Innovation Program

Amanda Gendek, Manager
Bureau of Research
Division of Statewide Planning
What are our challenges?

- Aging infrastructure
- Growing Traffic Volumes
- Funding Impediments
- Limited Staffing
- Extreme Weather
- Demographics
- Technology
- Energy & Fuels
What are our goals?
“Improving Lives by Improving Transportation”

- Maintain & Renew Transportation Infrastructure
- Integrate Transportation and Land Use Planning
- Increase Safety and Security
- Improve Mobility, Accessibility, Reliability
- Operate Efficiently
- Respect the Environment
- Optimize Freight Movement
- Continue to Improve Agency Effectiveness
What is the role of the Bureau of Research?

Innovation

FASTER
BETTER
SMARTER

Challenges
Goals
Ideas & Creative Thinking

Innovation
STRATEGIC RESEARCH PLANNING

HOW?
- Survey
- Interviews
- Strategic Workshops & Focus Groups

WHO?
- NJDOT Leadership, Subject Matter Experts, Research customers

WHY?
- To discuss global and domestic issues that have the potential to transform transportation in NJ
- To identify challenges that you have in disseminating information out to your staff and users
- To identify areas of research that will prepare NJ for short and long term changes

Results = Strategic Research Plan
What is Technology Transfer (T2)?

- Ultimate goal of all transportation research
- Process by which the transportation community receives and applies the results of research.
- Tech transfer accelerates the successful adoption of innovations and increases the impact of every taxpayer dollar spent on research and development.
Keys to having a successful T2 Program:

- Understand adopters’ needs
- Understand the technology
- Address the barriers to adoption
- Communicate the value of a technology throughout the research and development—not only at the conclusion.
NJDOT’S T2 Program Objectives:

- Developing a Knowledge Capture Program to address loss of knowledge (brain drain)
- Hosting Training and Events (Tech Talks, Webinars, Peer Exchanges)
- Online Events Calendar
- Competition/Awards for ideas in innovation
- Tech Transfer website
- Newsletter
- Prepare Annual Implementation Status Reports
- Web-based crowdsourcing tool for solicitation of research ideas

(David Aimen - IdeaScale)
NJ State Transportation Innovation Council (STIC)
Where do the innovative 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)

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

See our STIC display boards and submit your idea TODAY!
STIC Council

Executive Team
Manages STIC operation
Point for reporting to Assistant Commissioner & FHWA
Coordinates with all groups

Innovation Advisory Team
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

- Propose Innovations
- Investigate Ideas
- Develop Ideas
- Deploy Ideas

Report to FHWA and the Council
Innovation Advisory Team (IAT)

- Screens Innovative Ideas
- Provides Process Feedback to Executive Team

CIA TEAM LIAISONS (NJDOT & FHWA)

NJDOT SUBJECT MATTER EXPERTS

OTHER STIC MEMBERS
Executive Team

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

• Manages & Coordinates NJ’s STIC Initiative
• Screens Innovative Ideas
• Supports CIA & IAT Teams
NJ STIC Achievements

• Institutionalized 13 innovations
• Advancing most Every Day Counts (EDC-4) initiatives
• 5 STIC Incentive Funding Projects
  • Safety Analyst
  • Use of Mobile Devices in Local Public Agencies (LPA) Program
  • Unmanned Aerial Systems (UAS)
  • Peer Exchanges for Local Safety Program
  • Expanding e-Construction Using Mobile Devices
• Applied for an Accelerated Innovation Deployment (AID) Funding project for Weather-Savvy Roads

https://www.fhwa.dot.gov/innovation/stic/
Communication & Outreach

- Websites, newsletters, calendar
- Web-based research idea solicitation platform (Ideascale)
- Increased participation on TRB Committees/Subcommittees
- Actively pursuing recognition for accomplishments
- Stronger requirements for research implementation plans
- Innovative Awards & Competitions
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**
We are...

Contracting & Administrative Support
  Suzanne Rizzo
  Stephanie Nock

Research Project Managers
  Kimbrali Davis
  Tineen Howard
  Stefanie Potapa
  Mac Rashid
  Pragna Shah
  Priscilla Ukpah
  Giri Venkiteela

Research Librarians
  Carol Paszamant
  Laurie Strow

Thank you!!
A website to gather and share research ideas
What is our goal?
To find workable solutions to problems that affect the safety, mobility and accessibility of New Jersey’s residents, workers, visitors and businesses.

To enhance the quality and cost effectiveness of the policies, practices, standards and specifications that are used in planning, building and maintaining New Jersey's transportation infrastructure

What are we looking for?
Research ideas from our research customers, research institutions and other practitioners that address critical existing and emerging transportation needs in New Jersey.

We want ideas that can turn problems into solutions that can be implemented.

Who do we work with?
University and other research professionals

Where are research ideas shared?
https://njdottechtransfer.ideascale.com/
Ideas Need

- Title
- Description
- "Champion" to see idea through the research process
- Why is this a priority?
- What are the benefits?
Which “Campaign” does your idea fit in?
• Community members can see the research categories for which NJDOT is seeking ideas.

Who else is interested in this topic?
• Develop Communities of Practice
• Collaborate with peers interested in similar ideas
1. **Register to Participate.** NJDOT’s research customers and other interested transportation practitioners (e.g., MPOs, county and local governments, and other transportation subject matter experts from trade, universities and NGOs) can register to participate.

2. **Submit Research Ideas.** Registered participants log in to submit a new idea. You may submit ideas at any time.

3. **Comment and Vote.** Give feedback on other research ideas and vote to show support.

4. **Check back to see what’s new.**
When is the deadline for the next research round?

• The deadline for new research ideas to help inform the next round of research RFPs is December 31, 2017.

• Research ideas will be prioritized by the Research Oversight Committee after this date, and high priority research needs will be posted as proposals. RFPs will be posted on the Bureau of Research website.

• We will continue to collect research ideas. Submit a new idea anytime!
1. Where Do I Register? [https://njdottechtransfer.ideascale.com](https://njdottechtransfer.ideascale.com)

2. Who Can Register to Participate? NJDOT’s research customers and other interested transportation practitioners (e.g., MPOs, county and local governments, and other transportation subject matter experts from trade, universities and NGOs) can register to participate.

3. Questions about How to Register?
Please email our site administrator: ideas@njdottechtransfer.net