of the Educational Test Site

TU Dresden, University of Technology Dresden, Dep. Of Transport Science

Objective of the whole course

Understanding of environmental effects of transport should be strengthened. Feedbacks and systematic responses are modelled or discussed. The strategic option of “sustainable transportation” is evaluated, then.

Content of the whole course

- Effects of transport auto the environment
- Emission modeling: Calculation of transport emissions
- Noise and ozone and CO₂
- Sustainable transportation

Which parts of PORTAL (project results) were taken up?

Chapters of Portal, written material and transparencies

Which PORTAL material was used?

Parts of the written material, parts of transparencies

Title of the whole course:

Operation and Regulation of Urban Transport

Urban traffic Management

Name of the Educational Test Site:

Czech Technical University in Prague, Faculty of Transportation Sciences

Objective of the whole course

Operation, organization and regulation in traffic engineering. Basic ways and means of traffic control and organization. Traffic rules and standards. Traffic signs and traffic marking. Traffic control by traffic lights, criteria for traffic rights establishment. Basic terms - cycle, phase, among-green light, productive time period. Fundamentals of traffic lights calculation. Capacity of traffic lights controlled crossing. Traffic controlled operating. Advantages and disadvantages of one-way streets. Preferring of various transport modes. Preferring of public transport. Traffic calming layouts. Crossing modifications, information and navigation systems. Parking regulation and organization. Approximate appreciation of controlled crossings capacities. Proposal of traffic lights coordination. Small roundabout design.

Content of the whole course

- Means and ways of traffic control and organization
- Rules of right of ways
- History of road traffic
- General principals of traffic lights establishment (criteria, types of traffic lights)
- Ecological aspect of traffic lights
- Public transport preference
- Quality of public transport
- Small roundabouts – purpose, advantages, suitability of use
- Advantages and disadvantages of one-way streets

Which parts of PORTAL (project results) were taken up?

Chapter Kt2 of Portal written material:

Transport policy objectives and strategies and road users characteristics and needs,
Sustainable transport in cities – case studies
Multimodal transport solutions – case studies

Which PORTAL material was used?

Portal written material,
Portal transparencies after own modifications.

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