



# Research Problem Statement

ODOT Research Section  
555 13<sup>th</sup> Street NE; Ste 2  
Salem OR 97301-5192  
  
Phone (503) 986-2700  
Fax (503) 986-2844

## I. TITLE

17-017 Underwater Bridge Cameras

## II. PROBLEM

There are around 1,000 bridges with elements in the water in Oregon and inspecting them all with divers can be time consuming and expensive. By using underwater cameras in critical locations of the bridge to take snapshots weekly or monthly it can save time and money.

## III. PROPOSED RESEARCH, DEVELOPMENT, OR TECHNICAL TRANSFER ACTIVITY

Conduct field studies with underwater cameras to test the resolution of the picture from underwater and the effectiveness of wirelessly sending the picture from the camera to a database. Something will also need to be used in conjunction with the camera to ensure that the lens is clear of debris.

## IV. POTENTIAL BENEFITS

Save time, resources and money but reducing the number of instances a year that dive teams will need to manually inspect bridges with elements underwater.

## V. IMPLEMENTATION

The implementation of this research idea will produce a new set of guidelines for the inspection of bridges that have underwater elements.

## VI. LIST OF REFERENCES *(optional)*

[List the references you identified when you searched for completed and current research.]

## VII. CONTACT INFORMATION

Your name: Bryan Porter  
Affiliation: ODOT Contractor  
Telephone: 503-986-6700  
Email: Bryan.Porter@odot.state.or.us

Person Responsible for Implementation: \_\_\_\_\_  
Affiliation: \_\_\_\_\_  
Telephone: \_\_\_\_\_  
Email: \_\_\_\_\_