NEW JERSEY STATE TRANSPORTATION INNOVATION COUNCIL

2017 Winter Meeting
December 18, 2017

WELCOME & INTRODUCTIONS

Assistant Commissioner Michael Russo, NJDOT

Division Administrator Robert Clark, FHWA

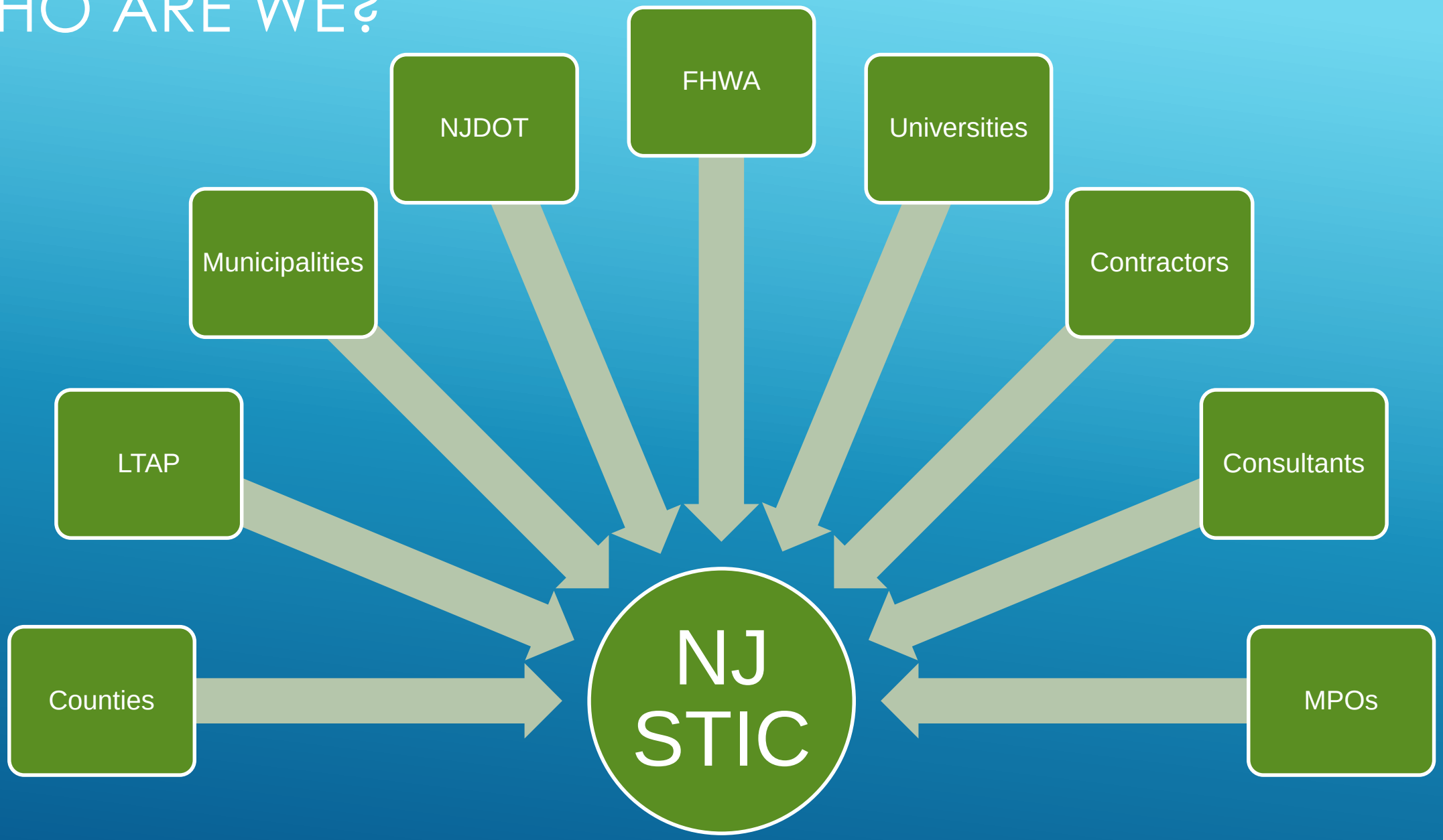
NJ STIC OVERVIEW: WHY ARE WE HERE?

- The National STIC Network was born out of FHWA's Every Day Counts

- In 2009, FHWA launched EDC in cooperation with AASHTO to accelerate the delivery of highway projects and to address the challenges presented by limited budgets.
  - Goals are to identify and rapidly deploy proven, but underutilized innovations to
    - Shorten the project delivery process
    - Enhance roadway safety
    - Reduce congestion
    - Improve environmental sustainability

- In 2010, FHWA introduced the STIC concept to state DOTs to foster ***ownership and pride*** in establishing this state-based model for innovation.

WHO ARE WE?


NJDOT
FHWA
Universities
Municipalities
Contractors
LTAP
Consultants
Counties
NJ STIC
MPOs

WHERE DO THE IDEAS COME FROM?
HOW DO I SUBMIT AN IDEA TO THE STIC?

Step 1 Click on the button
Step 2 Fill out the online form
Step 2 Click submit!

- NJDOT Intranet (internal)
- NJDOT Internet (public) www.njdot.nj.gov
- NJDOT's Tech Transfer site (public) www.njdottechtransfer.net

Need more information?
Email DOT-Innovative.Idea@dot.nj.gov

NJ STIC Structure

Core Innovation Area

INFRASTRUCTURE PRESERVATION

Core Innovation Area

SAFETY

Core Innovation Area

MOBILITY & OPERATIONS

Executive Team

Innovation Advisory Team

STIC

(The Council)

CORE INNOVATION AREA (CIA) TEAMS

CIA TEAM SAFETY

NJDOT – Sophia Azam
FHWA – Caroline Trueman

CIA TEAM MOBILITY & OPS

NJDOT – Sal Cowan
FHWA – Ek Phomsavath

CIA TEAM INFRASTRUCTURE PRESERVATION

NJDOT – Bob Signora
FHWA – John Miller

- Generate ideas
- Investigate Ideas
- Develop Ideas
- Deploy Ideas

Report to FHWA and the Council

EXECUTIVE TEAM

Assistant Commissioner
Bureau of Research
FHWA Assistant Division Administrator
FHWA Innovation/EDC Coordinator

- Manages & coordinates NJ's STIC business
- Screens innovative ideas
- Point for reporting to Asst. Commissioner & FHWA
- Coordinates with all STIC groups
- Maintains the NJ STIC Charter

INNOVATION ADVISORY TEAM (IAT)

CIA LIAISONS
(NJDOT & FHWA)

NJDOT SUBJECT MATTER EXPERTS

OTHER STIC MEMBERS

- Assist the Exec. Team in reviewing and vetting innovative ideas
- Provides STIC process feedback to Executive Team and makes recommendations for improvement

GOALS & OBJECTIVES OF NJ STIC

Mission of NJ's STIC:

To identify, evaluate, and rapidly deploy new technologies and process improvements that will accelerate project delivery and improve the safety and quality of transportation in New Jersey.

