Swept Path Analysis

Intuitive and accurate
vehicle movement analysis

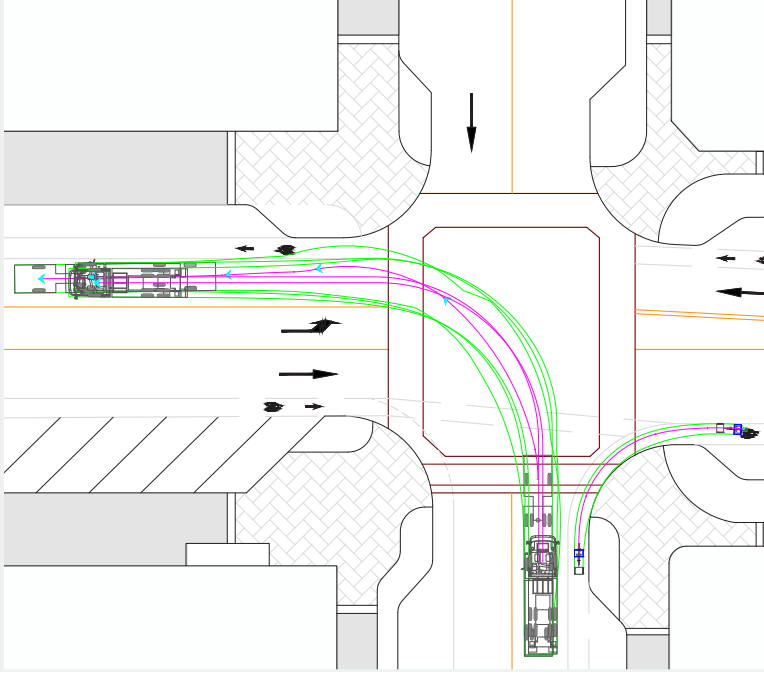
TRANSOFT SOLUTIONS

AUTOTURN

Model, Visualize and Analyze Vehicle Paths

The most comprehensive swept path analysis and turning simulation software to check your sites, intersections, loading docks and road designs.

Ensure all types of vehicles can drive safely and efficiently. From bicycles and cars to buses, trucks and heavy-haul industrial transport vehicles—you can quickly test multiple maneuvers and be assured your results are accurate and extensively realistic. Our patented technology allows you to automate processes, saving you time and increasing productivity. Enhanced review, presentation and reporting features help you get projects approved sooner and expand the value of your work.



Discover the best design and model complex scenarios

Manually 'drive' a standard or manufacture vehicle of your choice, while controlling the speed, superelevation, lateral friction and turn radius using AutoTURN's SmartPath tools. The software will compute the space requirements and display the results so you can focus on the important safety and operational aspects of your design.

Quickly create simulations and check multiple maneuvers for all vehicles accessing the site or see if your intersection and turning lanes can accommodate your design vehicles at the same time. Generate accurate and efficient simulations when testing your designs with vehicles with larger steering lock angles, eliminating the risks of over-design and costly rework.

Simulate bicycle movements to tackle complex urban design

Adopt the principles of urban design and help make your neighborhood safer by giving all road users the space they need to move. Just like motor vehicles, bicycles have their own turning radius, and as the speed increases so will the swept path of these bicycles.

Effortlessly simulate these movements and the turning requirements of a variety of cycle types including typical bicycles, bike with trailers, scooters and more to validate your design. Ensure your on-street and off-street design projects provide enough space to accommodate all the different bikes safely and comfortably since good traffic flow for cyclists plays an important role when designing bicycle infrastructure.

Solve multiple possible drive paths

Automatically solve possible drive paths based on the available space and the desired speed with the IntelliPath® feature. It calculates the maximum allowable speeds for specific turns based on the vehicle type and available space for turning.

This helps you save time and make better decisions, increasing productivity and reducing human errors. Great for scenarios such as traffic calming and site circulation analysis. Eliminate the challenges of modeling vehicles with different steering capabilities manually.

Visualize the impact in 3D

Prevent costly damages to vehicles and infrastructure by using the 3D Clearance Analysis tool during design.

By incorporating terrain elevation, overhead obstacle, and vehicle clearance data together in the project drawing, issues not anticipated in designing in a 2D plane are now detected and can be resolved using a 3D space.

This patented technology simulates the 3D vehicle envelope and analyzes multiple design layers to detect potential conflicts with lateral, ground and overhead structures.

