



Central Florida Automated Vehicle Proving Grounds Partnership

Overview by

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for

The MetroPlan Orlando

Community Advisory Committee

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Why?

- **City of Orlando's Executive Leadership Direction**
 - Earn & Retain "Smart City" Branding
 - Use Affordable & Emerging Technologies on a Continuing Basis to be -
 - *A Great Place to Visit, Live, Work, Play, Raise a Family, Ensure Good Environmental Stewardship, Attract the Creative Class and Promote Economic Development*
- **Response to USDOT Solicitation**
 - Fall 2016
 - **Numerous Concerns & Needs**
 - Safety
 - Closed Environment Testing
 - Gradual Transition to Open Environment Testing
 - Research
 - Knowledge Sharing



Background & Guidance

- **“How Shall We Grow”**
- **Beyond Traffic 2045**
- **US DOT Smart City Challenge**
- **MetroLab Network**
- **Mean Streets/Dangerous By Design**
- **World’s Largest Tourist Destination**
- **World’s Largest Rental Car Market**



Central Florida's History of Transportation Innovation

- **Travtek**
 - Early to Mid-1990's
 - Response to Local & Statewide Challenge
 - In-Vehicle Navigation Systems
 - Extensive Partnership
 - City of Orlando
 - AAA
 - USDOT
 - FDOT
 - GM
 - UCF
 - Avis Rental Car



Central Florida's History of Transportation Innovation

- **Lymmo Bus Rapid Transit (BRT) System**
 - **First "Pure" BRT Project in the USA**
 - **Fore runners**
 - **Meter Eater**
 - **Free Bee**
 - **Response to Local Access & Mobility Challenge**
 - **Downtown Development of Regional Impact**
 - **OSCAR**
 - **Purpose**
 - **Challenges**
 - **Funding & Operating Constraints Yielding Innovation**

