



## Florida Job Growth Grant Fund Public Infrastructure Grant Proposal

Proposal Instructions: The Florida Job Growth Grant Fund Proposal (this document) must be completed by the governmental entity applying for the grant and signed by either the chief elected official, the administrator for the governmental entity or their designee. Please read the proposal carefully as some questions may require a separate narrative to be completed.

### Governmental Entity Information

Name of Governmental Entity: City of Coral Gables

Government Federal Employer Identification Number: 288.075, F.S.

### Contact Information:

Primary Contact Name: Raimundo Rodulfo

Title: Information Technology Director

Mailing Address: 2801 Salzedo Street

Coral Gables, FL 33134

Phone Number: 305-461-6725

Email: rrodulfo@coralgables.com

### Public Infrastructure Grant Eligibility

Pursuant to section 288.101, F.S., the Florida Job Growth Grant Fund was created to promote economic opportunity by improving public infrastructure and enhancing workforce training. Eligible governmental entities that wish to access this grant fund must submit public infrastructure proposals that:

- Promote economic recovery in specific regions of the state, economic diversification or economic enhancement in a targeted industry. (View Florida's [Targeted Industries here.](#))
- Are not for the exclusive benefit of any single company, corporation or business entity.
- Are for infrastructure that is owned by the public and is for public use or predominately benefits the public.

## 1. Program Requirements:

Each proposal must include the following information describing how the project satisfies eligibility requirements listed on page 1.

- A. Provide the title and a detailed description of the public infrastructure improvements.

Coral Gables Smart District: Infrastructure for High-Speed Internet

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- B. Is this infrastructure owned by the public?

Yes       No

- C. Is this infrastructure for public use or does it predominately benefit the public?

Yes       No

- D. Will the public infrastructure improvements be for the exclusive benefit of any single company, corporation or business entity?

Yes       No

- E. Provide a detailed explanation of how the public infrastructure improvements will connect to a broader economic development vision for the community and benefit additional current or future businesses.

Please refer to attached document: "Coral Gables Smart District: Infrastructure for High-Speed Internet"

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F. Provide a detailed description of, and quantitative evidence demonstrating, how the proposed public infrastructure project will promote:

- Economic recovery in specific regions of the state;
- Economic diversification; or
- Economic enhancement of a Targeted Industry (View Florida's [Targeted Industries here.](#))
  - As part of this response, describe how the project will promote specific job growth. Include a description of the number of jobs that will be retained or created, the average wages of such jobs, and in which industry(ies) the jobs will be created using the North American Industry Classification System ([NAICS](#)) codes. Where applicable, you may list specific businesses that will retain or grow jobs or make capital investment.
  - Further, include the economic impact on the community, region, or state and the associated metrics used to measure the success of the proposed project.

Please refer to attached document: "Coral Gables Smart District: Infrastructure for High-Speed Internet"

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Please refer to attached document: "Coral Gables Smart District: Infrastructure for High-Speed Internet"

## 2. Additional Information:

A. Is this project an expansion of an existing infrastructure project?

Yes       No

B. Provide the proposed commencement date and number of days required to complete construction of the public infrastructure project.

Fiber expansion to start in 7/1/2018 and estimated to take 12 months after permit

C. What is the location of the public infrastructure? (Provide the road number, if applicable.)

Please refer to attached document with map of Coral Gables Downtown area.

D. Who is responsible for maintenance and upkeep? (Indicate if more than one are applicable.)

Federal     State     County     City     Other\_\_\_\_\_

E. What permits are necessary for the public infrastructure project?

City Building permits, City Public Works permits, County permits, FDOT permits

F. Detail whether required permits have been secured, and if not, detail the timeline for securing these permits. Additionally, if any required permits are local permits, will these permits be prioritized?

Local permits can be prioritized by the City. The City is already working with Miami-Dade County and FDOT processing permits for ongoing components of this infrastructure project.

G. What is the future land use and zoning designation on the proposed site of the infrastructure improvements, and will the improvements conform to those uses?

The improvements will conform to those uses.

- H. Will an amendment to the local comprehensive plan or a development order be required on the site of the proposed project or on adjacent property to accommodate the infrastructure and potential current or future job creation opportunities? If yes, please detail the timeline.

