

PTV TrafficCountManagement

Professional traffic count data analysis and management



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Traffic count data are a vital component in traffic and transportation planning. They are an input for the design of road infrastructure and pavement management systems. Additionally, count data help to analyze the impacts of changes on the road network and supports decision-making in the field of urban construction.

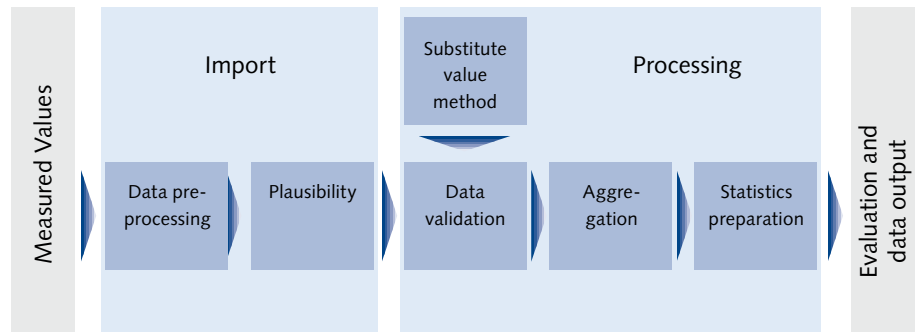
Automatic traffic counters collect data on traffic volumes, and -speeds, as well as each vehicle's weight and number of axles. Past experience has shown that handling extremely large volumes of data is quite time-consuming.

PTV TrafficCountManagement helps you cope with all the tasks concerning traffic count data management. Users benefit from the high level of automation and user-friendly operation. You will save a considerable amount of time and cut personnel costs due to efficient data processing. Moreover, intelligent control methods help reduce errors in analyses.

Central data storage and processing

PTV's traffic data count management system is designed to centrally process and store the collected count data. Thus, traffic engineers and transportation officials can quickly access important high-quality key data.

A central database for count data storage and processing simplifies data aggregation and the storage and calculation of key values.



Data editing in PTV TrafficCountManagement

Utilizing count data from different sources

Regardless of whether your data are supplied by permanent traffic counters, based on historic key values, or collected manually, you can process the count data from all kinds of sources.

Common statistics of a traffic counter, such as AADT, will first be calculated in the system and can be instantly used for evaluation. The system can import detailed raw data and group them according to different criteria for further data validation. The system can combine time intervals, is aware of lane directions and cross-sections, and has a sophisticated vehicle classification scheme.

The program enables automatic and flexible import of count data from different standard sources. The master data format developed by PTV allows you to import any combination of count data via an XML file and to easily store historic or manually collected data. In addition, the modular structure of the import software supports numerous file formats.

Visualization of your data

The intuitive user interface provides you with access to the following modules:

- ▶ Data management
- ▶ Data control with the possibility to overwrite values
- ▶ Data analysis

An integrated rights management tool allows you to assign read and write access to different users.

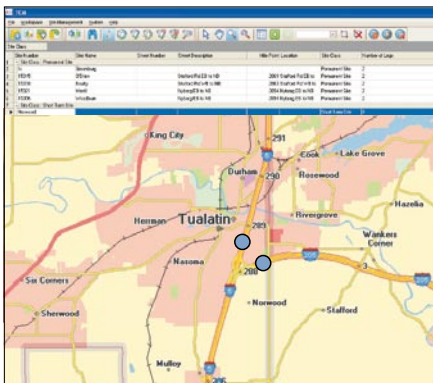
Extended use of your count data

PTV TrafficCountManagement transfers data to existing GIS or traffic and transportation planning systems. It can therefore support the calibration of transportation models in PTV Vision (VISUM) as well as in the PTV TrafficPlatform for traffic and transportation management. This allows you to include count data and key values in market-leading systems for transportation planning and traffic management, to display the data in a network and to process it for further use.

Modules and Applications

Keep a grip on your key data

You manage all data related to the traffic counters. It is possible to add new counters to the system or to store additional information. This way you create a configurable list of traffic counters which can be easily exported later if needed. The exact traffic counter's position is displayed on the map.



Data management

Data validation

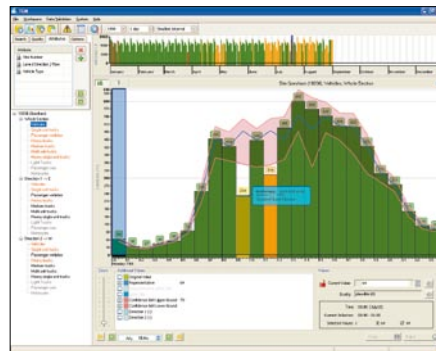
The plausibility of the count data will be automatically checked during import. A preliminary quality score is assigned to each data record. You can thus identify plausible or non-plausible values as well as gaps in the data.

Non-plausible or missing data can be easily corrected or supplemented.

Modified count data will be highlighted in color and appropriate quality scores will be assigned to the data records in the database. The original value remains unmodified in the database, which means that changes can be tracked.

