

CIA TEAM

INFRASTRUCTURE

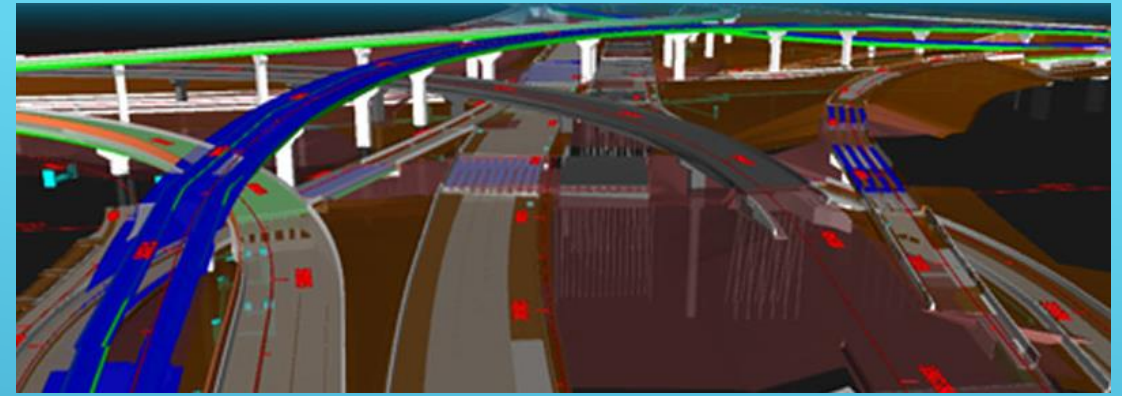
PRESERVATION

NJDOT – Shivani Patel

FHWA – Nunzio Merla

EDC – 6

DIGITAL AS-BUILTS



Purpose: To explore the use of 3D models to build projects and update that digital information to reflect the project's as-built condition

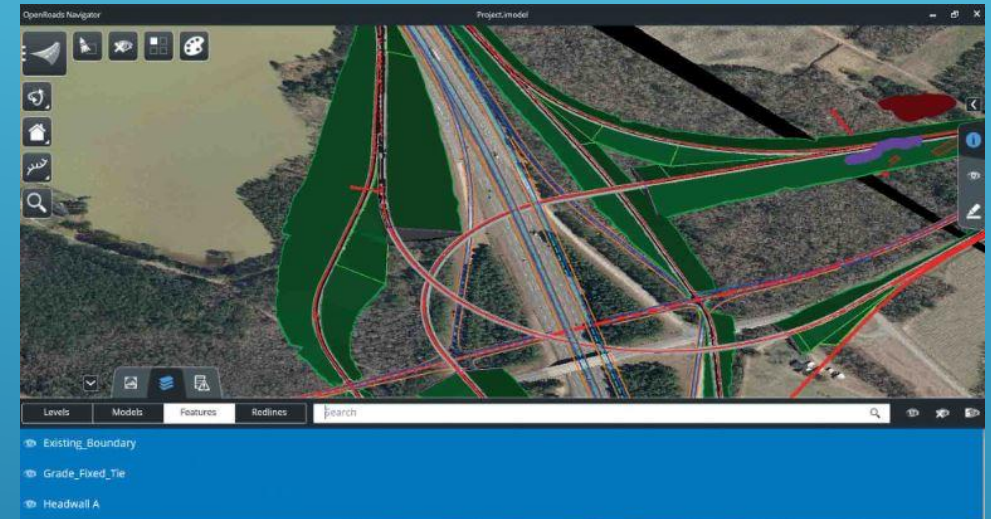
Status:



