MUNICIPAL ADVISORY COMMITTEE MEETING

KEYSTONE BUILDING 8N1 AND MICROSOFT TEAMS ·· NOVEMBER 2, 2023

pennsylvania
DEPARTMENT OF TRANSPORTATION

AGENDA

- **Welcome and Updates – Executive Deputy Secretary Cheryl Moon-Sirianni and Deputy Secretary Larry Shifflet** **1:00-1:10**
- **Updates** **1:10-2:00**
  - Municipal Association Updates
    - Pennsylvania State Association of Township Supervisors
    - Pennsylvania State Association of Boroughs
    - Pennsylvania Municipal League
    - Pennsylvania State Association of Township Commissioners
    - County Commissioners Association of Pennsylvania
  - Federal Highway Administration – Veronica Feliciano
  - Department of Community and Economic Development – Rachel Reznick
  - Municipal Research and Outreach – Chris Metka
  - Financial and Contract Services – Kristen Sims
  - Research Implementation – Pat McVeigh
  - Electric Vehicles/NEVI – Natasha Fackler/Colton Brown
  - Multimodal – Dave Bratina
- **Break – 5 Minutes** **2:00-2:05**
- **Presentations**
  - E-ticketing and Design Collaboration – Kelly Barber **2:05-2:35**
  - LTAP Website Update – Mike Dudrich **2:35-2:45**
  - Automatic Work Zone Safety Enforcement – Dan Farley **2:45-3:00**
  - Micromobility: What Is It and Where Can Your Ride It? – Roy Gothie **3:00-3:15**
- **Next Meeting/Adjournment** – Chris Metka **3:15**

WELCOME AND UPDATES

EXECUTIVE DEPUTY SECRETARY CHERYL MOON-SIRIANNI ·· NOVEMBER 2, 2023

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WELCOME AND UPDATES

DEPUTY SECRETARY FOR PLANNING LARRY SHIFFLET ·· NOVEMBER 2, 2023

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MUNICIPAL ASSOCIATION UPDATES

- Pennsylvania State Association of Township Supervisors
- Pennsylvania State Association of Boroughs
- Pennsylvania Municipal League
- Pennsylvania State Association of Township Commissioners
- County Commissioners Association of Pennsylvania

FHWA UPDATE

VERONICA FELICIANO ·· NOVEMBER 2, 2023

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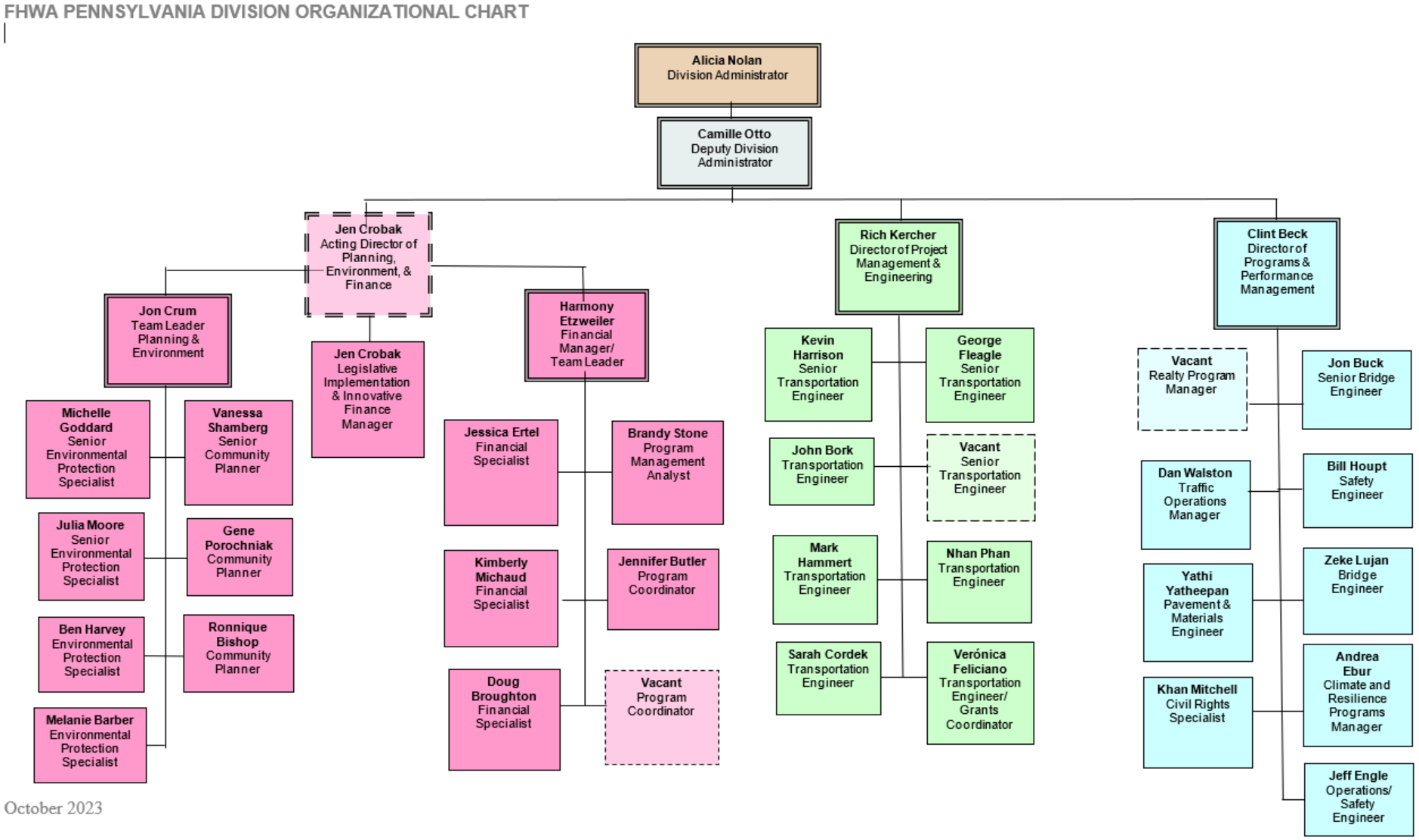
FHWA PENNSYLVANIA DIVISION ORG CHART



DCED UPDATE

RACHEL REZNICK ·· NOVEMBER 2, 2023

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PENNDOT UPDATES

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MUNICIPAL RESEARCH AND OUTREACH

CHRIS METKA ·· NOVEMBER 2, 2023

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PENNDOT CONNECTS

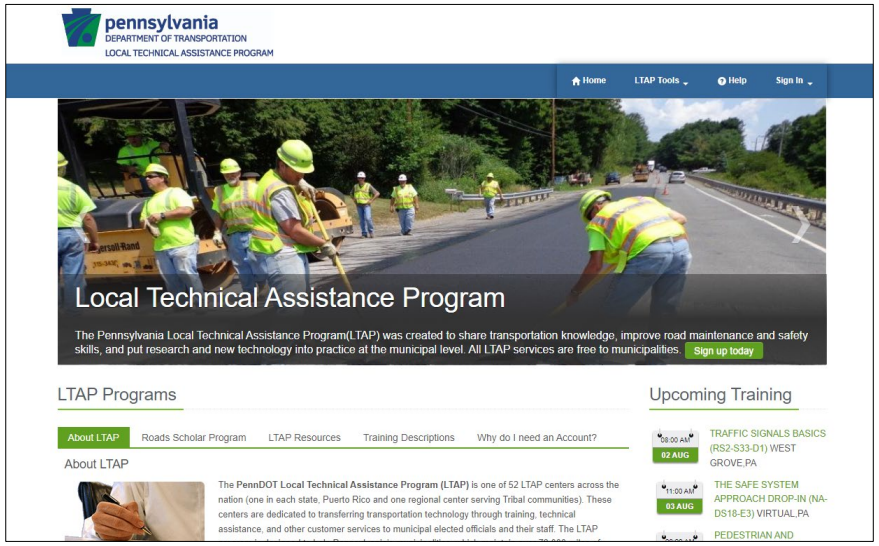
- 2024 PennDOT Connects Municipal Outreach
  - District Focus – *coordinated with each District Planner*
    - Executive Staff (if they wish to participate)
    - District Planning and Programming/Planners
    - Municipal Services
    - Others?
  - PennDOT's Strategic Planning and Finance Office
  - PA Department of Health – Resources and Funding
- Resources
  - Planning Assistance
  - Recorded Training
  - Tech Sheets
  - Drop-Ins (live and recorded)

PennDOT Connects
Planning with our communities

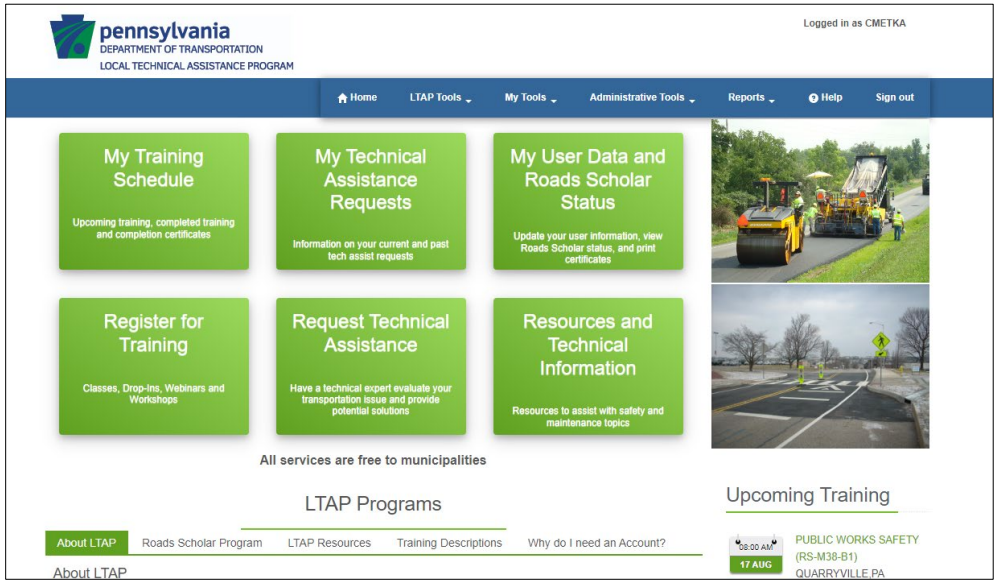
LTAP WEBSITE UPDATES

- Since 2020
  - More virtual offerings
  - More users doing self-service
- Previous layout
  - Dated, unintuitive
  - Inefficient use of space
  - Needed new features
    - View/Print Class Attendance
    - View/Print Road Scholar Certificates
    - A personalized user dashboard
    - Quick access to commonly-requested services

Before



After



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LOCAL TECHNICAL ASSISTANCE PROGRAM

LTAP – NEW CLASSES IN DEVELOPMENT

- Trucks on Local Roads: Issues and Solutions
  - Dry run – November 29, 2023
  - Pilot – February 6, 2024
- Geographic Information Systems (GIS)
  - Pilot – December 12, 2023
- Drones Basics
  - Dry run – January 10, 2024
  - Pilot – February 20, 2024
- School Transportation Management
  - Kickoff – November 15, 2023
  - Dry Run - TBD
  - Pilot – March 2024

What classes would you like to see?

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LOCAL TECHNICAL ASSISTANCE PROGRAM

BUILD A BETTER MOUSETRAP

- PennDOT has been seeking local roadway innovation since 1989!
- Goals:
  - Improve safety
  - Reduce costs
  - Increase efficiency/save time
- Examples
  - New/modified tools or equipment
  - New process or approach
  - Unique use of technology
    - Computers/Smartphones
    - Apps
    - Drones
- Administered through LTAP
- State and National Challenges

PennDOT's Humble Beginning:
The Idea Store

2023 State Winner: Inlet Replacement Tools
London Grove Township, Chester County

2022 NATIONAL Winner: Sidewinder
South Manheim Township, Schuylkill County

BUILD A BETTER MOUSETRAP

- New for 2023-2024
  - Name: Build a Better Mousetrap Innovation Challenge
  - Graphic
  - Streamlined Application
  - Collaboration
    - Press Office
    - PennDOT Bureau of Innovations
  - Additional LTAP support
    - Instructors/Technical Experts on the lookout
    - Submit brief description/photos/videos to ltap@psats.org
      - Innovation will be evaluated
      - Assistance provided as necessary

Did you see the press release yesterday?

FINANCIAL AND CONTRACT SERVICES DIVISION UPDATE

KRISTEN SIMS ·· NOVEMBER 2, 2023

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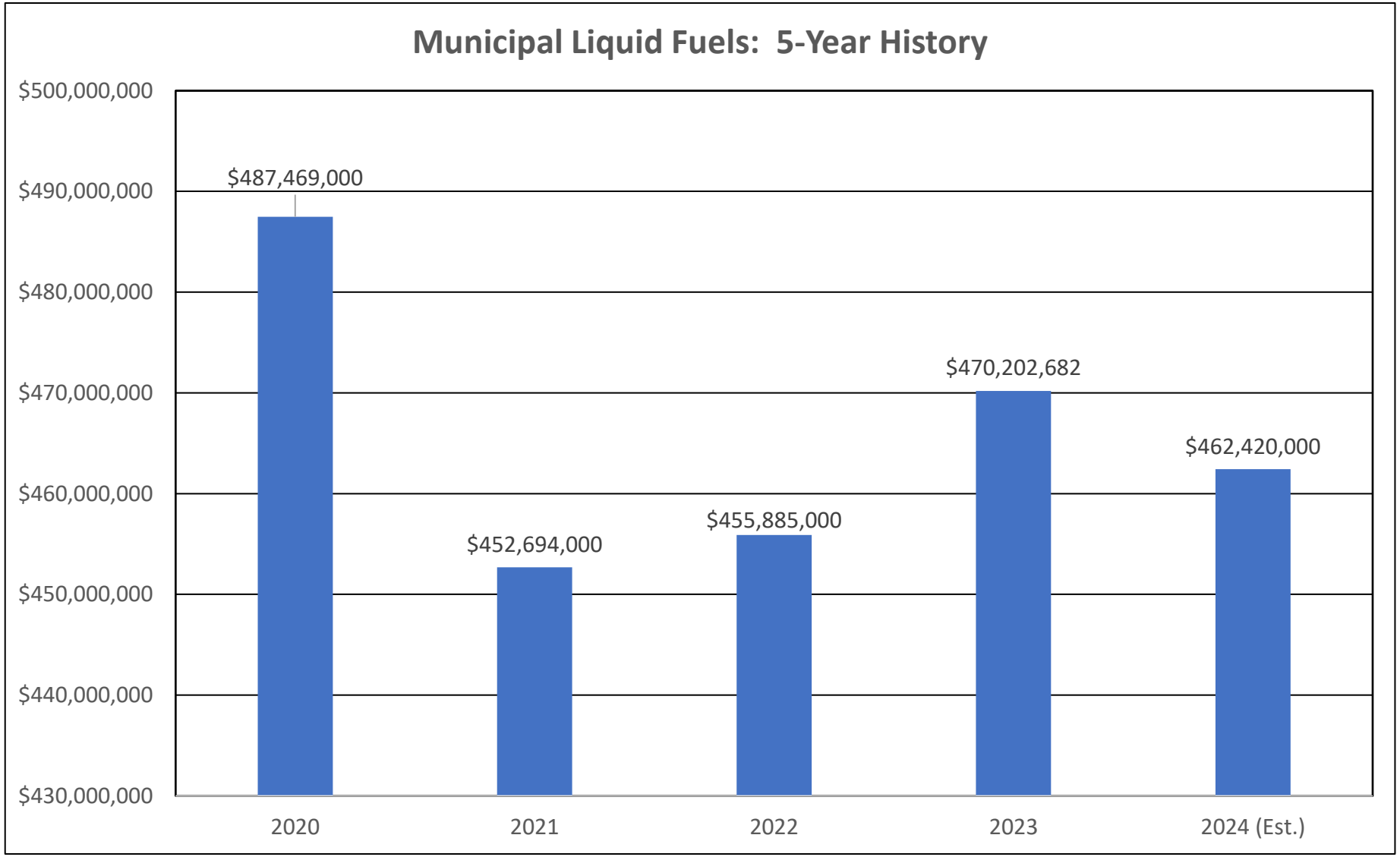
2023 MLF ALLOCATION

- 2023 MLF allocation - $470,202,682
  - 2022 MLF allocation - $455,885,000
  - $14,317,682 (3.1%) increase
- As of October 30, 2023 - $463,811,947.31 released to 2,499 municipalities
  - Payments released as municipalities become certified

MLF ALLOCATION HISTORY



PRIOR MLF ALLOCATION

- 2022 MLF allocation - $455,885,000
  - $3,191,000 (0.7%) increase
  - As of October 30, 2023 - $454,030,567.81 released to 2,538 municipalities

- 2021 MLF allocation - $452,694,000
  - As of June 30, 2023 - $451,329,226.81 released to 2,554 municipalities
  - Allocation lapsed on June 30, 2023
  - One municipality had a CRP block and lost their funds
  - One municipality did not turn in required documentation and funds were never released

AUGUST ALLOCATION

- 2023 Act 13 Allocation
  - $25,910,477
  - Paid to counties August 15, 2023

DECEMBER 2023 PAYMENTS

- The following payments will be allocated on December 1, 2023
  - State Police Fines and Penalties to eligible municipalities - $3,409,584 ($2,975,445 to municipalities, $434,139 to PSP for cadet classes)
  - County Liquid Fuels Tax Fund to all counties - $14,204,538 (6 on hold)
  - Act 44 to eligible counties (61) - $5,000,000 (2 on hold)
  - Act 89 to eligible counties (61) - $4,682,000 (2 on hold)
  - $5 Fee for Local Use to counties who have passed the required ordinance (26) - $20,401,445 (4 on hold)

FHWA FORM 536

- Notification of form was sent July 12, 2023
- Second notice was sent August 23, 2023
- Due date for the form was September 15, 2023
- 1,216 (46.3%) municipalities and counties submitted the form
  - 1,374 (52.2%) submitted the form when collected in 2022
- Final compiled form was submitted to FHWA on October 2, 2023

FHWA FORM 536 RESPONSES

	2023	2022
1st Class Townships	42	48
2nd Class Townships	745	839
Cities	17	24
Boroughs	383	431
Town	0	1
Counties	29	31
Total	1,216	1,374

Questions?

