MICHIGAN ECONOMIC
DEVELOPMENT CORPORATION

MTRAC TRANSPORTATION
UNIVERSITY OF MICHIGAN

Homepage: MTRAC Advanced Transportation

Welcome to the MTRAC Advanced Transportation Program Overview

- Program Overview
- Timeline for upcoming grant RFP & program cycle
- Technology Development Process
- Project / Team support
- Value to the researcher and the team
- Awarded Project examples
- Next Steps

MTRAC* Advanced Transportation

This 1-year program accelerates commercialization of high potential early-stage translational technology applications in the advanced transportation/mobility space. The program provides up to $100K in funding and access to mentors, venture and industry support. All awarded projects require a cost share from the investigator/institution.

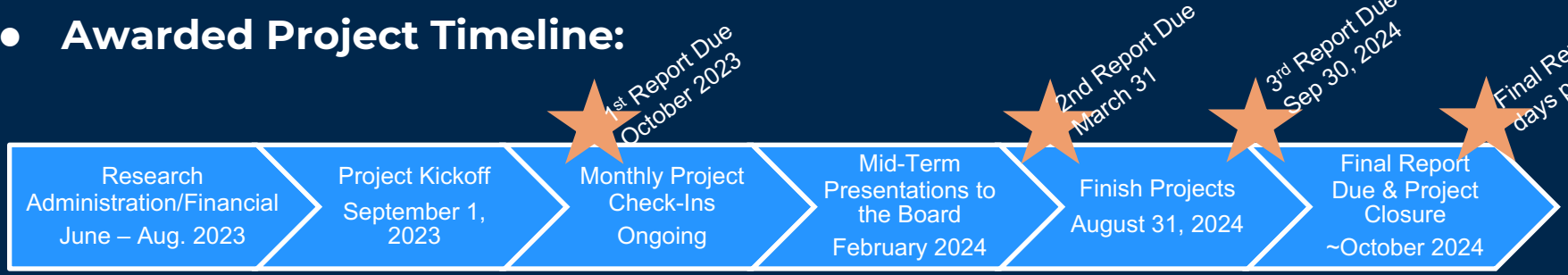
**MTRAC - Michigan Translational Research and Commercialization*

**The program reinforces the State of Michigan's Michigan Strategic Fund (MSF), the MEDC (Michigan Economic Development Corporation) and U-M's commitment to use entrepreneurship as a catalyst for economic growth in the State and beyond.

2023 MTRAC Program Timeline

- **Proposal Timeline**:

- **Awarded Project Timeline:**

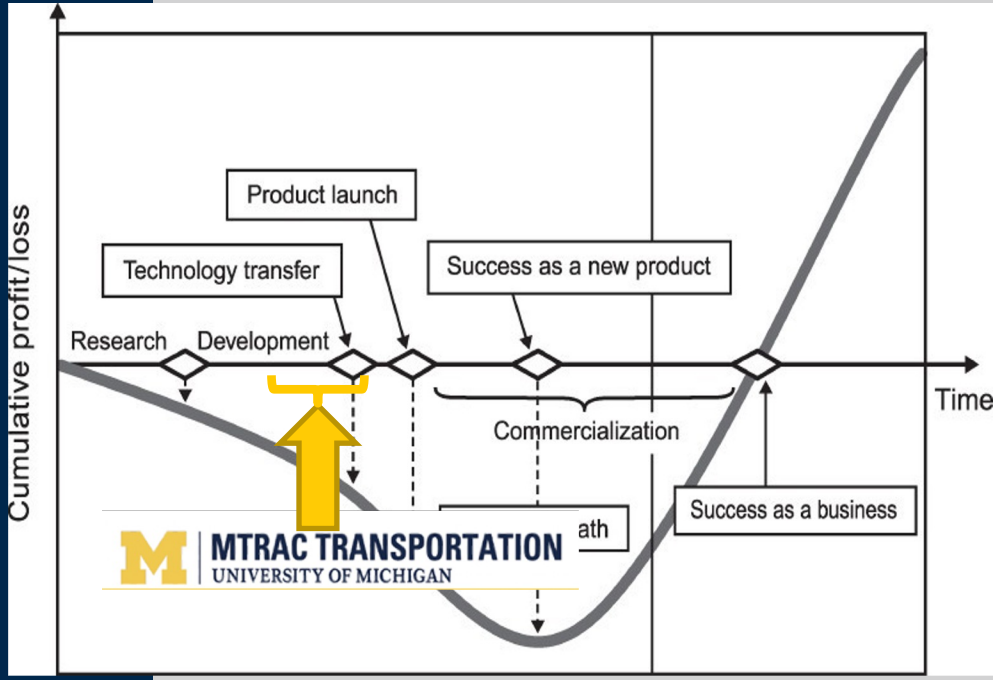


- **Key Takeaway: Engagement with program is typically 18M+, Grant funding provided for 1 year defined project.**

