

**ATG USA**

**2018**

# **ATG PARTNERS WITH THE NEW MEXICO DEPARTMENT OF TRANSPORTATION**



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# I-25/MONTGOMERY INTERCHANGE



## A LITTLE BIT ABOUT THIS PROJECT

The New Mexico Department of Transportation has been redoing several sections of I-25 in phases, with the I-25/Montgomery Interchange being the next piece to that puzzle. The interchange gets congested on a daily basis. After years of asking the federal government for money to fix it, NMDOT said it finally had the funding to make big changes to help traffic flow. Bids for the \$55 million project will go out in summer 2020, with construction starting in late 2020 or early 2021.

# ATG'S ROLE IN THIS PROJECT

Staff from multiple arms of the NMDOT were brought in to conduct a study to determine different alternatives for redesigning the interchange using a wide range of Autodesk software that included Civil 3D, InfraWorks and NavisWorks, all supplied by their Autodesk reseller, ATG. Next steps called for building a new model from the study results.

Rob Bigelow, ATG Infrastructure Industry Specialist, conducted a six-day InfraWorks training workshop. NMDOT staff involved

in this project decided to utilize InfraWorks as a preliminary and final design 3D model tool. The first three days were dedicated to fundamentals training with the final three days dedicated to custom workflow training for the I-25/Montgomery project. Rob worked closely with Jeremy Salazar of the NMDOT to create a model of the intersection and all of the corridors within Civil 3D. Collaboratively, they worked together in the cloud, integrating and uploading new changes from Civil 3d into InfraWorks.

## EXECUTIVE SUMMARY

The NMDOT conducted this study to document existing deficiencies and future conditions within the North I-25 corridor in Albuquerque, New Mexico and to identify improvement strategies to address design-year transportation needs.

ATG provided NMDOT with training to utilize InfraWorks through all stages of the project and transform the Civil 3D model into an immersive 3D model with videos, renderings and a virtual reality experience.



