### City of Miami Gardens

### **Cover Page**

Project Name	City of Miami Gardens, Florida Traffic	
	Congestion Management Project	
Eligible Entity Applying to Receive Federal Funding	City of Miami Gardens	
Total Project Cost (from all sources)	\$2,567,267	
ATCMTD Request	\$1,000,000	
Are matching funds restricted to a specific project component? If so, which one?	No	
State in which the project is located	Florida	
Is the project currently programmed in the:  • Transportation Improvement Program (TIP)  • Statewide Transportation Improvement Program (STIP)  • MPO Long Range Transportation Plan  • State Long Range Transportation	No	
Plan	State of the out wide company and related	
Technologies Proposed to be Deployed	State of the art video cameras and related	
	technologies to monitor and mitigate traffic	
	congestion while improving public safety and	
	increasing regional collaboration	

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### i. Project Description

#### 1. Introduction

With the support of \$1,000,000 in Advanced Transportation and Congestion Management Technologies Deployment Initiative grant funding, supported by \$1,567,267 in matching funds, the Miami Gardens Police Department will deploy high-resolution, state-of-the-art video cameras and related technologies to monitor and mitigate traffic congestion while improving public safety and increasing regional collaboration. The project will focus on improving traffic safety across 20 high-traffic intersections covering about 10 miles of 27th Avenue/State Route 817 in the City of Miami Gardens, Florida. The requested funding will support deployment of video cameras to relay real-time footage to the Miami Gardens Police Department. This information will be used to quickly deploy resources to ensure public safety and minimize traffic congestion. Trained professionals in the Real-Time Crime Center will monitor the traffic conditions and dispatch appropriate traffic enforcement units to the area to aide in the safety and congestion issues. The City will use the project to assist in the decrease of congestion and injury accidents along the thoroughfare. More than 25 percent of traffic congestion is non-recurrent, according to the Federal Highway Administration. Instead, it is caused by traffic incidents. As a result, detecting incidents early and responding to them effectively makes for safer roads, less congestion, and smoother traffic flow. The proposed solution provides insight into urban traffic patterns so that traffic authorities can make better decisions and long-term plans.

### 2. Description of Applicant

The Miami Gardens Police Department is the lead law enforcement agency for the 113,000 residents living within the City's 23 square miles. The department operates under a unified command structure with its headquarters located at 18611 NW 27th Avenue, Miami Gardens, Florida 33056. The department became operational on Sunday, December 16, 2007 with 159 sworn officers. Since then, the department has grown to 259 members consisting of 201 sworn positions with an equally important 58 non-sworn support positions. The Department operates under the following Mission Statement: The Miami Gardens Police Department is committed to building a better tomorrow through community interaction. This will be accomplished through mutual trust and cooperation with those "We Serve". We are committed to providing ethical, quality and responsive service to the community with professionalism, pride and trust. This trust will be established by providing service which will be fair but firm, and by protecting our citizens with consistent commitment which will be unyielding.

The employees within the Real-Time Crime Center will monitor the daily conditions along the roadway, initiate, and manage appropriate responses to conditions observed in a real-time fashion. The units that will assist within the field will be the Traffic Enforcement Unit to mitigate traffic congestion, Traffic Homicide Units to mitigate injury accidents and Public Works to evaluate and coordinate any major changes in traffic patterns.

**Fiscal management:** Celina Green-Mike is the Department's Management Analyst and will be responsible for providing financial oversight for the proposed project. The Department's financial records are maintained in accordance with Generally Accepted Accounting Principles

(GAAP). The District uses fund accounting to ensure and demonstrate compliance with legal requirements.

**Partnering organizations:** Miami Gardens Police Department intends to make the video feeds available to Miami-Dade County traffic management and public safety personnel to support regional traffic congestion mitigation and public safety enhancement efforts.

#### 3. Geographic Area to be served

The project will serve the City of Miami Gardens, which is in Miami-Dade County, about 25 minutes north of Miami. The City is centrally located in northern Miami-Dade County and is the county's third largest city, with a population of 113,000 people (2015 U.S. Census Bureau) living in more than 31,000 households. Incorporated in 2003, as the County's 33rd city, Miami Gardens is centrally located in the region. Our community is socioeconomically diverse, with more than 31% of the population speaking a language other than English in the home. Approximately 23.1% of Miami Gardens residents live in poverty.

