Semi-Annual Progress Report for

University Transportation Centers

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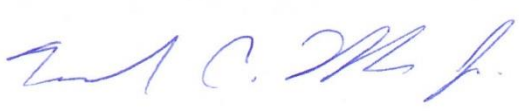

1. Accomplishments

1.1 What are the major goals of the program?

Our New England University Transportation Center (NEUTC) mission is to advance equitable safety through transformational research, education, and technology transfer. Our focus upon translating research into implementation as we work to save lives today, while delivering research that transforms safety in the presence of evolving technology and opportunity. The passage of the Infrastructure Investment and Jobs Act (IIJA) and the development of the National Roadway Safety Strategy (NRSS), coupled with a more mainstream introduction of safety culture (e.g., Safe System) provide a foundation for improved safety across the surface transportation system. The time to make a generational impact in equitable transportation safety is now.

NEUTC promises to advance transportation expertise and technology throughout the transportation discipline and contribute towards workforce development through the delivery of a robust research, education, and technology transfer agenda in support of IIJA statutory research priority of *Promoting Safety* along with the US DOT Strategic Plan Goals of *Equity* and *Transformation*. NEUTC brings together research and education leaders with a proven track record of delivering cutting-edge research to address key challenges in the delivery of equitable transportation safety. NEUTC will support the US DOT's mission, "To deliver the world's leading transportation system, serving the American people and economy through the safe, efficient, sustainable, and equitable movement of people and goods.".

1.1.1 Research

Traditional safety challenges, such as safety of vulnerable users, driver behavior, infrastructure assessment, and rural safety, are both complicated and potentially enhanced by the emergence of advanced technologies, such as AVs, smart infrastructure, and human-machine interactions (HMIs) as well as the need to account for diversity in the populations and geographies our transportation systems serve. This has created broad needs for educational and research breakthroughs and innovation across the safety spectrum. NEUTC's research addresses critical safety challenges and advances several of US DOT's Strategic Plan KPIs through the application of transformative technologies and equitable practices. To achieve impactful research and effective safety measures, focus is required on specific topic areas that either: a) provide the greatest potential for safety related improvements, and/or b) require additional attention due to the significance of crash-related outcomes. Our mission to advance equitable safety through transformative research will cover four thematic priority areas:

1) Embedding Equity and Community Engagement within Transportation Safety
2) Developing Smart Infrastructure and Connected Systems
3) Improving Safety for all Modes and Populations
4) Promoting Automated Vehicle Safety

These topic areas address integral components of the transportation system while simultaneously considering equity therefore, contributing to a sustainable transportation system for all.

1.1.2 Leadership Development

The members of our consortium are leaders within the transportation profession, and we are excited about the opportunity to expand our leadership role as we work to advance equitable transportation safety in a transformative fashion. Developing the next generation of leaders in transportation is a core function of NEUTC. As leaders we expect NEUTC to be at the forefront in advancing US DOT's KPIs. Our

plan is to mix new ideas with established best practices, such as an annual multi-day symposium that will bring faculty, students, stakeholders, vendors, and practitioners together to discuss innovations in safety research; these symposia will include activities to support collaboration, foster networking, and develop leadership skills for both researchers and students. An added focus will be placed upon increasing participation from government and industry by ensuring invitations are extended to all collaborators on all NEUTC projects. Given our prioritization on leadership, we will continuously seek opportunities for our consortium members.

1.1.3 Education and Workforce Development

The education and workforce development components will address K-12, university, and continuing education students. We are excited about the wide range of education activities within NEUTC which will expand our transportation knowledge base and broaden participation in transportation. Some of the specifical education and workforce development goals include the creation or expansion of the following activities:

The Safety Toolbox Curriculum: This initiative aims to develop and deliver educational materials focused on basic transportation safety concepts. The Safety Toolbox will feature a regional agenda including webinars, workshops, and outreach programs, targeting high school to undergraduate students and transportation professionals. It will also engage researchers, policymakers, and system operators.

Community College Pipeline: In collaboration with community college partners BHCC and HCC, this program will offer strategic educational activities such as the development of an introductory transportation course with transfer credit potential, a research and mentoring program (RAMP), visiting research and internship opportunities, and programming to address "the hidden curriculum" to help eliminate barriers to student success.

