How does the City of Copenhagen become the world’s most bike-friendly city?

Learn how PTV Vissim simulates all modes of transport realistically.
PTV Vissim at a glance:

- Study the movement of all modes of transport including pedestrians.
- Maximise the capacity of your existing infrastructure presented in highly customisable graphics.
- Represent all modes of transport and simulate their interactions, customised to local behaviour for realistic results.
- Seamless integration with PTV Visum, the world’s leading transport planning software.

With our simulation software, you can create a balanced mobility ecosystem by improving the traffic situation in cities to reduce congestion and emissions.

“We use PTV Vissim to simulate planned measures in order to find the solution that is best for us.”

Emil Tin, Copenhagen’s Centre for Traffic
About the City of Copenhagen

There are 650,000 bikes in the City of Copenhagen, which is more than the number of its residents. 52% of the population cycles to work and school every day, therefore the city wants to expand its bicycle network. Consulting group COWI was called to help with the implementation by collecting, processing, and checking the data so it can be used to simulate the bicycle traffic realistically in PTV Vissim.

How other customers use PTV Vissim:

The Government of Western Australia used PTV Vissim to develop their first signalised roundabout. Previously, the Eelup Roundabout was the state’s worst black spot, which meant it had the highest accident rate of the whole state. The simulation in PTV Vissim shows that by adding traffic signals, accidents can be reduced significantly. Today, the number of accidents is reduced to 33%, with a saving of A$2 million per year.
PTV Vissim is the standard traffic simulation software used by 16,500 transport professionals in over 2,500 cities worldwide.

Areas of application

**Unlimited Digital Playground**
Create a digital replica of junctions and corridors in your city so you can identify and understand congestion issues. PTV Vissim provides support to help you optimise solutions before real-world implementation, thus saving unnecessary construction costs and minimising risks.

**Detect, Plan, Control**
Model and simulate all operational interventions and assess their effect on the overall traffic flow. PTV Vissim assists you in maximising the capacity of your existing infrastructure presented in highly customisable graphics and stunning visual representation of data.

**Next-Level Simulation**
No other microscopic simulation software in the world is comparable to PTV Vissim. Our software not only represents all modes of transport and simulate their interactions, but it can be customised to local behaviour for absolute realistic results.

**Always Ready for the Future**
The growth of connected autonomous vehicle (CAV) around the world can benefit cities and their public transportation systems. With PTV Vissim, you can demonstrate what the impacts of CAVs to cities are and understand how they interact with regular traffic. You can also experience the simulation in an immersive virtual reality environment and interact freely with other agents.
Benefits

Avoid costly mistakes
Experimenting in a traffic flow simulation environment ahead of implementation avoids a range of potential costs in the real world.

Improve traffic flow
Devise efficient traffic management strategies to solve traffic issues with a detailed simulation of local traffic conditions.

Total flexibility
Select the level of detail you need for a specific application; at microscopic or mesoscopic resolution, or combination of both.

Make evidence-based decisions
Simulate improvement projects and evaluate the benefits of investment so you can deliver a successful project.

Data visualisation
Present your results with a realistic, comprehensive representation of the simulation in 3D.

Quick and simple
Easy to use simulation software, absolutely no scripting or programming required so you can get to work right away.

About PTV Group

PTV Group takes a holistic approach that integrates all aspects of traffic, transport and logistics to create and promote sustainable mobility. Recognized as global market leader, PTV develops intelligent software solutions for transport logistics, traffic planning and traffic management. Thus cities, companies and people save time and money, enhance road safety and minimize the impact on the environment. Based on its unique expertise in every facet of mobility, PTV ensures that people and goods arrive at their destinations safe and sound, and on time.

More than
2,500

cities make smart decisions based on our software

Up to
17%
cost savings with our route optimisation technology

Customers in
120
countries rely on our solutions