# Project Title:
**Effective Use & Application of Winter Roadway Maintenance Material Enhancers**

## PennDOT Technical Advisor:
William Davenport

## Project Duration:
April 2015 – October 2015

## Project Purposes:

Project purposes are to:

The purpose of this project is to develop guidance for the use of Winter Roadway Maintenance Material Enhancers that extend the effective operating temperature range, improve the effectiveness of current treatment materials and are environmentally sound, and to develop a sound approach for testing.

## Anticipated Outcomes:

Anticipated project outcomes include:

- A review will be performed to better understand the performance, chemical composition, and to identify the data gaps. Product summaries will be produced.
- Deicer product performance testing, conducted at multiple temperatures, will be compared to product cost to determine product efficacy and value.
- Deicer product chemical analysis and corrosion testing will be conducted to assess potential water quality and environmental implications of deicer application.
- This project will support PennDOT’s strategic goals to leverage resources to maximize effectiveness, to continually increase efficiency, and to promote continuous improvement and innovation.

## Implementation Plan:

Project results were disseminated by posting the research project Final Report on the PennDOT Research Division website. Additionally, electronic copies of the Final Report were sent to all state DOT Transportation Libraries, PA Turnpike, and FHWA and other national repositories such as the National Transportation Library, National Technical Information Service, and the Transportation Research Board Library (TRID).

## Research Partner:
Temple University

## Principal Investigator:
Erica McKenzie

## Project Cost:
$90,000.00