FEATURE CORE INNOVATION AREA (CIA) PRESENTATION

CIA TEAM

SAFETY

NJDOT – Sophia Azam

FHWA – Caroline Trueman

AASHTOWare - SAFETY ANALYST

New Jersey Department of Transportation

Bureau of Transportation Data & Safety

Presentation by: Peter Brzostowski

SAFETY ANALYST

1. WHY SAFETY ANALYST?
   - NJDOT – SAFETY ANALYST
   - TIME, MONEY, & EFFICIENCY
2. SAFETY ANALYST - PRESENT
   - DATA REQUIRMENTS
3. NJDOT DATA & M.I.R.E.
   - INNOVATIVE CONCEPTS
   - INTERNAL NJDOT POLICIES
4. PILOT STUDY
   - BURLINGTON COUNTY
   - METHODOLOGY
5. NJDOT IMPLEMENTATION
   - NETWORK SCREENING
6. SAFETY ANALSTY - FUTURE
   - FULL IMPLEMENTATION

SAFETY ANALYST

- **SAFETY ANALYST**:

  "The software automates procedures to assist highway agencies in implementing the six main steps of the highway safety management process, including:

  - network screening
  - diagnosis
  - countermeasure selection
  - economic appraisal
  - priority ranking
  - countermeasure evaluation "

Source: http://www.safetyanalyst.org/

SAFETY ANALYST

- **<u>Current NJDOT Screening Method</u>**:
  - Equivalent Property Damage Only (Based on Average Frequency and Severity of Crashes)
  - Roadway Characteristics Not Taken Into Account
  - Intersections do not account for volume

- **<u>Safety Analyst Screening</u>**:
  - Based on many variables
    ex: volume, roadway characteristics, driveway density, lane widths

SAFETY ANALYST

Time –

- Decreased analysis time using Safety Analyst vs. Manual

Efficiency –

- More roadway segments / intersections analyzed

Funding –

- Better analysis of roadway networks
- Federal Funding monitoring through Safety Analysis

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SAFETY ANALYST

2. SAFETY ANALYST - PRESENT

DATA REQUIRMENTS

- More data needed then initially expected
- NJDOT – Objectives & Expectations
  - Limited use of default values
  - Collect additional data, ex:
    - Driveway Density
    - Minor Approach Volumes
  - Reduce redundancy of NJDOT data collection

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SAFETY ANALYST

- **New Jersey looking into innovative ways to gather data**:
  - Involve multiple Bureaus for data collection, ex:
    - Traffic Engineering
    - Mobility and Systems Engineering
    - Access Management
  - Systems (Existing and New) to capture data, ex:
    - Cameras
    - Radar
  - Model Inventory of Roadway Elements, M.I.R.E.

SAFETY ANALYST

3. NJDOT DATA & M.I.R.E. | INNOVATIVE CONCEPTS | INTERNAL NJDOT POLICIES

- Develop official NJDOT Policy for Data Collection Standards
  - Internal Data Collection – Format of Data
  - External Data for Various Projects – Provided to Data Development
  - All data collected shared with Data Development
- Collected data stored/saved on Share Drive / Cloud Service
  - Multiple sources
- Standards and Details / Specifications
  - New system installations, ex: Camera / Radar

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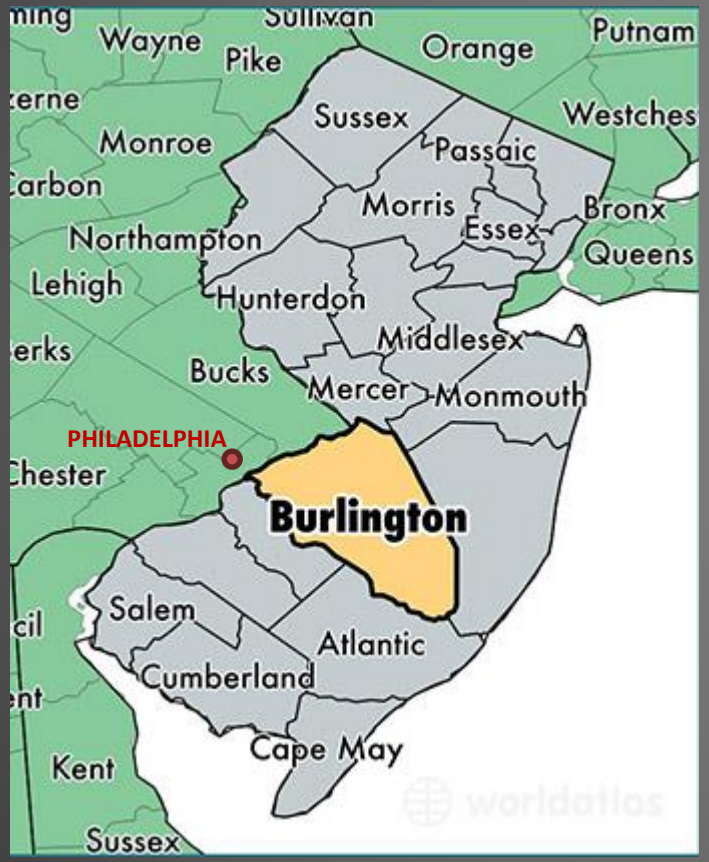
SAFETY ANALYST

4. PILOT STUDY | BURLINGTON COUNTY | METHODOLOGY



New Jersey Department of Transportation

SAFETY ANALYST

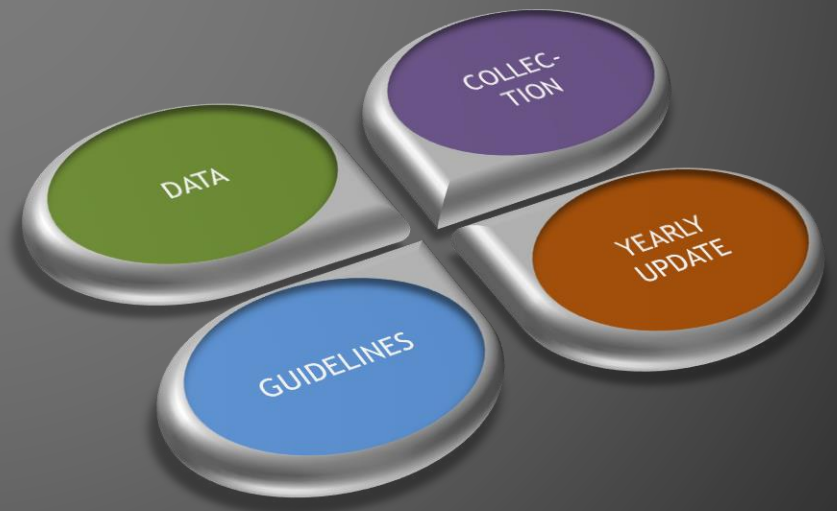
4. PILOT STUDY | BURLINGTON COUNTY | METHODOLOGY

