VISUM – State-of-the-Art Travel Demand Modeling
VISUM is a comprehensive, flexible software system for transportation planning, travel demand modelling and network data management. VISUM is used on all continents for metropolitan, regional, state wide and national planning applications. Designed for multimodal analysis, VISUM integrates all relevant modes of transportation (i.e., car, car passenger, goods vehicles, bus, train, motorcycles, bicycles and pedestrians) into one consistent network model. VISUM provides a variety of assignment procedures and 4-stage modelling components which include trip-end based as well as activity based approaches.

VISUM is a PC-based programme using MS Windows and offers data and image exchange in the Windows environment via clipboard or interfaces to industry standard formats. In addition, VISUM has an open object-oriented concept that enables users to programme their own applications using Visual Basic or the programming language of their choice. PTV Vision® is more than just traditional demand modelling. Our software integrates demand modelling with microscopic traffic and pedestrian simulation (VISSIM), providing transportation professionals with the most complete suite of analysis tools. To round out the software package, VISUM includes embedded components from other leading software packages such as ArcGIS® from our business partner ESRI for better GIS integration.

VISUM is used to build conventional four-step models for regional and state-wide planning while also serving as a powerful analysis and data management tool for traffic engineers and transportation planners. A unique strength is detailed public transportation service planning, with a data model for routes and schedules that goes far beyond traditional demand models. Furthermore we do support operating systems with 64bit and so it is possible to edit bigger networks and models even more efficiently through the enlarged memory.
VISUM Features – A Close Up View

Interactive Use of VISUM:

VISUM is an extremely flexible visualisation environment. The VISUM Graphical User Interface (GUI) is easy to learn and to use. Selection and editing of network objects in the Geographical Information Systems (GIS) style is highly intuitive. With the junction editor for example all relevant details of an intersection can be modelled. This reaches from the node and turn attributes all the way through the whole junction model. Also the network object toolbar lets you toggle the visibility of layers and filter settings. Using the spatial selection users can select any collection of network objects they want to edit.

VISUM speeds up your transportation planning analysis workflows. Just one example for this is Multi-Threading, which helps to split each task into multiple parts which run concurrently. Through this parallelisation the computationally intense procedures can be speeded up. Furthermore the Network object toolbar and context menus give you fast access to functionalities such as graphic parameters, visibility of layers, listings and/or filters.

The listings for each network object work like a spreadsheet programme, which allows for fast and efficient editing of model data. Network editor and listings are synchronised. Different synchronisation modes make it possible to work parallel in the listings and network editor.

VISUM includes integrated “Undo” and “Redo” commands that restore network integrity after a complex series of user interactions and network modifications. Even data for very large models can be easily accessed and modified via VISUM’s GUI. All model steps, such as assignments can be interactively started from the menu. With the print preview mode, users can access a “what-you-see-is-what-you-get” view.

A Quick View window allows the users to view and edit attributes of the currently marked objects without opening any dialogs. This speeds up the network editing process significantly. For creating different map views, the graphics parameter selector can be used for changing between graphical settings with just one mouse click.

GIS Integration

One of the most exciting features of VISUM is its ability to merge GIS-data and transportation data into a common database with several layers including: Traffic Analysis Zones and jurisdiction boundaries; transportation network with connectivity, street centrelines, intersection turns and public transport routes; user defined attributes and user defined object classes; and background maps. In addition the linkage to the personal geo database of ESRI or shape files can be used to populate additional geography layers in VISUM which then can be intersected and buffered with the transportation network of VISUM. This GIS integration enables networks to be coded in a geographically accurate way.

VISUM alone is sufficient to design powerful maps including flexible legends, no other GIS software is needed for post-processing and presentations. Only a few steps are necessary to make use of the many visual options. To enrich the graphical capabilities all standard vector formats as well as image and bitmap formats can be imported. This includes aerial imagery file formats such as MrSID and ECW.

Script Based Use of VISUM

VISUM provides a COM interface based on MS Windows technology and can be integrated with other COM-compliant Windows products like MS Office and ArcGIS. Users can programme applications using Python, Visual Basic, C, C++ and others. Based on this concept, VISUM is an open system that enables users to create and run customised pre-processing and post-processing utilities and to control advanced multi-stage model runs.
Network Data Management

The network model of VISUM is composed of layers of different object classes commonly used for transportation demand modelling:
- Transportation network links and nodes
- Zones
- Centroid connectors
- Public Transport (transit) routes
- Multi-layered public transport stops
- Intersection movements
- Territory objects for aggregated evaluation
- User defined object layers

All of these objects contain standard attributes and user definable attributes. VISUM has a powerful editor for all of these objects. You can change the shape, as well as the attribute data of every single object interactively. Creating a public transport route is just a matter of a few mouse clicks. In addition to the single change, you can change multiple objects at a time. This feature is extremely useful when it is combined with the powerful selection tools. As a result it is easy and efficient to exchange with MS Access, MS Excel, ArcGIS, MapInfo and other software products with relational databases.

