What is Swept Path Analysis?

Swept path analysis examines the movement and path of a vehicle to determine the space requirements for vehicle turning maneuvers. Making swept path analysis part of each phase of the design process can help avoid costly and time-consuming mistakes by ensuring designs safely and efficiently accommodate vehicle movements.

Developed by Industry Experts

AutoTURN was created and is supported by an experienced team of civil engineers and software developers dedicated to innovation.

We collaborate with industry associations such as AASHTO (US) and CROW (The Netherlands) to develop design vehicles and turning templates, and work with our users to understand their needs and continually innovate.

AutoTURN Helps to Make Your Designs Safer and More Efficient

The industry standard for more than 25 years, AutoTURN, developed by transportation engineers, is field-tested and proven to be the most accurate and reliable swept path solution available.

AutoTURN is easy to learn and user-friendly while delivering powerful results, allowing designers to quickly:

- Explore design options and alternatives
- Optimize designs while minimizing rework
- Comply to your local guidelines on design vehicles
- Evaluate safety and operational impacts
- Increase productivity in planning and design phases
**AutoTURN Pro**
AutoTURN Pro, the intelligent swept path analysis solution, has all the great functionality of AutoTURN plus advanced automation and true 3D capabilities. Even if your designs work in 2D, make sure they pass a 3D check.

**FEATURES**

- **3D Clearance Analysis**
  Our unique 3D technology highlights potential conflicts between vehicles and terrain or overhead obstructions. You can instantly see where you may need to adjust your design. The analysis considers yaw, pitch and roll, overhead conflicts, and vertical curve conflicts that may not be apparent.

- **IntelliPath**
  Automatically simulate vehicle paths and perform swept path analysis for complex scenarios, such as traffic calming and site circulation analysis. You can generate multiple maneuvers for many vehicles in seconds, saving time and performing faster analysis. It will also provide you with the maximum possible speed on a given route.

- **Manufacturer-Based Vehicle Libraries**
  AutoTURN Pro’s Maintenance Assurance Program includes models that are based on manufacturer specifications including Volvo, Mercedes and Hino. The models are dimensionally accurate for analysis and visually appealing for presentations.

- **Compatibilities**
  AutoTURN and AutoTURN Pro are compatible with the following CAD platforms:
  - Autodesk® AutoCAD® 2010 – 2019 (except AutoCAD LT)
  - Autodesk® AutoCAD® Civil 3D® 2010 – 2019 alignments
  - Bentley® MicroStation® V8i, CONNECT
  - Bentley® PowerDraft V8i, PowerCivil V8i
  - Bentley® Power GEOPAK V8i, Power InRoads V8i
  - Bentley® AEC/GIS Building Designer V8i, CONNECT
  - Bentley® OpenRoads Designer CONNECT
  - Bricsys® BricsCAD® (Pro and Platinum) V16 – V18
  - ZWSoft ZWCAD 2017 – 2018

**Languages Supported**
The AutoTURN software is available in English, French, German, Italian and Spanish.

**Maintenance Assurance Program (MAP)**
Our MAP subscription provides enhanced value to your software investment by providing you access to the latest releases, unique features, and priority technical support.

**Project Support Services (PSS)**
Transoft’s team of engineers and designers can create custom vehicles for your design analysis. It is a low-cost, quick turnaround service.

**Vehicle Libraries**
Transoft engineers work with professional bodies around the world to ensure our vehicle libraries are the most comprehensive and up-to-date in the industry. The design vehicles are based on the standards and guidelines of the following countries:

- North and Latin America – Argentina | Brazil | Canada | Chile | Colombia | Mexico | Peru | USA
- Europe, Middle East and Africa – Austria | Czech Republic | Denmark | Finland | France | Germany | Hungary | Iceland | Italy | Netherlands | Norway | Poland | Russia | South Africa | Spain | Sweden | Switzerland | UAE | UK
- Asia Pacific – Australia | Cambodia | India | Indonesia | Israel | Japan | Korea | New Zealand | Philippines | Taiwan | Vietnam

AutoTURN also features specialized libraries for vehicle types including: Wind Tower Trailers, Wind Blade Trailers, Beam Transporters I and II, Booster Trailers 19-axle, Heavy Haulers, and eco-combs.
“We need AutoTURN for everything that has to do with roads. I can not list all the projects for which we had to use AutoTURN. In fact we use it every day.”  

*Emch+Berger*

“With AutoTURN we checked the swept path in building permit applications, proving the trafficability of streets and T-junctions and also the space needed by vehicles in bends,” said Stephan Bussmann from City of Mainz planning office.”  

*City of Mainz - Mainz, Germany*

“We use AutoTURN every week. It helps us with the design of wind farm roads.”  

*TYPSA*

“The best software for vehicle path analysis”  

*Engimind*

“100% useful and simple software”  

*Tetrace*

AutoTURN can be used for many different design projects such as:

- Construction Sites
- Driveways
- Emergency Vehicle Access
- Fast Food Drive-Throughs
- Intersections
- Loading Bays
- Mine Sites
- Oversized/Abnormal Loads
- Parking Lots
- Petrol/Filling Stations
- Rail Crossings
- Roundabouts
- Special Transport
- Transit/Bus Loops

Transoft Solutions, Inc. develops planning, design and analysis software for each phase of the transportation design process. We create innovative and easy-to-use software for transportation professionals, serving over 50,000 users across 120 countries. Since 1991, civil engineers and technologists, architects, and city planners across traffic engineers across local, regional and national road authorities, airport authorities, cities, ports, and infrastructure consultants have come to rely on Transoft’s field-researched design solutions.