

Impaired Pedestrian-Bicycle Evaluation and Demonstration Project

UEI: R37RMC63XKG1

Opportunity Number: DOT-OST-2023-0048

USDOT FY23 Safe Streets and Roads for All

Funding

Assistance Listing # 20.939



Key Information Questions

Lead Applicant Name	Pinellas County
Lead Applicant Unique	R37RMC63XKG1
Entity Identifier (UEI)	R3/IdWe03/AKO1
Eligible Entity Type	(2) a political subdivision of a State or territory;
Do you have additional	No
applicants as part of a	110
multijurisdictional group	
of eligible entities?	
Total Applicant	959,107 (US Census Population as of April 1, 2020)
Jurisdiction Population	757,107 (OS Census i opulation as of April 1, 2020)
Total Applicant	Pinellas County is comprised of 275 Census Tracts .
Jurisdiction Applicant	r menas County is comprised of <u>273 Census Tracts</u> .
Census Tract(s)	260 02, 262, 265 02, 267 02, 269 19, 269 00, 266 02, 269 10, 264 02,
Census Tract(s) of any	260.03; 262; 265.02; 267.03; 268.18; 268.09; 266.02; 268.19; 264.02;
pilot or demonstration	265.01; 259.02; 259.01; 264.01; 266.01; 254.13; 254.2; 276.04; 258; 255.01; 254.01; 254.12; 254.21; 257; 255.05; 255.1; 255.07; 245.07;
projects (if applicable)	
	276.05; 252.04; 256.02; 255.09; 254.07; 254.14; 245.08; 252.11;
	256.03; 253.03; 254.16; 254.15; 245.09; 255.08; 252.1; 253.09; 253.05;
	254.17; 245.14; 245.1; 254.18; 254.19; 254.11; 250.2; 250.21; 253.1;
	252.07; 253.07; 253.11; 251.15; 250.11; 250.09; 245.05; 245.12;
	244.12; 244.06; 245.18; 245.19; 244.09; 244.1; 244.13; 245.15; 245.16;
	249.05; 249.04; 249.07; 249.06; 252.08; 252.09; 252.05; 251.19;
	251.16; 251.14; 251.23; 251.22; 251.12; 251.13; 251.21; 251.11;
	250.07; 250.13; 250.12; 250.04; 251.1; 251.09; 251.07; 250.16; 250.14;
	249.01; 249.08; 246.01; 243.02; 243.01; 244.03; 244.08; 250.15;
	277.04; 277.01; 251.08; 251.06; 250.19; 250.17; 250.18; 248.04;
	248.05; 248.03; 248.01; 247.01; 247.02; 246.04; 246.03; 242.01;
	242.02; 241; 240.02; 278.01; 278.02; 279.05; 224.02; 225.02; 225.03;
	226.02; 228.01; 230; 247.03; 231; 232; 239; 238; 240.01; 237; 233;
	229.01; 229.02; 228.02; 227; 226.01; 225.01; 234; 236.02; 236.01;
Total Count Motor	596
Vehicle-Involved	
Roadway Fatalities that	
includes the last five	
years of data made	
available in the Fatality	
Analysis Reporting	
System (FARS) during	
the NOFO period	
Total Average Annual	62.14
Fatality Rate (per	
100,000 population)	

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Pinellas I-PED (Impaired Pedestrian-Bicycle Evaluation and Demonstration) Project