RESEARCH IMPLEMENTATION

PAT MCVEIGH ·· NOVEMBER 2, 2023

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NATIONAL ELECTRIC VEHICLE INFRASTRUCTURE (NEVI) UPDATE

NATASHA FACKLER/COLTON BROWN ·· NOVEMBER 2, 2023

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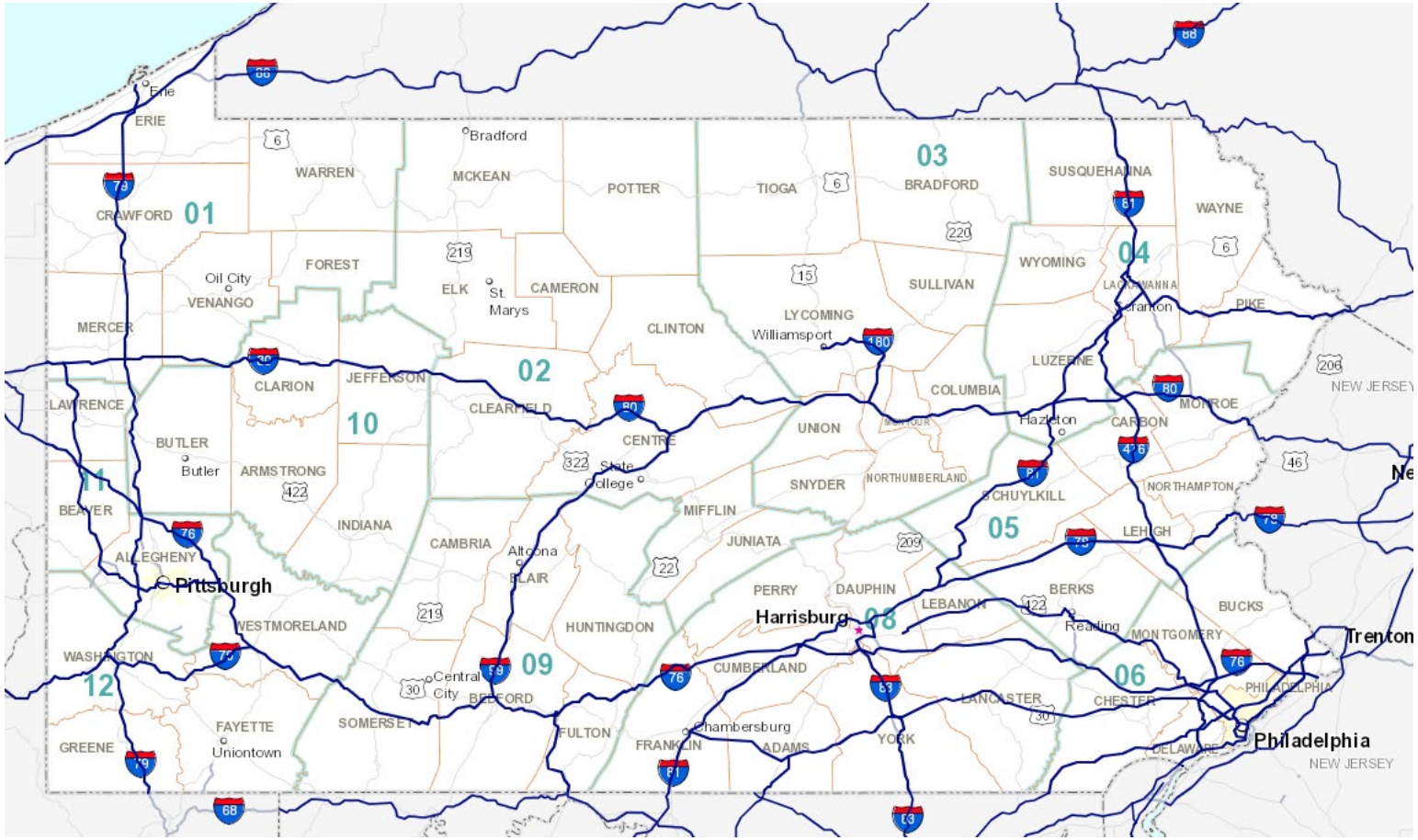
ALTERNATIVE FUEL CORRIDORS



- PennDOT has nominated corridors over 7 rounds - includes interstates and portions of US 30, US 15, Route 1, Route 422, and Interstate 180 - over 1,800 miles of roadway
- NEVI funding must be applied to AFCs until a "**Build-Out**" certification by FHWA

YEARS 1-2 CHARGING FOCUS

- **DC Fast Charging**
- Public
- 4 ports
- CCS Connectors
- At least 150kw power per port (600kw total)
- **Within 1-mile of highway**, 50 miles of the next station

How to Charge Your EV

	Charge Time	Charging Locations
Level 1	**3.5 - 6.5 miles** Per Hour	Residential, Workplace
Level 2	**14 - 35 Miles** Per Hour	Residential, Workplace, Destinations
DC Fast Charge	**200+ miles** Per Hour	Highways, Communities, Destinations

PENNDOT NEVI ROUND 1 CONDITIONAL AWARDS

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ROUND 1 CONDITIONAL AWARDS

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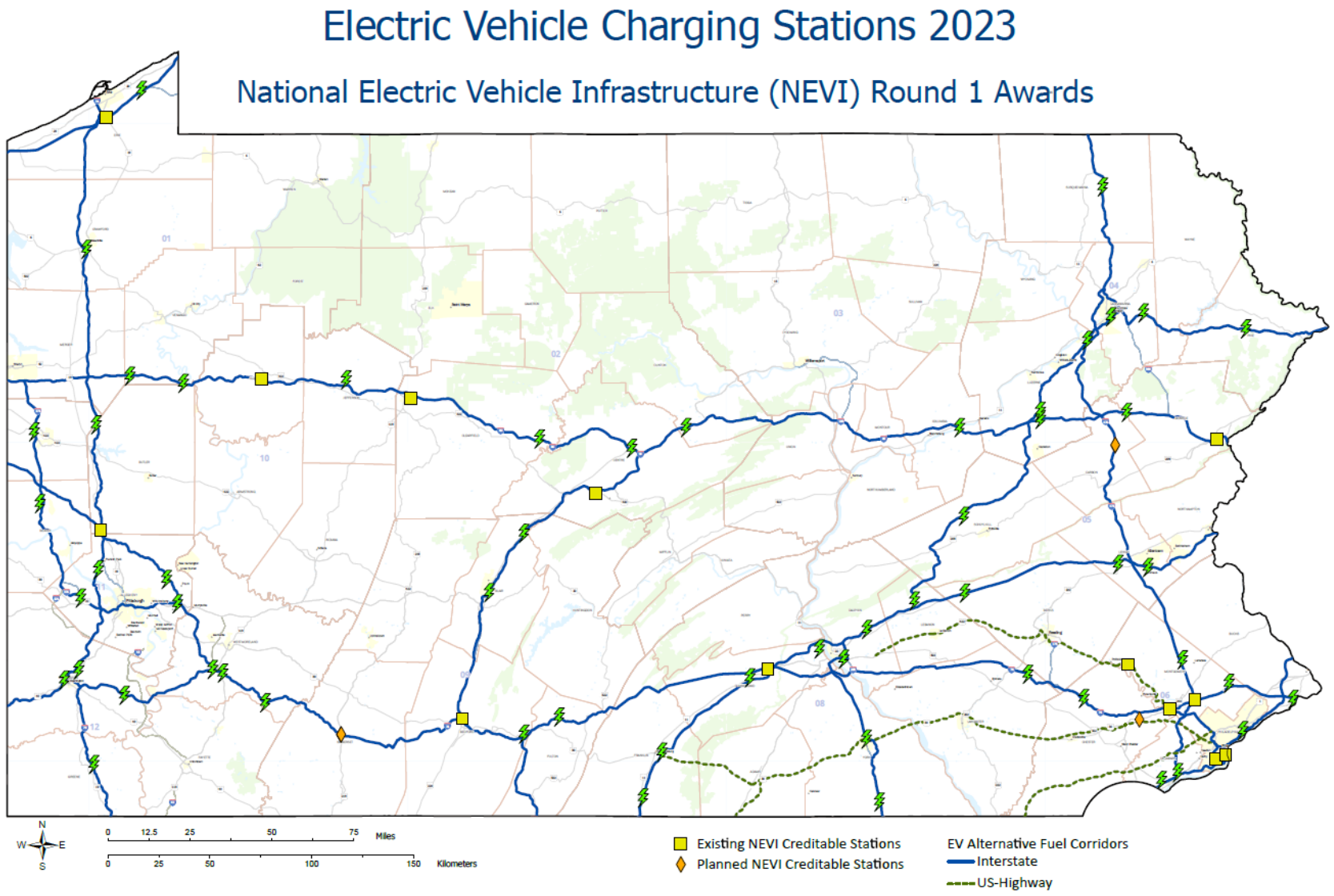

- 56 projects within 37 counties
- $34.8 million
- 24 projects in or within ½ mile of a Disadvantaged Community
- Typical Project Timeline 18-24 months

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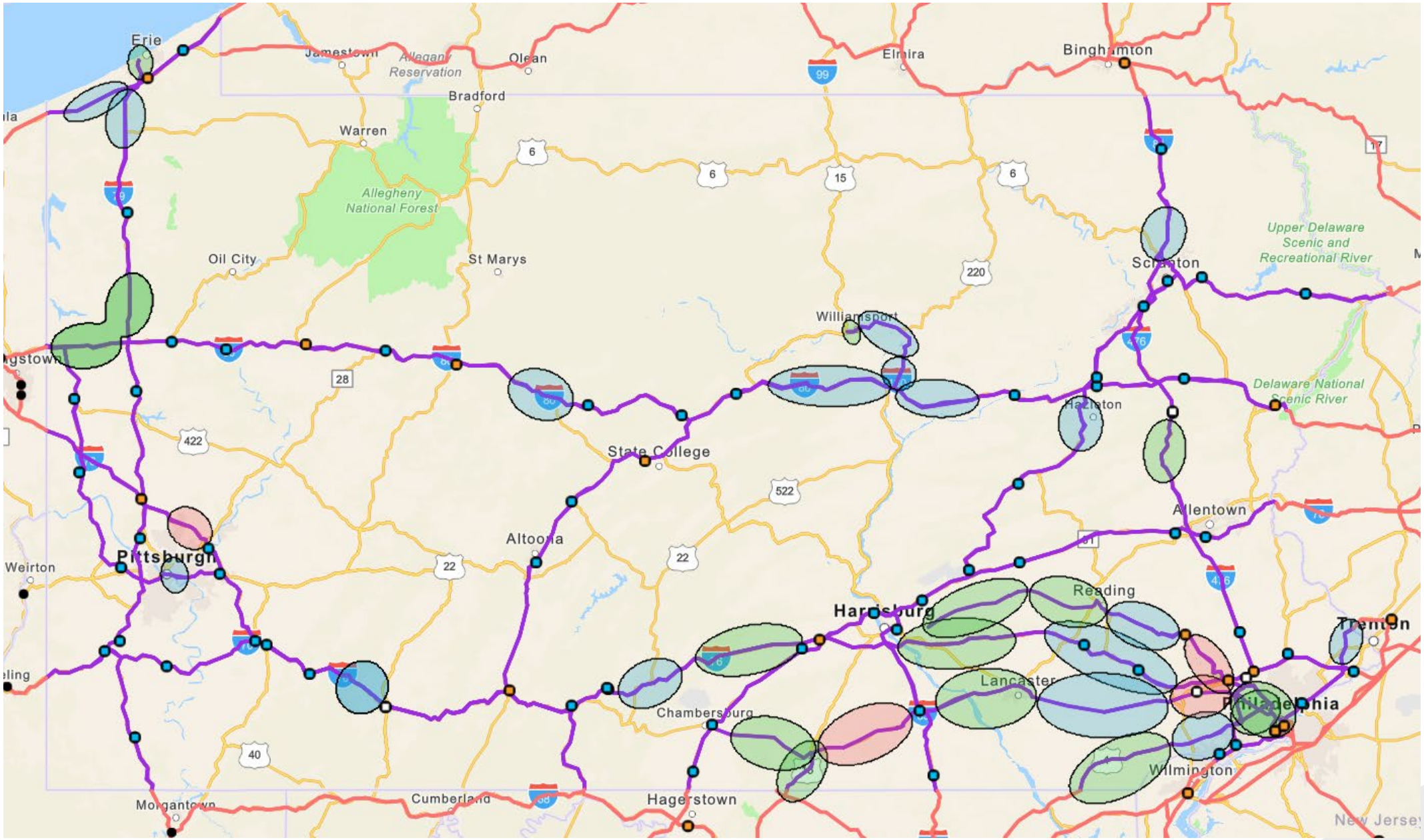
WHAT'S NEXT

- Support and oversee Round 1 projects
- Public outreach
  - 6 in-person community events
- Round 1A - anticipating about 25-30 sites
  - US Highway AFCs
  - Gaps remain from Round 1
  - $22 million remaining from FFY 23 funds
- Round 1A Informational and Networking In-person Event
  - In Harrisburg, November 13, 1-3pm
  - NEVI Round 1A Networking Event Registration
- FFY24-26 : Approximately $106 million for community deployments

ROUND 1A PRIORITY LOCATIONS



QUESTIONS?

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MULTIMODAL

DAVE BRATINA ·· NOVEMBER 2, 2023

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5 MINUTE BREAK

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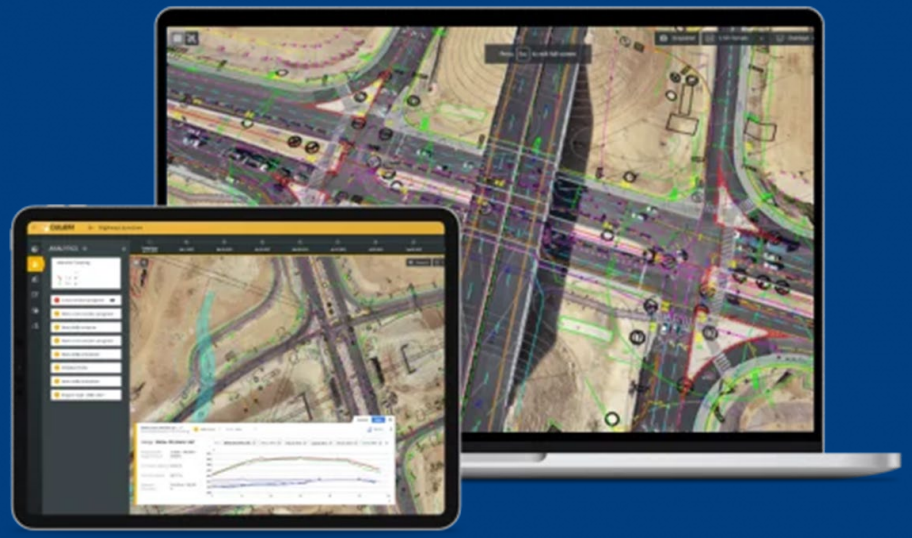
PRESENTATIONS

- **E-Ticketing, AR, UAS and Design Collaboration** – Kelly Barber
- **LTAP Website Update** – Mike Dudrich
- **Automatic Work Zone Safety Enforcement –** Dan Farley
- **Micromobility: What Is It and Where Can You Ride It?** – Roy Gothie



Engineering Automation and Services Division

Kelly M. Barber, P.E.

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Agenda

- Digital Transformation
  - e-Ticketing
  - Augmented Reality
  - Uncrewed Aerial Systems
- Bridging Innovations
- Design Collaboration

The start of PennDOT's Digital Transformation

Paper, Paper, Everywhere…

PennDOT Construction Projects Involve LOTS of Paper

- 100 to 5,000 associated documents- multi-page plans, shop drawing, requests for information, e-mails, etc.

Enterprise Application Security Solution (ESEC)

Interactve Straight Line Environment

Traffic Information Repository (TIRe)

PENNDOT ONE MAP

CE Expert System

SAP

Asta Powerproject

PENNDOT LRFD and Engineering Programs

RIGHT OF WAY

MPMS

LEAP Bridge Steel

Enterprise Content Services

TDS

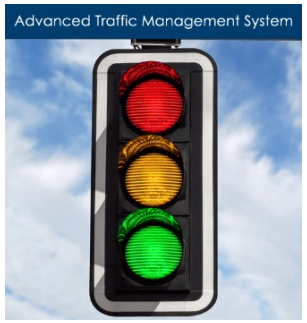
PennDOT BRADD Software

DARWin-ME Pavement Design Software

URMS

PATH

Advanced Traffic Management System



TDUS

TALKPA TRANSPORTATION

CRGIS

pennsylvania DEPARTMENT OF TRANSPORTATION LOCAL TECHNICAL ASSISTANCE PROGRAM

TSAMS

IQGeo Building better networks

CAMMS

Quality Assurance Reporting System (QARS)

S B E

BMS2

PennDOT IDENTITY SERVICES PORTAL

Pavement History

APRAS

CRASH REPORTING SYSTEM

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Keystone Environmental ePermitting System

Posted and Bonded Viewer

HY-8 Culvert Hydraulic Analysis Program

HBMS

JPA2 Expert System

511

ECMS

Electronic Quality Management System

Traffic Monitoring System

RAS

pennsylvania DEPARTMENT OF TRANSPORTATION Project Collaboration Center

video log

RAS

PennDOT GCEDMS

EPS

PSA

SAMPLE ID

Pennsylvania Crash Information Tool

TRANSPORTATION IMPROVEMENT PROGRAM

VSIR

iPeMS®

PAMS

State Transportation Innovation Council

- e-Ticketing
- Augmented Reality
- UAS Implementation
- RFID Tags

IMAJION
CONNECT. COLLABORATE. CAPTURE.

