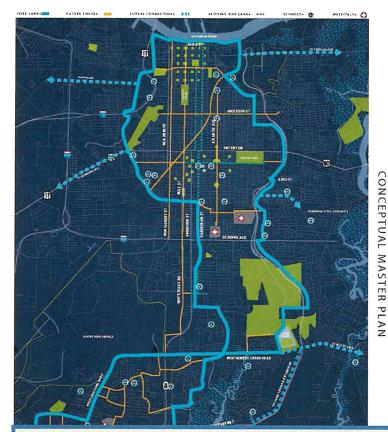
Safety Improvement Projects: Tide to Town Trail 37th Street Safety Improvements

2023 Safe Streets for All Implementation Grant July 10, 2023











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Appendix F – Self-Certification Worksheet

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KEY INFORMATION TABLE

Lead Applicant	City of Savannah		
If Multi-jurisdictional, additional eligible entities jointly applying	n/a		
Total Jurisdiction Population	145,403 (2019 ACS)		
Count of Motor-Vehicle-Involved Roadway Fatalities 2016-2020	88/year (2016-2020 Fatality and Injury Reporting System Tool [FIRST])		
Fatality Rate	12.1/100,000 (based on 5-year average from FIRST; 2019 ACS population data)		
Population in Underserved Communities	17.9% (23,163 of 145,403) as per Interim DOT Disadvantaged Communities Definition and Mapping Tool; ACS 2015-2019 5-year Estimates)		
State(s) in Which Projects and Strategies are Located	Georgia		
Roadway safety responsibility	Ownership and/or maintenance responsibilities over a roadway network	Yes – municipal ownership of network under the jurisdiction of the City of Savannah	
	Safety responsibilities that affect roadways	Yes – municipal ownership of network under the jurisdiction of the City of Savannah	
	Have an agreement from the agency that has ownership and/or maintenance responsibilities for the roadway within the applicant's jurisdiction	n/a	
Funds to Underserved Communities	\$4,166,168	A comment of the comm	
Cost total for eligible activity (A) supplemental action plan activities in support of an existing Action Plan	\$0.00		
Cost total for eligible activity (B) conducting planning, design, and development activities for projects and strategies identified in an Action Plan	\$10,106,984		
Cost total for eligible activity (C) carrying out projects and strategies identified in an Action Plan	\$13,167,800		
Action Plan or Established Plan Link	See Supporting Documentation		

OVERVIEW

The City of Savannah is seeking funding to advance safety projects that achieve the intent of the Vision Zero Action Plan. The City is requesting funding for:

- 1. Tide to Town Core Route design and NEPA
- 2. Tide to Town Middleground Road construction
- 3. 37th Street Safety Improvements design, NEPA and construction

The City of Savannah has a proven track record of improving safety on local streets as demonstrated through their participate in the National Association of County Engineers (NACE) Pilot Local Roadway Safety Program (LRSP) in partnership with the Georgia Department of Transportation (GDOT) and the Federal Highway Administration (FHWA). In February 2022 the Mayor and Council passed the *Resolution Implementing Vision Zero Initiative*, followed by the completion of the *Vision Zero Action Plan* in September 2022. The proposed implementation projects are in the City of Savannah, Chatham County, Georgia. The project area is in Georgia's 1st Congressional District. The Vision Zero Action Plan is in supporting documentation as Appendix A, and the Resolution as Appendix B.

Tide to Town

The Tide to Town Urban Trail System will be a protected network of walking and bicycling trails connecting all of Savannah and Chatham County. When complete, the Core Route will provide 30+ miles of continuous transportation system, connect 30 schools, 3 major hospitals, 62 neighborhoods, and several economic centers. It will be a combination of off-road shared-use paths and barrier-separated on street bike lanes. The intent is to use existing rights-of-way where viable to reduce implementation costs. Off-road sections of the trail will be 10 to 12 feet wide bidirectional concrete (with potential for about 2-4' of rubberized track for running/walking in off-road applications). For on-street sections, the trail will be a minimum of 8-foot protected bike lane, typically on existing street surface or elevated concrete. All sections of the Core Route will be compliant with the American with Disabilities Act (ADA).