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Total Percent of	37% (353.4K population)						
Population in Underserved Communities Census Tract(s)	County of Pinellas, FDEP, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS DOT DOT, Census Powered by Esri Total Population Living in Disadvantaged Census Tracts in the Selected Project						
	\$\mathref{1}\$ 971k						
Project Title	Pinellas I-PED (Impaired Pedestrian-Bicycle Evaluation and Demonstration) Project						
Application Type (select	/ \$						
all that apply)	Demonstration Activities to inform the development of a Safety						
	Action Plan.						
Description of Supplemental Planning and Demonstration Activities (if relevant) Total Federal Funding	The Pinellas I-PED (Impaired Pedestrian-Bicycle Evaluation and Demonstration) Project activities include further research into recognizing discrepancies into the crash reporting process within the State of Florida dealing with fatal crashes involving pedestrians and bicyclists that are under the influence. The program will also test various physical infrastructure, educational sessions, and enforcement activities to test the effectiveness to reduce these types of fatal crashes. Additionally, the application will pilot programs to analyze and document the crash reporting process to determine why the toxicology report findings in 2021 identified over 67% of pedestrian and bicycle fatalities being under the influence versus the statewide reporting system's (Signal 4) 16% rate of being under the influence.						
Request	\$2,500,000 (80%)						
Total Local Share/Match	\$625,000 (20%)						
Total Project Cost	\$3,125,000						
Regional Coordination	Through this application, Pinellas County will coordinate with the Florida Department of Transportation, Pinellas County Sheriff's office, Community Traffic Safety Team, Florida Department of Health, and the Metropolitan Planning Organization - Forward Pinellas to build upon the existing Vision Zero Action Plan to determine specific measures to reduce the number of pedestrian and bicycle fatalities under the influence of drugs and alcohol.						



Roadway Safety Issues

According to the National Highway Traffic Safety Administration (NHTSA), the nationwide average for fatalities per 100,000 population is 11.78. **Pinellas County is recording nearly 6x** the national average seeing 62.14 fatalities per 100,000 people in 2020, consequently ranking the Pinellas County region as the 4th highest metro area for pedestrian and bicycle fatalities according to *Smart Growth America's Dangerous by Design 2022 edition*.

Amongst the fatalities in Pinellas County, pedestrians and bicyclists account for 256, or 45% of the fatalities over the last 5 years (2017 – 2021) with future projections on the rise. Furthermore, the state of Florida's crash database management tool, Signal Four, determined that 16% of all bicycle and pedestrian fatalities in 2021 in Pinellas County were under the influence of drugs and/or alcohol. Pinellas County compared this statistic to the Pinellas County Medical Examiner's office data. The 2021 data for 59 pedestrian and bicycle fatalities showed that over 67% of victims were under the influence of either drugs and/or alcohol.

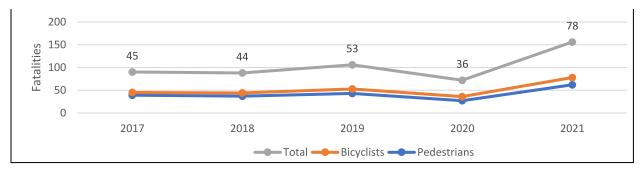


Figure 1: Bicycle and Pedestrian Fatalities in Pinellas County

Scope of Work

Pinellas County's SS4A application will build off the Pinellas County Metropolitan Planning Organization's (Forward Pinellas) Vision Zero Action Plan. Pinellas County was part of the multi-jurisdictional group that jointly cooperated in the Safe Streets Pinellas Action Plan and will develop a supplemental safety action plan to add to the existing Action Plan. This is accomplished through the following Supplemental Planning and Demonstration activities:

Supplemental Safety Action Plan

- Validate 2022 Toxicology Report Validate 2022 toxicology data and compare results to the 2021 results. Reports will be validated by comparing the 2021 results of the Medical Examiners' Toxicology Reports vs. Signal 4 data to confirm the 2020 observations.
- **Identify Conditions** Pinellas County will identify conditions that are more prominent/susceptible to experiencing a bicycle or pedestrian fatality caused by being under the influence of drugs and/or alcohol.
- **Policies and Regulations** After identifying the conditions and analyzing the trends resulting from the 2021 and 2022 Toxicology Report, a list of recommended policies and regulation changes will be submitted to mitigate future fatalities.
- **Develop Context Sensitive Safety Toolbox** A list of context-sensitive safety countermeasures specific to addressing pedestrian and bicycle fatalities under the influence of drugs and alcohol will be developed. The toolbox will identify countermeasures that are most effective under this application's demonstration activities.
- **Process Analysis** The County will evaluate the crash reporting process to determine processing disconnects and improvements that can improve the information being reported on the statewide crash reporting system.



