

**Specification of Transportation Planning Software**

Two commercial licenses to the software package for transportation planning with components enabling:

- A) Editing, analysis and visualization of multimodal transport network and traffic analysis zones with support of ArcGIS software
- B) Complex travel forecasting (demography, land-use, infrastructure and vehicle fleet) for:
  - a. Traditional four-step models
  - b. Three-step models (simultaneous choice of destination and mode)
  - c. Activity-based models including representation of complex activity patterns
- C) Modeling of travel behavior
  - a. Statistical, mathematical and econometrical models (gravity models, regression models, discrete choice models and other) in programmable environment
  - b. Graphical interface to design and display of sub-processes and logistic units as components of transport model (traditional and particularly activity-based models)
- D) Multimodal modeling and planning, including walk, bike, public and freight transportation for:
  - a. Statistical, mathematical and econometrical models (gravity models, regression models, discrete choice models and other) enabling modeling of each mode, their interactions and multimodal considerations
  - b. Multimodal assignment of travel demand on transportation network
  - c. Accessibility analysis and transport service analysis for public transportation
  - d. Modeling of logistics decisions (supplier selection, shipment size determining, mode choice) for freight transportation
  - e. Sensibility analysis
- E) Software package must enable:
  - a. Modeling of network with minimum range of 15 000 zones, 1 500 000 nodes and 3 000 000 links
  - b. Iterative search of model equilibrium (feedback of OD pair distribution and modal split)
  - c. Methods for traffic assignment
  - d. Integration of GIS environment (ArcGIS)
  - e. Integration of land-use models
  - f. Universal import and export for transportation network (attributes of nodes, links and zones), including public transportation (lines and timetables)
  - g. Graphical support for analytical and designing part of transport model development
  - h. Comprehensive (volumes in persons, vehicles, tons of freight, OD pairs graphic, cost analysis, etc.) and decomposed (in detail of each mode, cost type) outputs of transport model
  - i. Server license key

Total price must include at least 5 years of free access to updates and upgrades of the purchased version