

UTC Project Information	
Project Title	Machine Learning-Based High-Fidelity Mesoscopic Modeling Tool for Traffic Network Optimization
University	University of Idaho
Principal Investigator	Robert Heckendorn
PI Contact Information	heckendorn@uidaho.edu
Funding Source(s) and Amounts Provided (by each agency or organization)	University of Washington PacTrans \$40,000 University of Idaho \$ 40,000
Total Project Cost	\$80,000
Agency ID or Contract Number	69A3551747110
Start and End Dates	March 16, 2021-March 15, 2022
Brief Description of Research Project	<p>Traffic optimization is a complex system without reliable and situation specific closed form formulas for optimization. This means a simulation plays a critical roll in any advancement in traffic optimization.</p> <p>With the advent of specialized hardware and high performance bus and memory architectures, machine learning has shown near magical improvement in the last 10 years. Evidence of this is plainly visible on the cell phones we use everyday such as speech recognition and classification of your picture library by subject. We will apply this technology to learning and predicating the behavior of traffic on individual road segments allowing us to quickly assess the arrival times and create a fast simulator suitable for traffic optimization.</p>
Describe Implementation of Research Outcomes (or why not implemented)	
Place Any Photos Here	

Impacts/Benefits of Implementation (actual, or anticipated)	
Web Links <ul style="list-style-type: none">• Reports• Project Website	