

2016 UDOT RESEARCH PROBLEM STATEMENT

*** Problem statement deadline is March 14, 2016. Submit statements to Tom Hales at tahales@utah.gov. ***

Title: Photoluminescent Markings development

No. (office use): 16.01.06

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UDOT Champion (suggested):

Select One Subject Area

Materials/Pavements

Maintenance

Traffic Mgmt/Safety

Preconstruction

Planning

Public Transportation

1. Describe the problem to be addressed.

Current traffic markings have less reflectivity in the following situations: 1) night, and 2) wet weather.

2. Explain why this research is important.

The proposed research will develop a marking formula containing photoluminescent chemical(s), which can light during night and/or wet weather. This will improve drivers' safety in roads.

3. List the research objective(s):

1. Develop a photoluminescent containing paint and test it at night and/or wet weather conditions.

4. List the major tasks:

1. Investigate applicable photoluminescent chemicals.
2. Formulate a paint
3. Test the paint at night and/or wet weather.

5. List the expected results:

1. At least two traffic markings will be developed and tested in a lab.

6. Describe how this research will be implemented.

We will work with a paint manufacturer and UDOT to develop and test the markings on a road.

7. Requested from UDOT: \$30,000
(or UTA for Public Transportation)

Other/Matching Funds: \$

Total Cost: \$30,000

8. Outline the proposed schedule, including start and major event dates.

Month 1: literature review for photoluminescent chemicals

Month 2-4: Develop a marking formula

Month 5-6: test the marking and write a report.