URS

April 16, 2010

City Clerk
City of Key West - City Hall
525 Angela Street
Key West, FL 33040

RE: Request for Qualifications #10-009 – Carrying Capacity Traffic Study

Dear Ms. Snider:

On behalf of URS Corporation, I would like to formally submit our qualifications to support the City of Key West with the Carrying Capacity Traffic Study (CCTS). One (1) original, ten (10) copies and ten (10) electronic copies of our proposal are attached. Supporting URS will be a team of subconsultants including Florida Transportation Engineering, Inc. (FTE) a certified DBE and MBE firm, Sandra Walters Consulting, Inc. (SWC) a certified DBE and MBE firm, and Atlantic Engineering Services (AES). The URS Team has the comprehensive knowledge and expertise in transportation planning and traffic engineering necessary to meet the needs of the City of Key West.

For years, URS has been providing comprehensive and cost effective transportation solutions to address the region's growing mobility and traffic congestion issues. Through a comprehensive planning process, URS analyzes existing conditions and gathers public input to determine transportation issues. Our Team can develop a full range of transportation solutions and strategies for long-range transportation and comprehensive planning activities, circulation and access studies, as well as other multi-modal assessments.

Staffed by professionals with diverse capabilities in traffic engineering, transportation planning, transit operations, public involvement, and impact analyses, URS currently serves the varied consulting needs of local and state governments, regional planning councils, transportation authorities and private developers. We also assist institutions and local businesses with traffic signal design, redesign of onsite traffic flow and parking, and driveway permitting.

The URS Team has significant local experience completing Carrying Capacity Studies for clients. Our Team will leverage lessons learned from other previous successfully completed studies in order to provide a well-planned, comprehensive study to the City of Key West. Our recent experience includes:

- Florida Keys Carrying Capacity Study – URS was contracted by the U.S. Army Corps of Engineers (USACE) to study conditions and develop a spatially explicit, computer-based analysis model to determine the ability of the Florida Keys ecosystems and infrastructure to withstand impacts of additional development. The project goal was to provide USACE, the Florida Department of Community Affairs (DCA), Monroe County and local planning agencies with a database planning tool. The Carrying Capacity Study won the 2003 National Grand Award from the American Council of Engineering Companies (ACEC)
- FDOT District Six Traffic Engineering – URS is serving as the Traffic Engineering Consultant for the Florida Department of Transportation, which includes Miami-Dade and Monroe Counties. In this role, URS serves as an extension of the Department's staff providing task work order type servies by completing traffic studies, which identify operational and safety improvements; performing

capacity analysis with and without improvements; developing preliminary design plans; preparing preliminary cost estimates; and coordinating public involvement support. Currently, we are assisting the Department with improving the traffic operations and safety at the intersection of US-1 and Sugarloaf Boulevard in Monroe County. In addition to providing traffic engineering and safety analysis at the intersection, we have been assisting the Department staff with presenting the technical merits of our recommendation to the public.

- City of Wilton Manors – Under our general engineering contract, URS completed a traffic carrying capacity study for the City of Wilton Manors. The study focused on traffic-calming applications which were analyzed to develop strategies to enhance the quality of life for the City's residents. Not only was the unwelcome cut-through traffic eliminated, but opportunities to improve the aesthetic quality of the City were also identified.
- City of Miami – URS completed a master plan corridor study of SR7 and NW 7th Avenue for the City of Miami which analyzed various approaches to reduce environmental impacts of transportation improvements, reduce the need for costly future infrastructure investments and identify strategies to encourage private sector development patterns including transit-oriented development that achieve these goals. The measure of the short and long term results of the study was largely a function of the acceptance of the deliverables through the public participation process and the review and concurrence of the participating agencies.
- Monroe County – URS provided transportation planning services to Monroe County through assistance with reviews of site plans and traffic impact reports, and provided other congestion management assistance. The annual Travel Time Delay Study is performed to assist the County with meeting their specific Congestion Management Requirements.

The URS Team will approach this opportunity with energy, enthusiasm and expertise. The individuals presented in this proposal are available and committed to exceeding the expectations of the City of Key West for the duration of the assignment. Should you have any questions regarding the content of this response, please do not hesitate to contact me at the number provided below. Thank you for your consideration.

Kindest Regards,

Carlos Garcia, PE
Vice President / Principal-in-Charge
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Tel: (305) 514-2412
Fax: (305) 261-4017

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2.0 Information Page

1. Project Name:

RFQ: 10-009 - Carrying Capacity Traffic Study

2. Name of Prime firm:

URS Corporation Southern

3. Contact info for Project Manager:

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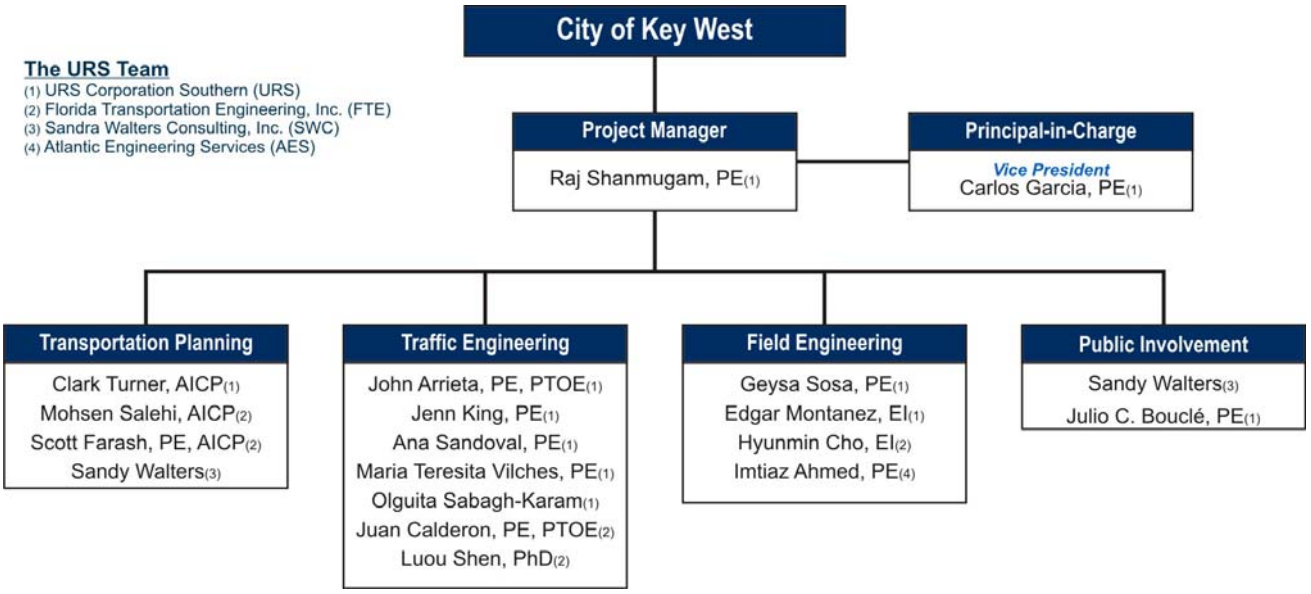
3.0 Organizational Chart

Project Team Organization

People make the difference; they are critical to the success of any project. For the carrying capacity traffic study to be performed for Key West, the City must feel confident that its consultant has the knowledge, technical skills, and commitment necessary to achieve your goals. Our professionals have years of diverse experience performing comprehensive services where collaboration and coordination are of the essence. Staff, services, technology all is matched to your needs, whether you prefer our assistance as an extension of-staff to supplement your internal resources or as a full consultant management team to direct the implementation of your project. Provided below is the organizational structure of the URS Team. The individuals presented in the table below are available and committed to exceeding the expectations of the City of Key West for the duration of the assignment. Resumes, detailing the educational and experience achievements of each team member, have been provided in Section 6.

Project Team Organizational Chart



Location of Team Personnel

Name	Firm Name	Function	Location
Key Team Personnel			
Raj Shanmugam, PE	URS	Project Manager	Ft. Lauderdale, FL
Carlos Garcia, PE	URS	Principal-in-Charge	Miami, FL
Clark Turner, AICP	URS	Transporation Planning	Miami, FL
Mohsen Salehi, AICP	FTE	Transporation Planning	Miami, FL
Scott Farash, PE, AICP	FTE	Transporation Planning	Tampa, FL
Jenn King, PE	URS	Traffic Engineering	Miami, FL
Luou Shen, PhD	FTE	Traffic Engineering	Miami, FL
Juan Calderon, PE, PTOE	FTE	Traffic Planning	Miami, FL
John Arrieta, PE, PTOE	URS	Traffic Planning	Ft. Lauderdale, FL
Geysa Sosa, PE	URS	Traffic Planning	Ft. Lauderdale, FL
Ana Sandoval, PE	URS	Traffic Planning	Miami, FL
Maria Teresita Vilches, PE	URS	Traffic Planning	Miami, FL
Olguita Sabagh-Karam	URS	Traffic Planning	Miami, FL
Edgar Montanez, EI	URS	Field Engineering	Miami, FL
Hyunmin Cho, EI	FTE	Field Engineering	Miami, FL
Imtiaz Ahmed, PE	AES	Field Engineering	West Palm Beach, FL
Sandra Walters	SWC	Public Involvement	Key West, FL
Julio Bouclé, PE	URS	Public Involvement	Miami, FL

4.0 Company Information

1.0 Prime Capabilities Overview

URS Corporation Southern (URS)

URS Corporation offers the full range of professional planning, engineering and architectural design, environmental, construction, and program and construction management services. We also provide system integration, operations and maintenance, management and a wide range of specialized technical services. With a network of approximately 50,000 employees in 300 offices, we have significant resources found only within one of the largest engineering consulting firms in the world. Established in 1904, URS is publicly owned and listed on the New York Stock Exchange as *URS*. The following section provides an overview of the URS Team's expertise.

Firm Capabilities Profile

As a single source for nearly every professional design discipline, URS is committed and able to bring unmatched expertise and innovation to every project. We have established a tradition of innovation and dependability in our assignments by providing individualized services and responding to the special requirements of each client and project. With this philosophy, we have successfully solved challenges across the full range of planning and design projects. URS has been providing professional services throughout south Florida for over twenty-five (25) years.

Our local capabilities include:

- Master Planning and Facility Evaluation
- Architectural Planning and Design
- Engineering Planning and Design
  - Electrical
  - Civil
  - Mechanical
  - Process and Chemical
  - Structural
  - Geotechnical
  - Communications
  - Traffic Engineering
  - Transportation
  - Survey
- Site Analysis, Planning, and Landscape Design
- Environmental Engineering
- Demolition Planning and Management
- Contamination Assessment and Monitoring
- Interior and Graphic Design
- Cost Estimating and Scheduling
- Construction Administration
- Construction and Program Management
- Fire Protection and Life Safety Systems
- Value Engineering

*URS was ranked as the **#1 design firm** nationally by Engineering News Record magazine, for 8 consecutive years.*

Firm History

URS Corporation's oldest predecessor company was founded in 1904. URS was established in 1951, and incorporated in 1957 as Broadview Research – a research group active in areas of physical and engineering sciences. In 1967, management developed a growth strategy focused on building a multidisciplinary professional services firm. In 1968, Broadview Research acquired United Research Incorporated of Cambridge, Massachusetts. During this period, the name Broadview was changed to United Research Services, later shortened to URS.

Today, URS offers a broad range of planning, engineering, and architectural design, program and construction management, system integration, and operations and maintenance for transportation, hazardous waste, industrial processing, and petrochemical, general building, water/wastewater, military facilities and equipment platforms, and security projects. The company services federal, state and local government agencies in the U.S., Fortune 500 corporations worldwide and government clients in Europe and Asia/Pacific.

Recently "Engineering News Record" released their rankings of the Top 500 engineering firms and URS was ranked #1 in Design and ranked #2 in Transportation. We have over 250 professionals in the South Florida region supported by over 750 state-wide employees should additional resources or specialized expertise be required.

Traffic Engineering and Transportation Planning Expertise

URS specializes in traffic engineering, highway safety and operations studies, including engineering studies, traffic systems analysis, design, and implementation. We also perform transportation planning and modeling studies, toll feasibility studies, construction engineering and inspection projects for roadways and bridges, as well as assignments involving geographic information systems (GIS). Our qualifications and expertise are well known in Florida. We have served as the Florida Department of Transportation's FIHS Planning Consultant, the Turnpike District's Traffic Engineering Consultant (since 1955), the General Planning Consultant, and the District Four Traffic Operations Safety Review Consultant.

The adequacy of transportation facilities is a key infrastructure concern of the decade – whether it involves construction of a new expressway, an access road to a new development, a guideway transit system, a traffic signal at an intersection, or planning for the continued growth of a community. URS offers custom services for specific transportation problems, as well as comprehensive area-wide planning and engineering programs for traffic impact studies, transit feasibility analysis, long-range road networking planning, and alternative corridor location and environmental analyses.

Traffic/Transportation Planning Capabilities Include:

- Preliminary and Feasibility Investigations, Cost Studies, and Economic Comparisons
- Environmental, Social, and Alternate Transportation System Studies
- Traffic Impact Studies and Traffic Control Strategy Evaluation and Recommendation
- Systems Travel Forecast Analyses
- Signal System Design
- Roadway Intersection Capacity Analysis

Public Involvement

The URS Team understands there are a number of stakeholders in any given project who hold a variety of perspectives. Stakeholders of the various agencies, elected officials, interest groups, and advisory committees must be fully informed regarding the projects and be given the opportunity to address concerns, share their ideas, and develop strategies in a setting and manner that are easily accessible and convenient for them. Our team has vast experience in presenting before affected stakeholders. Our experience stems from the various projects completed which requires the preparation of press packages, newsletters, advertisements, reports, workshops as well as public hearings.