MULTIVISTA

RECONSTRUCT®

XPERTEYE

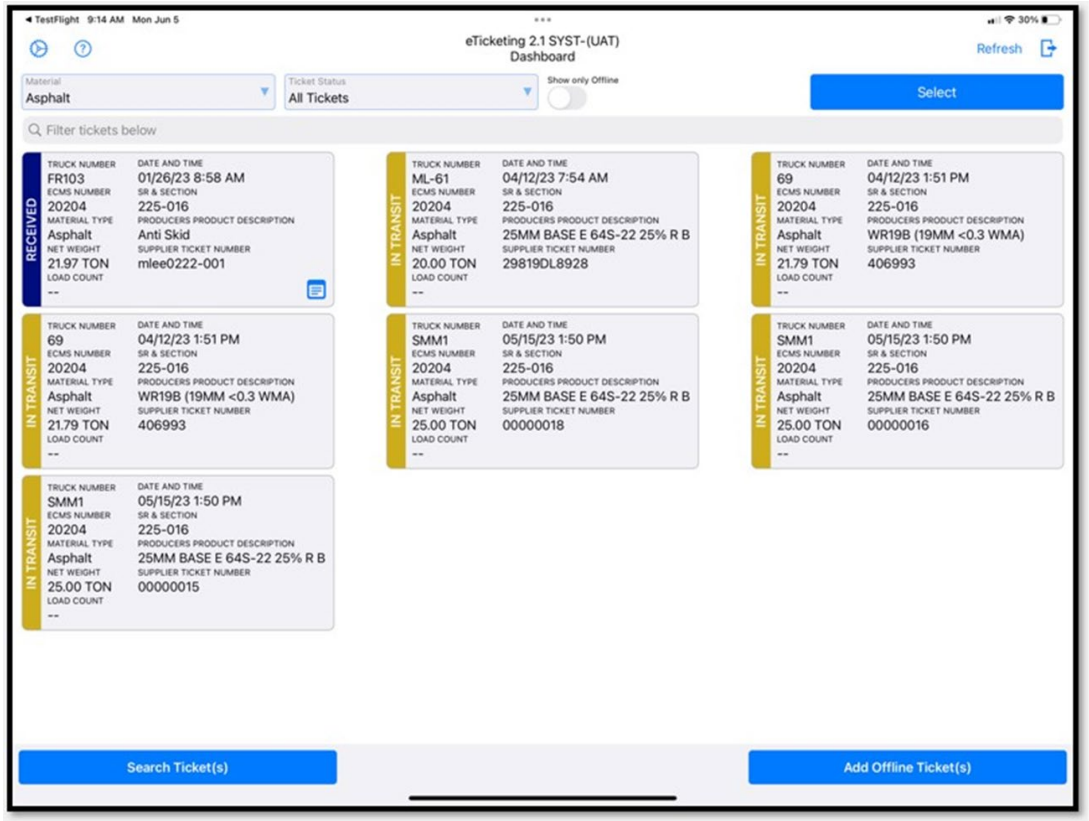
Trimble®

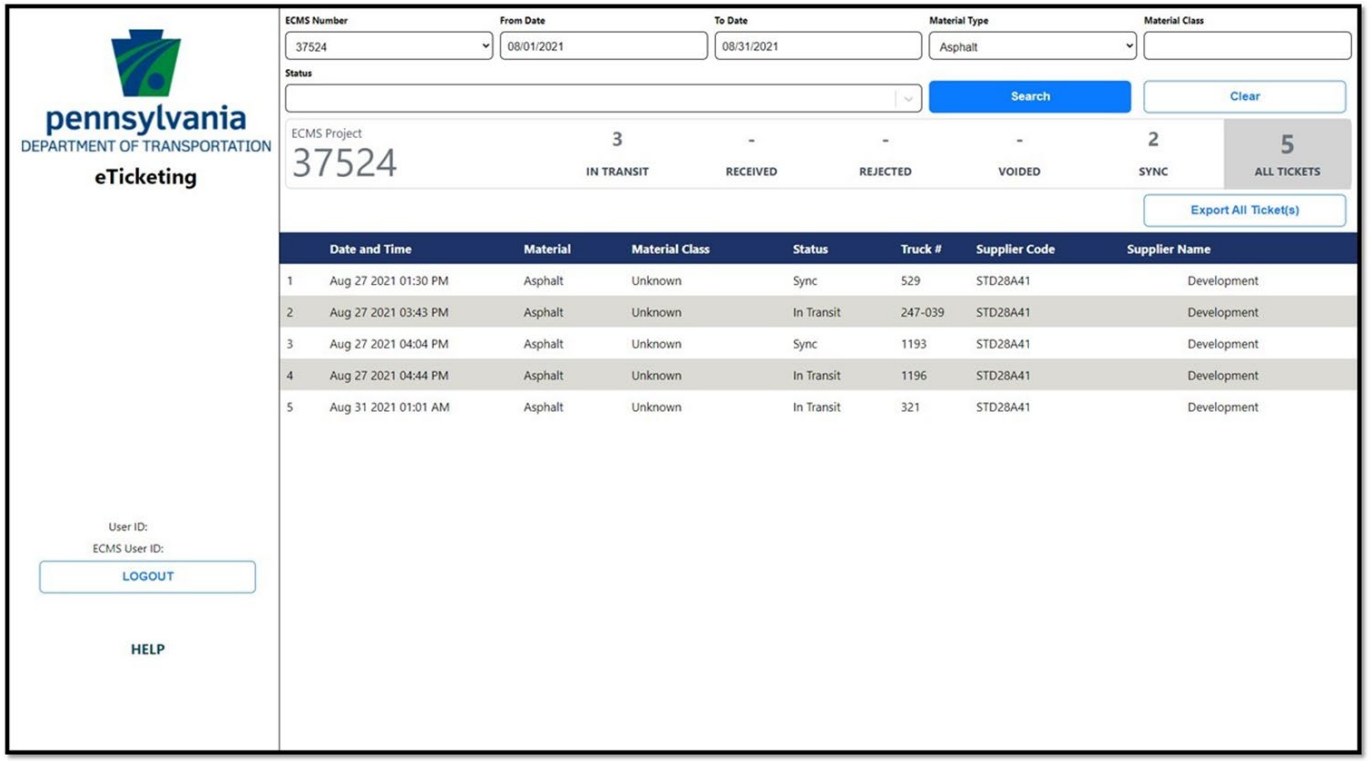
Datumate

Digital Backbone that is Platform Inclusive

e-Ticketing Application

PennDOT e-Ticketing App went live on July 1st, 2021





PennDOT Portal Connections

Option 1

For Producers and Contractors with Internal IT Resources

PennDOT will provide an API key for you to send ticket data to the Pennsylvania DOT Portal

Option 2

For Producers and Contractors with existing e-Ticketing Solutions

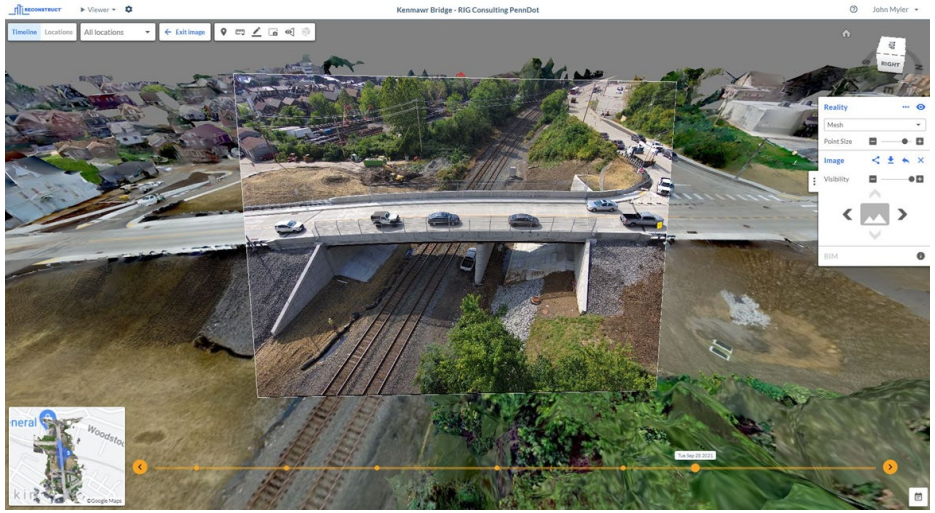
The e-ticketing provider can forward the tickets via API to the PennDOT Portal. If they are unable to do so currently, HaulHub can assist in establishing the connection.

Option 3

For Producers with Limited to No IT Resources and no e-Ticketing Solution

Provide a simple solution to get your tickets flowing into the portal at no cost to you.

Moving into a Virtual World



Augmented Reality

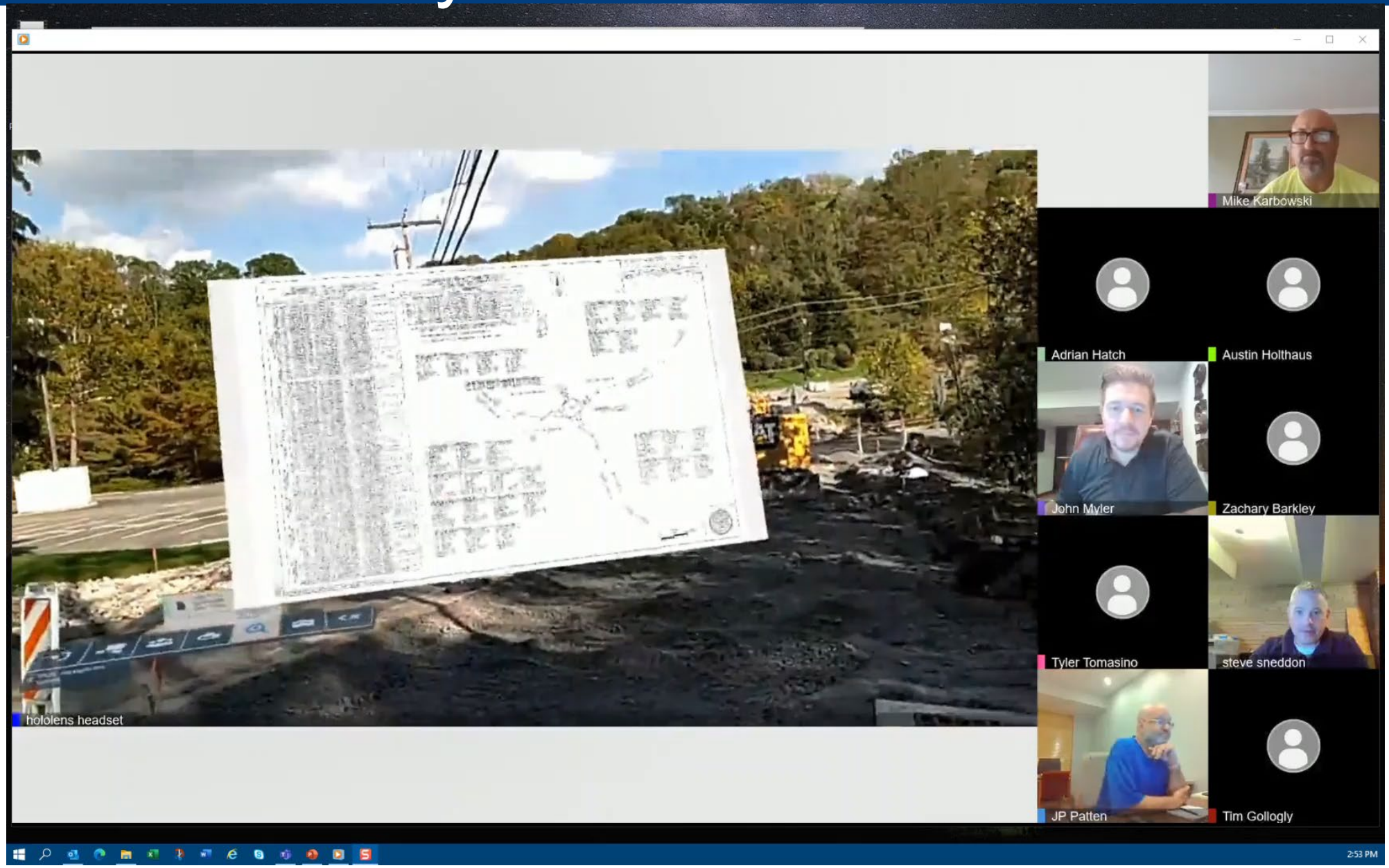
Challenges Addressed

- Facilitating multiple, busy schedules.
- Reducing travel time and expenses.
- Expedited problem solving.
- Real-time photo/video/lidar progress documentation and collaboration.
- Single source for all contract documents available at the touch of a button.
- Facetime on steroids

Augmented Reality

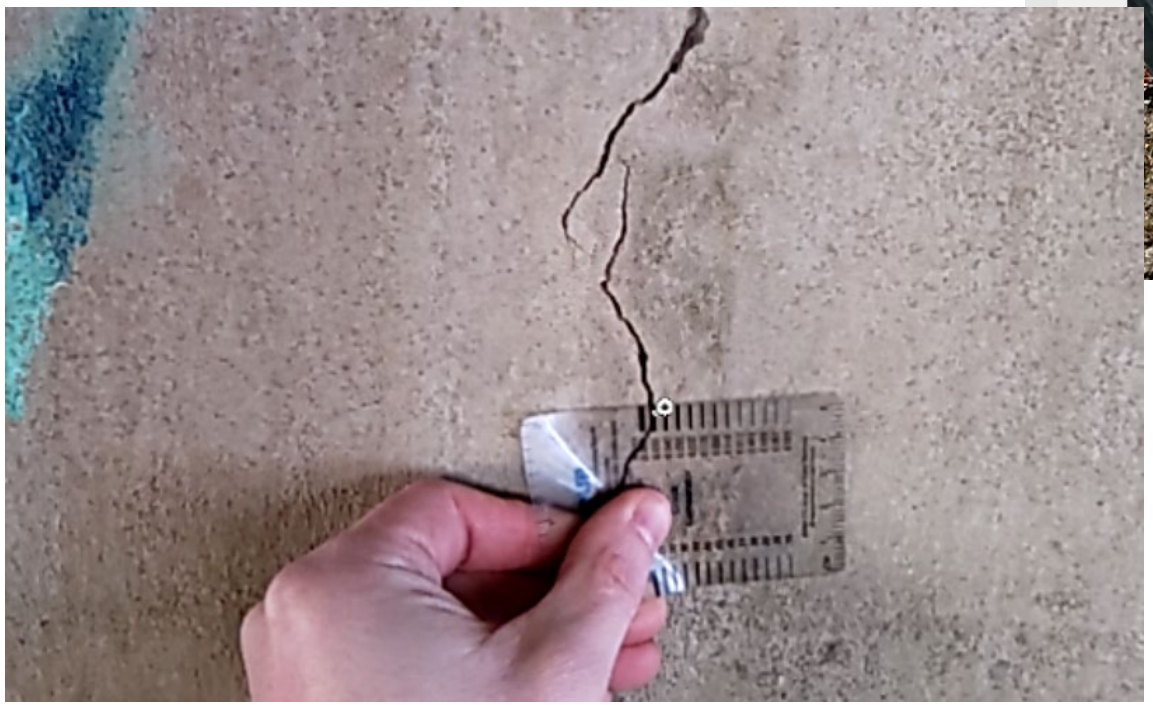
- What is Imajion Project XR?
- District 11 Pilot Project
  - Bridge Inspection
  - Construction
  - Design
  - Materials Testing

Augmented Reality

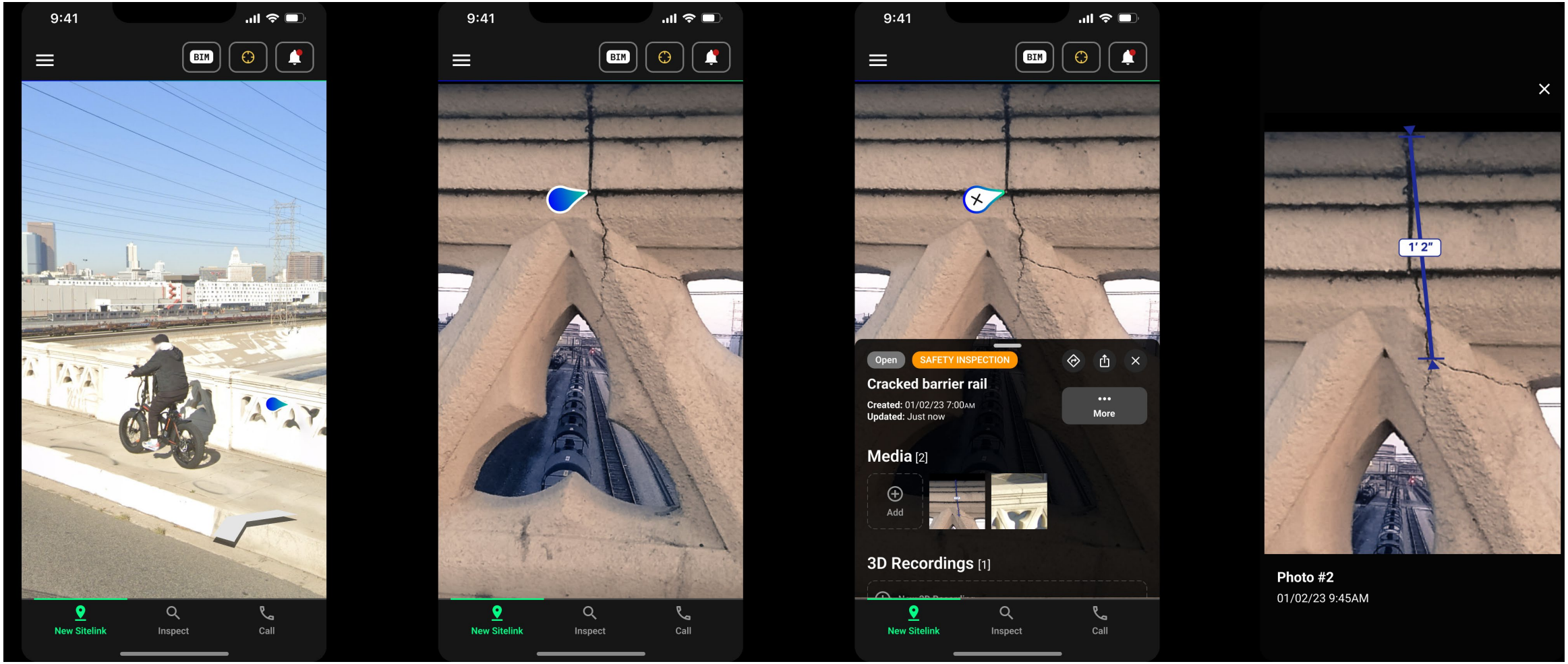


Bridge Inspection

- Real-time problem solving, inspection.



SiteLink


9:41
BIM
New Sitelink
Inspect
Call
9:41
BIM
New Sitelink
Inspect
Call
9:41
BIM
Open
SAFETY INSPECTION
Cracked barrier rail
Created: 01/02/23 7:00AM
Updated: Just now
More
Media [2]
Add
3D Recordings [1]
New Sitelink
Inspect
Call
1' 2"
Photo #2
01/02/23 9:45AM

Augmented Reality

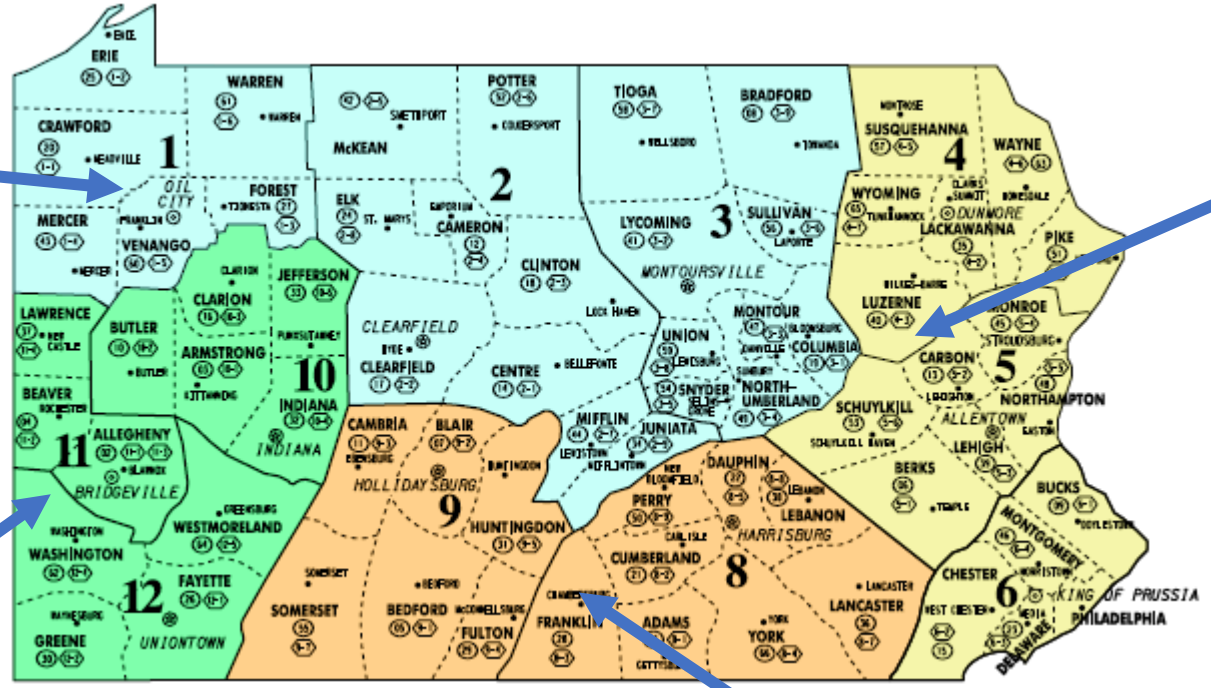
- What is AMA Xpert Eye?
- Remote Visual Inspection
- District 11 Pilot Project
- Highway Administration
  - Laboratory Testing Section
  - Structural Materials Section

Trimble Site Vision

- Brings the 3D model to the field
- Mesh overlay
- Clash Detection
- Ability to walk the project prior to construction
- Department Field Demo