- Proximity to Philadelphia
- Commuter Traffic
- Rural / Urban Roadway Network
- Roadway Characteristics

SAFETY ANALYST

4. PILOT STUDY | BURLINGTON COUNTY | METHODOLOGY

- Establish NJDOT Methodology for Safety Analyst
  - Collection of Data: Current & Future
  - Locations for Data Collections
    - M.I.R.E.
    - Limit Redundancy
- Default vs. Actual Values
- Time, Effort & Cost
- All Counties / Municipalities



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SAFETY ANALYST

5. NJDOT IMPLEMENTATION

NETWORK SCREENING

Achievements

- NJDOT received grant from Federal Highway Administration
  - Acquired software license for Safety Analyst
  - Service Units
  - Initial Work – PILOT Study
- Grant allowed NJDOT to start full implementation
  - Methodology for meeting NJDOT goals
  - Advanced specifics for Safety Analyst Operation

SAFETY ANALYST

5. NJDOT IMPLEMENTATION

NETWORK SCREENING

- Based on Burlington County PILOT Program
- Safety Analyst used as Network Screening Tool for Entire State
  - Internal and External users of program
- Efficient use of resources, time and money appropriation

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SAFETY ANALYST

6. SAFETY ANALSTY - FUTURE

FULL IMPLEMENTATION

- Methodology Burlington County used for entire state
- Updates of data on yearly basis
- Network Screenings completed at State and Local Level

SAFETY ANALYST

Thank you
Questions?

Peter Brzostowski
Bureau of Transportation Data & Safety
Traffic Technology Section
Peter.Brzostowski@dot.nj.gov
609-530-6463

- START OF PRESENTATION
- PRESENTATION LINKS

New Jersey Department of Transportation

CIA PROGRESS UPDATES: ONGOING INNOVATIONS

CIA TEAM
SAFETY

NJDOT – Sophia Azam
FHWA – Caroline Trueman

CIA TEAM
MOBILITY & OPS

NJDOT – Sal Cowan
FHWA – Ek Phomsavath

CIA TEAM
INFRASTRUCTURE PRESERVATION

NJDOT – Bob Signora
FHWA – John Miller

INNOVATION STATUS

CIA TEAM

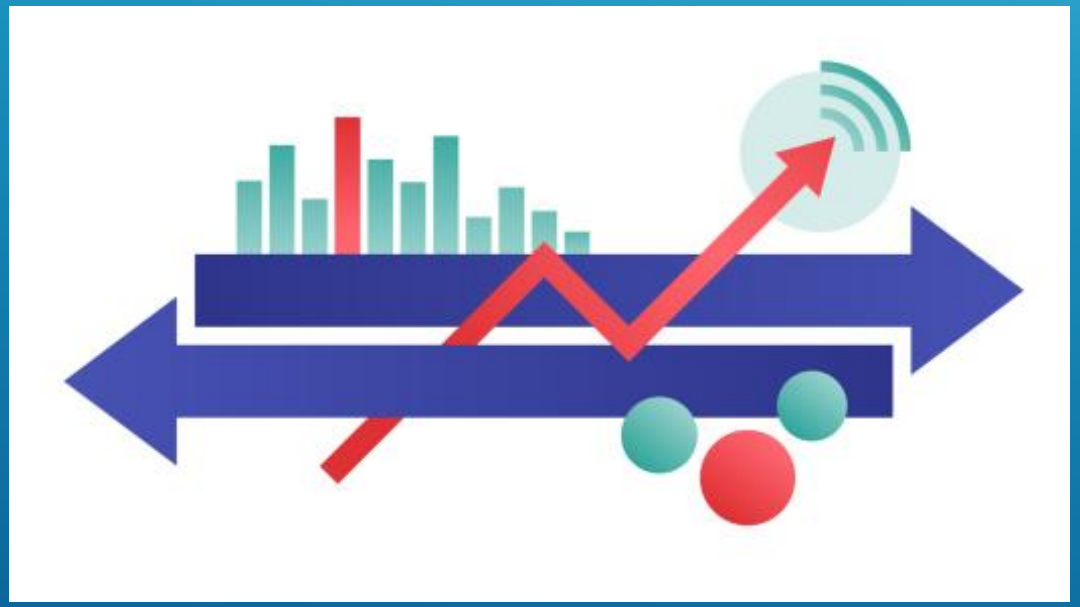
MOBILITY & OPS

NJDOT – Sal Cowan

FHWA – Ek Phomsavath

Regional Models of Cooperation – Data Models and Tools

- Purpose: Understanding of Various Tools Available
  - NJDOT and other agencies use RITIS – I-95 Corridor Coalition for TPMs
  - TRANSCOM suite of PM tools (SPATEL) regularly being evaluated



Automated Traffic Signal Performance Measures (ATSPMs)

- Purpose: Determine Appropriate Signal PMs
  - NJDOT MSE research project initiated (Real-Time Traffic Signal System Performance Measurement (PROJECT NO. 2016-14). Stakeholders include State, MPOS, Counties.
  - Discussions included Burlington County, TCNJ, DVRPC, NJ Traffic Engineering, Mobility and Systems Engineering.