The following list of relevant activities are examples of information collected and strategies used for this purpose which have already been implemented on previous projects:

- Identify property owners and businesses affected by the proposed project improvements.
- Use of aerial photos to convey project information to the public and elected officials.
- Identify potential project concerns early on in the process.
- Identify concerned public and agencies.
- Establish Citizens Advisory Committees (CAC) and/or Businesses Advisory Committees (BAC) to gather input and disseminate information.
- Elected Officials briefings and project updates.
- Develop project renderings with future improvements to demonstrate a before and after effect related to project improvements.
- Create a video if necessary to simulate improvements.
- Establish a Public Information Program that includes: periodic newsletters, community meetings, project website, use of media updates, etc.
- Public Workshops and / or Public Hearings at project milestones.
- Toll Free telephone number dedicated to the project.
- On-site public information office with full time staff for major projects.
- Mail-out surveys and / or Focus Groups to receive input on the proposed improvements.
- Project close-out meetings with the community to clarify additional concerns generated from the project improvements.

The preparation of presentation materials is a critical aspect for any good public involvement plan. An appropriate combination of graphics, handout materials, and interactive multi-media presentations must be obtained to achieve optimal results. This will improve communications with the public, minimize misunderstandings and conflicts, facilitate the incorporation of public input into the decision-making process, and identify and involve all of the affected communities and other parties throughout the process. We have the capabilities in-house to design, develop, and package all the necessary presentation information after City's approval on a draft exhibits.

2.0 Subconsultant Capabilities Overview

Florida Transportation Engineering, Inc. (FTE)

Florida Transportation Engineering, Inc. (FTE) was founded in 1989 by the late Nanette E. Hall, PE. Since then, FTE has grown to a staff of 35 professionals, technicians, and support staff. FTE has offices in Punta Gorda, Tampa, Miami, and Tallahassee. They are a full service civil engineering firm offering services in roadway design, traffic engineering, transportation planning, traffic operations design, traffic monitoring site design, and construction engineering inspection (CEI). Over the years, FTE has developed a large client and partner base. Their experience serving different clients, consultants, and a variety of projects provides the advantage of a broader view of projects and how they relate to other factors. Additionally, FTE staff has developed a strong working relationship with client project managers and other consultant staff. Their experience allows them to work closely with clients and partners to produce the results expected. FTE provides services on projects throughout the state of Florida including projects for the FDOT District Offices, Central Office, and Florida's Turnpike. Additionally, they serve various municipalities including counties, cities, metropolitan planning organizations (MPO), and private developers. FTE offers consulting engineering services both as a prime consultant and as a subconsultant. They have served on numerous District Wide Design, Planning and Traffic Operations Studies contracts for FDOT, counties, municipalities and private firms. Their staff is well acquainted with work order driven contracts and understand their importance and urgency.

FTE's extensive experience and understanding of projects with a similar scope and nature will enable the staff to be responsive, perform tasks properly, and provide quality data and documents within a very short time frame for the following disciplines:

- Civil Engineering
- Engineering
- Transportation Planning
- Technical Analysis Engineering
- Traffic Engineering
- Transportation Design & Engineering Studies
- Geographic Information Systems
- CADD
- Mapping
- Cost Engineering and Estimates

Sandra Walters Consulting, Inc. (SWC)

Sandra Walters Consultants, Inc. (SWC) provides services in all areas of public involvement including ecological and environmental consulting; land use, public facilities planning and permitting; habitat assessments, wetland permitting and mitigation design, environmental impact statements, compliance monitoring, development agreements, and submerged land leases. SWC will provide public involvement services on behalf of the URS Team.

SWC has extensive experience working in Monroe County and the Florida Keys, including:

- Improvements to Atlantic Boulevard and access to Glynn Archer and Gerald Adams Schools, City of Key West - Member of team that is providing engineering services for three roadway segments in Key West. SWC is responsible for development and implementation of public involvement programs, including identifying stakeholders, preparing and distributing informative mailers and news releases, planning and implementing public meetings to solicit comments, and preparing final public involvement summaries; and environmental and planning elements.
- City of Key West Bahama Village Redevelopment Plan Update - member of team that updated community redevelopment plan. Primary roles included environmental and public facilities planning; and public involvement, preparation and distribution of project newsletters and news releases; and development and implementation of proactive community involvement process.
- City of Key West Economic Development Conveyance Application - member of team that developed EDC application for surplus Navy properties. Primary role included planning and implementing meetings with local officials and interest groups, coordination of public workshops and presentations, and public facilities and environmental data collection and analysis.
- Stock Island-Key Haven US 1 Corridor Study, Florida Keys - provided public involvement outreach and meeting coordination services for study to identify improvements to US 1 corridor segment; resulted in significant participation by user groups and relevant and effective planning charrette.
- District 6 FDOT General Public Information Contract for Design Services, Monroe County - SWC is a member of the consulting team that presently holds the general design services public information contract, providing services for the Florida Keys. Projects worked on to date include US Highway 1 corridors from Key West to Stock Island, on Big Coppitt Key, Big Pine Key, Cudjoe Key and Grassy Key.
- FDOT Planning, Design & Environmental (PD&E) Studies in Islamorada, Marathon and Big Coppitt Key, Florida Keys - Member of team that conducted FDOT studies of roadway improvements, including turn lanes, in five-mile corridor in Islamorada, five-mile corridor in Big Coppitt Key, and Sombrero Beach Road in Marathon. Services included public involvement, land use planning, and landscape architecture elements of study, including coordination with local staff and elected officials.

Atlantic Engineering Services (AES)

Atlantic Engineering Services (AES) is a comprehensive consultant services firm focusing on all aspects of engineering, planning, design and construction. Led by Mr. Ahmed has over 23 years of experience in all aspects of engineering, planning, design, and construction. Since 1998, he has been in private practice. He provides planning and engineering assistance on a continuing basis to public and private sector clients. As an engineer, Mr. Imtiaz Ahmed, PE, AES has designed several projects that include single- and multi-family residential, site planning and land development work for subdivisions, residential and commercial projects, intersection improvements, parking lots, sidewalks, and streets. Mr. Ahmed also served in the public sector as an engineer and project manager, which included road design and construction, drainage, lighting and landscaping, and coordination with utilities and homeowners. AES will provide field engineering services on behalf of the URS Team.

5.0 Methodology and Approach

1. Project Understanding

The island of Key West is approximately 2 miles by 4 miles wide with a total area of approximately 4.2 square miles. The island is densely populated with approximately 22,000 permanent residents. Key West, due to its climate, beauty, history, and the geographic location attracts a large number of visitors every year, peaking during the winter months. Key West has become a destination for cruise ships. The city owned ferry terminal attracts a large number of tourists from Naples and Fort Meyers, among other locations. US 1 provides the only land based access, through a four-lane bridge – Cow Key Bridge. The local traffic competes with tourist traffic on the City's transportation infrastructure. With some exceptions, the transportation infrastructure on the island mainly consists of two-lane roadways with on-street parking, commonly within narrow rights of way.

Population Density (2007)

	Permanent Population	Density (Persons Per Square Mile)
Florida (2007)	18,807,219	349
Key West (2007)	22,364	1,950

The issue of congestion within the City of Key West was underscored by the City imposed moratorium on issuing "…any new or additional licenses, business tax receipts, permits, franchises or similar authorization for motorized and non-motorized vehicles that make primary use of City streets in the operation of their businesses." The moratorium was imposed on February 17, 2010. City Ordinance 10-17 cites "…the City of Key West has seen an increase in the level of traffic from commercial vehicles…", and "…this increase in vehicles is especially apparent in Key West's dense nationally recognized historic district…."

URS understands the purpose of this Carrying Capacity Traffic Study (CCTS) is to assist the City of Key West in their efforts to assess the capacity of city streets and related infrastructure. The infrastructure includes, but is not limited to sidewalks, bike paths, on-street parking, loading/unloading facilities, and transit stops. The City of Key West mobility encompasses several modes of transportation: pedestrians, bicycles, private automobiles, city transit, sight seeing vehicles, vehicles for hire, electric cars, pedi-cabs, and mopeds, among others. These modes of transportation vary in size, speed, and physical characteristics. The City officials rightfully recognize that measuring the street capacity using traditional traffic engineering methods would ignore the importance and the impact of all the various modes of transportation on the City's mobility need. In short, using traditional methods will underestimate the true capacity of city streets. Further, a city that is unique as Key West should recognize the importance of all modes of transportation, and have

a procedure that would credit the importance of accommodating alternate modes of transportation within the City streets. There is no place in the City where the recognition of alternate modes of transportation is critical for the sustainability of quality of life, more notable than the historic Old Town section. The Traffic Circulation Element of City's Comprehensive Plan (Chapter 2, Conformed version, March 2008) has since recognized for some time the importance of alternate transportation mode in the City's mobility needs, and this is clearly stated in Policy 2-1.2.3:

"The City will continue to explore the applicability and utility of designating Old Town as Transportation Concurrency Management Area (TCMA), as means of ensuring an adequate level of mobility that is sensitive to the City's historic character. If pursued, the TCMA will promote the use of public transit and other non-automobile modes, such as bicycling and walking, while discouraging the proliferation of urban sprawl and protecting natural resources."

The CCTS should recognize mobility in all modes of transportation and their impact to adjacent land uses. The Study will address the volume of vehicles, the volume associated with non-traditional and non-vehicular traffic, overall circulation, and conflict between vehicular and non-vehicular traffic. Further, the Study will address the issue of traffic within the residential neighborhoods, which may include limiting the types of vehicle permitted to use residential streets, while conversely, addressing the need for access and patronage to the commercial and service districts.

Key West Annual Visitor Characteristics (2008)

Method of Travel	Total Visitors	5-Year Decrease
Cruise Ship Passengers	1,067,222	(26.4%)
Key West Passenger Arrivals (Airport)	222,198	(23.8%)
Arrival by Automobile (estimated)	900,000	---
Total Annual Visitors	2,254,055	(17.0%)

2. Approach

Understanding the techniques in measuring roadway capacity and mobility impacts is critical to developing the appropriate approach to this study. The first part of this section discusses the most commonly and currently used techniques – HCM and the Generalized LOS methodology, and the 2009 FDOT Quality/LOS. The balance of this section discusses what the URS team sees as the appropriate technique to use given the complexity of Key West transportation system, and our approach to applying this unique technique to address the carrying capacity of City streets.

Household Vehicle Availability (2007)

	Number of Vehicles Available			
	None	One	Two	Three or More
Key West	18.9%	47.1%	28.9%	5.1%
Florida	6.4%	39.7%	39%	14.9%

HCM and the Generalized LOS Methodology

One source for roadway capacity methodology is Highway Capacity Manual (HCM) developed by the Transportation Research Board. The standard approach to measuring capacity is to

assess the Level of Service (LOS). The HCM methodology separates the two-lane facilities into two classes: Class I, for efficient mobility purposes; Class II, where speed is not critical to drivers. The HCM methodology uses two parameters to adjust the Free Flow Speed: Lane and Shoulder Width, and Access Point Density. It also uses two parameters to adjust the Peak Hour Flow Rate: Grade Adjustment and Heavy Vehicle Adjustment. There is an additional parameter to adjust the Average Travel Time (Percent of No-Passing Zone Adjustment). For the City of Key West, new parameters which affect the average travel time need to be considered. For the percent of time spent following, since the passing is not allowed and passing zones are not provided in the urban street. The percent of time spent following low speed road users (such as trolley, electric cars, pedi-cabs and mopeds), and the percent of time spent on waiting for vehicles loading passengers/goods are two concepts recommended as measurements to determine the LOS.

In addition to roadway capacity, transit capacity needs to be addressed. The Transit Capacity Quality of Service Manual (TCQSM) methodology which defined the LOS based on bus frequency, bus span of service, comfort and convenience measures.

For the City of Key West, the LOS classification in the TCQSM needs to be modified based on user perception. The use of multiple modes of transportation also requires extensive modifications to the HCM based methodology. The low speeds of vehicles will require extensive data collection and modifications to the standard methodology.

In general, the LOS definition based on Free Flow Speed and Density for multi-lane condition, and Average Travel Speed and Percent Time Spent Following for two-lane roadways need to be examined and extended to accommodate the special conditions that exist in Key West. The behavior and impact of special vehicles and activities need to be studied and measured in the field.

The HCM methodology uses Free Flow Speed from 45 mph to 60mph in the LOS criteria for Multi-Lane Highway. New density/maximum, v/c ratio/maximum service flow rate, and LOS criteria corresponding to lower speeds need to be established. The uniqueness of Key West will require additional factors such as: Percent of Electric Car, Percent of Pedi-Cabs, Percent of Mopeds, Number of Bus Stop activities per hour per mile, Number of Trolley Stop activities per hour per mile, Number of Loading Vehicle activities per hour per mile, and Number of Roadside Parking activities per hour per mile.

FDOT 2009 Quality/Level of Service Methodology

A second source for roadway capacity methodology is the Florida Department of Transportation (FDOT) 2009 Quality / level of Service Handbook. The Handbook has developed flexible methods for evaluating bicycling, walking and transit quality of service which relate to comfort and convenience. These measures consider factors such as the type of pedestrian or bicycle facility (i.e., off road versus on-road) and transit service, the speed and volume of adjacent street traffic, whether there is a buffer between the bike/pedestrian facility and the travel lane, the condition of the pavement, and the availability, frequency (i.e., headway) and span of the public transportation service. The measures result in a segment by segment rating of roadway quality of service conditions from A to F, similar to that of

conventional LOS auto oriented concurrency. The methods also entail area-wide measures for street connectivity. The procedure provides a useful screening tool for conditions and potential solutions to improve the environment for non-auto travel. However, they are essentially facility based measures oriented toward and limited to roadway right-of-way.

The URS Team Approach

The URS Team proposes to introduce the Person-Trip Capacity concept for urban transportation planning. This concept is based upon a new method for measuring passenger transportation quality and levels of service wherein the fundamental measure of travel is the person-trip, not the vehicle; and the Person-Trip Capacity for a facility or system is the sum of two or more modes of person-trip travel, instead of the vehicular capacity of roadways.

The Person-Trip Capacity concept and methodology is designed to meet the challenges posed by Florida's growth management laws: to promote compact urban development, discourage suburban sprawl, and improve urban mobility. It offers alternatives and options to manage sustainable development of the urban area, promote improved transportation efficiency through increased occupancies of private passenger vehicles, and make providers of alternatives to the private passenger car full partners in the urban transportation system.

