



# PTV Visum

Multimodal  
transportation planning  
software



# PTV Visum: The world's leading transportation planning software

PTV Visum is the standard for macroscopic simulations and modeling of transport networks and transport demand, public transport planning, and for the development of transport strategies and solutions.

With PTV Visum, you create transportation models that provide insights for long-term strategic planning and short-term operational use.

To effectively evaluate many possible future variants, short model run times are critical. The PTV Visum algorithms are therefore continuously optimized with new methods and techniques, such as contraction hierarchies and parallel processing. Especially in the key area of traffic assignment, amazing accelerations have been achieved in recent years.



## Your benefits:

### Reliable transportation of future investments



Cost-benefit analysis for new mobility infrastructure and public transport

### Develop balanced sustainable mobility concepts

Evaluate transport concepts for sustainability, accessibility & more



### Simulate multimodal transport



Plan mobility for all existing and future transportation modes and their interactions

### Integrate all mobility data



Bring together mobility data and provide powerful analysis tools

### High performance for more efficiency

Fastest and most advanced algorithms for travel demand modeling



### Seamless integration with PTV Vissim



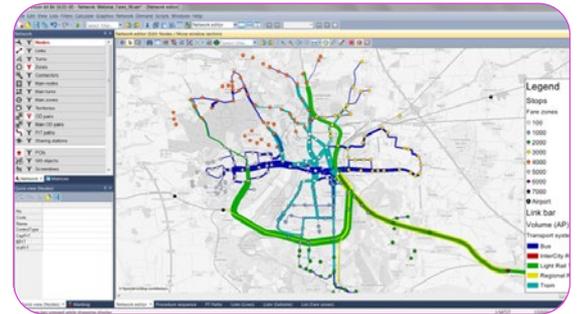
Easily combine macro and micro modeling

# PTV Visum key functions:

## Multimodal transport modeling

With PTV Visum, you plan multimodal transportation in a city or a region, get information on the modal split, analyze all travel processes in detail, and find the best solutions for present and future mobility challenges.

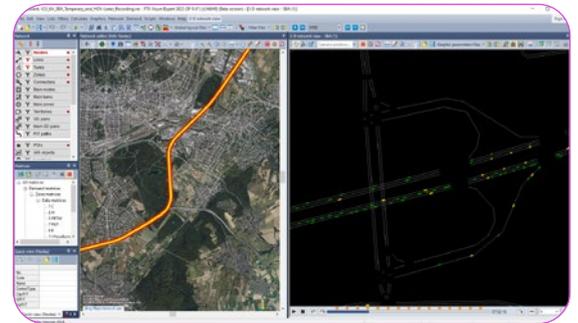
Use PTV Visum software to develop a master transportation system plan for the entire region, even when there is little data available.



## Detailed traffic flow simulation of large-scale transport networks

The powerful mesoscopic assignment method Simulation-Based Assignment (SBA) enables fast and accurate traffic flow simulation of large networks.

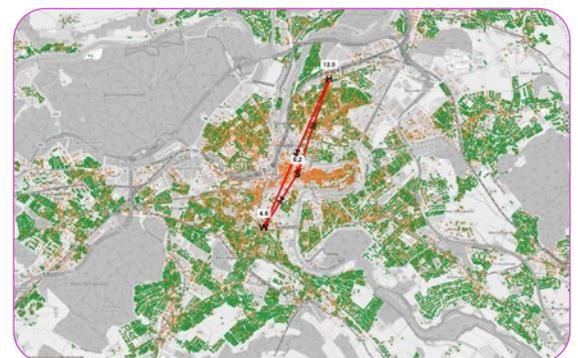
As a result, the network effects of local traffic management strategies are assessed easily and accurately.



## Activity-based demand modeling (ABM)

PTV Visum supports Activity-Based Demand Models (ABM), which model mobility decisions of individuals instead of groups of people. As a result, daily activity and travel schedules are created with information on start times, time spans, locations, and mode.

Easily integrate and manage your ABM demand data; store surveyed or synthesized households, persons, tours, and trips; and connect them to the database. Trips can be assigned to static assignment paths for analysis.



## A selection of satisfied PTV customers:



# Are you interested in a free trial of PTV Visum?



Start your free trial of PTV Visum – the world's leading transportation modeling software.



## Common use cases for PTV Visum:

### Environmental analyzes

- Calculate pollutants and noise emissions
- Evaluate the effects of traffic measures at an early stage
- Model access restrictions such as low emissions zones (LEZs)

### Shared & autonomous mobility

- Design, analyze, and integrate new modes of transport e.g. electric, connected and autonomous vehicles
- Model motorized private transport, bikes, walking, and ride-sharing schemes, as well as their integration with public transport services
- Study the effects of shared mobility

### Public transport planning

- Create a PT network with supply and demand data
- Get key figures on user experience: travel times, frequency, walking times, fares
- Calculate operational indicators: operating times, performance kilometers, empty runs, vehicle requirements, depot use
- Manage timetable variants and fleet capacity
- Combine strategic transport demand models with operational assessment tools