UAS Efforts

Region 1: Districts 1, 2 & 3
Vince Mazzocchi
vmazzocchi@pa.gov



Region 4: Districts 4, 5 & 6
Rex Alfes
ralfes@pa.gov

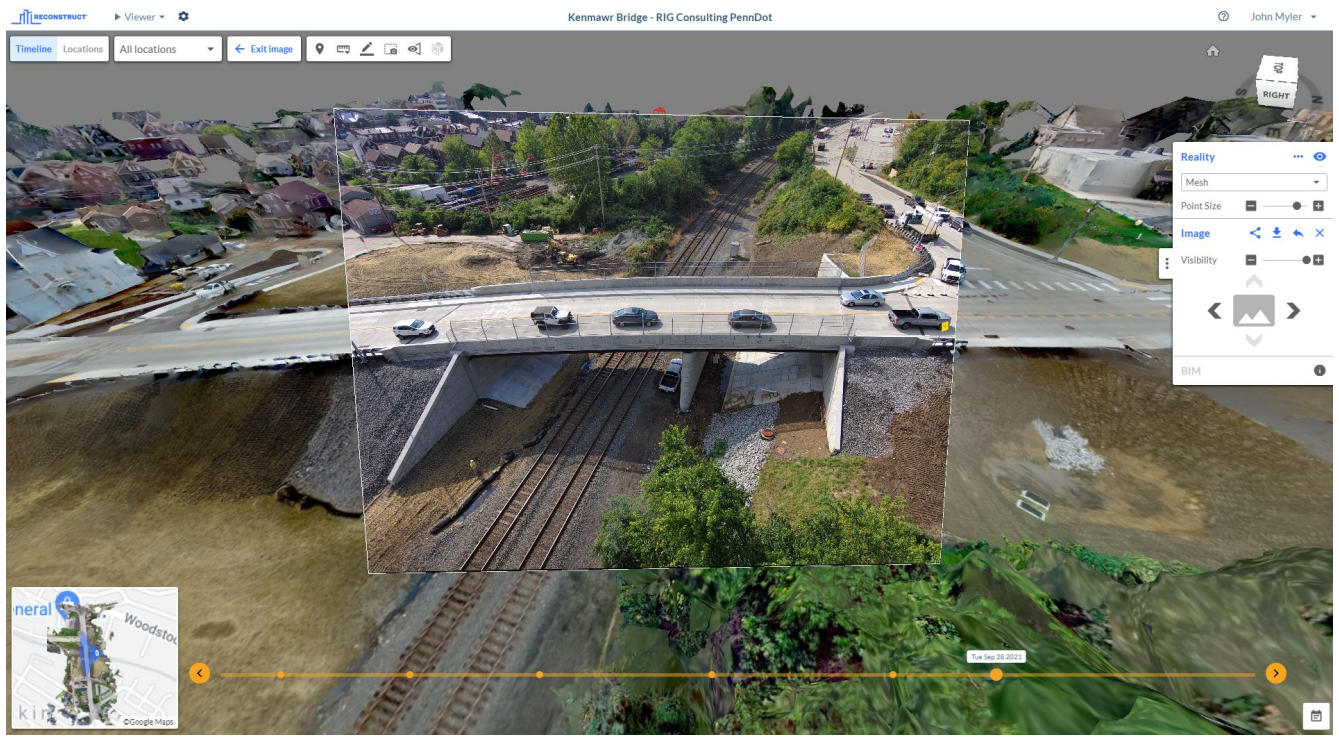
Region 2: Districts 10, 11 & 12
Kevin Lira
klira@pa.gov

Region 3: Districts 8, 9 & Central Office
Nicolas Barrelet
nbarrelet@pa.gov

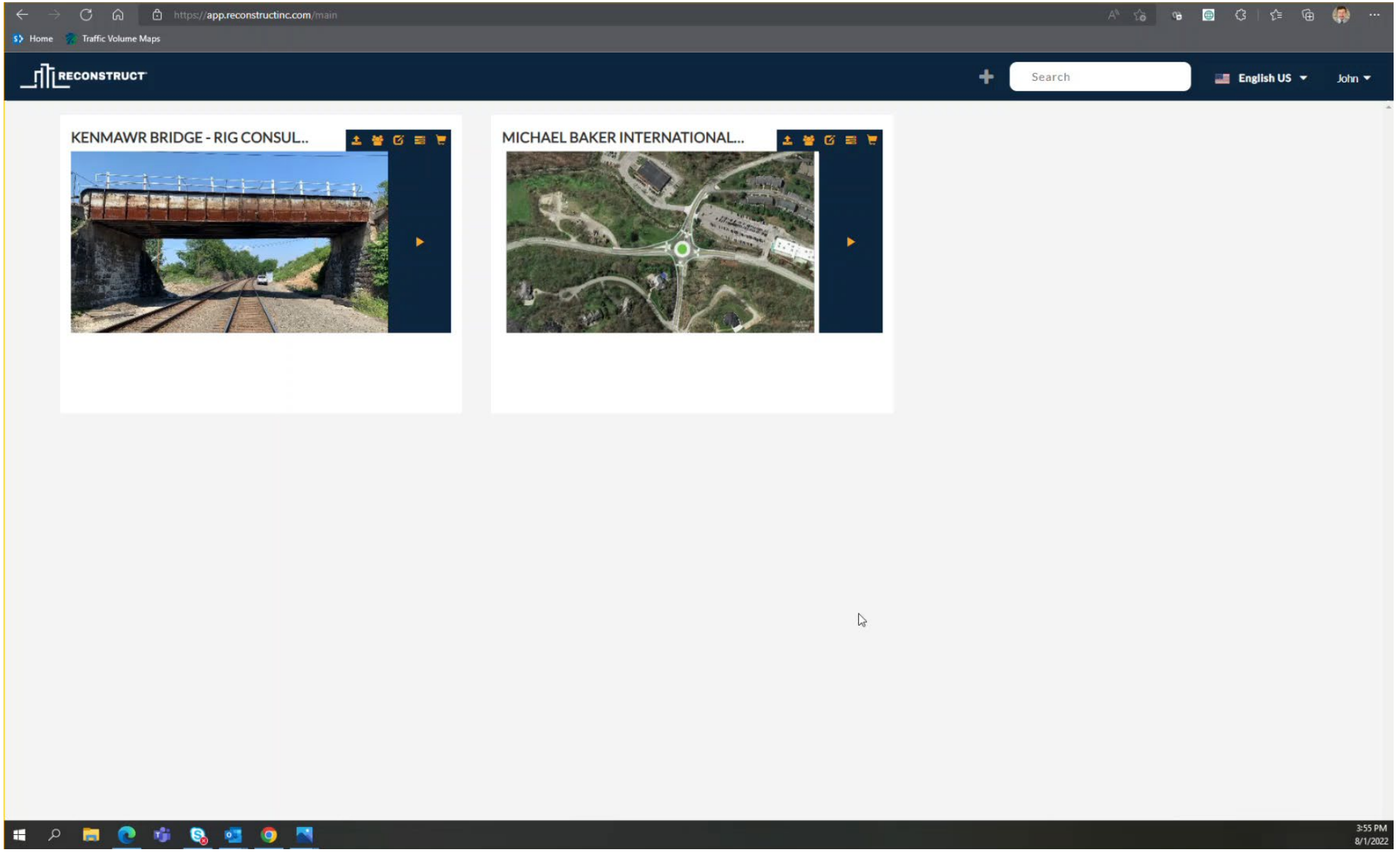
UAS Regional Coordinators

Reconstruct

- Currently in use on Two Projects in District 11
  - Kenmwar Bridge Replacement
  - McLaughlin Run Roundabout
- Only Capturing Drone Flight Data
- Limited Use Without 3D Model
- Potential Return on Investment (ROI)
  - Reduced Need for Site Reviews
  - Improved Project Completion
  - Construction Timeline
  - Quick Calculations for Difficult Measurements
  - As Built Records

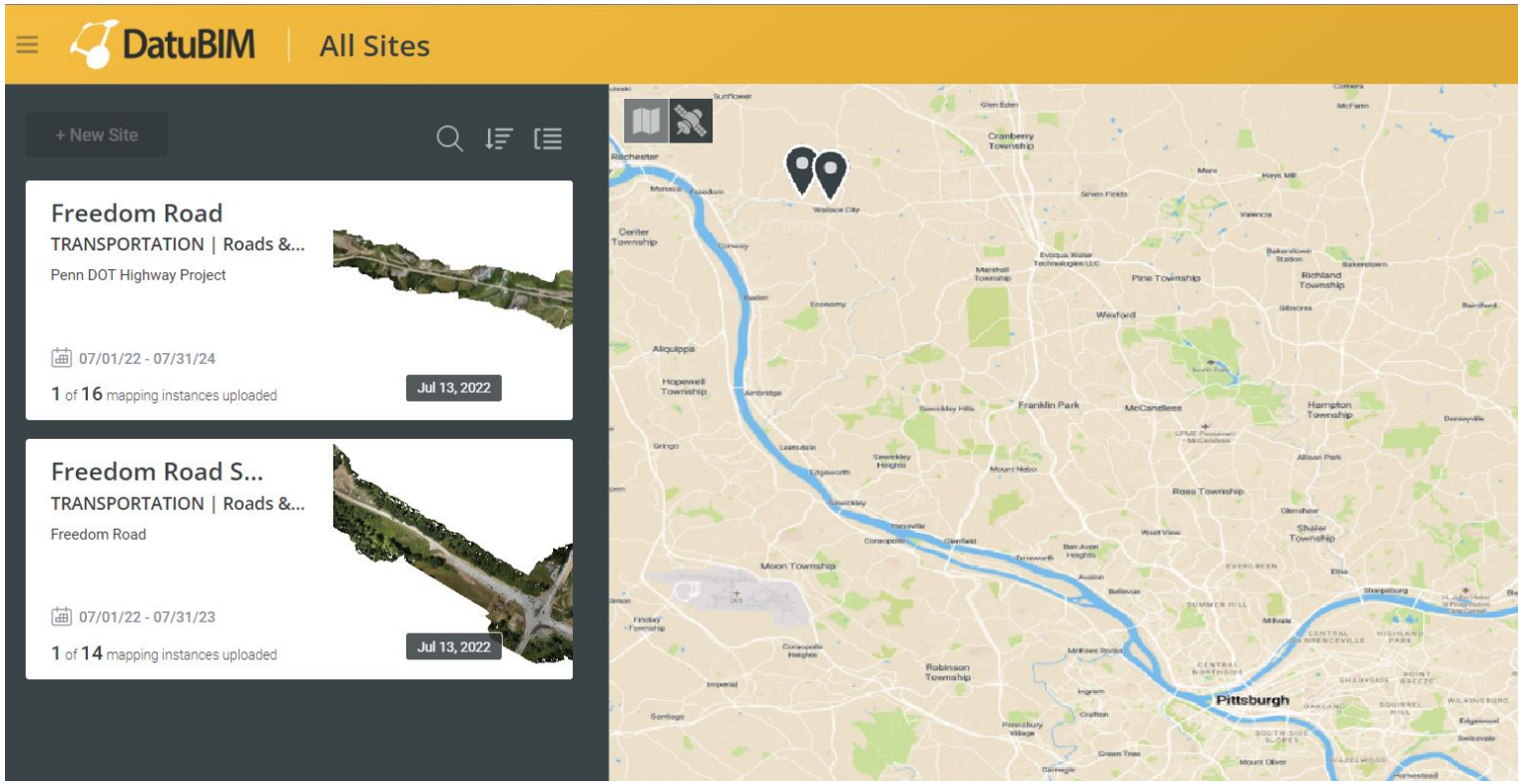


Reconstruct: McLaughlin Roundabout

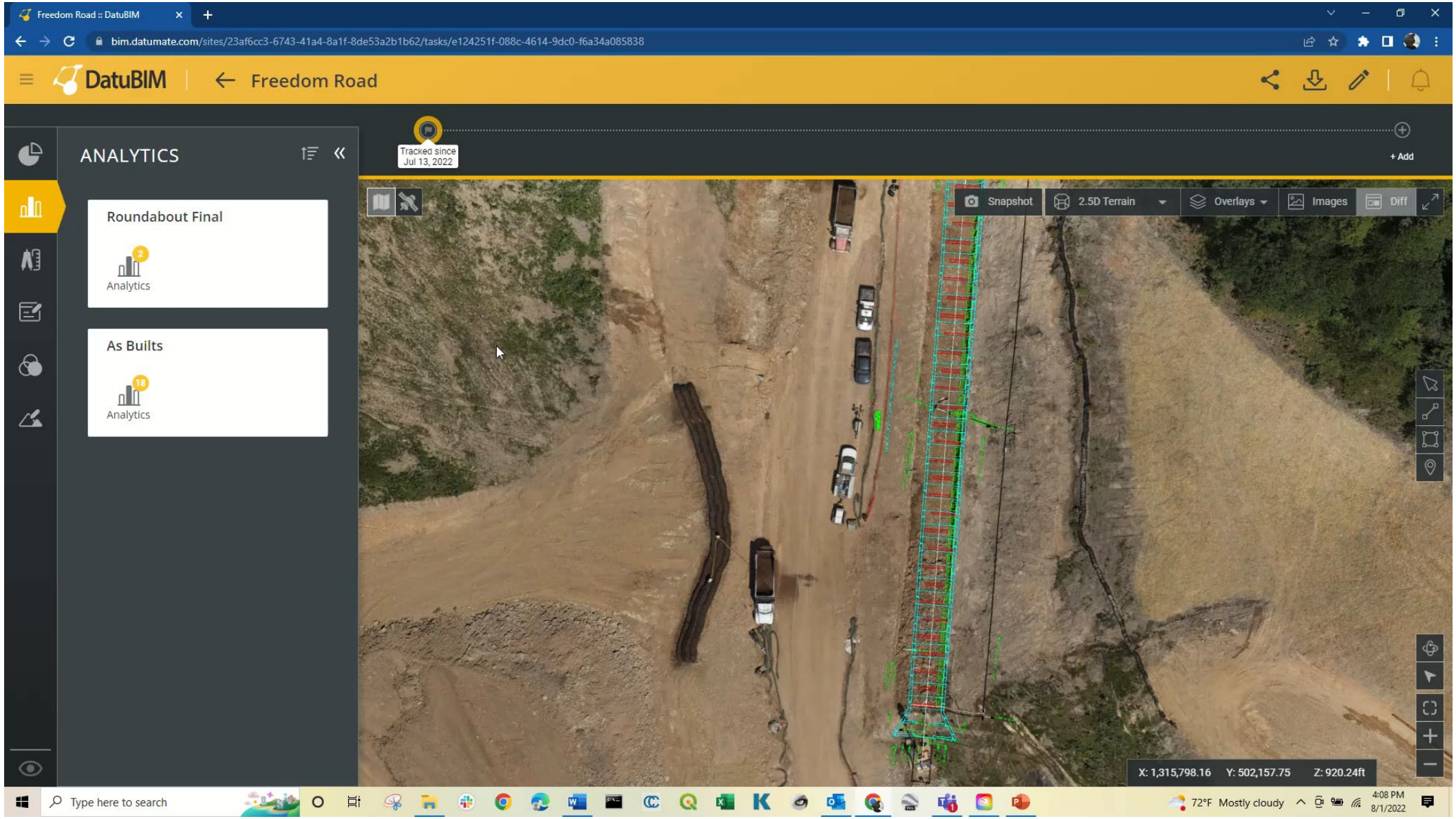


Datumate

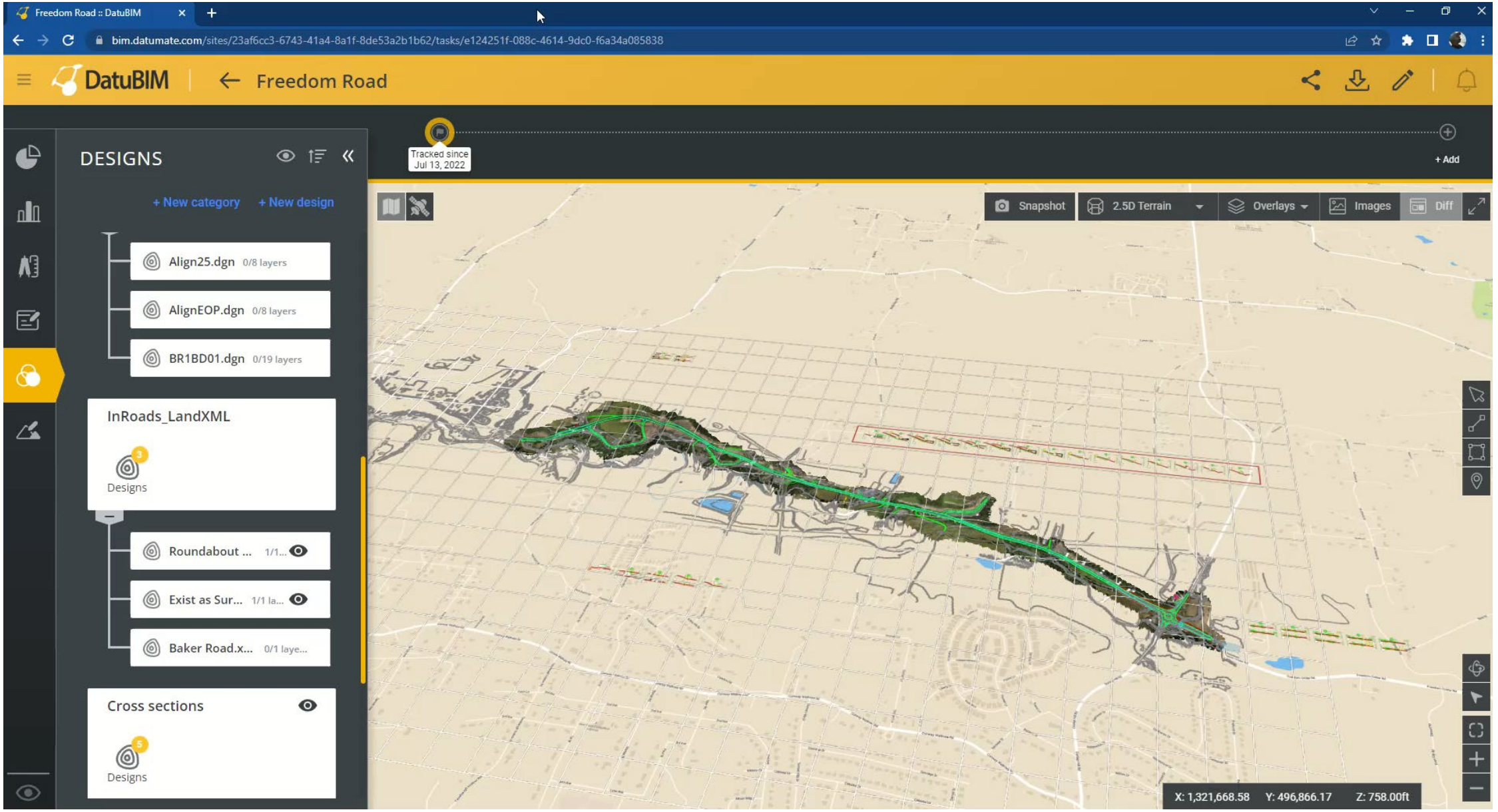
- Currently in use on One Project in District 11
  - Freedom Road SR 2004-B06