Key West Major Trip Generators and Traffic Attractors

The URS Team believed that utilization of the Person-Trip Capacity concept would be a significant step toward a solution to the urban traffic congestion problem in the City of Key West.

Key West has a unique setting – in practical ways it resembles an island more than the mainland. It is also becoming a "fully-developed" City. This means that, in transportation terms, there has been a slowing of new trip generation associated with land development, as less and less vacant land is available for development.

Despite the overall slowing of the "new development" component of trip growth, there are increased employment opportunities – especially in the tourism sector – being developed in Key West that attract travel from other parts of the urban area and from beyond it. Newly-created hotel rooms and other tourist/visitor accommodations are appearing, and the introduction of cruise ship visitors creates a heavy load of pedestrian traffic for relatively short periods of time. The total trips generated in the City continues to increase as land is redeveloped at higher intensities and employment grows, but the rate of increase may actually become smaller as the City matures.

All these factors taken together result in an increasing number of trips being made in and through the City, while population holds relatively steady or declines and new land development activity

diminishes (and is replaced by redevelopment). Of critical importance is the fact that the existing Key West street system is now fixed in place, and there is little opportunity for any significant increase in the traditional vehicular capacity of the system.

The implications for transportation planning, then, are that an increasing number of person-trips must be accommodated in a street and highway system that has limited physical expansion capability. Continuation of this trend without conscious redirection will produce ever-increasing traffic congestion and deteriorating levels of service. The Person-Trip-Capacity concept can lead to alternatives and options that offer solutions.

The "Traffic Congestion" Issue

Much of the problem in dealing with "traffic congestion" lies in fundamental misunderstandings about what it is. Some of the problem lies in how traffic congestion is measured, discussed below, and some in the nature of congestion itself -- when and how it happens.

In its simplest sense, "traffic congestion" is too many vehicles trying to travel along the same roadway. As the number of vehicles reaches the roadway's capacity, traffic slows and finally stops. Various techniques such as adding traffic lanes, increasing the "green time" of traffic signals, limiting turning movements, and similar traditional alternatives are employed to enhance roadway capacity. Ultimately, however, the entire system reaches a physical limit than cannot be expanded. This is the most important characteristic of what is typically characterized as “traffic congestion” -- it is invariably associated with images of vehicles (mainly automobiles) crowded into a roadway.

The "Level of Service" Issue

Regardless of congestion, the critical issue in urban transportation is the movement of people, not machines. The movement of people is measured in person trips (a "person trip" is one person's trip from one place to another -- a trip from home to work and the return home equals two person trips). It is easy to overlook this fact in an automobile-oriented society, because the majority of person-trips are made driving alone in a passenger car, so that one person-trip appears to equal one vehicle-trip. Most transportation plans count these vehicle-trips as their fundamental unit of measurement, and their "level of service" calculations (a rough measure of traffic congestion) reflect this assumption. But such calculations fail to differentiate between a transportation facility’s **physical capacity** (the number of vehicles it can accommodate irrespective of passenger occupancy) and its **person-trip capacity** (the number of person-trips that can be accommodated at various numbers of persons-per-vehicle).

Failure to make this distinction introduces fundamental flaws that can seriously distort the entire transportation planning process in a number of ways:

- First, the traditional approach establishes **vehicular movement** as the critical measure instead of the **movement of people,** which is the key issue at which transportation

planning should be directed;

- Second, the vehicle-based approach overlooks the fact that the "one-vehicle-one-person" equation is inaccurate at the outset: the average passenger car occupancy in Key West is certainly more than one person per car – and could be as much as two – persons, so that 100 cars could actually be carrying as many as 200 person-trips – a fundamental error that continues to increase as vehicle-occupancies go up;
- Third, the vehicle-based approach measures roadway capacity in terms of the **numbers of vehicles** that can be physically accommodated within the facility, thereby placing an absolute physical limit on the assumed "capacity" of a roadway based on the vehicles, and not the people using it; and
- Fourth, it tends to define the transportation facility as the roadway utilized by passenger cars, ignoring other transportation modes – especially pedestrian and public conveyance – that may be available to perform the same person-trip-carrying task.

The person-trip approach, by contrast, recognizes the fact that **every street and highway facility has a greater person-trip capacity than it does vehicle-trip capacity,** and that the objective of urban transportation planning should be to utilize that person-trip capacity and not to become preoccupied with the machinery used in moving the person-trips. In short, **vehicle trips and person trips are not the same thing and should not be mistaken for one another.**

Viewed in this context, the vital role that can be played by mass transportation and other ways that vehicle-occupancies can be increased becomes clear. As a simple illustration of these points, if one were to assume that the typical peak-period average occupancy of an automobile were to double to from, say, 1.4 to 2.8 persons as the result of decisions to carpool, the immediate effect would be a 50% reduction of the number of cars -- and of traffic congestion -- for the exact same number of person trips.

Where bus service and/or other public conveyance is available, the person-trip capacity of the roadway is the sum of the passenger-carrying capacities of all the passenger cars plus the other services that can travel along it. If people riding in 36 cars (50 people at 1.4 persons per car) decided to fill a standard transit bus, vehicular traffic congestion would be reduced by almost 70%: one bus occupies about the same street space as three cars, but it carries about 50 seated passengers versus the one or two in each automobile.

On any roadway, then, collective individual decisions, freely made by the people who are traveling, determine how many people will ride per car and per bus (and other public conveyances); so the actual number of vehicles on the roadway, and how congested it is, is the result of these decisions and the number is higher or lower depending upon them.

Therefore, it can be seen that the key measure that should govern transportation planning is person-trips, and that **"roadway capacity" and its derivative "level of service" are the functions**

not of how many person trips are being made, but rather of the collective decisions that choose by what manner the trips are made. This is not to suggest that these collective decisions are easily capable of change -- they most certainly are not -- but simply to emphasize that, **within a reasonable range, traffic congestion exists as a matter of collective individual choice, not physical law.**

It would be possible, and certainly desirable, to plan for the amelioration of traffic congestion through the provision of greater levels of public transit service if there were any reasonable expectation that such services would be used and afforded. However, the key to increased utilization depends upon the collective decision-making on travel choice discussed earlier, and there are few, if any, signs that the collective preference for private automobile transportation is weakening, despite the time, expense, and frustration produced by ever-increasing traffic congestion.

This essentially pessimistic view does not, however, satisfy the City of Key West's obligation to provide alternative travel choices alluded to above, so that the alternatives are available to be chosen if collective decisions should point their way. And, while acceptance of increasing levels of traffic congestion is the unfortunate by-product of the present direction of these collective decisions, congestion alone should not be permitted to thwart Key West's traditional function as a unique urban place in an unparalleled tropical setting so long as the alternatives are available. To that end, and to reflect a balancing of these interests, the Person-Trip Capacity concept is proposed to help sustain Key West's growth and forestall traffic congestion from throttling its development and quality of life.

The Person-Trip Capacity Concept

The fundamental concept underlying Person-Trip Capacity relates to the person-trip, rather than vehicle movement, and the capacity and level-of-service of the facility is expressed in person-trip quantities and ratios, rather than the conventional vehicular measurements. This implements the approach suggested for dealing with the critical urban transportation issue, the movement of people, as discussed earlier. In brief, within the facility, vehicular volumes and capacities and their resulting presumed "levels of service" are secondary to the critical values of vehicle occupancies yield a more meaningful and useful "level of service" evaluation. The methodology used to calculate person-trip capacity of a facility is simple: add the various person-trip capacities of each mode within the facility to produce a total capacity. The actual person-trip volume moving through the facility, converted to a percentage of capacity, yields the level of service. For forecasts and projections, the various vehicle occupancies for each mode can be set at assumed future levels, and the same computations can be used to produce future levels of service. All the facilities calculations can be added together to permit a system wide analysis.

Caution should be exercised when using the person-trip methodology, that it not be mistaken for the traditional vehicular volume-over-capacity (V/C) methodology the two measurements, applied to the same situation, will yield quite different results. Viewed as a vehicular V/C problem, the LOS of a roadway in a facility may be recorded as "F", because the volume of vehicles exceeds the nominal

physical roadway capacity for such vehicles. But the person-trip calculation will measure as "volume" only the actual numbers of persons traveling in all the vehicles of all modes, and as "capacity" will include all the movement options (including public conveyances and increased occupancy of private passenger vehicles) available in the facility for these persons to make the same trips. This will normally produce a "higher" letter-grade of LOS for the facility than for the traditional roadway vehicular only component.

Advantages

- Fundamental measure is the movement of people, not vehicles.
- Easy to use, after basic understanding.
- Lends itself well to area-wide modeling.
- Flexible in forecasting alternative futures.
- Analysis can provide the basis for testing modal incentives and disincentives.

Disadvantages

- May be difficult to understand for those accustomed to conventional methodologies.
- Potential conflicts with existing approved techniques.
- Somewhat more data-intensive than conventional LOS measurement.
- Relies on more assumptions than conventional methodology.

Potential for Funding Assistance

The federal government has historically provided funding in various forms for transportation planning and projects. Moreover, it has funded planning and projects that test and/or demonstrate innovative approaches to dealing with transportation problems. These forms of assistance vary widely in amount and use, depending on the funding agency and the nature of the work.

Recently, new and renewed emphasis on treating transportation issues in the context of larger concerns involving environment, energy, air quality, sustainability, quality of life, and the like has become a high-priority for federal attention.

If Key West chooses to pursue this innovative approach, and links its particular transportation issues to the larger concerns mentioned above in a meaningful way, it would likely have a persuasive argument that its approach is worthy of support at the federal level.

Micro Simulation

There are many existing micro simulation models to analyze capacity and LOS, which form a hierarchy ranging from the use of Generalized Service Volume Tables (the simplest to use but potentially least accurate) to the application of complex operational analysis tools. They could also be divided in to generalized planning, preliminary engineering, and operational analysis; which ranges from “simple” to “complex”.

The *FDOT 2009 Quality/LOS Handbook* provides two levels of analysis: generalized planning and preliminary engineering. The current Key West *Policy 2-1.1.1: Level of Service Standards* requires the use of FDOT software to calculate LOS. The tools in the currently available LOS planning software (LOSPLAN, developed by FDOT), including ARTPLAN, FREEPLAN, and HIGHPLAN, are appropriate tools for this type of planning analysis. They have been specifically developed to address preliminary engineering issues in Florida, based on the nation's leading operational tools and are easy to use. These recognized tools include the previously mentioned HLM and TCQSM, along with the Bicycle LOS Model, and the Pedestrian LOS Model.

The potential micro simulation tools applicable to this study include:

- CORSIM, developed by the Federal Highway Administration (FHWA): is one of the most commonly used micro-simulation programs for modeling vehicle traffic operations;
- PARAMICS, developed by Quadstone Limited, a Scottish company: is a software program used to model the movement and behavior of individual vehicles and transit on local arterial and regional freeway networks; and,
- VISSIM, developed by Planung Transport Verkehr (PTV), a German company: is one of the most sophisticated microsimulation software programs available, it provides significant enhancements in terms of driver behavior, multi-modal transit operations, interface with planning/forecasting models, and 3-D simulation.

VISSIM is the leading microscopic simulation program for multi-modal traffic flow modeling. With its unique high level of detail it accurately simulates urban roadway and traffic conditions, including pedestrians, bicyclists and motorized vehicles. VISSIM is the ideal tool for this study since pedestrian simulation and vehicle simulation (which include transit and user custom defined vehicles) have been combined in one software program.

Using VISSIM, performance measurements such as average speed, stop delay, travel time, air emission statistics and variables for noise analysis can be obtained to evaluate existing and forecasted conditions. VISSIM would also be used to develop adjustment factors (which represent the unique characteristics of the Key West transportation network). The simpler analysis tools such as, FDOT software and Highway Capacity Software (HCS) will be merged with VISSIM to create a new tool (less complex than the VISSIM model) to assess the capacity of specific city street segments and related transportation infrastructure in Key West.

3. Scope of Services

- Draft a Study Methodology and Associated Cost Estimate and Present to the City Commission: A detailed study methodology and fee proposal will be developed in coordination with City staff and presented to the City Commission for input and approval.
- Collect Existing Data:
    - Review Previous Studies

- Field Data Collection

To the extent possible, the existing condition scenario will be developed from available data in previous studies. When necessary, additional data will be collected. A data collection plan will be created ensure quality, timeliness and relevance. The accuracy of the data is critical to identifying the problem and developing meaningful solutions. We believe that training, experience, and supervision will result in the accuracy that we desire during the data collection. Our data collection staff is fully trained and has extensive experience.

- Identify System Deficiencies and additional analysis requirements of existing conditions: A thorough understanding of existing conditions, specific problem areas and the unique mobility issues faced by the City of Key West is key for the efficient use of limited resources and adequate development of a Circulation Plan.
- Develop Goals and Objectives: One role of the URS team will be to facilitate a process that elicits the goals and objectives from the residents of Key West and its elected officials. The team will also provide their technical expertise to translate the intent of the community into measurable goals and objectives that can define the different plan proposals.
- Review of City, County and State Regulations: Regulation plays an important role in the successful implementation of the proposed plans. Early identification of related regulations will facilitate the selection of implementable solutions as well as the identification of regulations that need to be modified or created for proper implementation of the plan. As an example *CHAPTER 2: TRAFFIC CIRCULATION ELEMENT, Policy 2-1.1.1: Level of Service Standard*s states: "The Level of Service (LOS) determination of thresholds shall be calculated using FDOT software…"; which currently mandates the use of FDOT software to calculate LOS which will likely be required to be modified.
- Develop Demand (Origin/Destination) Network: A planning model is usually developed from social-economic data such as: population forecasts, economic forecasts, and land use patterns. The City of Key West is not included in the existing Miami MPO model and to build a new model for the City is not time effective or cost feasible. Therefore, more basic concepts and equations regarding the trip generation, distribution, mode choice and route assignment must be applied in this study to analyze the travel pattern within the City and develop the Demand (Origin/Destination) Network. For example, the population in the City of Key West could be generally classified as permanent residents, seasonal residents, and visitors. Then, different travel characteristics could be developed for each of these three groups of people.
- Develop a Mobility (Inclusive of the Different Modes) Analysis Model: Micro-simulation like VISSIM can be used to assess the capacity of city streets and related transportation infrastructure. Model parameters (such as, acceleration/deceleration rate, safe distance, average travel speed, and road space occupation) for 'Key West Specific' vehicles (e.g., electric cars, pedi-cads, mopeds) would be developed. Once this data is available, the micro-simulation software can be used to assess the impact

of the mixed flow under the unique characteristics of Key West. Performance measurements such as average speed, stop delay, travel time, air emission statistics and variables for noise analysis can be obtained to evaluate the current and forecasted conditions. This Model would also be used to develop adjustment factors (which represent the unique characteristics of the Key West transportation network) to be used in existing analysis tools such as, FDOT LOS plan, HCS or the creation of a new tool (less complex than the VISSIM model) to assess the capacity of specific city street segments and related transportation infrastructure in Key West.