The city boundaries are from I-95 and NE 2nd Avenue on the East; NW 47th Avenue and NW 57th Avenue on the west; County Line Road on the north; and NW 151st Street on the South. This location at the border of Miami-Dade and Broward Counties makes Miami Gardens extremely accessible, and a viable residential and business destination.

The City of Miami Gardens is easily accessed by I-95, the Palmetto Expressway (SR 826), the Florida Turnpike, as well as numerous other county and state surface roads that form a relatively uninterrupted grid through the City. In addition, the city boasts multi-modal access to rail through the Florida East Coast Railway and the South Florida Tri-Rail System and is easily connected to the Miami International Airport and Fort Lauderdale / Hollywood International Airport. The Tri-Rail station is located at the Golden Glades Interchange which also includes a park-and-ride lot. The City's centrality was a key factor in locating Hard Rock Stadium, which is near the county line in a sports complex that is also near Calder Race Track. A Florida Turnpike Interchange at NW 199th Street/Ives Dairy Road provide excellent access to these activity generators.

There are many levels of connectivity in Miami Gardens, from major interstates, regional rail transit, and sub regional county and state roads, to prevalent pedestrian and bicycle facilities. The NW 27th Avenue Corridor, also known as State Road 817, represents the central north-south commercial corridor for the City. It is primarily a strip retail commercial area. The City is encouraging the NW 27th Avenue Commerce area's revitalization as the City's central boulevard through a mixture of new commercial and multiple family development as well as redevelopment of existing commercial uses. This six-lane facility provides primary access to the Hard Rock Stadium and Calder Race Track as well as serving as a major north-south transportation artery. Figure 1 below outlines the Miami Gardens boundaries.

Figure 1 City of Miami Gardens



4. A description of the real-world issues and challenges to be addressed by the proposed technology deployments. Applicants should discuss how the proposed technology deployments address the goals of the initiative, and any applicable technology focus area.

The project will consist of multiple cameras installed along NW 27<sup>th</sup> Avenue to combat traffic congestion and safety issues in real-time. The staff in the Real-Time Crime Center will monitor the traffic conditions and dispatch appropriate traffic enforcement units to the area to aide in the safety and congestion issues. The City would like to use the project to assist in the decrease of congestion and injury accidents along the thoroughfare. The requested technologies will be deployed at the following high-traffic intersections:

- NW 27<sup>th</sup> Avenue and NW 215<sup>th</sup> Street
- NW 27<sup>th</sup> Avenue and NW 211<sup>th</sup> Street
- NW 27<sup>th</sup> Avenue (20900 Block)
- NW 27<sup>th</sup> Avenue and NW 207<sup>th</sup> Street
- NW 27<sup>th</sup> Avenue (NW 20400 Block)
- NW 27<sup>th</sup> Avenue and NW 202<sup>nd</sup> Terrace
- NW 27<sup>th</sup> Avenue and NW 199<sup>th</sup> Street
- NW 27<sup>th</sup> Avenue (19700 Block)

- NW 27<sup>th</sup> Avenue and NW 191<sup>st</sup> Street
- NW 27<sup>th</sup> Avenue and NW 183<sup>rd</sup> Street
- NW 27<sup>th</sup> Avenue and NW 179<sup>th</sup> Street
- NW 27<sup>th</sup> Avenue and NW 175<sup>th</sup> Street
- NW 27<sup>th</sup> Avenue and NW 170<sup>th</sup> Street
- NW 27<sup>th</sup> Avenue and NW 167<sup>th</sup> Street
- NW 27<sup>th</sup> Avenue and NW 163<sup>rd</sup> Street
- NW 27<sup>th</sup> Avenue and NW 160<sup>th</sup> Street
- NW 27<sup>th</sup> Avenue and NW 156<sup>th</sup> Street
- NW 27<sup>th</sup> Avenue and NW 154<sup>th</sup> Street
- NW 27<sup>th</sup> Avenue and NW 151<sup>st</sup> Street

