December 19, 2016

The Honorable Anthony Foxx
Secretary
U.S. Department of Transportation
1200 New Jersey Ave, SE
Washington, D.C. 20590

Re: Designated Automated Vehicle Proving Ground Pilot

Dear Secretary Foxx:

The Iowa City Area Development Group (ICAD), in partnership with the University of Iowa (UI) National Advanced Driving Simulator (NADS), is pleased to submit the following proposal to have the Iowa City/Cedar Rapids Corridor designated as a U.S. DOT Automated Vehicle Proving Ground. Our response highlights our region's assets, history, and commitment to the advancement and safe deployment of automated vehicle (AV) technologies.

The Iowa City/Cedar Rapids Corridor offers a diversity of testing environments not seen in other established automated vehicle proving grounds readily available today. Our Corridor's Automated Vehicle Proving Ground testing environments would include: closed course, controlled access highway, urban core, university campus, highways, secondary roads, paved roads with unmarked lanes, gravel roads, and the country's largest and most expansive simulated virtual proving ground (at the NADS). With Iowa's strong agricultural economy, we offer a variety of secondary and gravel roadway types that will ultimately require testing when planning for automated and connected vehicle technologies. Agricultural implements are common on our secondary and gravel roads throughout the year, with peak traffic during spring planting and fall harvest. During these times, it is common for agricultural vehicles to enter and depart roadways at unmarked and unexpected locations, providing a unique opportunity for automated vehicle technology testing.

Uniquely situated at the intersection of two major national interstates, I-80 and I-380, the Iowa City/Cedar Rapids Corridor not only offers a variety of roadway landscapes, but also diversity in our roadway users. The region has some of the most significant commercial and heavy trucking traffic in the U.S., with several large-scale commercial trucking companies based in or having close relationships within the state. Additionally, the Corridor has frequent commuter travel to and from both cities due to sizeable business and university employment opportunities in each community.

The Iowa City/Cedar Rapids Corridor also offers climate variety, with all types of seasonal road conditions, including rain, snow, ice, fog, and wind. As we've seen in Iowa, weather not only affects driving conditions, it also impacts the infrastructure and roadways themselves. Roadways that endure all four-seasons are susceptible to lane, lane marking, and concrete imperfections, all of which directly impact the safety of the vehicle. Testing of imperfect roadways and lane markings will be an essential consideration to the future of automated vehicle technologies.

Leveraging this diversity in testing environments with the inclusion of exceptional local businesses and institutional partners makes the Iowa City/Cedar Rapids Corridor an ideal destination for automated vehicle technology advancement and testing. The Corridor is home to large, even multinational companies like Rockwell Collins, CRST, and Hummer Trucking, as well as small businesses like Innovative

Software Engineering (data telematics), Connect Five, and Drive Spotter. Our institutional partners include the UI, Iowa State University, and Kirkwood Community College, all offering individual strengths in the way of research, development, testing, and commercial driver education. An Automated Vehicle Proving Ground designation will open the door for even more new and innovative partnerships to be established within the Iowa City/Cedar Rapids Corridor.

Our region is already poised for vehicle innovation. The Iowa DOT has embarked on the "Automated Vehicles Ready Environment" project with HERE. The project features high definition mapping of the I-380 corridor connecting the Iowa City and Cedar Rapids communities. The resulting HD maps will be coupled with a cloud service that offers various V2X opportunities, all of which will further enable the testing and support of automated and connected vehicle technologies. The NADS is a key institutional partner on the Iowa DOT's Automated Vehicles Ready Environment and will be overseeing the demonstrations of the AV ready technologies.

The following pages detail our solutions to the mandatory requirements regarding safety and data management. Our proposed role in advancing automated vehicle technology is highlighted throughout the document. The NADS and its research center will serve as the primary point of contact to safely deploy and manage the advancement of the technology. The NADS' established safety and data practices will serve as the foundation for all testing considerations in the region and will be adjusted to uniquely address requirements.

We appreciate the opportunity for the Iowa City/Cedar Rapids Corridor to be designated as an Automated Vehicle Proving Ground. We strongly believe that our available testing environments, existing legislation, investments made in infrastructure, world-class facilities like the NADS, and our local partner businesses, institutions, and resources make us an ideal fit. Above all, in whole, we believe our Corridor offers broad level support across a variety of institutions and organizations and a diversity in its roadways, users, and weather not typically seen in other established proving grounds. It's in these realistic, everyday, highly variable conditions where the true test of automated vehicles and technologies will take place.