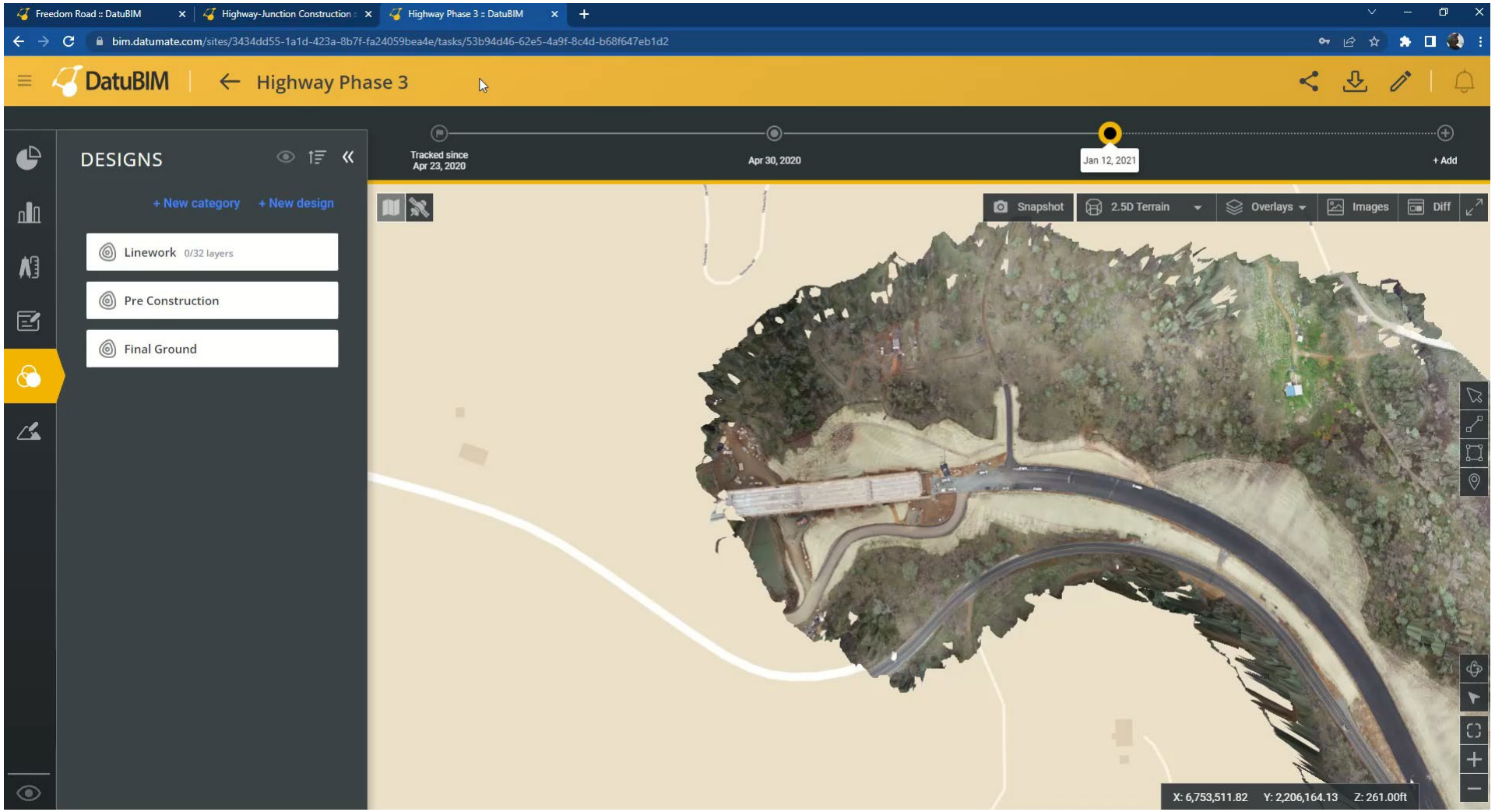
Cross Section Trim

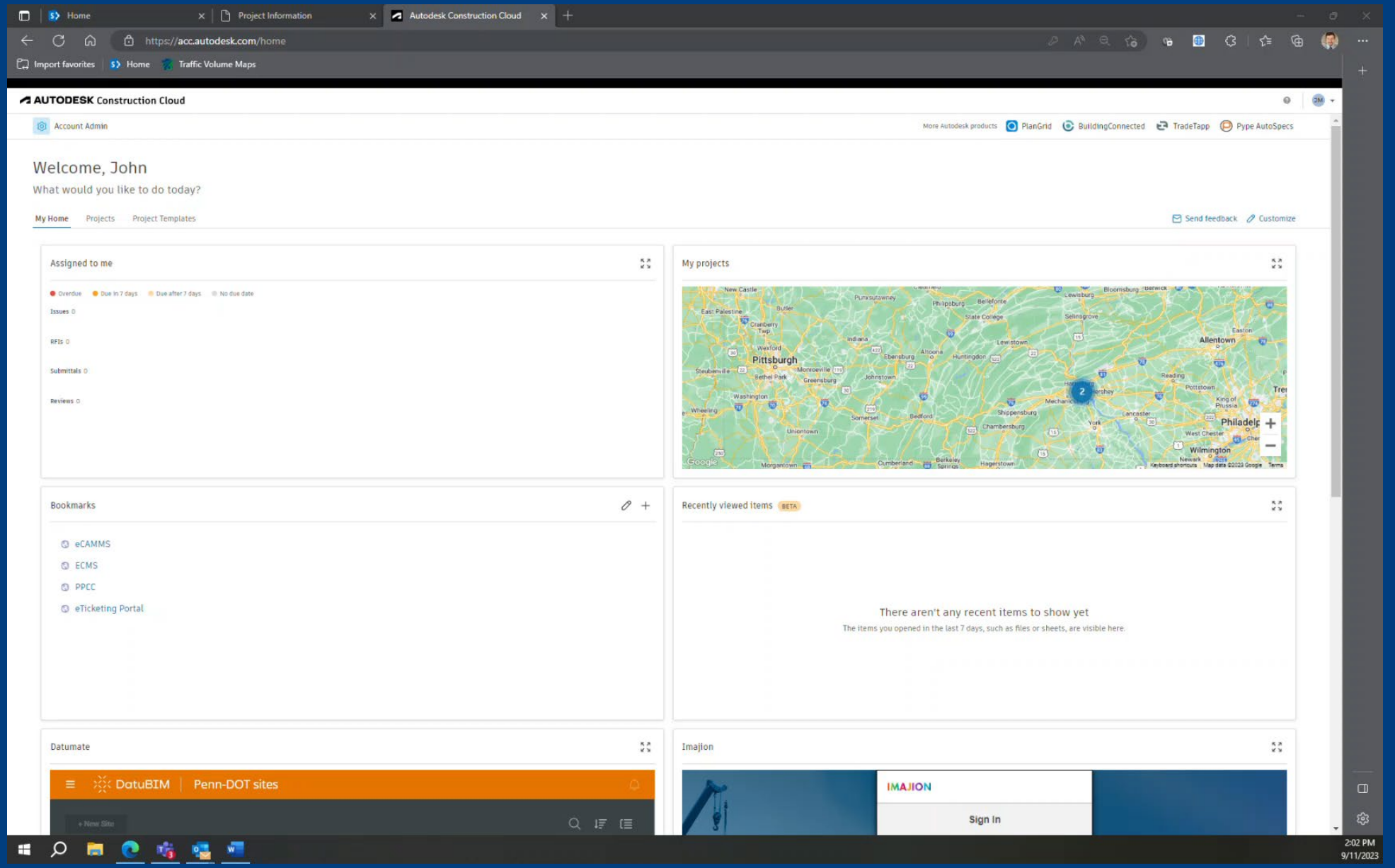


Cross Section Design



Slider


Freedom Road :: DatuBIM
Highway-Junction Construction
Highway Phase 3 :: DatuBIM
bim.datumate.com/sites/3434dd55-1a1d-423a-8b7f-fa24059bea4e/tasks/53b94d46-62e5-4a9f-8c4d-b68f647eb1d2
DatuBIM
Highway Phase 3
DESIGNS
+ New category
+ New design
Linework 0/32 layers
Pre Construction
Final Ground
Tracked since Apr 23, 2020
Apr 30, 2020
Jan 12, 2021
+ Add
Snapshot
2.5D Terrain
Overlays
Images
Diff
X: 6,753,511.82
Y: 2,206,164.13
Z: 261.00ft



Bridging Innovative Opportunities

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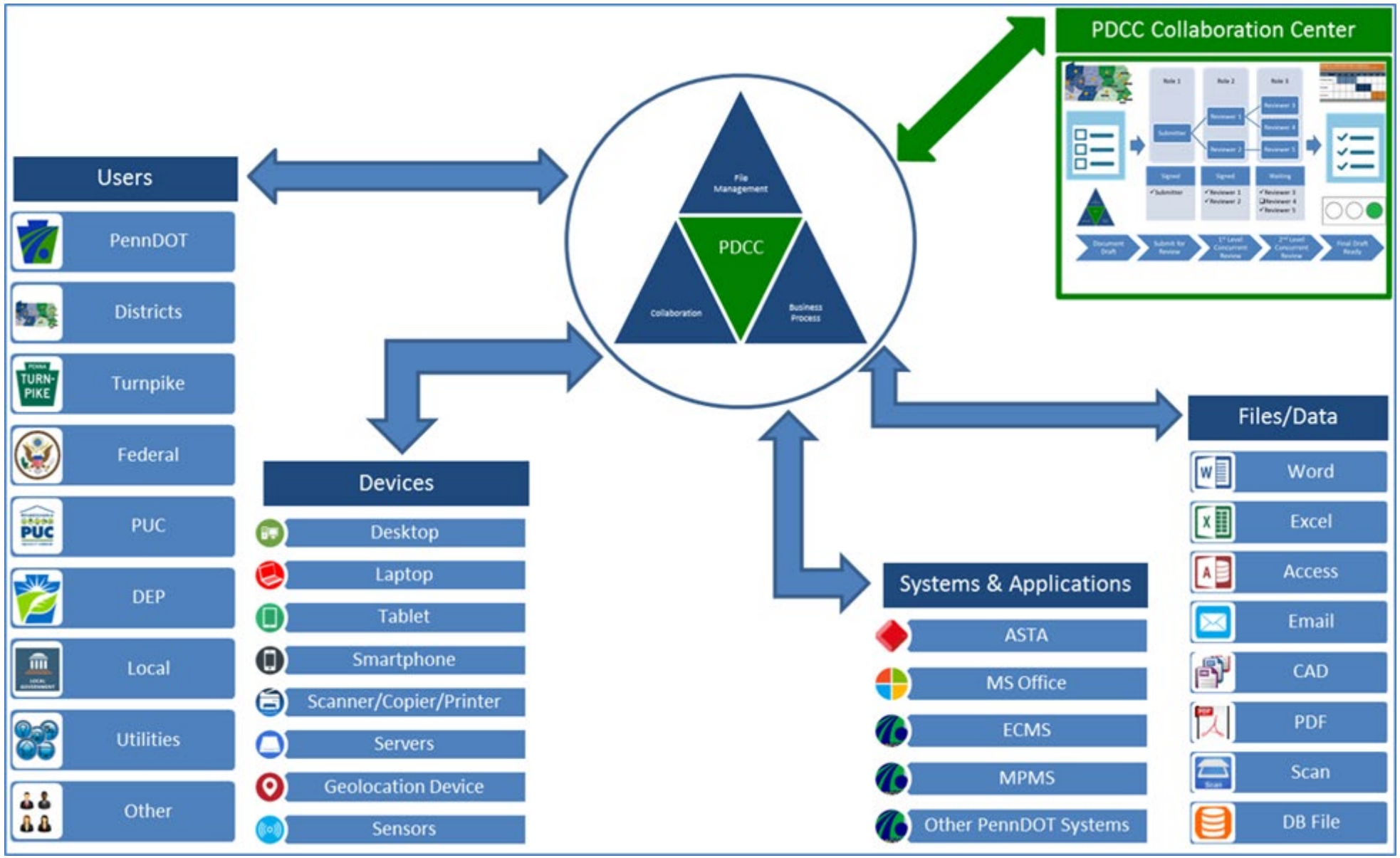
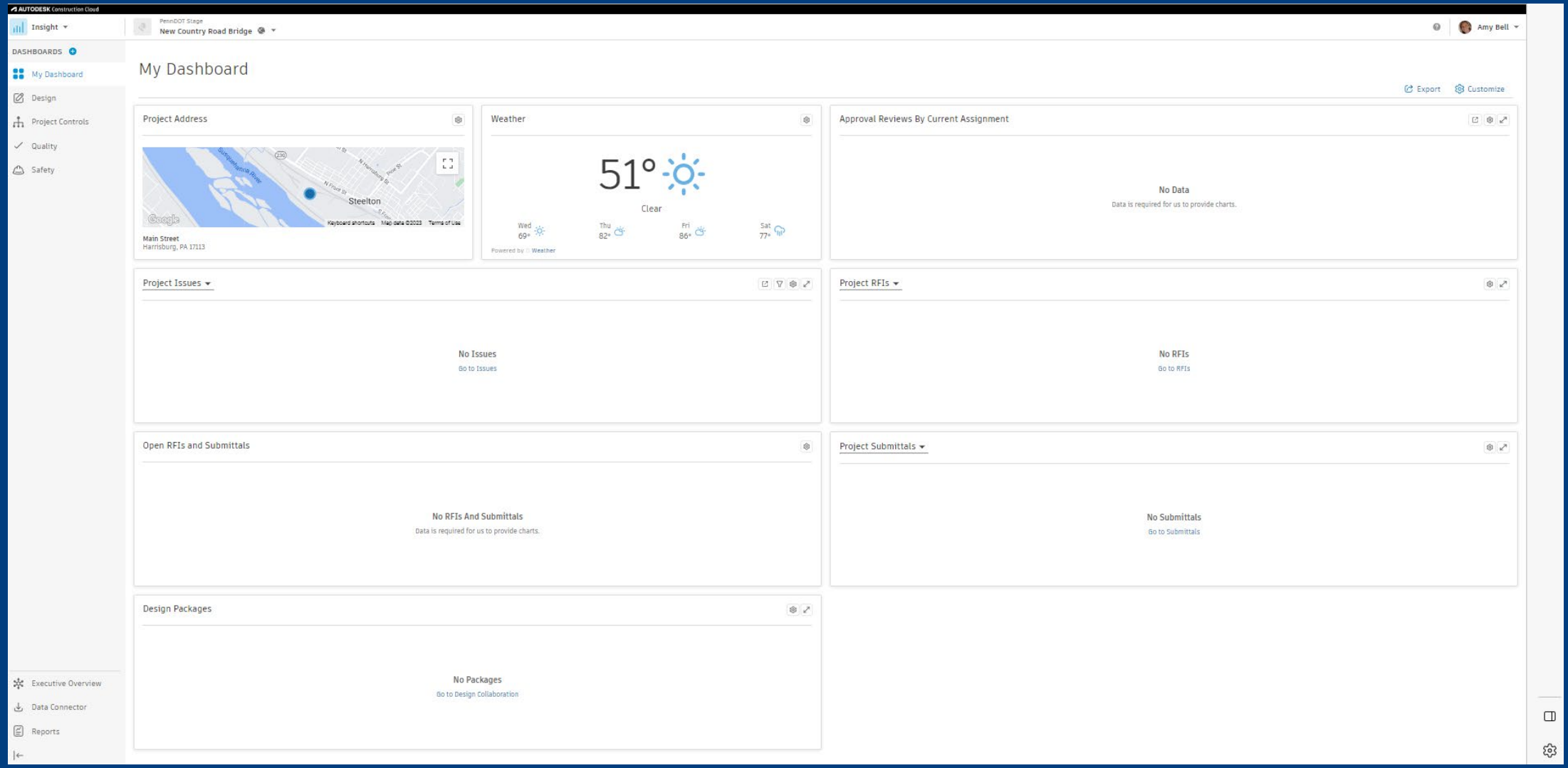
DEPARTMENT OF TRANSPORTATION

Project Delivery Collaboration Center



Primary Project Goal

Implement a solution to manage the roadway/bridge design process with a focus on the need for collaboration across all project stakeholders



Project Dashboard

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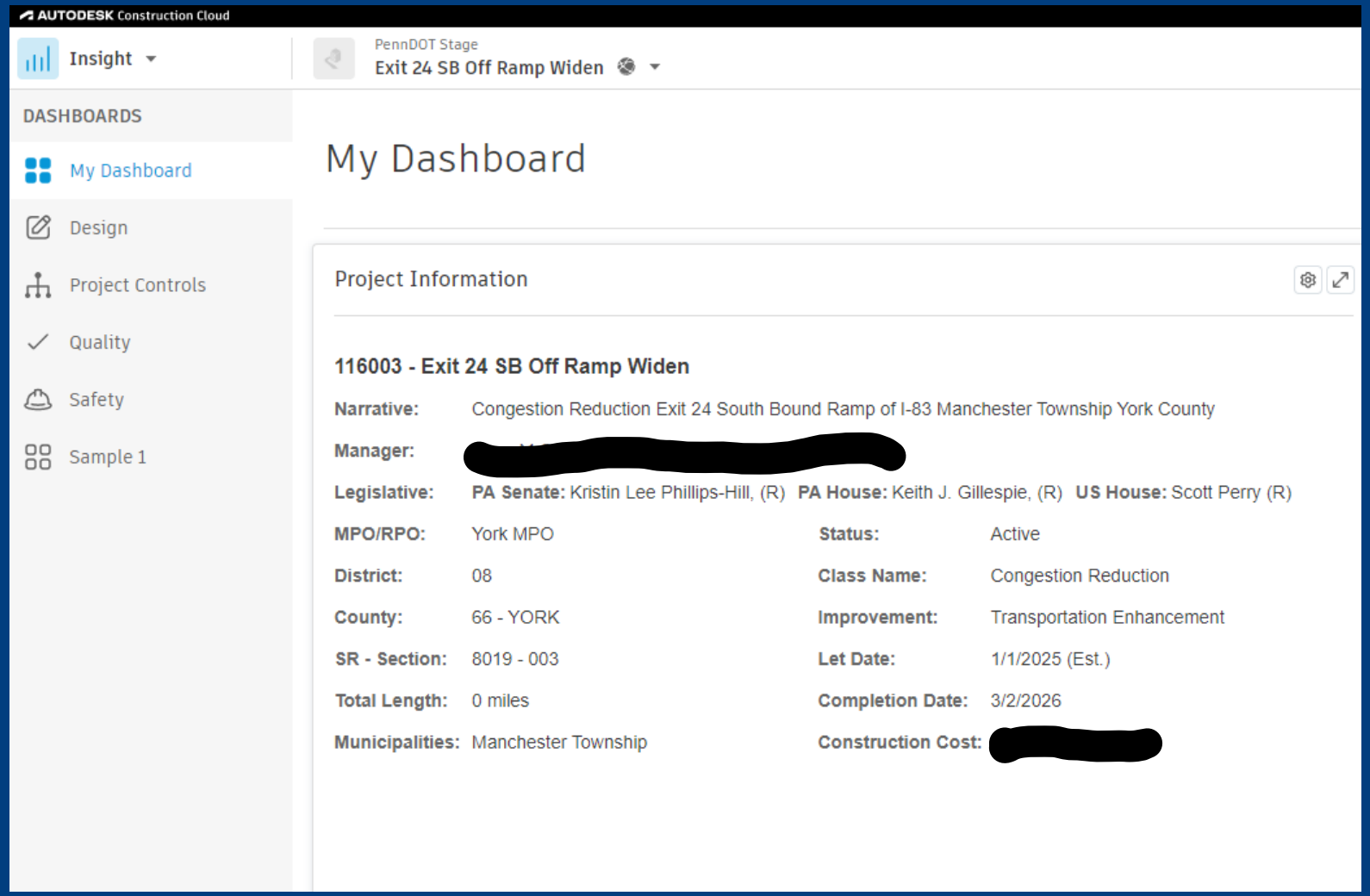