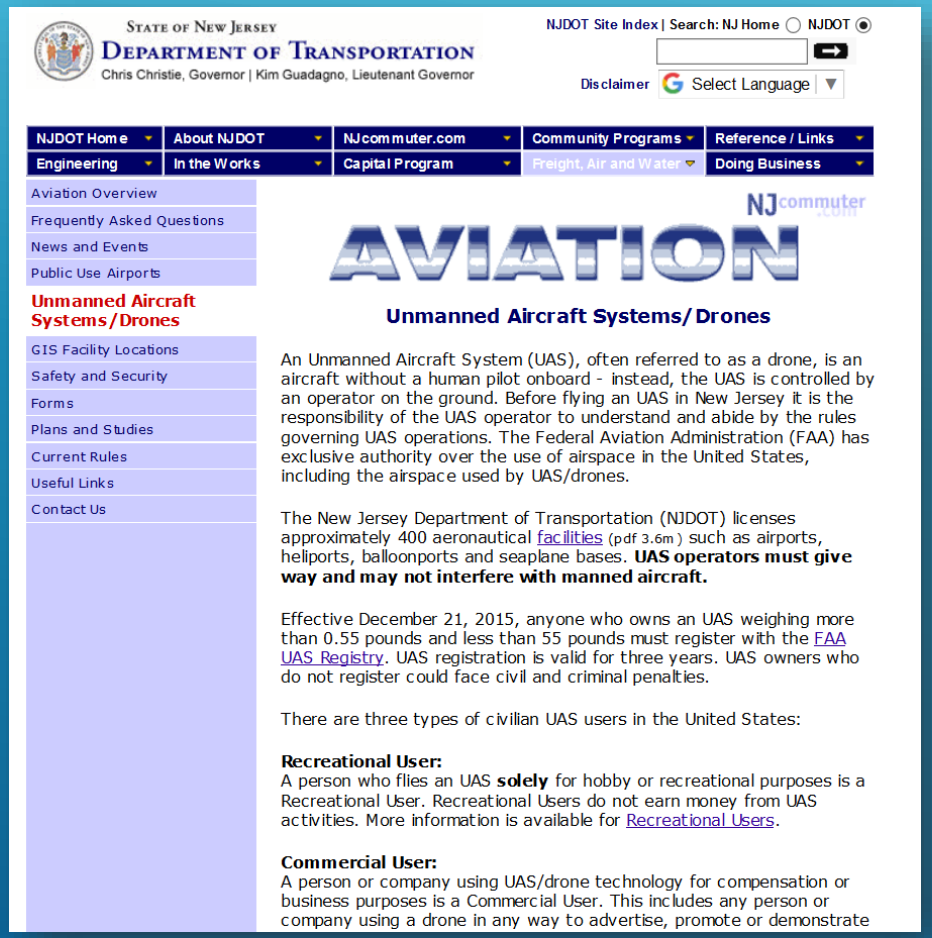
Road Weather Management – Weather Savvy Roads

- Purpose: Utilize Technology to Improve Weather Situational Awareness and Response
  - AID Grant was resubmitted in May to outfit 20 NJDOT vehicles - Operations Dump Trucks, Winter Operations Vehicles, SSP, IMRT - with dashboard cameras for real-time weather monitoring and situational awareness as well as Vaisala Surface Patrol HD pavement/humidity sensors.
  - Technical team being assembled for integration of the data sets and the broadcast capabilities from wireless systems.

Using Data to Improve Traffic Incident Management

- Purpose: Integrate DOT and Law Enforcement Systems
  - Established working group among various technical and policy stakeholders. Coordinated with I-95 Corridor Coalition to hold national webinar (October 2017).
  - Next step is in-person multi-agency workshop in Maryland Spring 2018. Department Incident Management Performance Measures (OpenReach) approved for funding in 2018.

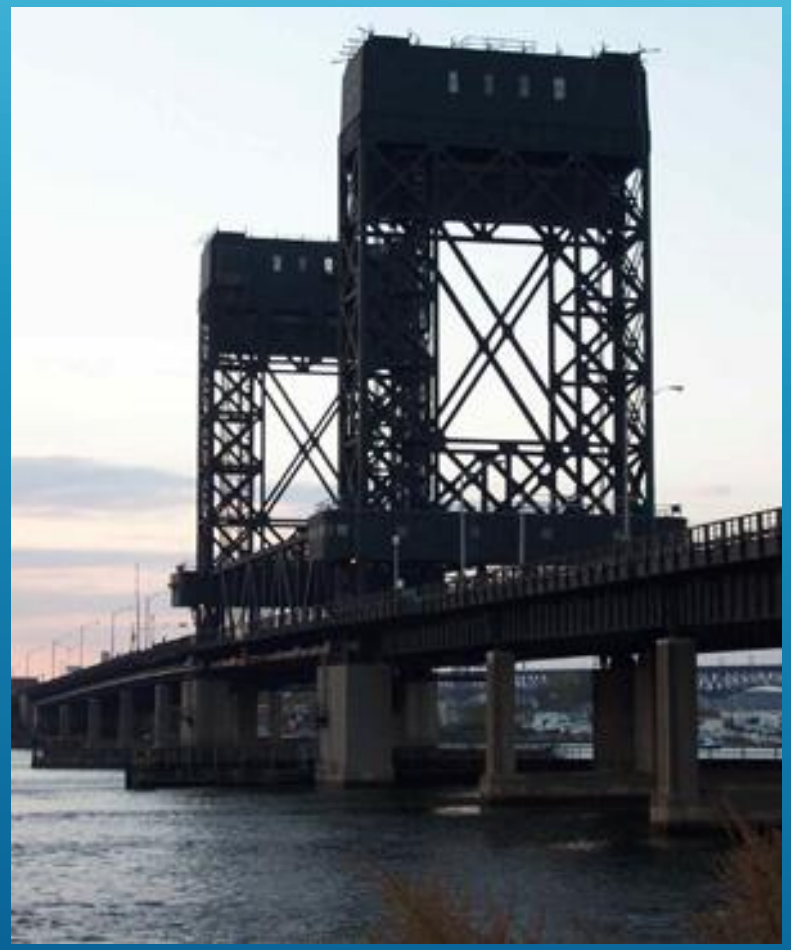
Use of Unmanned Aerial Vehicles



Purpose: Evaluation and Adoption of UAV at NJDOT

- Division of Multi-Modal Services has a grant through Bureau of Research that provides assistance in developing regulations and policies for 38 business areas of the DOT.
- STIC incentive funding was request for procurement of UAV's, training, etc. Additional activities and practical applications being developed

Remote Controlled Moveable Bridges



Purpose: Use of Technology for Program Performance

- Operations is developing a pilot project whereby they will remotely operate the Rt 44 Drawbridge in Paulsboro, Gloucester County.
- FHWA has offered research assistance and coordination with other areas in the country with similar programs to learn and build upon

Technology Deployment to Resolve Overpass Strikes

- Purpose: Investigate and Assess Current Technology for Supporting Safety Initiative
  - TxDOT is using infrared technology to assess the height of trucks in the hopes of alerting drivers of overheight vehicles to exit the road before approaching low-clearance bridges.
  - Research is reaching out to internal stakeholders as well as NJ Transit and Amtrak. TxDOT conference call scheduled for January 2018

INNOVATION STATUS

CIA TEAM

INFRASTRUCTURE PRESERVATION

NJDOT – Bob Signora

FHWA – John Miller

Locally Administered Projects: Local Stakeholder Partnering

Purpose: Provides a forum for the exchange of information between NJDOT, FHWA and the LPA's to assist in the delivery of federal aid programs and projects

- Agenda - August 4, 2017 Session
  - NJDOT Bicycle and Pedestrian Master Plan
  - Rutger's Proposed Bikeshare Program
  - High Friction Surface Treatment
  - Civil Rights Contract Compliance

Locally Administered Projects: Consultant Services Flexibilities

Purpose: Provides consultant services to develop and deliver locally administered federal aid projects.

