

United States Senate

WASHINGTON, DC 20510

COMMITTEES:
APPROPRIATIONS
COMMERCE
HEALTH, EDUCATION,
LABOR, AND PENSIONS

February 6, 2024

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

Dear Secretary Buttigieg:

I am pleased to support the City of Madison's (City) application in partnership with Wisconsin Department of Transportation and University of Wisconsin-Madison for funding through the U.S. Department of Transportation's FY 23-24 Advanced Transportation Technologies and Innovative Mobility Deployment (ATTIMD) Program, also known as the ATTAIN Program. If awarded, funding would help to deploy emergency vehicle traffic signal preemption and pilots snow plow traffic signal priority in association with red-light running collision warning systems, through signalized intersections in Madison along US-151, a critical roadway in the region.

Specifically, the City's proposal focuses on anticipating and addressing critical safety concerns by predicting traffic trajectory and red-light running conflicts. The project will also utilize Connected Vehicle technology that will create vehicle-to-infrastructure and infrastructure-to-vehicle communication to enable the City to develop and deploy next generation traffic signal preemption for emergency vehicles such as fire trucks and ambulances. Additionally, the project will enable the City's snowplows to move through the corridor more efficiently to improve the effectiveness of snow plowing operations and to reduce weather related crashes. The pilot project proposes solutions that fit the context, population density, and demographics of the US-151 corridor in Madison and aligns with the transportation needs of the community. The project also investigates whether these technologies can provide context-sensitive solutions to solve real-world challenges, be integrated with existing transportation systems, and be scaled for implementation throughout Madison and other communities.

I strongly support collaborative proposals that improve Wisconsin's transportation infrastructure and help to reduce vulnerable roadway user injuries. For this reason, I respectfully request that full and fair consideration be given to the City's ATTAIN program application. Please keep my office updated on the progress of this application by email at projects_grants@baldwin.senate.gov. Thank you for your thoughtful consideration of this request.

Sincerely,



Tammy Baldwin
United States Senator

MARK POCAN

2ND DISTRICT, WISCONSIN

COMMITTEE ON APPROPRIATIONS

SENIOR WHIP



UNITED STATES
HOUSE OF REPRESENTATIVES

10 EAST DOTY STREET, SUITE 405

MADISON, WI 53703

(608) 258-9800

1026 LONGWORTH HOUSE OFFICE BUILDING

WASHINGTON, DC 20515

(202) 225-2906

POCAN.HOUSE.GOV

January 29, 2024

The Honorable Pete Buttigieg
United States Secretary of Transportation
U.S. Department of Transportation
1200 New Jersey Ave, SE
Washington, DC 20590

Dear Secretary Buttigieg:

I write to you on behalf of the City of Madison in partnership with the Wisconsin Department of Transportation and the University of Wisconsin-Madison regarding the application being submitted to the United States Department of Transportation's FY 2023-2024 Advanced Transportation Technologies and Innovative Mobility Deployment (ATTIMD) Program, also known as the ATTAIN Program.

Funds from the ATTAIN Program will be used to implement advanced transportation technologies to improve safety, mobility, equity, efficiency, and systems performance. This proposal will deploy next generation emergency vehicle traffic signal preemption and pilot snowplow traffic signal priority in association with red-light running collision warning systems. This will be located at the signalized intersections in Madison along U.S. Highway 151, a critical roadway for many communities in the region. Furthermore, the project would leverage existing Smart City investments made in the Smart Park Street Corridor by the City and its partners.

This application focuses on addressing critical safety concerns by predicting traffic trajectory and red-light running conflicts. Specifically, the project will utilize Connected Vehicle (CV) technology that will create vehicle-to-infrastructure and infrastructure-to-vehicle (V2I/I2V) communication to allow for next generation traffic signal preemption for emergency vehicles such as fire trucks and ambulances. The project will also enable Madison's snowplows to move through the corridor more efficiently, improving operations and reducing weather related crashes. This approach aligns with USDOT's strategic goals and priorities, while proposing solutions that fit the transportation needs of the Madison community. The project investigates whether these technologies can provide context-sensitive solutions to solve real-world challenges, be integrated with existing transportation systems, and be scaled for implementation throughout Madison and other communities.