Test your design with a vast array of vehicles

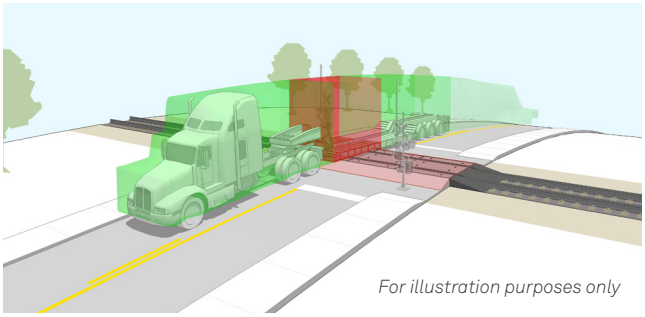
In addition to using the vast catalogue of vehicles, you can now test designs with a variety of new specialty manufacturer vehicles such as forklifts, limousines, construction cranes, fire trucks and tanker trailers. Standard vehicle libraries have been updated to meet the latest design guidelines in multiple countries. With over 1,300 manufacturer-specific vehicles, quickly search by library name and apply filters to refine results or set custom vehicle groups that match your country or local area design guidelines.

Design safe infrastructure with sightlines

Ensure drivers have enough time to notice and react to potential conflicts on the road, with sightline checks, stopping sight distance, interval distances, and object heights analysis. Our 2D and 3D (horizontal and vertical alignments) analyses can help identify blind spots or sight failure zones that may be compromised by obstructed sightlines at intersections, terrain obstructions, and others alike.

Review your results with quality diagnostic tools

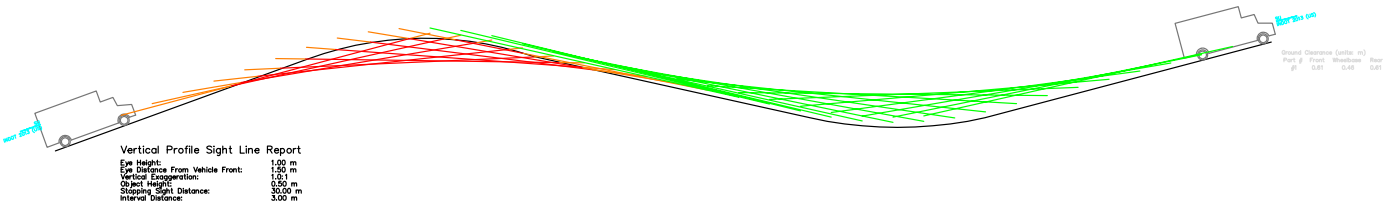
The automated tools ensure your design aligns with the guidelines and safety requirements of local transportation agencies. Conduct informed reviews of simulations with the Inspect Simulation tool which allows you to check any manually produced simulations to ensure key parameters, such as steering angle, speed, and proximity to vehicles or objects, meet design criteria. The visualization tools generate a conceptual 3D rendering of your road or site design, illustrating how vehicles will use the designed infrastructure to stakeholders and clients faster and more effectively. Produce detailed reports so that reviews can be done by peers or others, so you can get a quicker stamp of approval on your design.



For illustration purposes only

Choose the right version according to your needs

AutoTURN® Family Products	Best for:
AUTOTURN	**Basic Vehicle Path Simulation** Confidently analyze road and site design projects including intersections, roundabouts, bus terminals, loading bays, parking lots or any on/off-street assignments involving vehicle access checks, clearances, and swept path maneuvers.
AUTOTURN PRO	**Design for all Users & in a 3D Environment** Optimize designs with enhanced analysis and visualization for urban designs, terrain elevation, overhead obstacle, and vehicle clearance data together in the project drawing. Issues not anticipated in designing in a 2D plane are now detected and can be resolved using a 3D space.



Vehicle Libraries

Our 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 | Bahrain | Czech Republic | Denmark | Finland | France | Germany | Hungary | Iceland | Ireland | Israel | Italy | Netherlands | Norway | Poland | Russia | South Africa | Slovakia | Slovenia | Spain | Sweden | Switzerland | UAE | UK
- **Asia Pacific** – Australia | Cambodia | Hong Kong (PRC) | India | Indonesia | 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-combis.