Custom Web Card

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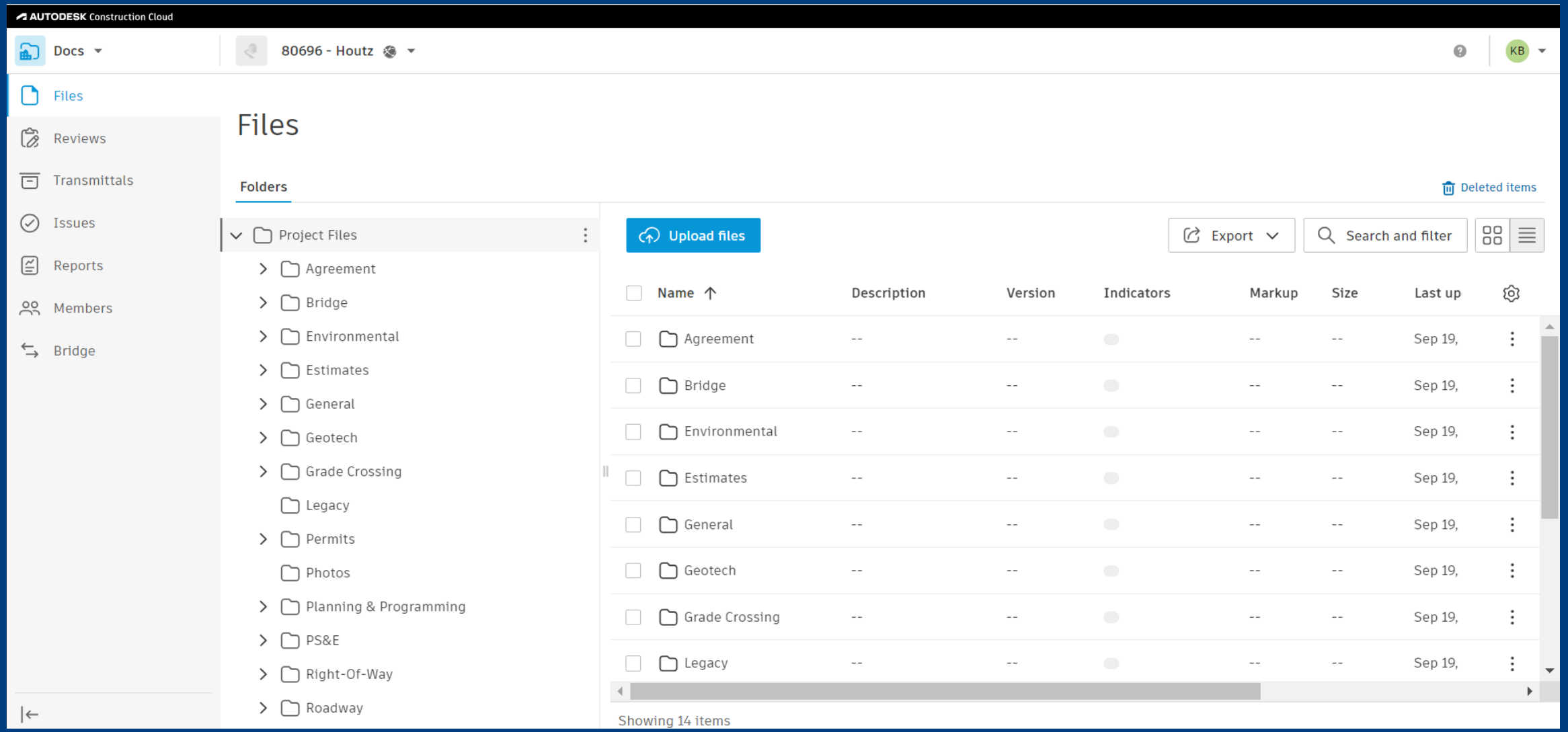

Folder Structure

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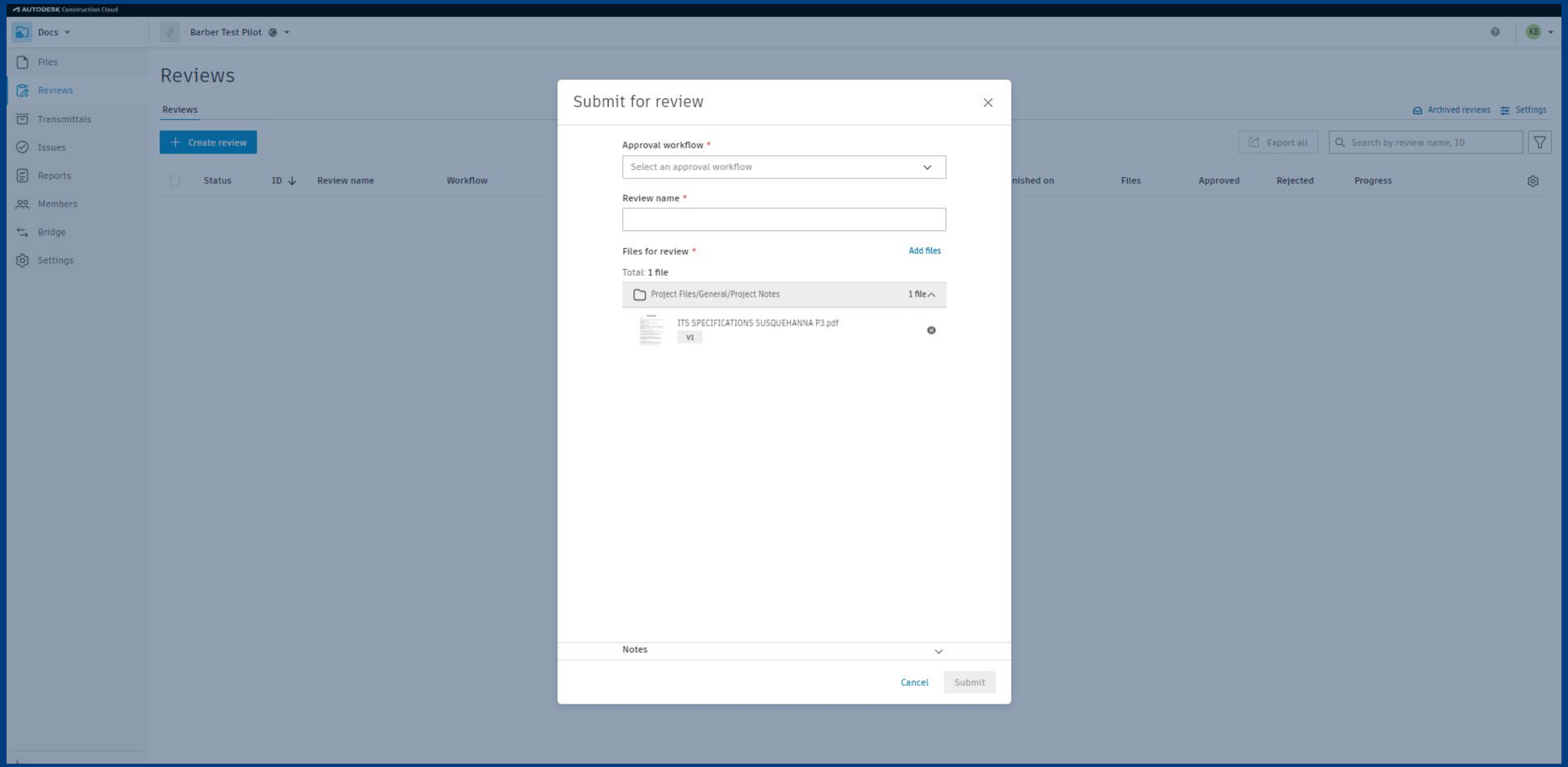

Document Review

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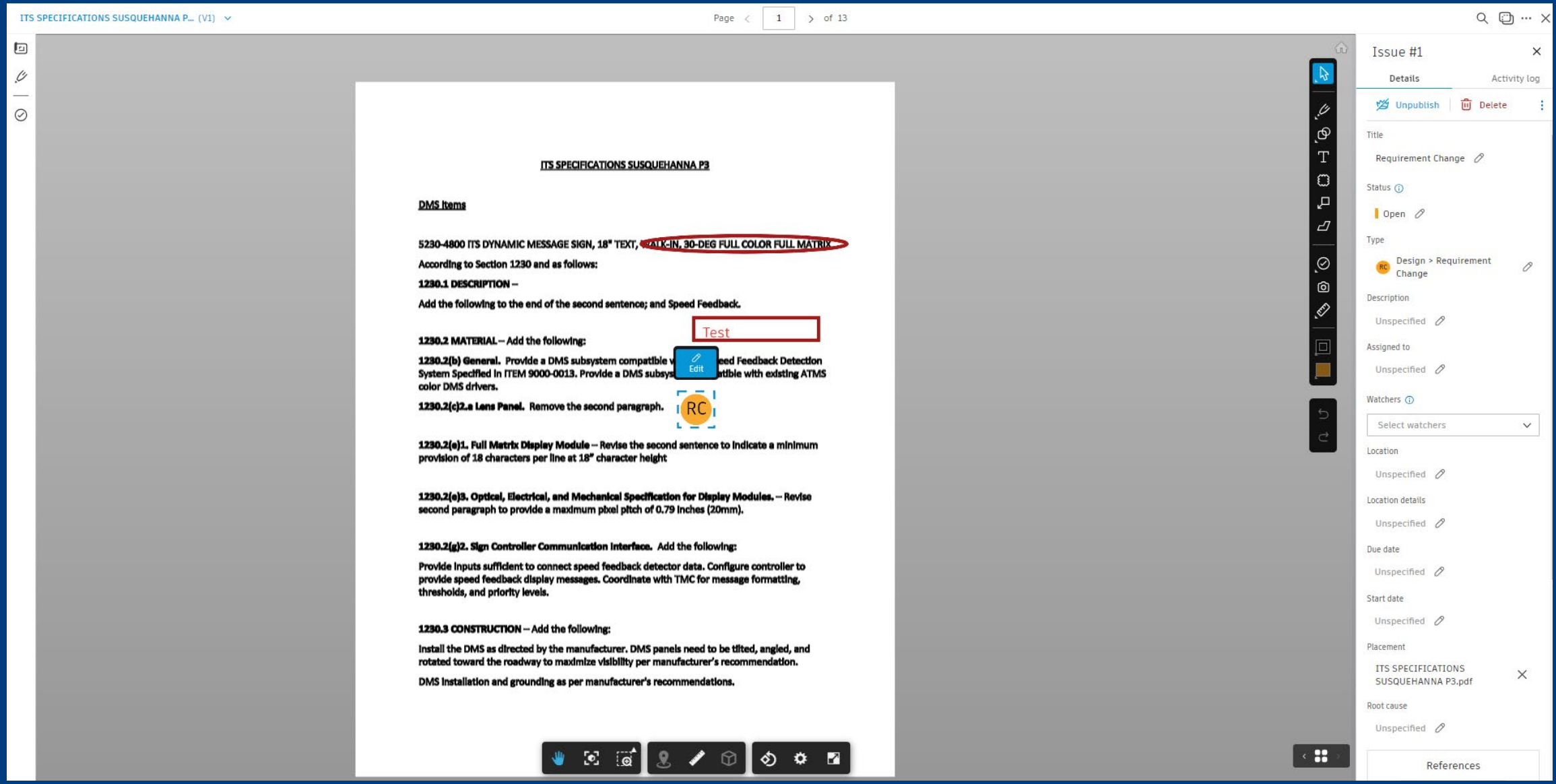

Mark-up and issues

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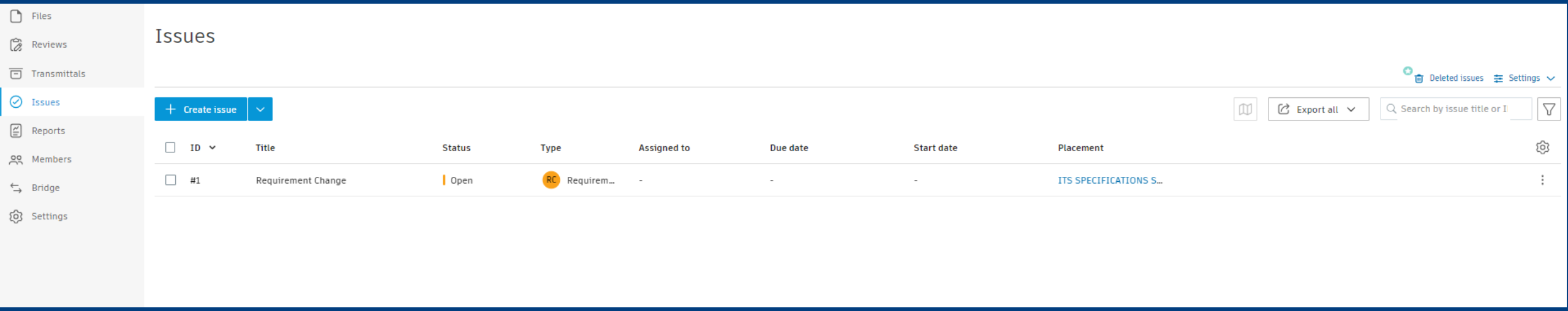

Issues Tracker

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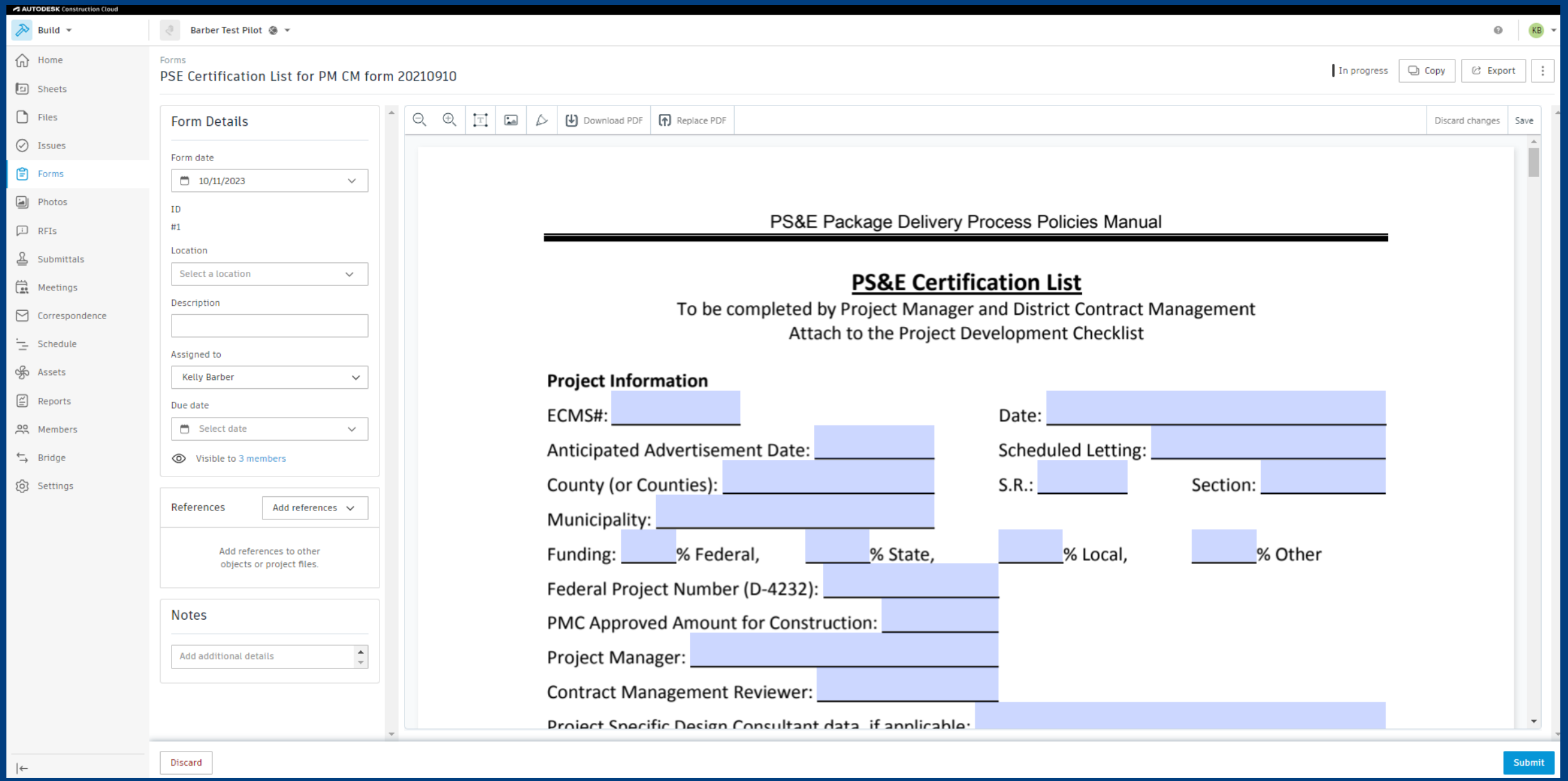

Forms

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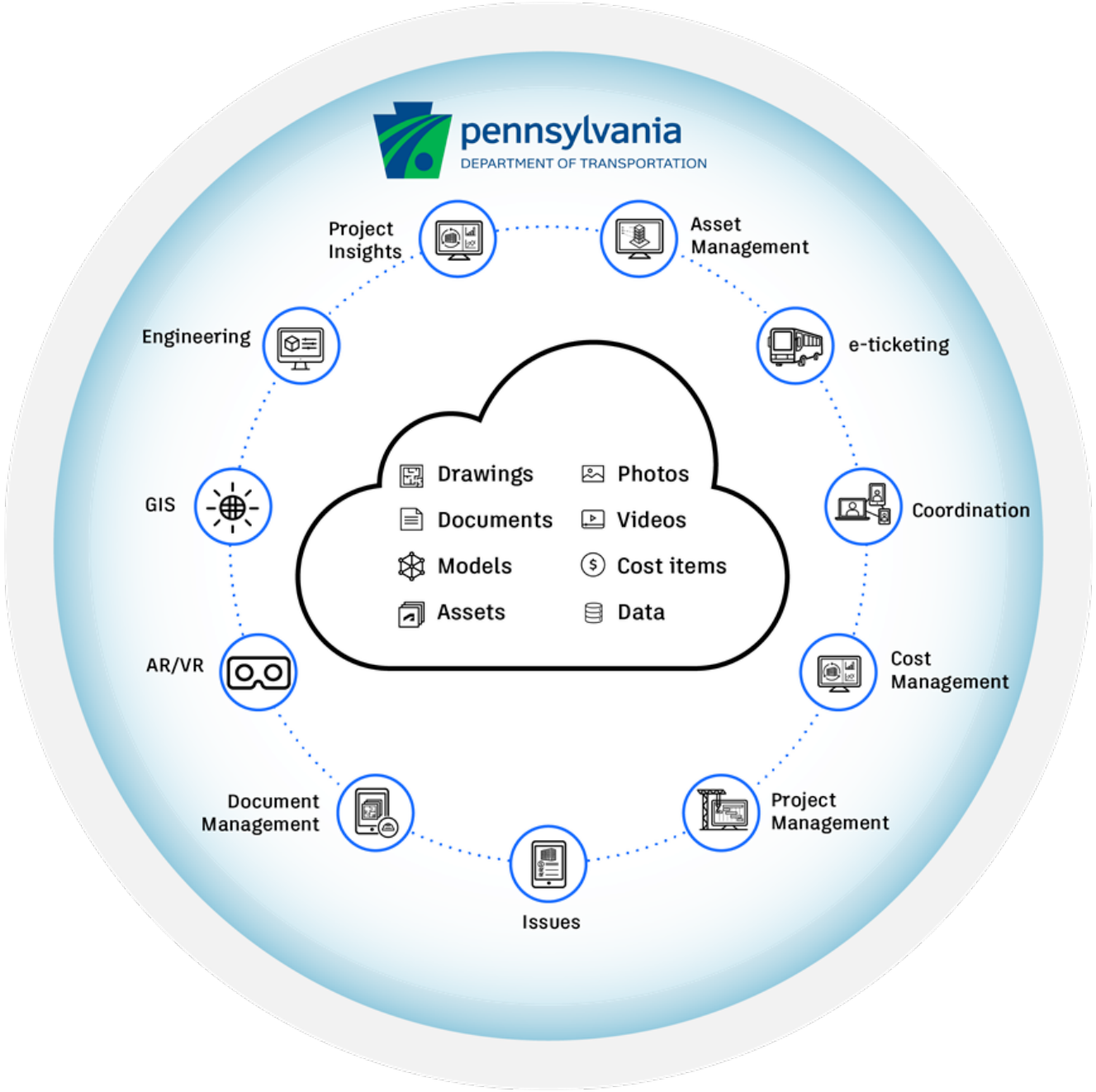
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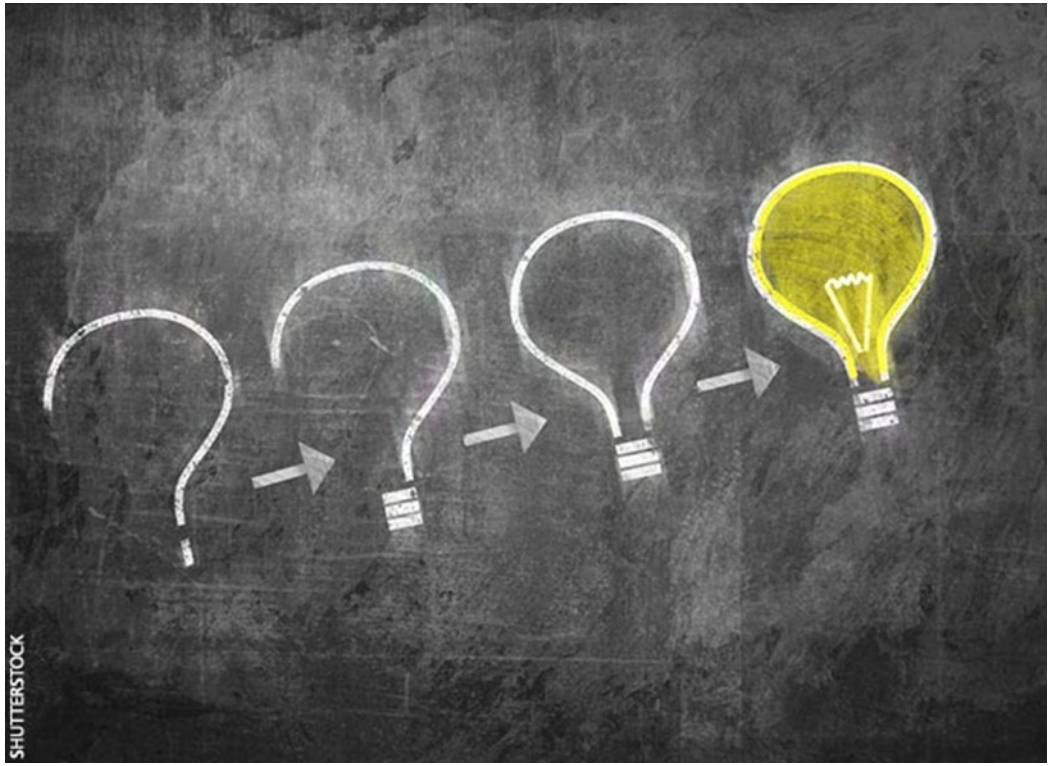
Project Insights
Asset Management
Engineering
e-ticketing
GIS
Coordination
Drawings
Photos
Documents
Videos
Models
Cost items
Assets
Data
AR/VR
Cost Management
Document Management
Project Management
Issues