Network Consistency

A unique feature of the interactive network editor is the automated network consistency check. These checks are performed in the background after each operation. For example, splitting a link or renumbering a node that is used by a public transport route will automatically update the public transport route data as well. This means that the network is always ready for routing and assignment. During the process of network editing, VISUM also offers “undo” and “redo”.

Assignment Procedures

VISUM offers users both advanced highway and public transport assignment procedures. The highway assignment simultaneously loads multiple modes (i.e. car, taxi, good vehicles) and offers the following procedures:
- Linear User Cost Equilibrium (LUCE): Origin-based Assignment which achieves perfect proportionality of path volumes within one origin; Loads richer path set (in congested networks); Implicit path representation as bushes instead of explicit paths
- Incremental loading
- User-optimal equilibrium, fulfilling the strict Wardrop criterion
- A general user-optimal equilibrium (“learning method”)
- Dynamic User Equilibrium (DUE): dynamic algorithm including blocking back, time-dependent capacities and departure time choice model
- Bi-criterion stochastic user-equilibrium (“TRIBUT”) – for road pricing studies
- Stochastic equilibrium
- Dynamic stochastic equilibrium with departure time choice

Highway assignment and flow analysis for large metropolitan models
Highway and public transport assignment

In addition to a pre-defined selection of formulas for volume-delay functions (VDF) used in an assignment, it is possible to define your own custom VDF. VISUM allows weights on zone connectors providing better levels of calibration for side streets and intersection volumes.

For public transport assignment VISUM offers two different families of procedures:
- Headway based and
- Timetable based assignment.

All methods create multiple path alternatives for every OD pair. All public transport paths can be multi-modal (e.g. P&R-bus-train-walk). All assignments are time dynamic, reflecting varying service and path choice and demand variations during the day. Passenger survey data can be easily integrated, automatically tested for plausibility and then converted into a direct assignment.

Four Stage Models and Convergence

VISUM covers the entire model chain from generation to destination and mode choice to assignment. The user can define flexible destination and mode choice models.

VISUM provides menu-driven (i.e. without scripting) calibration and execution of 4-stage models. Users can also add their own programme code into the model loop using any COM-compatible programming language. Combined iterations of assignment, destination and mode choice are recommended and will reach high level of convergence thanks to the sophisticated assignment procedures in VISUM.

For experienced users there is also an advanced activity-based approach. It builds trip chains (or journeys) from activity programmes, allows the use of demand stratifications and takes into account mode choice constraints along a trip chain. VISUM also features an interactive matrix editor that easily manages large trip tables and performs all basic matrix operations with one or multiple matrices.

Post Assignment Analysis in VISUM

VISUM is the only demand-modelling package that stores all paths after assignment and makes them available in several analysis functions:
- Volume displays of links and nodes
- Difference and multiple volumes
- Select link analysis
- Select node analysis
- Select zone analysis
- Area flow analysis
- Screen line
- Aggregated statistics for evaluation territories (e.g. counties)
- Isochrones
- Sub-area models
VISUM is equipped with an interactive editor for public transport routes. The public transport routes are consistently integrated with the rest of the transportation network. The network model differentiates between the abstract stop in the schedule and multiple physical stop locations in the network. The description of service can be as detailed as in a scheduling system, including route variations, time profiles, schedules and varying service frequencies. VISUM can also estimate public transport system capacity based on vehicle types and perform a sophisticated estimation of operational cost and revenue.

The cost-revenue model consists of the following components:
- Fare model
- Line blocking (vehicle rotation) including inter-route vehicle transfers
- User-definable vehicle types and train compositions
- Operational cost model

Also available is a schedule optimisation feature which minimises transfer time and fleet size.

Time Dynamics
To support the use of time-dynamic approaches, VISUM automatically adds a time stamp to all data, including a 24-hour clock and if the user wishes even different weekdays or a calendar. Thus network attributes, travel demand and all assignment results are stored as time-dependent variables.

