**UTC PROJECT INFORMATION**

<table>
<thead>
<tr>
<th>Project Title</th>
<th>Microscopic Simulation, Complete Streets, and Tactical Urbanism Strategies to Enhance Multimodal Transportation in Downtown San Jose</th>
</tr>
</thead>
</table>
| University                  | San Jose State University  
Mineta Consortium for Transportation Mobility                                                                         |
| Principal Investigators     | Anurag Pande, Ph.D.  
Serena Alexander, Ph.D.                                                                                             |
| PI Contact Information      | Mineta Transportation Institute  
San José State University  
210 N. 4th St., 4th Floor  
San José, CA 95112  
apande@calpoly.edu  
serena.alexander@sjsu.edu |
| Funding Source(s) and Amounts Provided (by each agency or organization) | U.S. Department of Transportation, Office of the Assistant Secretary for Research and Technology – $69,955.35  
California State University, San Luis Obispo – $12,057.70 |
| Total Project Cost          | $82,013.05                                                                                                           |
| Agency ID or Contract Number | 69A3551747127                                                                                                         |
| Start and End Dates         | 10/1/2017 – 2/28/2019                                                                                               |
| Brief Description of Research Project | Located in the heart of the Silicon Valley, Downtown San Jose is attracting new residents, visitors, and businesses. Clearly, the mobility of these residents, visitors, and businesses cannot be accommodated by streets that focus on the single-occupancy automobile mode. To increase the potential for individuals to use non-single-occupancy modes of travel, the downtown area must have a cohesive plan to integrate multimodal use and public life. Complete streets are an integral component of the multi-modal transport system and more livable communities. Similarly, tactical urbanism can provide cost-effective modifications (e.g., through temporary road closures for events like the farmers’ market) that |
enrich the public life in an urban environment. The ability to serve current and future transportation needs of residents, businesses and visitors through the creation of pleasant, efficient, and safe multimodal corridors is a guiding principle of a smart city. This project attempts to address some of the narrower questions that lie within this guiding principle. These questions relate to travel patterns and potential impacts of tactical urbanism and conversion of the corridor(s) into complete streets. The proposed effort will also produce easily digestible information based on relevant model outputs so that the City can convey various impacts and trade-offs to partners and stakeholders prior to implementation of these plans.

The investigators will develop a set of strategies to prioritize improvements to certain corridors in downtown for the Downtown Mobility and Public Life plan. These strategies will be informed by a thorough review of literature and lessons learned from cities around the world. These strategies will be evaluated for their impacts through a microsimulation environment. Microsimulation allows for detailed modeling and visualization of the transportation networks including movements of individual vehicles and pedestrians. The output metrics from the simulation used to inform the evaluations include estimates of delays for each mode, intersection queue lengths, and speed variability compared to a ‘do-nothing’ scenario.

The proposed work will also provide cities across North America a framework for developing complete street and tactical urbanism scenarios and their evaluation using microscopic traffic simulation models.