- Implemented Pilot Design Assistance Program for Safe Routes to School and Transportation Alternatives
- Team will evaluate the program once the projects have been completed

Locally Administered Projects: e-Construction

Purpose: Collecting, reviewing, approving, and distributing highway construction contract documents in paperless environment

- Tablets used to conduct construction oversight inspections
- Data recorded directly in field
- Eliminates paper inspection reports and the manual transfer of data
- Tablets procured using STIC Incentive funding
- Secondary uses include the rating of SRTS and TAP grant applications

Pavement Preservation (When and Where)

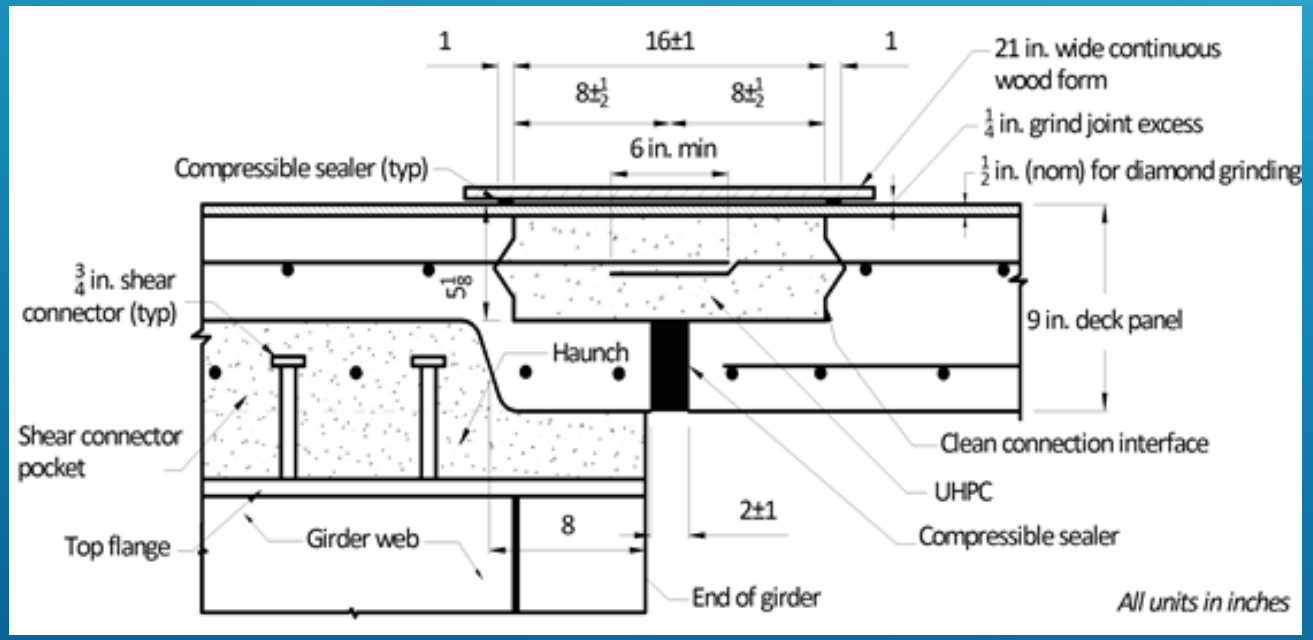
- Purpose: Developing comprehensive pavement strategy (preservation programs)
  - Evaluated a number of different pavement treatments
  - Projected anticipated life cycle and value information for the HPTO treatment
  - Refining treatment selection & timing
  - Developing design guidance help determine appropriate treatment selection at project level

Ultra High Performance Concrete (UHPC) overlay for bridge decks

- Purpose: Investigate new application of UHPC (overlaying bridge decks)
  - Pilot project (Rt. 17 over Central Avenue bridge) being considered
  - Department/CD Consultant will evaluate further

Ultra High Performance Concrete (UHPC) on Link Slabs

- Purpose: Investigate new application of UHPC (Link Slabs)
  - Team is being assembled to initiate the research
  - Pursuing potential prototype testing via Rutgers CAIT BEAST program



INNOVATION STATUS

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SAFETY

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Data Driven Safety Analysis- Project Development

Local Safety Peer Exchange

Purpose:
Develop and deploy new tools, technology and practices to accelerate the adoption of innovation in all aspects of highway transportation both on the state and local side.

Completion date- June 2018

Data Driven Safety Analysis- Project Development

Local Safety Peer Exchange

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Develop and deploy new tools, technology and practices to accelerate the adoption of innovation in all aspects of highway transportation both on the state and local side.

Completion date- June 2018

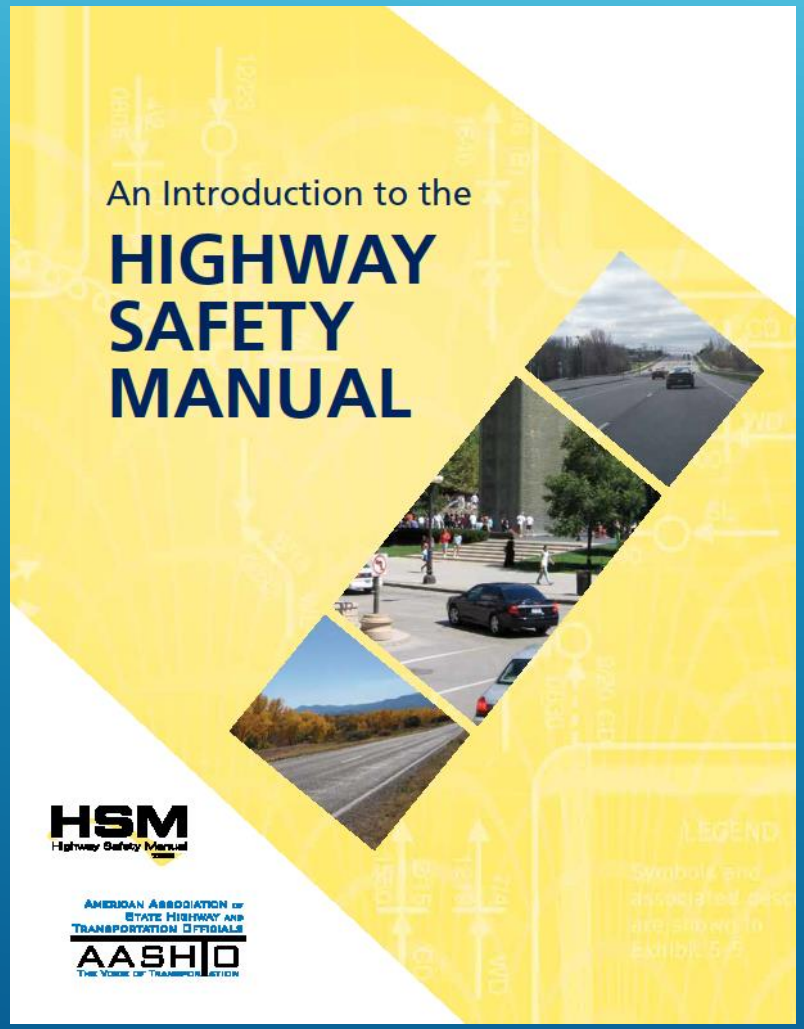
Data Driven Safety Analysis- Safety Management

AASHTOWARE - Safety Analyst

Purpose:
Safety Analyst can be used to proactively determine which sites have the highest potential for safety improvement, as opposed to reactive safety assessments done conventionally.