Yes  No

If additional space is needed, attach a word document with your entire answer.

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- I. Is the project ready to commence upon grant fund approval and contract execution? If no, please explain.

Yes  No

If additional space is needed, attach a word document with your entire answer.

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- J. Does this project have a local match amount?

Yes  No

If yes, please describe the entity providing the match and the amount.

City of Coral Gables capital funds, \$450,000.

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- K. Provide any additional information or attachments to be considered for this proposal.

Please refer to attached document: "Coral Gables Smart District: Infrastructure for High-Speed Internet"

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### 3. Program Budget

**Estimated Costs and Sources of Funding:** Include all applicable public infrastructure costs and other funding sources available to support the proposal.

**A. Public Infrastructure Project Costs:**

|                            |                     |                       |
|----------------------------|---------------------|-----------------------|
| Construction               | \$ 600,000          |                       |
| Reconstruction             | \$                  |                       |
| Design & Engineering       | \$ 400,000          |                       |
| Land Acquisition           | \$                  |                       |
| Land Improvement           | \$                  |                       |
| Other                      | \$                  | Please Specify: _____ |
| <b>Total Project Costs</b> | <b>\$ 1,450,000</b> |                       |

**B. Other Public Infrastructure Project Funding Sources:**

|                               |                     |                       |
|-------------------------------|---------------------|-----------------------|
| City/County                   | \$ 450,000          |                       |
| Private Sources               | \$                  |                       |
| Other (grants, etc.)          | \$                  | Please Specify: _____ |
| <b>Total Other Funding</b>    | <b>\$ 450,000</b>   |                       |
| <b>Total Amount Requested</b> | <b>\$ 1,000,000</b> |                       |

**Note:** The total amount requested must equal the difference between the public infrastructure project costs in 3.A. and the other public infrastructure project funding sources in 3.B.

**C. Provide a detailed budget narrative, including the timing and steps necessary to obtain the funding and any other pertinent budget-related information.**

- There are 3 miles of fiber optics in total in the project. The City is taking care of 0.8 miles (Match), with a value of \$450K. The City is asking for a grant to cover the remaining 2.2 miles, with a total estimate cost of \$1M, which covers transport (underground fiber) and electronics (site nodes).
  - The average cost per mile to build underground fiber optics is approximately \$250K/mile (transport only, without electronics). The electronic equipment necessary to light the fiber (core, hubs, distribution cabinets equipment...) is approximately \$50K per site node (8 site nodes).
  - The total length of proposed fiber is approximately 2.2 miles
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#### 4. Approvals and Authority

- A. If the governmental entity is awarded grant funds based on this proposal, what approvals must be obtained before it can execute a grant agreement with the Florida Department of Economic Opportunity (e.g., approval of a board, commission or council)?

City officials have shown support for the project. Project execution is subject to permit process, procurement process, and Commission approval.

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- B. If approval of a board, commission, council or other group is needed prior to execution of an agreement between the governmental entity and the Florida Department of Economic Opportunity:

- i. Provide the schedule of upcoming meetings for the group for a period of at least six months.

Commission meetings are held every other Tuesday (next one on 2/13/2018)

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- ii. State whether that group can hold special meetings, and if so, upon how many days' notice.

Yes, as determined by the City Manager's Office and the City Clerk's Office

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- C. Attach evidence that the undersigned has all necessary authority to execute this proposal on behalf of the governmental entity. This evidence may take a variety of forms, including but not limited to: a delegation of authority, citation to relevant laws or codes, policy documents, etc.



I, the undersigned, do hereby certify that I have express authority to sign this proposal on behalf of the above-described governmental entity.

Name of Governmental Entity: City of Coral Gables

Name and Title of Authorized Representative: Raimundo Rodulfo, I.T. Director

Representative Signature: *Raimundo Rodulfo*

Signature Date: 2/7/2018





- The City is asking for a grant to cover the remaining 2.2 miles, with a total estimate cost of \$1M, which covers transport (underground fiber) and electronics (site nodes).
- The average cost per mile to build underground fiber optics is approximately \$250K/mile (transport only, without electronics)
- The electronic equipment necessary to light the fiber (core, hubs, distribution cabinets equipment...) is approximately \$50K per site node.
- The total length of proposed fiber is approximately 1 mile of high priority and 1.2 miles of medium priority fiber. There will be approximately 8 site nodes in total.
- Based on the above, the rough cost estimates are:
  - High priority fiber: 1 mile \* \$250K/mile + 4 site nodes \* \$50K/site node = \$450,000
  - Medium priority fiber: 1.2 miles \* \$250K/mile + 4 site nodes \* \$50K/site node = \$500,000
  - Total: \$950K
  - Adding a 5% buffer for contingency, CPI, overhead and intangibles we have a total budget of \$1M for the project.