Figure 2 Proposed locations for technology deployment

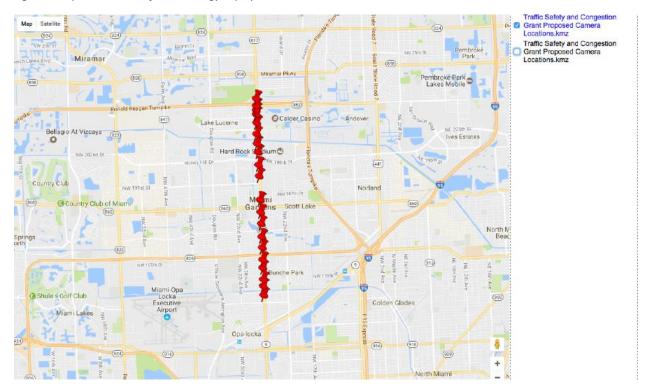


Table 1 below provides a listing of accidents that occurred along NW 27<sup>th</sup> Avenue throughout 2016.

Table 1 Accident data

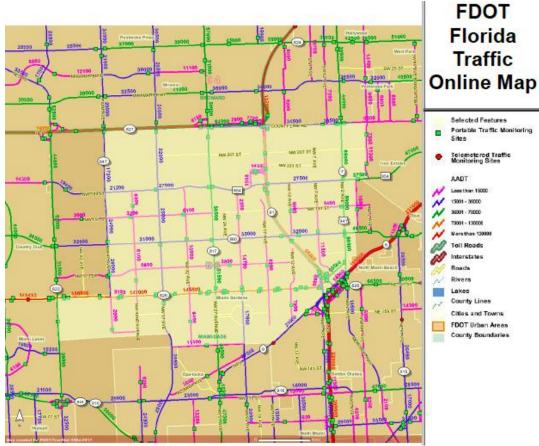
Accident ID	Case ID	Date & Time	Intersection
86321484	2016000969	1/15/16 11:10	NW 27TH AVE, NW 167TH ST
86321980	2016003853	2/29/16 10:48	NW 27TH AVE, NW 167TH ST
86322247	2016005273	3/22/16 11:12	NW 27TH AVE, NW 167TH ST
86322635	2016007250	4/21/16 10:21	NW 27TH AVE, NW 167TH ST