- **Reporting/Benefits/Performance Metrics** Per FHWA requirement, quarterly progress reports will be provided with a final report summarizing the Action Plan studies and findings. The final report will include a 1-year evaluation of the project benefits for the demonstration activities to report on the reduction of pedestrian and bicycle fatalities, before and after bicycle lane departure activities, and before and after jaywalking activities.
- **Develop a New Safety Plan** Pinellas County will build on the existing Forward Pinellas Vision Zero Action Plan to include a new Safety Plan that includes the findings through this application.

Demonstration

- 1. **Public Information, Education, and Enforcement** Pinellas County will work with the local Opioid Task Force, public information campaigns, community leaders, and local law enforcement agencies to demonstrate projects to test the effectiveness of each of the public facing campaigns.
- 2. **Pilot programs to impact behavioral activities** The demonstration activities will test multiple countermeasures along select locations as identified in the Supplemental Safety Action Plan Identify Conditions task. Measures that will be tested include the installation of physical barriers, passive pedestrian detections, rectangular rapid flashing beacons (RRFBs), and more. This demonstration will determine the most effective countermeasures to incorporate into the Planning toolbox to mitigate future fatalities of persons under the influence of drugs and alcohol.

Equity

The demonstration task for this application will employ low-cost, high-impact countermeasures at the locations that are most heavily concentrated with pedestrian and bicycle fatalities. While 37% of Pinellas County's population resides within an underserved community, this application's demonstration projects will focus on the mid to southern section of the County along the underserved communities of Lealman and Highpoint (See Project Location Map).

Schedule

The Pinellas I-PED application assumes consultant support in performing the activities identified under the Action Plan stage and will leverage firm(s) that have been competitively procured in accordance with CFR § 200.404 and 405 to begin work immediately upon receipt of Notice to Proceed. All project tasks and activities will be completed within the 5-year period of performance.

Task Name	Start	Finish	2025	2026	2027	2028	2029
Anticipated NTP	Jan-25	Jan-25					
Supplemental Safety Action Plan	Jan-25	Nov-29					
Validate 2022 Toxicology Report	Jan-25	May-25					
Identify Conditions	May-25	Dec-25					
Policies and Regulations	Jan-26	Dec-26					
Develop Context Sensitive Safety Toolbox	Jan-27	Jul-28					
Process Analysis	Jun-25	Dec-25					
Reporting/Benefits/Performance Metrics	Mar-28	Jul-29					
Develop Safety Plan	Aug-29	Nov-29					
Demonstration	Aug-25	Nov-28					
Demonstration Project 1 - Public Education	Aug-25	Jan-27					
Demonstration Project 2 - Physical	Jul-26	Mar-28					
Demonstration Project 3 - Enforcement	Aug-27	Nov-28					

Figure 2: Project Schedule



Budget

The Pinellas I-PED Project application is comprised of two main components: Supplemental Safety Action Plan and Demonstration. The budget assumes a high-level cost overview of each of the project activities and does not include any previously incurred expenses, or costs to be incurred before the time of award. The following table describes the estimated budget and tasks associated with each component.