## **PROJECT BENEFITS**

The project would help to further several City initiatives and objectives. Due to Coral Gables' strategic central location in Miami-Dade County, its proximity to Miami International Airport, presence of regional corporate headquarters, and its high volume of County vehicle traffic and commuters, these benefits also have a significant county and regional impact:

- Economic development (see attached fact sheet)
- Government services
- Public Safety and Smart Policing (911, CCTV and License Plate Readers, speed sensors, gunshot detectors)
- Smart Parking systems
- Smart city ecosystem, data hub, and social platform
- Video analytics for forensics, investigations, policing, traffic engineering
- Business Continuity and Disaster Recovery (resiliency, hurricanes)
- Sustainability
- Smart Lighting, remote control, and energy efficiency
- Digital signage and smart kiosks
- Private/Public partnerships
- Business services
- Citizen services and apps
- Internet of Things (IoT) smart sensors for traffic (pedestrian/bikes/vehicles), parking, environmental variables (air quality, temp, humidity, CO/CO2), optical/acoustic/magnetic/location/chemical sensors
- Marketing, Ads, location-aware content (Augmented Reality AR, smart ads)
- Cost savings in telecom, utilities, recurring services, increased uptime of business and services, supply chain, etc.
- Community enrichment
- Flexibility and scalability of value streaming
- Crowdsourcing and citizen engagement
- Digital transformation, modernization
- Smart apps
- GIS platforms

**Explain how this proposed project will spur economic development, attract new businesses to Coral Gables and create jobs.**

The Central Business District of Coral Gables, FL is currently home to more than 150 multi-national companies. A true gateway to Latin America, Coral Gables is ideally situated 5 minutes from Miami International Airport and 15 minutes to Port Miami to attract and house leading companies from varied industries world-wide. With focus sectors including Law, Architecture, Design, Marketing and Media, the addition of high speed internet will provide a competitive advantage to the current companies while attracting companies from all sectors, such as health and technology.

Studies have shown that gigabit broadband drives GDP. A study by the Fiber to the Home Council Americas (FTTH Council) looked at 55 communities in nine states and found a positive impact on economic activity in the 14 communities that have gigabit technology. The gigabit broadband communities exhibited a per capita GDP approximately 1.1 percent higher than the similar communities without gigabit services. The research suggests that the 14 communities realized approximately \$1.4 billion in additional GDP when gigabit broadband became widely available.

The deployment of widespread ultra-high bandwidth broadband offers great promise for our economic future, similar to the way that access to abundant electricity transformed the country, lighting up factories to produce affordable consumer goods and automobiles for transportation. The availability of electricity spurred an era of high productivity and economic growth. And now, we are beginning to see that access to abundant bandwidth is likely to have a similarly positive impact on our economy.

Widespread gigabit availability contributes to the economy in multiple ways. Investment in physical infrastructure and labor creates jobs. Next generation broadband infrastructure can also shift economic activity, sparking local tech scenes and the relocation of businesses. For instance, Claris Networks moved its data center operations from Knoxville to Chattanooga to take advantage of its fiber network. Lafayette's network attracted Hollywood special effects company Pixel Magic to the community, because the high-performance gigabit network lets Pixel Magic move computer files back and forth between Lafayette and California quickly. And from the Hacker House in Kansas City to Fargo's Startup House in Fargo, North Dakota, local entrepreneurs are using gigabit networks to develop new applications and services, bringing in new investment and talent along the way.