- Develop LOS Criteria
    - Mobility
    - Noise Quality
    - Air Quality

  The development of LOS criteria will be influenced by regulations and the established Goals and Objectives and vise versa. While the development of an overall LOS may not be recommended and may over emphasizes one mode over another, a standard person-trip approach for each mode will help focus the analysis in assessing the mobility capacity provided by the transportation network and not only considering the vehicular capacity of the street segment.

- Develop LOS Analysis Tool(s)
    - Mobility
    - Noise Quality
    - Air Quality

  The VISSIM model would be used to develop adjustment factors to be used with existing tools to determine the performance of specific city street segments and related transportation infrastructure in Key West.

- Develop and Test Circulation Plan(s)
    - By mode
    - Combined

  Under this task, alternative plans will be developed to meet the goals and objectives. Their performance will be measured based on the goals and objectives and their financial requirements. Through an iterative process with input from the public, city staff and elected officials, different alternative actions from each plan will be selected and included in the final proposal.

- Develop Subject Specific Plans
    - Traffic Calming Plan
    - Access Management Plan
    - Parking & Loading Areas Plan
    - Transit Plan
    - Pedestrian Network Plan
    - Bicycle Network Plan

Once a final plan has been developed, subject specific plans should be developed. They will help in the implementation phase and with seeking federal grants.

- Develop proposed modifications to City, County and State regulations
- Develop a Financial Plan to identify revenue and other funding sources
- Coordination with City staff (throughout the project)
- Public Involvement (at each key stage throughout the project)
- Present Findings to Public and City Commission

4. Deliverables and Schedule

• Project Kick-Off:	Start Date
• Draft Scope of Services Document:	+ 14 Calendar Days
• Final Scope of Services Document:	+ 14 Calendar Days
• Community Engagement Plan:	+ 7 Calendar Days
• Interim Project Status / Work-In-Progress Report:	+ 77 Calendar Days
• First / Interim Presentation to City Commission:	+ 14 Calendar Days
• Draft Planning and Conceptual Engineering Report:	+ 140 Calendar Days
• Second Presentation to City Commission:	+ 14 Calendar Days
• Final Planning and Conceptual Engineering Report:	+ 35 Calendar Days
• Third Presentation to City Commission:	+ 14 Calendar Days
• Community Engagement Summary Report:	+ 7 Calendar Days
• Final (Revised if Necessary) Report:	+ 7 Calendar Days
• Fourth and Final Presentation to City Commission:	+ 21 Calendar Days
TOTAL =	364 calendar days

5. Community Engagement Approach

The URS Team is aware that a number of traffic and related studies have been conducted over the years in Key West, and several are in progress right now. Therefore, it is important that all this work be reviewed and the results of current studies be incorporated into this planning process. Particularly pivotal to the success of this Traffic Carrying Capacity Study is an effective pubic outreach and involvement program. Too often, technical studies overlook critical concerns of residents, ultimately resulting in studies and plans that are either not adopted or not implemented. Effective public involvement can prevent that type of outcome, resulting in a supported plan that gets enacted.

For this Study, the URS Team proposes the formation of a Citizens Advisory Committee (CAC) as the central public involvement mechanism for this study. A CAC allows a reasonably-sized group of active and involved stakeholders (approximately 10-15 people) to:

- become well informed about project constraints and the overall planning process,
- learn from each other regarding different concerns and perspectives,
- work effectively with City staff and project planners during the process,
- communicate with their constituencies, and
- serve as ambassadors back to their constituencies regarding the finally-selected approaches they have helped to craft.

A critical element of developing an effective CAC will be the process of identifying the relevant stakeholders and ensuring that representatives of each group are articulate, informed, and can speak for their constituencies. This will involve coordination with City staff, members of related City boards and commissions (including the Community Traffic Safety Team and the Key West Duval Street Committee) and a number of local groups (such the Key West Chamber of Commerce and Last Stand).

In addition, the URS Team proposes to prepare a project website where members of the public can regularly review updated information regarding the study and its status, and can provide comments throughout the planning process. News releases to local print and broadcast media would also be prepared and distributed at regular intervals to update the public and direct them to the website for more detailed information.

Prior to the CAC beginning work, the URS Team proposes to hold a kickoff meeting, open to the general public to inform Key West residents and business owners regarding the project and to solicit general comments and suggestions regarding the study. Then, upon completion of work with the CAC, another public meeting would be held to present the alternative or alternatives developed and request final public input.

Following the completion of the study, the URS Team would give a full presentation of the proposed project to the City Commission, anticipating support from the public and the Commission and ultimately adoption of the study and its proposals. A public involvement summary report will then be prepared fully documenting the entire process.

Sandra Walters Consulting (SWC) is the member of the URS Team that will manage the public involvement process for this project. SWC's principal office is in Key West, and the company has conducted and is conducting a number of similar public involvement programs for the City, Monroe County and FDOT District 6. For example:

- SWC was in charge of public involvement for the Bahama Village Redevelopment Plan Update and the Truman Waterfront Economic Development Application to the US Navy, working closely with the Key West residents to develop plans that received widespread public support and final City Commission adoption.
- SWC also provided public involvement services for three Planning, Development and Environmental (PD&E) studies District 6 FDOT in Monroe County, and for the Key West-Stock Island Corridor Study for Monroe County, all of which resulted in full community support at final public hearings.

- Currently, SWC is providing public involvement services in Key West for the Atlantic Boulevard improvements project, and also for the Glynn Archer transportation access improvement and the Gerald Adams sidewalk projects.

This local presence and deep understanding of both the community and other related transportation projects will be invaluable to ensuring an effective public outreach and involvement process for the Key West Traffic Carrying Capacity Study.

6.0 Personnel

Key Project Team Personnel

People make the difference; they are critical to the success of any project. For the transportation planning and traffic engineering services to be provided to the City of Key West, the City must feel confident that its consultant has the knowledge, technical skills, and commitment necessary to achieve your goals. URS is proud to introduce the following Transportation and Traffic Discipline Experts. Our professionals have years of diverse experience performing comprehensive services where collaboration and coordination are of the essence. The following section provides a brief overview of our key discipline leaders. Resumes including education, technical training and professional experience have been included at the end of this section.

Raj Shanmugam, PE – Project Manager: Raj Shanmugam has over 20 years of experience in Traffic/Transportation Engineering. He overseas the traffic/transportation related functions for URS in the south Florida area. He graduated with a MS in Civil Engineering from the West Virginia University. He is a Professional Engineer registered in the State of Florida. As a functional manager Mr. Shanmugam is responsible for providing traffic planning and engineering services including: signal timing and operational analysis; signal timing plans; traffic operational improvements; roadway signing and marking improvements; traffic calming; and maintenance of traffic planning.

Carlos Garcia, PE – Principal-in-Charge: Mr. Carlos Garcia will serve as the Principal-in-Charge on behalf of the URS Team. Mr. Garcia has extensive experience in the overall management and administration of engineering operations as well as a strong background in surface transportation engineering including transit and aviation design. His unique experience covers transportation projects from planning, PD&E, and final design including interstate corridors, complex interchange highway designs, HOV/Managed Lanes. Prior to joining URS for the Miami Office, Mr. Garcia worked for 8 years with the Florida Department of Transportation, District Six Office, as Internal Design Project Manager directing a multi-discipline design team working on numerous projects and finally as District Multi-Modal Planning Manager.

Clark Turner, AICP - Transporation Planning: Mr. Turner has more than 50 years of experience in the fields of government and private-sector planning and management, with career specialization in urban and regional planning, transportation policy planning, project management and implementation. Mr. Turner's 30 years of experience with the City of Miami and Metropolitan Miami-Dade County was in professional planning and managerial activities at the senior and executive levels. He retired in 2003 as Director of Transportation Administration in the Office of the City Manager, City of Miami, responsible for direction of the City's transportation policy, planning, and programs. Prior to that, he headed the Community

Planning Division in Miami's Planning and Zoning Department, with responsibility for the City's Comprehensive, Neighborhood, and Transportation Plans.

Mohsen Salehi, AICP, ITE(F) – Transporation Planning: Mr. Mohsen Salehi has been an independent consultant with FTE for the past decade. He has played a major role in resolution of comprehensive plan amendments/EAR/ORC and concurrency issues, in formulation & revisions of land development codes, in transportation/infrastructure planning and traffic/parking studies, as well as in various tasks including major DRIs and development reviews and zoning cases, redevelopment, visioning and urban design planning for various city and county clients. Recently, Mr. Salehi participated in the Bonita Springs Density Reduction/Groundwater Resource (DRGR) Land Use Study. He is providing services to the City of Bonita Springs for their Comprehensive Plan Amendments, Zoning and land development regulations, technical support for development reviews and re-zonigs cases. He has also been working on the Fort Myers Beach Comprehensive Plan and Pine Island Community Plan Update. He was instrumental in providing inter-modal transportation policy revisions for Boynton Beach. Additionally, Mr. Salehi has been a member of the Florida Main Street Resource Teams, and has served as a Transportation/Urban Design Consultant for the State's Main Street Program's participating communities.

Scott Farash, PE, AICP - Transporation Planning: Mr. Farash is a senior project manager with 24 years of engineering experience, the last 17 years specializing in designing, managing, and marketing transportation projects, principally for FDOT. Management experience includes FDOT Roadway and PD&E projects, District-wide contracts, maintaining client relationships, sub-consultant coordination, personnel management of cross-functional teams and LAP project management. Project experience includes Roadway Design, PD&E, Feasibility, and Safety studies; and GIS mapping. Mr. Farash's technical software experience includes: MicroStation, GEOPAK, Descartes, HCS, Synchro, ESRI's ArcMap, Primavera and SureTrak scheduling software.

John Arrieta, PE, PTOE – Traffic Engineering: John Arrieta has over 9 years of experience in Traffic/Transportation Engineering and Planning. He performs transportation engineering related functions for URS in the south Florida area. He graduated with a M.E. in Transportation Engineering from Maryland University. He is a Professional Engineer registered in Florida and Maryland. As a Senior Traffic Engineer/Transportation Planner, Mr. Arrieta is responsible for providing traffic planning and engineering services including: signal timing and operational analysis; site plan development review; traffic operational improvements; roadway signing and marking improvements; traffic calming; and maintenance of traffic planning.

Juan S. Calderon, PE, PTOE – Traffic Engineering: Mr. Calderon has over 7 years of experience in traffic and transportation engineering. He has been involved in several traffic and planning engineering projects with the Florida Department of Transportation, providing direct support in planning and traffic projects for District 4 and 6. Mr. Calderon is intimately familiar with traffic data analysis for traffic impact projects, traffic calming, street closures, and traffic safety studies. He is specialized in traffic and transit data collection, traffic and transit data analysis and mapping using Geographic Information System (GIS) platforms and roadway

design software. Mr. Calderon's traffic operation and safety experience includes studies such as traffic calming analysis reports, pedestrian signal warrants, intersection improvement designs and bicycle facilities for the following cities and neighborhoods, City of Coral Gables, City of Miami, and the City of Miami Beach. Within FDOT District 6 he has participated actively in scoping reports, preliminary engineering reports, environmental documentation, development of alternative alignments, selection of typical section alternatives, signal warrants; corridor studies, simulation using NETSIM and CORSIM and SYNCHRO, multi-way stop sign warrant analysis, qualitative assessments, left-turn warrant analysis, crash analysis and benefit/cost analysis, among others.

Luou Shen, PhD - Traffic Planning: Dr. Shen has wide experience in traffic operation, transportation modeling, ITS modeling, data mining and research. His transportation engineering experience includes: highway and bridge design in Shanghai, China; transportation modeling and construction management in Guangzhou, China; transportation modeling in Detroit, Michigan, and traffic operation, design, and transportation modeling in Miami, FL. As a research assistant in FIU, Dr. Shen worked on data mining for freeway travel time estimation and prediction; freeway service patrol optimization using simulation model of ARENA. Also, he has wide knowledge about Artificial Intelligence including Neural Networks, Genetic Algorithms and Fuzzy math, Statistics of regression analysis, logistic regression, multivariate analysis, econometrics and data mining.

Jenn King, PE - Traffic Planning: Ms. Jenn King is a Senior Transportation Engineer responsible for providing roadway design and traffic engineering services for projects throughout the south Florida area. Ms. King has experience in managing engineering design teams, for both roadway and drainage design, as well as a strong background in traffic engineering, traffic safety and operation studies, and site development land use planning and traffic impact studies. Her traffic engineering experience includes a broad range of traffic engineering and transportation-related studies and analysis. Assignments have included large and small scale projects for both the public and private sectors, including: traffic impact studies, parking reduction studies, trip generation analysis, parking and circulation analyses, turn lane analysis, state access management analysis, right-of-way vacation analysis, sight distance analysis, STOP sign and signal warrant analysis, reviewing traffic reports for municipalities, garage design review, review and design of signing and pavement marking plans, driveway / access management permitting, field reviews, and assisting with expert witness testimony pertaining to various traffic and transportation-related project issued.