Time-dynamic assignment procedures are available for both public transport and highway. The dynamic assignment algorithm handles multiple OD-matrices layered in time slices as well as time-dependent demand profiles. If travel paths are time-dynamic, VISUM considers the effects of capacity constraints that occur only at certain times of day and computes downstream metering and upstream spill-back.
Intersection Models and Level of Service (LOS) Analysis

During highway assignment, delays can be computed for nodes (intersections) in addition to links. There are several approaches for node delay. One planning oriented approach defines capacity constraints for intersections as a function of node type, link class ranking, relation to major flow, and movement type (left, right, through, U-turn).

Another approach is inherited from the TMODEL software, deriving delays from a node capacity that is applied to some or to all turns.

The third approach uses additional intersection data such as signal timing and intersection geometry. Intersection Capacity Analysis (ICA) computes intersection delays and level of service (LOS) conforming to the Highway Capacity Manual (HCM) 2000 and other LOS standards.

Intersection delay and LOS can either be used during the assignment process, or simply be generated as post-assignment statistics. This capability in combination with the integrated NCHRP 255 turn flow post-processing procedure makes VISUM a very efficient analysis tool for infrastructure planning projects such as Major Investment Studies (MIS) and Corridor Studies.

Integrating Microsimulation

The PTV Vision suite integrates macroscopic analysis in VISUM with microscopic traffic simulation in VISSIM. Both programmes work together seamlessly, saving valuable time and reducing error. Travel demand volumes can be determined in VISUM and then exported into microscopic simulation. VISUM can also export consistent microscopic networks for VISSIM. Together, the two programmes help to analyse the effectiveness of transportation scenarios including mode shift, regional route choice and operational impacts. VISUM users can incorporate the microscopic detail of VISSIM to obtain a better understanding of critical and congested parts of the network. Or, they can use VISSIM only as a graphical post-processor to produce 3D visualisations of their results. The PTV Vision suite is unique in its integration of macroscopic planning and microscopic traffic analysis. It opens exciting new opportunities to planners as well as to traffic engineers to combine the strength of the two different approaches in order to produce the most accurate analysis.
VISUM – State-of-the-Art Travel Demand Modelling

Your benefits of VISUM at a glance:

- Display of all relevant traffic data in one model
- Detailed analysis and planning possibilities
- High data quality through consistent network models
- GIS-orientated and detailed
- Individual and customised through open system concepts
- Numerous efficient calculation procedures
- User-defined level of detail
- Close linkage to VISSIM for traffic simulation and to ITS

VISUM sets a new benchmark

With VISUM at the core of PTV Vision, transportation planners and engineers can calculate traffic flows, operational measures of effectiveness as well as noise and air quality impacts. VISUM by far surpasses the present level of detail in a network model for both private and public transport. Prominent features are time dynamics and the extension of public transport modelling.

PTV’s Focus on the Users

Fore more than 15 years, the PTV Vision development team has been setting new standards that our clients value and our competitors aspire to. Today, PTV Vision is helping increase the productivity of transportation professionals and the value they provide to their countries in more than 90 countries. We view our clients as a pivotal resource for ideas. Our industry leading products combined with our desire and motivation to continue setting new standards guarantees a sound investment for years to come.
VISSIM – Microscopic Simulation

VISSIM is a microscopic traffic, public transport, and pedestrian simulation software and belongs to the PTV Vision® suite. It is the most powerful tool available for simulating multi-modal traffic flows, including cars, goods vehicles, buses, heavy rail, trams, LRT, motorcycles, bicycles and pedestrians. Through the implementation of multi-threading VISSIM operates optimally on multi-processor and multicore computers. Its flexible network structure provides the user with the confidence to know they can model any type of geometric configuration or unique operational/driver or pedestrian behaviour encountered within a transportation system.

Typical VISSIM applications

VISSIM is used for a host of traffic and public transport simulation needs. Common applications include:

- Freeway and arterial corridor studies
- Sub-area planning studies
- Freeway management strategies
- Traffic calming schemes
- Light rail/bus rapid transit studies
- Public transport signal priority evaluations
- Railroad grade crossing analyses
- Toll plaza evaluations
- Intelligent Transport System (ITS) assessments
- Current and future traffic management schemes
- Airport studies for landside and airside traffic
- Environmental impact studies
- Multi-modal public transport interchanges
- Pedestrian modelling in any built environment including evacuation planning
VISSIM Features – A Close Up View

What Makes VISSIM Special?

