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NON-COMPETITIVE DIVISION

The Road to Innovative Solutions between Transportation and Access and Functional Needs Communities during Disasters

Access and Functional Needs (AFN) populations are individuals or groups who require additional assistance because of needs in one or more functional areas. Transportation is one of the five areas of assistance individuals may require in an emergency identified by the CMIST framework. Every incident is unique and poses distinctive demands, yet individuals with Access and Functional Needs are most disproportionately affected; the lack of data collected further compounds this issue.

We propose leveraging rideshare technology as a solution to close the transportation gaps for persons with Access and Functional Needs in disasters. Integrating rideshare companies, and partnerships with community groups into the planning process can help create adequate infrastructure to ensure smooth operations should their need arise.

Many populations may not have access to the technology necessary to use rideshare programs, may lose access during a disaster, and/or may not feel comfortable using this technology. To fill this gap, we propose leveraging an Uber tool called "Uber Central". which allows businesses to act as central dispatchers to order rideshares for their clients. The integration into emergency plans and later, the emergency operations center can help fill some of the identified gaps.

There are also ancillary benefits of this group's proposal. If drivers are local, they can earn money to aid in their personal recovery and keep the money within the community, especially in a time where normal rideshares are likely not to be happening. While these programs may not radicalize the rideshare economy to offer full accessibility to every community member, the goal is to reduce stress on traditional transportation infrastructure while providing more efficient service to those who need it. This strain reduction could mean better access to specialized mobility equipment transportation for those who require wheelchair-accessible vehicles.

Presentation Theme: Persons with Access and Functional Needs are often disproportionately impacted by disasters. Transportation needs are a major concern regarding these communities. This research group focused on innovative technology driven solutions to fill gaps in transportation needs for persons with Access and Functional Needs surrounding a disaster. This proposal seeks to leverage existing systems by adding features, maximizing programs, and taking the strain off traditional transportation infrastructure.

Collaborators, Advisor(s) and Department(s) that assisted with this research:

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