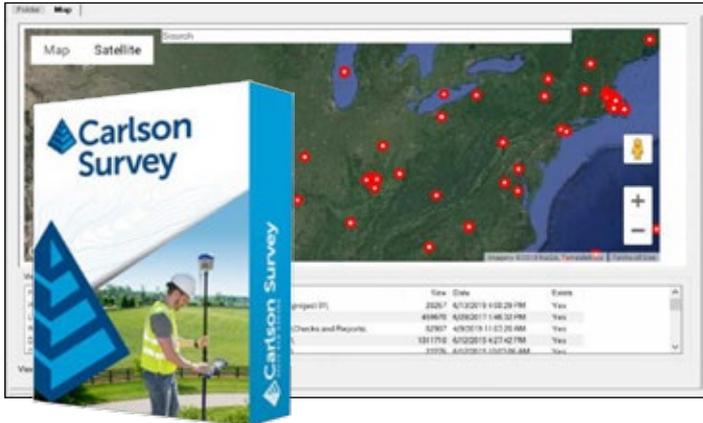


# Carlson Software

Carlson Software offers the complete suite of software solutions for land surveying, civil engineering and construction covering the full cycle of a project from concept to completion. The range of software solutions, which are compatible with essentially every manufacturers' proprietary hardware and software, are explained below.



## Carlson Survey

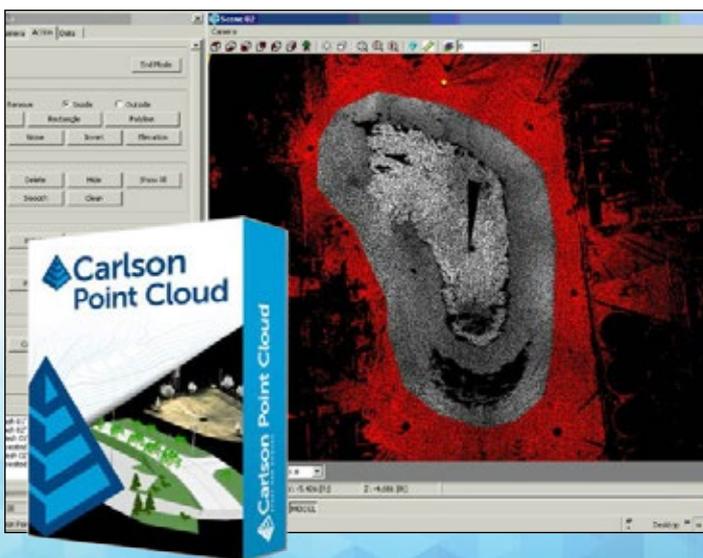
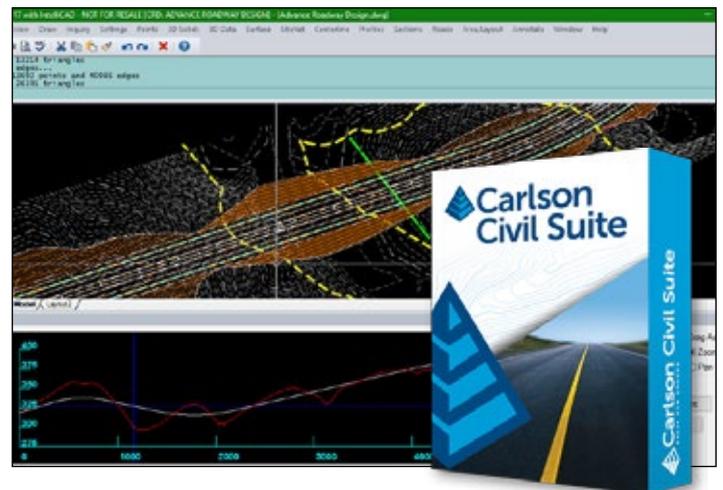
Carlson Survey is a versatile land surveying software that gives a full tool kit for surveyors providing the ability to work seamlessly between the office and the field. Its key features include:

- **SURVNET** for processing raw spatial data for total station, digital level and GNSS vector file data;
- **Surface Commands** for building surfaces, contouring, volumes and pad design; Profile creation, editing, drawing and projecting profiles to 3D;
- **Area Layout** to allow for automatic sub-division of parcels;
- **Field to finish** to re-draw topographical elements based on descriptions edits.

