

CARLSON SURVEY

- GET ACCURACY, EFFICIENCY & VERSATILITY

Get Choice — Plus Two Software Solutions in One!

Carlson Survey works on:

- AutoCAD® versions 2000 to current
- IntelliCAD® (built-in)
- Windows 7

Or choose **Carlson Survey AutoCAD Embedded** with the AutoCAD OEM engine built-in

And, **NOW** you get two of the nation's most popular survey programs in one — **Carlson Survey includes C&G:**

- If you are a C&G user, you get Carlson Survey
- If you are a Carlson Survey user, you also get C&G.

Get the Power of Carlson Field-To-Finish

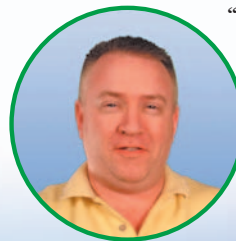
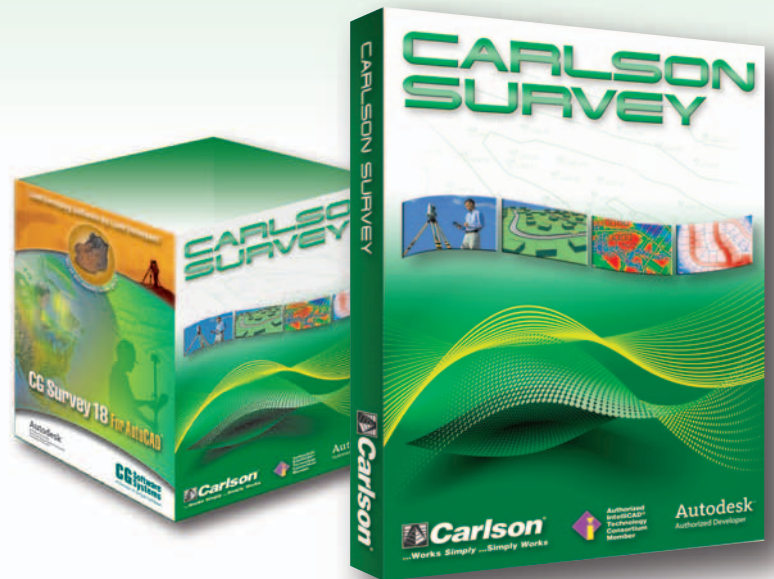
Use Carlson Survey together with Carlson's popular data collection software, Carlson SurvCE, and you'll get powerful, effective, and accurate "Field-to-Finish."

Thanks to the ability to code all entries in Carlson SurvCE, symbols, points, and linework are drawn automatically in Carlson Survey.

In fact, SurvCE serves as an efficient preview screen for the final drawing — if it looks good on the data collector, it will process perfectly in Carlson Survey.

Find Out More NOW!

Call or visit Carlson Software:
800-989-5028 • www.carlsonsw.com



"Carlson Survey does it all for us — it's a big time saver on all different levels. Carlson's Field-to-Finish is better, too, because it connects all the line work for you. It just makes the whole process a lot easier."

— Reed Adams, LS
Director of Land Surveying
Koontz-Bryant
Richmond, Virginia



Free Technical Support
By Phone, Email, and Web

Autodesk®
Authorized Developer



**Authorized
IntelliCAD® Technology
Consortium Member**

*IntelliCAD is a robust, DWG-compatible CAD platform that every CAD developer can build upon



Carlson®

...Works Simply ...Simply Works

CARLSON SURVEY

- CONNECT TO ESSENTIALLY EVERY MANUFACTURER'S PROPRIETARY HARDWARE AND SOFTWARE

Top New Features

Smart Annotation Rules: Fully adjustable for cleaner designs with no overlapping labels

Document Management: Here's a smart filing system - the Carlson Data Depot - for sharing files and archiving or making back-ups

Settings Management: Get everyone working on the same page with this ability to establish company-wide settings and styles

CAD Standards Draw Tool: Easy-to-use table of custom items you can draw complete with standardized properties

Best Fit Line/Curve: Added ability to add or remove points from processing and then recalculate

C&G Survey Commands Included: The menus for each survey solution run side by side — you get two of the nation's most popular survey programs in one.

Survey Commands

- **Data Collection Interfaces:** Upload and download to popular data collectors
- **Traverse Adjustment:** Spreadsheet editor for raw data with graphics and processing for traverse adjustments
- **SurvNET:** Advanced network least-squares for totalstation, GPS and level data
- **Field-to-Finish:** Draw points with styles and in point groups set by point descriptions and draw linework by several flexible methods
- **Field-to-Finish Inspector:** Inspect all field-to-finish elements, see description source and re-draw based on descriptions edits.
- **COGO:** Streamlined inverse, traverse, sideshot, intersections, interpolation, translate, rotate, scale and align
- **Coordinate Transformations:** Transform coordinates and screen entities between lat/lon and grid projections as well as local to local by Helmert and least-squares methods
- **Deeds:** Enter deed by description, read deed data from deed file, deed reports, deed correlation and generate legal description from drawing
- **Cut Sheets:** Create custom cut sheet reports with reference grades and station-offsets

Surface Commands

- **Build Surfaces:** By triangulation or rectangular grids
- **Contouring:** One step triangulate and contour from 3D entities as well as contouring from surface files
- **Surface Manager:** Change surface display properties and adjust surface functions to add and remove points and breaklines and swap edges
- **Volumes:** Earthwork volumes between triangulation or grid surfaces
- **Pad Design:** Tie cut/fill slopes from pad perimeter to surface, build pad surface, calculate and balance volumes, and edit pad parameters