The City of Savannah is looking to advance the design of the Core Route and construction of a segment of Tide to Town along Middleground Road. There were two pedestrian fatalities on Middleground Road between 2016 and 2020, demonstrating the need for the separated facility along this on-street portion of the proposed trail. This project is consistent with the City of Savannah's Complete Street ordinance (Division II, Part 4, Chapter 1, Article G), Resolution Implementing Vision Zero Initiative and the Vision Zero Action Plan. This project is included in the Coastal Region Metropolitan Planning Organization (CORE MPO) Metropolitan Transportation Plan – Mobility 2045 under the Non-Motorized improvements. Details on the Tide to Town Trail are available as Supporting Documentation in Appendix C.

37th Street Safety Improvements

In coordination with GDOT and FHWA, the City identified the top safety priorities in the Local Roadway Safety Program. 37th Street is a major corridor within the City because of the direct access to Interstate 16 and as a major east-west connector. A segment of 37th Street between Ogeechee Road and Abercorn Street was removed from the state highway network in 2020. The

roadway is functionally classified as a Principle Arterial west of Abercorn Street and a Minor Arterial to the west.

To address the needs of the corridor the project will upgrade signals and timing of up to 15 intersections (listed below). Dedicated left turn bays would be constructed with protected phasing at critical intersections along the corridor. Critical intersections are considered those with the highest accident rates and poor level of service. Safety improvements include the following:

- Install left turn bays along 37th St. at MLK Blvd. and Montgomery St. widen 37th St. approximately eight feet between the two intersections to provide an 11-foot left turn bay and two 11-foot through lanes at the intersections
- Install left turn bays on 37th St. at Bull St. widen to provide an 11-foot left turn lane and two 11-foot through lanes at the intersection
- Provide system-wide signal system improvements and pedestrian facility upgrades.
- Provide protected only left turn phasing along 37th St. at the modified intersections.
- Prohibit on-street parking adjacent to intersections
- Delineate on-street parking areas
- Improve roadway markings

37th St. 9 1 (a) Ogeechee Rd. 37th St. Abercorn St. Connector 37th St. 37th St. Connector/I-16 (a) 10 37th St. (a) Habersham St. 3 37th St. MLK Blvd. 12 37th St. (a)(a)East Broad St. 4 37th St. (a) Montgomery St. 14 37th St. Harmon St. (a)5 37th St. Barnard St. 11 37th St. (a) a, Price St. 6 37th St. Whitaker St. 13 37th St. Paulsen St. (a)7 37th St. a, Bull St. 15 37th St. Waters Ave. 8 37th St. a, Drayton St.

Table 1 Signal Locations

PROJECT LOCATION

The project is located in the City of Savannah, Chatham County Georgia. The High Injury Network is shown below. The Tide to Town Core Route spans the City and will provide an alternative non-motorized travel corridor that is separated from City streets. The Middleground Road segment is located along the southern edge of Hunter Army Airfield. The 37th Street Safety Improvements would be located along 37th Street between Ogeechee Road and Bee Road. Maps of the projects and additional information on safety conditions in the City of Savannah are provided in Supporting Documentation in Appendix D.

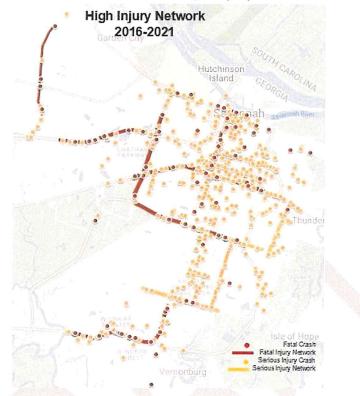


Figure 1 Vision Zero Action Plan High Injury Network 2016-2020

RESPONSE TO SELECTION CRITERIA

Safety Impact

Savannah renewed its commitment to safer streets in 2022 with the adoption of Vision Zero, a strategy to eliminate all traffic fatalities and severe injuries, while increasing safe, healthy, and equitable mobility for all. The City has completed a Vision Zero Action Plan and the following principles were identified by the City of Savannah's Vision Zero Resolution and continued work to create safer streets:

- Traffic deaths and serious injuries are preventable and unacceptable.
- Saving human lives is an objective of the highest order.
- Solutions should be comprehensive, collaborative, equitable, and data-driven.
- Savannah as a whole staff, elected officials, staff, community members, and visitors are accountable for implementing the Vision Zero Action Plan.