Useful substitution values

PTV's count data management solution calculates possible substitution values in order to correct or supplement the count data. The system calculates these values on the basis of existing and similar daily time series. The calculation is based on the shape and the distances of the time series as well as the appropriate day category and vehicle group. The program creates clusters of similar time series. This is the basis for substitution values suggested for each missing or non-plausible data record.



Data validation

Short term counts

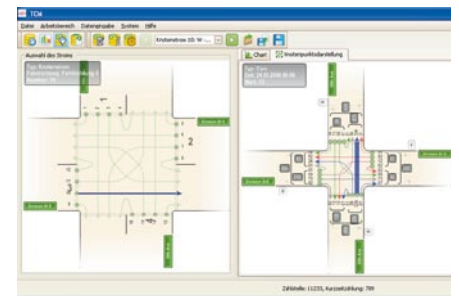
Alternatively, short term counts are carried out, since an area-wide survey with permanent counts would not be economical. Short term counts encompass both section counts as well as node flow counts. Both counts are newly integrated into the program.

The average annual daily traffic is calculated on the basis of permanent traffic counters with annual traffic flows that are similar to those at the cross-section of short-term traffic counts.

This feature is of particular interest to cities and Departments of Transportation (DOT) which only can afford to install a smaller amount of permanent traffic counts.

Intersection editor

An intersection editor enables users to flexibly define the node topology and to easily import surveys from manual counts.



Node flow analysis

Easy made professional analysis

Standard functionalities make it easy to generate professional analyses. Templates are available for frequently used statistics. The menu help you present the results in nice tables and graphs. The analysis results are automatically presented in Microsoft Excel or other formats documents for visualization or post-processing purposes. Additionally, a wizard allows you to perform special analyses tailored to your specific needs

PTV TrafficCountManagement at a glance

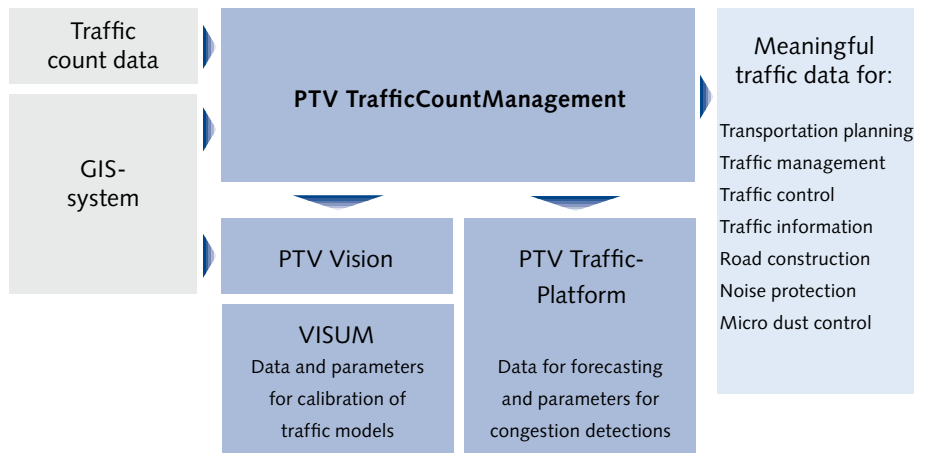
PTV TrafficCountManagement is the intelligent basis for transportation management of the future.

Your advantages:

- ▶ Easy management of traffic counters
- ▶ Quick access to count data
- ▶ Automatic data import and control
- ▶ Calculating substitution values for non-plausible or missing data
- ▶ Central data processing independent of the import format
- ▶ Easy identification of adjusted count data
- ▶ Easy data export to Microsoft Excel
- ▶ Easy generate reports in Microsoft Word
- ▶ Flexible and comprehensive analysis

This solution is of particular interest to

- ▶ Public authorities in the field of traffic and transportation
- ▶ Consulting companies and private service providers
- ▶ Manufacturers of data collection systems
- ▶ Departments of Transportation of countries and cities



- ▶ Traffic management centers and traffic control systems
- ▶ Content providers generating traffic data
- ▶ Service providers offering traffic management and mobility services
- ▶ Universities and private research institutes

PTV AG's unique expertise in the field of traffic management and mobility services has been recognized worldwide. Our success is based on a long history of strong partnerships.

This intuitive software allows you to:

- ▶ control all count data management processes
- ▶ manage traffic counters and record their features and current position
- ▶ visualize the collected Traffic data
- ▶ correct and supplement collected and processed raw data in a clearly structured manner
- ▶ create meaningful analyses and reports on the basis of count data

Austria's Federal State of Tyrol relies on PTV TrafficCountManagement

Since 2005 Austria's Federal State of Tyrol has been using the PTV Traffic-CountManagement solution for its traffic count data management and ana-

lysis. Data collected by 150 automatic traffic counters has to be imported and processed every day. Manual counts and historic key values have to be managed as well.

The Tyrol project manager says: "Thanks to PTV's professional software solution we can now rely on valuable traffic data

and information urgently required to provide a better basis for decision-making in the field of traffic and transportation planning."

Tyrol's website describing how traffic data is collected in Tyrol won the „Best Practice“ prize awarded by Digitales Österreich (Digital Austria).