Table 1: Budget Summary

Task Name	Federal	Non-Federal Match	Total	
Supplemental Safety Action Plan	\$1,800,000	\$ -	\$1,800,000	
Validate 2022 Toxicology Report	\$400,000	\$ -	\$400,000	
Identify Conditions	\$200,000	\$ -	\$200,000	
Policies and Regulations	\$200,000	\$ -	\$200,000	
Develop Context Sensitive Safety				
Toolbox	\$200,000	\$ -	\$200,000	
Process Analysis	\$200,000	\$ -	\$200,000	
Reporting/Benefits/Performance				
Measures	\$200,000	\$ -	\$200,000	
Develop a Safety Plan	\$400,000	\$ -	\$400,000	
Demonstration Projects	\$700,000	\$625,000	\$1,325,000	
Total	\$2,500,000	\$625,000	\$3,125,000	

Match Percentage

80%

20%

The demonstration projects will incorporate public education, physical infrastructure installations, and an enforcement phase. These demonstration activities will be tested to determine the effectiveness of each activity and included under the evaluations report to finalize recommended activities and countermeasures under the Supplemental Safety Action Plan activities. The physical infrastructures installed will test various low-cost, high-impact countermeasures to be tested among multiple locations identified through the tasks associated with the Supplemental Safety Action Plan. The Demonstration will test countermeasures to determine the effectiveness of reducing pedestrian and bicycle fatalities through the implementation of the following measures:

- Fencing
- Shoulder concrete barrier wall
- Photo sensing bollards with flashing lights
- Rectangular Rapid Flashing Beacons (Solar Powered)
- Passive Pedestrian Detection systems

The total project cost is estimated to be \$3.125M with Pinellas County contributing \$625K, totaling a 20% non-federal match.



Pinellas I-PED (Impaired Pedestrian-Bicycle Evaluation and Demonstration) Project

Local Match Source

Pinellas County's local match will be provided through the Traffic Safety Improvements fund source. The following describes the fund sources:

Match Source 1:

- Project Name: Traffic Safety Improvements PIV
- Project Number 005125A
- CIP Phase: Recurring Program Project
- Location: Countywide
- Penny Program: Roads, Bridges & Trail

Match Source 1 is an annual program funded at \$250K per year (\$1.25M over 5 years) to provide the local match requirement of \$625K. The program is funded through the latest Penny for Pinellas fund source that started in 2020. The program offers flexibility to invest in the project locations that will be determined as part of the Action Plan efforts to identify the conditions that are more predominant in pedestrian and bicycle fatalities.



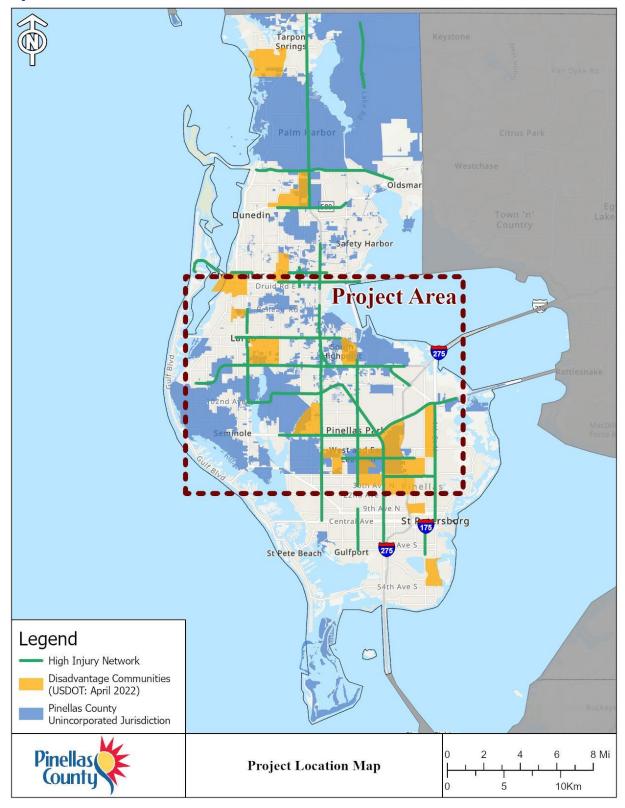


Figure 3: Project Location Map