The High Injury Street network shows the locations to consider safety improvements throughout the City and the proposed safety implementation projects are a part of a program of investments to reduce crashes. Based on the crash analysis in the Action Plan, there were 822 total crashes from 2016-2021 that resulted in a fatality or serious injury, according to information from the Georgia Department of Transportation. These crashes are identified with the KABCO scale, corresponding to the severity of the injuries as assessed by law enforcement responding to

investigate the scene. The number of series injuries has increased during this time period, particularly during 2021. The average annual fatality rate for the City of Savannah is 12.1 which is higher than the national rate of 10.6 but lower than the Georgia rate of 15.5.

Data analysis of the contributing factors in 801 fatal and serious injury crashes between 2016 and 2021 revealed that Savannah aligns closely with other cities and the state for collision causation, including:

- Angle collisions represent 42% (State Highway Safety Plan Priority)
- In serious injury crashes, drivers/pedestrians/cyclists were suspected of being impaired 35% of the time; this represents an impairment rate more than 3 times the state average of 10%.
- Drivers/pedestrians/cyclists were suspected of impairment in 60% of fatal crashes; the state rate of 32% is less than half of Savannah's rate.
- Statewide, pedestrian fatalities represent 17% of all collisions resulting in a death; in Savannah, the percentage is more than twice the state, at 34%.

Throughout the City of Savannah the two primary causes of crashes are intersection incidents (nearly 57%) and because of impaired drivers. On 37th Street the analysis shows that crashes along the corridor involve impaired drivers. In coordination with the FHWA Office of Safety, the City of Savannah identified priority City streets based on Top 10 locations for pedestrian incidents, intersection crashes and incidents that involve impaired drivers. Detailed information on the Local Roadways Safety Programs and the outcomes can be found in Appendix D.



Figure 2 City Streets Priority Locations



Figure 3 City Streets Impairment Locations

The Tide to Town Core Route provides a separated facility along the City's canals and some City streets to provide an alternative travel corridor off of the high injury network. Middleground Road currently has a posted speed of 35 miles per hour and is a four-lane facility providing an alternative route to SR 204. Two pedestrian fatalities occurred on Middleground Road between 2016 and 2020. The High Injury Street network in the Vision Zero Action plan shows incidents on this corridor primarily occurring at intersections.

Proven Safety Countermeasures

FHWA Office of Safety has Proven Safety Countermeasures¹, and relevant measures are listed below. These countermeasures are inclusive into the features of the proposed safety improvements for each of the projects. Table 2 shows the potential safety benefits based on FHWA's Crash Modification Factor Clearinghouse².

Table 2 FHWA Proven Safety Countermeasures

ure Tide to 37th Safety

Countermeasure	Tide to	37 th	Safety Benefits
	Town	Street	
Appropriate Speed Limits for All Road Users		X	Lower speeds result in less severe crashes. A 10% speed decrease has a CMF of 0.68
Left- and Right-Turn Lanes at Two-Way Stop Controlled Intersections		X	Installation of left turn lanes can have a 28-48% reduction in total crashes.

¹ https://safety.fhwa.dot.gov/provencountermeasures/

² https://www.cmfclearinghouse.org/

Countermeasure	Tide to Town	37 th Street	Safety Benefits
Yellow Change Intervals		X	Appropriately timing the yellow change interval can have an 8-14% reduction in total crashes and 36-50%
Leading Pedestrian Interval (LPI)		X	reduction in red light running. An LPI gives pedestrian more time to establish their presence in an intersection and can reduce pedestrian-vehicle crashes at intersections by 13%
Crosswalk Visibility Enhancements	Х	X	Improving the visibility of crosswalks with lighting and improved markings can reduce pedestrian injury crashes by 40% or more.
Bicycle Lanes	Х		The addition of bicycle lanes can reduce crashes by at least 30% and may be even more in separated facilities.
Walkways	Х	Х	Sidewalks and shared-use paths improve safety and mobility for pedestrians and can reduce crashes involving pedestrians by 65-89%.
On-Street Parking		Х	On-street parking increases the friction and therefore encourage lower speeds, but parking should be at least 20-feet from a crosswalk for visibility.

