

WHY ADVANCED TRANSPORTATION CENTER?

Disruptive change is transforming the transportation and manufacturing industries due to new governmental standards related to safety and energy efficiency, along with the development of mobility technologies - the point where advanced manufacturing and information technology intersect.

WHY WASHTENAW COMMUNITY COLLEGE?

Washtenaw Community College has access to the world's leaders in connected car development. The Center is strategically located near:

- The University of Michigan Transportation Research Institute (UMTRI), which is currently conducting a USDOT-sponsored Connected Vehicle Safety Pilot Program
- M-City
- Michigan-based automotive engineering facilities
- US Environmental Protection Agency's National Fuel and Emissions Laboratory
- The Center for Automotive Research (CAR)
- The Mobility Transformation Center
- University of Michigan Schools of Engineering and Information
- Merit Networks
- Offices of Google

WCC is a partner with Square One Education Network, a leader in creating connected vehicle technologies educational opportunities for students in K-12.

Ann Arbor is the **recognized** hub for intelligent transportation systems research and development.

"Michigan's automotive industry, and the intersection between automotive and the evolving sphere of big data and cloud based computing will accelerate our automotive industry over the next decade. Michigan's competitive strategy begins and ends with its ability to develop, attract and retain the most talented workforce in the world. The proposed center at WCC can create a meaningful advantage for Michigan's industry stakeholders."

Nigel Francis, Vice President of Corporate Planning
American Axle & Manufacturing, Inc.
Former Senior Vice President, Automotive Office
Michigan Economic Development Corporation
Special Advisor to the State of Michigan for the Automotive Industry

"Washtenaw Community College is preparing to address one of the most important challenges facing a national deployment of connected vehicle technology: qualified, job ready employees who are trained in the latest intelligent transportation systems. Located within a mile of the largest connected vehicle deployment test bed in the world, WCC faculty and students will benefit from the test sites, the experts and the technology that will play a part in transforming our current transportation system as well as playing a critical role in the revitalization of the economy of the state of Michigan."

Dr. Peter Sweatman, Director
University of Michigan Transportation Research Institute
Director, Michigan Mobility Transformation Center

For more information, contact:

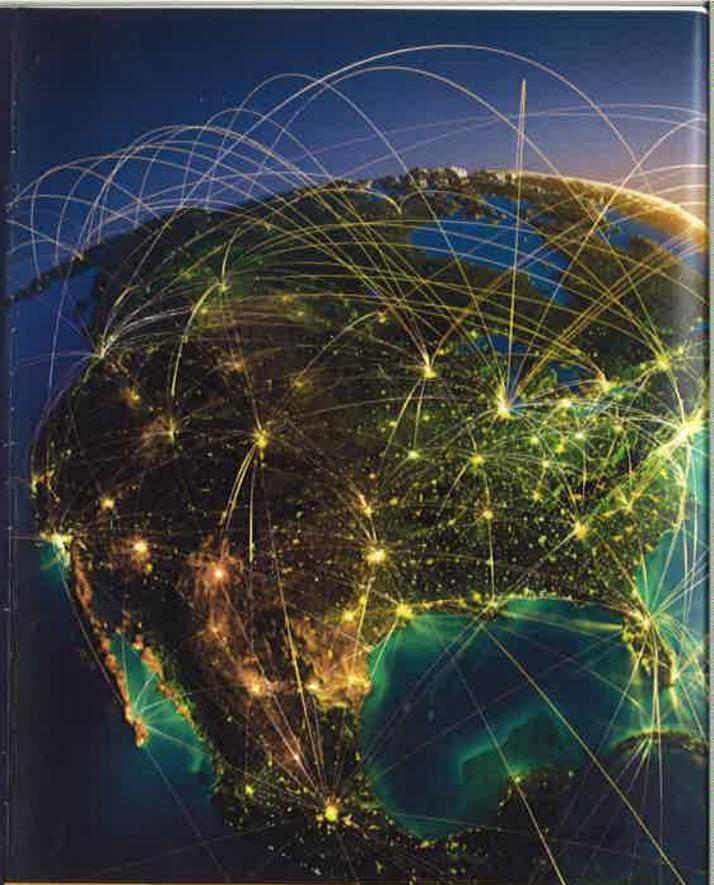
Advanced Transportation Center
Washtenaw Community College
4800 E. Huron River Dr. Ann Arbor, MI 48105
wccnet.edu/atc

