September 30, 2016

Mr. Mohammed Yousuf
Accessible Transportation Technology Research Initiative
Federal Highway Administration
U.S. Department of Transportation

Dear Mr. Yousuf:

The College of Engineering and Computing’s School of Computing and Information Sciences is hereby committing cost sharing of $661,926 to this project. The cost sharing is supported by an IT performance award made by the State of Florida to the FIU School of Computing and Information Sciences for being the best IT program among Florida state universities as measured by objective metrics.

Distinguished faculty members of the College included below, are pleased to contribute significantly to this project:

- Dr. Naphtali Rishe, Eminent Professor of Computer Science, the first FIU professor to have received the status of Outstanding University Professor, Director of NSF Industry-University Cooperative Research center, and the Principal Investigator of the DOT TIGER-13 award contracted to FIU in 2014.
- Dr. S.S. Iyengar, Director of the School of Computing and Information Sciences, Member of the European Academy of Sciences, Fellow of the Institute of Electrical and Electronics Engineers (IEEE), Fellow of the Association of Computing Machinery (ACM), Fellow of the American Association for the Advancement of Science (AAAS), Fellow of National Academy of Inventors (NAI).
- Dr. Oliver Ullrich, Director of the Computational Transportation Lab within the NSF Center.
- Dr. Fabian Cevallos, Director of the Transit Program within the Lehman Center for Transportation Research.
- Dr. Armando Barreto, Director of the Digital Signal Processing Lab and former director of the NSF-CREST Human Computer Interaction for Universal Access Thrust, which focused on Assistive Technologies.
- Dr. Debra Davis, Psychologist and Computer Scientist experienced in evaluation of technology impact on user community.

I am also pleased to acknowledge that the FIU CFO has assigned to this project the top transportation policy expert, Thomas Gustafson, J.D., and that our partner organizations have committed support as stated in their letters: Miami-Dade County, City of Sweetwater, Neuroscience Centers of Florida Foundation, Pirouette Inc, Sweetwater Seniors Centers, and University City Transportation Management Association.

Sincerely,

Ranu Jung, PhD, Fellow AIMBE
Interim Dean and Professor, College of Engineering and Computing
WH Coulter Eminent Scholars Chair in Biomedical Engineering
September 30, 2016

Secretary Anthony R. Foxx
U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, D.C. 20590

Dear Secretary Foxx:

Florida International University (FIU) is submitting an R&D proposal addressing the “Pre-Trip Concierge and Virtualization” area of the Accessible Transportation Technologies Research Initiative.

The proposed application is more than a research project. It will create technology for the community by helping an important segment of our population: older adults and people with disabilities. Specifically, the system to be development and tested as proposed will provide pre-trip and en-route traveler guidance, recommendations, and concierge services, especially addressed to people with cognitive impairments, older adults without technology experience, individuals with low vision, and people with different degrees of mobility impairments.

It is, therefore, of high priority to FIU that we have the resources needed to work with the community to improve transportation experience for the entire population; including those people with disabilities, injured veterans and older adults who today face significant transportation system obstacles.

FIU is committed to developing world class technologies, helping the local community, and a sustainable region and nation that can adapt to changing conditions. This project cross-pollinates with our DOT TIGER-2013 University City Prosperity Project. We are grateful to Under Secretary Monje for his guidance upon his personal review of the state of technology development of the TIGER project last March 29, 2016.

Our Principal Investigator on this project, Dr. Naphtali Rishe, is a renowned computer scientist, who has directed at FIU over $50 million in research projects funded by DOT, NSF, and other agencies. Dr. Rishe uniquely combines research excellence, involvement of community and industry in applied R&D, and excellence in educating next-generation experts. The all-star inter-disciplinary team includes top experts on software engineering, computational transportation, transit, transportation policy, assistive technologies, and socio-evaluation of technology: Drs. Iyengar, Ullrich, Ceballos, Gustafson, Barreto, and Davis.