Deploying advanced transportation technologies in this project corridor will strengthen the local transportation system, fuel regional growth, and reduce roadway injuries and deaths. I ask that this application receive full and fair consideration for funding. Please contact Audra Cohen-Plata on my staff with any updates or questions related to this application. She may be reached at (608) 258-9800 or Audra.Cohen-Plata@mail.house.gov. Thank you for your time and attention to this matter.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Mark Pocan', with a stylized flourish at the end.

Mark Pocan
Member of Congress



Wisconsin Department of Transportation
Office of the Secretary
4822 Madison Yards Way, S903
Madison, WI 53705

Governor Tony Evers
Secretary Craig Thompson
wisconsindot.gov
Telephone: (608) 266-1114
FAX: (608) 266-9912
Email: sec.exec@dot.wi.gov

January 29, 2024

The Honorable Pete Buttigieg
Office of the Secretary of Transportation
U.S. Department of Transportation (DOT)
1200 New Jersey Avenue, SE
Washington, DC 20590

RE: Letter of Support for City of Madison's FY 2023-2024 ATTIMD/ATTAIN Grant Application – *Advancing Safety and Emergency Operations through a Regional Connected Vehicle Corridor*

Dear Secretary Buttigieg:

I am pleased to support the City of Madison's application in partnership with the Wisconsin Department of Transportation (WisDOT) and University of Wisconsin-Madison, for funding through the United States Department of Transportation's FY 2023-2024 Advanced Transportation Technologies and Innovative Mobility Deployment (ATTIMD) Program, also known as the ATTAIN Program. The ATTAIN funding will be used to deploy advanced transportation technologies in the creation of a regional connected vehicle corridor that will improve safety, mobility, equity, efficiency, system performance, and infrastructure return on investment. The project highlights red-light running collision warning systems, next generation emergency vehicle traffic signal preemption, and tests snowplow traffic signal priority* to show how improved snow plowing operations can reduce weather related crashes. *Note: Current state law reserves signal "preemption" for emergency vehicles. Bills AB869/SB840 are currently being circulated to allow snowplows to use signal priority. The on-road portion of this project will be held over until such time as the law is revised.

The City's project deploys Connected Vehicle (CV) technology that creates vehicle-to-infrastructure and infrastructure-to-vehicle (V2I/I2V) connected signalized intersections in Madison along US 151, a critical roadway in the region serving and connecting many communities. It also leverages the existing Smart City investments made along the Smart Park Street Corridor by the City and its partners since 2016. An important objective of the collaboration is to connect this City's CV corridor to the state managed interstates at the south and the northeast edges of the city. The City and WisDOT will work together to integrate data sharing between the two jurisdictions that handle significant freight and economic importance for the region.

Funding

The Wisconsin Department of Transportation is committing \$900,000 in support of this project toward the cost share requirement of the ATTAIN grant program. The source of funds is the state funded *ITS and Traffic Control Signals Program*, which is intended to fund upgrades to traffic signals and apply intelligent transportation systems technology. A portion of the \$900,000 of financial support for this project will be in the form of the following in-kind engineering services: planning and policy development, design/construction, and

construction/integration/testing. Total in-kind engineering services are estimated at 1,650 hours, an estimated value of \$117,150.

This project and collaborative approach align with U.S. DOT's strategic goals as well as ATTAIN Grant Program priorities. The pilot project proposes solutions that fit the context, population density, and demographics of the US 151 corridor in Madison and aligns with the transportation needs of the community.

The deployment of advanced transportation technologies along the project corridor strengthens the system of transport, contributes to growth in this region, reduces vulnerable roadway user injuries and saves lives and most importantly, provides a model of city-state collaboration for cities in Wisconsin and across the United States.

The team assembled for this project, the Wisconsin Department of Transportation, the City of Madison, and the University of Wisconsin Traffic and Operations Safety Laboratory, have proven their capability to deliver based on their previous collaboration on the City of Madison's *Park Street Connected Vehicle Corridor*, which is the predecessor to this ATTAIN grant proposal project.

I strongly support the City of Madison's application and look forward to the infrastructure investment in our region through the Bipartisan Infrastructure Law. Please give this 2023-2024 ATTAIN Discretionary Grant proposal your full consideration.

