




# Smart Cities Challenge

---

ASSOCIATION FOR COMMUTER TRANSPORTATION  
BEST WORKPLACES FOR COMMUTERS

# Agenda

---

- What is the Smart Cities Challenge – The Nuts & Bolts
  - How you can get involved in the Smart Cities Challenge - Discussion
  - Q&A
  - FTA Mobility on Demand Sandbox
- 

# Smart Cities Challenge

## The Nuts & Bolts

---

- The USDOT is holding a \$40 million competition that will be awarded to a mid-size city to utilize data driven technologies and shared-use mobility to solve a transportation problem

### EXPECTED OUTCOMES OF THE CHALLENGE

**Improve Safety** – By using advanced technologies, including connected vehicle technologies, to reduce the number of collisions, fatalities, and injuries.

**Enhance Mobility** – By providing real-time traveler information and emerging mobility services to improve personal mobility for all citizens.

**Address Climate Change** – By implementing advanced technologies and policies that support a more sustainable relationship between transportation and the environment through fuel use and emissions reductions.

Ideally, the winning city will view Intelligent Transportation Systems (ITS), connected vehicles, and automated vehicles as the next logical step in its existing, robust transportation infrastructure. It should also aim to have critical systems in vehicles and infrastructure that communicate with each other, allow for active citizen participation, and integrate new concepts that leverage the sharing economy.

---

Source: US DOT <https://www.transportation.gov/smartcity>



# Smart Cities Challenge

## The Nuts & Bolts

---



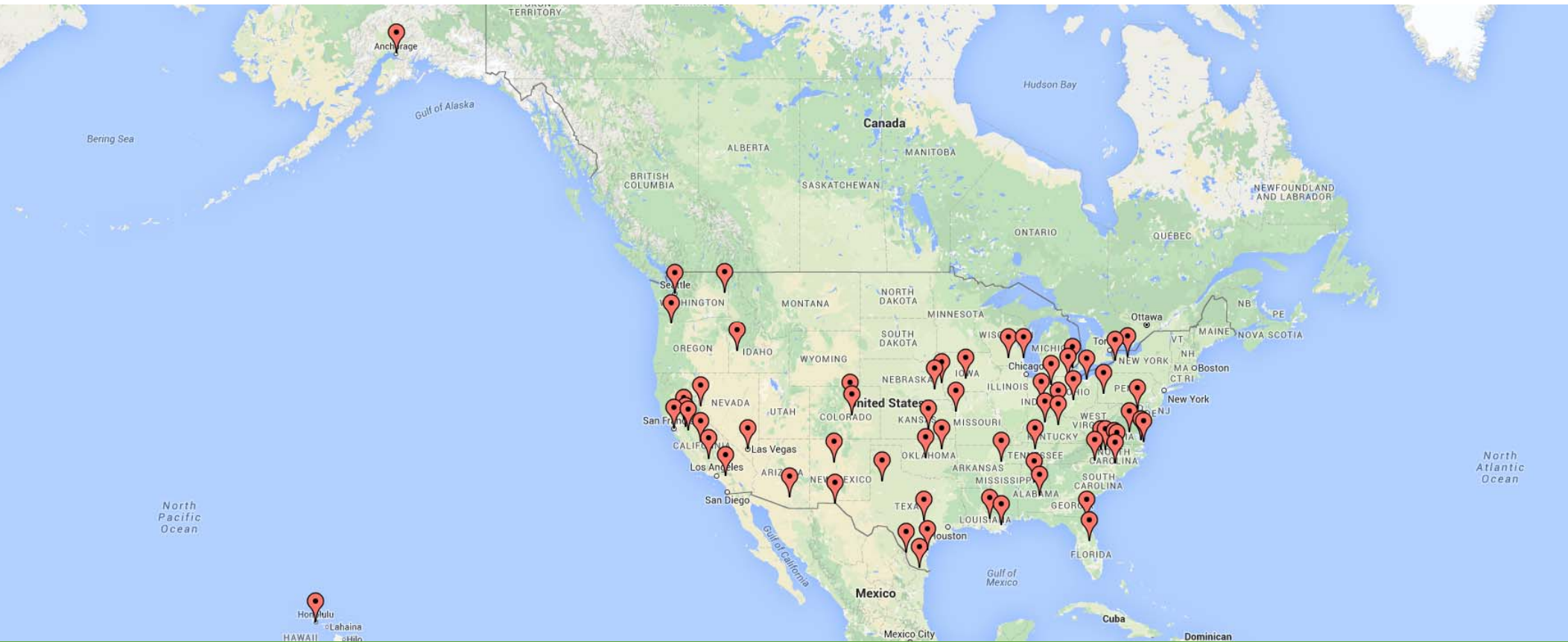
- Description of Desired Cities – According to DOT The ideal Smart City would have the following attributes:
  - Population between approximately 200,000 and 850,000 people **within city limits** as of the 2010 Census;
  - A dense urban population typical for a mid-sized American city;
  - Represents a significant portion (more than 15%) of the overall population of its urbanized area using 2010 Census data;
  - An existing public transportation system;