Geysa Sosa, PE - Traffic Planning: Ms. Geysa Sosa is a Traffic Engineer, responsible for providing traffic engineering services for URS offices in the South Florida area. Her technical expertise includes: Traffic Forecasting, Preparation and Review of Site Traffic Impact Studies, Signal Timing and Operational Analysis, Traffic Operational Improvements, Signal Warrant Analysis, Shared Parking Analysis and Safety Studies. In addition, Ms. Sosa was the Traffic Engineer responsible for preparing the 2006 and 2007 Monroe County Travel Time and Delay Study. Since 1996 URS has been providing professional traffic engineering and transportation

planning services to Monroe County in preparing the US 1 Arterial Travel Time and Delay Study.

Ana Sandoval, PE - Traffic Planning: Ms. Ana Sandoval is a professional engineer with over 14 years of experience in traffic data collection, planning, PD&E studies, GIS, traffic operations and safety projects, minor design, construction, surveying and traffic research projects. Currently she serves as the project manager for Districtwide Transportation Statistics Support for FDOT District 6. As Project Manager for a miscellaneous planning contract Ms. Sandoval provides support in the areas of RCI, HPMS, GIS Mapping, On-Site support, Data Collection, Scoping Reports, and Planning Studies.

Maria Teresita Vilches, PE – Traffic Planning: Ms. Maria Teresita Vilches is a professional engineer with more than 7 years of experience in PD&E, planning, minor design, traffic operations, and construction projects. As a Transportation Engineer for FDOT's District IV Planning and Environmental Management Office, she has performed management and engineering tasks pertaining to Project Development and Environment (PD&E) studies, developing, reviewing and assisting in the preparation of engineering and environmental reports and documentation necessary for compliance with Federal, State, and Local requirements related to the proper development of the State Road System. In addition, Ms. Vilches served as FDOT's District 6 Safety Engineer and was responsible for the implementation of the FDOT's Strategic Highway Safety Plan (SHSP), which included the implementation of corridor wide access management improvements. She contributed in the development of traffic engineering study types such as qualitative assessments of both intersections and arterials, signal warrant analysis, intersection analysis, arterial analysis, left turn phase warrant analysis, access management studies Level of Service analysis, traffic signal optimization, pedestrian group size, spot speed study, and other traffic engineering related studies.

Olguita Sabagh-Karam - Traffic Planning: Ms. Olguita Sabagh-Karam has 8 years of experience in traffic data collection, planning, traffic operations and safety projects, plans review, graphic design, public involvement, and traffic research projects. Most recently, she has served as the Engineer-in-Charge for Districtwide Data Collection Services for FDOT District 6 and coordinates data collection efforts for the District's Routine Traffic count program. Ms. Sabagh-Karam served in all tasks related to Roadway Characteristics Inventory (RCI), from field data collection to production of Straight Line Diagrams (SLDs), and has performed data extraction of various RCI features to produce GIS maps depicting information such as number of lanes, lane widths, and speed limits, etc. In addition, Ms. Sabagh-Karam served as the Project Engineer for the Transportation Planning Analysis Support for Miami-Dade and Monroe Counties. She participated in various work orders including plans review, CADD support, and data collection efforts.

Edgar Montanez, EI – Field Engineering: Mr. Montanez is an Electrical/Civil/Traffic Engineer with over 20 years of experience. He is responsible for providing highway design and traffic engineering services including roadway lighting, lighting justification report, signal system design, overhead signing, signal design and timing plans, power distribution and electrical

design facilities, roadside and overhead signing and pavement marking projects. Mr. Montanez has experience conducting inspection of different construction operations, approved proper materials, shop drawing approval, and proper construction techniques.

Hymin Cho, EI - Field Engineering: Mr. Cho has conducted engineering investigations and planning work by completing well-defined tasks including collection and analysis of data; perform routine calculations, and participate in evaluating the feasibility of alternate solutions. He also has performed Data Collection Analysis for traffic, pedestrians, transit and parking for transportation engineering studies. Types of traffic studies including traffic forecasting, traffic counts, vehicle classifications, functional classification studies, turning movement studies, speed studies, travel time & delay studies, parking studies, vehicle gap studies. He has also analyze traffic, parking, and pedestrians for existing and future conditions and assesses impacts on the surrounding roadway network. In addition, Mr. Cho has experience as roadway designer in projects that involved preparation of plans in compliance with FDOT Standards, use of Microstation/GEOPACK, and proper cost estimates.

Imtiaz Ahmed, PE - Field Engineering: Mr. Imtiaz Ahmed is responsible for providing overall management, direction and coordination to AES' engineering team for professional services related to all civil, traffic and transportation projects undertaken. He has worked on numerous projects which include roadway and signal design, site planning, traffic impact studies, and data collection for traffic engineering studies and analysis of data. He has experience with setting traffic counters, retrieving and processing data, completing turning movements counts, vehicle occupancy, class, volume and speed counts, as well as travel-time/delay counts. Served as a subconsultant on a project involving 52 count locations complying with D.O.T. requirements which included volume and turning movement counts. In addition, Mr. Ahmed's responsibilities have included supervising the field office staff assigned to perform the inspection of the construction, demolition or alteration of structures to assure that all work is being done according to the contract documents and with other statutes, rules and regulations imposed by governmental agencies, and inspect construction activities to insure conformance with plans, specifications and special provisions.

Sandra Walters – Public Involvement: Ms. Walters has 30 years of professional experience in Florida. She is qualified as an Expert Witness in Florida administrative hearings and court proceedings; has conducted and supervised environmental studies, and developed avoidance and mitigation plans, in all South Florida submerged and upland habitats; has successfully permitted projects ranging from single family homes to developments of regional impact, working with all regulatory agencies; has extensive experience in design and implementation of public participation programs and review and development of comprehensive plans; and has represented clients successfully with many agencies and government boards. She is presently serving as chair of the South Florida Regional Planning Council, appointed by governors Bush and Crist; serves on EPA's Water Quality Steering Committee for the Florida Keys; and served from 2000 to 2004 as a Governor's appointee on Florida's Acquisition and Restoration Council, which supervises purchase and management of State conservation lands.

Julio C. Bouclé, PE – Public Involvement: Mr. Bouclé has extensive experience in the development of Public Involvement Plans and/or Community Awareness Plans for transportation related projects. Mr. Bouclé will develop and lead the public information program. This program may include periodic newsletters, community meetings, project website, use of media updates, public workshops, and/or public hearings at project milestones. Currently, Mr. Bouclé is Vice President and Director of Planning and Project Development. Prior to joining URS, Mr. Bouclé worked for 15 years with the Florida Department of Transportation, District Six Office, in various capacities including Senior Project Manager with the Office of Consultant Management, and Project Development Manager with the Office of Project Development and Environment.

Rajendran Shanmugam, PE

Project Manager

Areas of Expertise

Project Management / Traffic Engineering / Traffic Safety / Traffic Planning & Calming/ Access Management / IJR-IMR / Neighborhood Traffic Calming / Site Impact Studies / Minor Roadway Design

Years of Experience

With URS: 13 Years
With Other Firms: 13 Years

Education

MS / 1985 / Civil Engineering - Transportation / West Virginia University
BSc. / 1981 / Civil Engineering / University of Westminster (formerly Polytec. of Central London)
Completed Levels 1, II, and III of the Certified Public Manager (CPM) courses

Registration/Certification

1988 / Professional Engineer / Florida #39626

Professional Societies / Affiliates

Member, ITE International Chapter
Member, ITE Florida Chapter
TRB Access Management Committee

Overview

Mr. Shanmugam is a Senior Traffic Engineer, responsible for providing traffic engineering services for URS offices in the South Florida area. He has extensive experience in managing, budgeting, and successfully completing traffic operations and traffic safety contracts. As a manager, he overseas all aspects of traffic engineering and planning related activities in relation to any type of transportation projects in the south Florida area. Representative projects include the SR 80 Turnpike Interchange Justification Report (TIJR), Veterans Expressway Operational Improvement concepts, Identification of operational and safety improvement projects for the Florida's Turnpike and related facilities, several traffic operations and safety contracts with FDOT Districts 4 and 6. His experience also include managing and providing traffic engineering and planning related services to municipalities, such as, Monroe County, City of Wilton Manors, Town of Davie, City of North Miami Beach, City of North Miami, and City of Miami.

Prior to joining URS, Mr. Shanmugam worked with Florida Department of Transportation, District 4 Office, as District Traffic Services Engineer, Traffic Operations Engineer, and Access Management Engineer. During his eight-year employment with the District, he was actively involved in the rule-making process for Access Management Standards for the State highway system, and had the responsibility of implementing access management rules and standards in District 4. As the District 4 Traffic Services Engineer, Mr. Shanmugam managed both the Roadway Permitting and Access Management Offices.

His technical expertise include signal timing and operational analysis, signal timing plans, traffic operational improvements, and roadway signing and marking improvements.

Project Specific Experience

Districtwide Traffic Operations Safety Review Study, FDOT, District 4. Project Manager for this study to reduce crashes on roadways by developing recommendations for geometric and operational improvements. Services to be performed include traffic data collection, technical studies, and engineering studies, including conflict analyses and fatal crash reviews.

Transportation Planning and Engineering Services, Monroe County, Florida. Project Manager for projects that included the annual US1 Arterial Travel Time and Delay Study for 1994, 1995, 1996, 1997, 1998, 1999, 2000 and 2001; provided engineering support to the county by reviewing all traffic impact reports; responsible for all traffic engineering needs for the county including representing the county at public meetings, commission hearings and at quasi-judiciary settings as an expert witness, support for revising the transportation-related sections of the County's Land Development regulations; trip generation rates for land

use; reassessment of the methodology for determining the Level-of-Service on US1; and congestion management assistance.

Districtwide Traffic Operations Safety Studies, FDOT, District 6. Project Manager for this study to reduce crashes on roadways by developing recommendations for geometric and operational improvements. Services to be performed include traffic data collection, technical studies, and engineering studies.

Traffic Operation Conceptual Design Studies, FDOT, District 4. Project Manager responsible for developing operational and safety improvement studies and 30% design plans.

Districtwide Traffic Operations Safety Studies, FDOT, District 6. Project Manager for this study to identify operational problems and develop improvements to maximize traffic flow and reduce crashes on state roadways.

Traffic Operations Push Button Design, FDOT, District 6. Project Manager responsible for developing design plans for minor roadway improvements.

Districtwide Enhancement Contract, FDOT, District 4. Project Manager responsible for developing design plans to implement roadway enhancement improvements (sidewalk, bike lane, landscaping, etc.).

Neighborhood Traffic Studies, North Miami Beach. Project Manager responsible for developing, evaluating and recommending techniques to eliminate or reduce neighborhood traffic intrusion for several neighborhoods in the city.

General Planning Contract, FDOT, District 4. Project Manager for ISTEA Enhancement Application Review, DRI Application Review, Traffic Monitoring Site Inventory , ZDATA review and update for Broward and Palm Beach Counties, and GIS support.

General Planning Contract, FDOT, District 6. Project Manager for NE 125th Street/NE 6th Avenue/West Dixie Highway Intersection improvements in North Miami; Task Manager for the transportation section of the Monroe County Greenways project; Department appointed representative for Monroe County Bicycle Plan Task Team.

I-95 Master Plan, FDOT, District 4. Project Manager for Data Collection and Data Development Technical Report, and Existing and Future Base Conditions Technical Report.

District Traffic Services Engineer, FDOT, District 4. Responsible for managing permitting and access management offices. The permitting office is responsible for reviewing and recommending approval/denial of various engineering projects for work done within the Department Right-of-Way. The access management office is responsible for reviewing roadway improvement plans prepared by various FDOT offices as well as privately funded projects for conformance to access management standards; reviewing DRI applications for its impact on state roadways. Supervised a total of six people in both offices combined.

Carlos Garcia, PE

Principal-in-Charge

Areas of Expertise

Program Management
Project Management
Highway Design
HOV
Managed Lanes
Aviation Design
Transit Design
Design-Build
Public Involvement Programs
Traffic Engineering

Years of Experience

With URS: 14 Years
With other firms: 10 Years

Education

1984 / BS / Civil Engineering / University of Miami

Registration/Certification

Professional Engineer / Florida #41908

Overview

Mr. Garcia has extensive experience in the overall management and administration of engineering operations as well as a strong background in surface transportation engineering including transit and aviation design. His unique experience covers transportation projects from planning, PD&E, and final design including interstate corridors, complex interchange highway designs, HOV/Managed Lanes. Prior to joining URS for the Miami Office, Mr. Garcia worked for 8 years with the Florida Department of Transportation, District Six Office, as Internal Design Project Manager directing a multi-discipline design team working on numerous projects and finally as District Multi-Modal Planning Manager.

Project Specific Experience

Principal-in-Charge, NE 164 Street, North Miami Beach, Florida. Right-of-Way to Right-of-Way reconstruction of Hanford Boulevard (NE 164 Street). The project included the implementation of numerous beautification techniques, such as the installation of decorative light posts, paved asphalt crosswalks, sidewalk and median landscaping, and the use of neo-traditional streetscaping fixtures. It also included the use of exfiltration trenches, the connection to an outfall discharging to a nearby canal with the appropriate pollution control structures, and the use of a recently developed drip irrigation system. This project included extensive public involvement with nearby businesses.

Principal-in-Charge, Alleyway Improvement Program, North Miami Beach, Florida. Principal-in-Charge providing oversight for setting horizontal and vertical alignments, typical section configuration, and plans preparation for 137 service alleyways located throughout the City of North Miami Beach.

Principal-in-Charge, NE 18th Avenue Drainage Improvement, City of North Miami Beach, FL: Principal-in-Charge providing oversight of the management for the 18th Avenue Drainage Improvement project which proposed an independent collection system designed to considerably reduce overland flow and flooding within the project area. The drainage design included construction of french drains and the disconnection of the 18th Avenue drainage system from the existing 60-inch pipe outfall. It also included the construction of a CDS unit connected to a new 48-inch outfall pipe in order to meet water quality criteria established by the South Florida Water Management District (SFWMD) and the Department of Environmental Resources Management (DERM).