Equity, Engagement, and Collaboration

Aligning with the USDOT's Justice40 goals, the projects provide significant opportunities to improve transportation infrastructure that will impact disadvantaged communities. 44.4% of the tracts in the project areas were identified as highly disadvantaged as defined by the Department of Transportation. These communities scored greater than the 50th percentile in four or more of the indicators. Moreover, 51% of the tracts have at least 3 of the required indicators to be identified as highly disadvantaged and could be deemed "moderately" disadvantaged. The following table shows the Census tracts identified as underserved communities, and details of the tracts associated with each project are in Appendix E.

Table 3 Highly Disadvantaged Census Tracts

国政治的建筑企业	Indicators						
Implementation Project	Census Tract	Access	Health	Economic	Equity	Resilience	Environment
	Tract 22		X	Х	х		x
37th Street	Tract 26		X	X	х		х
	Tract 27	X	X	X			x
	Tract 109.01	X	X	х	х		
Tide to Town	Tract 11		X	х	х		X
	Tract 33.02	X	x	X			X

		Indicators					
Implementation Project	Census Tract	Access	Health	Economic	Equity	Resilience	Environment
-	Tract 45	X	X	Х			X
	Tract 6.01	X	X	X			X

The above table demonstrates that Health and Economic disadvantages are present in a large majority of the census tracts affected by the Tide to Town plan, which presents key focus on reducing each.

There has been significant collaboration between over twelve community, public and private organizations in creating the Tide to Town overall plan. The City of Savannah has supported the initiative with allocation of one million dollars from its Special Purpose Local Option Sales Tax (SPLOST) in 2019 (savannahga.gov). The plan has also been the recipient of the Racial and Ethnic Approaches to Community Health (REACH) grant from the U.S. Centers for Disease Control (CDC). The grant provides funding for additional education and outreach with focus on access for underserved communities and schools. Community outreach activities have been ongoing since 2018.

The City of Savannah has engaged a team from multiple City Departments to deliver the Vision Zero Action Plan. Representation includes the City Manager's Office, Mobility Services, Fire, Police and Office of Management and Budget. This group meets bi-weekly and addresses the implementation of not only vision zero projects but other strategies such as enforcement and education. The regular agenda includes the following: Traffic Calming Policy & Procedures; Status of Traffic Calming Projects; Vision Zero planning & implementation; Vision Zero Action Plan development.

Since 2015, the City has hosted a Mobility Advisory Committee (MAC) of diverse community stakeholders with the mission to promote safety, health & wellness, and ease of mobility for all residents and visitors, using non-motorized and public transportation, in and around the City of Savannah and Chatham County. Their vision is a healthy community that allows people to navigate through the City and County safely, easily and efficiently. The goals of the MAC are to:

- Inform and guide a comprehensive approach to municipal policy, infrastructure design, and decision-making related to mobility and urban connectivity.
- Ensure compliance with City of Savannah Complete Streets ordinance and make recommendations for improvements as necessary.
- Coordinate with state and federal policies, regulations and funding sources to ensure support for non-motorized transportation and transit projects

Effective Practices and Strategies

Safe System Approach. The implementation projects deliver on the elements of a Safe System Approach for Safer People, Safer Roads and Safer Speeds.

"Safer People: Encourage safe, responsible behavior by people who use our roads and create conditions that prioritize their ability to reach their destination unharmed."

The intent of each project is to provide an environment that supports safe and responsible behavior. The Middleground Road segment of the Tide to Town Trail provides a separated facility and a safer choice of travel to reach their destination unharmed. The pedestrian improvements along 37th Street encourage safer behavior by indicating safe crossing locations, informing driver behavior on the corridor by improving signal timing, and limiting interactions between drivers and other roadway users.

