



Research Project Name: Accessibility Assessment of Elderly Groups to Emergency Medical Services (EMS) in Rural Areas
Recipient/Grant (Contract) Number: Florida A&M University; Cleveland State University
Center Name: Rural Safe Efficient Advanced Transportation (R-SEAT) Center
Research Priority: Improving Mobility of People and Goods
Principal Investigator(s): Emmanuel Kidando, Josiah Owusu-Danquah and Angela Kitali
Project Partners: -
Research Project Funding: \$ 100,000 (Federal request); \$ 52,027 (Non-Federal cost share)
Project Start and End Date: 6/1/2023 to 12/31/2024
Project Description: <p>This research has two main objectives: first, the accessibility of rural disadvantaged populations, particularly aging residents, to emergency medical services (EMS) and identifying critical locations, and second, to evaluate the post-crash care accessibility of the aging population in the rural area.</p> <p>The elderly population is overrepresented in traffic fatalities. This over-representation of the older population in fatal and severe injury crashes compared to younger adults may be due, in part, to an age-related diminished ability to select gaps in oncoming traffic. Moreover, increased fragility with age may exacerbate injury severity. It is thus imperative to ensure when older adults are involved in a crash, they have immediate access to post-crash care, i.e., emergency first responders need to quickly locate them, stabilize their injury, and transport them to medical facilities. Notably, post-crash care is one of the five components of the safe system approach adopted by the USDOT to eliminate fatal and severe crashes. Understanding the essential locations in rural areas with low accessibility to EMS will provide valuable information that can address the growing challenges associated with the accessibility of disadvantaged populations in rural communities. This research project will identify critical problems and propose innovative solutions to address accessibility, particularly focusing on post-crash care as one of the US DOT priorities and goals.</p>
US DOT Priorities: This project supports the USDOT priorities goals by addressing accessibility to emergency medical services (EMS) for vulnerable rural populations, aligning with the goal of improving mobility and safety for all.
Outputs: <ul style="list-style-type: none">• Final project report was completed• Final draft for submission to the Transportation Research Record Journal• A webinar was given related to the project findings
Outcomes/Impacts: Findings will inform proposed strategies to EMS location planning, potentially leading to faster response times and reduced fatalities. Findings of this research will also inform policy decisions regarding the allocation of resources for EMS infrastructure, particularly in rural areas, enhancing the overall reliability and responsiveness of the transportation system.
Final Research Report: N/A