SR 826 / SR 836 Interchange, Miami-Dade County (URS Corporation, 2002-Present). Project Director for the master plan development, final design and plans preparation of a fully directional interchange, including direct connectors to "Managed Lanes" along SR-

836. This project includes a number of complex interchanges at Flagler Street, Dolphin (SR 836) Expressway, Miliam Dairy Road and NW 87th Avenue. Several design constraints involved in the project include airport aerial easements, canal relocations, the CSX Railroad corridor, the East-West Transit Alignment (including ramp access to a transit station) and maintaining freeway traffic within the existing interchange during construction. The drainage system includes dry retention ponds, french drains and outfalls to nearby canals with appropriate pollution control structures. Total construction costs are estimated at $600 million dollars. Reference: FDOT 6 Project Manager: Ali Toghiani, PE (305) 470-5343

MIC / MIA Interchange, Miami-Dade County, FL (URS Corporation, 2002-2007). Project Director responsible for the final design and preparation of construction documents for the interchange on LeJeune Road (NW 42nd Avenue) and NW 21st Street. This complex interchange project includes four steel plate girder, two steel box girder, and four concrete girder bridges within the interchange. Critical elements within this 3-level interchange project includes maintenance of traffic during construction for the Miami International Airport access roadways, accommodating the MIA Automated People Mover Transit Project, the MDX Interconnector Project, and the concurrently constructed Miami Intermodal Center and associated Rental Car Facility. Estimated construction cost is estimated at over $40 million dollars.

I-95 Design-Build HOV Widening, West Palm Beach, FL (URS Corporation, 2002-2006). Project Director for the design portion of this Design-Build project in partnership with PCL Constructors. The project includes the widening and reconstruction of 2.8 miles of Interstate 95 from North of Blue Heron to PGA Boulevard. The project includes adding HOV lanes in the median, auxiliary lanes to the outside, and bridge replacements for Northlake Boulevard, Burns Road, and Holly Drive. In addition, the project includes Sound Barrier Walls, culvert extensions, MSE walls, signalized intersections, and extensive public involvement meetings. Construction cost is estimated at over $68 million dollars. Reference: FDOT District 4, John Thompson, PE, Project Manager (954) 777-4680

State Road 836 Expressway Reconstruction and Toll Plaza Replacement, Miami-Dade County (URS Corporation, 1999-2002). Project Director for this $33 million project that includes reconstruction of SR 836 (Dolphin Expressway) between Northwest 27th and 17th Avenues, including two express AVI toll lanes, a toll plaza equipped with SunPass, an electronic toll collection system, five bridges, construction of a satellite toll plaza on the Northwest 17th Avenue ramps, reconstruction of the 17th Avenue eastbound ramps and provisions for the proposed East-West Rail Line to the airport and seaport. Reference: Miami-Dade Expressway Authority, Sam Gonzalez, Project Manager (305) 637-3277

URS

Clark P. Turner, AICP

Transportation Planning

Areas of Expertise

Urban and Regional Planning, Transportation Policy Planning, Project Management and Implementation

Years of Experience

With URS: < 1 Year
With Other Firms: >50 Years

Education

Masters / City Planning / Ohio State University/1964
Bachelor of Arts / Political Science/Antioch College/1956

Registration/Certification

American Institute of Certified Planners

Professional Societies / Affiliates

American Institute of Certified Planners:
Founder/President, Ohio Chapter, 1970
Founder/President, Dayton Section, 1970-76
Member, National Board of Examiners, 1969-74
Ohio Society of Consulting Planners: Founder/President, 1968
Miami-Dade Planners Technical Committee, Founder/Chairman, 1999-2002

Overview

Mr. Turner has more than 50 years of experience in the fields of government and private-sector planning and management, with career specialization in urban and regional planning, transportation policy planning, project management and implementation. He also taught undergraduate courses in national, state, and local government, and transportation public policy at three universities: Wittenburg University, Wright State University, and Florida International University.

Mr. Turner's 30 years of experience with the City of Miami and Metropolitan Miami-Dade County was in professional planning and managerial activities at the senior and executive levels. He retired in 2003 as Director of Transportation Administration in the Office of the City Manager, City of Miami, responsible for direction of the City's transportation policy, planning, and programs. Prior to that, he headed the Community Planning Division in Miami's Planning and Zoning Department, with responsibility for the City's Comprehensive, Neighborhood, and Transportation Plans. Mr. Turner then joined the Florida Department of Community Affairs as Administrator of the Areas of Critical State Concern, and retired from that position February 1, 2008.

Project Specific Experience

State of Florida, Department of Community Affairs, Bureau of State Planning, (2006-2008): Administrator, Areas of Critical State Concern, (Retired 2008).

Miami-Dade County, Florida — Planning & Zoning Department, (2004-2006): Principal Planner, Metropolitan Planning.

City of Miami, Florida - Office of the City Manager, (2002 - 2003): Director, Transportation Administration, (Retired 2003).

City of Miami, Florida - Planning & Zoning Department: Chief, Transportation and Community Planning, (1995 – 2002). Transportation Planner, (1985 – 1995).

Miami-Dade County, Florida - Office of the County Manager (Transportation Administration):

- Manager, Paratransit Support, 1984-85
- Office of the MPO Secretariat, 1983-84
- Chief, Policy and Program Development, 1980-83
- Principal Planner, Policy and Program Development, 1977-80

Regional Planning Agencies, Dayton, Ohio:

- Deputy Director for Transit Planning, 1974-76
- Deputy Director for Comprehensive Planning, 1971-74

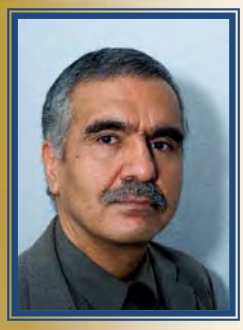
The Miami Valley Regional Planning Commission (Dayton, Ohio): Deputy Director heading Comprehensive Planning for a five-county region.

The Montgomery-Greene County Transportation Coordinating Council (Dayton, Ohio): Deputy Director heading Transit Planning and Operations under contract to a two-county Regional Transit Authority.

Consultant to Municipalities and Counties:

- Comprehensive plans: goals, objectives and policies for land use and transportation.
- Community facilities, capital improvements, and fiscal policy.
- Planning and zoning law and policy.
- Grants application, management, and administration.
- Community housing and commercial redevelopment projects.

Mohsen Salehi, AICP, ITE(F)
Senior Planner



Areas of Expertise

Transportation/Infrastructure Planning
Comprehensive Planning/Land Development Code/Zoning Issues
Urban Design
Downtown Redevelopment
Main Street Planning
Corridor Planning
Traffic/Parking Studies

Education

Master of City and Regional Planning, Clemson University

Bachelor of Architectural Engineering, Southern Polytechnic University

Professional Affiliations

American Institute of Certified Planners (AICP) Member

Institute of Transportation Engineers (ITE) Fellow

American Society of Civil Engineers (ASCE) Associate Member

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Professional Experience

Mohsen Salehi has been an independent consultant with FTE, LaRue Planning and Management Services, Inc., Spikowski Planning Associate, and Delisi Fitzjerald, Inc for the past decade. He has played a major role in resolution of comprehensive plan amendments/EAR/ORC and concurrency issues, in formulation & revisions of land development codes, in transportation/infrastructure planning and traffic/parking studies, as well as in various tasks including major DRIs and development reviews and zoning cases, redevelopment, visioning and urban design planning for various city and county clients. Recently Mohsen participated in Bonita Springs Density Reduction/Groundwater Resource (DRGR) Land Use Study as part of Delisi Fitzjerald, Inc. team. He has been working with Spikowski Planning Associates on Fort Myers Beach Comprehensive Plan and Pine Island Community Plan Update. Mohsen has been providing services to the City of Bonita Springs for their Comprehensive Plan Amendments, Zoning and land development regulations, technical support for development reviews and re-zonigs cases. Mohsen was instrumental in providing inter- modal transportation policy revisions for Boynton Beach when LaRue Planning and Management Services was selected to provide assistance for their EAR-based Comprehensive Plan Amendments several years ago. He has been a member of the Florida Main Street Resource Teams, and has served as a Transportation/Urban Design Consultant for the State's Main Street Program's participating communities

Key Projects

Development Review for the City of Bonita Springs, On-call
Contact: Gary Price, City Manager, 239/949-6262

Bonita Springs Density Reduction/Groundwater Resource (DRGR) Land Use Study as part of Delisi Fitzjerald, Inc. team 239/418-0691. On-going

Transportation Concurrency for the City of Okeechobee, On-call
Contact: Brian Whitehall, City Manager, 863/763-3372 ext. 212

The Commons DRI Traffic Consultant for the Town of Davie, On-going
Contact: Larry Peters, PE, Public Works, 954/797-1113

Development Review for the City of North Bay Village, On-call
Contact: Yvonne Hamilton, City Clerk, 305/756-7171

Transportation Consultant for (A) the Greater Pine Island Civic Association Community Plan (Florida Planning and Zoning Association awarded this Plan its 2002 Certificate of Merit Award). (B) the Fort Myers Beach Comprehensive Plan's transportation element including transportation demand management, traffic operations, land and water based public transportation (Florida Planning and Zoning Association awarded this Plan its 1999 Outstanding Public Report Award).
Contact: Bill Spikowski, Project Manager, 239/334-3366

Scott Farash, P.E., AICP
Senior Planner

Education/Training:

Bachelor of Science in Civil Engineering, Florida International University

Years of Experience:

Less than 1 with FTE
24 Years Other Firms

Registration:
- Professional Engineer in FL: No. 47653
Data of Registration: 2/18/1994
-Certified Planner: No. 022592
-Professional Transportation Planner : No. 114

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Tampa, FL 33617
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Professional Experience:

Mr. Farash is a senior project manager with 24 years of engineering experience, the last 17 years specializing in designing, managing, and marketing transportation projects, principally for FDOT. Management experience includes FDOT Roadway and PD&E projects, District-wide contracts, maintaining client relationships, sub-consultant coordination, personnel management of cross-functional teams and LAP project management. Project experience includes Roadway Design, PD&E, Feasibility, and Safety studies; and GIS mapping. Mr. Farash's technical software experience includes: MicroStation, GEOPAK, Descartes, HCS, Synchro, ESRI's ArcMap, Primavera and SureTrak scheduling software.

Project Specific Experience:

Sharpes Ferry Bridge PD&E Study, FDOT 5 / Marion County, Florida - Responsible for Quality Control, review of documents and production of the Environmental Determination submittal to FHWA. This was a FDOT D5 Study, to replace the historic bridge on CR 314 over the Ocklawaha River. The Study was so well received by the FDOT and FHWA that the District elected to have final design services provided as optional services through this contract, without advertising.

Dale Mabry Highway Enhancement Project, FDOT D7 Hillsborough County, Florida - (Project Manager / Project Engineer) – This FDOT District 7 project was a task assignment through a Districtwide Enhancement Contract. The Scope includes adding sidewalk along the west side of Dale Mabry Highway (SR 597). The design is 100% complete, with Specifications package and electronic plans delivery. The plans are being shelved with a Final submittal near the Letting date; July 2011.The FDOT project manager is Brian L. Shroyer.

Alston Avenue Trail Design, City of Zephyrhills, Florida (Project Manager / Project Engineer) –The Scope involves the conceptual design of a multi-use trail along Alston Avenue in Zephyrhills. The Trail alignment begins at the City's public sports facilities and ends at "Paw Park" (a public park for dogs and their owners). The design includes a mid-block street crossing in a location designed for trail user's safety by maximizing driver's sight distance of the crossing. A permit exemption was received from SWFWMD. The City intends to construct the Trail *using their labor force, to lower the construction cost.*

Dairy Road from Daughtery Road to Pretty Pond Road, Pasco County, Florida (Project Manager / Engineer) – This ongoing project for the City of Zephyrhills includes both alternatives development and design. The Scope includes a adding a southbound left turn lane at Daughtery Road, and a trail along the east side of Dairy Road. The alignment for this project was designed to minimize the Right of Way impacts to adjacent businesses and reduce the number of utility relocations. The City is currently negotiating Right of Way acquisition with the adjacent property owner.

URS

John Arrieta, PE, PTOE

Senior Traffic Engineer / Transportation Planner

Areas of Expertise

Traffic Engineering / Traffic Safety
Traffic Planning / PD&E
Access Management / Site Impact Studies
Neighborhood Traffic Calming / Minor Roadway Design

Years of Experience

With URS: 3 Years
With Other Firms: 9 Years

Education

ME / Civil Engineering - Transportation / 2000 / University of Maryland
BS / Civil Engineering / 1996 / University of Maryland

Registration/Certification

2004 / Professional Engineer/ Florida No.: 61370
2008 / Professional Traffic Operations Engineer

Overview

Mr. Arrieta is a Senior Traffic Engineer, responsible for providing transportation/traffic engineering services as a Project Engineer for URS offices in south Florida area. His technical expertise include traffic forecasting, preparation and review of site traffic impact studies, signal timing and operational analysis, traffic operational improvements, and roadway signing and marking improvements.

Project Specific Experience

Project Engineer/Traffic Engineer, Districtwide Traffic Operations Studies, Florida Department of Transportation, District 4. Tasks under this project had included the development of traffic engineering reports/studies such as intersection qualitative assessments, signal warrant analysis, left turn phase warrant analysis, access management analysis, composite studies (i.e. counts, crash analysis, travel time and delay study, queue analysis, vehicle gap measurement, conflict analysis, Level of Service analysis, pedestrian group size, spot speed study, other traffic engineering related studies and public involvement). In charge of coordinating data collection efforts, processing and analyzing field data.

Project Traffic Engineer, SR 9/I-95 PD&E Study, Broward & Palm Beach Counties, Florida. Project Traffic Engineer for an Environmental Impact Statement Project that will analyze potential upgrading to the existing facility.

