

# Initiatives to Innovate Middle Tennessee Transportation

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Nashville Area MPO  
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# Technology & Transportation



## Expanded and Modernized Transit Options

The plan places significant emphasis on improving public transit in the years to come. This will provide alternatives to congested roadways and ensure Middle Tennessee remains livable, while competing economically on a national and global scale.



## More Active and Walkable Communities

As Middle Tennesseans are demanding safer and more walkable streets, the plan identifies investments in infrastructure for pedestrians and bicyclists that will enhance local commerce, foster healthier lifestyles, and serve as the backbone for transit expansion.



## Reimagined Corridors with Integrated Technology

The plan focuses on reinvestment in existing roadways, while maximizing limited transportation dollars and ensuring that infrastructure is not overextended beyond the region's ability to maintain a state of good repair. Priorities identified emphasize projects that bring roadways to design standards and integrating technologies to improve traffic operations and real-time travel information.



# Recent / Current Activities

## **National**

- 2015 Smart Cities Challenge
- T4A's Smart Cities Collaborative

## **Regional**

- Moving Forward initiative
- ITS/Regional Smart Cities Assessment

## **Local**

- Connected Nashville
- Collaborative Pilots



# Context for the Conversation

## What is a Smart City?

A city that integrates data to support better decision making by leaders **and** to improve the manage city services and assets.

## What's the role of technology in transportation/mobility?

- Emerging technologies can improve and optimize the efficiency of the transportation system
- Technology can help people understand their options and make better transportation choices based on information available

*“Smart cities technologies -- and intelligent transportation services (ITS) in particular -- will become key policy areas for local governments.”*

-SmartCitiesCouncil





# National Level Activities

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# DOT Smart City Challenge

1,400

local officials,  
companies, academics and non-  
profits joined our webinars

800

people participated  
in our Smart City Forum

300

companies have  
expressed interest in partnering

78

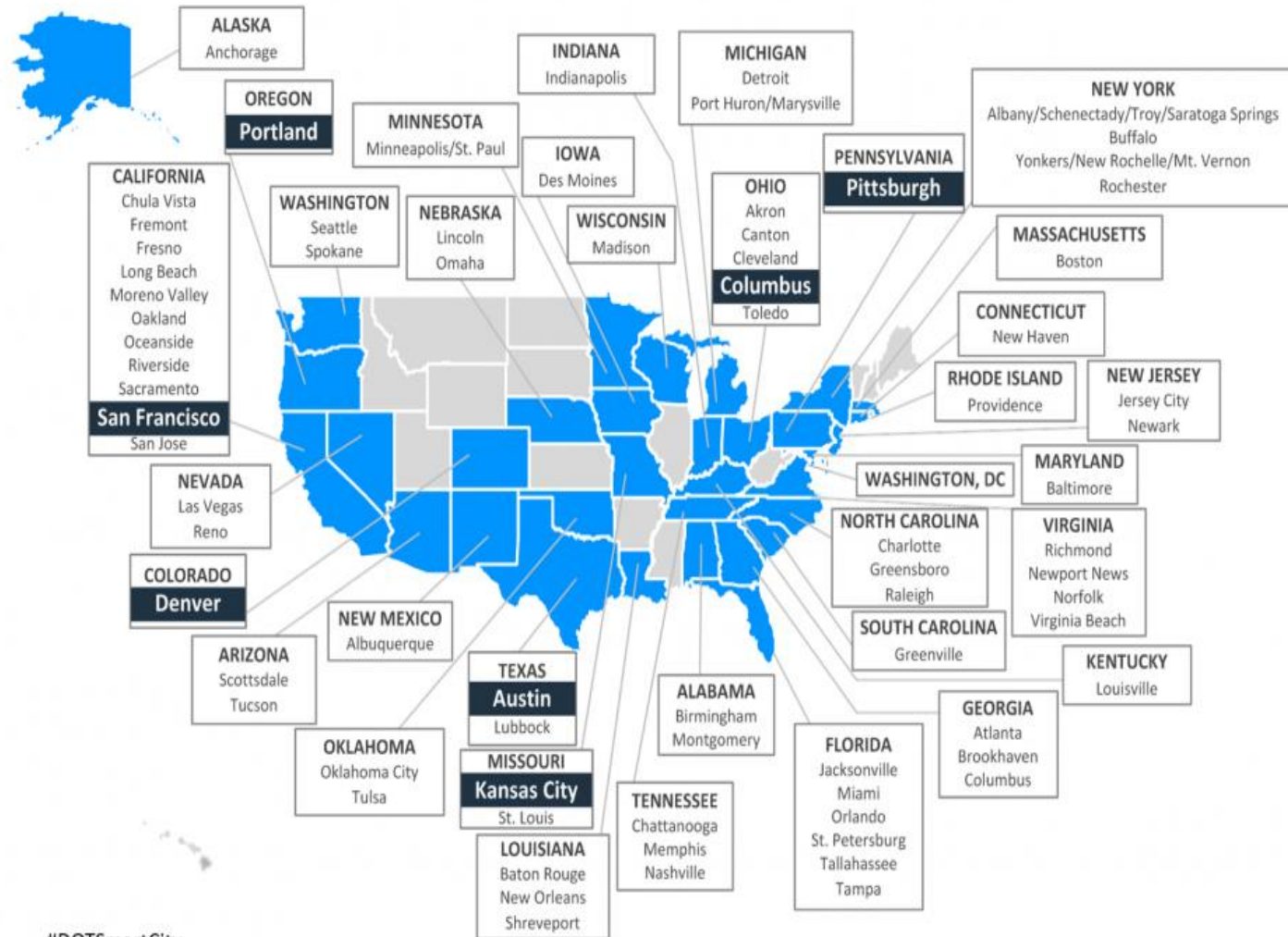
applications  
received for the Smart City  
Challenge