Sincerely,



Craig Thompson
Secretary



Office of the Vice Chancellor
for Research and Graduate Education
UNIVERSITY OF WISCONSIN-MADISON

January 17, 2024

U.S. Department of Transportation
Federal Highway Administration
Office of Acquisition and Grants Management
1200 New Jersey Avenue, SE
Washington, DC 20590

To Whom It May Concern:

The Office of the Vice Chancellor for Research (OVCR) at the University of Wisconsin-Madison is pleased to extend its support of a proposal entitled "Advancing Safety and Emergency Operations through a Regional Connected Vehicle Corridor." The proposal, submitted to the U.S. Department of Transportation for the "Advanced Transportation Technology and Innovation (ATTAIN) Program" (NOFO 693JJ324NF00005), is led by the City of Madison in collaboration with the University of Wisconsin-Madison.

The OVCR commits to a cost share contribution of \$128,751, based on a four year effort, with a project total of \$2,000,730, for the University of Wisconsin-Madison portion of the proposed project, to be led by Prof. David Noyce. The OVCR cost share contribution will supplement the federal grant by providing stipend support for a graduate research assistant during each year of project. The graduate student will work closely with the UW PIs to enhance the research effort and build internal research capacity within the field of connected vehicles.

Thank you for your consideration of this proposal. If you have any questions, please let me know.

Sincerely,

A handwritten signature in black ink, appearing to read 'Amy Wendt'.

Amy Wendt
Associate Vice Chancellor for Research - Physical Sciences
Professor, Electrical and Computer Engineering



**WISCONSIN TRAFFIC OPERATIONS
& SAFETY LABORATORY**
UNIVERSITY OF WISCONSIN-MADISON

Department of Civil and Environmental Engineering

1203 Engineering Hall
1415 Engineering Drive
Madison, WI 53706 danoyce@wisc.edu

January 30, 2024
Pete Buttigieg
United States Secretary of Transportation
U.S. Department of Transportation
1200 New Jersey Ave, SE
Washington, DC 20590

RE: Letter of Commitment for the 2024 ATTAIN Grant Program: City of Madison

Dear Secretary Buttigieg:

I am writing on behalf of the University of Wisconsin – Madison Traffic Operations and Safety (TOPS) Laboratory which is a key stakeholder in the Park Street corridor project. We commit to working with the City of Madison on their project – Advancing Safety and Emergency Operations through a Regional Connected Vehicle Corridor.

To support the project and its partners, the University of Wisconsin – Madison TOPS lab commits to the following:

- Serve as the system manager for the project to coordinate various systems and subsystems of the project in order to ensure timely and complete development of the connected vehicle corridor.
- Provide technical assistance and evaluation to the project team to improve the project's outcomes and the likelihood of successfully scaling the project's applications to other roadways in Madison and Wisconsin.

This commitment is new, specific, and measurable in the following ways:

- UW TOPS Lab has been a partner on the Park Street Smart Corridor since its creation. This project will revitalize the corridor with new technologies and applications that will both showcase emerging connected vehicle technologies and focus on solving an important and timely issue for the community at large.
- This project engages a cross-discipline collection of faculty and staff to provide complementary solutions to address this complex issue.
- The UW is committed to sharing the cost match with our partners by providing \$400,348 in matching funds from direct costs and unrecovered indirect costs.

Please give this 2024 Discretionary Grant proposal your full consideration and if I can answer any questions, please do not hesitate to contact me. I may be reached at (608) 265-1882 or danoyce@wisc.edu.

Sincerely,

David A. Noyce, Ph.D., P.E., F. ASCE, F.ITE
Arthur F. Hawn Professor, Department of Civil and Environmental Engineering
Executive Associate Dean, College of Engineering
Director, Traffic Operations and Safety Laboratory