Washtenaw Community College
Alan R. Lecz
Advanced Transportation Center Director
734-677-5472
alecz@wccnet.edu

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 Washtenaw Community College



WASHTENAW COMMUNITY COLLEGE ADVANCED TRANSPORTATION CENTER

Preparing the future and existing workforce for the emerging needs of the advanced transportation industry.

 **Washtenaw**
Community College

ADVANCED TRANSPORTATION APPROACH

- Provide quality teaching and learning experiences meeting business and industry needs
- Prepare students for careers in emerging mobility infrastructure technologies
- Create a pipeline to develop talent for high-skill careers



ADVANCED TRANSPORTATION EXPERTISE

Washtenaw Community College is a leader in creating IT intensive intelligent transportation systems curricula.

WCC has extensive experience collaborating with industry partners in the Center's state-of-the-art laboratories and classrooms.

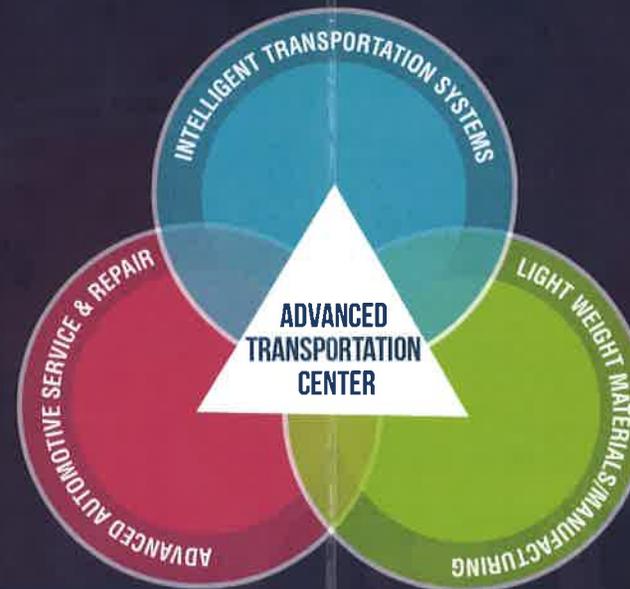
WCC programs contain a unique mix of e-learning combined with hands-on training to prepare students for technician certificates and provide transfer degree options to four-year university programs.

Regional employers and industry experts assist WCC in shaping the curricula design and identifying workshops and paid experiential learning opportunities.

ADVANCED TRANSPORTATION CENTER

INTELLIGENT TRANSPORTATION SYSTEMS

- Connected vehicle technologies, V2V, V2I
- Embedded systems technology and software
- Data/analytics
- Cyber security
- Communication infrastructure
- Driver interactions
- Industry/government's move toward standardization



ADVANCED AUTOMOTIVE SERVICE & REPAIR

- Advanced diagnosis, service and repair
- Intelligent systems diagnosis, repair and maintenance
- Auto testing, powertrain calibration and R&D
- Chassis dynamometer performance, fuel economy, exhaust emission testing
- Engine mapping and optimization
- Aftermarket installation of ITS equipment
- Aluminum and composite material body repair, including self-piercing riveting

LIGHT WEIGHT MATERIALS/MANUFACTURING

- Production design/rapid prototyping
- Advanced manufacturing processes/mechanics
- Additive 3D manufacturing
- Aluminum and composite materials
- Multi-axis CNC machining, including plasma shape cutting
- CNC laser and robotic cutting and welding
- Wire electrical discharge machining (EDM)
- Non-destructive testing (NDT), including x-ray and ultrasonic methods

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