7

Smart City  
Challenge Finalists announced in  
March at SXSW

1

Smart City  
Challenge Winner announced in June



#DOTSmartCity

[www.transportation.gov/smartcity](http://www.transportation.gov/smartcity)

# Smart Cities Collaborative

## Collaborative Partner Cities

- Austin
- Denver
- Boston
- Centennial, CO
- Chattanooga
- Lone Tree, CO
- Los Angeles
- Miami-Dade County
- Madison, WI
- Minneapolis/St. Paul
- **Nashville**
- Portland, OR
- Sacramento
- San Jose
- Seattle
- Washington DC



**Transportation**  
for America





# Smart Cities Collaborative

## ***Nashville Areas of Focus:***

- *Shared Mobility*
- *Performance Measures and Data Analytics*

## ***Pilot Programs:***

- *Gulch Connected Corridor*
- *Environmental Health Data Analytics*



# Regional Level Activities

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# Regional Smart Cities Assessment

Later this year, the **Nashville Area MPO** will be issuing an RFP for a Regional ITS and Smart Cities Assessment.

As Middle Tennessee invests in connected infrastructure, **region-wide coordination** will help bring a system that works for all users, across each city, for every trip. Plan for disruption and anticipate needs at steps along the way

## ***Focus Areas***

- Communication infrastructure
- Data sharing analysis
- Outreach (Project Coordination Committee)
- Inventory of existing ITS
- Technology needs in existing plans
- Regional integrated tech vision
- Funding, priorities, and strategies
- Evaluation of current architecture
- Private sector collaboration



# Moving Forward

The **Nashville Area Chamber of Commerce** began their **Moving Forward** initiative to ensure the creation of a regional transportation solution through a cohesive community effort that engages business and community leaders

## **Autonomous Vehicles (AVs) Subcommittee**

Subcommittee established to study how AVs are being addressed locally, state-wide, and nationally; review policies and strategies around AVs; examine AV technology trends; make strategy recommendations to Moving Forward

### **AV Vision:**

- AVs support other goals
- Safety increases
- Shared vehicles incentivized
- Public/private coordination



# Local Level Activities

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# Connected Nashville

## **Local initiative following the Smart City Challenge**

Develop a long-term strategy designed uniquely for our community that will advance shared goals and objectives through the use of technology and data.



### **Built on Existing Plans**

Serves as a framework for implementing cross-agency, collaborative solutions to support better-connected citizens, more citizen-centric public services and better decision-making.

### **Focused on technology and data to improve:**

- Mobility
- Livability
- Economic Development
- Education



# Shared Mobility Pilot

## Shared Mobility: First Mile/Last Mile and Crosstown Connectivity

MTA issued an RFP for Shared Mobility and Mobility on Demand Solutions to address first/last mile and crosstown connectivity challenges

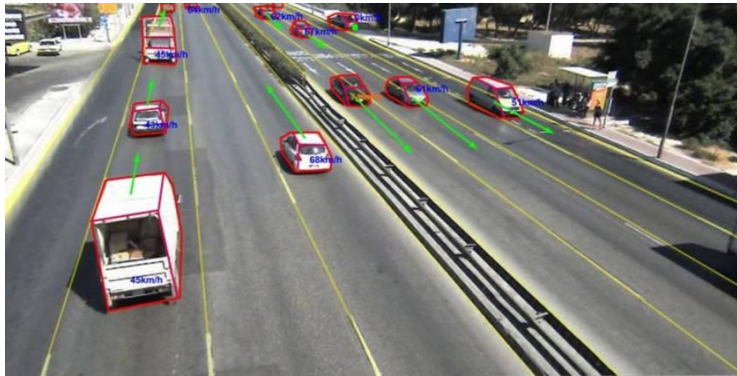
### Pilot Elements

- First/last mile connections to and from transit in suburban areas
- Multimodal trip planning integration
- Partnerships with TNCs
- Transit vehicle conversion to real-time on demand services
- Solutions for unbanked and/or individuals without smartphones



# Next Steps

- Continue working with partner cities, sharing best practices, templates
- Implement pilots, make data useful, find way to scale pilot to broader use
- Improve service, customer experience
- Pursue platforms for trip planning, seamless payment





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NASHVILLE AREA

**Metropolitan Planning Organization**