VISSIM is based on decades of intensive research at various academic institutions. Core algorithms are well documented. Open interfaces provide compatibility with external software. Its link-connector topology allows the highest versatility combined with vehicle movements in a detailed 1/10s resolution. Since being introduced to the market in 1992, VISSIM has set the standard for simulation software; intensive research and a large user community worldwide guarantee VISSIM to be the leading edge software of its kind. Furthermore, the PTV Vision suite has been the first of its kind to integrate microscopic simulation with strategic transport planning/travel demand modelling.

Network

VISSIM has been used to analyse networks of all sizes ranging from individual intersections to entire metropolitan areas. Within these transportation networks, VISSIM is able to model all roadway functional classifications from freeways (motorways) to driveways. VISSIM’s breadth of network applications also includes public transport, bicycle and pedestrian facilities. Many common, as well as unique, geometric and operational conditions exist throughout the transportation system which VISSIM can simulate.

Some examples include:

- Multi-lane freeways, interchanges, roadway grades
- High Occupancy Vehicles (HOV) and High Occupancy Toll (HOT) lanes
- Merging and weaving areas
- Complex signalised and unsignalised intersections
- U-turns, exclusive lanes, mixed flow lanes
- 2-way left turn lanes
- Bike lanes
- Multi-modal lane sharing and passing (e.g. bikes and cars)
- Angle and parallel parking
- Roundabouts, continuous flow intersections
- Airport curbside drop-off areas
- Exclusive lanes, mixed-flow lanes, queue jumps, queue-bypass lanes
- Public transport stops, terminals
- Centre and side-running LRT alignments
- Pedestrian queuing
- Pedestrian - vehicle interaction
- Railroad lines

Toll plaza, Camden, NJ

Diagonal parking, New York, NY
Traffic Volumes

An unlimited number of vehicle types exist in VISSIM allowing the user to model a full range of multi-modal operations. These vehicle types include cars, trucks, vehicles equipped with route guidance systems, buses, heavy rail and light rail vehicles, bicyclists, wheelchairs, pedestrians and even aircraft.

VISSIM also offers the unprecedented ability to assign these vehicles to the network using one or a combination of three methods. The basic method assumes that traffic is stochastically distributed over Fixed Routes from user-definable start to end points. For coding intersection turning movement counts, these start and end points cover a single intersection, but they can also continue through multiple intersections (e.g. freeway interchange) or even the entire study area. Dynamic Routes allow traffic to be dynamically assigned to user-specified paths when specific events occur. One example of Dynamic Routes is the assignment of vehicles to a railroad underpass only when the railroad grade crossing is occupied by the more commonly travelled path.

Dynamic Traffic Assignment (DTA) allows VISSIM to assign traffic to the network using origin/destination matrices (time- and vehicle class-dependent) and travel cost stochastic assignment techniques. Origin/destination matrices can be generated using the integrated demand model of VISUM with its advanced matrix estimation and calibration functionality.

Public Transport

VISSIM has long been the software of choice for transit related studies including bus rapid transit, light rail transit and multi-modal transit terminals. Besides being able to analyse the transit related network and signal control aspects listed in the previous sections, VISSIM models transit routes, various transit vehicle types, schedules, stops, stop types and dwell times.

Analysis

When, where and how data is reported in VISSIM is up to the user. Data can be reported for any time period and interval within that time period. Data can be reported for any point-location in the network, for an intersection, along any path and/or for the entire network. Data can be aggregated by mode or by vehicle class. It can also be reported for an individual vehicle. Numerous measures of effectiveness (MOEs) can be reported from VISSIM. Typical ones include delay, speed, density, travel time, stops and queues. The decision on which data to report and when, where and how the data is reported, is based on the needs of the project. For graphical representation of simulation output, VISSIM uses its PTV Vision suite’s sister product VISUM. VISUM provides an extensive graphics library for effectively visualising transportation modelling results.
Traffic Control

VISSIM can model intersections that control traffic using yield signs, stop signs (all-way, 2-way stop control), signals, and any combination thereof. What sets VISSIM apart from other simulation software packages is its flexibility in modelling all forms of signal control. There are several ways to model signal control in VISSIM:

- Fixed-time/pre-timed signal plans
- Actuated (via a NEMA graphical user interface)
- User definable signal control logic through VISSIM’s VAP macro language logic
- Interfaces to signal controller firmware (virtual controllers) such as Siemens NextPhase and Traffic Language, D4, VS-PLUS and Vialis
- Interfaces to adaptive algorithms such as Peek’s Spot/Utopia, SCATS and SCOOT
- Serial communication to external controllers
- Interfaces to the McCain CID II allowing users to connect signal controllers directly to VISSIM

The C-like traffic control macro language, VAP, is supplemented with a flow chart editor VisVAP for easy data entry, error checking and debugging. In addition, the NEMA GUI used to enter actuated signal timings in VISSIM also has custom menus to allow users to model bus and LRT priority and railroad pre-emption.

