



# Detroit Mobility Optimization through Data for Equity and Safety (MODES) - SMART Grant *One-Pager*

*Submitted to:* City of Detroit City Council

Submitted by:

## Office of Mobility Innovation (OMI) & Department of Public Works (DPW)

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### **Detroit MODES - Enhancing Safety and Equity through Smart Intersections**

**Project Overview:** The City of Detroit's Office of Mobility Innovation previously secured a \$2 million award from the USDOT Strengthening Mobility and Revolutionizing Transportation (SMART) grant program for the Detroit Mobility Optimization through Data for Equity and Safety (Detroit MODES) initiative. This project aims to reduce traffic fatalities and enhance transportation-safety equity for Detroiters, especially in Historically Disadvantaged Communities (HDCs). The City Council accepted the project funds on September 19, 2023. The initiative involves deploying smart intersection technologies to improve safety and address equity issues in transportation.

This document is to make City Council members aware of the upcoming contracts related to the Detroit MODES project that will soon require your approval. These contracts are critical to the successful implementation of the project in the tight timeframe given to us to implement the project by the USDOT.





#### **1. In the City Council Process**

- Derq Contract (Pending City Council Approval, \$277,000): Derq, a Michigan-based start-up with a national presence, specializes in advanced traffic safety solutions. The contract involves integrating Derq's crash nearmiss software with existing City ITS systems to analyze traffic data and enhance roadway safety. Derq's software will provide real-time insights into traffic patterns and potential hazards, contributing to reduced traffic fatalities and improved safety for all Detroiters, especially in HDCs. For maximum transparency, the project team has prepared a project <u>CIOGS specification report</u> and has conducted two public meetings (held on June 5, 2024, and June 10, 2024) in collaboration with the Department of Neighborhoods.
- Miovision Contract (Pending City Council Process, up to \$440,500): Miovision, known for its expertise in traffic signal management and safety analytics, will renew and slightly expand its currently deployed solutions in Detroit. The contract includes services and software for managing and analyzing traffic signals, enhancing intersection safety, and providing data-driven insights. Miovision's technology will work in tandem with Derq's software to create a comprehensive safety solution. For maximum transparency, the project team has prepared a project <u>CIOGS specification report</u> and has conducted two public meetings (held on June 5, 2024, and June 10, 2024) in collaboration with the Department of Neighborhoods.
- Wayne State University Contract (Pending City Council Process, up to \$185,000): Wayne State University, with its expertise in ITS, will focus on data collection and analysis. Their involvement ensures the project's academic rigor and provides valuable insights into the system's effectiveness. Wayne State's evaluation of the deployed technologies will be critical in measuring the project's impact and guiding future improvements in transportation safety.
- Cities Reimagined Public Engagement Partner (Pending City Council Process, approx. \$80,885): Services to engage communities and gather input for solution improvements. This contract will facilitate community involvement and ensure that the deployed solutions meet the needs and expectations of the residents, particularly in HDCs.

#### 2. Soon to Enter City Council Process

- Telecom Internet Service (Soon to Enter City Council Process, approx. \$100,000): Internet service at selected locations to support smart intersection technologies. This contract is essential to ensure connectivity for the deployed systems, enabling real-time data collection and analysis.
- Michigan Department of Transportation (MDOT) Contract (Soon to Enter City Council Process, \$50,000): MDOT will collaborate closely with the City of Detroit, leveraging overlapping infrastructure and enhancing roadway safety through data sharing. This partnership will facilitate improved interagency coordination and contribute to the project's overall goal of reducing traffic fatalities and enhancing safety in HDCs.

#### 3. Previously Approved Contracts:

- Tyme Engineering Contract (Completed, \$400,000): Consultant and Designer. Approved by City Council on January 8, 2024
- UrbanLogiq Contract (Completed, \$390,000): Platform Developer. Approved by City Council on December 12, 2023



**Project Vision & Impact:** The Detroit MODES project aligns with Detroit's vision for safer roadways, economic mobility, and smart city innovation. As one of the first recipients of USDOT funding, we aim to set a national example by showcasing the successful implementation of futuristic transportation technology, saving lives, and addressing mobility challenges.

#### **Expected Benefits:**

- Improved data-driven road safety.
- Tool to quantify roadway intervention impact.
- Automatic crash detection and alerts.
- Increased transparency and interagency collaboration.
- Workforce expertise establishment and Detroit technology leadership.
- Facilitate rapid interventions that could save lives.

#### **Key Performance Indicators (KPIs):**

- Collect and integrate diverse traffic data.
- Develop methodologies for analyzing crash causes and intervention impacts.
- Reduce time spent on crash analysis and intervention.
- Improve cost savings through reduced crashes and efficient decision-making.