Centerlines

- **Design and Edit Centerlines:** Design or input alignments on screen or in dialog with graphics
- **Label Stations and Offsets:** Annotate station and offsets along centerline and at selected points
- **Calculate Offsets:** Reports stations and offsets for selected points along centerline
- **Create Offset Points:** Create points at specified stations and offsets
- **Spirals:** Flexible handling of the most complex spiral curves including "spiral-only" elements going arc-spiral-arc, arc-spiral-line and line-spiral-line

Profiles

- **Create Profiles:** From surfaces, screen entities, points on centerline, etc.
- **Quick Profile:** One step profile creation with real-time update while adjusting centerline
- **Input-Edit Profiles:** Enter profile data in dual spreadsheet and graphic window, and design in reference to controlling profile grade points
- **Draw Profiles:** Draws profiles on grids or plan-profile sheets with auto-updating based on edits
- **Profiles To 3D:** Create points and 3D polylines from profiles

Points

- **Import/Export:** User-defined import and export of point data along with conversions with specific other formats
- **Draw Points:** Draw points with settings for symbols, layers and styles
- **Point Groups:** Point group manager to define sets of point by filters
- **Coordinate File History:** Tracks all changes to points with report and undo functions
- **Fix Point Label Overlaps:** Finds point label overlaps with rule options to fix automatically
- **Point Tools:** Utilities for modify point labels such as move with leader, twist and resize

Area/Layout

- **Label Areas:** Customized area label styles and several methods to select areas to label
- **Size Areas:** Sliding side area, hinged area, area radial from curve and bearing area cutoff
- **Lot Network** – Commands for subdividing a site into lot and ROW areas. Dynamically updates areas for any changes to boundaries. Includes ability to label linework and areas and to draw setback boundaries.
- **Lot Manager:** Lot definitions by point numbers with functions to create lots, conduct map check for closure, edit in spreadsheet with graphics, report lots and draw lots
- **Lot Layout:** Size lots along alignment with controls for target area, setback and frontage
- **Offsets, Intersection and Cul-de-Sacs:** Layout for ROW and EOP linework

Annotation

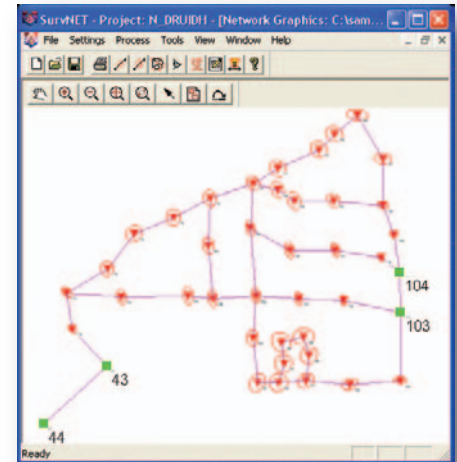
- **Angle & Distance Labels:** Flexible routines to label linework in all possible layout combinations plus available rules to automatically fix label overlaps and revise labels when entities move
- **Curve Labels:** Label curve data in stack, along arc or in table
- **Survey Text:** Routines to create typical plat labels such as offset and building dimensions
- **Label Elevations:** Label spot elevations along an alignment
- **Linetypes:** Draw special linetypes

GIS Commands

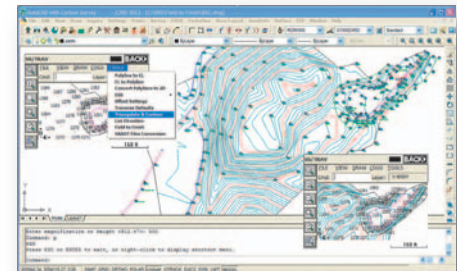
- **GIS Data:** Input, edit, query, report, label and inspect database data attached to drawing entities.
- **ESRI SHP:** Import/Export point and linework data
- **Geo-Referenced Images:** Place geo-referenced images into the drawing.
- **Place Camera Symbol/Image:** Draw a camera symbol with an attached image.

General

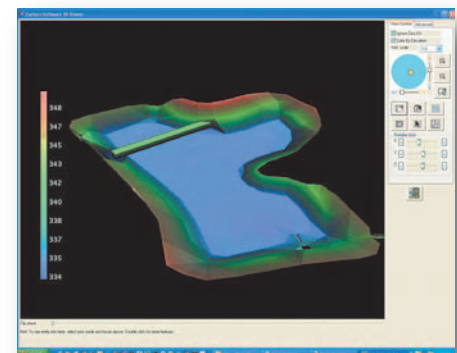
- **Project Setup:** Flexible data storage methods
- **Drawing Explorer:** Manage and access project data files
- **Drawing Cleanup:** Fix common drafting errors
- **Drafting Enhancements:** Handy tools for working in Autocad® such as Join Nearest, Shrinkwrap Entities, Polyline Utilities, Drawing Inspector, Layer Inspector and Twist Screen
- **Data Compatibility:** Supports industry standard LandXML and scores of specific data conversions



SurvNet traverse network with error ellipses



Contour in both Carlson Survey and SurvCE



3D screen shot, courtesy of The Engineering Groupe, www.enggroupe.com



...Works Simply ...Simply Works