86323062	2016009533	5/26/16 8:54	NW 27TH AVE, NW 167TH ST
86324244	2016015840	9/3/16 15:29	NW 27TH AVE, NW 167TH ST
86324554	2016017485	9/30/16 8:30	NW 27TH AVE, NW 167TH ST
86324853	2016019078	10/25/16 11:16	NW 27TH AVE, NW 167TH ST
86325430	2016022189	12/14/16 14:59	NW 27TH AVE, NW 167TH ST
86322372	2016005877	3/31/16 12:51	NW 215TH ST, NW 27TH AVE
86324305	2016016164	9/8/16 19:50	NW 215TH ST, NW 27TH AVE
86325390	2016021954	12/11/16 4:39	NW 215TH ST, NW 27TH AVE
86321488	2016000977	1/15/16 12:24	NW 27TH AVE SR 817, NW 167TH ST
86321960	2016003681	2/26/16 11:27	NW 27TH AVE SR 817, NW 167TH ST
86322473	2016006385	4/8/16 10:38	NW 27TH AVE SR 817, NW 167TH ST
86322536	2016006716	4/13/16 5:16	NW 27TH AVE SR 817, NW 167TH ST
86323014	2016009265	5/22/16 12:47	NW 27TH AVE SR 817, NW 167TH ST
86322751	2016007203	5/1/16 13:00	NW 179TH ST, NW 27TH AVE
86322752	2016007905	5/1/16 13:38	NW 179TH ST, NW 27TH AVE
86323827	2016013583	7/29/16 14:09	NW 179TH ST, NW 27TH AVE
86325393	2016021964	12/11/16 11:58	NW 179TH ST, NW 27TH AVE
86321462	2016000830	1/13/16 7:39	NW 27TH AVE, NW 169TH TER
86322814	2016008237	5/6/16 12:33	NW 27TH AVE, NW 169TH TER
86323990	2016014514	8/14/16 3:16	NW 27TH AVE, NW 169TH TER
86325497	2016022536	12/20/16 11:03	NW 27TH AVE, NW 169TH TER
86324285	2016016050	9/7/16 8:33	NW 175TH ST, NW 27TH AVE
86325085	2016020332	11/14/16 10:55	NW 175TH ST, NW 27TH AVE
86325481	2016022414	12/18/16 13:29	NW 175TH ST, NW 27TH AVE
86323039	2016009417	5/24/16 11:44	NW 183RD ST, NW 27TH AVE
86325440	2016022224	12/15/16 8:21	NW 160TH ST, NW 27TH AVE
86323249	2016010422	6/9/16 10:33	NW 27TH AVE, NW 173RD TER
86933644	2016023075	12/29/16 16:06	NW 27TH AVE, NW 173RD TER
86933648	2016023075	12/29/16 16:06	NW 27TH AVE, NW 173RD TER
86321708	2016002214	2/3/16 12:54	NW 27TH AVE, NW 191ST ST
86324372	2016016474	9/14/16 9:54	NW 167TH ST, NW 27TH AVE SR817
86323274	2016010564	6/11/16 12:20	NW 199TH ST, NW 27TH AVE
86323340	2016010975	6/18/16 1:13	NW 207TH ST, NW 27TH AVE (SR 817)
86321854	2016003112	2/17/16 11:05	NW 27TH AVE SR 817, NW 175TH ST
86323788	2016013400	7/26/16 11:05	NW 27TH AVE SR 817, NW 175TH ST
86321918	2016003516	2/23/16 20:04	NW 27TH AVE, NW 166TH ST
86325070	2016020272	11/13/16 10:03	NW 27TH AVE, NW 166TH ST
86324775	2016018681	10/19/16 5:23	(SR-817) NW 27TH AVE, NW 170TH ST
86325542	2016022727	12/23/16 12:12	NW 27 TH AVE, NW 167 TH STREET
86325343	2016021782	12/8/16 12:23	NW 27TH AVE SR817, NW 160TH ST
86323157	2016010038	6/3/16 13:10	NW 27TH AVE SR817, NW 170TH ST