We sincerely look forward to the opportunity to working with others in our collective Community of Practice to encourage new levels of public safety while contributing to a strong, innovative foundation that safely advanced automated vehicle technologies.

Sincerely,

Thomas Banta

Daniel McGehee,
Director, National Advanced Driving Simulator

Thomas Banta
Director, Strategic Growth, ICAD Group

The proposed Iowa City/Cedar Rapids Corridor Automated Vehicle Proving Ground is located in Eastern Iowa, in adjacent Johnson and Linn counties, spanning the I-80 and I-380 highway/interstate corridors. The following proposal is submitted by the Iowa City Area Development Group (ICAD) and the University of Iowa (UI) National Advanced Driving Simulator (NADS), with support from the Iowa DOT, Iowa Economic Development Authority, and our respective communities.

Mandatory Criteria

Designated Safety Officer
Steve Gent P.E., Office Director, Traffic and Safety, Iowa Department of Transportation

Commitment to Sharing Approaches to Safety and Safety Data Generated
As a designated Automated Vehicle Proving Ground, we agree to share with the Community of Practice any and all safety-related practices and data collected as a result of testing operations in our region, as well as attend and participate in regular quarterly meetings of Safety Officers. Additionally, we would welcome input from automotive industry leaders and the U.S. DOT to assist us with building the best practice safety and data requirements.

Proposed Contributions

Eligibility and Administration of an Established Automated Vehicle Program
The NADS and ICAD believe that our collective established connections in the automotive industry, research, development, testing, local business, and various levels of government meet and exceed the mandatory eligibility requirements.

Capability to Provide Leadership in Mobility Challenges
The NADS continues to be a key contributor and leader in the advancement and understanding of automated vehicles and their safe deployment. As an organization, the NADS is the nation's largest and first simulator of its kind anywhere in the world, making the UI a leader in vehicle research. For more than 20 years, researchers at the NADS have studied the connection between humans and vehicles through driving simulation and on-road research. Our contributions have helped to deepen understandings of countless transportation challenges, including those relating to automated vehicle technologies.

Individually, as leaders in the transportation field, NADS researchers hold positions on various regional and national committees within the Transportation Research Board (TRB) and other specialized transportation-industry committees. Locally, our researchers hold memberships on community and state committees focused on vehicle technology, driver distraction, and human factors. Every year, NADS researchers publish findings in dozens of reputable national and international academic journals and present at conferences worldwide. The most recent examples of our staff's work include NADS' involvement in the NTSB and NSC expert panel discussion, "Reaching Zero Crashes: A Dialogue on the Role of Advanced Driver Assistance Systems" and in leading a TRB workshop at the Automated Vehicles Symposium titled, "Human Factors in Road Vehicle Automation: Look Ma', No Hands! MyCarDoesWhat: Preparing the American Public for Automated Vehicles and Changing Transportation Network."
Our leadership experience, both as a whole and individually, provides our team with great depth to make contributions at all levels to the solution of both long-range and immediate mobility challenges through the testing and deployment of automated vehicle technology.

Proposed Contributions to the Community of Practice
The NADS and ICAD will adapt existing safety management plans in place at the NADS to reflect the needs of highly automated and connected vehicle technologies. This will include engagement and welcomed participation from key players all across the automotive spectrum. Testing data and the proving grounds will be open to entities looking to do testing, and opportunities are planned for the general public to learn, understand, interact, and be a critical component to the testing. Public engagement will be critical so that researchers and the industry can best understand and identify the driver and consumer education elements and gaps related to the deployment and introduction of automated and connected vehicle technologies. All of our testing data, public engagement, and consumer education research will be made fully available upon NHTSA's review and approval of all reports.

Ability and Willingness to Maintain a Working Relationship
The NADS has a strong background in managing and conducting research grants for the U.S. DOT and has built strong relationships with several individuals within the Department. The NADS and ICAD believe constant and nimble communication is vital to the success of an Automated Vehicle Proving Ground. The U.S. DOT will be included in all management plans created and developed by the NADS and ICAD. Additionally, the NADS and ICAD will work closely with the Department at every intersection to ensure that comprehensive analysis and consideration is given to each and every issue that may arise during the testing and deployment of automated vehicle technologies.