Office of the Fire Chief

Chris Carbon

314 W. Dayton St.
Madison, WI 53703-2506
(Phone) 608 266 4420
(FAX) 608 267 1100

January 31, 2024

Chris Carbon
Fire Chief
608-266-6564

Ché Stedman
Assistant Chief
608-266-4201

Tracy L. Burrus
Assistant Chief
608-266-5959

Scott K. Bavery
Assistant Chief
608-267-8674

Timothy J. Mrowiec
Division Chief
608-266-5966

Paul J. Ripp
Division Chief
608-266-4203

Jerome D. Buechner
Division Chief
608-266-4886

Liza Tatar
Division Chief
608-266-5956

Jeffrey T. Larson
Division Chief
608-266-5946

Chris Hammes
Division Chief
608-266-4789

David Crossen II
Division Chief
608-266-4256

Lisa M. Becher
Division Chief
608-243-0195

Bill Sullivan
Fire Marshal
608-261-9658

Brent Sloat
Admin. Services Mgr.
608-266-4777

Megan E. Gussick, MD
Medical Director
608-266-4420

The Honorable Pete Buttigieg
United States Secretary of Transportation
U.S. Department of Transportation
1200 New Jersey Ave, SE
Washington, DC 20590

RE: Letter of Support for City of Madison's FY 2023-2024 ATTIMD/ATTAIN Grant Application
– Advancing Safety and Emergency Operations through a Regional Connected Vehicle Corridor

Dear Secretary Buttigieg:

I am pleased to support the City of Madison's application in partnership with Wisconsin Department of Transportation (WisDOT) and University of Wisconsin-Madison, for funding through the United States Department of Transportation's FY 2023-2024 Advanced Transportation Technologies and Innovative Mobility Deployment (ATTIMD) Program, also known as the ATTAIN Program. The ATTAIN funding will be used to deploy advanced transportation technologies to improve safety, mobility, equity, efficiency, system performance, and infrastructure return on investment.

The City's project deploys next generation emergency vehicle traffic signal preemption and pilots snowplow traffic signal priority in association with red-light running collision warning systems, through signalized intersections in Madison along US 151, a critical roadway in the region serving and connecting many communities. It also leverages the existing Smart City investments made along the Smart Park Street Corridor by the City and its partners since 2016.

The project will utilize Connected Vehicle (CV) technology that will create vehicle-to-infrastructure and infrastructure-to-vehicle (V2I/I2V) communication to enable the City to develop and deploy next generation traffic signal preemption for Madison's Fire Department and Emergency Medical Services. This information will improve operational efficiency and improve safety outcomes by providing real-time, predicted, and individualized information about travel choices based on data from traffic sensors.

Additionally, this project focuses on anticipating and addressing critical safety concerns by predicting traffic trajectory and red-light running conflicts. The project will also enable the City's snowplows to move through the corridor more efficiently to improve the effectiveness of snow plowing operations and to reduce weather related crashes.

The deployment of advanced transportation technologies along the project corridor will strengthen our system of transport, contribute to growth in our region, reduce vulnerable roadway user injuries and save lives and most importantly, provide a model of city-State collaboration for cities in Wisconsin and across the United States. I strongly support the City of

Madison's application and look forward to the infrastructure investment in our region through the Bipartisan Infrastructure Law. Please give this 2023-2024 ATTAIN Discretionary Grant proposal your full consideration. I may be reached at ccarbon@cityofmadison.com, or call 608-266-6564.

Sincerely,

A handwritten signature in black ink, appearing to read "C. Carbon", written in a cursive style.

Chris Carbon
Fire Chief, City of Madison Fire Department



Jack E. Daniels, III, Ph.D., President

January 22, 2024

The Honorable Pete Buttigieg
United States Secretary of Transportation
U.S. Department of Transportation
1200 New Jersey Ave, SE
Washington, DC 20590

RE: Letter of Support for City of Madison's FY 2023-2024 ATTIMD/ATTAIN Grant Application – Advancing Safety and Emergency Operations through a Regional Connected Vehicle Corridor

Dear Secretary Buttigieg:

I am pleased to support the City of Madison's application in partnership with Wisconsin Department of Transportation (WisDOT) and University of Wisconsin-Madison, for funding through the United States Department of Transportation's FY 2023-2024 Advanced Transportation Technologies and Innovative Mobility Deployment (ATTIMD) Program, also known as the ATTAIN Program. The ATTAIN funding will be used to deploy advanced transportation technologies to improve safety, mobility, equity, efficiency, system performance, and infrastructure return on investment. The City's project deploys next generation emergency vehicle traffic signal preemption and pilots snowplow traffic signal priority in association with red-light running collision warning systems, through signalized intersections in Madison along US 151, a critical roadway in the region serving and connecting many communities. It also leverages the existing Smart City investments made along the Smart Park Street Corridor by the City and its partners since 2016.

