Mobility Ecosystem in the Ann Arbor Region

Presentation to LDFA: 4 month progress report

How do we define the Mobility Ecosystem?

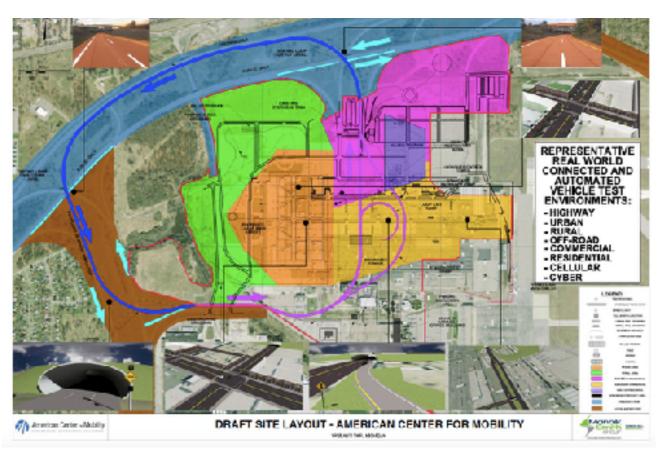
Mobility Assets in Ann Arbor/ Ypsi Region

MCity



University of Michigan maintains Mcity, a 32-acre controlled environment designed to test real-world urban and suburban driving conditions for autonomous and connected vehicles. It has 60 industry partners and over \$20million invested in R&D projects https://mcity.umich.edu/

The American Center for Mobility



The American Center for Mobility is 335-acre driverless car testing and development site located adjacent to Willow Run airport. Designated as a Federal Connected Vehicle Testing site in 2016, the center will test, verify, and certify connected and automated vehicles. Ann Arbor SPARK is on the Board of ACM and is also operationally involved with them. http://www.acmwillowrun.org/

University/Govt Programs + Centers of Innovation

EPA National Fuel and Vehicle Laboratory: The US EPA's center for testing vehicles, engines and fuels is located in Ann Arbor. The laboratory tests light-duty cars and trucks, heavy duty trucks for emissions and fuel economy.

The University of Michigan Transportation Research Institute: UMTRI is dedicated to achieving safe and sustainable transportation for a global society. Their safety pilot deployment in Ann Arbor (3500 vehicles by 2018) is informing how well connected vehicle safety technologies and systems work in a real-life environment with real drivers and vehicles.

Automotive Cybersecurity: The University of Michigan was part of the ARPANET research effort that was the forerunner of today's Internet. In the last few years, the Ann Arbor region has attracted several small companies focused on automotive embedded control systems, specifically automotive cybersecurity.

Other Washtenaw County Resources

Washtenaw Community College Advanced Transportation Center
Center for Automotive Research
MTRAC

Other SE Michigan Resources

MMTC
Pinckney Cyber Training Inst

Industry Research and Development Centers

76% of U.S. Research and Development in the auto industry is done in Michigan.

Here are some R&D Facilities in Ann Arbor/Ypsi

- <u>Toyota Research Institute of North America</u> & Toyota Technical Center
- Subaru Research and Development, Inc
- Hyundai America Technical Center (Ypsi)
- NSK Americas, Inc.

Entrepreneurial Resources

- Accelerators/Incubators: TechArb, TechLab, Techstars Mobility, Desai Accelerator, TUS Accelerator
- Co-Working spaces: TechBrewery, Cahoots
- PLANET M
- Michigan Small Business Development Center
- BBCetc
- UM Office of Tech Transfer
- Venture Capital and Angel Investors: Michigan Angel Fund, Plymouth growth partners, RPM Ventures, Beringea, Grand Angels and more...

Within SPARK's Ecosystem

- 188 Mobility companies located in Washtenaw County are in SPARK's ecosystem
- 65 Mobility startups located in Ann Arbor/Ypsi city limits have been served successfully through our funding programs
- 76 Mid-Large Mobility companies have been successfully served by the Business Development team.

Understanding the State of the Mobility Ecosystem

Conversations with SPARK's Clients (36)

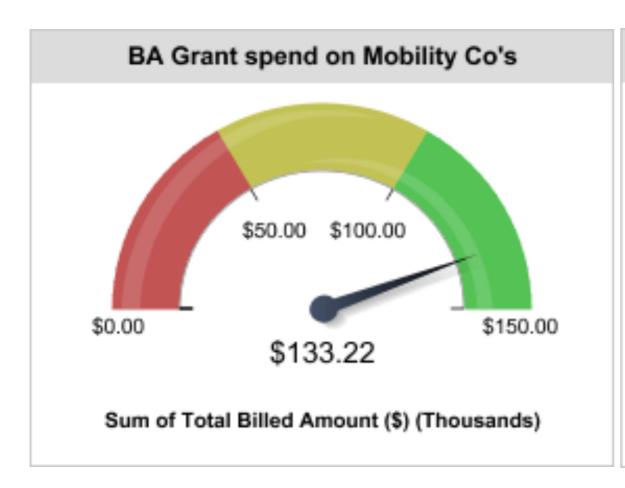
- Develop a relationship with these companies
- Better understand their business model, growth plan and needs.
- Identify commonalities and patterns. Explore ways we could address those needs or build on those commonalities.
- Example: A need for a more connected mobility community. A
 desire to collaborate with other startups for specific services.

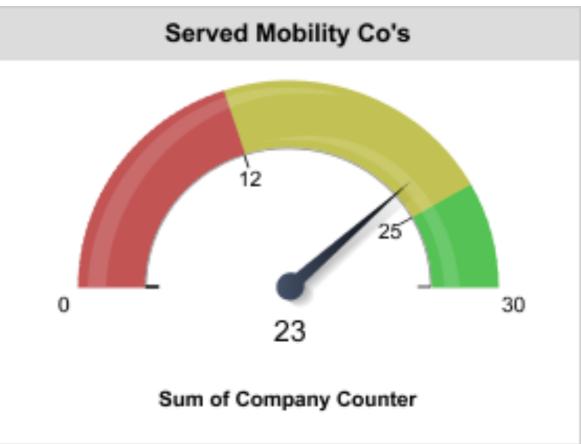
Conversations with Partner Organizations (30)

- Develop a relationship with these partners
- Better understanding of their services and goals
- Identify ways to collaborate
- Identify gaps and opportunities
- Include additional organizations within Mobility Ecosystem
- Example: Retained 2 Techstars Mobility companies in Ann Arbor.

Mobility within Existing SPARK Programs

Mobility Startups Served 2017-18





Mobility at Tech Trek 2018

Mobility Row

Profile physical assets of amazing mobility tech companies innovating in Ann Arbor and Ypsilanti region on a closed off block of Washington Street.

Meeting of the Minds Ann Arbor Mobility Summit:

Meeting of the Minds, in partnership with Ann Arbor SPARK and Ann Arbor-Ypsilanti SmartZone, is convening a unique one-day thought leadership summit in Ann Arbor focused on mobility and smart cities.

Knowledge Sharing and Community Participation

- Ignitelt: Juror: Feb 10, 2018
- CREW Panel: Speaker: March 7, 2018
- SXSW Michigan House: Panelist: March 11, 2018
- GAMIC's Finals: Juror: April 10, 2018
- ULI End Users Session: Moderator: May 2, 2018
- A2MobilityTechMeetup: Organizing team

Next Steps