Aurora Program

Aurora Road Weather Information System (RWIS) Pooled Fund Study (PFS)

WHAT IS THE NEED?

Caltrans has over 100 RWIS installation statewide that are deployed for many purposes, such as automated fog ice, wind, warning; for traveler info online (on QuickMap); and for planning winter maintenance and other roadwork. This Aurora Program is a technical focused PFS working on RWIS issues.

WHAT ARE WE DOING?

The Aurora Program is a consortium of public agencies focused on collaborative research, evaluation, and deployment of advanced road weather information systems (RWIS) that fully integrate state-of-the-art roadway and weather forecasting technologies with coordinated, multi-agency weather monitoring infrastructures. Aurora's research projects are designed to improve the efficiency of highway maintenance operations and distribute effective real-time information to travelers. Its initiatives are expected to result in technological advancement and improvement of existing RWIS, significantly reducing the adverse impacts of inclement weather on mobility.

Pooled Fund Information
- PFS Approved until December 2020
- Iowa DOT – Lead State for Pooled Fund Study (PFS)
- 19 Participant State Department of Transportations
- Caltrans Commitment $150,000 over 6 years
  - FY 2013/2014 $25,000
  - FY 2014/2015 $25,000
  - FY 2015/2016 $25,000
WHAT IS OUR GOAL?

The program’s mission is to support cooperative research, evaluation, and deployment of innovative technologies that advance road weather monitoring and forecasting in highway design, construction, maintenance and operations and to serve as an international advocate for expanded uses of these technologies.

Six primary goals are:
1. To improve dissemination of road weather information to transportation providers and end users, ultimately increasing safety by reducing potential weather-related incidents and improving transportation safety, reliability, and mobility in both urban and rural areas.
2. To improve the efficiency of maintenance operations.
3. To aid in the development of technologies that seamlessly integrate to facilitate the formation of partnerships between maintenance and operations and facilitate the dissemination of road weather information.
4. To develop initiatives that assist public agencies in deploying RWIS technologies and methodologies.
5. To encourage greater cooperation and information exchange between transportation agencies and the other agencies and groups.
6. To support development of expanded uses of RWIS technologies.

WHAT IS THE BENEFIT?

1. Caltrans involvement allows us to have input on national standards, development and implementation (device and communication)
2. Caltrans will learn best-practices from other states
3. Caltrans will be able to influence which studies are conducted, making California’s priorities known.

WHAT IS THE PROGRESS TO DATE?

See list of completed projects and on-going projects.

Recent Activities:
- Pooled Fund Study - Board Meeting in March 2019 in San Diego, CA
- Solicitation for continuation of Aurora Program (FY 2020-FY 2024) Pooled Fund Study (Solicitation #1496)

PROJECT WEBSITES:
https://www.pooledfund.org/details/study/532
http://www.aurora-program.org/
https://www.pooledfund.org/Details/Solicitation/1496

IMAGES

The attached figure represents the Aurora Program organization presented herein.

Figure 1: Aurora Organizational Chart

Picture 1: Organization Chart
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Picture 2: Aurora Website