Expand Bridging Expectations & High School Course: This initiative plans to build upon a 2-day pilot program to introduce more students to transportation, with the aim of developing a year-long transportation elective for Springfield Public Schools and expanding the program across the consortium, focusing on diverse populations in major cities.

Hack-a-thons & Capstones: This involves hosting hack-a-thon style events where student teams from multiple disciplines work on solving safety and equity challenges, such as leveraging data in smart environments for better decision-making. It also supports diverse student teams working on capstone projects related to their academic degrees.

Develop College Curriculum: NEUTC members aim to increase the inclusion of transportation safety topics and improve their quality in college curricula. This includes developing case studies and curriculum modules for engineering courses, particularly for first-year students, to encourage specialization in transportation. Plans include integrating domain expertise into existing courses, developing a general education module on the societal impacts of traffic safety, and supporting the development of new courses and certificates.

Outreach to K-12: The consortium members will continue supporting K-12 STEM and career exploration activities, such as tours, internships, and presentations, along with sharing successful outreach practices across New England. Additionally, student contributions will be recognized through awards and features at annual symposia and on the NEUTC website.

1.1.4 Technology Transfer

One of the primary functions of the UTC program is to directly translate research into practice, policy, or novel advancements of the state-of-the-practice. Technology transfer and collaboration is well-documented historical strength across the entire NEUTC team. We are particularly excited about the seven-part technology transfer plan that we have developed to complement our research and education activities. Our consortium members are actively engaged in innovative technology transfer that is blend of both traditional (e.g., LTAP workshops, industry engagement, conference participation, etc.) and less traditional (e.g., DECIDE©, NSF I-Corp, public information videos, etc.) methods. Our focus in technology transfer will be translating research and best practices into implementation, especially in our rural and/or underserved communities across New England. Each member of our consortium will contribute towards- and participate within- our technology transfer and collaboration activities.

1.2 What was accomplished under these goals?

1.2.1 Research

The New England University Transportation Center (NEUTC) has had a productive start to our consortium, underlining its dedication to enhancing transportation safety and efficiency through rigorous research and active engagement with the broader community. Following the first Request for Proposals (RFP) NEUTC has moved forward with a mix of funded research projects, technology transfer activities and education projects.

Funded Projects

During this period, the NEUTC successfully managed a diverse portfolio of projects, comprising:

19 research projects: These projects span a variety of themes critical to advancing transportation safety and technology:

- Evaluation of Battery Electric Vehicle (BEV) Performance in Mountainous Regions and Cold Climates
- Evaluating the Impacts of Age and Health on Different Aspects of Mobility and Driving Behaviors
- Sensor Networks for Vulnerable Road User Safety
- Improving Crash Prediction Using GRIDSMART Infrastructure
- Spatiotemporal Trends in Pedestrian Crashes: Exploring the Influence of Socioeconomic, Demographic, Infrastructure, and Emerging COVID-19 Conditions
- Assessing the Effectiveness of Bicycle Infrastructure Treatments through a Large-Scale Trajectories collected with Drones
- Community-Centered Traffic Safety
- Towards a Safe, Healthy and Efficient Gig Transportation Workforce
- Learning a Spatial Crash Typology Representation for Analyzing and Improving Multimodal Road Safety in New England
- Safety and Public Health Impacts of Microtransit Services
- Holistically Identifying Road Complexity and Relating it to Fatal Crashes
- Evaluating Older Drivers' Reaction to Forward Collision Warning (FCW) Systems Under Conditions of Distraction Using a Driving Simulator

- Examining the Impact of Land Use, Transit Stops, Roadway, and Demographic Factors on Pedestrian Injury Severity in Connecticut
- Equity in Livability: Identifying Systemic, Operational, and Systemic Inequities in Active Transportation for Socio-economic Disadvantaged Communities in Connecticut
- 5G-enabled Safe and Robust Deep Multi-agent Reinforcement Learning Framework for CAV Coordination
- Unlocking Forensics Data for Vehicles Involved in Motor Vehicle Crashes
- Real-time Information Dissemination for Efficiency in a Robo-taxi System (RIDERS)
- Exploring the Relationship Between the Built Environment, Safety, and Bus Ridership in Connecticut Using Mixed Research Methods
- Incorporating Large Language Models (LLMs) into Transportation Safety Analytics and Equity

2 projects focused on Technology Transfer: These projects are crucial for translating research findings into practical applications that can influence real-world transportation systems.