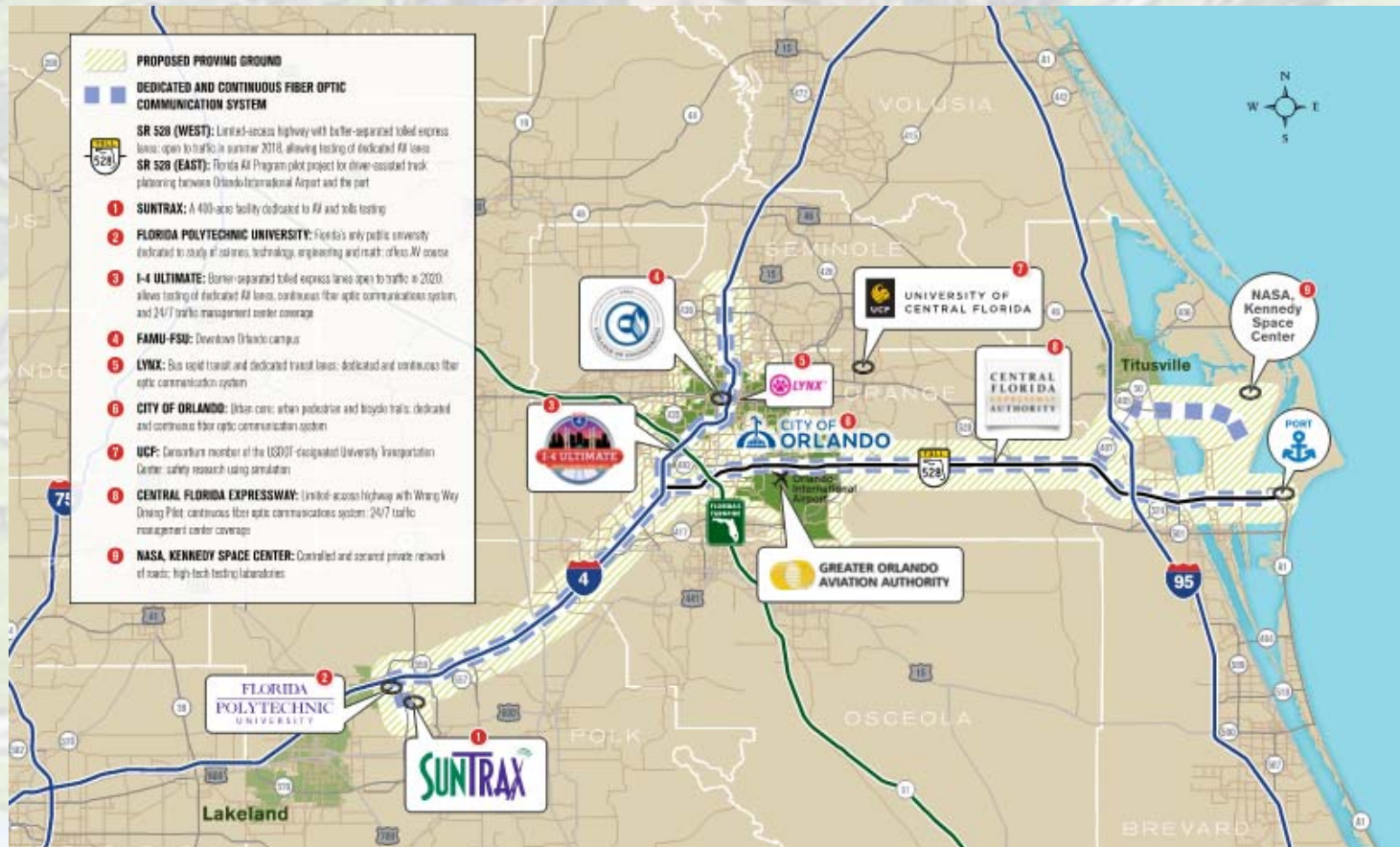


Team

- **City of Orlando**
- **University of Central Florida**
- **Florida Polytechnic University**
- **FAMU-FSU College of Engineering**
- **Florida Turnpike Enterprise**
- **Central Florida Expressway**
- **Florida Department of Transportation Districts 1 & 5**
- **Lynx**
- **NASA – Kennedy Space Center**



Map of Primary Partner & Facility Locations



Areas of Focus

- **Four Modes of Travel**
 - Automobiles
 - Freight
 - Transit
 - Bike-Ped
- **Interaction of Modes**
- **Safety**
- **Full Range of Automation**
 - Vehicles
 - Roadside Equipment
 - Sensors
 - Human Factors
 - Alternate Fuels
 - Fueling/Charging Facilities
 - Fueling/Charging Types



Approach

- **UCF & FPU**
 - Research, Simulation & Emulation
- **FAMU & FSU**
 - Review of Work Performed by Primary University Partners
 - Allow for Minority Institutions' Participation & Mentoring
- **FTE & FPU**
 - Development of Test Track
 - Closed Environment Testing
- **NASA-KSC**
 - Testing of sensors for extreme environments
 - Closed Environment Testing
- **CFX & FDOT**
 - Freight Vehicle, Infrastructure & Sensor Testing in More Open Environments
- **City of Orlando, UCF & Lynx**
 - Automobile, Freight, Transit & Bike-Ped Vehicle, Infrastructure & Sensor Testing in Open Environments
- **UCF School of Public Administration, FAMU & FSU Law Schools**
 - Public Engagement
 - Policy Development
 - Legislative Coordination



Anticipated Benefits

- **US DOT Designation/Certification Agreement & Funding Opportunities**
- **Coordinated Research**
- **Safer & More Livable Communities**
- **Independent Pursuit of Other Opportunities**
 - **University Research**
 - **Independent engaging of auto-makers, OEMS & interest groups**
 - **Promoting and branding of work by subsets of the partnership**
 - **Engaging & utilization of Central Florida tech companies & talent**
 - **Economic Development**
 - **Attracting the “Creative Class”**
 - **Facilitating a culture of continuing innovation, review and R&D**



Current Status

- **Unofficial designation since mid-January 2017**
- **Initial Team Meeting – early February 2017**
- **US DOT Convening of 10 winning teams – February 27 & 28, 2017**
- **Sharing of details & opportunities with local governments & other local interest groups**



Next Steps

- **Development of Partnership MOU**
- **Development of process for engaging**
 - Auto-makers
 - OEMs
 - Local Tech Community
- **Dealing with the full range of procurement issues**
 - Harmonizing among partners
 - Advocating for local, state and federal law/rule changes
 - Facilitating un-invited/un-solicited suggestions for innovation
- **Development of protocols for media engagement as well as requests for, and releasing of, information**
- **Spring-boarding to other innovative ideas that can improve access, mobility & quality of life in Greater Orlando**



Acknowledgements

- HNTB
- VHB
- FDOT I & V
- FTE
- CFX
- Lynx
- NASA-KSC Swamp Works
- UCF
- FPU
- Metroplan Orlando





Questions & Comments, Please