Some examples of signal control and related ITS applications of VISSIM include:

- Ramp metering
- Adaptive signal control
- LRT and bus signal priority
- Railroad pre-emption
- Emergency vehicle pre-emption
- Dynamic speed control
- Lane control signals
- Dynamic lane assignment signals
- Changeable message signs
Pedestrian Simulation

VISSIM is a microscopic simulation tool, meaning that all vehicles and pedestrians are simulated individually. Pedestrian travel creates complex interactions. The VISSIM pedestrian simulation has been designed to be flexible enough to handle complex design situations, to make VISSIM suitable for a broad range of applications. These include traffic engineering and transportation planning, city planning, building design as well as evacuation and also animation.

Furthermore there are several advantages in using VISSIM such as:

- Area-based walking behaviour
- Multi-story modelling
- Recording of simulations
- Background import
- COM Support
- Pedestrian - vehicle interaction

VISSIM is the first multi-modal microscopic simulation program to include real interaction between pedestrians and vehicles. Traffic lights, pedestrian crossings, and normal parts of streets can all be modelled and simulated in VISSIM. For example, you can define road users who willingly infringe upon the traffic rules like pedestrians who do not obey red crossing signals.

Graphics

VISSIM features 3D animation. This feature allows users to create realistic video clips in AVI format, an excellent tool for communicating a project’s vision. VISSIM also offers users background mapping capabilities with aerial photographs and CAD drawings. Building models can be imported from Google Sketchup. For even more advanced virtual reality visualisation, the simulated traffic can be exported to Autodesks® 3dsmax software.
Interfaces Increase Efficiency

One of VISSIM’s strengths is its ability to interface with a number of programs that are common to the transportation engineering and planning profession. These include:

- Signal optimisation tools – Synchro™, TEAPAC; Transyt*
- Control programs – Scoot, PCmov*a
- Travel demand models - emme/2, TranPlan, Cube etc.
- Geographic information systems (GIS) and navigation data - ArcGIS* and NAVTEQ

PTV pioneered the integration of simulation and travel demand software. This effort has led to the first truly integrated simulation software, VISSIM, and travel demand software, VISUM, in the market. Simply put, the benefit to the transportation community is increased efficiency.

Interfaces Increase Efficiency

PTV Vision – The Transportation Software Suite

For the past quarter century, PTV has been developing software tools to address the spectrum of needs within the transportation profession from traffic analysis to real-time traffic management. Our vision has been to seamlessly integrate these tools into a transportation software suite. Today, our vision has become a reality! The transportation software suite, PTV Vision, integrates these tools to increase efficiency in your work tasks and is scalable to grow with the needs of your organisation.

PTV Vision enables you to expand your analysis to a more macroscopic view with VISUM, VISSIM’s complimentary travel demand model.

* Synchro™ is a registered trademark of the Trafficware Corporation, TEAPAC is a product of Strong Concepts, Transyt and PCmov*a are a product of TRL, Scoot is a product of Siemens, TRL and Peek

VISSIM is a key component in PTV Vision as shown in the data flow diagram above. It allows for a detailed analysis of multi-modal traffic operations.
VISSIM – State-of-the-Art Multi-Modular Simulation

5 Reasons for VISSIM

- Integration with travel demand modelling: exchange of network, demand and result data
- All modes in one simulation: cars, trucks, busses, LRT, bicycles and pedestrians
- Road geometry as detailed as you need it
- Comprehensive toolbox for signal control: interface to signal control firmware, user definable signal control logic, manual and automated testing
- Convincing 3D visualisation

Application Development Platform

VISSIM offers a COM programming interface allowing users to integrate VISSIM in their own applications using languages like Visual Basic (e.g. in MS Excel), Python or C++. The COM interface provides access to the network topology, signal control, path flows, vehicle behaviour and evaluation data. Typical applications include automation of work flow processes, modification of simulation parameters during run time, and customised display options. Important is that COM allows full flexibility and thus empowers the user to use his or her own creativity to the fullest extent.

