Developing a Scalable Evaluation Framework and Dashboard for Implementing and Monitoring Transit-Oriented Communities

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Center Name: Center for Transit Oriented Communities (CETOC)

Research Priority: Preserving the Environment

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Project Partners: Larry Massey, New Orleans City Planning Commission; Django Szilagi, New Orleans Regional Transit Authority; City of New Orleans Transit Oriented Communities Interim Working Group including representatives from: Regional Transit Authority, City Planning Commission, Mayor's Office of Resilience & Sustainability, Mayor's Office of Community Assets & Investments, Mayor's Office of Economic Development, Mayor's Office of Community Development, Mayor's Office of Nighttime Economy, Housing Authority of New Orleans & New Orleans Redevelopment Authority

Project Funding: $54,000 (USDOT) + $27,000 (matching funds) = $81,000 (total)

Project Start and End Date: 10/1/2024 – 5/31/2026

Project Description: Implementation of a "transit-oriented communities" (TOC) approach that optimizes outcomes for impacted communities is a complex, interdisciplinary process. Transit agencies must work closely with local, regional, and/or state agencies and departments to ensure that local and federal investments lead to anticipated outcomes. Significant changes to land use and zoning, housing policy, development regulations, property tax structures, and physical characteristics of the built environment (e.g., design guidelines) are often needed to coordinate supportive conditions for effective TOCs. Adoption of new technologies such as Computer-Aided Dispatch/Automatic Vehicle Location (CAD/AVL) systems, smart fare collection systems, AI-based video data, digitization of local land use data etc. have led to a massive expansion of the quantity of data available for planners and transit operators to evaluate existing conditions and benchmark performance over time. Many local agencies, however, lack sufficient internal capacity to collect, integrate, analyze, and regularly report on the many factors and variables that impact success. Moreover, disparate agencies may have different measures of success, based on their organizational mission and adopted goals. Decision support tools that streamline data integration, analysis, and reporting to meaningfully measure performance and evaluate next steps are needed. Incorporating data, methods, and findings from CETOC Year 1 research (e.g., CETOC-23-R-09, CETOC-23-R-03, CETOC-23-R-04, CETOC-23-R-05) as well as active collaboration with the City of New Orleans and New Orleans Regional Transit Agency as local partners, this project aims to transfer research results to real-world application by supporting the development of a TOC Evaluation Framework and preliminary performance dashboard that is scalable, replicable, and can be adapted to include a variety of data sources aligned with local policies and goals, including but not limited to transit service quality, climate

resilience and adaptation, affordable housing, job and services access, and community priorities and perceptions.

USDOT Priorities: This project supports the USDOT strategic goals of supporting *economic strength and global competitiveness* by promoting high-performing core assets and system reliability and connectivity, as well as by expanding access to jobs and opportunity, supporting proactive intervention, planning, and capacity building. The project also supports the goals of *transformation* for the future and *organizational excellence* by directly linking CETOC's advanced research to policy and providing a flexible and adaptable tool and technical assistance for data-driven programs and policies, oversight and performance measurement.

Outputs: The primary output of this project is a preliminary public data dashboard that integrates previously siloed (or underdeveloped) datasets for practical use by relevant agencies. Underlying datasets will be published, where applicable, via the City's Open Data platform. This project is the first formal collaboration of CETOC with New Orleans RTA and New Orleans City Planning Commission, along with partners in numerous other local departments/agencies working together through the New Orleans Transit Oriented Communities Interim Working Group. The collaboration with CETOC lends the working group technical and staff capacity, while leveraging stakeholder access, data, and internal analytics not otherwise available to the consortium. Secondary outputs are expected to include: 1) Final technical report summarizing project activities and methods 2) Instructional guide for replication, including preliminary analytical model for measuring expected outcomes resulting from TOC-supportive intervention 3) One or more journal articles submitted highlighting translation of CETOC research into local applications 4) One or more public presentations (in-person and/or virtual) highlighting project outputs, future applications, and implementation next steps.

Outcomes/Impacts: This study aims to expand local capacity for data analysis and tool development through the integration of best-practice research and technical support for innovation, while the City of New Orleans and New Orleans RTA will provide opportunities for applied learning and skill development among future transportation leaders through CETOC. It is anticipated that the resulting performance dashboard will support planning, zoning, and policy decision-making, including but not limited to transit service routing decisions, zoning overlays, right-of-way design standards, and affordable housing development practices. Promoting well-coordinated transportation and land use planning ensures that transportation infrastructure investments such as BRT are optimized to support transportation choice, job access, roadway safety, congestion reduction, and other goals.

Final Research Report: (Link to be provided after project completion).