NADS staff will continue to participate in key industry meetings and conferences, such as the TRB, and will work closely with the Department to identify critical meetings, conferences, and research opportunities that may be enhanced by our Automated Vehicle Proving Ground.

Commitment to Safety

Demonstrated Capability to Control Risks through Safety Precautions
The NADS brings a wealth of experience and knowledge regarding vehicle testing environments and the safety of subjects in a vehicle. The UI's current human subject protocols can serve as an initial starting place for human subject safety considerations on the road, as well as inside a virtual environment. The UI maintains several protocols to ensure the safety and comfort of individual(s) in a vehicle, as well as a number of backup plans that can immediately go into effect should a subject become ill, uncomfortable, or desire to end their drive.

Additionally, the NADS and ICAD will research existing safety management plans from entities such as Mcity, Virginia Tech Transportation Institute, IIHS Vehicle Research Center, the U.S. DOT, and the Iowa DOT to develop, adapt, and model our safety management plan appropriately for the testing, deployment, and operation of automated vehicles. The safety management plan will be considered a living document that will frequently be evaluated and updated as protocols, testing, and deployment evolve.

Specific Safety Considerations Met
The NADS' mission is to improve driving safety for everyone by researching the connection between humans and motor vehicles. This commitment to safety extends to all of our research activities and will be likewise adhered to in the Automated Vehicle Proving Ground. As previously mentioned, the UI adheres to current human subject protocols. Additionally, the NADS has a demonstrated record of on-road safety while carrying out advanced vehicle technology research, as evidenced by our recent

Technology Demonstration Study investigating subjects' attitudes and knowledge of these systems during ride-along demonstration drives.

The NADS and ICAD commit to fully consider all safety protocols related to operation, deployment, and testing of automated vehicle technology. This includes, but is not limited to: proving ground personnel protocols, human subject protocols, testing protocols, public roadway testing protocols, and design practices. Additionally, communication and risk management plans will be created alongside all testing and safety protocols. All staff and individuals involved in the testing and deployment will be properly trained and tested on the protocols and plans. As mentioned previously, the NADS and ICAD will seek continuous improvement with quality control and quality assurance metrics of all safety management plans.

Research, Application and Data Sharing

Applicable Solutions for the Broader Region and Surrounding Corridor for Improved Mobility
Comprehensively, the NADS and ICAD believe that the state of Iowa as a whole offers a full lens to study, test, and deploy automated vehicle technologies. The Iowa DOT's multi-phase project, "Automated Vehicles Ready Environemnt", that will lay the foundation for the future of transportation and mobility in Iowa. The project focuses on portions of I-80 and I-380 from Cedar Rapids to Iowa City, a region known as the "Corridor" (the same region proposed in this Automated Vehicle Proving Ground application). The Corridor has frequent commuter travel to and from both cities due to several employment opportunities between large businesses such as Rockwell Collins and Aegon in Cedar Rapids and the UI and UI Hospitals and Clinics in Iowa City. Additionally, the Corridor has a great deal of commercial motor vehicle traffic, as both Iowa City and Cedar Rapids are home to several trucking companies such as Heartland Express and CRST.

The Iowa DOT's Automated Vehicles Ready Environment Project will leverage technology to create a more efficient and safe road network. Initially, the project will map the I-380 and I-80 corridor with high definition mapping. As part of this, HERE will set its open location platform, which includes real-time predictive traffic maps, to allow transportation officials the ability for automated and connected vehicles to better communicate with the infrastructure and other vehicles. The project includes information integration to the vehicle regarding the state traffic management center data, roadway conditions, and real-time traffic conditions from the cloud to the driver and vehicle. The vehicle and driver can also communicate reported issues to the cloud as well, building for an overall infrastructure system that includes vehicle to X and X to vehicle.

Vehicle connection to roadway and traffic conditions will be a vital component to the overall testing of automated vehicles. The NADS and ICAD are uniquely situated in the mapped corridor and the NADS currently serves as a project partner on the Iowa DOT's Automated Vehicles Ready Environment Project.

Additionally, the NADS can offer a digitally mapped automated vehicle proving grounds known as Springfield (to be detailed in a following section).