*Reports must be received before year end

Where in the development process we fit…

- *High potential early-stage projects*
- *Typically entering TRL level 2-4*
- *Minimum IP: invention disclosure, Ability to secure IP (Patent, Trademark, etc.)*



MTRAC* Advanced Transportation Hub Focus Areas

- Advance early-stage translational research technology development for commercialization
- Advance market adoption readiness to meet industry/market needs & reduce risk along the technology development path
- Provide high-touch support for University researchers and their teams
- Develop follow-on funding and commercialization path
- Catalyze input of our Oversight Committee Board consisting of VC and Industry Partners to drive successful project outcomes

Further Details of Project Focus areas:

- Technology milestones/Product Roadmap
- Market research/Strategy
- Commercial application /milestones
- Industry communications
- Establish IP
- Industry Connections – Pilot/co-development
- Funding Pathways
- Business Model
- Licensing Opportunities/Start-up support

Impact of the MTRAC Advance Transportation Program

27

STARTUPS FORMED

$6M

MTRAC GRANT FUNDING AWARDED

$96M+

FOLLOW ON FUNDING

*Impact to Date Since 2014

MICHIGAN ECONOMIC DEVELOPMENT CORPORATION

MTRAC TRANSPORTATION UNIVERSITY OF MICHIGAN

INNOVATION PARTNERSHIPS UNIVERSITY OF MICHIGAN

MTRAC Advanced Transportation Technology Eligibility

- The technology must be the subject of an invention disclosure from a Michigan-based university
- Translational research w/high potential of commercially viability
- The technology must be available for licensing in the application/field of the proposal and relevant geography.
- The applicant Principal Investigator (PI) must be from a university or non-profit research institution located in Michigan.
- More information in grant template
- InfoReady Link: https://mtrac-transportation.infoready4.com/

MTRAC Transportation Proposal Best Practices

- Novel idea with clear & scalable* value proposition
- Ongoing customer discovery
  - Recommend I-Corps Programs: https://www.greatlakesicorps.org/
- Ability to secure IP
- Beachhead market opportunity tied to Transportation/Mobility
- Must be: Pre-Startup, IP must fall under University, No Right of First Option or Exclusivity

MTRAC Advanced Transportation Funding Areas

Industry agnostic (Air, sea, land, etc.) Funding areas must be related to transportation. They include and are not limited to:

- Electrification, Battery Technology, Charging Technology
- Connectivity/Connected Vehicles
- Renewable Energy (solar energy, wind power, geothermal energy, hydroelectric power, measurement systems, etc.)
- Infrastructure Tech
- Advanced Driver Assistance Systems (ADAS)
- Manufacturing Solutions
- Supply Chain Solutions
- Sustainability

MTRAC Advanced Transportation Application Process Benefits

- Receive feedback from MTRAC Team, industry and venture capital experts
- Access to industry reports and market research
- Proposal development support from licensing team, Mentor's in Residence, and MTRAC team
- Pitch development support
- Connections to other commercialization program partners (i.e. NSF I-Corps Hub, Great Lakes Region)

MTRAC Advanced Transportation Application Awardee Benefits

- Continued commercialization support from licensing team, Mentor's in Residence, and MTRAC team
- Opportunity to explore other non-dilutive grants (NSF, SBIR, other MTRAC hubs, etc.)
- Referrals and coaching on working with industry partners
- Team development
- Funding: The program awards a range of funding typically up to $100K+. All awarded projects require a cost share from the investigator/institution (up to $50,000 from the MTRAC Grant program, with a corresponding cost-share match required based on institution matching levels)

There are a wide range of potential projects and we invite you to come explore this program with us!

2022-2023 Awarded Projects

- Compensation of Nonlinear Vibration of Robots
- Motion Sickness Prevention in Moving Vehicles via Anticipatory Passenger Stimuli
- Crossing-i - Harnessing Drone Data and Analytics for Efficient Grade Crossing Management
- Digital Tools for Design and Certification of Fiber-reinforced Polymer Composites
- ImpLi-Fi: Line-of-sight low-power high data-rate optical communication link for use in ad-hoc (vehicle) networks
- Cyber Supply Chain Risk Assessment and Mitigation for Automotive IoT
- Reducing Quench Distortion in Metal Extrusion to Accelerate Vehicle Light weighting
- Adaptive, Personalized and Proactive In-vehicle Virtual Assistant

Next steps?

- Please contact us to have an initial discussion and explore whether your technology could be a fit for MTRAC Advanced Transportation or other MTRAC hubs in Michigan. For more information about the program and 2023-2024 application visit the website:

  MTRAC Advanced Transportation Innovation Hub

THANK YOU!

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