86322134	2016004626	3/11/16 22:18	NW 27TH AVE (SR 817), NW 160TH ST
86323624	2016012574	7/12/16 15:32	NW 27TH AVE (SR 817), NW 167TH ST
			NW 27TH AVE (SR 817), NW 167TH
86322941	2016008884	5/16/16 11:53	ST.
86322623	2016007172	4/20/16 5:29	NW 27TH AVE (SR 817), NW 191ST ST
86324808	2016018841	10/21/16 18:34	NW 27TH AVE (SR 860), NW 175TH ST
86324292	2016016092	9/7/16 18:16	NW 27TH AVE SR 817, NW 167TH ST E
86322815	2016008231	5/6/16 11:36	NW 27TH AVE SR817, NW 151ST ST
86325113	2016020464	11/16/16 9:33	NW 27TH AVE SR817, NW 169TH TER
86322816	2016008227	5/6/16 11:36	NW 27TH AVE SR817, NW 179TH ST
86324373	2016016477	9/14/16 10:32	NW 27TH AVE, 17021
86323043	2016009438	5/24/16 15:47	NW 27TH AVE, NW 151 ST
86323247	2016010409	6/9/16 7:52	NW 27TH AVE, NW 156TH ST
86323505	2016011943	7/3/16 3:37	NW 27TH AVE, NW 165TH TER
86324021	2016014672	8/16/16 12:25	NW 27TH AVE, NW 168TH TER
86324513	2016017299	9/27/16 13:17	NW 27TH AVE, NW 17100 BLK
86324243	2016015841	9/3/16 14:19	NW 27TH AVE, NW 185TH TER
86322951	2016008942	5/17/16 11:15	NW 27TH AVE, NW 194TH ST
86324396	2016016608	9/16/16 10:35	NW 27TH AVE, NW 195TH ST
86323742	2016013117	7/21/16 11:23	NW 27TH AVE, NW 207TH STREET
86324742	2016018497	10/16/16 12:04	NW 27TH AVE, NW 211TH ST
86324338	2016016335	9/12/16 7:44	NW 27TH AVENUE, 18500 BLK
86322702	2016007587	4/26/16 18:55	NW 27THAVE, NW 167THST
86321997	2016003940	3/1/16 12:33	NW 27TH AVE, NW 167TH ST
86322098	2016004457	3/9/16 9:34	NW 27TH AVE, NW 167TH ST
86322220	2016005120	3/19/16 11:49	NW 27TH AVE, NW 167TH ST
86322966	2016009012	5/18/16 13:09	NW 27TH AVE, NW 167TH ST
86323450	2016011621	6/28/16 17:36	NW 27TH AVE, NW 167TH ST
86323569	2016012314	7/8/16 9:07	NW 27TH AVE, NW 167TH ST
86323879	2016013897	8/3/16 15:00	NW 27TH AVE, NW 167TH ST
86323858	2016013777	8/1/16 12:10	NW 27TH AVE, NW 167TH ST
86324110	2016015178	8/24/16 9:57	NW 27TH AVE, NW 167TH ST
86324997	2016019900	11/7/16 6:01	NW 27TH AVE, NW 167TH ST
86325286	2016021462	12/3/16 11:34	NW 27TH AVE, NW 167TH ST
86322065	2016004314	3/7/16 5:22	NW 215TH ST, NW 27TH AVE
86322445	2016006227	4/6/16 7:41	NW 215TH ST, NW 27TH AVE
86322545	2016006750	4/13/16 13:52	NW 215TH ST, NW 27TH AVE
86324450	2016016883	9/20/16 15:23	NW 215TH ST, NW 27TH AVE
86321485	2016000970	1/15/16 11:11	NW 27TH AVE SR 817, NW 167TH ST
86322593	2016007026	4/18/16 7:02	NW 27TH AVE SR 817, NW 167TH ST
86321740	2016002402	2/6/16 11:39	NW 179TH ST, NW 27TH AVE

	T I		
86325557	2016022802	12/24/16 18:37	NW 179TH ST, NW 27TH AVE
86323928	2016014160	8/8/16 8:18	NW 27TH AVE, NW 169TH TER
86321475	2016000915	1/14/16 12:02	NW 175TH ST, NW 27TH AVE
86321965	2016003725	2/27/16 5:05	NW 183RD ST, NW 27TH AVE
86324980	2016019802	11/5/16 13:28	NW 183RD ST, NW 27TH AVE
86325336	2016021745	12/7/16 16:33	NW 183RD ST, NW 27TH AVE
86321701	2016002165	2/2/16 18:58	NW 151ST ST, NW 27TH AVE
86321775	2016002625	2/10/16 8:15	NW 151ST ST, NW 27TH AVE
86324448	2016016869	9/20/16 8:07	NW 151ST ST, NW 27TH AVE
86323838	2016013650	7/30/16 18:23	NW 160TH ST, NW 27TH AVE
86325487	2016022473	12/19/16 14:30	NW 160TH ST, NW 27TH AVE
86323456	2016011670	6/29/16 10:58	NW 27TH AVE, NW 191ST ST
86325415	2016022084	12/13/16 8:26	NW 27TH AVE, NW 191ST ST
86322800	2016008161	5/5/16 14:34	NW 167TH ST, NW 27TH AVE SR817
86322856	2016008432	5/9/16 17:38	NW 199TH ST, NW 27TH AVE
86322248	2016005274	3/22/16 11:20	NW 207TH ST, NW 27TH AVE (SR 817)
86321713	2016002240	2/3/16 17:03	17300, NW 27TH AVE
86324432	2016016772	9/18/16 21:20	191ST ST, NW 27TH AVE
			NW 156TH ST, NW 27TH AVE
86323263	2016010492	6/10/16 10:06	
86323600	2016012453	7/10/16 14:54	NW 163RD ST, NW 27TH AVE
86325484	2016022447	12/19/16 6:26	NW 168 TH TERR, NW 27TH AVE
86324732	2016018445	10/15/16 15:36	NW 175TH ST, NW 27TH AVE/ SR 817
			NW 183RD ST SR860, NW 27TH AVE
86323338	2016010955	6/17/16 17:55	SR817
0.622.42.62	2016016472	0/10/14/20000	NW 185TH STREET, NW 27TH
86324363	2016016450	9/13/16 20:09	AVENUE
86324454	2016016925	9/21/16 7:42	NW 191ST ST, NW 27TH AVE SR817
86324741	2016018488	10/16/16 12:11	NW 203RD ST, NW 27TH AVE
86323369	2016011189	6/21/16 23:20	NW 207TH ST, NW 27TH AVE
86324957	2016019673	11/3/16 1:14	NW 215TH STREET, NW 27TH AVE