Data Driven Safety Analysis-

Develop policy for the use of Highway Safety Manual Analysis in Design Exception



Purpose:

The HSM provides a science-based, technical approach that helps State and local agencies take the guesswork out of safety analysis. HSM brings the most significant enhancements to the analysis, decision-making and documentation of the quantitative safety effects of a proposed design exception.

EDC-4 Safe Transportation for Every Pedestrian Workshops focusing on State and Local uncontrolled locations

Purpose:

- To promote the use of Road Diets, Pedestrian Hybrid Beacons, Pedestrian Refuge Island, Raised Crosswalks and Crosswalk Visibility Enhancement.
- Workshop scheduled for state roads

NEW IDEA DISPOSITION REPORT

3rd Quarter 2017 (July-September)

- 23 total submittals received
- 19 not advanced – forwarded to appropriate unit to address
- 4 innovative ideas moved forward in the STIC process

4th Quarter 2017 (October-December)

- 19 total submittals received
- 14 not advanced – forwarded to appropriate unit to address
- 5 innovative ideas moved forward in the STIC process

INNOVATIVE IDEAS FORWARDED THROUGH STIC PROCESS

- **Existing Bridge Safety Technology Retrofit**

  Use of lasers and laser targets to monitor bridges.

- **Conversion to LED strobes at fire stations**

  The strobes are more noticeable as opposed to those in current practice.

- **Adding paraffin wax to the concrete mixture for roadway construction**

  Stores energy and releases it as heat to aid in roadway melt-off.

- **Freight Highway System - construct highway lanes/routes for use by trucks**

  Construct highway lanes/routes for the MANDATORY and EXCLUSIVE use by trucks.

- **Using infrared technology to prevent truck crashes on low-clearance bridges**

  To assess the height of trucks in hopes of alerting drivers of too-tall trucks to exit the road before approaching low-clearance bridges. The goal is to reduce accidents.

- **Helicopter video sharing with NJDOT traffic operations centers**

  The video feed will provide a roaming camera view of images and incidents on our state network that may be out of view of our current camera system.

- **Advanced pothole repair by preheating the excavated pothole**

  Current research shows that preheating the excavated pothole prior to its repair can be a promising solution. This novel tool can greatly help for this need in field.

- **Long Life Bridge Design**

  The testing, as well as construction experience of FDOT suggest that Class A concrete using molybdenum based stainless steel has the least problems with cracking due to shrinkage and temperature concerns.

- **Innovative Method For Monitoring and Evaluating the Structural Integrity of Foundations**

  All drilled shafts require Crosshole Sonic Logging (CSL) testing during/post construction using steel tubes. The same tubes can be used to monitor the long-term performance of the drilled shafts, concrete-casted piles, and even shallow foundations using the same CSL testing equipment, Ultrasonic Flaw Detector, or other similar gadgets.

OVERVIEW OF FUNDING OPPORTUNITIES

Technology and Innovation Deployment Program (TDIP)

STIC Incentive Program

- Up to $100,000 per STIC per year
- Rolling application process and no competition
- Support cost of standardizing innovative practices (i.e., developing standards, specifications, technical guidance, MOAs, training, reporting)

Accelerated Innovation Deployment (AID) Demonstration Program

- Rolling application process and no competition
- Offsets the risk of trying an innovation
- Up to full cost of innovation – max. $1M
- State DOT applies
- 6 months to obligate funds

YEAR IN REVIEW

Awards

Recently Institutionalized Innovations

STIC Incentive Projects

Local Innovations

AWARDS

2017 National Roadway Safety Award – NJDOT Bureau of Transportation Data & Safety

WINNER in the Program Planning, Development, and Evaluation (PPDE) category

A biennial competition sponsored by FHWA and the Roadway Safety Foundation to spotlight the nation's very best efforts by public agencies to save lives on our nation's roadways. The award recognizing life-saving engineering solutions that integrate effectiveness, innovation, and efficient use of resources.

New Jersey Roundabout Implementation Program

The Safety Concern: The intersection of two county roads in Burlington County, NJ had experienced severe crashes and was identified for improvements

The Solution: The installation of a roundabout at the location

The Result: A 100% reduction in right-angle and left-turn crashes at the location, and additional roundabout implementation elsewhere in the state

RECENTLY INSTITUTIONALIZED INNOVATIONS

Ultra-High Performance Concrete (EDC-4 and previous rounds)

Pavement Preservation (How) (EDC-4)

Integrating NEPA and Permitting (EDC-4)

****Road Diets (EDC-3) – *Covered in a later segment***

Ultra High Performance Concrete (UHPC)

Ultra-high performance concrete is a steel fiber-reinforced material that improves durability and simplifies connection details, fabrication and construction. It has been institutionalized in NJ for the prefabricated bridge elements application.

NJDOT used UHPC to connect precast deck panels on the Pulaski Skyway, the Nation's largest accelerated bridge construction project.

Pavement Preservation (How)

This initiative focuses on developing improved construction of pavement preservation treatments; including innovations in treatment materials, construction practices, improved specifications, better equipment, and a greater emphasis on construction quality, all of which lead to longer lasting preservation treatments.

NJDOT has developed specifications for and constructed a number of successful slurry seals, microsurfacing, and High Performance Thin Overlays (HPTO).

- constructed 1 successful Ultrathin Friction Course (UTFC).
- identified three UTFC projects which are currently under development for the 2018 Preservation program.
- Asphalt Rubber Chip Seal project was awarded this year and will be constructed next season

Integrating NEPA and Permitting

This initiative focuses on establishing Programmatic Agreements to streamline environmental process.

- NJDOT developed an Endangered Species Act Section 7 Formal Programmatic Consultation for Bog Turtles with US Fish & Wildlife Service, FHWA, NJDEP & NJDOT to streamline required consultation for NJDOT actions.

- We anticipate that the Programmatic Consultation (including Programmatic Biological Assessment and Programmatic Biological Opinion) will be completed in 2018.