Kelly Barber, P.E.
keluckenbi@pa.gov



LTAP WEBSITE UPDATE

MIKE DUDRICH ·· NOVEMBER 2, 2023

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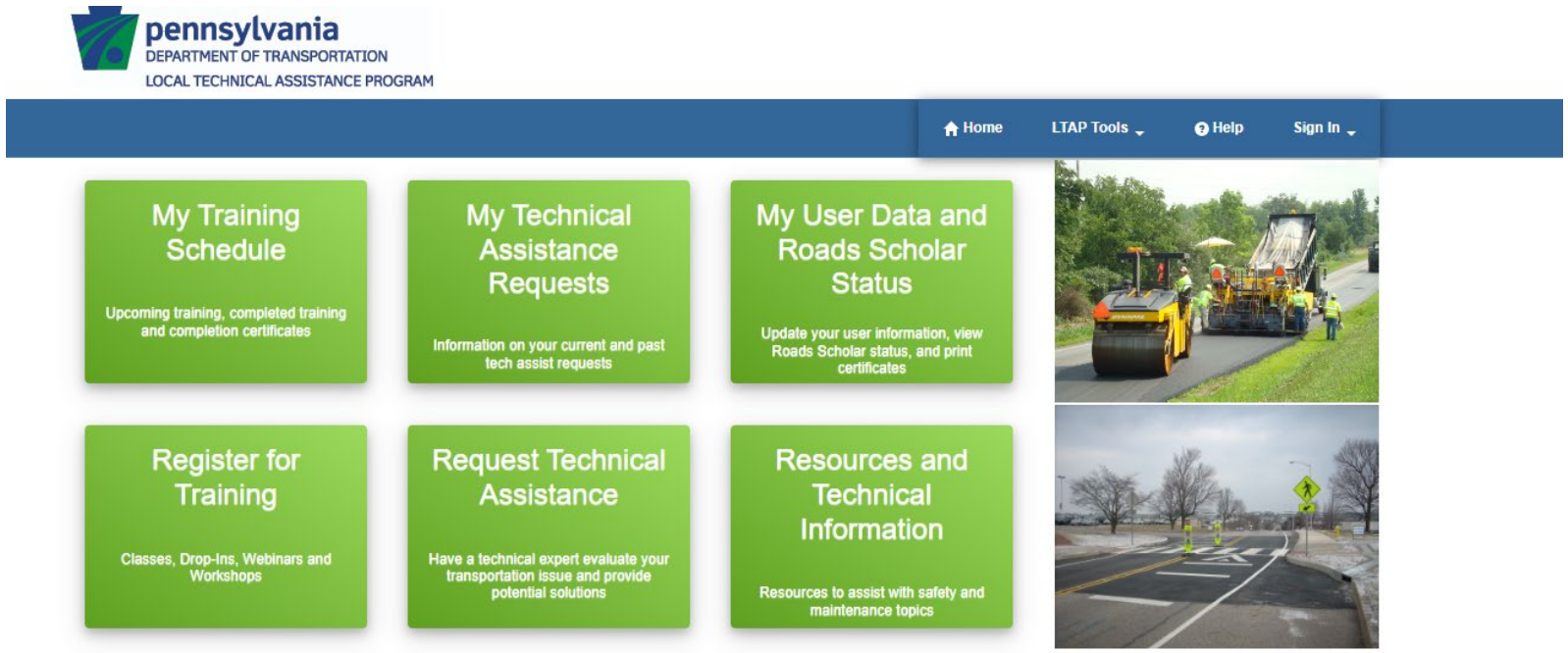
WEBSITE UPDATES

Biggest impacts on municipal users:

- New Look Dashboard
- Class Registration Check Box
- No loss of old functionality

NEW LOOK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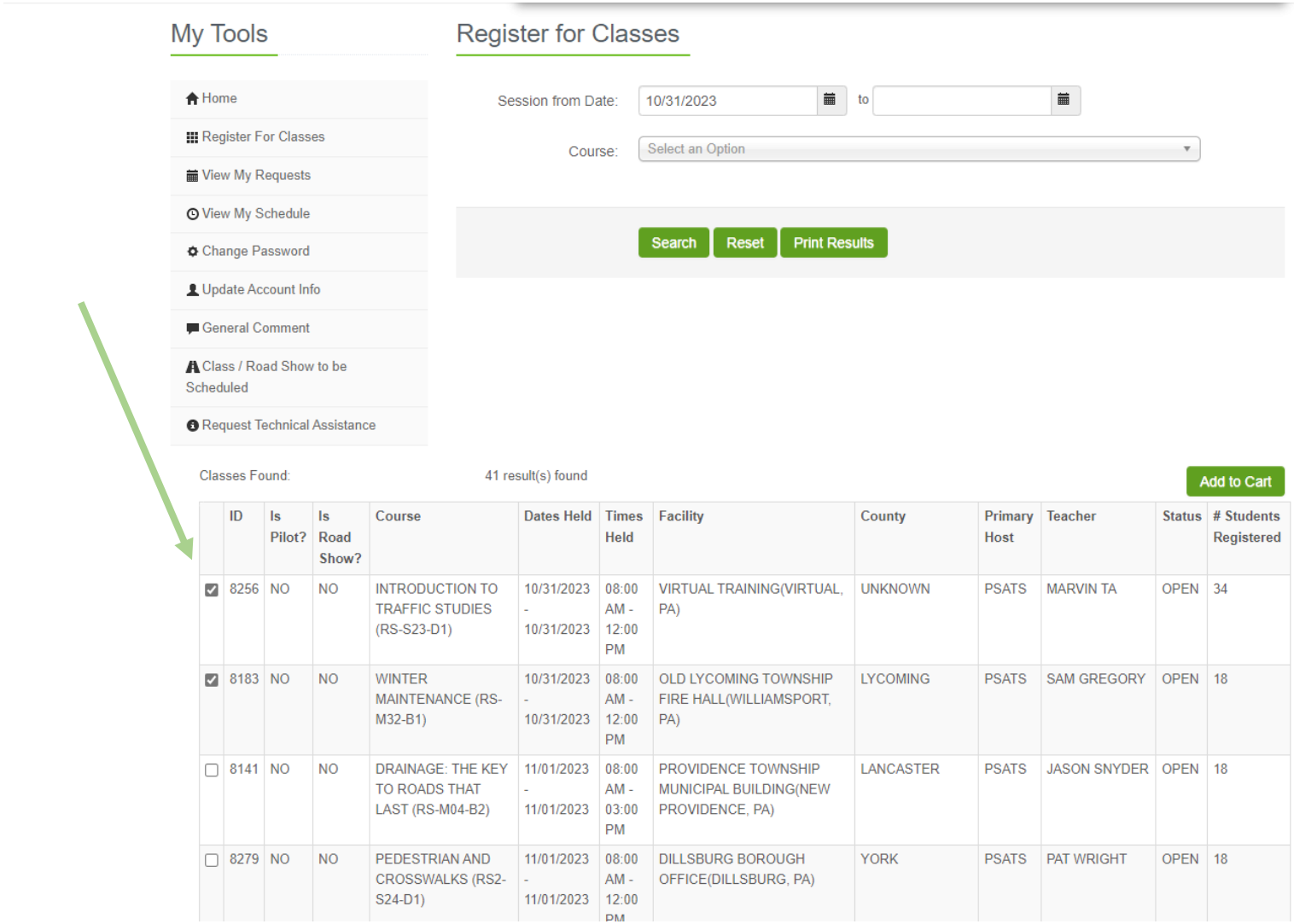
LOCAL TECHNICAL ASSISTANCE PROGRAM
Home
LTAP Tools
Help
Sign In
My Training Schedule
Upcoming training, completed training and completion certificates
My Technical Assistance Requests
Information on your current and past tech assist requests
My User Data and Roads Scholar Status
Update your user information, view Roads Scholar status, and print certificates
Register for Training
Classes, Drop-Ins, Webinars and Workshops
Request Technical Assistance
Have a technical expert evaluate your transportation issue and provide potential solutions
Resources and Technical Information
Resources to assist with safety and maintenance topics
All services are free to municipalities
LTAP Programs
About LTAP
Roads Scholar Program
LTAP Resources
Training Descriptions
Why do I need an Account?
About LTAP
The PennDOT Local Technical Assistance Program (LTAP) is one of 52 LTAP centers across the nation (one in each state, Puerto Rico and one regional center serving Tribal communities). These centers are dedicated to transferring transportation technology through training, technical assistance, and other customer services to municipal elected officials and their staff. The LTAP program is designed to help Pennsylvania's municipalities, which maintain over 78,000 miles of roadways, make the best use of their roadway maintenance dollars. PennDOT LTAP provides technical information and proven technologies dealing with roadway maintenance and safety methods to meet the growing demands on municipal governments. PennDOT LTAP has provided technology transfer services to
Upcoming Training
08:00 AM
31 OCT
WINTER MAINTENANCE (RS-M32-B1) WILLIAMSPORT,PA
08:00 AM
31 OCT
INTRODUCTION TO TRAFFIC STUDIES (RS-S23-D1) VIRTUAL,PA
08:00 AM
01 NOV
DRAINAGE: THE KEY TO ROADS THAT LAST (RS-M04-B2) NEW PROVIDENCE,PA

CLASS REGISTRATION



	ID	Is Pilot?	Is Road Show?	Course	Dates Held	Times Held	Facility	County	Primary Host	Teacher	Status	# Students Registered
☑	8256	NO	NO	INTRODUCTION TO TRAFFIC STUDIES (RS-S23-D1)	10/31/2023 - 10/31/2023	08:00 AM - 12:00 PM	VIRTUAL TRAINING(VIRTUAL, PA)	UNKNOWN	PSATS	MARVIN TA	OPEN	34
☑	8183	NO	NO	WINTER MAINTENANCE (RS-M32-B1)	10/31/2023 - 10/31/2023	08:00 AM - 12:00 PM	OLD LYCOMING TOWNSHIP FIRE HALL(WILLIAMSPORT, PA)	LYCOMING	PSATS	SAM GREGORY	OPEN	18
☐	8141	NO	NO	DRAINAGE: THE KEY TO ROADS THAT LAST (RS-M04-B2)	11/01/2023 - 11/01/2023	08:00 AM - 03:00 PM	PROVIDENCE TOWNSHIP MUNICIPAL BUILDING(NEW PROVIDENCE, PA)	LANCASTER	PSATS	JASON SNYDER	OPEN	18
☐	8279	NO	NO	PEDESTRIAN AND CROSSWALKS (RS2-S24-D1)	11/01/2023 - 11/01/2023	08:00 AM - 12:00 PM	DILLSBURG BOROUGH OFFICE(DILLSBURG, PA)	YORK	PSATS	PAT WRIGHT	OPEN	18

FUTURE UPDATES

- More promotion of the Build a Better Mousetrap Innovation Challenge

- Any ideas or features you'd like to see?

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PENNA TURN PIKE

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STATE POLICE

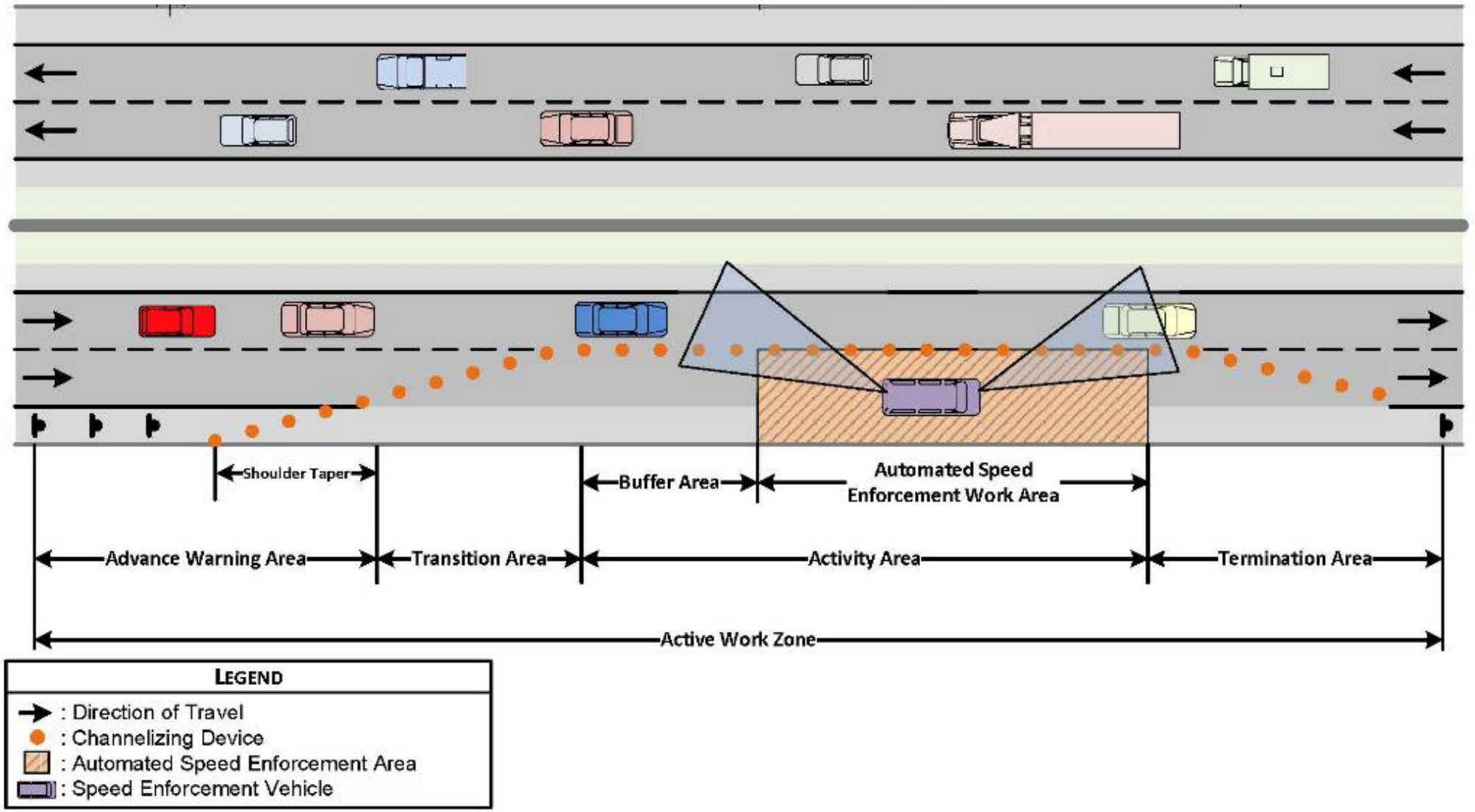
Automated Work Zone Speed Enforcement (AWZSE) in Pennsylvania

MUNICIPAL PRESENTATION – NOVEMBER 2023

PROGRAM GOALS

- ✓ Reduce speeds in work zones
- ✓ Improve driver behavior
- ✓ Save worker and traveler lives
- ✓ Complement existing enforcement by the Pennsylvania State Police
- ✓ Promote work zone safety

OPERATION - AWZSE DEPLOYMENT LOCATION

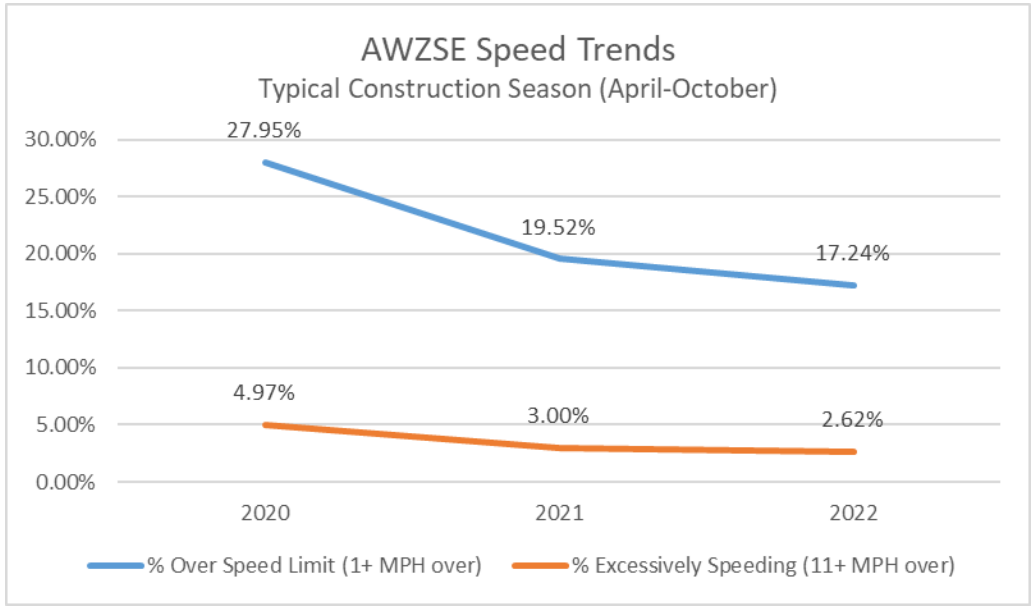


OPERATION - AWZSE UNIT TECHNOLOGY

- Self contained mobile unit (SUV)
- Dual radar system
- Both radar readings must agree for violation
- Two cameras – advancing (front), receding (rear) plates
- Field unit software feeds to cloud-based database, processing portals

