



Stan Caldwell, Executive Director

**Mobility21**

**A USDOT NATIONAL  
UNIVERSITY TRANSPORTATION CENTER**

**Carnegie Mellon University**

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 **Penn**  
UNIVERSITY OF PITTSBURGH

 **THE OHIO STATE UNIVERSITY**



# Our UTC's approach is...

- Research
- Development
- Deployment through partnerships

Deployment Partner Consortium  
with over 80 members

# Spinoffs from CMU's National UTCs



Affordable Automated Road Assessments

*Jobs Created*

> 30



Intelligent transportation technologies for smart cities

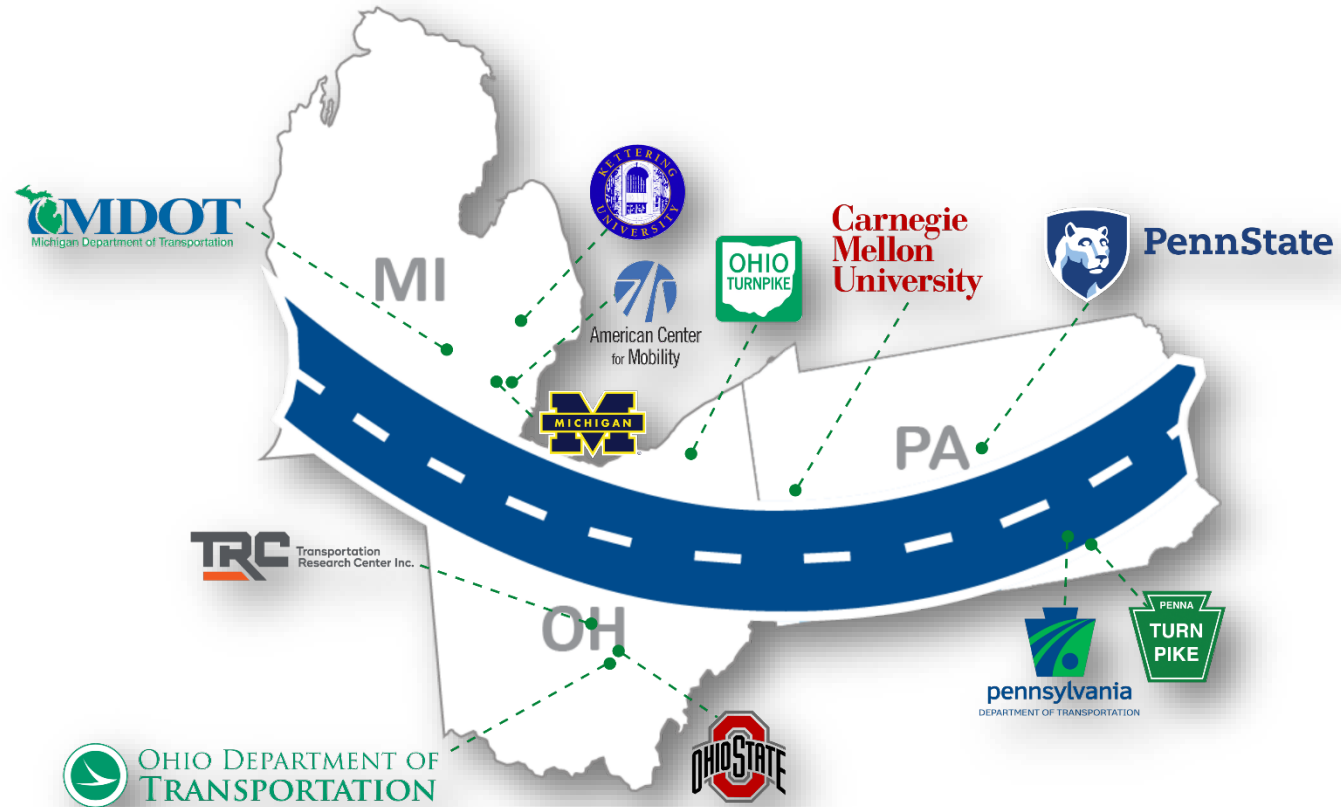
> 10



Intelligence for connected and automated vehicles

> 100

# Smart Belt Coalition



## Attributes:

4 Distinct Seasons

Urban & Rural Roadways

Multi-jurisdictions

## Priorities:

Freight

Work Zones

Traffic Incident Mgmt.

*44 cities, 5 counties and 59 universities*



# UTC Technology Transfer Plan Components (1 of 3)

## **1. Involvement of Stakeholders in the Research Program**

- Deployment Partner Consortium Symposium
- Community Partners for Individual Projects
- National Safety Summits and National Mobility Summits

## **2. Assisting Stakeholders in Implementing and Deploying Research Outputs**

- Support of the City of Pittsburgh Smart City Challenge and ATCMTD Grant
- City of Pittsburgh Autonomous Vehicle Proving Ground
- Smart Mobility Challenge

## **3. Commercialization Process of Research Outputs**

- Spinoff Companies, Jobs Created and Communities Served

# UTC Technology Transfer Plan Components (2 of 3)

## **4. Collection and use of licensing revenues to project further support for research and technology transfer**

- CTTEC, Swartz Center and Engineering Research Accelerator

## **5. Dissemination of Research Results**

- Publications and Presentations, What's Happened, Dispatch

## **6. Tracking and Reporting of Research Outputs, Outcomes and Impacts**

- PPPR Live
- Impacts and Accomplishments

## **7. How Corporate Research Support Will Be Increased**

- Corporate Sponsored Research

# 8. Technology Transfer Goals and Performance Measures

	Research Performance Measure	Target
<b>Output #1</b>	Annual Number of Journal Publications	35
<b>Output #2</b>	Annual Number of Research Pilot Deployments	10
<b>Outcome #1</b>	Annual Number of Media Stories Referencing UTC Research, Faculty, or Spinoff	80
<b>Outcome #2</b>	Annual Number of Instances Providing Exposure to Transportation, Science and Technology for Practitioners, Teachers, Young people, or Other Members of the Public (other publications, conference papers and presentations)	50
<b>Impact #1</b>	Annual Number of Instances of Technology Adoption or Commercialization	3
<b>Impact #2</b>	Annual Number of Instances of Research Changing Behavior, Practices, Decision Making, Policies (Including Regulatory Policies), or Social Actions	3



# PPPR Live

The screenshot displays the Mobility21 website interface. At the top left is the Mobility21 logo. A navigation bar contains links for HOME, CONTACT, IMPACTS, ACCOMPLISHMENTS, and US DOT REPORTS. Below this is a secondary navigation bar with links for About Us, News, Events, What's Happening (highlighted in green), Projects, and For Students. The main content area features three news items, each with a thumbnail image, a title, a date, and a brief description.

**Mobility21 Researcher Participates in the Traffic Safety and the 5.9 GHz Band Conference**  
June 3, 2019  
Mobility21 UTC researcher, Steve Smith participated in a panel at the Traffic Safety

**CCAC Faculty Leads Transportation Discuss with Career and Technology Center Students**  
June 1, 2019  
Bob Koch from the Community College of Allegheny County visited the Western Area

**UTC Faculty Received Award from Office of Naval Research**  
May 30, 2019  
Venkat Viswanathan, Assistant Professor at Carnegie Mellon University and UTC funded faculty received a 2019 Young Investigator Award from the Office of Naval Research to research how to improve battery safety in low

https://mobility21.cmu.edu/whats\_happening/ccac-faculty-leads-transportation-discuss-with-career-and-technology-center-students/

Slide 9 of 9 | Notes | Comments | 54%