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

Steady improvement in the quality and cost effectiveness of the policies, practices, standards and specifications 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/

NJDOT Technology Transfer
What happened to ideas submitted in 2017?

Where are research ideas shared?
https://njdottechtransfer.ideascale.com/
Smart Roadway Energy Harvesting

The Piezoelectric Electric Generator utilizes the phenomena that electricity is generated when crystal is under pressure. The application of this technology is widely used in our daily life, from the rubber tube that DOT uses to count vehicles on the roads, to the cigarette lighters that utilize piezo ignition to give us fire. By embedding a series of Piezoelectric Electric Generators under the pavement, piezoelectric ...more »

Idea Submitted by: Edward Liu
List your Agency/Division / Bureau, County, City Univ. or Other: NJDOT / Bureau of Traffic Engineering

Why is this a priority and what are the benefits for the State/County/City?:
Energy harvested from this technology is stored in the electronic capacitors of the storage system. The accumulated energy can be used to power traffic lights, street lamps or even routed into the grid. It could also assist with real-time information about congestion and traffic counts.

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 inform the next round of research RFPs is **December 31, 2018**.
• The Research Oversight Committee will prioritize ideas after this date.
• High priority research needs will be posted as RFPs 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](mailto:ideas@njdottechtransfer.net)