1 project dedicated to Outreach and Education: The NEUTC education project, titled. “Promoting Changes to University Curricula to Support More Agile Decision Making and to Create a More Diverse Workforce” will provide a critical review of academic programs with a specific focus on future education needs. Transportation as an industry faces challenges more complex than ever before, as disruptive events occur with greater frequency. There is a need for the industry to employ, more widely, agile decision making to face these disruptions. There needs to be a shift in the way transportation is taught in the nation’s colleges and universities to further adoption of this mindset, and with that a new consideration of what types of students are suited for careers in transportation agencies to help address current workforce shortages.

Peer-reviewed Journal Publications/Conference Papers

The center has made significant contributions to the academic field through a variety of peer-reviewed publications, including:

Transportation Research Record: Various studies have been published, such as the work on high crash-risk locations using roadway indicators and the behavior at bike boxes, indicating the center’s ongoing commitment to road safety research.

Accident Analysis & Prevention and Journal of Safety Research: Articles by Gil-Marin and Vergara explored crash hotspot identification and speeding behavior, providing new insights into traffic safety.

IEEE Robotics and Automation Letters: Fei Miao and colleagues' work on "Collaborative Multi-Object Tracking with Conformal Uncertainty Propagation" introduces innovative methods in robotics and automation crucial for the development of autonomous vehicles.

Research-Related Engagements

Engagement with the media and public through various platforms highlighted the center's commitment to influencing public policy and understanding on transportation issues:

Public Engagement Program Fellowship: Participation in this program at UMass allowed for extensive media interaction, including features on satellite radio and publications like The Conversation, discussing the impact of technology on driving safety.

Notable Media Mentions:

- **Shannon Roberts** was featured in ***The Conversation*** discussing the implications of hands-free phone usage on driver distraction.
- **Eric Jackson** was quoted in multiple articles concerning traffic safety and the potential implications of electric vehicle mandates.
- **Michael Knodler** was featured in a WBZ news interview on Vision Zero in the Commonwealth of Massachusetts.
- **Michael Knodler** was quoted in multiple media articles related to transportation safety policies and speed management.

External Grants

NEUTC consortium members have secured substantial external funding to support their research activities, including:

NSF CAREER grant: Received by Fei Miao (UConn), focused on robust learning and control for connected and autonomous vehicles.

NSF grant on Ride-Sourcing Drivers' Learning Dynamics: This grant, led by Song Gao (UMass) supports research aimed at optimizing the performance and learning processes of ride-sourcing drivers, an increasingly relevant area as the gig economy grows.

Invited Research Presentations

Faculty and researchers from the NEUTC have been active in presenting their research findings at various prestigious venues:

- **Fei Miao** gave invited talks at the University of Pennsylvania and the University of Michigan, discussing advances in networked systems and control.
- **Michael Knodler** gave invited talks at both Oregon State University and the University of Arizona on driver behavior and safety related to traffic control devices
- **Eleni Christofa** presented at the MassDOT Moving Together Conference and the MassDOT Innovation Webinar Series, sharing insights on food access inequities and public health improvements through transportation planning.
- **Eric Jackson** and **Song Gao** participated in national and international conferences, highlighting the center's leadership in crash mapping and transportation economics.

1.2.2 Leadership Development

The New England University Transportation Center (NEUTC) has demonstrated robust leadership in the transportation field, highlighted by a series of invited presentations, prestigious awards, and significant editorial responsibilities held by its faculty and students. This active involvement not only promotes

NEUTC's visibility in the academic and professional communities but also enhances its impact on transportation policies and practices.

Invited Presentations and Workshops

- **Fei Miao** shared insights on control systems at the University of Michigan's Control Seminar and discussed networked systems modeling at the University of Pennsylvania.
- **Eleni Christofa** delivered a lecture on Health in Transportation Decision Making at Montreal Polytechnique, emphasizing the integration of public health considerations in transportation planning.
- **Shannon Roberts** engaged with industrial engineering students and led discussions on technology's impact on mobility at the AAAFTS Safe Mobility Conference.
- **Eric Jackson** played a pivotal role in discussions at the GIS-T AASHTO national conference, focusing on the advanced applications of GIS in safety management.
- **Song Gao** participated in workshops on sustainable urban mobility and equity in transportation systems, addressing critical issues in transportation economics and policy.
- **Michael Knodler** presented an overview of NEUTC at the UTC Safety Summit in Washington DC on April 4th, 2024.
- **Lisa D'Ambrosio** presented on the challenges and opportunities in transportation for aging populations, contributing to the dialogue on accessibility and inclusivity.

