

Advanced Transportation Technologies and City of SeaTac

Presentation to SeaTac City Council
March 14, 2017
By John Niles, CATES Research Director

CATES

Center for Advanced Transportation and Energy Solutions

3 Improvements in Personal Mobility
Yielded by Vehicles that are
Connected, Automated, Tailored, Electric, Shared

- Far fewer motor vehicle crashes
- Reduced traffic congestion
- Much lower vehicle emissions

In a few years – Autonomous Driving



Automated Transit Available Today



Opportunities for City of SeaTac

- Become a demonstration site for automated vehicle deployments that address problems and opportunities for businesses and residents
 - Shuttles to/from parking lots
 - Service to/from transit stations
 - Neighborhood circulation
- Focus on practical uses, effectiveness and acceptance of automated, driverless mobility
- Embrace Target Zero – maintain strong safety emphasis
- SeaTac as Center of Excellence for Transportation Technology

Angle Lake Station: Mobility Hub



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Unsolicited Proposal Submitted 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)
- Seek input from officials, citizens, other govt. agencies, businesses
- Develop a portfolio of opportunities and SWOT assessment of pursuing them
- Action Plan report providing the rationale for City of SeaTac operating with identified Federal funding as a Municipal Center of Excellence
- Formal introduction of the Action Plan recommendation to council and public

Example of Potential Partner: INRIX

Leading Global Provider of Connected Car Services & Transportation Analytics

Gateway to a world to technology providers



Sample Portfolio of Opportunities

- In-community trip-making with new mobility services where Metro doesn't go
- Robotic, small-vehicle transit to destinations with insufficient parking
- Systems yielding higher vehicle occupancy
- Support for vehicle electrification
- Eyes on the street crime prevention
- Automated valet parking demonstration
- Collision prevention in city fleet vehicles

Key Action Opportunity

Design projects qualified for external
Federal, private, and Non-Government
Organization funding

Thank you!

Any questions?

<http://aboutCATES.org>

John Niles, 206-854-3060

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

Action Opportunities

- Educational workshops
- Develop portfolio of deployment opportunities



U.S. Department of Transportation

Notice of Funding Opportunity Number DTFH6116RA00012

"Advanced Transportation and Congestion Management Technologies"

Summary Information

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| 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. |

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

Vision of the Long Run Future



Additional Mobility Between Hotels?

