Using Point Cloud and Public LIDAR to produce existing terrain
Recorded 7/9/2024

This webinar, hosted by That CAD Girl and presented by Travis Maxwell, demonstrates how to use Carlson Point Cloud software with publicly available LiDAR data to create accurate existing terrain models. The session covers data acquisition, classification filtering, surface generation, and contour refinement techniques for civil and surveying applications.

Key Topics:

- Downloading and managing public LiDAR data (USGS & state sources)
- Importing LAS/LAZ files into Carlson Point Cloud
- Classifying and filtering ground points
- Creating TIN surfaces and contours
- Managing point density and data reduction

Descriptions, transcripts and other details of this recording have been AI-generated and may contain errors.

This session was presented by Travis Maxwell on 07/09/2024.

Fast Track to Surface Modeling in Carlson Software – Session 2-3
Recorded 07/27/2023

This session of the *FastTrack Surface Modeling* series demonstrates advanced Carlson Software road network design, including intersections, cul-de-sacs, turn lanes, and lot grading automation. The instructor walks through practical workflows for building, editing, and processing road networks while explaining how Carlson dynamically manages profiles, templates, and surfaces.

Key Topics:

- Creating and editing roads within Carlson Road Network
- Managing intersections, cul-de-sacs, and roundabouts
- Using templates, profiles, and grading settings
- Elevating pads and lots for building sites
- Generating surfaces, contours, and quantity reports

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This session was presented by Jennifer DiBona on 07/27/2023.

Fast Track to Surface Modeling

in Carlson Software – Session 2-2
Recording 07/27/2023

This Carlson Software training webinar continues the Fast Track Surface Modeling series, focusing on advanced grading, 3D polyline editing, and surface modeling workflows. The session demonstrates practical tools for curb, sidewalk, and parking lot design, as well as road network setup and volume calculations.

Key Topics:

- 3D polyline elevation editing and grading
- Creating and adjusting curb, sidewalk, and parking lot surfaces
- Using Carlson's "Points by Slope" and "2D to 3D Polyline" tools
- Building and merging surface models
- Road Network (RoadNet) setup and template creation

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This session was presented by Jennifer DiBona on 07/27/2023.

Fast Track to Surface Modeling

in Carlson Software – Session 2-1
Recorded 7/27/23

This advanced Carlson Software training session covers surface modeling workflows, LandXML data exchange, pad grading, and volume calculations. Participants learn practical grading and modeling techniques for civil and survey projects using Carlson Civil and Survey modules.

Key Topics:

- LandXML export/import and data archiving
- Pad grading and daylight projection
- Volume calculations and balancing
- Surface merging and cut/fill analysis
- Stockpile volume computation

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This session was presented by Jennifer DiBona on 07/27/2023.

Fast Track to Surface Modeling in Carlson Software – Session

#1-3
Recorded 07/25/2023

This session is the third installment in the *Fast Track to Surface Modeling in Carlson Software* training series. It provides a detailed walkthrough of surface modeling workflows, including labeling, 3D polyline editing, pad grading, daylighting, and design pad templates within Carlson Civil and Survey.

Key Topics:

- Labeling and annotating 3D polylines
- Elevating 2D polylines using surfaces and slope calculations
- Pad grading and daylighting techniques
- Using Design Pad Template for automated grading

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This session was presented by Jennifer DiBona on 07/25/2023.

Fast Track to Surface Modeling in Carlson Software – Session #1-2

Recorded 07/25/2023

This Carlson Software training session led by That CAD Girl provides a detailed walkthrough of surface modeling techniques, focusing on creating and refining TIN and grid surfaces from contours, points, and public data sources. The webinar demonstrates best practices, pitfalls to avoid, and advanced Carlson Civil tools for accurate grading and surface preparation.

Key Topics:

- Building surfaces from contours and avoiding flat triangles
- Using Carlson’s triangulation and contouring tools
- Importing public elevation data (Google Earth, NED, LiDAR DEM)
- Managing TIN vs GRID files and surface boundaries
- Elevating 2D polylines to 3D for grading and design

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This session was presented by Jennifer DiBona on 07/25/2023.

Fast Track to Surface Modeling in Carlson Software – Session #1-1

Recorded 7/25/23

This session introduces the fundamentals of surface modeling in Carlson Software, covering how to build, inspect, and refine existing ground surfaces using points, breaklines, and triangulation tools. Participants learn practical workflows for creating accurate TIN models, troubleshooting elevation issues, and improving contour quality.

Key Topics:

- Building and validating existing ground surfaces
- Using Drawing Inspector, 3D Viewer, and Shrink Wrap tools
- Managing non-surface points and breaklines
- Triangulate & Contour workflows
- Field-to-Finish automation and contour aesthetics

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This session was presented by Jennifer DiBona on 07/25/2023.

Understanding Changes to Projections and Zones in Carlson 2024

Recorded 3/21/2024

This webinar, hosted by That CAD Girl and presented by Carlson Software’s Doug Oberg, explains the updates to projection and zone settings introduced in Carlson 2024. It clarifies the purpose of new prompts, datum realizations, and configuration options to help surveyors transition smoothly to the latest version.

Key Topics:

- Changes to projection and datum settings in Carlson 2024
- Understanding NAD83 realizations and EPSG codes
- Lat/Long transformation toggle and its implications
- Backward compatibility and upgrade recommendations
- Future improvements planned for Carlson 2025

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This session was presented by Doug Aaberg on 03/21/2024.

SurvNet Least Squares In Carlson Software

Recorded 4/4/2024

This recorded webinar provides a detailed overview of Carlson SurvNet’s Least Squares Adjustment tools, presented by surveyor and software developer Donnie Stallings. The session covers the theory behind least squares, practical setup and configuration in SurvNet, and interpretation of adjustment reports for survey network analysis.

Key Topics:

- Fundamentals of Least Squares Adjustment
- Carlson SurvNet configuration and settings
- Processing total station and GPS data
- Reading and interpreting adjustment reports
- Troubleshooting and blunder detection

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This session was presented by Donnie Stallings on 04/04/2024.

SurvNet Least Squares – Working with Project Datasets

Recorded 6/13/2024

This webinar by That CAD Girl covers how to standardize CAD drawings using the National CAD Standard (NCS) within Carlson Software and AutoCAD. It explains best practices for managing layers, linetypes, and dimension styles to ensure consistency across civil and survey projects.

Key Topics:

- National CAD Standard (NCS) layer naming and structure
- Carlson template and layer library management
- Linetype scaling, polyline generation, and plotting behavior
- Dimension style creation and scaling for different drawing types

Descriptions, transcripts and other details of this recording have been AI-generated and may contain errors.

This session was presented by Jennifer DiBona on 05/07/2024.