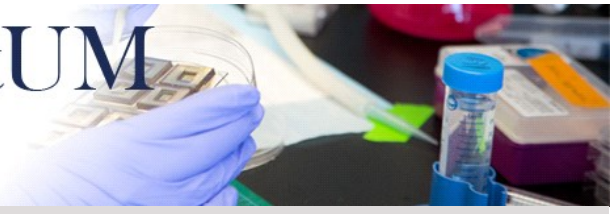


momentUM

nrcr newsletter



November 2013

Welcome to the November issue of momentUM. This month we will share our 2013 NCRC Annual Report which focuses on how connected, vibrant and flourishing NCRC has become over the years.

I am very excited that U-M researchers will be utilizing 30 acres of NCRC to test their recently approved plans for automated vehicles.

Wishing you a happy holiday season and a wonderful new year!

[David Canter](#), Executive Director, NCRC



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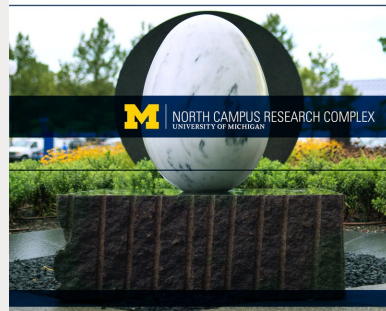
NCRC Annual Report 2013

Connected, Vibrant and Flourishing

We are very excited to announce the release of the NCRC Annual Report 2013. Our theme this year for the Annual Report is Connected, Vibrant and Flourishing. NCRC is connected, as proven in a May 2013 survey, where results show that nearly 60% of the participants have a sense of collaboration here. NCRC is vibrant, because we now have over 2,200 occupants and thousands more that travel to NCRC for meetings, seminars and events. NCRC is flourishing, because we are continuing plans for future development and collaboration.

"The North Campus Research Complex has two stated missions: to expand the university's strengths in translational research, and to help lead the resurgence of the Michigan economy. I'm proud of how far we have come, just four years into the NCRC acquisition, in accomplishing those missions. Our commitments to collaboration and partnerships, to state of the art research and lab space, and to supporting complex research programs built on the University of Michigan's ability to attract the most excellent and innovative researchers, programs, and private companies in the world, and make possible advances in research that can translate valuable research discoveries into better human health."

- **David Canter**, Executive Director, NCRC



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U-M Researchers Will Use 30 Acres of NCRC as Test Environment

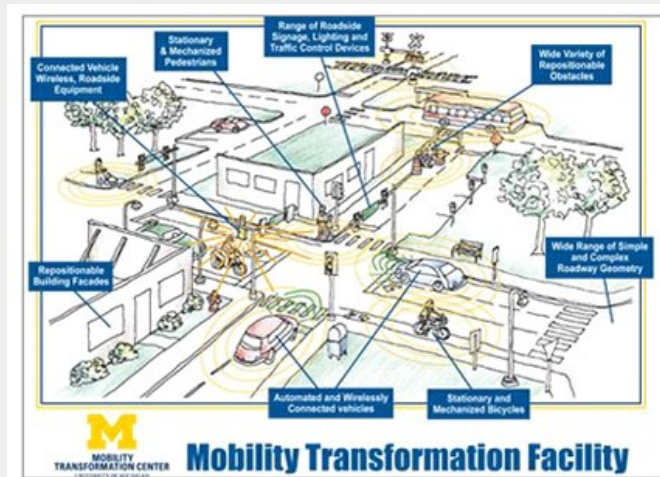
New era of connected and automated vehicles

The University of Michigan Board of Regents approved plans to proceed with the design of a unique environment for testing connected and automated vehicles.

The facility, which simulates a dynamic urban environment, is a critical element of a joint project with the industry and government to develop and implement an entire system of connected and automated vehicles on the streets of Southeastern Michigan by 2021.

"There have been a host of innovations in this arena in recent years, but one of the major challenges ahead is to ensure that these vehicles can perform safely and reliably in a complex urban setting," said Peter Sweatman, director of the U-M Mobility Transformation Center, which is leading the initiative. "Testing a workable system of such technologies in a realistic off-road environment is an essential step before a significant number of vehicles can be safely implemented on actual roadways."

Occupying 30 acres at the U-M's North Campus Research Complex, the novel test environment will include approximately three miles of roads with intersections, traffic signs and signals, sidewalks, benches, simulated buildings, street lights and obstacles such as construction barriers. Current plans call for the facility to be completed by fall 2014 at a cost of about \$6.5 million.



Artist's conception of a novel test facility that U-M researchers will use to help usher in a new era of connected and automated vehicles. Drawing by Steve Maggio, The Maggio Line.

"Connected and automated vehicles provide a new platform for safety improvements, better traffic movement, emissions reduction, energy conservation and maximized transportation accessibility," Sweatman said. "The new facility will help the MTC accelerate and integrate innovations that will lead to a commercially viable automated mobility system that will fundamentally transform mobility in our society."

According to Stephen Forrest, U-M vice president for research, the scope of the challenge goes far beyond technology.

"Developing and implementing a realistic approach to moving both people and freight requires that we integrate scientific, technical, economic, social and policy considerations," he said. "The MTC will convene the required expertise from across campus as well as from the industry and government to pave the way for the future."

Forrest says the initiative holds great promise for innovation and change.

"The most exciting prospect is the enormous economic and technological opportunity MTC offers to our region and the U.S. by literally reinventing the automobile more than a century after its first introduction on our nation's roadways," he said.

Launched last spring, the MTC builds on U-M's broad base of expertise and experience working with the industry and government on transportation research over the years. With \$25 million in funding from the U.S. Department of Transportation, U-M recently implemented the world's largest on-road vehicle-to-vehicle and vehicle-to-infrastructure model deployment in Ann Arbor, with more than 3,000 users. This project, which includes several industry participants, is providing data to inform future policy decisions by the USDOT.

Other activities under way in the region are also laying the foundation for the new mobility system. For example, the Michigan Department of Transportation is installing unique "smart" infrastructure across Southeastern Michigan. And the region's industrial powerhouse of automotive R&D is deeply engaged in automating vehicles for use by consumers and businesses.

Funding for the new research facility will be provided by U-M's Office of Research, College of Engineering, Transportation Research Institute, Energy Institute and Office of the Provost, in partnership with the MDOT.

NCRC Metrics: Did You Know?

NCRC FACT SHEET

< 2,200
People work at
Michigan's NCRC
October 2013



Growth

- 7 Research Programs
- 178 Faculty Members
- 23 Venture Accelerator companies with 89 employees
- 330+ New jobs created

Community



83%
Percent satisfied
with their quality
of life at NCRC
(2013)



1
New Cafeteria



5
Art Exhibits FY13

Partnerships



Event Attendees

369
Total U-M events since
2010



Finances

- Operating expensed 15% less than budget in FY10-13
- \$108M to acquire in 2009
- \$41M total capital expenses FY2010-13
- \$58M operating expenses FY2010-13

Bus Service

5 regular U-M and city bus service connections including the Research Link (every 15 minutes until 7PM), Commuter Bus South, Commuter Bus North, Northwood Bus, and AATA



Number of Occupants



Space Usage



Key Facts

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