Project Traffic Engineer, Krome Avenue South PD&E Study, Miami-Dade County, Florida. Project Traffic Engineer for an Environmental Impact Statement Project that will analyze potential upgrading to the existing facility.

Lane Closure Analyses: FGT Lane Closure SW 87th Ave N & S of SW 24th Street, FGT Project on Le Jeune Rd. (42nd Ave) - 36th Street, SW 87th AVE - SB Lane Closure south of SW 8th St, SW 87th AVE - SB Lane Closure to SW 88th St

Prior to joining URS, Mr. Arrieta has fulfilled and carried out the following positions and duties in both, public and private sectors:

Public Sector: City of Rockville – Department of Public Works, Rockville, MD (4.5 Years) Civil Engineer II; Civil Engineer I. Assignments Included: Monitored and enhanced multi-modal transportation operation; Reviewed/performed roadway and street design for storm drain and paving, traffic signal, pavement marking and signing, and work zone/temporary traffic control plans; Managed and coordinated tasks for other engineers, engineer technicians, and interns; Managed several Capital Improvement Program projects for the transportation division; Worked extensively with City commissions and other citizen

groups; Managed the Transportation Division data collection and inventory program; Managed the coordination and review of Transportation Impact Studies (TIS); Managed the Traffic Calming Program; Managed the Permit Parking Program; Presented development review findings to elected and appointed officials, citizens, and City staff; Represented the DPW – Transportation Division on the Development Review Committee (DRC) which required the resolution of access management issues.

Private Sector (4.5 Years) Assignments Included:

Provided supervision and mentoring to junior engineering staff; Served as Project Engineer for FDOT District 5, District Wide Design Traffic for PD&E. Developed design traffic forecasts for use in PD&E studies and ESAL reports; Served as Project Engineer for FDOT District 5, District Wide Traffic Operations conducting traffic operational and safety studies; Coordinated with FDOT districts, counties and municipalities to provide clients from the private sector with quality traffic reports for use during development approval process; Served as Project Engineer for City of Deltona on-call services contract; Served as support extension to City of New Smyrna Beach staff on transportation concurrency review. In charge of coordinating data collection efforts, processing and analyzing field data for crews of 10 to 15 people. Trained clients and staff on the use of the MetroCount's traffic data collection software, which records vehicular statistics using time-stamping technology.

Juan S. Calderon, P.E., PTOE
Vice-President

Education/Training:

Master of Science in Civil Engineering; Florida International University, Miami 1999

Bachelor of Science in Civil Engineering; University Santo Tomas, Bogota, Colombia, 1997

Years of Experience:

4 Years with FTE
7 Years with Other Firms

Registration:

Professional Engineer in Florida No. 58569

Professional Traffic Operations Engineer
No. 1301

Proficiencies:

-Traffic & Transportation Engineering
-Planning Engineering
-Traffic, Highway & Transit Data Collection
-Traffic & Transit Analysis
-Roadway Design Platforms
-GIS
-Traffic Calming
-Simulation
-Financial Management
-Project Management

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Professional Experience

Mr. Calderon has over Twelve years of experience in traffic/ transportation engineering with a Master Degree on those areas. Mr. Calderon has been involved in several traffic and planning engineering projects with the Florida Department of Transportation providing direct support in planning/ traffic projects for Districts 4 and 6. He is intimately familiar with traffic data analysis for traffic impact projects, traffic calming, street closures, and traffic safety studies. He is also specialized in traffic/transit data collection, traffic and transit data analysis, and mapping using Geographic Information System (GIS) platforms, as well as, roadway design software. Mr. Calderon's traffic operation and safety experience includes studies such as traffic calming analysis reports for City of Coral Gables, City of Miami, and City of Miami Beach.

Within traffic operations related contracts, he has participated actively in scoping reports, preliminary engineering reports, environmental documentation, development of alternative alignments, selection of typical section alternatives, signal warrants, corridor studies, simulation using CORSIM and SYNCHRO. In addition, he has been the leader for multiple task work orders that include multi-way stop sign warrant analysis, qualitative assessments, left-turn warrant analysis, crash analysis and benefit/cost analysis among others.

Key Projects

City of Sarasota "Connecting Downtown to Bayfront" project
Juan J. Florensa, P.E (941) 316-1988. From 2009 to Ongoing

Opa-Locka Airport Signalization Design
Franklin Stirrup, III, P.E. (305) 876-7076: From May 2006 to Ongoing

Roundabout analysis and design at Old Cutler Rd at SW 87 Ave. & SW 97 Ave.
David Hays (305) 375-2078: From June 2008 to Ongoing

Traffic Study Operation Improvement SW 120 Street from SW 117 Ave. to SW 137 Ave. David Hays (305) 375-2078: April 20, 2006 to November 1, 2007

Pavement Deficiency Evaluation and Condition Report
Jennifer Barrow (305) 470-5382: July 2007 to Ongoing

Miami Dade Public Works Traffic Safety Studies & Counts
David Hays (305) 375-2078: April 2007 to August 2007.

Traffic Operation and Safety Study
Juan Carlos Villalba (305) 551-8100: May 2008 to Ongoing

Bonita Spring Traffic Circulation Study
Daryl C. Walk, P.E. (941) 390-1004: November 2006 to September 2008

SR 9 (I-95) - Data Collection and Origin-Destination
Doug O'Hara (954) 777-4653: October 2007 to January 2008

Miami Coral Park Senior High School, Miami-Dade County, Public Works Department
Mr. Harvey Bernstein, (305) 375-2030: February 27, 2006 to May 18, 2006

Traffic Monitoring Sites Design and Professional Services, FDOT, District 6
Mr. Ernesto Polo, P.E., (305) 470-5382: February 24, 2004 to January 1, 2007

Districtwide General Transportation Statistics Consultant, Fed. Func. Classification
FDOT, District 4. Mr. Doug O'Hara, (954) 777-4653: March 3, 2006 to December 2008

Flashing School Signal Design, Miami-Dade County, Public Works Department
Mr. Vishnu Rajkumar, (305) 375-2090: April 14, 2006 to November 10, 2006

Traffic Signal Design, Miami-Dade County, Public Works Department
Mr. Vishnu Rajkumar, (305) 375-2090: April 14, 2006 to November 10, 2006

East Kendall Charrette, Miami-Dade Urban and Planning Department
Mr. Shailendra Singh, (305) 375-2476: October 11, 2006 to March 15, 2007

Luou Shen, Ph.D
Engineer

Education/Training:
PhD in Transportation Engineering, Florida International University, Miami

Master of Science in Highway and Transportation Engineering

Changsha Science and Technology University, Changsha, China.

Bachelor of Science in Civil Engineering, Tongji University, Shanghai, China.

Years of Experience:
1 year with FTE
2 Years with other firms

Proficiencies:
- Traffic Engineering
- Transportation Modeling
- ITS Modeling
- Artificial Intelligence
- Statistics & Data Mining

Honors:
"Academic Excellence Scholarship" 1999 Tongji University
Honored "University Excellent Undergraduate" 1998 Tongji University
"JingChuan" Scholarship 1998 Tongji University
Honored "University Excellent Undergraduate" 1997 Tongji University

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Professional Experience:

Dr. Shen has wide experience in traffic operation, transportation modeling, ITS modeling, data mining and research. His transportation engineering experience including: highway and bridge design in Shanghai, China; transportation modeling and construction management in Guangzhou, China; transportation modeling in Detroit, Michigan, and traffic operation, design, and transportation modeling in Miami, FL.

As a research assistant in FIU, Dr. Shen worked on data mining for freeway travel time estimation and prediction; freeway service patrol optimization using simulation model of ARENA. Also, he has wide knowledge about Artificial Intelligence including Neural Networks, Genetic Algorithms and Fuzzy math, Statistics of regression analysis, logistic regression, multivariate analysis, econometrics and data mining.

His computer skills include AIMSUN, VISSIM, CORSIM, ARENA, HCS+, SYNCHRO, TransCAD, CUBE, DYNASMART, ArcGIS, IDAS, National ITS Architecture, Florida Turbo Architecture, AutoCAD, MicroStation, SAS, WEKA, VB, VC++, Access, SQL, and Oracle.

Currently he is actively developing traffic forecasting with Cube as in house support for FDOT D 4 and corridor micro-simulation modeling for multi-projects using VISSIM.

Publications & Presentations:

Luou Shen and Mohammed Hadi. "Freeway Travel Time Estimation from Point Traffic Detectors" ***Transportation Research Record***, 2009 (in press).

Mohammed Hadi and Luou Shen. "Use of Operation Data to Evaluate the Benefits and Costs of Advanced Traffic Management Components" ***Transportation Research Record 2086***, pp 48-55, 2008.

Chengjun Zhan, Luou Shen, Albert Gan and Mohammed Hadi. "Understanding the Characteristics of Secondary Crashes on Freeways" Presented at 87th Annual meeting of the Transportation Research Board, Washington, D.C., 2007.

Sheng Yang, Luou Shen and Mohammed Hadi, "Risk Analysis to Account for Uncertainty in Benefit-Cost Evaluations of Intelligent Transportation Systems" ***Transportation Research Record 2035***, pp 187-194, 2007.

Key Projects:

Project Traffic, Model Support & Traffic Review In-house Support,
Ms. Lysa Dystra (954) 777-4360 March 2009 - on going

City of Sarasota Bayfront Drive Traffic Modeling and Simulation,
Juan J. Florensa (941) 316-1988 August 2009 – on going

Gate Optimization through simulation at Portofino Palms Community,
Bill Greinfields (305) 252-0738 May to July 2009

Miami-Dade County, Traffic analysis and design for Old Culter Road Roundabouts.
Mr. Leo Ona, (305) 375-1909: January 13, 2009 to Ongoing

Miami-Dade County, Waterstone/South Dade Venture CDD, Community Gate System Simulation Study,
Mr. Juan R. Alvarez, (305) 640-1345: November 10, 2008 to February 13, 2009

Miami-Dade Expressway Authority (MDX), Critical Intersections Improvements,
Mr. Juan Villalba, (305) 252-4433: August 25, 2008 to February 6, 2009

NCHRP 3-85 "Guidance for the Use of Alternative Traffic Tools in Highway Capacity Estimate" for TRB, Dynasmart Modeling.
Do Nam (248) 588-2700 September to October 2008

Jenn L. King, PE

Traffic Engineering

Areas of Expertise

Project Management
Roadway Design
Drainage Design
Project Development
Environment (PD&E) Studies
Access Management
Traffic Engineering
Traffic Safety
Site Impact Studies

Years of Experience

With URS: 14 Years
With Other Firms: 2 Years

Education

BS / 1994 / Civil Engineering / Worcester Polytechnic Institute / International Scholar

Registration/Certification

2001 / Professional Engineer / Florida No. 56874

Overview

Ms. King is a Senior Transportation Engineer working in the Fort Lauderdale office. She is responsible for providing roadway design and traffic engineering services for projects throughout the south Florida area.

Ms. King has experience in managing engineering design teams, for both roadway and drainage design, as well as a strong background in traffic engineering, traffic safety and operation studies, and site development land use planning and traffic impact studies.

Prior to joining URS, Ms. King worked for Tinter Associates, Inc., a traffic engineering firm specializing in land development traffic engineering, in traffic engineering consultant services for municipalities, and in FDOT eminent domain expert witness services. Ms. King also worked for Pitman-Hartenstein & Associates, Inc., as an Assistant Project Manager and Project Engineer in their Roadway and Drainage Departments, providing services to both FDOT and local municipalities.

Her traffic engineering experience includes a broad range of traffic engineering and transportation-related studies and analysis. Assignments included large and small scale projects for both the public and private sectors, including: traffic impact studies, parking reduction studies, trip generation analysis, parking and circulation analyses, turn lane analysis, state access management analysis, right-of-way vacation analysis, sight distance analysis, STOP sign and signal warrant analysis, reviewing traffic reports for municipalities, garage design review, review and design of signing and pavement marking plans, driveway / access management permitting, field reviews, and assisting with expert witness testimony pertaining to various traffic and transportation-related project issued.

Her technical design experience includes being primary roadway designer and assistant project manager of a design team of 18 engineers and technicians for an eight-mile, four-lane total roadway reconstruction project, designing and permitting both on-line and off-line, rural and urban roadway drainage systems, analyzing and writing Pond Siting Reports (PSR), writing Preliminary Engineering (PE) Reports for Project Development and Environmental (PD&E) Studies, performing geometric analyses, evaluating alternatives and writing a Route Study for an 11-mile new roadway alignment, presiding over Public Information Workshops, analyzing bridge lengths, determining scour depths, writing Bridge Hydraulic Reports (BHR), preparing Bridge Hydraulic Recommendation Sheets (BHRS), designing maintenance of traffic (MOT) plans for roadway reconstruction jobs, field reviews of stormwater systems for permit compliance and corrective recommendations, and developing and permitting paving, grading and drainage plans.

Project Specific Experience

Monroe County. Big Pine Key Cross-Island Connector Alternatives Evaluation Report (AER), determining nine potential new local island connections and evaluating against community, environmental and engineering factors; Big Pine Key Transportation Improvement Study (TIS), assessing capacity improvements and parallel corridors for U.S.1; Monroe County Traffic Report Guidelines Manual (TRGM), updating the County recommended procedures to applicants for determining trip lengths to be assessed when submitting Traffic Impact Studies for review; and the U.S. 1 Arterial Travel Time and Delay (TT&D) Study annual update, assessing segment levels of service (LOS).

City of Wilton Manors. Neighborhood Traffic Calming Studies for both Section 2 and Section 4 of the city, including public meetings, data collection and analysis and culminating studies.

FDOT District 4 Safety Reviews and Studies. S.R. 818 (Griffin Road) at I-95 interchange, S.R. 811 (Dixie Highway) at N.E. 26th Street, and S.R. 5 (Federal Highway) between S.R. 870 (Commercial Boulevard) and Bridge # 222.

The Waverly, City of Fort Lauderdale. Preparation of a Traffic Impact Study for a multistory, multifamily, mixed use development with a parking garage to be located at the intersection of two major state arterials. Included FDOT driveway permitting, right-of-way vacation permits from the local municipality, and parking reduction variances from local code.