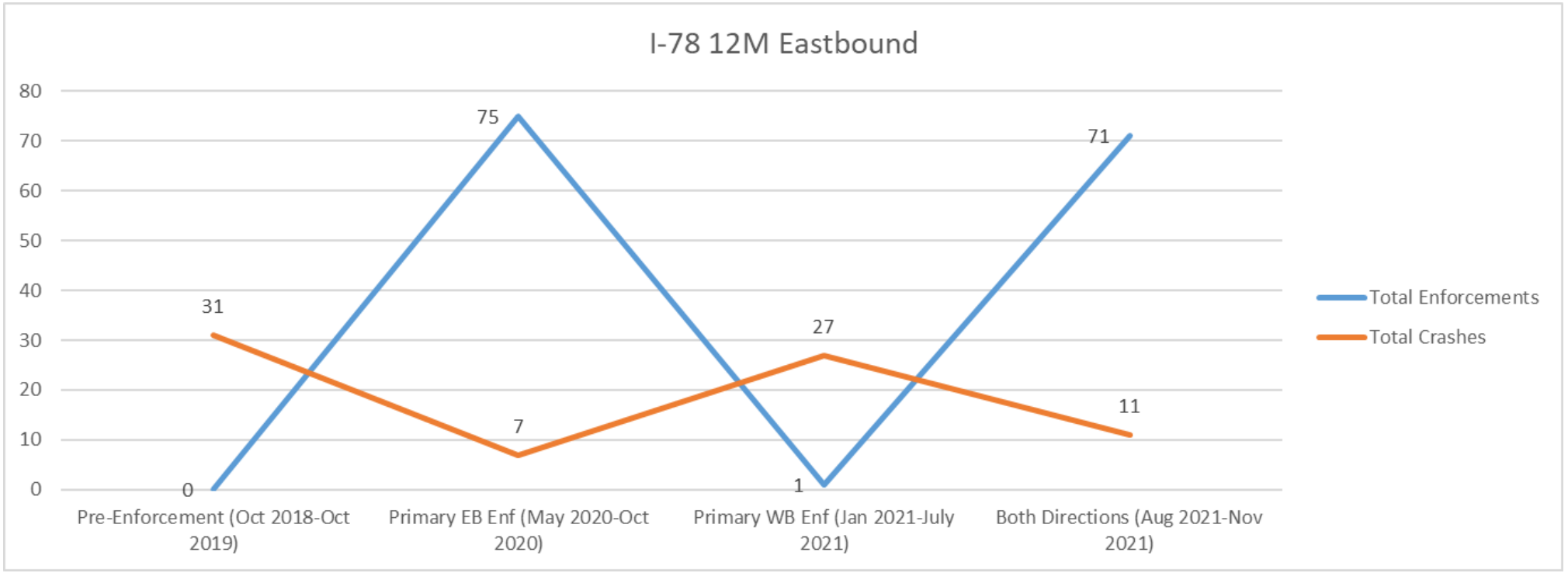
PROGRAM EFFECTIVENESS

- **THE AWZSE PROGRAM HAS REDUCED SPEEDS WHEN DEPLOYED**
  - **38% REDUCTION IN TRAFFIC TRAVELING OVER SPEED LIMIT**
  - **47% PERCENT REDUCTION IN TRAFFIC EXCESSIVELY SPEEDING (11+ MPH OVER SPEED LIMIT)**
  - **SPEEDS HAVE BEEN HIGHER IN BARRIER PROTECTED WORK ZONES THAN IN UNPROTECTED WORK ZONES**



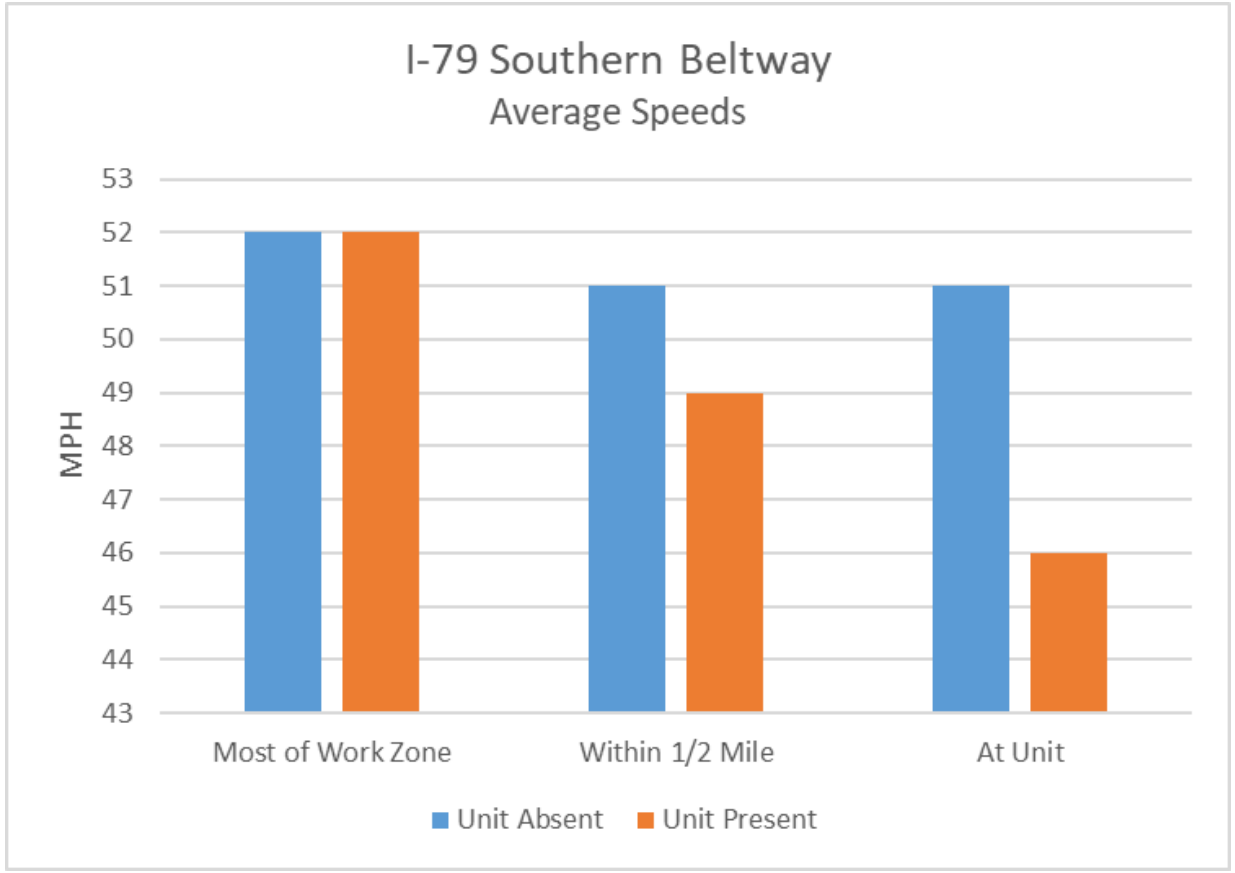
PROGRAM EFFECTIVENESS

- **THE AWZSE PROGRAM HAS REDUCED CRASHES WHEN DEPLOYED**
  - **PRIMARILY STUDIED FOR LONG-TERM BARRIER PROTECTED WORK ZONES**
  - **15-50% REDUCTION IN CRASHES WHEN PRESENT**



PROGRAM STATUS

- **PROGRAM STATS**
  - **10,000+ DEPLOYMENTS**
  - **1,300,000+ VIOLATIONS ISSUED**
  - **16.9% REPEAT RATE**

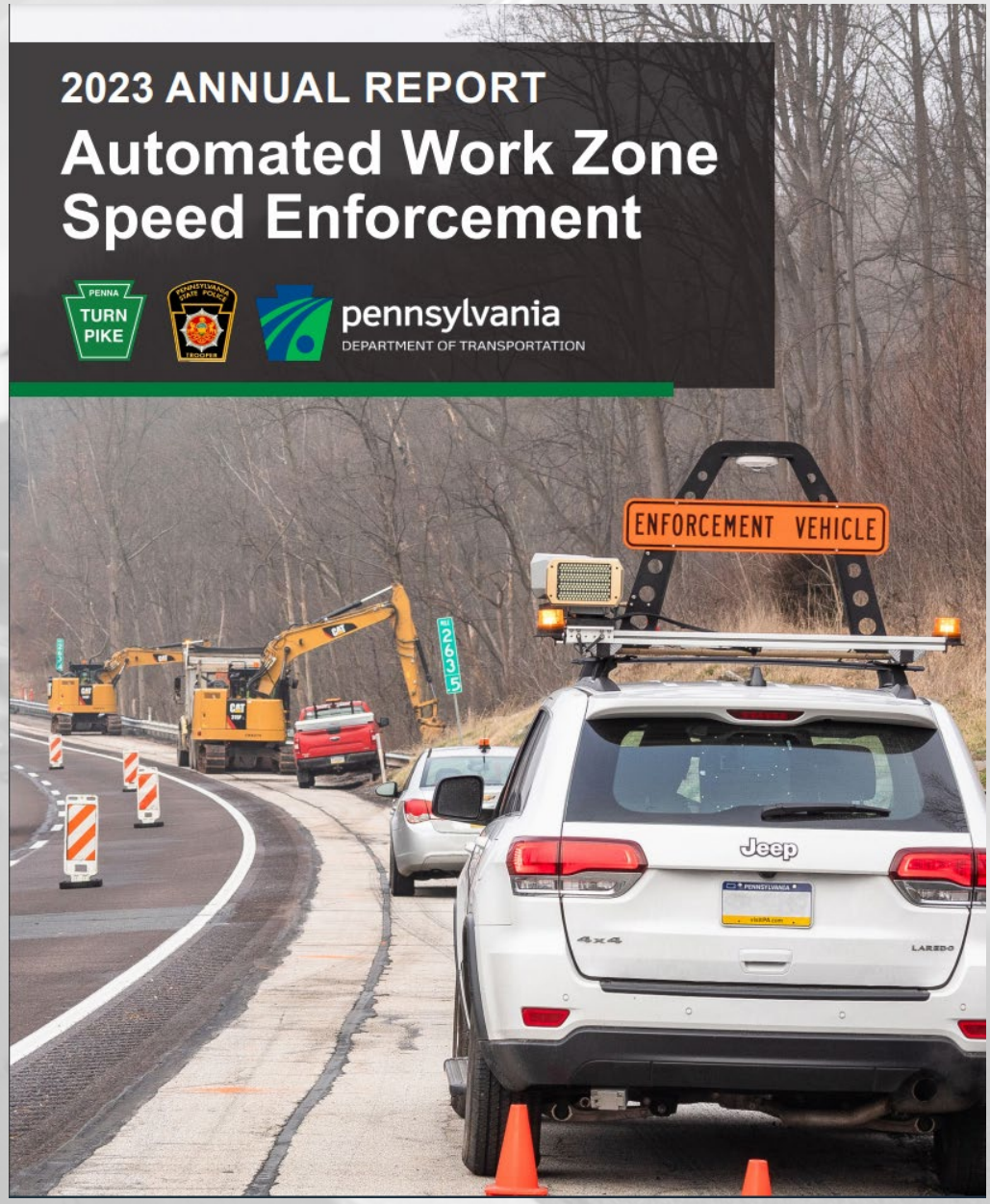


Dan Farley, PE
Director, Bureau of Operations
PennDOT
dfarley@pa.gov
717-783-0333

Key Links

[Legislation - Section 3369]

https://workzonecameras.penndot.gov/



MICROMOBILITY: WHAT IS IT AND WHERE CAN YOU RIDE IT?

ROY GOTHIE ·· NOVEMBER 2, 2023

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MICROMOBILITY: WHAT IS IT AND WHERE CAN YOU RIDE IT?

Photo by Leonard Bonerak

- **Roy Gothie**
- Executive Policy Specialist
- rgothie@pa.gov

MICROMOBILITY: WHAT IS IT AND WHERE CAN YOU RIDE IT?

- **The TLDR Version:**

- Micromobility includes a wide range of vehicles under 2200 lbs.
- Many are familiar such as electric motorcycles, mopeds, and bicycles
- Others are less familiar to the public including Pod vehicles, unicycles, commercial cargo bikes, and e-scooters.
- Title 75 (Vehicle Code) controls what is allowed on the roads and in local communities.
- Many new electric form factors aren’t covered in Title 75 and are therefore not legal to operate on the roadway.

The Story:

A car is a bundle of trips – mostly short trips less than five miles

It is also an aspirational purchase – Of course you're going on adventure far away someday.

The Reality:

For most trips under 3 miles micromobility will work quite well

- Shopping
- Going to school
- Getting to work
- Reaching the bus stop

Cost are Lower

- An e-bike is about $250 year to operate
- A Toyota Camry is about $9,700 per year to operate

The Reality of Regulation and Legislation

- Not as clear as we might prefer
- Elected Officials, Law Enforcement, and the Public are confused
- Bike shops are trying to educate
- DCNR created an E-Bike Policy
- Researchers are producing some work on the laws and how these vehicles are being used.

MICROMOBILITY: WHAT IS IT AND WHERE CAN YOU RIDE IT?

MOTOR-DRIVEN CYCLE DEFINITION: A motorcycle, including a *motor scooter,* with a motor which does not to exceed 5 brake horsepower

MICROMOBILITY: WHAT IS IT AND WHERE CAN YOU RIDE IT?

- ***MOPED DEFINITION:*** A motor-driven cycle equipped with operable pedals, a motor rated no more than 1.5 brake horsepower, a cylinder capacity not exceeding 50 cubic centimeters, an automatic transmission, and a maximum design speed of no more than 25 miles per hour, or an electric motor-driven cycle equipped with operable pedals and powered by an electric battery or battery pack powered electric motor with a max design speed of no more than 25 mph.

- From FAQ not Title 75

MICROMOBILITY: WHAT IS IT AND WHERE CAN YOU RIDE IT?

Motorized Pedalcycles

A motor-driven cycle equipped with operable pedals and a motor rated no more than 1.5 brake horsepower, a cylinder capacity not exceeding 50 cubic centimeters, an automatic transmission and a maximum design speed of no more than 25 miles per hour

OR

an electric motor-driven cycle equipped with operable pedals and an automatic transmission powered by an electric battery or battery pack-powered electric motor And a maximum design speed of no more than 25 miles per hour

MICROMOBILITY: WHAT IS IT AND WHERE CAN YOU RIDE IT?

MICROMOBILITY: WHAT IS IT AND WHERE CAN YOU RIDE IT?

The ELF Pedalcycle with Electric Assist

150 lbs. – up to 550 lbs. loaded

UPS – Motorized Cycle

400 lbs. unloaded and w/o driver

MICROMOBILITY: WHAT IS IT AND WHERE CAN YOU RIDE IT?

Challenging to operate for new riders

Higher than expected speeds

Definitely not in Title 75

Available from Amazon and Target

MICROMOBILITY: WHAT IS IT AND WHERE CAN YOU RIDE IT?

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PA MICROMOBILITY FACT SHEET

DESCRIPTION	MIN AGE	LICENSE	REGISTRATION	INSURANCE	HELMET	PASSENGER	LIGHTS	MAX CAPABLE SPEED	RIDE ON SIDEWALK	RIDE ON BIKE LANE	POSSIBLE DUI	PA VEHICLE CODE
ELECTRIC SCOOTER	-	-	-	-	-	-	-	-	-	-	Yes	§ 102
Can operate only on private property. Electric scooters, like electric skateboards and electric unicycles, cannot be legally operated on public roadways.												
MOTORIZED PEDALCYCLE	16	C	Yes	Yes	Yes, under 21	Yes	Yes	25	No	No	Yes	§ 102, § 3523(e), § 1714
Has operable pedals. Design speed of no more than 25 mph. Gas - motor rated 1.5 brake horsepower or less, has an automatic transmission. Electric - powered by an electric battery.												
MOTOR SCOOTER	16	Class M/Class if >50 cc, Class C if <50cc	Yes	Yes	Yes, under 21	Yes	Yes	Up to 5 brake horsepower	No	No	Yes	§ 102, § 3525
Is a motor-driven cycle. Motor shall not exceed five brake horsepower.												
SEGWAY	-	No	No	No	Yes, under 12	No	Yes	-	Yes	No	Yes	§ 102, § 3581-3583, § 3703 (c)
Is an electric personal assistive mobility device. An electric, self-balancing, two-nontandem-wheeled device. Lighting must be used when operating between sunset and sunrise. A Segway is allowed on sidewalks unless a municipality prohibits it.												
E-BIKE	16	No	No	No	No	Yes	Yes	20	Yes, not in business district	Yes	Yes	§ 102, § 3514
Is a pedalcycle with electric assist. Weighs less than 100 pounds. Motor not more than 750 watts. Has operable pedals. Not capable going faster than 20 mph on a level surface when powered by the motor source only. Lighting must be used when operating between sunset and sunrise.												
BICYCLE	-	No	No	No	Yes, under 12	Yes	Yes	-	Yes, not in business district	Yes	Yes	§ 102, § 3501 et seq., § 3802, § 1547
Is a pedalcycle. Is moved solely by human-powered pedals. Lighting must be used when operating between sunset and sunrise.												

For more information visit penndot.gov

May 2021

SUPPORTING RESOURCES

- PennDOT Fact Sheet: Mopeds, Motor-Driven Cycles, and Motorcycles https://www.dot.state.pa.us/public/dvspubsforms/bmv/bmv%20fact%20sheets/fs-momo.pdf

- PennDOT Micromobility Fact Sheet https://www.penndot.pa.gov/TravelInPA/active-transportation/Documents/Low_Speed_FACT_Sheet_2021_Final.pdf

- DCNR E-Bikes in Pennsylvania State Parks and Forests - https://www.dcnr.pa.gov/Pages/EBikePolicy.aspx

- *Title 75 (PA Vehicle Code) https://www.dmv.pa.gov/Information-Centers/Laws-Regulations/Pages/PA-Vehicle-Code-(Title-75).aspx*

- *How and Where Should I Ride This Thing? "Rules Of The Road" for Personal Transportation Devices – Fang, Agrawal, Hooper 2019. https://transweb.sjsu.edu/research/1713-Rules-Personal-Transportation-Devices*

MICROMOBILITY NEWSLETTERS AND PODCASTS

- Micromobility – very good but technical, focusing on equity investments, product design, systems operations for e-bikes and scooters.
- The War on Cars – from NYC, very light and airy discussions of issues surrounding the current and past practice of designing public space for cars.
- The Mobility Podcast – wide range of topics including connected and autonomous vehicles, trains (rail and freight), electrification of buses (and school buses).
- Talking Headways – more in depth - some transit, some on health-transportation linkages, e-bikes, electrification of cities.
- Streets Ahead – dedicated to the world of active transportation, livable streets, and people-focused urban design.
- Arrested Mobility - minority and veteran-owned urban planning, public policy and research firm focused at the intersection of transportation, health and equity

MICROMOBILITY: WHAT IS IT AND WHERE CAN YOU RIDE IT?

Contact Information:

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Phone: 717.783.3991

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NEXT MEETING: JANUARY 18, 2024 MICROSOFT TEAMS (ALL VIRTUAL)

Draft Topics:

ARLE Updates

UAS/Drones

Dirt and Gravel Roads

Pennsylvania's Master Plan for Older Adults

Legislative Update?

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