



The Florida Senate

Local Funding Initiative Request

Fiscal Year 2023-2024

LFIR # 2639

1. **Project Title**
2. **Senate Sponsor**
3. **Date of Request**

4. Project/Program Description

The Florida State Hispanic Chamber of Commerce's (FSHCC) Institute for Sustainable Water Solutions is partnering with the Village of Key Biscayne, to build a Stormwater Management Predictive Analytic Solution Pilot Program. The Village of Key Biscayne is a low-lying coastal community riddled with Stormwater Infrastructure issues as a result of immense flooding. The FSHCC is seeking to work with the Village of Key Biscayne to provide a Stormwater Management Predictive Analytic Solution that uses large volumes of historical data from weather systems and data collected by water level sensors systems to quickly understand the current stormwater flooding environment and predict. This Solution will utilize sensor monitoring data and analytics to predict impacts to help mitigate impacts by performing analytic assessments in support of gaining predictive awareness for emergency responders. Upon successful implementation, the Chamber intends to implement the Solution across FL

5. **State Agency to receive requested funds**
- State Agency contacted?**

6. Amount of the Nonrecurring Request for Fiscal Year 2023-2024

Type of Funding	Amount
Operations	3,000,000
Fixed Capital Outlay	0
Total State Funds Requested	3,000,000

7. Total Project Cost for Fiscal Year 2023-2024 (including matching funds available for this project)

Type of Funding	Amount	Percentage
Total State Funds Requested (from question #6)	3,000,000	100%
Matching Funds		
Federal	0	0%
State (excluding the amount of this request)	0	0%
Local	0	0%
Other	0	0%
Total Project Costs for Fiscal Year 2023-2024	3,000,000	100%

8. **Has this project previously received state funding?**

Fiscal Year (yyyy-yy)	Amount		Specific Appropriation #	Vetoed
	Recurring	Nonrecurring		

9. **Is future funding likely to be requested?**
- a. **If yes, indicate nonrecurring amount per year.**

b. Describe the source of funding that can be used in lieu of state funding.

The Village of Key Biscayne can seek local funding from Miami-Dade County, and federal funding from EPA, FEMA, and DHS.



The Florida Senate

Local Funding Initiative Request

Fiscal Year 2023-2024

LFIR # 2639

10. Has the entity requesting this project received any federal assistance related to the COVID-19 pandemic?

If yes, indicate the amount of funds received and what the funds were used for.

Complete questions 11 and 12 for Fixed Capital Outlay Projects

11. Status of Construction

a. What is the current phase of the project?

Planning Design Construction

b. Is the project "shovel ready" (i.e permitted)?

c. What is the estimated start date of construction?

d. What is the estimated completion date of construction?

12. List the owners of the facility to receive, directly or indirectly, any fixed capital outlay funding. Include the relationship between the owners of the facility and the entity.

13. Details on how the requested state funds will be expended

Spending Category	Description	Amount
Administrative Costs:		
Executive Director/Project Head Salary and Benefits		0
Other Salary and Benefits		0
Expense/Equipment/Travel/Supplies/Other		0
Consultants/Contracted Services/Study		0
Operational Costs: Other		
Salary and Benefits		0
Expense/Equipment/Travel/Supplies/Other	Sensors to collect the data	200,000
Consultants/Contracted Services/Study	To design and develop the Stormwater Management Predictive Analytic Solution for an early warning detection system and advanced flood monitoring solution. This project proposal aims to improve overall situational awareness during traditional rain and flooding events with the ability to: Access and visualize all relevant data; Forecast future conditions; Improve forecasting models; Provide real-time tracking and alerts; and Improve situational awareness, flood resiliency, and stormwater management	2,800,000
Fixed Capital Construction/Major Renovation:		
Construction/Renovation/Land/Planning Engineering		0
Total State Funds Requested (must equal total from question #6)		3,000,000



The Florida Senate

Local Funding Initiative Request

Fiscal Year 2023-2024

LFIR # 2639

14. Program Performance

a. What specific purpose or goal will be achieved by the funds requested?

To design and develop a pilot for an early warning detection system and advanced flood monitoring solution. This project proposal aims to improve overall situational awareness during traditional rain and flooding events with the ability to:

- Access and visualize all relevant data - Quickly monitor and analyze relevant weather, environmental, sensor, and development data for modeling and insight generation.
- Forecast future conditions - Identify weather and development trends that can provide timely insights regarding the magnitude of storm/rain/water events, the forecasted impact, and the location of flooding.
- Improve forecasting models – Leverage real-time data sources with advanced analytics to improve situational awareness and enhance forecasting.
- Provide real-time tracking and alerts – Automate early warning flood detection systems with real-time alerting capabilities for emergency responders.
- Improve situational awareness & flood resiliency –Analyze impacts.

b. What activities and services will be provided to meet the intended purpose of these funds?

- To design system architecture for a smart flood early warning detection system.
- To provide emergency responders with real-time predictive analytics.
- To develop models using machine learning to predict flood inundation levels.
- To evaluate and review the design of a smart flood early warning detection system using the initial sites of interest.
- To develop a flood inundation model powered by advanced analytics for historical analysis, event simulation, and real-time/forecasted flood inundation impact.

c. What direct services will be provided to citizens by the appropriation project?

Citizens will be positively impacted by their local governments' ability to react in real-time to flooding and stormwater events. During storm events, local municipalities will have visibility into water levels or how quickly water was rising. With the ability to predict flooding events, municipalities can reach out to their Public Works or Public Safety personnel, dispatching them to the scene to put up barricades, close roads, redirect traffic and respond to emergencies.

d. Who is the target population served by this project? How many individuals are expected to be served?

The citizens of the Village of Key Biscayne during the pilot phase, with ultimately the entire citizenry of Miami-Dade County during the full implementation of this project and the state of Florida.

e. What is the expected benefit or outcome of this project? What is the methodology by which this outcome will be measured?

Success factors include:

- Ensure sensors are providing accurate data.
- Automate the current manual flood detection process.
- Facilitate the development of analytic models to proactively predict flood events, enabling to provide early warning and supporting proactive road closures that will better serve the citizens.

f. What are the suggested penalties that the contracting agency may consider in addition to its standard penalties for failing to meet deliverables or performance measures provided for the contract?

Suggested penalties include withholding payments, barring third party technology firms from doing business with the State of Florida, and potential financial penalties owed to the State.

15. Requester Contact Information

a. First Name Last Name

b. Organization

c. E-mail Address

d. Phone Number Ext.



The Florida Senate

Local Funding Initiative Request

Fiscal Year 2023-2024

LFIR # 2639

16. Recipient Contact Information

a. Organization

b. Municipality and County

c. Organization Type

For Profit Entity

Non Profit 501(c)(3)

Non Profit 501(c)(4)

Local Entity

University or College

Other (please specify) 501 (c)(6)

d. First Name Last Name

e. E-mail Address

f. Phone Number

17. Lobbyist Contact Information

a. Name

b. Firm Name

c. E-mail Address

d. Phone Number