Professional Awards

- **Eleni Christofa** was recognized as a Chancellor's Leadership Fellow and received the College of Engineering Outstanding Teaching Award, underscoring her leadership in academic and educational excellence.
- **Efthymia Kostopoulou**, a UMass graduate student, was awarded scholarships from WTS-Boston and WTS-Rhode Island, reflecting her potential and dedication to advancing in the transportation field.
- **Song Gao** was honored with fellowships from UMass Public Interest Technology and the Public Engagement Project, highlighting her contributions to public interest technology and engagement.

Journal Editorships and Review Panels

Faculty members hold influential positions in prestigious journals, contributing to the dissemination and scrutiny of research:

- **Eleni Christofa** and **John Ivan** serve as editors for journals like the American Society of Civil Engineers Journal of Transportation Engineering and Accident Analysis and Prevention.
- **Shannon Roberts** and **Song Gao** enhance the editorial direction of journals such as Ergonomics and Transportation Research Part B, ensuring the quality and relevance of published research.

Leadership in Professional Organizations

NEUTC leaders hold significant roles in various professional organizations, influencing policy and research directions within the transportation sector:

- **Nicholas Kirsch** serves as the Vice-President of Finance at the IEEE Vehicular Technology Society.
- **Michael Knodler** is the current Treasurer for CUTC and is a Director for ARTBA
- **Eleni Christofa** acts as the secretary for the Transportation Research Board's AME70 committee, focusing on Transportation and Public Health.
- **Anshu Bamney** and **Eric Jackson** contribute their expertise in student mentoring and traffic safety at national and international forums.

Student Leadership Activities

The NEUTC supports student involvement in leadership activities, exemplified by participation in events like the First Lego League VT Championship and the Resilient Vermont Conference, fostering leadership skills among young scholars.

1.2.3 Education and Workforce Development

We have made significant strides in education and workforce development, focusing on integrating advanced educational programs and supporting a diverse array of students in their academic and professional growth.

Hack-a-thon and Capstone Participants

- **UMass Industrial Engineering capstone team**: This year's team includes Hallie Tessler, Madison Perry, Jorge Espino, Jorge Ubinas, and Armen Bazarian. These students, including underrepresented minorities (URM), have participated in projects that challenge them to apply their academic knowledge in real-world scenarios, enhancing their readiness for professional careers.

NEUTC Peer Mentors and Mentees

- The center supports a robust mentoring program that includes five faculty mentors from the STEM Academy. Additionally, four other mentorship pairings have been active, with plans to expand into the UTC mentoring program in the following year.

Summer/Winter NEUTC Research Fellows

- **Norwich**: Majd Khalaf has contributed to the Battery Electric Vehicle (BEV) research by integrating data and AI analysis.
- **UConn**: Wiktor G. Szwajger served as a summer undergraduate research assistant, engaging in hands-on research that complements his studies in civil engineering.
- **UMass** was a host site for 10 undergraduate research assistant participating in an NSF REU Program related to transportation.

Students Supported by NEUTC Projects

- A total of 21 students across various engineering disciplines—Civil, Industrial, and Electrical—have been directly involved and supported by NEUTC-related projects, gaining valuable experience that contributes to their academic and professional development.

New Courses and Modules

- **Bunker Hill Community College (BHCC)** has introduced new courses in Advanced Geospatial Technologies and new curriculum modules in several foundational subjects, expected to reach between 150-450 students annually.
- **Fei Miao** developed a course on Networked and Embedded Systems Modeling and Abstraction.
- **Norwich University** introduced a Transportation Equity module applicable to civil engineering and economics programs.
- **Song Gao** created a module focusing on gig drivers for her Transportation Economics course, addressing contemporary issues in transportation labor.
- **UConn** incorporated findings from a literature review on safety inequities into the graduate class CE 5715 Sustainable Transportation, which explores the social impacts of transportation engineering.