"Safer Roads: Design roadway environments to mitigate human mistakes and account for injury tolerances, to encourage safer behaviors and facilitate safe travel by the most vulnerable users."

The roadway design for each of the projects is intended to improve safety by minimizing interactions between modes, improving user expectations and providing improved sight distances. The Tide to Town Trail provides an alternative transportation corridor that will reduce the number of cyclists and pedestrians on adjacent roadway facilities. Specifically, on the Middleground Road section, a protected separated facility on-street will limit the interaction between cyclists and motorists as well as reduce pedestrian interactions with vehicles. For the 37th Street Safety Improvements, a key element of the project is intersection improvements and improved signal timing. The improved intersection designs are intended to prevent the number of incidents along the corridor as well as providing signal phasings that limit the potential to trap vehicle within the intersection. Also, the design will provide parking locations and parking restrictions. The parking restrictions are to remove parked cars from intersections that block visibility. The addition of on-street parking at locations along the corridor will allow for enough space for parking and travel flow.

"Safer Speeds: Promote safer speeds in all roadway environments through a combination of thoughtful, context-appropriate roadway design, targeted education and outreach campaigns, and enforcement."

As part of the Vision Zero Action Plan, the City of Savannah has identified corridors where the speed limit may be reduced. Speed limit reductions are planned on 37th Street from 35 mph to 30 mph between Abercorn Street and Waters Avenue for just under one mile, about half of the corridor. "In 2019, 78 percent of the vehicles involved in fatal pedestrian crashes were on a roadway with a speed limit greater than 30 miles per hour (mph). Unsafe speeds are now a well-documented and understood factor in death and injury, especially among people outside of a vehicle".

Complete Streets. The City of Savannah has a Complete Streets Ordinance as well as a Traffic Calming Policy. "The city shall undertake feasible and circumstantially appropriate measures to make complete streets practices a regular part of its day-to-day operations, including applying pertinent principles to appropriate transportation projects and programs. To the extent feasible and circumstantially appropriate, every street project shall incorporate complete streets infrastructure to enable reasonably safe travel along and across the right of way for each category of user..."

The proposed projects are consistent with the Complete Streets Ordinance and provide the opportunity for the improvement of safety and enhance the convenience of users both motorized and non-motorized. The Tide to Town project embodies the complete streets approach by

improving accessibility and multimodal networks citywide for people outside of a motor vehicle, including people who are walking and biking. The 37th Street Safety improvements designate spaces for motorized vehicles and pedestrians with improved management of the available right-of-way. A copy of the Complete Street Ordinance is provided in Appendix B.

Climate Change and Sustainability, and Economic Competitiveness

Overall, dedicated bike and pedestrian networks provide higher visibility and easier access to commercial areas along their pathways, which can increase business activity. Enhancing safety features for all users creates an environment where local residents tend to visit business more frequently. Research in peer cities shows a positive economic benefit of constructing greenway trails, including Greenville SC, where the Swamp Rabbit Trail is estimated to have generated \$6.7 million in tourist revenues³, while individual businesses along the trail reported between 30% and 80% increased earnings⁴ in the first year the trail was open. Economic competitiveness is not limited to trail-related businesses; trails also have a positive impact on a community's health and wellness. According to the nonprofit American Trails, every \$1 invested in building trails results in \$3 saved in medical costs⁵.

Tide to Town

The proposed improvements are part of a 30-mile network connecting 62 neighborhoods, 30 K-12 schools, four universities and colleges, three major hospitals, and other key locations Savannahians need to access to meet their basic needs. Building out the dedicated non-motorized network is anticipated to spur increased walking and cycling, reduce local air pollution by allowing Savannahians to reduce reliance on fossil fuel vehicles, and increase community and transportation resilience. The Tide to Town project provides an alternative and safer travel route that avoids roadways included in the high injury street network identified in the Action Plan. This route also provides redundancy for the #6 Crosstown bus, which has 12 stops along Middleground Rd and further enhances transportation options for road users. Increasing utilization of this route can positively affect the economic viability for the transit system and local businesses.