Sincerely,

Mark B. Rosenberg
September 29, 2016

Dr. Naphtali David Rishe, Director  
NSF Industry-University Center for Advanced Knowledge Enablement  
Florida International University  
11200 S.W. 8th St, Miami, Florida 33199

Re: ATTRI Grant to Develop and Test Pre-Trip Concierge & Visualization App

Dear Dr. Rishe:

I am pleased to express Miami-Dade Department of Transportation and Public Works (DTPW)'s support for the FIU’s submission to the FTA’s Accessible Transportation Technologies Research Initiative (ATTRI) Program for the development and testing of an advanced technology-based application to increase accessible transportation, personal mobility, and independent travel for all transportation users. The proposed solutions will increase accessible mobility options by removing barriers that the differently abled population faces in accessing shared-use mobility services.

The proposed project will advance innovations in accessible transportation through the development of an automated human-assisted transportation concierge system that will allow pre-trip and en-route traveler guidance, recommendations, and concierge services for disadvantaged groups, including the digitally disconnected, older adults and people with disabilities (low vision, and people with different degrees of mobility impairments).

As the Community Transportation Coordinator (CTC) for Miami-Dade County, DTPW supports the FIU’s efforts to create a technology solution that will provide products and services that are inclusive of all citizens and end-users by filling the digital divide, allowing same-day reservations for spontaneous trips, connecting riders with accessible transportation, and increasing safe and reliable transportation options for the differently abled. DTPW will assist the FIU team by providing guidance in the design, development, testing and evaluation of the proposed technology solutions. After smaller-scale testing of the application within the City of Sweetwater, the Department will consult and evaluate potential locations for the deployment of a large-scale testbed/pilot.

DTPW looks forward to a continuing robust collaboration with FIU and intends to expand, through innovative initiatives, its efforts in the search for mobility solutions. This program represents a transformative opportunity for Miami-Dade County to adopt a path toward a transportation network of shared and accessible mobility services within a sustainable mobility ecosystem and universal mobility marketplace accessible to all of us.

Sincerely,

Carlos-Cruz-Casas, P.E.  
Assistant Director
September 28th, 2016

Dr. Naphtali Rishe  
Director, NSF Industry-University Center for Advanced Knowledge Enablement  
NSF I/UCRC-CAKE at FIU  
Florida International University  
11200 SW 8th Street  
Miami, FL 33199

RE: FIU ATTRI Proposal to U.S. DOT – Commitment of Participating Organization

Dear Dr. Rishe:

The Neuroscience Centers of Florida Foundation, Inc. (NSCFF) is a not-for-profit organization established to improve healthcare delivery and address the unmet needs of patients afflicted with neurological diseases such as Alzheimer’s, Parkinson’s Disease, Multiple Sclerosis and Stroke. We employ a comprehensive team approach to care that is uniquely poised to answer to a patient’s medical and non-medical issues. As part of our comprehensive healthcare approach, NSCFF aims to provide support services and education to patients and their caregivers to facilitate their daily lives and help keep them out of the hospital. The State of Florida and individual donors fund NCSFF. We are geared to serve 15,000 patients over 5 years.

We are very excited about the research being performed at the NSF Industry/University Cooperative Research Center for Advanced Knowledge Enablement at Florida International University CAKE Center) and are very interested in working with the Center on this exciting and innovative project. We strongly believe that the proposed project will provide great benefits to our patients and caregivers, as well as to the community as a whole. We calculate that there are 150,000 people in South Florida alone who have been impacted with MS, PD, Alzheimer’s and Stroke. Once the program is able to expand beyond the South Florida region, the potential impact is monumental.

NSCFF has previously provided cash support to the FIU CAKE Center at $100,000 for prior research by FIU faculty. NSCFF is an industrial member of the CAKE Center pursuant to NSF guidelines and is very pleased with the outcome of the CAKE Center’s research that has been funded by NCSFF and other industrial members.

Should the DOT choose to fund the FIU ATTRI proposal, NSCFF will work alongside the Center for design, testing and deployment of the system for testing and evaluation with about 50% of our patient base. We understand that to aid in these efforts, FIU will allocate two FTEs of employees to interface with our patients. The will fulfill these roles:
(1) Recruiter – One staff member will be stationed at the NCSFF main clinic. NSCFF will provide this staff member with space (including a desk), phone and Internet connectivity where the recruiter will have easy access to patients. The recruiter will facilitate the above efforts, as well as promote the program to the patients/caregivers and will educate NCSFF staff and potential users on the program’s advantages and usage.