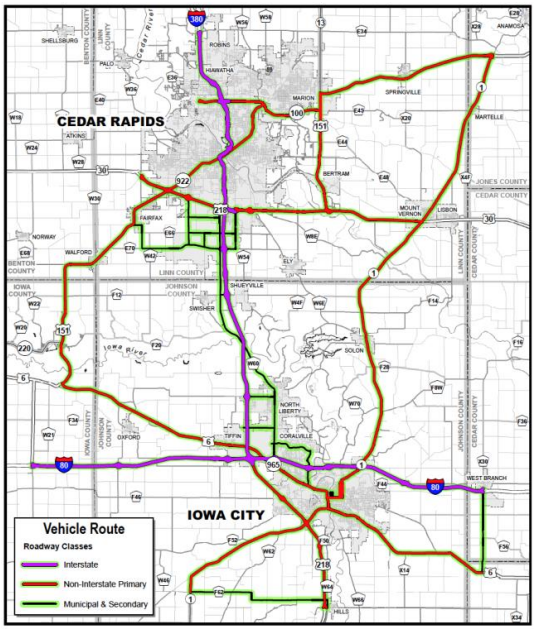

Figure 1: The Iowa DOT and HERE Automated Vehicle Technologies Project Study Area.
The project area and roads to be mapped are subject to change as the project progresses.

Other regional testing environments include three closed course options, all offering different opportunities:

1. Speedway (closed test track and surrounding roadways) – this test track in the Cedar Rapids area includes direct access to urban areas and is in close proximity to the interstate system, as well as to heavy industrial areas.

2. Unique rural parcel – a 2,000-acre rural parcel of land that is available for closed secondary road testing. We believe this parcel is an opportunity unlike any other for three reasons:
    a. This unique parcel offers the ability to test imperfect road scenarios and imperfect lane markings in a rural setting
    b. Although our society is moving towards higher levels of urbanization, rural settings and landscapes account for 72 percent of the nation's land area[1]. While those living in these areas only accounts for 14 percent of U.S. population, these residents include some of the people that can benefit the most from automated vehicles, including individuals in poverty with low educational attainment, poor access to necessary services and goods, and limited transportation options.
    c. The parcel's location to surrounding agriculture offers a range of farm-to-market automated vehicle testing scenarios

3. Mid-size urban airport landing strip – an urban airport has committed to the use of one of its defunct runways for automated vehicle technology testing. The NADS and ICAD would have the ability to edit and adapt the closed environment to test in various lane marking conditions prior to going on-road. Additionally, this testing environment offers close proximity to an institutional-college urban core, as well agricultural and the interstate system.

[1] Rural America at a Glance, 2016 Edition. United States Department of Agriculture. https://www.ers.usda.gov/webdocs/publications/eib162/eib-162.pdf

Each of these three closed environments offer a unique perspective for testing and touch on some of the greatest potentials of automated vehicles from the standpoints of equity, efficiency, and innovation. Few data currently exist from an agricultural or rural area for automated vehicle technology. Iowa's small "big" town feel offers the quick maneuvering and relatively low traffic congestion throughout the region (compared to a larger sized urban core). This means more time spent on data collection and testing rather than commuting from test site to test site, while experiencing a variety of driving conditions and scenarios along the way.

The NADS and ICAD view testing taking place at various levels, with each level offering a unique opportunity while always centering around the importance of safety. Before testing is done on-road, it can be simulated at the NADS, resulting in findings that can then drive the protocols and testing scenarios for closed course testing. Finally, this can be iterated in on-road public scenarios. Each level can offer additional data and build for the next level. Additionally, the beauty of simulation can offer thousands of scenarios, variables, and conditions that can be done in much less effort than building a new road or stoplight, for example.

Research and Extension Resources Available

In addition to the testing tracks noted above, as well as Iowa's diverse roadway and landscape options, the NADS has the capability and experience of collecting a variety of simulation, naturalistic, and on-road data. The NADS offers the unique opportunity to carry out testing and research activities in a variety of facets to fully and safely measure automated vehicles and human factors considerations. The NADS is already home to a virtual automated vehicle proving grounds environment, Springfield, which covers a total of 285 square miles, more area than the City of Chicago. Hundreds of miles of roadways, roadway types, intersections, traffic lights, and signs are included in the virtual environment. Springfield offers experimental control of automated vehicles in a variety of conditions, automation levels, and scenarios that cannot be easily or safely replicated on-road or even in a test track environment.

