

<b>UTC Project Information</b>	
Project Title	MPC-612 – Studying the Use of Low-Cost Sensing Devices to Report Roadway Pavement Conditions
University	University of Colorado Denver
Principal Investigator	Moatassem Abdallah Caroline M. Clevenger
PI Contact Information	<p>Moatassem Abdallah Assistant Professor University of Colorado Denver Phone: (303) 315-7566 Email: moatassem.abdallah@ucdenver.edu ORCID: 0000-0002-3077-6518</p> <p>Caroline M. Clevenger Associate Professor University of Colorado Denver Phone: (303) 315-7567 Email: caroline.clevenger@ucdenver.edu ORCID: 0000-0003-2265-8447</p>
Funding Source(s) and Amounts Provided (by each agency or organization)	<p>USDOT, Office of the Assistant Secretary for Research and Technology \$40,000.00</p> <p>Utah Department of Transportation \$40,980.68</p>
Total Project Cost	\$80,980.68
Agency ID or Contract Number	69A3551747108
Start and End Dates	February 18, 2020 to July 31, 2022
Brief Description of Research Project	<p>Road networks require regular inspection and repair to maintain their performance and function. Several techniques are currently in practice for inspecting roadway performance for presence of cracks, potholes, and other distress such as: inspectors that visually judge the road conditions, specialized vehicles that measure distress with laser devices and camera, and citizens that report their observations. These techniques, however, are inefficient, labor intensive, and expensive. The goal of this research work is to study the use of currently available low-cost sensors such as GPS, gyroscopes, accelerometer, noise recorders, and cellphones to automate inspection of roadway pavement conditions. The outcome of this research work is expected to reduce inspection cost and enable the capability of generating more frequent maps of roadway pavement conditions. Furthermore, authorities will be able to allocate available funds more efficiently to improve existing road performance and function based on more up-to-date conditions of existing transportation networks.</p>

Describe Implementation of Research Outcomes (or why not implemented)  Place Any Photos Here	
Impacts/Benefits of Implementation (actual, not anticipated)	
Web Links <ul style="list-style-type: none"><li>• Reports</li><li>• Project Website</li></ul>	