Texas Automated Vehicle (AV) Proving Grounds Partnership: Open for Innovation

Texas Automated Vehicle (AV) Proving Ground Partnership includes three premier research entities: The Texas A&M University System (TAMUS), The University of Texas at Austin (UT), and Southwest Research Institute (SwRI), the Texas Department of Transportation (TxDOT), and 33 municipal and regional partners with a shared interest in mobility and safety challenges related to connected vehicles on public roadways. Each partner conducts AV research and has controlled proving grounds on their campuses.

January 2017, USDOT selected 10 sites out of 60+ proposals
1. City of Pittsburgh and the Thomas D. Larson Pennsylvania Transportation Institute
2. Texas AV Proving Grounds Partnership
3. U.S. Army Aberdeen Test Center
4. American Center for Mobility (ACM) at Willow Run
5. Contra Costa Transportation Authority (CCTA) & O’Hare Station
6. San Diego Association of Governments
7. Iowa City Area Development Group
8. University of Wisconsin-Madison
9. Central Florida Automated Vehicle Partners
10. North Carolina Tumple Authority

Texas (AV) Proving Ground Partnership

Proving Grounds
RELLIS Campus Proving Grounds, a 2,000 acre campus
Proving Grounds: Streets and parking lots, J.J. Pickle Campus

Research Highlights
• Truck Platooning
• AV roadway infrastructure needs and VDI
• V2X sensing/communication Vehicle and non-motorized user interactions
• Deploying CAV since 2008

Expertise
• Expertise in infrastructure, vehicle controls, robotics, cybersecurity, and UAVs
• Expertise in travel behavior, GPS and wireless sensing, cybersecurity, policy, and regulation
• Specialties include: localization, perception, cybersecurity, connected automation, UAVs

Urban Test Site Partners
• City of Austin
• University of Texas at Austin
• Texas A&M University
• City of Dallas
• City of El Paso
• City of Fort Worth
• City of Grand Prairie
• City of Houston
• City of Round Rock
• Texas A&M Transportation Institute
• Texas A&M University System
• City of San Antonio
• VIA Transit
• Texas Department of Transportation

Strengths of Texas AV Partnership
• Proving Grounds open for business: All three research partners are conducting AV research and testing
• Match research expertise and proving grounds to testing needs
• Partnerships are in place for pilots and demonstrations
• Diverse set of urban test sites:
  - High speed freeways/managed lanes
  - Arterial streets with transit
  - Low Speed Urban
  - Campus environments
  - Border crossings

Next Steps
AVs have the potential to transform the lives, safety, and economic prospects of people, and the Texas AV Partnership offers the highest levels of public safety and value to the Community of Practice. This application brings together a partnership of world-class research institutions and forward-thinking cities that are working together to host and manage proving grounds and to develop best world test beds that offer a wide variety of AV test environments.

USDOT
• Meetings with the 10 National Proving Grounds
• Assist national guidelines
  - Define testing needs
  - Testing guidance
  - Best practices
  - Safety procedures

Texas
• Private companies and public agencies can engage Texas Partnership on testing needs

Background
USDOT was seeking to:
• Create national network of proving grounds
• Encourage new levels of public collaboration
• Establish Community of Practice on testing and demonstration of best practices
• Accelerate the pace of safe deployment

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www.texasprovinggrounds.org

Community of Practice: Join a network dedicated to sharing and implementing best practices and dedicated to supporting peer projects by sharing lessons learned.

Unified Communications & Marketing: Benefit from communicating the latest news and events around the world partners.

Make Texas A Leader, Signal that Texas communities will be early adopters of emerging transportation technologies and will advance their development, proving, and deployment.

Moving Texas Forward
Proving Ground
Urban Test Bed
Freight Test Bed

Central Florida Automated Vehicle Partners
City of Pittsburgh and the Thomas D. Larson Pennsylvania Transportation Institute
City of El Paso
City of College Station
Texas Department of Transportation
Central Florida Automated Vehicle Partners
City of Arlington
City of Houston
City of Bryan
City of Pittsburgh and the Thomas D. Larson Pennsylvania Transportation Institute
Texas A&M Transportation Institute

This page in the Report is dedicated to sharing and implementing best practices and dedicated to supporting peer projects by sharing lessons learned.