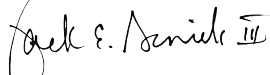
The project focuses on anticipating and addressing critical safety concerns by predicting traffic trajectory and red-light running conflicts. Additionally, the project will utilize Connected Vehicle (CV) technology that will create vehicle-to-infrastructure and infrastructure-to-vehicle (V2I/I2V) communication to enable the City to develop and deploy next generation traffic signal preemption for emergency vehicles such as fire trucks and ambulances. The project will also enable the City's snowplows to move through the corridor more efficiently to improve the effectiveness of snow plowing operations and to reduce weather related crashes. This approach aligns with USDOT's strategic goals as well as ATTAIN Grant Program priorities. The pilot project proposes solutions that fit the context, population density, and demographics of the US 151 corridor in Madison and aligns with the transportation needs of the community. The project investigates whether these technologies can provide context-sensitive solutions to solve real-world challenges, be integrated with existing transportation systems, and be scaled for implementation throughout Madison and other communities.

The deployment of advanced transportation technologies along the project corridor will strengthen our system of transport, contribute to growth in our region, reduce vulnerable roadway user injuries and save lives and most importantly, provide a model of city-State collaboration for cities in Wisconsin and across the United States. I

City of Madison
FY 2023-2024 ATTIMD/ATTAIN Grant Application
January 22, 2024
Page 2

strongly support the City of Madison's application and look forward to the infrastructure investment in our region through the Bipartisan Infrastructure Law. Please give this 2023-2024 ATTAIN Discretionary Grant proposal your full consideration.

Sincerely,

A handwritten signature in black ink that reads "Jack E. Daniels III". The signature is written in a cursive style with a large initial "J" and "D".

Jack E. Daniels, III, Ph.D.
President



January 22, 2024

The Honorable Pete Buttigieg
United States Secretary of Transportation
U.S. Department of Transportation
1200 New Jersey Ave, SE
Washington, DC 20590

RE: Letter of Support for City of Madison's FY 2023-2024 ATTIMD/ATTAIN Grant Application – Advancing Safety and Emergency Operations through a Regional Connected Vehicle Corridor

Dear Secretary Buttigieg:

On behalf of UW Health, I am pleased to support the City of Madison's application in partnership with Wisconsin Department of Transportation (WisDOT) and University of Wisconsin-Madison, for funding through the United States Department of Transportation's FY 2023-2024 Advanced Transportation Technologies and Innovative Mobility Deployment (ATTIMD) Program, also known as the ATTAIN Program.

The ATTAIN funding will be used to deploy advanced transportation technologies to improve safety, mobility, equity, efficiency, system performance, and infrastructure return on investment. The City's project deploys next generation emergency vehicle traffic signal preemption and pilots snowplow traffic signal priority in association with red-light running collision warning systems, through signalized intersections in Madison along US 151, a critical roadway in the region serving and connecting many communities. It also leverages the existing Smart City investments made along the Smart Park Street Corridor by the City and its partners since 2016.

The project focuses on anticipating and addressing critical safety concerns by predicting traffic trajectory and red-light running conflicts. Additionally, the project will utilize Connected Vehicle (CV) technology that will create vehicle-to-infrastructure and infrastructure-to-vehicle (V2I/I2V) communication to enable the City to develop and deploy next generation traffic signal preemption for emergency vehicles such as fire trucks and ambulances. The project will also enable the City's snowplows to move through the corridor more efficiently to improve the effectiveness of snow plowing operations and to reduce weather related crashes.

UW Health is the academic health system affiliated with the University of Wisconsin-Madison. UW Health cares for more than 766,000 patients each year with more than 1,800+ employed physicians and 23,900+ employees. UW Health includes six main hospitals in Wisconsin and Illinois. University Hospital in Madison is a Level I trauma center. In our fiscal year 2022, we served over 210,000 emergency department patients across our system. Improvements that benefit both emergency vehicles and snow plows are essential to our patients.