Figure 3 Daily traffic count for NW 27th Avenue



How the requested technologies will address these challenges: More than 25 percent of traffic congestion is non-recurrent, according to the Federal Highway Administration. Instead, it is caused by traffic incidents. As a result, detecting incidents early and responding to them effectively makes for safer roads, less congestion, and smoother traffic flow. The proposed solution provides insight into urban traffic patterns so that traffic authorities can make better decisions and long-term plans. Benefits of the technologies will include:

- ✓ More efficient traffic flow
- ✓ Less pollution and other environmental impacts
- ✓ More efficient use of budget
- ✓ Better visibility into traffic conditions
- ✓ Better infrastructure investments
- ✓ Automated incident detection and quicker responses
- ✓ Better-informed operational decision making
- ✓ Improved planning and resource allocation
- ✓ Greater collaboration among response agencies
- ✓ More effective operations
- ✓ Advanced analytics to monitor and report traffic incident distribution over time, day, and location to aid planning. Identify areas with recurring traffic and flow issues.

#### **Citizen Benefits**

- ✓ Improved road safety
- ✓ Less congestion, reducing frustration and fuel costs
- ✓ Better driving and commuting experiences

### Miami Gardens Police Department Real-Time Crime Center (RTCC)

The Real-Time Crime Center is an approximately 1,500 square-foot state-of-the-art innovation and technology driven center. It is comprised of 19 workstations and 3 large video walls. The center's staffing is authorized for 1 Sergeant, 4 police officers and 6 analysts. The RTCC is also designed for interagency collaboration on joint efforts. See picture below.

Figure 4 Miami Gardens Police Department RTCC



### Mitigating traffic congestion and improving public safety

Information about how the requested technologies will be utilized to mitigate traffic congestion and improve public safety is provided below.

- ✓ Traffic Congestion Traffic Enforcement teams will be deployed to the area under the direction of Sergeant Eamon Curran for mitigating the congestion in ways like manual timing of the light cycle, redirection of traffic flow and similar efforts.
- ✓ Traffic Safety Conditions Through real-time monitoring of the cameras, Traffic Homicide Units will be deployed to injury cases immediately to reduce the response time of first responders and congestion related to the crash. Pedestrian crossings at unauthorized locations causing safety concerns for pedestrians and automobiles can also be addressed with a prompt response.
- ✓ Public Works will use the heat maps (Video Analytics) to plan and establish proper reports for possible traffic modifications (i.e. round abouts).

### 5. A description of transportation systems and services to be included in the project. Question:

As noted, the proposed technologies will be deployed at 20 intersections along NW 27<sup>th</sup> Avenue in the City of Miami Gardens (see Figure 2 above). NW 27<sup>th</sup> Avenue is a primary transportation corridor passing through the heart of the City of Miami Gardens. The NW 27th Avenue Corridor,

also known as State Road 817, represents the central north-south commercial corridor for the City. It is primarily a strip retail commercial area. The City is encouraging the NW 27th Avenue Commerce area's revitalization as the City's central boulevard through a mixture of new commercial and multiple family development as well as redevelopment of existing commercial uses. This six-lane facility provides primary access to the Hard Rock Stadium and Calder Race Track as well as serving as a major north-south transportation artery.

