

# Preliminary Roadway Design Using InfraWorks

Brian J. Hailey, P.E.

Senior Application Specialist

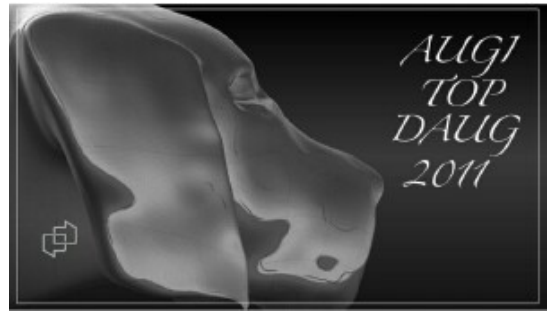
Applied Software





## About the speaker

- Brian J. Hailey, P.E.
- Licensed engineer in Colorado
- Autodesk Certified Instructor
- Autodesk Expert Elite



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# CLASS FORMAT CHANGE

~~60 MINUTES?~~

~~10:30-11:30~~

90 MINUTES

10:30-12:00

LUNCH STARTS

AT 12:15

# TRIVIA TIME!

What is the longest continuous commercial street in the United States?

## street

/strēt/ 

*noun*

a public road in a city or town, typically with houses and buildings on one or both sides.  
"the narrow, winding streets of Greenwich Village"

# Colfax Avenue, Denver area

- 26 miles long
- No residential
- Playboy called it, “The Longest, Wickedest Street in America”.
- My wife calls it, “The Bad Road”.

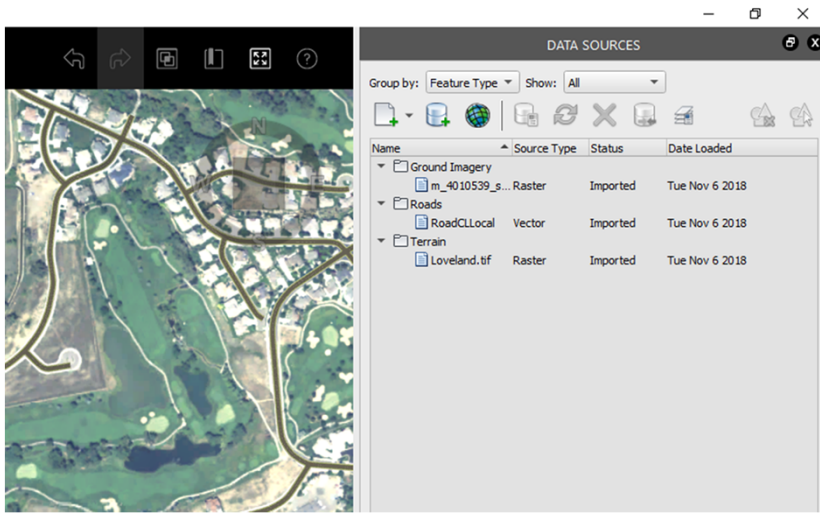


# Preliminary Roadway Design

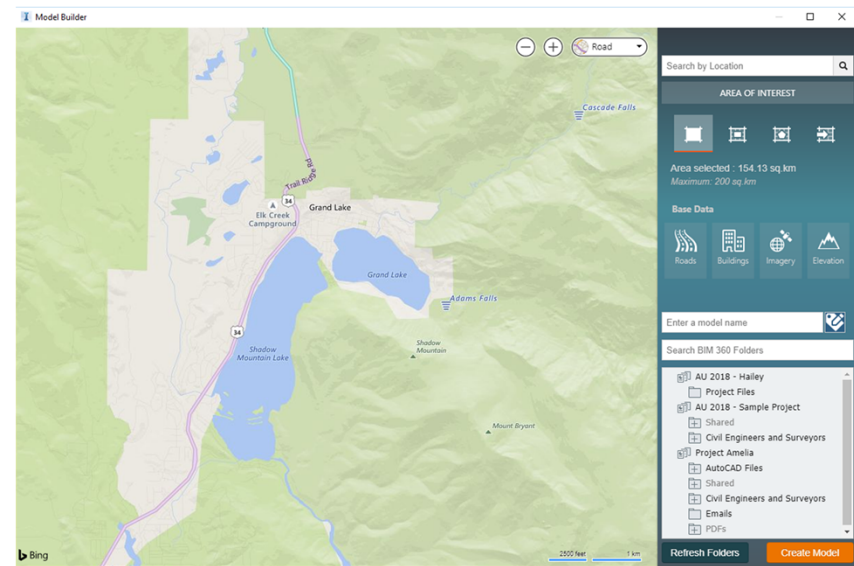
- Create a model of the existing conditions of the project area
- Layout a roadway both horizontally and vertically
- Adjust the cross section of the roadway
- Visualize the roadway and share it with stakeholders