PTV’s Focus on the Users

For more than 15 years, the PTV Vision development team has been setting new standards that our clients value and our competitors aspire to. Today, PTV Vision is helping increase the productivity of transportation professionals and the value they provide to their countries in more than 90 countries. We view our clients as a pivotal resource for ideas. Our industry leading products combined with our desire and motivation to continue setting new standards guarantees a sound investment for years to come.
What is VISWALK?

The most prevalent mode of transport was and remains – walking. But unlike vehicles, pedestrians are individuals and do not follow strict rules. They spontaneously stop, change directions or make sudden turns.

We have accepted the challenge and in close cooperation with the science community have developed a solution that takes into account the psychology of human walking behaviour. The result is VISWALK, the software tool for pedestrian simulation from the PTV Vision software suite.

VISWALK realistically simulates and analyses walking behaviour as no other software – whether in free space, inside buildings or in connection with mass gathering environments.

VISWALK is suitable for all those who take the needs of pedestrians into account in their projects or studies i.e.: transportation planners and consultants, architects and operators of large buildings and large public spaces, event managers or fire prevention officers.

What you get out of it

- **Dynamic routing**
  VISWALK enables you to perform a simulation where pedestrians not only choose the shortest but also the fastest route to get to their destination – because time really does matter.

- **Analytical output**
  Produce with VISWALK high value analytical outputs such as journey times, density levels, level of services (LOS), queuing times and waiting times.

- **Scientific-validated results**
  VISWALK was developed in cooperation with the world's leading scientists and researchers and is therefore in simulation allowing you to consider the psychology of walking people.

- **Impressive 2D and 3D animations**
  Generate your 2D and 3D animations concurrently.

- **CAD import**
  Benefit from import possibilities of common CAD formats as well as import and export of third party visualisation software.

- **Complete integration with VISSIM**
  VISWALK integrates seamlessly with VISSIM, the software for traffic simulation, offering you a combination of individual or public transport with pedestrian engineering.
VISWALK – PEDESTRIAN SIMULATION

Use cases

VISWALK is qualified for these and many other fields of application:

- **Space optimisation and capacity planning**
  Simulate pedestrians’ behaviour and design spaces in order to utilize them to the utmost extent. This includes for example shopping malls, stadiums etc.

- **Evacuation analysis**
  Plan secure ingress and egress flows and escape routes for example for train stations, airports, stadiums etc.

- **Plan and optimise mass attendee events**
  Develop proper crowd and site management strategies for high density events such as Olympic Games or other important sports events, concerts, festivals, etc.

- **Routing and queuing analysis**
  Shorten queuing times and guide pedestrians via alternative routes.

- **Assessment of alternatives**
  Compare costs and efforts of alternative plannings and easily demonstrate the results.

- **Dwell time analysis**
  Establish boarding and alighting times for public means of transport and use VISSIM to simulate a complete operation of a rail or metro network.

Benefits

- **Scientific approach**
  Use simulation software based on latest scientific insights and validated against empirical measurements.

- **High levels of demand**
  Accommodate an extensive population density of more than 100,000 in a single simulation.

- **Efficiency**
  Reduce costs and project times by concurrently building your 2D and 3D models directly in VISWALK.

- **Usability**
  Start immediately your work and concentrate on your project, thanks to easy handling and comprehensive functionality of VISWALK.

- **Visualisation**
  Simulate 2D and 3D output with just a click of a button.
More than pure pedestrian analysis: VISWALK + VISSIM

VISSIM, the traffic simulation solution from the PTV Vision software suite, started “on the street”. For analysis and simulation of complex traffic situations, it has been used around the world for many years.

Whether you implement urban design plans or plan intersection or junction sequences – with VISSIM you model your influence on traffic flow in the simulation.

Furthermore you are able to measure the impact of traffic and traffic signal control on the respective waiting times.

VISSWALK and VISSIM is the fully integrated package from PTV that allows you to simulate the interaction of pedestrians and road traffic.

The world of PTV Vision

PTV Vision is the worldwide leading software suite for transportation planning and operations analyses. PTV Vision provides a full range of solutions – including VISUM, VISSIM, VISWALK and further complementary modules. The software suite offers a high level of integration within the overall transportation planning process and, in particular, between strategic planning, transport operations and traffic engineering for macro-, meso- and microscopic application levels.

Get VISWALK

For more information on VISWALK visit:
www.ptv-vision.com/viswalk