As shown in Figure 3, daily traffic counts for NW 27<sup>th</sup> Avenue in Miami Gardens range from 70,000 to 130,000 vehicles per day. Figure 5 below shows a zoning map for the City.

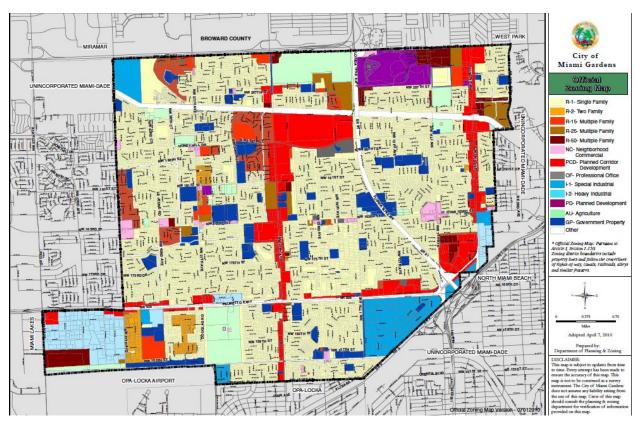


Figure 5 Traffic counts

6. A deployment plan that includes providing long-term operation and maintenance of advanced transportation and congestion management technologies to improve safety, efficiency, system performance, and return on investment.

**Deployment plan:** As shown in Table 2 below, the technologies will be deployed over a 12-month timeframe. The project will be led by Sergeant Erik Gleason, MGPD Real-Time Command Center Supervisor. Once deployed, the MGPD Real-Time Crime Center personnel will monitor the traffic cameras and take appropriate actions to achieve the identified project objectives.

**Technology management:** The Real-Time Crime Center, under the leadership of Sergeant Erik Gleason will manage the technology deployment and utilization. The RTCC is equipped with state-of-the-art technologies that will support attainment of the intended performance improvements. A video wall will simultaneously monitor all the camera feeds, mapping applications, and other critical data simultaneously. This creates a complete operating picture that heightens the team's situational awareness. Images and feeds can be manipulated in real-time to provide a full understanding of traffic situations. Features such as heat mapping will RTCC personnel to analyze traffic flow patterns and take appropriate actions to minimize congestion and improve traffic flow.

**Technology maintenance:** The requested funding includes 60 months of vendor-provided maintenance. Miami Gardens Police Department will assume the cost of maintaining the technologies beyond maintenance contract expiration.

### 7. A description of any challenges in the regulatory, legislative, or institutional environments or other obstacles to deployment.

Permits will have to be pulled from Florida Department of Transportation, Miami Dade County and The City of Miami Gardens. The CCTV vendor will be required to assist in this process. No special regulatory, legislative or institutional obstacles that could potentially slow progress of the proposed project have been identified. The Miami Gardens Police Department has full authority to deploy the proposed technologies.

# 8. Quantifiable system performance improvements, such as-- a) reducing traffic-related crashes, congestion, and costs; b) optimizing system efficiency; and c) improving access to transportation services.

The **goal** of this initiative is to increase the capability of Miami Gardens Police Department to monitor and mitigate traffic congestion while improving public safety and increasing regional collaboration. Targeted quantifiable system performance improvements include:

- ✓ Reduce the combined average incident response time at the targeted intersections by 50% over 12 months.
- ✓ Reduce the combined number of accidents across the targeted intersections by 20% over 12 months.

# 9. Quantifiable safety, mobility, and environmental benefit projections such as data-driven estimates of how the project will improve the region's transportation system efficiency and reduce traffic congestion.

This project will give us the opportunity to address congestion and safety concerns by improving the light timing, identifying areas of pedestrian concern to facilitate possible infrastructure changes. Traffic Congestion would improve by reducing travel time through the City on the main artery of through travel.

✓ Reduce the combined average traffic congestion across the targeted intersections by at least 25% over 12 months.

# 10. Vision, goals, and objectives of the applicant for the technology deployment, including any future related deployments; the vision of the organization and goals, objectives, and activities to be pursued in addressing the identified issues and challenges.

