

Advanced Transportation Technologies and SeaTac

John Niles, CATES Research Director,
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CATES

Center for Advanced Transportation and Energy Solutions

Opportunities for Improving Personal Mobility with Vehicle Automation

- Far fewer motor vehicle deaths and injuries
- Reduced traffic congestion
- Far fewer vehicle emissions

Vision of the Long Run Future



Automated Transit Available Today



Transport Technology Overview

- CATES vehicles
 - Connected, Automated, Tailored, Electric, Shared
- Intelligent signaling and electronic signs
- Traveler information
- Real-time traffic management
- Real-time parking management
- Data-driven planning

Opportunities for SeaTac

- Demonstration site for deployments that address real problems and opportunities for businesses and residents in the jurisdiction
 - Shuttles to/from parking lots
 - Service to/from transit stations
 - Neighborhood circulation
- Embrace Target Zero – establish safety emphasis

Traffic
Safety
Experts Now
See the
Potential for
Vehicle
Automation

Autonomous Vehicles Meet Human Drivers: Traffic Safety Issues for States

Prepared for
Governors Highway
Safety Association

by **Dr. James Hedlund,**
Highway Safety North



Potential Partnership Opportunities for SeaTac

- Partnering with Sea-Tac Airport, PSRC, Sound Transit, King County Metro, and WSDOT to support technology applications
- Peer partnerships with other municipalities
- Incrementally build a multi-modal mobility hub at a transit center or park-and-ride, e.g. Angle Lake Station
- Partnerships with business associations and other non governmental organizations
- Partnerships with private sector firms

Example of Potential Partner: INRIX

Leading Global Provider of Connected Car Services & Transportation Analytics

- **World's Largest Driver Network**
 - Majority of connected cars in the world powered by INRIX services
 - Crowd-sourcing data from 275M+ real-time vehicles and devices
- **Live with services in 60+ countries**
- **Delivering breakthrough connected car services & transportation analytics**
 - Traffic, Parking, EV, Multi-Modal, Fuel; Transportation & Population Analytics
- **Serving 450+ B2B customers worldwide**

| Automotive | Public Sector |
|------------|------------------|
| | |
| Enterprise | Mobile and Media |
| | |



Angle Lake Station: Mobility Hub



Action Opportunities

- Educational workshops
- Develop portfolio of deployment opportunities

Sample Portfolio of Opportunities

- In-community trip-making with new mobility services supplementing Metro
- Robotic, small-vehicle transit to destinations with insufficient parking
- Better manage traffic flows: intelligent signaling
- Systems for higher vehicle occupancy
- Support for vehicle electrification
- Crime prevention applications
- Automated valet parking demonstration
- Safety applications in city fleet vehicles

Key Action Opportunity

Design and obtain Federal, private, and
Non-Government Organization funding



U.S. Department of Transportation

Notice of Funding Opportunity Number DTFH6116RA00012

*"Advanced Transportation and Congestion Management Technologies
Deployment Initiative"*

Summary Information

| | |
|---|--|
| Funding Opportunity Summary: | \$60 Million in Federal Funding to provide grants to eligible entities to develop model deployment sites for large scale installation and operation of advanced transportation technologies to improve safety, efficiency, system performance, and infrastructure return on investment. |
| Federal Agency Name: | U.S. Department of Transportation (DOT) Federal Highway Administration (FHWA) Office of Operations 1200 New Jersey Avenue, SE Mail Drop: E86-205 Washington DC 20590 Attn: Robert Rupert |
| Funding Opportunity Title: | Advanced Transportation and Congestion Management Technologies Deployment (ATCMTD) Initiative |
| Announcement Type: | This is the initial announcement of this funding opportunity. This is not a follow-on notice. |
| Funding Opportunity Number: | DTFH6116RA00012 |
| Type of Award: | Cooperative Agreements or Allocations to State Departments of Transportations |
| Catalog of Federal Domestic Assistance (CFDA) Number: | 20.200 Highway Research & Development |

More Action Opportunities

- Start framing partnerships
- Prepare an adopt an Action Plan
- Engage with CATES

CATES

Center for Advanced Transportation and Energy Solutions

Ready to Help City of SeaTac Become a Municipal Center of Excellence in Transport Technology Deployment

- 90 day engagement --- Weekly meetings
- Initial orientation workshop briefing for Council and public
- Action steps to begin securing Federal funding (First report in 30 days)
- Portfolio of opportunities and SWOT assessment of pursuing them
- Report providing the rationale for City of SeaTac operating with identified Federal funding as a Municipal Center for Excellence
- Formal presentation to council and public

Thank you!

<http://aboutCATES.org>

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