UW Health's director of prehospital care, Anne Ridders, offers this statement: "Advancing transport technologies is crucial in ensuring that emergency medical services have improved access to hospitals. Every second counts in emergencies, and by investing in innovative transportation solutions, we can significantly improve access for patients in need. I am grateful that the City of Madison is pushing to leverage cutting-edge transport technologies to help connect emergency medical services with hospitals and hope that they will be given the needed resources to complete the work."

The approach in the grant aligns with USDOT's strategic goals as well as ATTAIN Grant Program priorities. The pilot project proposes solutions that fit the context, population density, and demographics of the US 151 corridor in Madison and aligns with the transportation needs of the community. The project investigates whether these technologies can provide context-sensitive solutions to solve real-world challenges, be integrated with existing transportation systems, and be scaled for implementation throughout Madison and other communities.

The deployment of advanced transportation technologies along the project corridor will strengthen our system of transport, contribute to growth in our region, reduce vulnerable roadway user injuries and save lives and most importantly, provide a model of city-State collaboration for cities in Wisconsin and across the United States. I strongly support the City of Madison's application and look forward to the infrastructure investment in our region through the Bipartisan Infrastructure Law. Please give this 2023-2024 ATTAIN Discretionary Grant proposal your full consideration. I may be reached at jaulik@uwhealth.org.

Sincerely,

Juli Aulik

Juli Aulik
Director
Community Relations



Through our exceptional health care services, we reveal the healing presence of God.

January 25, 2024

The Honorable Pete Buttigieg
United States Secretary of Transportation
U.S. Department of Transportation
1200 New Jersey Ave, SE
Washington, DC 20590

RE: Letter of Support for City of Madison's FY 2023-2024 ATTIMD/ATTAIN Grant Application – Advancing Safety and Emergency Operations through a Regional Connected Vehicle Corridor

Secretary Buttigieg,

SSM Health is pleased to share our support for the City of Madison's application in partnership with the Wisconsin Department of Transportation (WisDOT) and the UW-Madison, for funding through the United States Department of Transportation's FY 2023-2024 Advanced Transportation Technologies and Innovative Mobility Deployment (ATTIMD) Program, also known as the ATTAIN Program. The ATTAIN funding will be used to deploy advanced transportation technologies to improve safety, mobility, equity, efficiency, system performance, and infrastructure return on investment. The City's project deploys next generation emergency vehicle traffic signal preemption and pilots snowplow traffic signal priority in association with red-light running collision warning systems, through signalized intersections in Madison along US 151, a critical roadway in the region serving and connecting many communities. It also leverages the existing Smart City investments made along the Smart Park Street Corridor by the City and its partners since 2016.

The project focuses on anticipating and addressing critical safety concerns by predicting traffic trajectory and red-light running conflicts. Additionally, the project will utilize Connected Vehicle (CV) technology that will create vehicle-to-infrastructure and infrastructure-to-vehicle (V2I/I2V) communication to enable the City to develop and deploy next generation traffic signal preemption for emergency vehicles such as fire trucks and ambulances. The project will also enable the City's snowplows to move through the corridor more efficiently to improve the effectiveness of snow plowing operations and to reduce weather related crashes. This approach aligns with USDOT's strategic goals as well as ATTAIN Grant Program priorities. The pilot project proposes solutions that fit the context, population density, and demographics of the US 151 corridor in Madison and aligns with the transportation needs of the community. The project investigates whether these technologies can provide context-sensitive solutions to solve real-world challenges, be integrated with existing transportation systems, and be scaled for implementation throughout Madison and other communities.

The deployment of advanced transportation technologies along the project corridor will strengthen our system of transport, contribute to growth in our region, provide a model of city-State collaboration, and most importantly reduce vulnerable roadway user injuries and save lives. As a healthcare system who cares deeply about the health and wellness of the communities we serve, we are strongly supportive of the City of Madison's application and look forward to the infrastructure investment in our region through the Bipartisan Infrastructure Law. We ask you to give the 2023-2024 ATTAIN Discretionary Grant proposal your full consideration. If you have any questions, you can reach out to SSM Health's Director of Government Relations – Ben Van Pelt at benjamin.vanpelt@ssmhealth.com.

Sincerely,

Sue Anderson
Regional President, SSM Health—Wisconsin

Eric Thornton
President, SSM Health St. Mary's Hospital—Madison