Additionally, the NADS has a full suite of simulator cabs including: the traditional passenger vehicle cab (recently updated in 2016), heavy truck cab, and tractor cab, with the possibility to expand the cab types. The NADS also has a smaller, mobile simulator called the miniSim™. The NADS research team has recently partnered with another center at the UI to carry out public outreach and education with the miniSim™ around advanced driver assistance technologies. This program could easily be expanded for outreach efforts with the general public for the Automated Vehicle Proving Ground. The NADS suite options also include both an on-road instrumented vehicle ready for use, as well as experience with on-road, naturalistic driving data collection.

Figure 2: Connected vehicle testing done at the NADS in 2012.

Finally, NADS researchers possess a wealth of experience in several human factors topics including, but not limited to: distracted driving, impaired driving, demographic-related driving, automated vehicle and advanced vehicle technologies, and cognitive and human-machine interface considerations.

Disseminating Results through an Education Program
The UI has firsthand experience in building a comprehensive national education campaign dedicated to consumer outreach and education regarding advanced driver assistance technologies. During development of the MyCarDoesWhat campaign, the UI engaged with several critical stakeholders, as well as drivers, regarding the impact of the advanced driver assistance technologies that are quickly inflating American roadways. The UI partnered with the NSC to create, build, and manage the MyCarDoesWhat campaign which seeks to educate consumers about the technologies in their vehicles and how they can best interact with them. Some of these technologies are the initial stepping stones to higher levels of automation and have the ability to prevent a crash from ever occurring. However, if drivers are not engaging and utilizing the technologies effectively or to their full benefit, it's unsure if the safety potential will ever be translated to the roadways. Backed by data-driven decisions and carefully drafted messages that rely on the key concepts of the technologies, the UI's campaign aims to fill the knowledge gap experienced by many consumers. The campaign's foundation is vehicle and human factors research that guides the overall message development of each and every technology.

The UI considers the campaign to be one of the first of its kind dedicated to improving driver knowledge and understanding of these lifesaving technologies, believing its success is due to the data behind each and every decision, message, and direction of the campaign. Throughout the course the MyCarDoesWhat campaign, the UI has continued to contribute campaign research findings to national conferences and made available on the web as well as press releases to attract the public to understanding the research.

Commitment to Open Data and Sharing Performance Metrics and Results
The UI has a significant background in both collecting data, securing and managing data, and making the data publicly available. Based on the data variables and formats identified for collection, the UI can fully develop a comprehensive data plan that includes the analysis and reports that will be distributed and made publicly available. The NADS and ICAD will work closely with NHTSA to identify overall performance metrics best suited for collection in the Iowa region. To advance the automated vehicle landscape across the nation, the NADS and ICAD will commit to sharing their performance metrics and results collected based on the identified performance metrics. All reports and data performance metric methodologies will be thoroughly documented and made available via the web. The data metric performance methodologies can provide a dialogue and starting place for key industry and national players to evaluate strengths in the current data platforms, weaknesses or what may be missing, and how to best plan and consider the data needs of automated vehicles in the future from a regulatory and evaluation standpoint. Detailed below are the UI's data management best practices as applied to human subject studies and data.

Current UI Data Management Practices: The UI has established data management protocols that ensure that data is collected, stored and archived in the way that ensures data integrity, redundancy, and security. This applies to data that is collected using a variety of mechanisms: naturalistic data recorders, instrumented on-road vehicles, and simulators installed in local or remote locations. In order to ensure data quality and consistency in data reduction, all data is automatically transferred to the NADS each night via a secure wireless link. The transfer utilizes a security-hardened internal tool developed by the NADS to facilitate file transfers for large amounts of sensitive information. Unique logins on this system are tied directly into the UI's enterprise Active Directory system, which requires significant password

settings. Following receipt of the data, the NADS conducts verification procedures to ensure intact data files have been received adequately. Any issues with data files are reported to the data collection team.

Project-related files stored at the NADS are mandated to have at least two copies of any file recorded. Each of these two copies are stored at different secure datacenters, managed by UI Information Technology Services Enterprise Data Management staff. Data access is limited using explicitly-defined security groups.