(2) Meta-Concierge – The meta-concierge will provide remote phone and online support to patients and will serve as a human intervention Concierge. This will be performed by a pool of students who will provide live aid regarding the project to patients and caregivers, as well as aid in data collection and design improvement efforts to inform the development and deployment of the program.

In addition to their patient-serving functions, the Recruiter and Meta-Concierge will also engage in data and feedback collection, along with basic evaluation functions. In this capacity, they will report to the Evaluation co-PI (Dr. Debra Davis). Dr. Davis will oversee and provide feedback on the data collection and evaluation efforts, and determine appropriate metrics and performance levels.

As the pilot program rolls out, support from only 2 FTE may become insufficient. In such a case, we expect that FIU allocate additional personnel to support the needed functions. We are pleased to note that two FIU faculty serve pro-bono on the NCSFF Board of Directors, including the ATTRI proposal’s PI Dr. Rishe.

NSCFF believes that the proposed work with FIU CAKE Center will result in a highly beneficial product, increasing the comfort and mobility of older adults and persons with cognitive disability, as well as their access to healthcare. We look forward to working with FIU to ensure success of the project, particularly for patients and caregivers, both during the proposed evaluation phase and during the product deployment and technology transfer after the completion of the proposed grant.

Sincerely,

Jeffrey Horstmyer, MD, FAAN
Chief Executive Officer

JLHMD/tmr
Dr. Naphtali David Rishe  
Director, NSF Industry-University Center for Advanced Knowledge Enablement  
Florida International University  
11200 S.W. 8th Street  
Miami, Florida 33199

Re: ATRI Grant to Develop and Test Pre-Trip Concierge & Visualization App

September 28, 2016

Dear Dr. Rishe:

As the Director of the Sweetwater's Senior Center (also referenced as the Mildred & Claude Pepper Senior Activities Center), I want to enthusiastically express our interest in the development and testing of an automated human-assisted transportation concierge system by Florida International University (FIU). Sweetwater has worked with FIU before in regards to the ongoing 2013 TIGER-funded University City Prosperity Project and in the 2016 TIGER Discretionary Grant proposal that sought University City Part 2 funding. We will support this initiative as well with every expectation such efforts will improve the lives of our seniors and those with disabilities.

It is understood that this effort will provide pre-trip and en-route traveler guidance, recommendations, and concierge services, especially addressed to people with cognitive impairments, older adults without technology experience, individuals with low vision, and people with different degrees of mobility impairments. It is further understood that this grant will fund development and testing.

We will cooperate with you as needed to assure the needs of this transportation challenged community are met. In this regard, we will help with advice during the design and development of the system and its testing-purpose pilot deployment at the Senior Center, and we will help to gather and evaluate the outcomes of said pilot testing.

After testing is completed in co-operation with Senior Center personnel and the population we serve and based on a successful evaluation, we would be happy to work with FIU, City of Sweetwater, and the University City Transportation and Management Association of Sweetwater, Inc. (UTMA), which provides local community transit services and feeder bus service to rapid transit, in order to help deploy this technology as an important component of the Senior Center programming and an improvement to the University City community.

Please keep me informed as to any progress you make and how I can be of further assistance as in these matters.

Thank you,

Robert Herrada  
Director of Operations & Senior Center Director
Dear Dr. Rishe:

On behalf of Pirouette Software, I am pleased to submit the enclosed subaward proposal for funding. Pirouette Software is a Small Business incorporated in the State of Illinois. Our expertise is in Computational Methods and Intelligent Transportation. We have a long history of collaboration, which I am very excited to continue in this project.

Any negotiations related to an award should be directed to me at the address below.

Thank you in advance for your consideration.

