

Mobility Research at Michigan



The University of Michigan is the nation's leading public university in terms of research volume, with \$1.55 billion in annual research expenditures.

A growing portion of those expenditures is being invested into exploring the future of mobility, from developing vehicles that talk to each other and drive themselves, to understanding how advancements in mobility could change how we live our lives.

U-M researchers in disciplines ranging from robotics and law to public policy and urban planning are partnering with government and industry to develop and integrate new vehicle technology that helps reduce traffic crashes, decrease fuel consumption, cut emissions and expand accessibility to transportation.

37,461

people killed in motor vehicle crashes in 2016

90 percent

of car crashes in the U.S.
are thought to involve
some form of driver error

200+ RESEARCH AWARDS

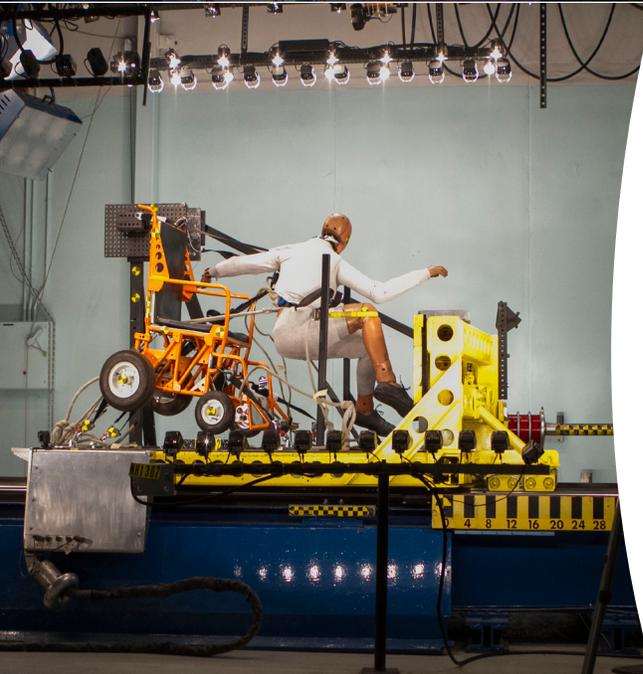
totaling more
than \$118 million
for transportation
and mobility
projects at U-M
since 2016



Mobility Research at U-M

Urban Test Facility and Deployments

Working with the Michigan Department of Transportation, U-M designed the Mcity Test Facility — the first purpose-built proving ground for testing connected and automated vehicles and technologies in simulated urban and suburban driving environments. The facility is operated by Mcity, a U-M research center that also funds academic research and works with partners to deploy connected and automated vehicles, including the world's largest connected vehicle and infrastructure deployment in Ann Arbor.



Safe, Equitable and Efficient Research

For more than 50 years, the U-M Transportation Research Institute's mission has been to eliminate the negative aspects of our current transportation system, while identifying mobility solutions for all, especially vulnerable road users. With a multi-million dollar research program, broad faculty expertise and research partners in government and industry, the institute remains at the forefront of connected and automated vehicle research and testing, sustainable mobility systems, transportation data fusion and analysis, and the efficient movement of heavy freight.



The Future of Robotics

Autonomy is about handling the unknown. Robots need to be able to navigate and map new environments, manipulate unfamiliar objects, cope with unforeseen circumstances, and carry on in spite of malfunctions. A new robotics facility at U-M will feature a three-story fly zone for autonomous aerial vehicles, an outdoor obstacle course for walking robots, high-bay garage space for self-driving cars, and dedicated space for rehabilitation and mobility robots, such as prosthetics and exoskeletons.