

Status Report for STIC Incentive Projects

July 3, 2019

State: New Mexico

STIC Incentive Projects

Project Name	State Champion	Federal Fiscal Year	Federal Funds - Amount Allocated	Federal Funds - Amount Obligated	Federal Funds - Amount Expended
Deploy System to Detect Dust Storm Hazards	David Hadwiger	FY18	\$32,000	\$32,000	\$28,079.20

STIC Project #1: Deploy System to Detect Dust Storm Hazards

Progress Report #: 1

Description of Proposed Work: (Overview of Project Proposal and Anticipated Outcome)

This project will purchase a ceilometer that uses optical lidar (light detection and ranging) technology to continuously monitor a portion of I-10 for dust hazards. Lidar instrumentation is able to give minute-by-minute information about the presence of dust every 33 feet from the lidar to a maximum range of about 9 miles. We propose to use a commercial ceilometer that is commonly used for airport ceiling determination. In this case, the ceilometer will be operated horizontally to provide dust plume surveillance along I-10. This ceilometer will be connected to a computer housed in a trailer and the data telemetered off-site via cell modem to provide the information to decision makers that include NMDOT, the National Weather Service office in Santa Teresa, and local emergency managers. The lidar will be best situated near an electrical power drop similar to what is at mile marker 11. The ceilometer would likely be operated 24/7 by New Mexico State University with the laser beam pointed along I-10 looking west.

Status: (Current progress that has been made on STIC Incentive project/activity including any benefits that have been realized)

A RFQ was distributed to four ceilometer vendors. In response to the RFQ, a Vaisala Ceilometer CL51 was purchased in June 2019 and delivered to NMDOT on July 5, 2019. Working with New Mexico State University, NMDOT will deploy the ceilometer at the Lordsburg Playa near I-10.

STIC Project #2: (Name)

Progress Report #:

Description of Proposed Work: (Overview of Project Proposal and Anticipated Outcome)

Status: (Current progress that has been made on STIC Incentive project/activity including any benefits that have been realized)