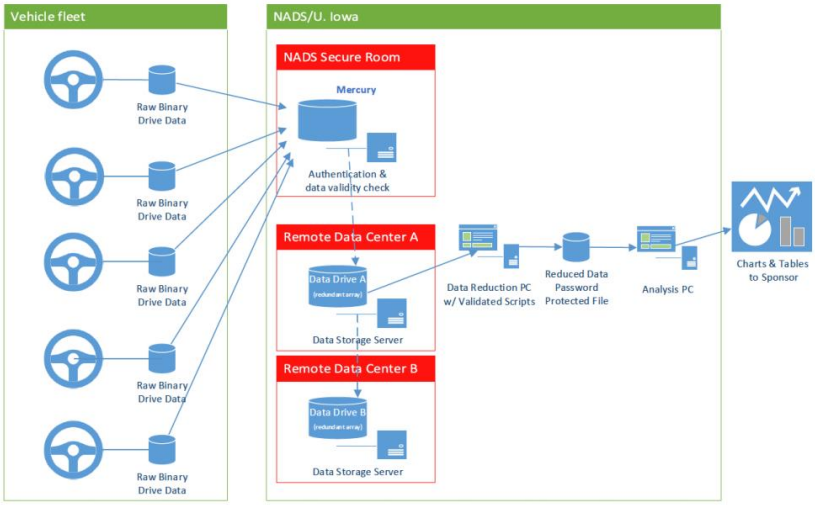

Figure 3: Flowchart of UI data management practices

Demonstrated Investment

As described in detail on page 5 of this proposal, the Iowa DOT has embarked creating a digital mapping corridor and cloud service that will enable automated vehicle technologies. Part of the overall project includes significant information cloud will directly go into the vehicle. This project also includes infrastructure on-road probe upgrades and traffic signal communication to the cloud and the vehicle to enable vehicle control. The NADS is working closely with the Iowa DOT and HERE to possibly take the digitally mapped data of the corridor and bring it into the simulator to allow for simulation testing. The NADS' Springfield virtual automated vehicle proving grounds environment is ready for consumption and testing, allowing for quick, agile testing in a variety of driving scenarios, conditions, and variables.

Johnson County, home to Iowa City and the UI, realizes the promise of automated vehicles and advanced vehicle technology and, in 2014, passed an early proclamation permitting automated vehicle testing on area roads. Linn County, located directly north of Johnson County and home to Cedar Rapids and the Eastern Iowa Airport, recently passed a similar proclamation enabling open road testing as well. A copy of both proclamations can be found in the appendix of this document. These two adjacent counties that form the proposed Iowa City/Cedar Rapids Corridor Automated Vehicle Proving Ground are the location of the HD mapped corridor that is being mapped by HERE and the Iowa DOT.
Finally, the NADS has completed several research studies related to higher levels of vehicle automation and connected vehicles both in its simulators and on-road. The NADS' current involvement in the Iowa DOT Automated Vehicles Project with HERE includes various levels of vehicle control based on cloud and high definition mapping data that will be collected throughout the project testing and demonstration phases.

Readiness

Designated Facility Open for Testing
The NADS, located on the UI Research Campus (2401 Oakdale Blvd, Iowa City, IA 52242), is home to multiple trials and testing operations from a variety of partner and sponsor organizations and is currently open and available for research and testing.

Other additional closed course testing areas noted in this response will also be available as well by January 1, 2018. As resolved in local government proclamations, on-road testing is supported by our communities. At the time of Automated Vehicle Proving Ground designation notification, the NADS and ICAD will begin work immediately to develop the necessary safety management and other plans to best prepare for the deployment of automated vehicle technologies.

Facility Supports Testing by Multiple Users or Data to be Shared Openly
The NADS has experience working with a variety of organizations, agencies, companies, and institutions in the government, military, and industry sectors looking to conduct various types of research through the NADS' full suite of simulators and on-road vehicles. As an Automated Vehicle Proving Ground, the NADS and ICAD will welcome the utilization of our virtual proving grounds, as well as the use of our closed test-track options and public roadways. The NADS will work closely with interested parties and organizations in the data collection component and create data management and marketing plans for dissemination of the data for public consumption.

