I-495/I-66 Interchange, VA

Customer:	Tuck Mapping Solutions
Demo-Project:	I-495 / I-66 Interchange, Virginia
Dates:	March 2009
Size:	6.5 miles of road/ ~ 405 Acres
Type:	Full DTM/TOPO of Interstate
Project Mngr:	Mauricio Terneus

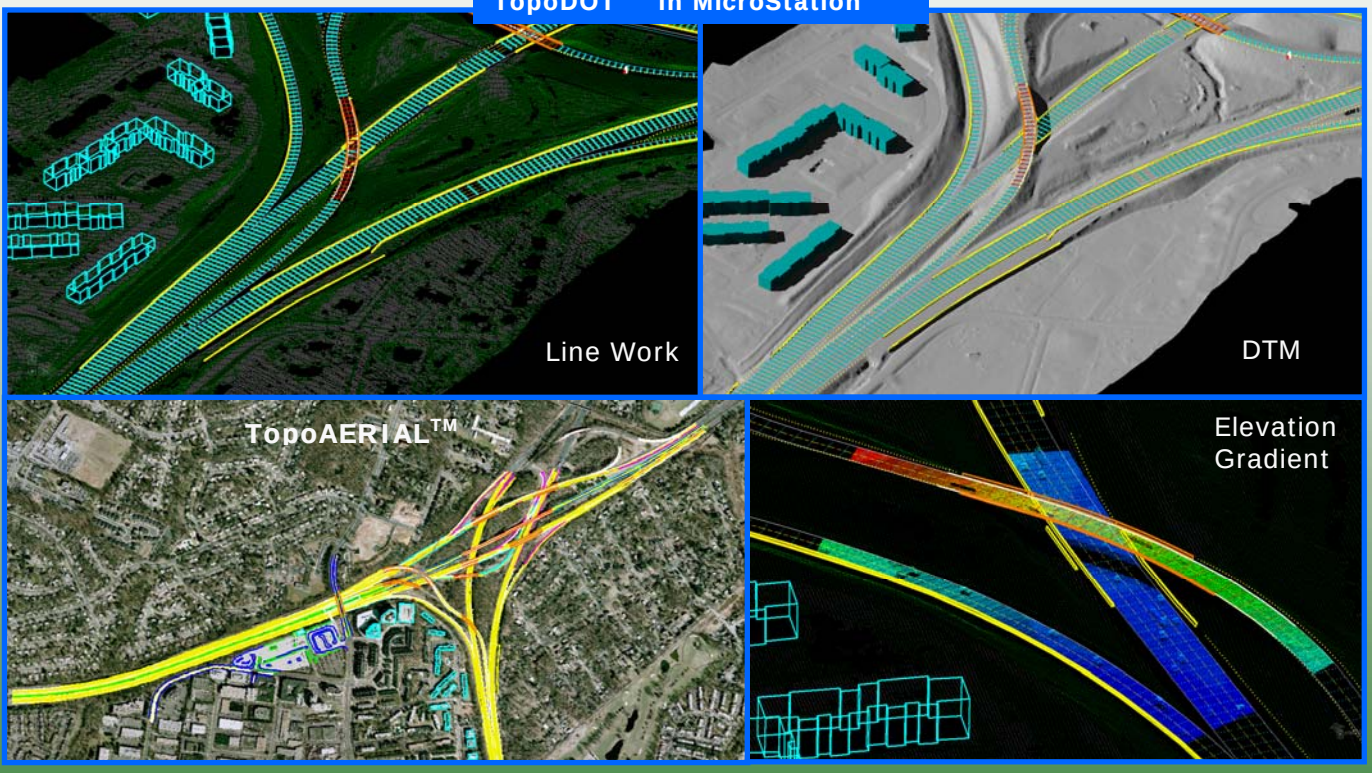
PROJECT HIGHLIGHTS

- **Five flight paths of data, approx. 405 Acres collected with Riegl Q560 Airborne LiDAR scanner**
- **Processed 6.5 miles of road with TopoDOT™ in Microstation™**
- **Detailed topography extracted in two man-weeks**

Demo-Project Summary:

Certainty 3D, LLC applied 3D Imaging Technology to produce a full DTM/Topographic survey for Tuck Mapping Solutions, Inc. 3D Image data was collected efficiently using Tuck's Riegl Q560 Airborne LiDAR scanner. A total of five flight paths of data were collected and covered approximately 405 Acres of Virginia Interstate. A highly detailed topography was extracted from the data. This included 6.5 miles of Roadway (5x1 meter grid on road surfaces), Terrain Features (1x1 meter grid on terrain surfaces), Road Markings, Walls/Dividers/Guard Rails, Bridges and Buildings. The combination of these extracted features gives an extremely detailed DTM. Project processing time was approximately 110 hours or two weeks for 1 processor. The application of 3D Imaging Technology brought both the total project time and cost down, and still yielded a superior product compared to traditional surveying methods.

TopoDOT™ in MicroStation™



Deliverable Summary

- **Data processed using Certainty 3D's TopoDOT™ application in MicroStation™**
- **All 3D image data is traceable back to control network survey reference**
- **TopoDOT™ generated model delivered in MicroStation™ and LandXML™ formats**
- **Completed Topography including all breaklines and elevations using Virginia DOT required formats**

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