# Smart Cities Challenge

## The Nuts & Bolts

---

- Description of Desired Cities – According to DOT The ideal Smart City would have the following attributes:
  - An environment that is conducive to demonstrating proposed strategies;
  - Continuity of committed leadership and capacity to carry out the demonstration throughout the period of performance;
  - A commitment to integrating with the sharing economy; and
  - A clear commitment to making open, machine-readable data accessible, discoverable and usable by the public to fuel entrepreneurship and innovation.
- Example List of Desired Cities:  
<https://www.transportation.gov/smartcity/citypopulations>
- NOTE – The size and ideal descriptions are NOT hard requirements, however, if a city not identified by this list to win, it would have to have an incredible application



Example List of Desired Cities:  
<https://www.transportation.gov/smartcity/citypopulations>

# Process

---

- **Submission** - Cities wishing to participate must submit an application. Deadline for Phase 1 is 3:00PM Feb. 4th – 2015
- **Finalists** - The USDOT estimates making five awards for Concept Development as a result of this Notice of Funding Opportunity. Each award will be a fixed amount award in the amount of \$100,000 in Federal funding. Each awardee is designated a Smart City Challenge Finalist.
- **Award**- The USDOT anticipates making one award for the Smart City Challenge, which will result from a separately issued Notice of Funding Opportunity, with competition limited to Smart City Challenge Finalists. The USDOT anticipates Federal funding in the amount of up to \$40 Million to be available for the one Smart City Challenge award.



# Smart Cities Criteria

## Priority Rating of Vision Elements

Vision Element	Priority
<b>Technology Elements</b>	
#1: Urban Automation	Highest Priority
#2: Connected Vehicles	Highest Priority
#3: Intelligent, Sensor-Based Infrastructure	Highest Priority
<b>Innovative Approaches to Urban Transportation Elements</b>	
#4: Urban Analytics	High Priority
#5: User-Focused Mobility Services and Choices	High Priority
#6: Urban Delivery and Logistics	High Priority
#7: Strategic Business Models and Partnering Opportunities	High Priority
#8: Smart Grid, Roadway Electrification, and Electric Vehicles	High Priority
#9: Connected, Involved Citizens	High Priority
<b>Smart City Elements</b>	
#10: Architecture and Standards	Priority
#11: Low-Cost, Efficient, Secure, and Resilient Information and Communications Technology	Priority
#12: Smart Land Use	Priority

# Application: Visioning document -- not technical application

---

- Applications shall provide a narrative of the Applicant's proposed vision and goals for a Smart City Challenge. The "Vision" document shall include a high-level summary of the following:
  - Description of your vision for your Smart City
  - Population characteristics
  - Description of other characteristics of your city and show how it aligns with the USDOT's characteristics for a Smart City
  - Annotated Preliminary Site Map
  - Description of how your holistic, integrated approach aligns to the twelve USDOT vision elements described in this solicitation. For each vision element, describe your approach including the technology solutions proposed

# Application elements (continued)

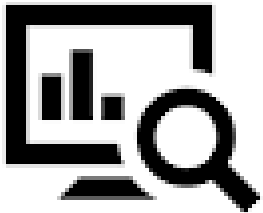
---

- **Identify and rate key technical, policy, and institutional risks associated with the deployment vision and discuss plans for mitigating those risks.**
- **Outline of preliminary team partners, key stakeholders, and demonstration governance processes.**
  - Describe existing and future public and/or private partnerships, including university research partnerships.



# Application elements (continued)

---



- **Define the data your city currently collects**
  - Describe how these data, along with new data to be collected and shared during the demonstration may be used by the lead agency, project partners, other agencies and stakeholders to further address city challenges
- **Describe your approach for using existing standards, architectures, and certification processes for ITS and connected vehicle-based technologies**
  - Describe plans for documenting experiences and cooperating with architecture and standards developers to improve the quality of these products based on lessons learned in deployment.

# Application elements (continued)

---

- **Provide measurable goals and objectives for your vision**
  - Describe your approach for monitoring the impact of the demonstration on mobility, safety, efficiency, sustainability, and climate change.
- **Provide evidence that establishes your capacity to take on a project of this magnitude**
  - This evidence includes executive commitment, workforce capacity, degree of infrastructure readiness, data and performance management capabilities.
- **Describe any opportunities to leverage Federal resources through cost share, in-kind donations, and partnering**

# How you can get involved in the Smart Cities Challenge

---

- Two Opportunities:
  - Pre-submission
  - After finalists are announced

Discussion on why and ways to get involved




# Questions & Answers

---

- Resources:

Jason Pavluchuk  
Association for Commuter Transportation  
[Pavluchuk@Actweb.org](mailto:Pavluchuk@Actweb.org)

- Website:

- <https://www.transportation.gov/smartcity>
  - Recorded Webinars
  - Application Information
  - FAQs
- 

# Mobility on Demand Sandbox

---

- FTA Initiative to merge shared used mobility and transit
- ‘safe place to test policy and legal boundaries’
- ~\$2 million available for initial pilots and demonstrations
- Opportunity for ACT and BWC members to collaborate