Designated Facility Point of Contact
Dr. Daniel McGehee, Director, National Advanced Driving Simulator
Email: Daniel-mcgehee@uiowa.edu
Phone: 319.335.6819
Link to bio: http://www.nads-sc.uiowa.edu/staff.php?showPerson=27

Engagement with Affected Communities
Both Johnson and Linn County have proclamations allowing for automated vehicle testing. The Appendix of this document includes a joint letter of support from Mark Lowe, Interim Director, Iowa DOT, and Debi Durham, Director, Iowa Economic Development Authority. The NADS is part of the UI community and has engaged in several conversations with key high level administrative staff at the university to plan and welcome an automated vehicle technology proving ground.

Adherence to Laws, Regulations, and Federal Policy

Adherence to All State and Local Laws and Federal Regulations
The NADS testing protocols align and adhere with all state, local, and federal laws. We will work closely with the Iowa DOT, other Automated Vehicle Proving Grounds in the Communities of Practice, and related Federal agencies to ensure we are in compliance at all times.

Adherence to Primary Subject Areas for Testing or Deployment of L3-L5 Systems on Public Roads
The UI, ICAD, and Iowa DOT are aware of the recently released *Federal Automated Vehicle Policy: Accelerating the Next Revolution in Roadway Safety* and will be in compliance for all testing done in our region and will work closely with NHTSA and the DOT to ensure compliance and evaluation throughout the deployment and testing.

APPENDIX

Testing Environments & Partner Organizations (logos displayed below)

Virtual

National Advanced Driving Simulator, University of Iowa
(Human Factors, Driving Simulation, and V2V systems)

Closed Course

Iowa City Municipal Airport, Iowa City, IA	Dedicated runway access
Hawkeye Downs Racetrack, Cedar Rapids, IA	Access to track and surrounding roads
Iowa Speedway, Newton, IA	Access to surrounding roads on track campus
Kirkwood Community College, Cedar Rapids, IA	Truck driving school testing grounds

Open Road

Digitally Mapped – I-380/80 Corridor, Cedar Rapids & Iowa City, IA
Urban Center – Downtown Iowa City and Downtown Cedar Rapids
College Campus – University of Iowa, Iowa City, IA Kirkwood Community College, Cedar Rapids, IA
Secondary and Gravel Roads – Johnson County and Linn County – Additional counties to be added in 2017

Agricultural Land & Airspace

Field/Field to Highway – 2,000-acre Farm Field Parcel – Eastern Iowa Airport (CID), Cedar Rapids, IA

December 13, 2016

Anthony Foxx
Secretary of Transportation
Office of the Secretary, U.S. Department of Transportation

RE: Designation of Automated Vehicle Proving Grounds Pilot

Dear Secretary Foxx:

On behalf of the Iowa Department of Transportation and the Iowa Economic Development Authority, this letter serves as a statement of support for ICAD Group and the University of Iowa, National Advanced Driving Simulator's submission for Designation of Automated Proving Grounds Pilot.

We believe this region of Iowa is uniquely positioned to provide a robust, yet diverse, set of testing environments for technology providers, manufacturers and related entities. We support the advancement of this technology through shared data and resources amongst the communities of practice with a primary commitment to safety. We will ensure the adherence to all state, local and federal laws with regard to highway safety and testing.

We look forward to working with your office and the Communities of Practice to safely advance all aspects of automated vehicle technology and leverage the assets and resources available to our respective organizations in doing so.

Sincerely,

Mark Lowe
Interim Director, Iowa Department of Transportation

Debi Durham
Director, Iowa Economic Development Authority

Johnson County Proclamation

PROCLAMATION
ENCOURAGING AUTONOMOUS VEHICLE TESTING AS A
PUBLIC SAFETY AND ECONOMIC DEVELOPMENT INITIATIVE

WHEREAS, the next technological transformation that will profoundly affect our lives will be the introduction of passenger and freight automobiles operating with autonomous functionality. These vehicles have the potential to one day eliminate traffic fatalities caused by human error and distraction. Furthermore, intelligent vehicles will reduce congestion, emissions and the need for costly additions of lanes to busy roadways; and

WHEREAS, the University of Iowa and its related research endeavors, most notably, The National Advanced Driving Simulator and the Public Policy Center, have been at the forefront of advancing innovations in vehicle-to-vehicle communications, sensor technology, human factors, artificial intelligence, and public policy issues critical to the success of this transformational change; and

WHEREAS, many companies in our region have been successfully pioneering similar vehicle systems in the agricultural, aerospace and related fields, and there exists a cluster of software and technology companies whose development can be encouraged by supportive communities; and

WHEREAS, it is our stated goal to engage in strategic economic development initiatives that will create high-paying employment opportunities to strengthen our overall economy and provide benefit to all citizens. We realize that those communities and states that are first to embrace this life-saving and transformational technological advancement will stand to gain the most potential economic benefit.