Platform & System Requirements

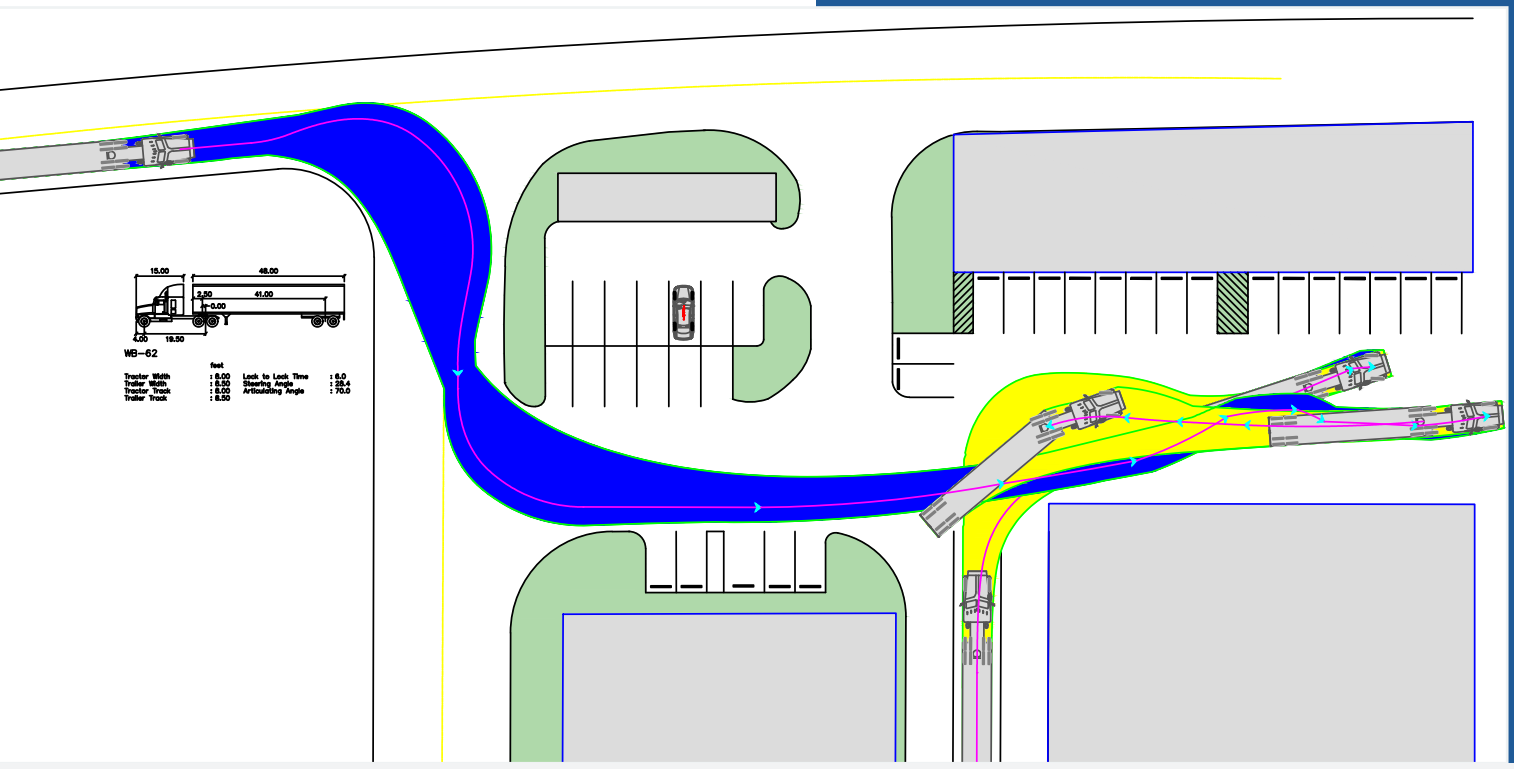
CAD Platform Compatibility
(64 bit, except Bentley V8i series):

This software is compatible with major CAD platforms, including Autodesk® AutoCAD®, Autodesk® Civil 3D®, Bentley® MicroStation®, Bentley® OpenRoads Designer, Bricsys® BricsCAD® Pro, ZWSOFT® ZWCAD® Pro and more.

For details on platform and system requirements, including the list of all supported versions, please visit the product compatibility section using the QR code below.

Languages Available

English, French, German, Spanish, Italian, Czech, Chinese



TRANSOFT SOLUTIONS

Phone (US & Canada)
1.888.244.8387

Email
sales@transoftsolutions.com

Web
www.transoftsolutions.com

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