STIC INCENTIVE PROJECTS

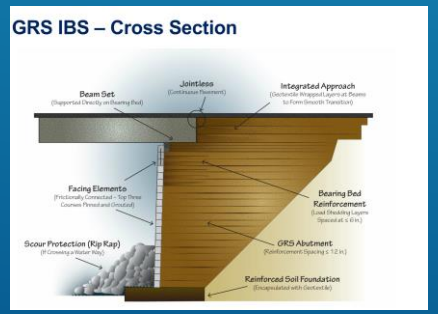
NJ	2015	1.Advancement of **Data Driven Safety Analysis** - ($41,600) 2.Advancing the **use of mobile devices** in the administration and oversight of the Local Public Agencies program - ($21,464)	$ 63,064
NJ	2017	1.Purchase, use, and evaluate **Unmanned Aerial Systems** (UAS) with the goal of developing guidance and specifications for bridge inspection and traffic incident monitoring - ($47,956) 2.Hold **Local Agency Peer Exchanges** for Local Safety Program delivery utilizing Data Driven Safety Analysis tools - ($18,564) 3.Purchase and evaluate the **use of tablets for construction** and work zone inspection ($32,404)	$ 98,924

LOCAL INNOVATIONS

- Expectations for Future Meetings

- Safe Transportation for Every Pedestrian (STEP)
  - Road Diets
  - Pedestrian Refuge Islands

- Automated Traffic Signals

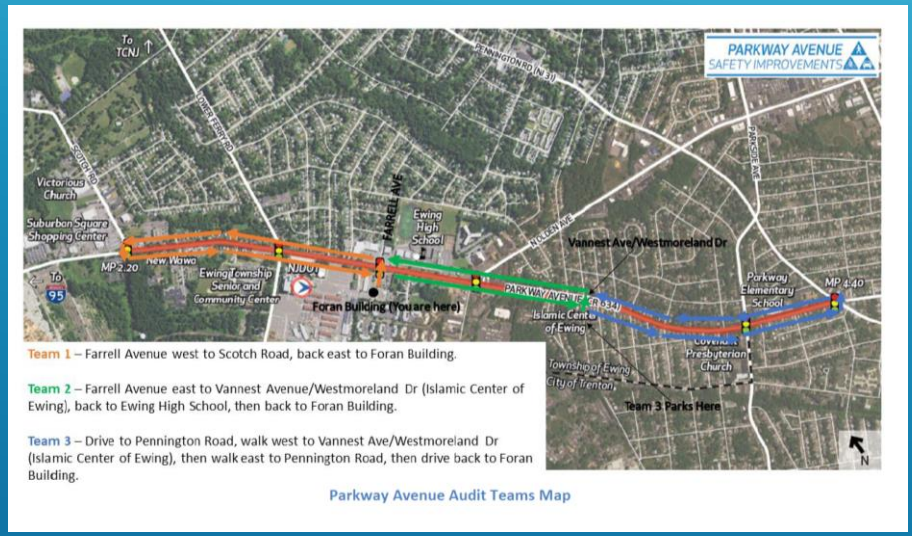


- Geosynthetic Reinforced Soil-Integrated Bridge System (GRS IBS)

Road Diets

Parkway Avenue – Ewing, Mercer County

- from Scotch Road (CR 611) to Pennington Road (NJ 31)
- important arterial roadway and transit route
- located adjacent to NJDOT headquarters, two public schools, numerous religious institutions, retail, and employment centers
- provides access to Routes I-95, NJ 29, NJ 129, NJ 31, Trenton-Mercer Airport, and The College of New Jersey
- has been identified as a high crash and high crash severity corridor, with 234 crashes, 5 ped and bike crashes
- goal is to improve substantive safety for all roadway users



Road Diets

Allwood Road – Clifton, Passaic County

Undivided Four-Lane Urban Minor Arterial
Two lanes each direction, no shoulder
AADT (Major): 20,657 (2012)
Residential/Commercial

Left turns difficult to execute, to and from driveways and intersections; history of left-turn crashes.

Excessive speed in the wide-open four-lane cross section.

No accommodations for bicycle travel along the corridor

Proposed Improvements will include:

Implementation of a road diet with one lane in each direction with left-turn lanes, bicycle lanes will be included.

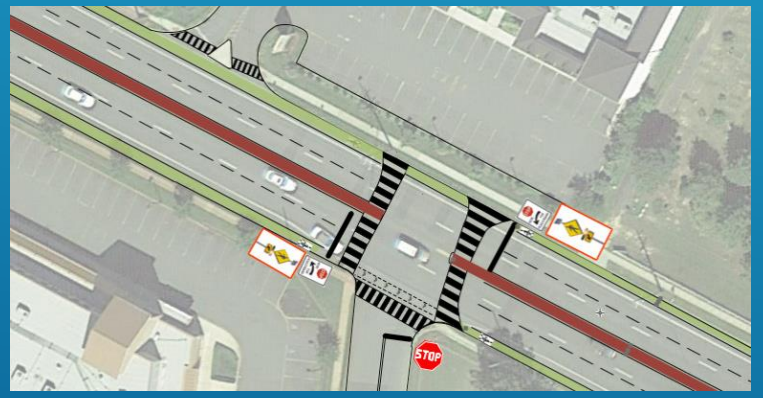
Ped Refuge Island

Cedar Bridge & Arlington Avenues, Lakewood, Ocean County

Existing: T-intersection; No marked crosswalks; very wide roadway; high pedestrian activity including children and strollers; area has residential and small businesses.

High Pedestrian Crash Location (2008-2012 Crash Data), Ranked high on the County Pedestrian Intersection (#1) and Pedestrian Corridor (#2) Network Screening List

Arlington Avenue is used as a bypass for regional congestion; speed is an issue in this transition zone, where the industrial/rural area approaches the urban area.



Proposed Improvements will include:

1) Installation of a median including a pedestrian refuge island at this unsignalized intersection.

2) Addition high visibility crosswalks across Cedar Bridge Avenue.

Geosynthetic Reinforced Soil-Integrated Bridge Systems (GRS-IBS)
"First Application of GRS–IBS in the Garden State"

Gloucester County Bridge 4-H-5
Jessup Mill Road over Edwards Run – Mantua Township

STIC COMMUNICATION & OUTREACH EFFORTS

- ACEC/FHWA/NJDOT Design Summit
- County Engineer Fall Forum
- Stakeholder Meeting
- Local Safety Peer Exchange
- NJ TransAction Conference
- Annual NJDOT Research Showcase
- Summer AASHTO RAC Meeting

ROUNDTABLE DISCUSSION

1 TO 2 MINUTES EACH

REMINDERS!