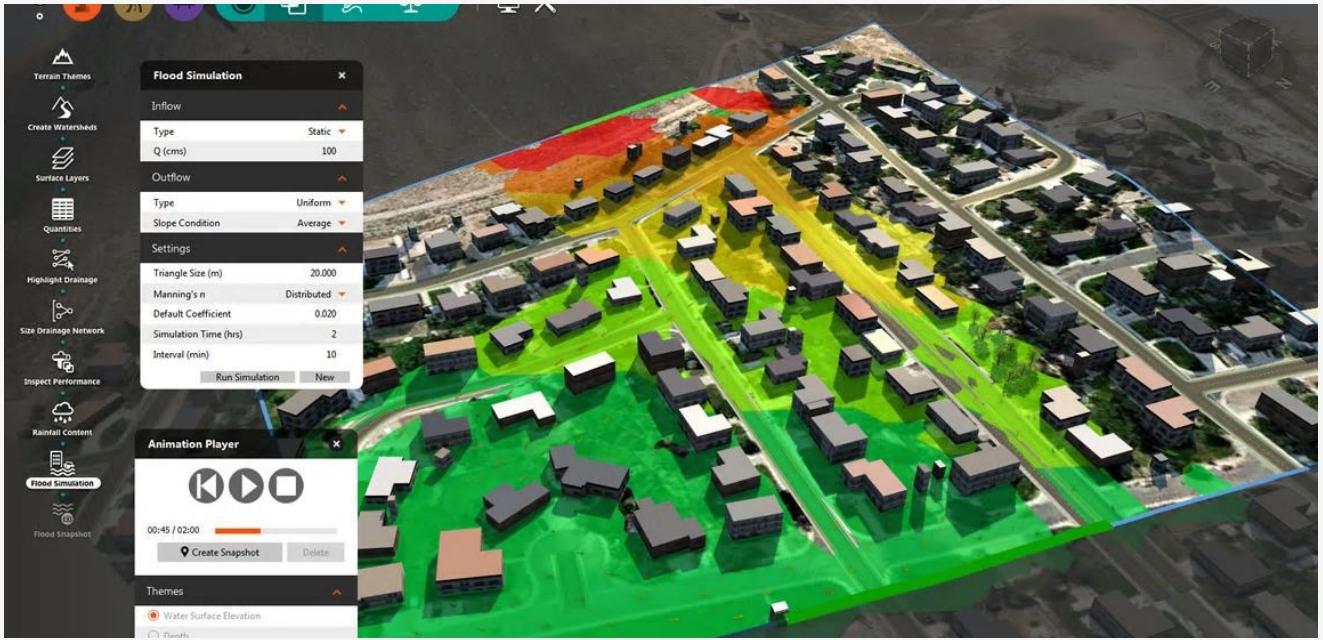
# INFRAWORKS FEATURES: DESIGN



## DESIGN:

Create roads, bridges, drainage and more. Use tools that are fast, visual and incorporate engineering principles. InfraWorks software supports connected BIM (Building Information Modeling) processes, enabling designers and civil engineers to plan and design infrastructure projects in the context of the real world.

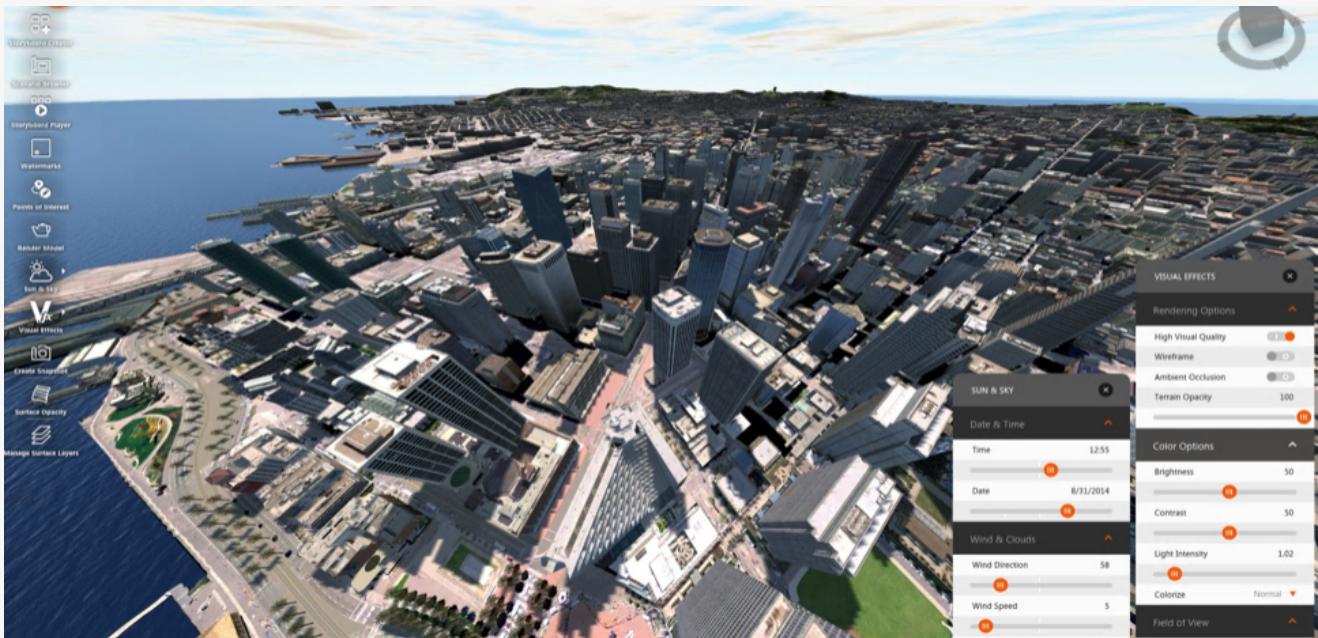
# INFRAWORKS FEATURES: ANALYZE



## ANALYZE:

Make better decisions throughout the project with tools for sight distance, flood simulation, dynamic site analysis and more. Choose between element-based or PI-based layout for more flexibility in how you design roads. Calculate underground infrastructure quantities by depth.

# INFRAWORKS FEATURES: VISUALIZE



## VISUALIZE:

Visualize your design, share cloud-based models with project stakeholders for real-time feedback, and transform designs into compelling presentations. Use photos to assist you when modeling features based on point cloud data.

