Department of Transportation
Supporting U-M Research to Serve the World

The Department of Transportation (DoT) partners with researchers at the University of Michigan to ensure a safe, efficient and modern transportation system, which improves the quality of life for people nationwide, while increasing the productivity and competitiveness of workers and businesses.

As a key external supporter of research and scholarship at U-M, DoT funding allows researchers to develop and integrate new vehicle technology that helps reduce traffic crashes, decrease fuel consumption, cut emissions and expand accessibility to transportation.

$8M
Research Expenditures during Fiscal Year 2019

1%
of Overall
U-M Federal Support

45 Active Projects

DoT grants annually support U-M researchers in a wide variety of roles:

- 41 Faculty
- 6 Postdoctoral Fellows
- 12 Graduate Students

For more information about U-M research, visit research.umich.edu
DoT-Funded Research Highlights

Michigan’s Mobility Ecosystem

With support from DoT, U-M researchers are developing and testing self-driving technologies at the Mcity Test Facility, the American Center for Mobility and in Detroit.

The collaborative is working to develop a process to evaluate the safety of automated driving systems from simulation to test tracks. It also focuses on future services and business models around driverless vehicles that improve the quality of life for the senior population in Detroit and cities across Michigan.

Reducing Traffic Congestion

U-M researchers, with funding from the DoT Center for Connected Automated Transportation, are working to reduce traffic and congestion in metropolitan and urban areas.

Traffic lights at intersections are traditionally regulated with a base plan developed using aggregated historical data. But with sensors and cameras in a connected network, researchers aim to make real-time adjustments to the base plan to improve traffic flow in unpredictable situations.

Safety Behind the Wheel

Using data from the DoT National Highway Traffic Safety Administration and the Centers for Disease Control and Prevention, U-M researchers compared fatality rates from road crashes with five leading causes of death for each state and the District of Columbia.

Their research shows that Rhode Island has the fewest road fatalities as a percentage of all deaths, while Wyoming has the highest traffic crash fatality rate.