

LOOP 101 PROJECT UPDATE

AUGUST 2021

Project Web Site: www.L101mobilityaz.com

SUMMARY OF ACTIVITIES COMPLETED

- The draft final Loop 101 Operations Plan was reviewed with stakeholder agencies during a webinar held on April 6, 2021 and was submitted as final on April 9, 2021. This Operations Plan will be reviewed for potential updates following completion of the Concept of Operations this fall.
- The Concept of Operations was kicked off on April 6, 2021. Two follow up webinars were held with stakeholders on May 26, 2021 and June 21, 2021.
- An in-person meeting and field review were conducted on May 20 and 21, 2021 for the Connected Vehicle Pilot in Scottsdale.
- The Intergovernmental Agreement between ADOT and the City of Glendale was executed on May 25, 2021 in support of the Adaptive Traffic Signal System project.
- The Executive Governance Team met on June 29, 2021. This meeting included a discussion on the key decisions that will be made during the Concept of Operations, an update on the Glendale Adaptive Traffic Signal System, the Scottsdale Connected Vehicle Readiness Assessment, and an update on the Communications and Outreach Plan.
- Technical Team leads met on August 16 to discuss tasks in progress.

UPCOMING MEETINGS

- Additional meetings for 2021 are in the process of being scheduled. Anticipated meetings in the third quarter include:
 - Concept of Operations small group discussions and stakeholder review webinars (TBD)
 - Connected Vehicle Pilot follow up discussions (as needed)
 - Executive Governance meeting (October 5, 2021)

TECHNICAL TASK UPDATES

Decision Support System / Operations Plan Development

Agencies provided feedback on the revised draft L101 Operations Plan as part of a review webinar on April 6, 2021. Stakeholders accepted the Operations Plan and it was submitted as final on April 9, 2021. This Operations Plan will be reviewed following the Concept of Operations to align with any updates needed as a result of decisions made during the ConOps development. The Concept of Operations was kicked off as part of the April 6, 2021 webinar. The GEC team developed a draft outline/framework for the ConOps document and provided this to stakeholders in advance of the webinar. The group walked through key sections of the document and mapped out a plan for how stakeholders will be engaged to develop key concepts and make technical decisions. Several sections of the Operations Plan provide some foundational content and direction for elements of the ConOps.

Stakeholders provided input to a User Needs survey that was distributed on April 27, 2021. The purpose of this survey was to get broad input on priorities, functions, features and preferences for ICM and decision support capabilities. Consolidated feedback from the survey was shared with stakeholders during the ConOps Working session on May 26, 2021. This working session also included some preliminary discussions of processes and work flows associated with the initial steps of the ICM timeline (awareness of events and notifications).

A second ConOps working session was held via webinar on June 21, 2021. During that webinar, it was determined that smaller group meetings would help to facilitate concept development and allow for more focused interaction and discussions. The GEC is coordinating with smaller groups of stakeholders

Arizona State University (ASU) is supporting strategy modeling for a segment of L101, which will help to inform ongoing strategy development in the ConOps and help to refine performance expectations. ASU staff is coordinating with ADOT and local agencies to obtain the data needed for the model, and is providing updates on progress through biweekly check-ins.

Adaptive Signal Control Technology (ASCT) for Glendale-area Special Events

This project will implement ASCT to support traffic management for special events near the stadium in Glendale. The IGA between ADOT and the City of Glendale was executed on May 25, 2021. ADOT's Procurement Group is finalizing the procurement package. Operations of the ASCT is planned for late summer 2022 in advance of Super Bowl LVII in February 2023 that will be held in Glendale.

Adaptive Ramp Meter Technology for Loop 101

ADOT is implementing adaptive ramp meters on the Loop 101 corridor. This technology is being installed as part of several projects and in different phases over the next two years. ADOT will continue to monitor peak-hour volumes to identify an appropriate timeframe for implementing the adaptive capabilities for the ramp meters on a segment of the corridor.

Connected Vehicle Technologies for Transit and Emergency Vehicles

This project will implement connected vehicle technologies to support vehicle-to-infrastructure and vehicle-to-vehicle communications to provide intelligent transit signal priority for transit and emergency vehicles during ICM events. Scottsdale Trolley vehicles will be outfitted with on-board equipment that will interface with roadside units installed on a route on Hayden Road.

The University of Arizona (UA), MCDOT, ADOT, the City of Scottsdale and Phoenix Transit met on May 20, 2021 in Scottsdale to discuss the technologies that will be a part of this project. Those who attended on-site at the City's offices got to see a trolley vehicle and some of the existing systems and equipment that are already on-board. On May 21, 2021 several team members participated in an intersection field review of the Hayden Road Trolley route. Scottsdale traffic technical staff were able to check cabinets and conduit to be sure there is sufficient capacity to install roadside equipment. Photos from both days are on the following pages.



Group photo in front of a Scottsdale Trolley vehicle.



Pete Peralta (Scottsdale) sharing information about the current equipment on-board trolley vehicles.



Examples of CV equipment and antennae to be installed on vehicles and at intersections.



Existing Clever equipment installed on the trolley vehicles.



The team reviewed each intersection to check line of sight as well as existing equipment already installed on poles to be sure we can limit any conflicts.



Scottsdale traffic technicians checked each cabinet and conduit pull box at the intersections along Hayden Road.



The University of Arizona is working on a Readiness Assessment that will map out next steps for equipment selection, procurement, installation and future system development and integration. Scottsdale technical staff will install equipment at intersections. The team is coordinating with Phoenix Transit, which oversees the contract with Clever, to discuss the potential for obtaining an API from Clever that includes transit schedule adherence information.

Traveler Mobility Application

No activity yet. Needs and requirements for this application will be determined during the Concept of Operations process. A future Request for Information is planned to get feedback from industry on emerging applications that could be applicable to Loop 101 and regional travelers.

PROJECT REPORTING

Quarterly Reports are submitted to FHWA per the ATCMTD program requirements. These reports include a summary of activities completed for the quarter as well as agency in-kind match reports. The second Quarterly Report to FHWA for 2021 was submitted in mid July 2021.

Annual Reports are submitted in September, to correspond to the obligation date outlined in the ADOT-FHWA Agreement. The last report submitted was in September 2020 for the prior year's activities.