ATTACHMENT #2

On-route Electric Transit Bus Opportunity Chargers ($1,000,000)

This project would fund the construction and implementation of up to two (2) on-route opportunity fast chargers within the City of Alexandria. They would support charging requirements of a full 100% Zero Emissions Battery Electric transit bus fleet. The chargers would be constructed in strategic locations throughout the City and the DASH bus network to help ensure that the future fleet of 100+ Zero Emissions transit buses can meet the demand of DASH's 24/7 service, serving the community of Alexandria.

The chargers would utilize industry standard SAE J3105 pantograph technology, which is fully compatible with all fourteen (14) battery electric buses currently in use by DASH, and will be compatible with all future DASH battery electric buses (up to 130 buses total). It is expected that these chargers would be able to charge buses at up to 450 KW, promoting perpetual charging of much of the DASH fleet without needing to return to the garage. The chargers would also be compatible with battery electric buses of other local transit providers, to ensure regional benefits.

Restoration of Affordable Housing at 1022 Pendleton Street Boarding House ($850,000)

The Restoration of the Affordable Housing at the 1022 Pendleton Street Boarding House project will allow the City of Alexandria to work with property owners to preserve unique, affordable housing in our community while renovating a building with historic, cultural and architectural significance. The boarding house currently includes eight housing units with deeply affordable rents, as well as shared living space and room for the restoration of retail/commercial space original to the property. This project will allow the City to grant/loan funds to the owner/operator of 1022 Pendleton to renovate the building to include up to 10 deeply affordable rental housing units and manage substantial exterior and interior renovation of this existing structure.

Located at the corner of Henry and Pendleton Streets, adjacent to the Parker Gray Historic District in Alexandria, this building was constructed around 1880 and is among a few remaining examples of Alexandria's thriving black business community from this time period. It has been owned and operated since the 1930's by one African American family, over three generations, for various residential and commercial purposes. Initially a private home, additions to the property enabled commercial uses as a bakery, a barber shop, and a beauty salon, along with residential use. In the 1950's, the residential portion of the building was converted to serve as "green book-" style temporary lodging for black entertainers and notables working in the City/DC area but not accommodated at local hotels due to segregation. Among those known to have lodged at 1022 are Cab Calloway and Elijah Muhammed.

The building's use as temporary lodging shifted to operation as a boarding or rooming house in the late 1960's, with approximately 8-bedrooms serving low- and moderate-income individuals and small households. Boarders have private sleeping rooms but share common kitchen, living, dining/TV and porch areas as well as bathrooms. Some current boarders have resided at the property for several decades.

Because residential rents at the property are very low (e.g., $400-800/month), the property has fallen into general disrepair. The renovation is planned to upgrade all aspects of the building interior and exterior, add bedrooms, improve ingress and egress, and enable accessibility, including one, new fully accessible bathroom. The project will be managed by City Housing staff who are experienced in complicated rehabilitation projects.

Pilot Program for Violence and Crime Prevention Technology ($670,000)

This includes three key technologies: in-car cameras, fixed license plate readers (LPRs), and mobile surveillance trailers:

In-Car Cameras - This technology builds upon the Alexandria Police Department's ("department's") Body Worn Camera (BWC) program and enhances efforts to promote transparency, accountability, and professionalism. In addition to video, In-Car Cameras have integrated License Plate Readers (LPRs), which is a meaningful investigative tool that will enhance the department's investigative capacity. By leveraging this technology, the department can work toward ensuring the safety and security of all residents in Alexandria.

Fixed License Plate Readers (LPRs) -This technology is an advanced camera system that can quickly capture vehicle information. These cameras are strategically located at City ingress points and major thoroughfares to monitor public roadways. One key advantage of fixed LPRs is their ability to quickly identify vehicles associated with criminal activity, such as those linked to wanted subjects, felony vehicles, and stolen vehicles. Additionally, fixed LPRs are used to locate missing adults and endangered children. The data captured by fixed LPRs can provide valuable insights into criminal networks and patterns of activity, such as vehicle theft or drug trafficking. This information can aid in investigations and potentially solve complex cases. By leveraging this technology, the department can work toward ensuring that the community remains safe and protected.

Mobile Surveillance Trailers - This technology is a highly effective tool that can be deployed in response to crime trends to both deter criminal activity and provide real-time surveillance. These trailers are equipped with high-tech cameras that can provide both historical and real-time surveillance, giving law enforcement a critical tool to identify and investigate criminal activity. Additionally, the trailer is designed to help return peace and normalcy to the community by providing a visible law enforcement presence that deters criminal activity and provides a sense of security to residents. Furthermore, the trailer can be equipped with a message board that can be used to share important safety information with the public, such as traffic updates, emergency alerts, and crime prevention tips.

These three technologies provide a comprehensive solution for deterring, detecting, and apprehending individuals who pose a threat to safety and the quality of life in the City of Alexandria.

City of Alexandria/Virginia Tech Smart Mobility Lab ($963,000)

The Smart Mobility Lab (SML) initiative will create an urban living laboratory in Alexandria, in close proximity to Virginia Tech's Innovation Campus, to test and better understand transportation-related smart technologies. Funds will be used to pay Virginia Tech Transportation Institute as a sub recipient for the SML. The SML will also serve as a resource for technology companies to collaboratively develop, test, and implement smart technologies. This work will result in enhanced solutions to save lives, provide equitable mobility options, reduce commutes, help the environment, support workforce development, and spur economic growth.

Virginia Tech and the City of Alexandria will work together to identify mobility problems and deploy innovative technology solutions to address them on a modest scale while using the results to make recommendations for scaled up deployment. Virginia Tech will establish an interactive online learning and stakeholder engagement platform with training opportunities on new technological solutions to the existing municipal workforce to facilitate knowledge transfer and workforce development. Students, faculty, local transportation officials, and regional industry innovation partners will engage with the SML through sponsored workshops, hackathons, educational seminars, internships, and short courses that utilize SML assets. Students will be able to use real world data from existing City platforms including real time on and off-street parking, adaptive lighting systems, e-scooters, capital bikeshare, traffic signals, volumes and data, and transit ridership data through the data exchange platform. Engaging with the SML will be a means to present real-world challenges and opportunities and collaboratively develop solutions for validation and testing in the local environment.

In addition, funding will help establish connections between Alexandria's local government workforce and students and faculty at Virginia Tech to facilitate research and development on smart mobility solutions. A data exchange between the City and the SML will be established to facilitate data driven problem solving. This sandbox environment will provide appropriate levels of access to data from deployed systems in the field without compromising security or negatively affecting Alexandria's transportation operations.