As noted, the **goal** of this initiative is to increase the capability of Miami Gardens Police Department to monitor and mitigate traffic congestion while improving public safety and increasing regional collaboration. We will attain the goal by deploying a solution that provides insight into urban traffic patterns so that traffic authorities can make better decisions and long-term plans. RTCC personnel will utilize the deployed cameras and innovative CCTV and Analytical software to mitigate traffic congestion and improve public safety. The workstations in the RTCC have direct connections to the police dispatchers to aide in the prompt response of the traffic units, public works, fire departments and more. The video will also be analyzed through the video analytics solution in place for heat map constructions and analyzation of traffic patterns. As noted, the solution will be utilized as follows:

- ✓ Mitigate Traffic Congestion Traffic Enforcement teams will be deployed to the area under the direction of Sergeant Eamon Curran for mitigating the congestion in ways like manual timing of the light cycle, redirection of traffic flow and similar efforts.
- ✓ Improve Traffic Safety Conditions Through real-time monitoring of the cameras, Traffic Homicide Units will be deployed to injury cases immediately to reduce the response time of first responders and congestion related to the crash. Pedestrian crossings at unauthorized locations causing safety concerns for pedestrians and automobiles can also be addressed with a prompt response.
- ✓ Public Works will use the heat maps (Video Analytics) to plan and establish proper reports for possible traffic modifications (i.e. round abouts).

# 11. A plan for partnering with the private sector or public agencies, including multimodal and multijurisdictional entities, research institutions, organizations representing transportation and technology leaders, or other transportation stakeholders.

In deploying the proposed technologies, MGPD plans to provide video feed access to the following agencies: Miami-Dade County Traffic; Miami-Dade Fire Rescue; and Miami Gardens Public Works Department.

### 12. A plan to leverage and optimize existing local and regional advanced transportation technology investments.

The camera feeds will be monitored in a new state-of-the-art Command Center located within MGPD's Real-Time Crime Center. The Command Center includes 19 workstations and three large video walls from which to monitor the video feeds. The workstations have direct connection to the police dispatchers to aide in the prompt response of the Traffic Units, public Works, Fire Rescue, etc. The video will also be analyzed through the video analytics solution in place for heat map constructions and analyzation of traffic patterns.

## 13. A schedule for conducting the technology deployment and for completion of all proposed activities.

The proposed technologies will be deployed over a 12-month period. A proposed deployment plan with relevant milestones is shown below in Table 2.

Table 2 Deployment schedule with milestones

Timeframe	Activity	Milestone	Person responsible
Month 1	Finalize equipment list	Equipment list approved	
Months $2-5$	Secure necessary permits for installation	All necessary permits are obtained	Vendor
Month 2	Post-award evaluation of traffic congestion and public safety issues to reaffirm trouble spots	Traffic congestion and public safety issues are confirmed	
Month 2	Review RFP responses and make purchase decisions	Technology vendor identified	
Month 3	Negotiate vendor contract	Final vendor contract approved	
Months $4-5$	Vendor lead-time to support internal project planning and finalization of deployment schedules	Deployment plans finalized and approved	
Months 6 – 9	Deploy technologies	Proposed technologies are deployed	
Months 10 – 12	System training and testing	System debugged and fully operational	
Months 13 – 24	Track, monitor and report traffic counts, congestion and accidents along the NW 27 <sup>th</sup> corridor	Quantifiable improvements are tracked and reported	

14. Any support or leveraging of the ITS program or innovative technology initiatives (DOT ITS initiatives are described on-line at <a href="http://www.its.dot.gov.">http://www.its.dot.gov.</a>)

Not applicable

### ii. Staffing Description:

1. A description of the organization of staffing to manage and conduct the project, including identification of key personnel with résumés, organization, role, and responsibility.

Table 3 Staffing plan

Name and title	Primary roles and responsibilities

### 2. Primary point of contact and complete contact information.

Contact information for the Primary Point of Contact (Project Manager) is below.

Sergeant Erik Gleason Support Services Real Time Crime Center Miami Gardens Police Department erik.gleason@mgpdfl.org 305.474.1621 Office 954.298.1670 Cellular