Sincerely,

Ouri Wolfson
President and Chief Scientist
Pirouette Software
1030 N. State St.
Chicago, IL 60610
Dr. Naphtali David Rishe  
Director, NSF Industry-University Center for Advanced Knowledge Enablement  
Florida International University  
11200 S.W. 8th Street  
Miami, Florida 33199

Re: ATTRI Grant to Develop and Test Pre-Trip Concierge & Visualization App

September 28, 2016

Dear Dr. Rishe:

As the Mayor of the City of Sweetwater (Sweetwater), I want to enthusiastically express our interest in the development and testing of an automated human-assisted transportation concierge system at Sweetwater and FIU. Sweetwater has worked in partnership with FIU before in regards to the ongoing 2013 TIGER-funded UniversityCity Prosperity Project and in the 2016 TIGER Discretionary Grant proposal that sought UniversityCity Part 2 funding. We will support this initiative as well with every expectation such efforts will improve the lives of our seniors and those with disabilities.

It is understood that this effort will provide pre-trip and en-route traveler guidance, recommendations, and concierge services, especially addressed to people with cognitive impairments, older adults without technology experience, individuals with low vision, and people with different degrees of mobility impairments. It is further understood that this grant will fund development and testing.

Sweetwater staff will cooperate with you as needed to assure the needs of this transportation challenged community are met. In this regard, we will help with advice during the design and development of the system and its testing-purpose pilot deployment at the Sweetwater and FIU, and we will help to gather and evaluate the outcomes of said pilot testing.

After testing is completed in co-operation with the Sweetwater Senior Center personnel and the population they serve and based on a successful evaluation, we will be happy to work with FIU and the UniversityCity Transportation and Management Association of Sweetwater, Inc. (UTMA), which provides local community transit services and feeder bus service to rapid transit, in order to help deploy this technology as an important component of the Senior Center programming and an improvement for the UniversityCity community at FIU and Sweetwater. Please keep me informed as to any progress you make and how I can be of further assistance as in these matters.

Thank you,

Orlando Lopez, Mayor  
City of Sweetwater
Letters of Commitment

UniversityCity Transportation and Management Association of Sweetwater, Inc 
(UTMA)

From the Desk of: 
Amy Gonzalez-Hernandez, Chairwoman

Dr. Naphtali David Rishe
Director, NSF Industry-University Center for Advanced Knowledge Enablement
Florida International University
11200 S.W. 8th Street
Miami, Florida 33199

Re: ATTRI Grant to Develop and Test Pre-Trip Concierge & Visualization App

September 28, 2016

Dear Dr. Rishe:

As the Chair of the UniversityCity Transportation and Management Association of Sweetwater, Inc. (UTMA), I want to enthusiastically express my interest in the development and testing of an automated human-assisted transportation concierge system at Sweetwater and FIU. UTMA has worked with FIU and Sweetwater before in regards to the ongoing 2013 TIGER-funded UniversityCity Prosperity Project and in the 2016 TIGER Discretionary Grant proposal that sought UniversityCity Part 2 funding. I will support this initiative as well with every expectation such efforts will improve the lives of our seniors and those with disabilities.

It is understood that this effort will provide pre-trip and en-route traveler guidance, recommendations, and concierge services, especially addressed to people with cognitive impairments, older adults without technology experience, individuals with low vision, and people with different degrees of mobility impairments. It is further understood that this grant will fund development and testing.

As UTMA Chair, I will request that the UTMA Board and Sweetwater and FIU personnel working on UTMA matters cooperate with you as needed to assure the needs of this transportation challenged community are met. In this regard, we will help with advice during the design and development of the system and its testing-purpose pilot deployment at Sweetwater and FIU, and we will help to gather and evaluate the outcomes of said pilot testing.
Letters of Commitment

After testing is completed in co-operation with the Sweetwater Senior Center personnel and the population they serve and based on a successful evaluation, we will be happy to work with the City of Sweetwater and FIU in order to help deploy this technology as an important component of the Senior Center programming and an improvement for the University City community at FIU and Sweetwater.

Please keep me informed as to any progress you make and how I can be of further assistance as in these matters.

Thank you.

Amy Gonzalez-Hernandez, Chair
University City Transportation and Management Association of Sweetwater, Inc.