The installation of fiber optic lines in the core of downtown Coral Gables would be an avant-garde step towards ensuring that our City Beautiful remains on the cutting edge of technology and maintains its status as a world class city. According to the Center for Technology Innovation at the Brookings Institution, a country's digital connectivity score is strongly correlated to an increase in productivity by 2.3 percent, innovation by 2.2 percent and national competitiveness by 2.1 percent. Already, Coral Gables has been making strides to fully transform into a "Smart City." This currently includes a City app for resident services as well as GIS (Geographic Information Systems) to measure anything from sea-level rise, to mapping out automatic license plate readers (ALPR), crime intelligence cameras, and placement of various sensors in the pedestrian walkways to monitor foot traffic. The City is in the process of deploying more sensor technology which would enable reporting on economic factors such as daylight population movements and concentrations in order to support businesses and their marketing efforts. Moreover, advancements towards implementation of IoT (Internet of Things) is underway, smart kiosks will soon be installed, and use of drone coverage is in the initial stages of assisting the police with crime control. To incorporate fiber optics into the city's infrastructure, therefore, is a natural next step towards making Coral Gables a Smart City and is bolstered by actions the City is already taking to be a leading tech municipality and economic epicenter in the South Florida region.

In addition to assisting the City's internal population with municipal services, fiber optics would enhance the way the general public and business community could communicate and operate within Downtown Coral Gables. Fiber optic cables, in comparison to copper cables, provide several advantages. The City's growing downtown daytime population would benefit from greater bandwidth, faster speeds, and better reliability. Fiber optic cables, while initially costlier than copper, have a lower total cost of ownership because they are more durable and reliable. Copper cables suffer disadvantages such as disruptions in electrical currents, fire hazards, and vulnerability to temperature changes, severe weather and moisture. Fiber optic cables, on the other hand, are immune to these drawbacks, have less signal degradation, and provide faster signals than Cat5 or Cat6 copper cables. As the City nears the end of Streetscape construction on Miracle Mile and Giralda Avenue, increases in daytime populations are already being detected and all data indicates this trend will continue for some time. To ensure that business patrons, visitors, and downtown stakeholders can therefore continue to operate at the same speed (as the City outgrows its copper cable capacity), or even faster, the City of Coral Gables is determined to introduce a fiber optic conduit throughout its core. Despite what may happen with the region's proposal to Amazon.com, Inc. for placement of its second headquarters, it is cutting-edge infrastructure like fiber optic cabling that will make this City an appetizing destination for national and international companies alike. It is imperative that the City is able to secure funding for fiber optic cabling to maintain its attractiveness as a corporate center and ultimately to spur economic development. A 2015 study on the effects of the fiber network in Chattanooga, TN, concluded that it generated economic and social benefits ranging from \$865.3 million to \$1.3 billion and created between 2,800 and 5,200 new jobs. The effects of a fiber network in a larger city are consequently much more pronounced. In Chicago, smart city technology will create 90,000 jobs, add \$14 billion to the city's economic growth, and provide \$5 billion in smart grid and transportation benefits.

The city of Mesa, AZ has been fervently establishing its own city-wide fiber conduit providing firms with next-generation infrastructure. As a result, they have become the new site of a \$2 billion Apple global command center. A municipal network in Spanish Fork, UT saves the city \$1 million annually, which is in turn used for community projects and initiatives. The correlation between establishing a fiber network and increasing economic growth in a multitude of ways is impossible to ignore, especially in a forward-thinking, global city like Coral Gables.

A fiber network in the City of Coral Gables would multiply business opportunities, cost savings, increase home values, advance research, initiate tech booms and incubate startups. Coral Gables is determined to be proactive in acquiring fiber infrastructure in order to sustain and improve connectivity with a growing downtown population. The federal government's recent decision to eliminate internet neutrality further makes necessary this next step in the City's transformation to become a "Smart City." For these reasons, and in consideration of the undeniable economic benefits for the municipal, commercial, and residential communities, the City of Coral Gables formally requests grant funding in the amount of \$1 million from the Beacon Council, for which it will match \$450,000 towards this initiative, to begin the first tangible phase of implementing fiber optic infrastructure in the downtown core.

### **City of Coral Gables Contact Information:**

Information Technology Department: [it@coralgables.com](mailto:it@coralgables.com)

Economic Development Department: [ed@coralgables.com](mailto:ed@coralgables.com)

<http://www.coralgables.com>

**CITY OF CORAL GABLES, FLORIDA**  
**2017-2018 BUDGET ESTIMATE**  
**ORGANIZATION CHART**