37th Street Safety Improvements

Improvements along 37th Street have the potential to reduce impacts on the environment and enhance economic factors as well. Research shows that optimizing traffic signals can reduce greenhouse gas emissions and criteria pollutants associated with excessive idling and reduce other users' exposure to pollutants from vehicles⁶.

³ Economic Cycles: Bikes Pump More Than Millions into Local Economy, Upstate Business Journal, 2022 (retrieved 9/13/2022): https://upstatebusinessjournal.com/retail-hospitality/economic-cycles-bikes-pump-more-than-millions-into-local-economy/

⁴ Reed, Julian A., Ed.D, MPH, Furman University: Greenville Health System Swamp Rabbit Trail: Year 2 Findings (retrieved 9/13/2022):

https://cms6.revize.com/revize/rutherfordnc/document_center/Outdoor%20Recreation%20-%20Economic%20Impact%20Analysis/SRT%20Impact%20Study%20Year%202%20Final.pdf

⁵ Health Benefits of Trails, American Trails (retrieved 9/13/2022): https://www.americantrails.org/health-benefits

⁶ Fazzini P., Torre M., Rizza V., and Petracchini F. (2022); Effects of Smart Traffic Signal Control on Air Quality

PROJECT READINESS

The City of Savannah has completed planning activities for the implementation projects including the development of general trail requirements for the Tide to Town trail. For 37th Street, the City has conducted detailed traffic studies and developed improvement concepts for the corridor. Upon award, the City of Savannah will initiate activities to begin the design and environmental review process for each of the projects. The following schedule demonstrates how the City will achieve the proposed activities and deliver within 5 years. The City of Savannah has delivered similar projects and has both in-house and consulting resources available to meet the requirements to construct the Middleground Road segment of the Tide to Town trail and the improvements along 37th Street. The Self-Certification Worksheet is provided in Appendix F.

It is assumed based on the proposed scopes of the projects, that they will be documented as Categorical Exclusions (CE) under the National Environmental Policy Act. Upon award announcement, the City will coordinate with the CORE MPO to make any necessary programming updates to the MPO TIP.

	Phase	2024	2025	2026	2027	2028
SS4A Award Announcement		January				
SS4A Grant Obli	gation	October				September
	NEPA (12 mos)		June	June		
27th Street	Design (18 mos)	December		June		
37th Street Improvements	ROW/UTL (12 mos)			June	June	
	CST (24 mos)			June		June
Tide to Town						
Middleground Rd	ROW/UTL	N/A				
	CST (24 mos)		June		June	
Tide to Town Core Route	NEPA		June			June
	Design	December				June
	ROW/UTL	N/A				
	CST	N/A				

FUNDS TO UNDERSERVED COMMUNITIES

Approximately 17.9 percent of the population of the City of Savannah are within Underserved Communities Census Tracts. This equates to approximately \$4.2 million being allocated to underserved communities. The implementation projects are a part of a series of improvements within the Vison Zero Action Plan to serve the entirety of the City. However, the implementation projects are within seven of the nine census tracts that are identified as Underserved Communities in the City.

BUDGET

The City of Savannah is seeking funding in the two following activity areas: (B) conducting planning, design, and development activities for projects and strategies identified in an Action Plan; and (C) carrying out projects and strategies identified in an Action Plan. The table below shows the anticipated federal and non-federal share.

Subtotal Budget for (A) supplemental action plan activities	\$0.00				
Itemized Estimated Costs of the (A) supplemental action plan activities					
N/A	\$0.00				
Subtotal Budget for (B) conducting planning, design, and development activities \$10,106,9					
Itemized Estimated Costs of the (B) planning, design, and development activities					
Tide to Town Core Route	\$2,006,984				
Tide to Town Middleground Road	\$900,000				
37th Street Safety Improvements	\$7,200,000				
Subtotal Budget for (C) proposed projects and strategies \$13,167,800					
Itemized Estimated Costs of the (C) proposed projects and strategies					
Tide to Town Middleground Road	\$6,000,000				
37th Street Safety Improvements	\$7,167,800				
Subtotal Funds to Underserved Communities	\$4,166,168				