



Research Problem Statement

ODOT Research Section
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I. TITLE

17-026 Smart Road Reflectors

II. PROBLEM

Uncertainty of knowing the right time to treat the roads before they become iced over during winter can waste time, money and reduce safety. Creating a weather sensor that fits on the road and mimics a reflector. The reflector reports back weather information such as humidity, temperature etc.

III. PROPOSED RESEARCH, DEVELOPMENT, OR TECHNICAL TRANSFER ACTIVITY

Create a prototype weather sensor and conduct field studies into its usefulness of collecting weather data and the information that it can wirelessly report back.

IV. POTENTIAL BENEFITS

The department would be alerted when the weather sensors reported back the weather conditions that would be most likely to ice over the roads. This would allow time to be more proactive and base the decision to treat the roads with greater precision which ultimately can reduce time, money and safety of travelers on the road.

V. IMPLEMENTATION

This research study would create a prototype weather sensor that would report back the weather conditions of the road and would ideally be utilized by maintenance crews.

VI. LIST OF REFERENCES *(optional)*

VII. CONTACT INFORMATION

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