NOW, THEREFORE, be it resolved that we, the Johnson County Board of Supervisors, do hereby proclaim that Johnson County welcomes the testing and operation of intelligent vehicles on the streets and roads over which we have jurisdiction in accordance with applicable law, as a means to encourage the advancement of this technology and to create economic benefit, and will, if necessary, work collaboratively with other jurisdictions in Johnson County to address any issues that arise in order to best protect the safety of our citizens.

Signed this 24th day of July, 2014, in Johnson County, Iowa.

RESOLUTION NO. 2016–12– 144

A RESOLUTION SUPPORTING THE DESIGNATION OF THE CEDAR RAPIDS/IOWA CITY CORRIDOR AS AN AUTONOMOUS VEHICLE PROVING GROUNDS

WHEREAS, the introduction of passenger and freight automobiles operating with autonomous functionality has the potential to positively and profoundly affect our lives through reducing or eliminating traffic fatalities caused by human error and distraction, reducing congestion and emissions and reducing the need for costly expansion of busy roadways; and,

WHEREAS, The University of Iowa and its related research endeavors, most notably, The National Advanced Driving Simulator, have been at the forefront for advancing innovations in vehicle to vehicle communication, sensor technology, human factoring and artificial intelligence which are critical to the success of this transformational change; and,

WHEREAS, many companies in the Cedar Rapids/Iowa City region have been successfully pioneering similar vehicle systems in the agricultural, aerospace and related fields; and,

WHEREAS, there exists a cluster of software and technology companies in the Cedar Rapids/Iowa City region which can be grown and complimented through the development of the autonomous vehicle sector; and,

WHEREAS, a stated goal of the Linn County Board of Supervisors is to promote and participate in economic growth opportunities.

NOW, BE IT THEREFORE RESOLVED the Linn County Board of Supervisors welcomes the testing and operation of intelligent vehicles on the roads over which it has jurisdiction in accordance with applicable law, as a means to encourage the advancement of this technology and to create economic benefit, and will, if necessary, work collaboratively with nearby jurisdictions to address any issues that arise in order to best protect the safety of our citizens.

BE IT FURTHER RESOLVED the Linn County Board of Supervisors supports a response to the US Department of Transportation's Request for Proposals for the designation of autonomous vehicle proving grounds.

PASSED AND APPROVED this 7th day of December, 2016.

LINN COUNTY BOARD OF SUPERVISORS

Ben Rogers, Chairperson

AYE:
NAY:
ABSTAIN:

Brent Oleson, Vice Chair

Page 1 of 2

RESOLUTION NO. 78-12-16

WHEREAS, the Cedar Rapids Airport Commission desires to increase our regional economic impact in Iowa's Creative Corridor through community engagement and active regional partnerships; and

WHEREAS, the Iowa City Area Development Group (ICAD) desires to submit a proposal in response to the U.S. DOT Solicitation of Proposals for Designation of Automated Vehicle Proving Grounds Pilot; now therefore

BE IT RESOLVED, that the Cedar Rapids Airport Commission hereby declares its support for ICAD's initiative for Iowa's Creative Corridor to receive designation as proving grounds for autonomous vehicle programs; and

BE IT FURTHER RESOLVED, that The Eastern Iowa Airport welcomes the testing and operation of intelligent automated vehicles on the streets and roads over which we have jurisdiction in accordance with applicable law, as a means to encourage the advancement of this technology and to create economic benefit to the corridor, and will, if necessary, work collaboratively with the other jurisdictions to address any issues that arise.

Passed this 12th day of December 2016.

Marcia Rogers

Marcia Rogers, Chair

ATTEST:

Carroll Reasoner

Carroll Reasoner, Secretary