- Prioritizing CADD development

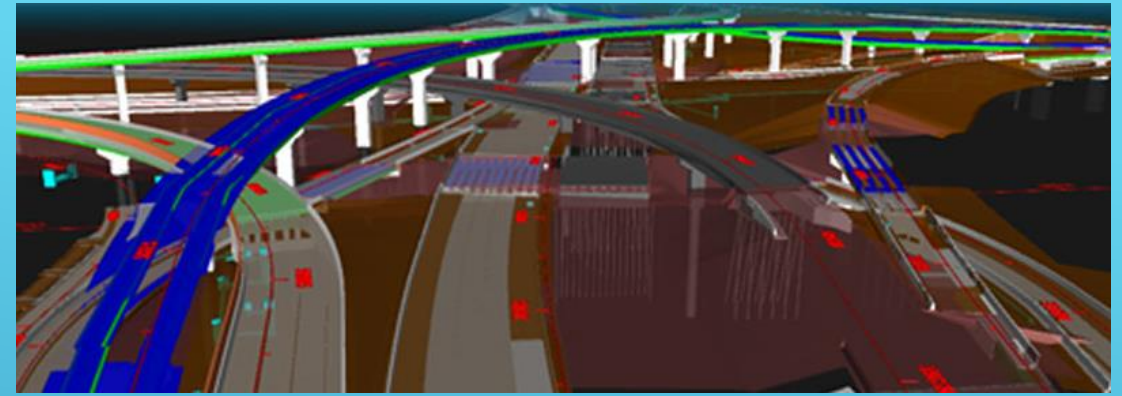


- Participated in a webinar focusing on the importance of digital twins

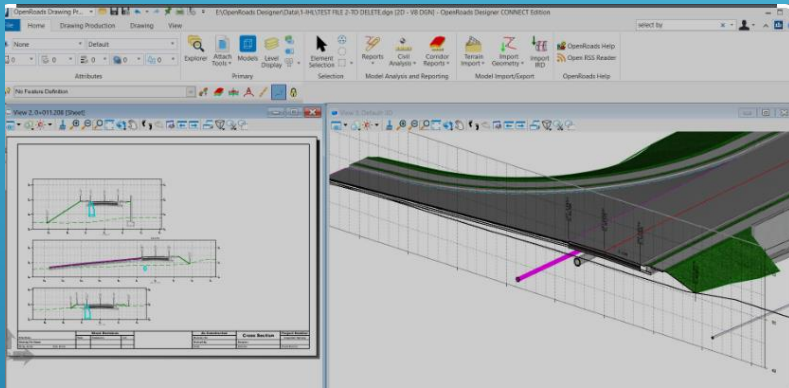


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DIGITAL AS-BUILTS



Lessons Learned & Accomplishments



- Emphasized the prioritization of CADD development



- Need for staff availability and expertise

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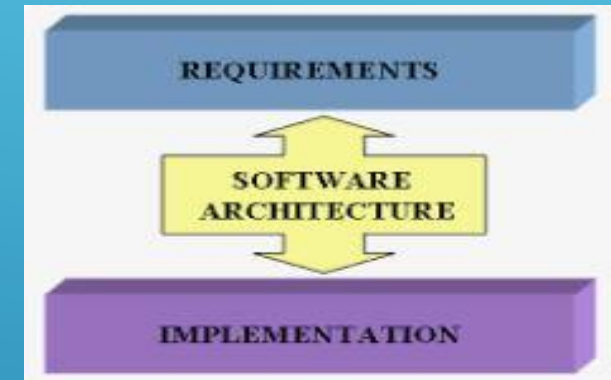
E-TICKETING



Purpose: Provide stakeholders with an electronic means to produce, transmit, and track and verify materials deliveries

Status:

- Submitted the System Architecture Review (SAR)
- Next steps: completing the procurement process, selecting a vendor and learning the system



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E-TICKETING



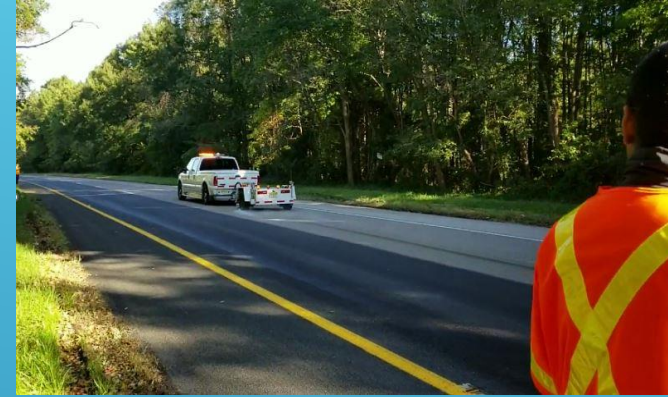
Lessons Learned & Accomplishments

- Logical SAR is in progress
- Required paperwork is time-consuming



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TARGETED OVERLAY PAVEMENT SOLUTIONS (TOPS)



Purpose: To develop and install overlays that provide long-life performance under a wide range of traffic, environmental, & existing pavement conditions

Status:

- NJDOT's first HiMA project (Rt.42 Pavement Preservation) is in construction
- Skid testing was conducted on six projects

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TARGETED OVERLAY PAVEMENT SOLUTIONS (TOPS)



Lessons Learned & Accomplishments

- Project including HiMA is now in construction (South State Inc.)
- Acquired new skid testing equipment in 2022
- Rutgers University will perform companion testing



UHPC FOR BRIDGE PRESERVATION AND REPAIR



Purpose: *To explore the use of UHPC for Bridge Preservation and Repair*

Status:

- Established baseline of UHPC overlay bond condition
- Presented at the 2022 International ABC Conference
- Seeking funding to extend UHPC overlay monitoring program up to 2026



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UHPC FOR BRIDGE PRESERVATION AND REPAIR



Lessons Learned & Accomplishments

- Completed two UHPC overlay projects
- NJDOT's first UHPC link-slab application project is in construction
- Material and labor for UHPC is costly
- Industry experience in UHPC applications is limited