# Create a Model of the Existing Conditions

## GIS Data

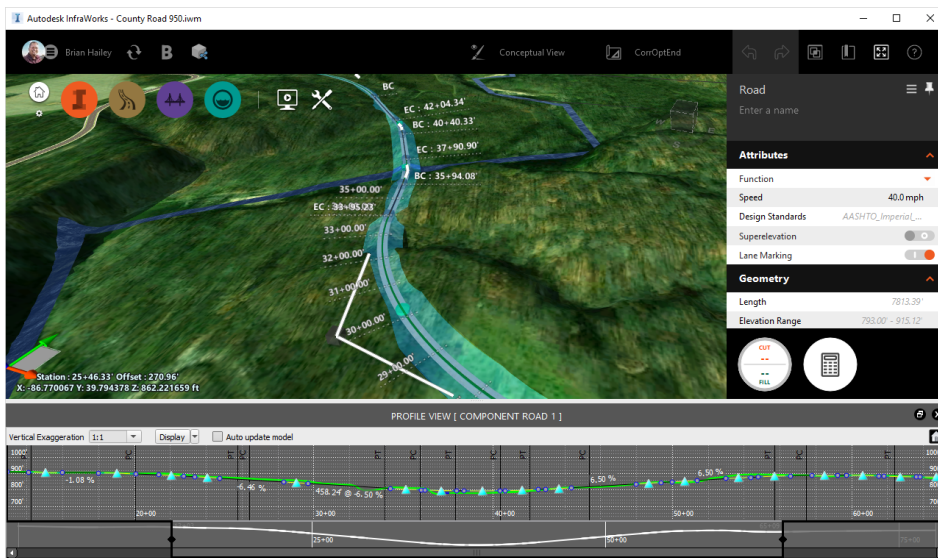


## Model Builder

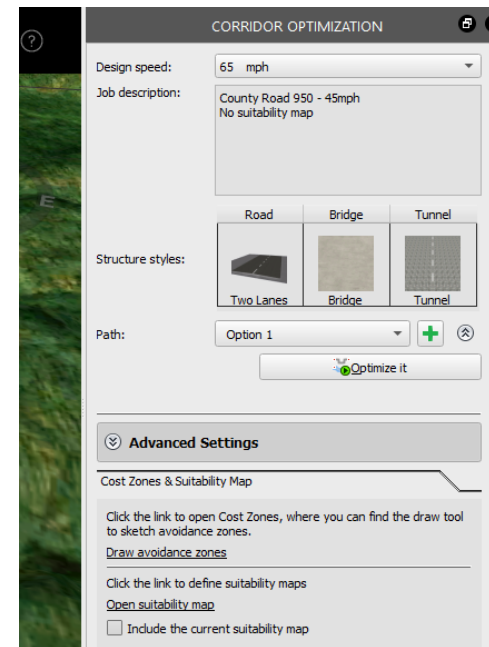


# Preliminary Roadway Layout

## Manual Layout



## Optimization



# Cross Sections

## Components



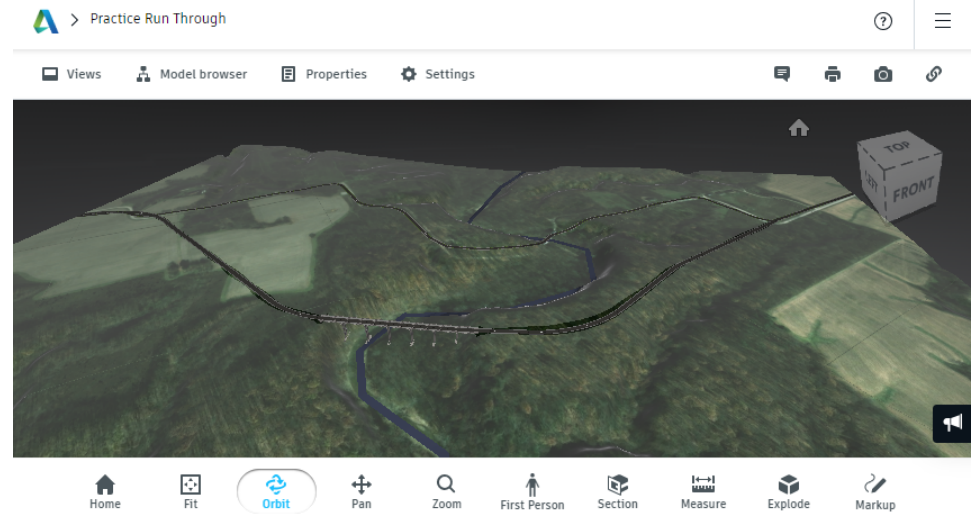
## View Sections



# Sharing and Visualization

Visualization





Sharing



# Sharing and Visualization

## Video Comparison

This PC > Local Disk (C:) > Temp > Video Comparison

<input type="checkbox"/> Name	Date	Type	Size	Length
 DV Video Encoder.avi	11/7/2018 10:18 AM	AVI File	58,939 KB	00:00:20
 Uncompressed.avi	11/7/2018 10:15 AM	AVI File	937,822 KB	00:00:20
 Windows Media Video.wmv	11/7/2018 10:17 AM	WMV File	3,092 KB	00:00:20
 MJPEG Compressor.avi	11/7/2018 10:20 AM	AVI File	202,922 KB	00:00:20

$$\frac{937,822}{3,092} = 303.3$$

# Preliminary Roadway Design

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# THANK YOU!

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 brianjhailey



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