K-12 Student Engagement

- **Norwich**: Engaged approximately 500 students in the First Lego League of Vermont Championship, fostering early interest in STEM fields.
- **World is our Classroom**: Hosted about 120 students from the Springfield-area public high schools over the course of eight days at the UMass Transportation Center at Westover, providing insights into air transportation and engineering careers.
- **Shannon Roberts** and her team conducted lab tours for prospective undergraduate students from diverse backgrounds during various outreach events, promoting engineering education and showcasing the NEUTC's research facilities.

1.2.4 Technology Transfer

We are continually engaging in technology transfer activities, ensuring that the research findings and innovations are communicated effectively to stakeholders within the industry, government, and the general public. This engagement enhances the application of research outputs in practical settings and contributes to broader societal impacts.

NEUTC-Related Events and Attendance

- **NEUTC Webinar by Prof. Fei Miao**: Held on March 28, 2024, this seminar focused on advancements in autonomous vehicle technologies, attracting approximately 25 attendees.
- **NEUTC Webinar by Song Gao**: On January 18th, Song Gao led a webinar titled "Leveraging Technology in a Socially Responsible Way: An Efficient and Scalable Cooperative for Ride-Sourcing Drivers," which also gathered around 25 participants, discussing the implications of ride-sourcing dynamics in urban mobility.

- **NEUTC Webinar by Michael Knodler**: On December 14th, our center director provided a webinar introducing the NEUTC consortium. It was attended by approximately 20 people.
- **NEUTC** helped to host the MassDOT Moving Together Conference in November 2023 with approximately 1,300 attendees

LTAP Engagements

- **Learning and Control for Safety, Efficiency, and Resiliency of Embodied AI – Fei Miao**: This workshop provided insights into how artificial intelligence can be integrated into transportation systems to enhance safety and efficiency.
- **Presentation on Connecticut Crash Data Repository by Anshu Bamney**: Held during the Speeding and Speed Management Peer Exchange in Lakewood, Colorado, this presentation addressed data-driven approaches to managing speed and reducing accidents.
- **Presentation on Speed Management by Michael Knodler and Francis Tainter:**

Media Requests

- **Eric Jackson** responded to multiple media inquiries concerning transportation safety and policy:
    - Discussions ranged from potential electric vehicle mandates to analyses of traffic accident data and strategies to prevent wrong-way crashes. These appearances in various news outlets such as CT Examiner, WFSB, NBC CT, CT Mirror, and WTNH have helped to elevate public discourse on transportation safety.

Industry and Governmental Stakeholders Requests for Technical Assistance

- **Connecticut DOT Technical Assistance**: Anshu Bamney provided ongoing support and expertise to the Connecticut Department of Transportation, focusing particularly on pedestrian safety projects and overall transportation safety improvements.

Social Media Engagements

- Researchers actively utilized platforms like LinkedIn to share insights, research findings, and discuss current trends in transportation, helping to keep the professional community informed and engaged.

Practitioner Attendance at Events

- Practitioners from various sectors attended NEUTC webinars, reflecting the center's role in disseminating cutting-edge research and practical solutions to challenges in transportation.

DOT Requests for Presentations or Proposals

- The NEUTC addressed specific requests from the Department of Transportation for presentations on the BEV Research Project and the NUARI Decide Exercise Training, showcasing the center’s proactive approach in applying research to solve real-world problems.

1.3 How have the results been disseminated?

As the NEUTC research, technology transfer and education projects progress, we anticipate increased opportunities to disseminate the results of our activities.

1.4 What do you plan to do during the next reporting period to accomplish the goals?

During the next reporting period we have planned several NEUTC activities that will directly support goal accomplishment

NEUTC will host the 1st Annual Symposium in April 2024 where updates and preliminary results across all projects will be presented.

NEUTC will issue a new RFP (Yr 2) to solicit new research, education and technology transfer projects.

NEUTC will continue the expansion of our website and social media platforms to help with the dissemination of NEUTC news and activities.

UMass Amherst will host an NSF REU site (RIDE) that promotes transportation research for undergraduate students from traditionally underrepresented groups.

Norwich University will initiate planning for the NEUTC Leadership Summit to be planned for early 2025.

NEUTC researchers will actively participate in both the CUTC Summer Meeting and USDOT Future of Transportation Summit among other conference events at which we can highlight our activity.

2. Participants and Collaborating Organizations

2.1 What organizations have been involved as partners?

Partner organizations within the current reporting period include the New England Department of Transportation. Most notably has been the continued integration of MassDOT and CTDOT to align priority projects with NEUTC activities. Additionally, NEUTC has actively partnered with MassDOT in the planning/hosting of the NEUTC Symposium and MassDOT Innovation Conference for which registered attendance of over 1600 participants from the public and private sectors, industry and academia.