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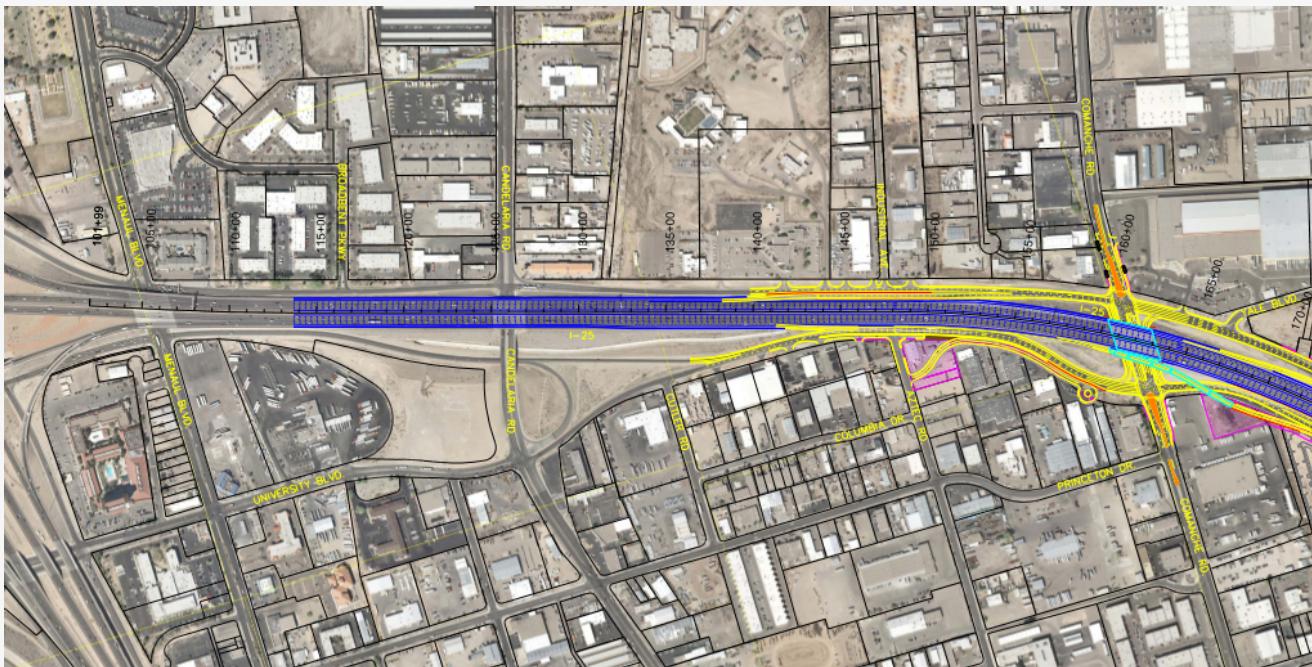
# INFRAWORKS FEATURES: COLLABORATION



## COLLABORATION:

Collaboration features help you overcome team coordination and workflow challenges within civil infrastructure projects. Use visualization, simulation, and water analysis tools integrated with the design process to improve project delivery and decision making.

\$ 150,000.00



## FUTURE PROJECTS BUDGET BREAKDOWN

PROJECT	ESTIMATED BUDGET
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WIDENING PROJECTS ALONG  
I-25 SOUTHBOUND FROM SAN  
ANTONIO TO JEFFERSON

**\$55 MILLION**

PAVEMENT PRESERVATION  
IN A 4-MILE STRETCH NEAR  
BELEN, NM

**\$12 MILLION**

WIDENING OF THE  
INTERSTATE TO 3 LANES,  
FROM RIO BRAVO TO  
BROADWAY IS SCHEDULED  
AFTER THE COMPLETION  
OF THE I-25 INTERCHANGE

**\$7 MILLION**

# CLOSING INSIGHTS



"NMDOT continues to prove they are a leader in their industry by utilizing innovative, cutting-edge 3D modeling software like Infraworks into their existing infrastructure workflows. It was a pleasure training and working with them on making this project a success."

-Rob Bigelow, ATG Infrastructure Industry Specialist

"ATG exceeded our expectations with training and the hands-on assistance with the interchange model. the engineers, design staff, and ATG were able to collaborate together in a fantastic way."  
**-Jeremy Salazar, NMDOT Engineer.**