## Carlson Civil

Carlson Civil Suite provides fast and intuitive civil engineering design capability to visualize projects directly and work seamlessly from ground data to design production of advanced infrastructural designs. Its key features Include:

- **Surface Commands** for building surfaces, contouring, volumes and pad design;
- **Grading** for volume computation from grid surfaces, Pad design, Cut/Fill colour Maps with labels;
- **Section and Centerlines** to allow creation of centerlines, offsets, quick sections and creation of Mass Haul diagram;
- **Road Design** for designing Road Network with dynamic road design using intersection and Cul de sac; and
- **Area/Layout** to allow for automatic sub-division of parcels.



## Carlson Point Cloud

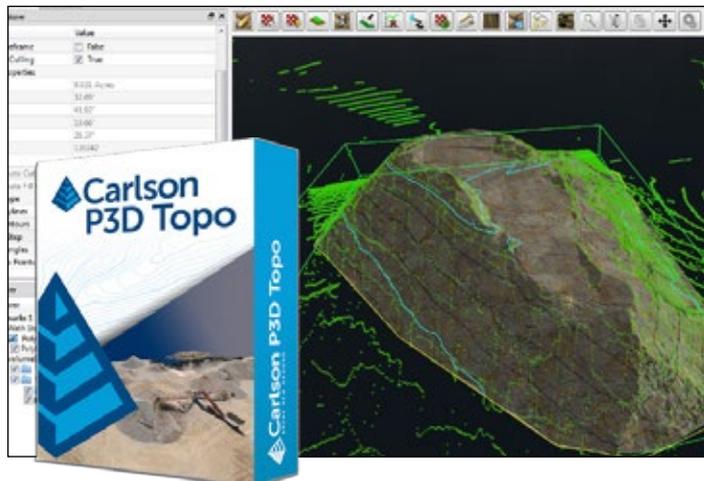
Carlson Point Cloud is a modular program providing the ability to go from field scan to finished survey plan with seamless integration with Carlson Survey and Carlson Civil. It delivers powerful automation for large datasets, with capability to view and process up to 1 billion points all with Carlson ease-of-use. Key features include:

- **Snap to edges** for automated field-to-finish processing of line works and symbols;
- **Create contours**, profiles, sections and break lines from within the point cloud;
- **Extract bare earth** to remove landscape, utilities and other non-surface features;
- **Data extraction** from clouds or meshes, TINs, Contours, Profiles, Sections and Break lines; and
- **General profile and sections** to allows for tracing an alignment across the site and generating profile or sections.

## Carlson Photo Capture

Aerial surveying is rapidly becoming a vital part of any surveyor's toolkit. Drone site flyovers are increasingly being used to boost efficiency and lower costs. Carlson Photo Capture allows full processing of drone data. Key features include:

- **Instant processing** to allow viewing and editing 3D maps the minute it's done uploading;
- **Aerial/Oblique/Terrestrial Ortho Mosaics** to capture the full 3D layout of your land from any camera angle;
- **Point Clouds and surface models** to turn pixels into accurate 3D models of your worksite;
- **Ground Control points** to allow setting of control points to fine tune the accuracy of the survey data; and
- **Digital contours** generated with just a click to get topographical elevations of landscape features.



## Carlson Precision 3D Topo

Designed for use by surveyors, civil engineers, and contractors, Carlson Precision 3D Topo allows users to import survey data, points, polylines, surfaces, point clouds, both traditional LIDAR and aerial drone survey data, and more from a wide variety of programs and entities to create usable 3D surfaces. Its key features include:

- **Creating TIN Surface Models** from edited point clouds;
- **Quickly import surface models** and images from google maps, proposed design surfaces and merge to existing surface models;
- **Calculates volume** directly from point clouds, surface to surface volumes; and Display cut/fill volumes reports in properties window, overlay image data with surfaces, Insert 3D models from .OBJ and .SKP files; and
- **Profile and section** for polylines; and animation tools for drive along and fly over videos.

## Carlson GeoTech

Carlson GeoTech is designed for Surveyors, Civil Engineers, and construction professionals. It provides the ability to import borehole data for analyzing subsurface conditions and materials. It models all core samples, producing a detailed, easy-to-read report for drill logs, cross sections and plan view. Key features include:

- Input, label and edit drillhole log data with strata elevation, depth and attribute data;
- Draw Geologic Columns and fence diagrams;
- Draw Isopach Maps for strata thickness, elevation or attributes;
- Draw and model Strata Surfaces with linkage to Carlson Civil and Construction for strata quantities; and
- Annotate plan view drillhole location maps.