World is our Classroom – a 501C3 has partnered with NEUTC to expand their Bridging Expectations program to include K-12 outreach related to transportation for public school students. We are now partnering with WioC and the Springfield Public Schools to plan for a high school level transportation elective course.

2.2 Have other collaborators or contacts been involved?

We have engaged with other collaborators both within the UTC Program and outside of the UTC Program.

NEUTC hosted Chandra Bhat to discuss transportation related outcomes with increase telehealth adoption.

NEUTC discussed traffic safety dashboard integration with collaborators at the University of Arizona

NEUTC collaborated with the University of Wisconsin and Oregon State University to understand the impact from rumple strip presence on bicycle safety.

3. Outputs

3.1 Publications/presentations/conference papers

As a newly established consortium, the New England University Transportation Center (NEUTC) is in the early stages of its research initiatives. Currently, there are no papers that have directly resulted from NEUTC projects. However, the foundation has been set for forthcoming research outputs that are expected to make significant contributions to the field of transportation. Our teams are actively working on developing innovative studies that promise to yield valuable findings and insights, which will be shared through future publications and presentations at major conferences.

3.2 Policy papers

None yet to report.

3.3 Website and other engagements

The NEUTC website was launched in mid-January 2024 and has since attracted 463 total users within this reporting period. Approximately 48% access the site via a direct link, 44% via Google, 10% from transportation.gov and the remainder from assorted sources.

In addition to our website, we are actively working on establishing a LinkedIn page and YouTube channel.

3.4 New methodologies, technologies or techniques

None yet to report.

3.5 Inventions, patents, and/or licenses

None yet to report.

3.6 Other Products

None yet to report.

4. Outcomes

As a newly established consortium there have been limited outcomes from our funded work. However, we are excited about some potential outcomes from our funded research projects:

Community-Centered Traffic Safety expects to develop A new model for traffic fines that accounts for socio-economic diversity, ensuring fairness and effectiveness in traffic law enforcement.

Evaluation of Battery Electric Vehicle (BEV) Performance in Mountainous Regions and Cold Climates will inform improvements in BEV design and technology, particularly for use in harsh climates and terrains, enhancing vehicle safety and reliability.

Spatiotemporal Trends in Pedestrian Crashes Exploring the Influence of Socioeconomic, Demographic, Infrastructure, and Emerging COVID-19 Conditions results will provide a basis for developing targeted safety interventions, improving infrastructure, and implementing public awareness campaigns to reduce pedestrian crashes.

Towards a Safe, Healthy and Efficient Gig Transportation Workforce will provide gig workers with tools to make informed decisions about their schedules and work strategies, the project aims to improve their overall well-being, reducing risks associated with fatigue, anxiety, and unsafe work practices.

Evaluating the Impacts of Age and Health on Different Aspects of Mobility and Driving Behaviors will develop materials aimed at supporting older adults in making informed decisions about driving retirement, enhancing their safety and mobility.

5. Impacts

5.1 Impact on the effectiveness of the transportation system

NEUTC's focus on understanding human interactions within a complex and dynamic transportation landscape aims to enhance both safety and efficiency across the transportation system. Our research endeavors are designed to foster safer travel conditions, support the integration of diverse transportation modes, and contribute to reducing traffic congestion. Ultimately, this will not only improve roadway safety but also help in preserving the environmental integrity of our communities.

5.2 Impact on the adoption of new practices, or instances where research outcomes have led to the initiation of a start-up company

Nothing to report.

5.3 What is the impact on the body of scientific knowledge?

Highlighted in Section 1.2.1

5.4 What is the impact on transportation workforce development?

Highlighted in Section 1.2.3

6. Changes/problems

As we approach the end of year one for NEUTC we are happy to report no specific changes needed or problems encountered.

6.1 Changes in approach and reasons for change

None to report

6.2 Actual or anticipated problems or delays and actions or plans to resolve them

None to report

6.3 Changes that have a significant impact on expenditures

None to report

6.4 Significant changes in use or care of human subjects, vertebrate animals, and/or biohazards

None to report

6.5 Change of primary performance site location from that originally proposed

None to report.

7. Special Reporting Requirements

N/A