Next STIC Meeting – late March or early April 2018

Call for EDC 5 Topics – Due January 18th 2018

STIC Incentive – Proposals due February 1st 2018

Build A Better Mousetrap Competition – Entries due June 1st 2018

EDC-5 Call for Ideas

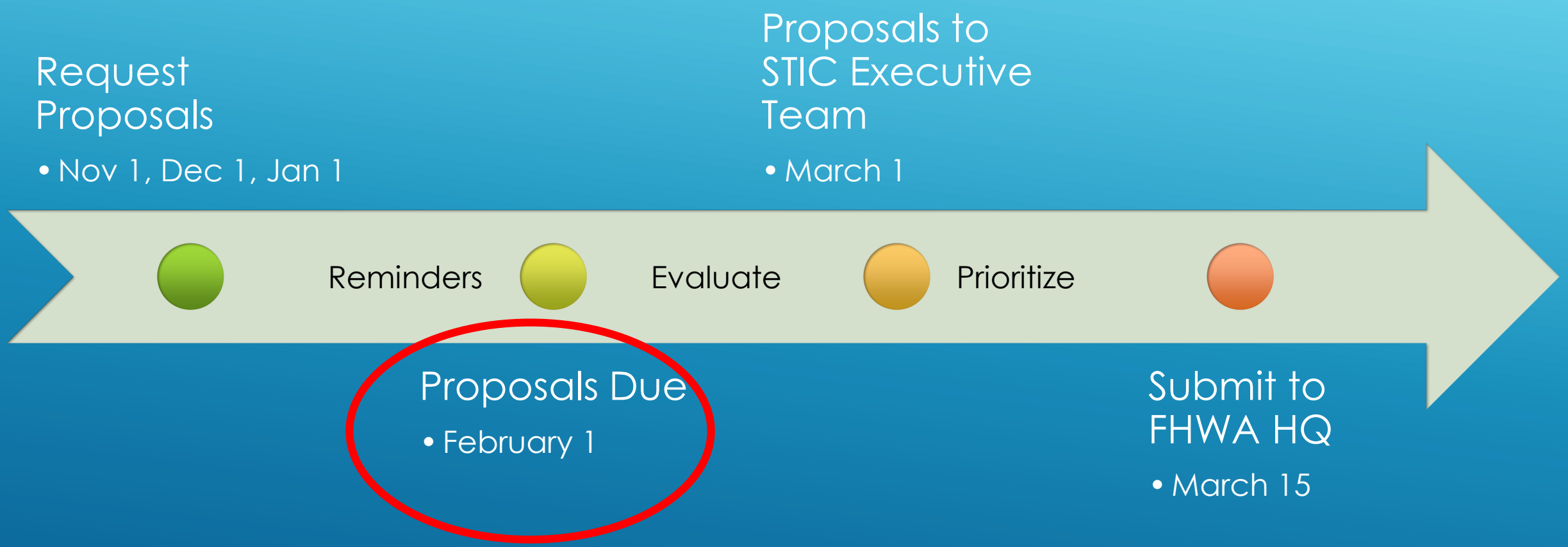
Identify proven, market-ready innovations for deployment through the fifth round of EDC in 2019-2020.

Deadline: January 18, 2018

Federal Highway Administration is seeking information from State, local, and industry partners and the public on proven processes or technologies that have the potential to provide efficiencies.

How to Submit Suggestions
Responses should be submitted by electronic mail to
EDC-5suggestions@dot.gov

STIC INCENTIVE FUNDING PROGRAM



BUILD A BETTER MOUSETRAP COMPETITION

Deadline to submit entries is **June 1st, 2018**.

Please submit all entries by mail or email to:

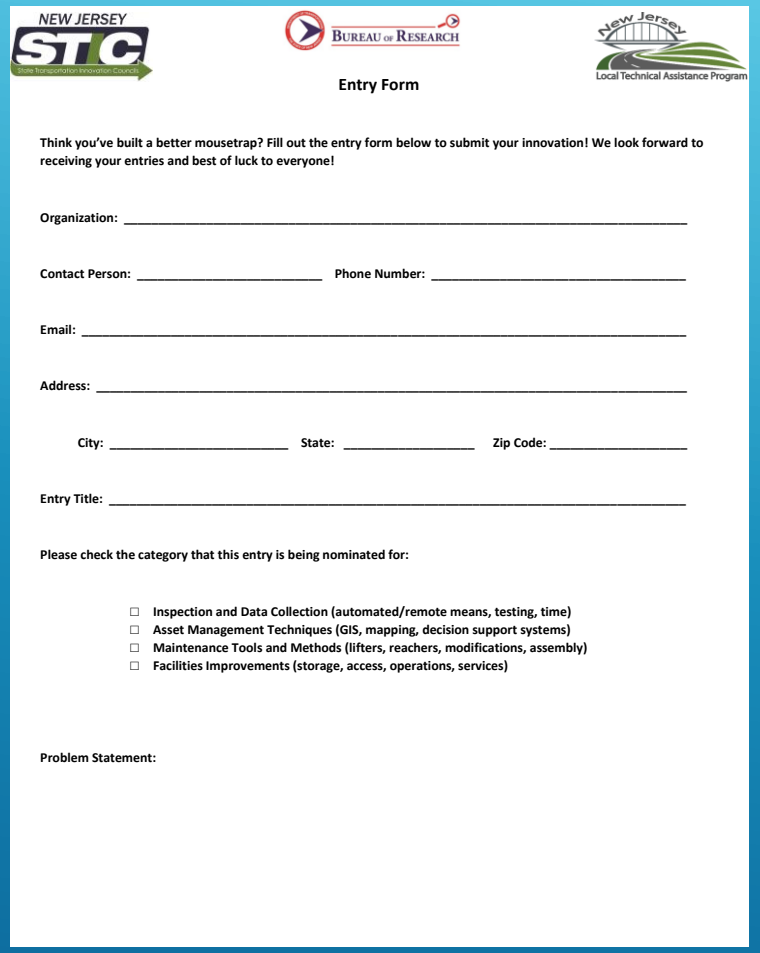
New Jersey Local Technical Assistance Program
100 Brett Road, Piscataway New Jersey 08854

Email: NewJerseyLTAP@gmail.com
Janet Leli – 848-445-2906

https://cait.rutgers.edu/njltap/2017-build-better-mousetrap-competition

Employees of local or state public transportation agencies (municipalities, counties, parks commissions, NJ Department of Transportation, NJ Transit)

ENTRY FORMS ARE AVAILABLE TODAY



NEW JERSEY STC State Transportation Innovation Council

Bureau of Research

New Jersey Local Technical Assistance Program

Entry Form

Think you've built a better mousetrap? Fill out the entry form below to submit your innovation! We look forward to receiving your entries and best of luck to everyone!

Organization: _____

Contact Person: _____ **Phone Number:** _____

Email: _____

Address: _____

City: _____ **State:** _____ **Zip Code:** _____

Entry Title: _____

Please check the category that this entry is being nominated for:

- ☐ Inspection and Data Collection (automated/remote means, testing, time)
- ☐ Asset Management Techniques (GIS, mapping, decision support systems)
- ☐ Maintenance Tools and Methods (lifters, reachers, modifications, assembly)
- ☐ Facilities Improvements (storage, access, operations, services)

Problem Statement:


DEPARTMENT OF TRANSPORTATION
THE STATE OF NEW JERSEY


STIC
State Transportation Innovation Councils


DEPARTMENT OF TRANSPORTATION
UNITED STATES OF AMERICA

THANK YOU!