Sawgrass Property, City of Sunrise. Provided a variety of traffic engineering analyses, in the process of obtaining a Notice of Proposed Change (NOPC) for a Land Use Plan Amendment (LUPA) for a Development of Regional Impact (DRI).

N.E. 5th Terrace, City of Fort Lauderdale. Right-of-way vacation process included FDOT permitting for U.S.1 access, extensive coordination with neighboring properties, and City Public Hearings.

Other Traffic Impact Studies. Granada Gardens – City of Fort Lauderdale; Summit Las Olas – City of Fort Lauderdale; Sunshine Plaza – City of Tamarac; Dance Building – City of Boca Raton; Villa del Sol – Palm Beach County; Shell Oil – City of Miramar; Office Building – City of Dania Beach; Heron Bay – Cities of Coral Springs and Parkland; The Faith Center – City of Sunrise.

S.R. 953 (Le Juene Road), Dade County. Designed the signing and marking plans for the roadway widening project, including coordination and connections with the Miami International Airport and the proposed Miami Intermodal Center.

Geysa Y. Sosa, PE

Traffic Engineering / Field Engineering

Areas of Expertise

Traffic Engineering
Traffic Safety
Traffic Planning
Access Management
Parking Analysis
Site Impact Studies

Years of Experience

With URS: 1 Year
With Other Firms: 5 Years

Education

2002 / BS / Civil Engineering / University of Puerto Rico

Registration/Certification

2008 / Professional Engineer / Michigan No. 6201055795

Professional Societies / Affiliates

Institute of Transportation Engineers-Gold Coast Chapter

Society of Women Engineers

Overview

Ms. Sosa is a Traffic Engineer, responsible for providing traffic engineering services for URS offices in the South Florida area. Her technical expertise include: Traffic Forecasting, Preparation and Review of Site Traffic Impact Studies, Signal Timing and Operational Analysis, Traffic Operational Improvements, Signal Warrant Analysis, Shared Parking Analysis and Safety Studies.

Project Specific Experience

Districtwide Traffic Operations Studies – Florida Department of Transportation – District 4. Traffic Engineer. Tasks under this project included: signal warrant analyses, left turn phase warrant analyses, access management analyses, crash analyses, travel time and delay studies, queue analyses, conflict analyses, LOS analyses, pedestrian studies, other traffic engineering related studies.

Monroe County Arterial Travel Time and Delay Study, Florida. Since year 1996 URS has been providing professional traffic engineering and transportation planning services to Monroe County in preparing the US 1 Arterial Travel Time and Delay Study. Traffic Engineer responsible for preparing the 2006 and 2007 Monroe County Travel Time and Delay Study.

City of Wilton Manors –Streetscape Enhancement Projects, Wilton Manors, Florida. Currently involved in the following Streetscape Enhancement Projects: Wilton Drive Streetscape Enhancement, Powerline Road Enhancement Project and N.E. 15th Avenue Streetscape Enhancement Project. The tasks performed include: General Transportation Planning, cost estimating, develop design drawings, specifications and environmental permits.

Turnpike at Sample Road and Coconut Creek Parkway Interchanges. Traffic Engineer assisting in the preparation of the Concept Traffic Report that analyzed potential upgrading to the existing facility. This project includes analyses for 2 interchanges and 2 arterials using Synchro, HCS and Turnpike's Toll Plaza analysis procedures.

SR 9/I-95 PD&E Study, Broward & Palm Beach Counties, Florida. Perform Traffic Forecasting Analysis for an Environmental Impact Statement Project that will analyze potential upgrading to the existing facility.

S.R. 836 & SR 826 Palmetto Interchange - Miami, FL. Develop Project Traffic Forecast for opening and design years.

Ms. Sosa has experience in both, public and private sectors. Prior to joining URS, Ms. Sosa has fulfilled and carried out the following positions and duties:

Public Sector: Illinois Department of Transportation – Schaumburg, IL (3.5 Years) Civil Engineer III (Traffic Division); Civil Engineer II (Construction Inspection); Civil Engineer I (Maintenance Contracts); Assignments Included: traffic signal operation studies, safety studies; review of Traffic Impact Studies (TIS) as part of the permitting process, capacity analysis for roadway links and intersection improvements, traffic signal warrant analysis, recommendations for geometric and operational improvements and access management evaluation. Develop safety and operational improvements on state roadway that included reviewing and recommending roadway improvements at high accident locations and fatal accident location. In addition, other assignments included: construction inspection, cost estimating and documentation and preparation of maintenance contracts for Phase II development of maintenance plans.

Private Sector (2.5 Years) Assignments Included:

Perform Traffic Impact Analysis and assist in Development Regional Impact Analysis (DRI) for: new neighborhoods, mixed use developments, retail, office and other uses. Some DRI studies include: Boca Technology Center and The Villages DRI. Perform intersection capacity analysis and roadway segment capacity analysis, signal timing optimization and traffic operational improvements and perform signal warrant analysis. Provide traffic engineering consulting services for Traffic Impact Analysis review for the following: City of Miami, City of Wilton Manors, Monroe County, City of Greenacres, City of Palm Beach Gardens and Town of Jupiter. Prepare site-specific analysis including: garage functional analysis, queue analysis for valet drop-off and drive-thru service lanes, driveway classification evaluation and site plan evaluation. Prepare Shared Parking Analysis following the methodology and rates develop by the Urban Land Institute (ULI), Institute of Transportation Engineers (ITE) and parking requirements as per City/County Code. Coordination with clients and agencies, through the permitting and reviewing process. Other services performed include traffic data collection, technical studies, and engineering studies.

Ana M. Sandoval, PE

Traffic Engineering

Areas of Expertise

Planning
PD&E Studies
Traffic data collection
GIS
Traffic operations

Years of Experience

With URS: 4 Year
With Other Firms: 10 Years

Education

BS / Civil Engineering / 1998 /FIU

Registration/Certification

2003 / Professional Engineer / Florida No. 60247

Overview

Professional engineer with over 14 years of experience in traffic data collection, planning, PD&E studies, GIS, traffic operations and safety projects, minor design, construction, surveying and traffic research projects.

Project Specific Experience

Districtwide Transportation Statistics Support, FDOT VI. Project Manager for a miscellaneous planning contract to provide support in the areas of RCI, HPMS, GIS Mapping, On-Site support, Data Collection, Scoping Reports, and Planning Studies.

I-75 PD&E Study, FDOT VI. Senior Engineer for an interstate PD&E study providing support in the areas of traffic and public involvement.

Districtwide Efficient Transportation Decision Making Process, FDOT VI. Deputy Project Manager providing support to the Planning and Environmental Management Office in numerous tasks including but not limited to all phases of the ETDM process, environmental permits and plan reviews, on-site support, and scoping reports.

Districtwide Public Transportation Consultant, FDOT VI. Deputy Project Manager for a multi-disciplined team providing support in the areas of Transit, Aviation, Railroads, Seaport, and ADA compliance.

Districtwide Corridor Studies, FDOT VI. Senior Engineer providing support to the Bicycle/Pedestrian coordinator in the areas of plan reviews, bike/ped crash analysis, and coordination with the MPO's Bicycle and Pedestrian Advisory Committee (BPAC).

SW 107th Avenue PD&E Study, FDOT VI. Senior Engineer for a PD&E project that developed alternatives to alleviate traffic congestion along the corridor.

Districtwide Data Collection Services, FDOT VI. Project Manager for a miscellaneous planning and statistics contract to provide support in the areas of RCI, SLDs, HPMS, GIS Mapping, on-site support, and Planning Studies.

Transportation Analysis Support Services, FDOT VI. Deputy Project Manager/Senior Engineer providing support with various tasks, such as plan reviews, corridor studies, jurisdictional transfers, traffic modeling, bicycle/pedestrian studies, traffic counts, etc.

Data Development and Mapping Services, FDOT VI. Served as Project Manager for this contract, which primarily involved the

development of SLDs, RCI and HPMS data collection, preparation of various GIS maps, on-site support, and electronic record keeping of historical SLDs.

Districtwide Project Development & Environmental Services, FDOT IV. Senior Engineer for a miscellaneous PD&E Services Contract providing support in the areas of engineering, traffic, environment and public involvement.

Districtwide Traffic Operations RCI Data Collection, FDOT VI. Project Manager providing support in the areas of traffic data collection and data input into FDOT's mainframe of traffic operations features such as speed limits, turning movement restrictions, school zone speed limits, parking restrictions and traffic signals.

Krome Avenue South PD&E Study, FDOT VI. Project Engineer for an Environmental Impact Statement Project providing support in the areas of traffic and public involvement.

Districtwide Traffic Operations and Safety Studies, FDOT VI. Project Engineer assisting in the development of traffic engineering studies. Tasks included crash analysis, collision diagrams, signal warrant analysis, access management evaluation, travel time and delay studies, queue analysis, vehicle gap measurement, conflict analysis, level of service analysis, pedestrian group size, spot speed study, etc.

Districtwide Traffic Operations Data Collection – FDOT VI. Traffic Engineer in charge of coordinating data collection tasks necessary to support FDOT's traffic operations functions. Data collection included but was not limited to traffic counts, travel time and delay studies, spot speed studies, crash analysis, condition diagrams, and project traffic reports.

Statewide Roadway and Traffic Data Consultant, FDOT Central Office. Project Engineer providing training to all districts on the standard FDOT procedures for the development of Project Traffic Forecasting reports.

Maria Teresita Vilches-Landa, PE

Traffic Engineering

Areas of Expertise

PD&E / Planning / Traffic Operations

Years of Experience

10 Years

Education

BS / Civil Engineering / 1997 / Florida International University

MS / Environmental Engineering / 1998 /Florida International University

Registration/Certification

2004 / Professional Engineer / Florida No. 61866

Overview

Professional engineer with more than seven years of experience in PD&E, planning, minor design, traffic operations, and construction projects. As a Transportation Engineer for FDOT's District IV Planning and Environmental Management Office, performed management and engineering tasks pertaining to Project Development and Environment studies. Developing, reviewing and assisting in the preparation of engineering and environmental reports and documentation necessary for compliance with Federal, State, and Local requirements related to the proper development of the State Road System.

Served as the FDOT's District VI Safety Engineer for the last year of the seven-year tenure with FDOT. In this capacity was responsible for the implementation of the FDOT's Strategic Highway Safety Plan (SHSP), which included the implementation of corridor wide access management improvements. Contributed in the development of traffic engineering study types such as qualitative assessments of both intersections and arterials, signal warrant analysis, intersection analysis, arterial analysis, left turn phase warrant analysis, access management studies Level of Service analysis, traffic signal optimization, pedestrian group size, spot speed study, and other traffic engineering related studies. In addition, managed several task driven Districtwide Traffic Operations Studies Contracts.

Project Specific Experience

State Road 714 / Monterey Road PD&E, FDOT IV, Martin County, Florida. Project Manager for this project which involved the upgrade of this corridor to meet current design standards and offer a safer travel way for motorist, bicyclist and pedestrians. The proposed facility will also provide an appropriate roadway for future traffic needs in this rapidly growing community.

Indian Street Bridge EIS Study, FDOT IV, Martin County, Florida. Project Engineer for this EIS conducted to evaluate and comprehensively examine various alternatives for an additional crossing of the South Fork of the St. Lucie River. The primary focus of this study was to identify the location, type, and size of the crossing that facilitates the improvement of the roadway network in Martin County. The study follows the completion of an Environmental Class of Action Determination, which categorized the level of evaluation necessary to complete the process. The study seeks a solution that most effectively serves the surrounding community while minimizing environmental impacts. Responsible for the engineering component on this project, overseeing the design of the alternatives developed during the study. Also, as part of the Community Assessment Task Team participated on the public outreach process that met will all the stakeholders for this project. This EIS has won several awards, such as the Davis Productivity Awards.

State Road 707 / Dixie Highway PD&E, FDOT IV, Martin County, Florida. Project Manager for this PD&E Study during the early stages of the process. This project proposes the widening of this corridor to alleviate the traffic congestion through the area.

State Road 70 from Florida's Turnpike Entrance / Kings Highway to County Road-611B (South Jenkins Road) PD&E, FDOT IV, St. Lucie County, Florida. Provided input on this PD&E Study contributing in the preparation of the Public Involvement Process for the Public Hearing of this project.

I-95 Corridor Planning Study for Managed Lanes, FDOT IV. Miscellaneous Planning study for managed lanes and other type of transportation improvements covering Broward and Palm Beach counties. Sub-Consultant to RS&H.

I-95 PD&E Study, FDOT IV. Interstate corridor study, including transit components, managed lanes; interchange modifications, and ITS implementation strategies.

Districtwide Project Development & Environmental Services, FDOT IV. Participating in miscellaneous tasks for PD&E Studies as in-house support staff.

URS

Olguita Sabagh-Karam

Traffic Engineering

Areas of Expertise

Traffic data collection
Planning
CADD
GIS
Public Involvement

Years of Experience

With URS: 3 Years
With Other Firms: 5 Years

Education

1999 / MS / Industrial Engineering / Universidad de los Andes / Colombia
1997 / BS / Industrial Engineering / Universidad del Norte/Colombia

Overview

Engineer with experience in traffic data collection, planning, traffic operations and safety projects, plans review, graphic design, public involvement, and traffic research projects.

Project Specific Experience

Districtwide Data Collection Services, FDOT VI. Engineer in charge of coordinating data collection efforts for the District's Routine Traffic count program. In addition, served in all tasks related to Roadway Characteristics Inventory (RCI), from field data collection to production of Straight Line Diagrams (SLDs). Performed data extraction of various RCI features to produce GIS maps depicting information such as number of lanes, lane widths, speed limits, etc.

Districtwide Miscellaneous Project Development & Environmental Services, FDOT IV. Engineer participating in various data collection activities for a miscellaneous PD&E Services Contract.

Krome Avenue South PD&E Study, Miami-Dade County, Florida. Engineer assisting with data collection and graphics design for an Environmental Impact Statement Project that will analyze potential upgrading to the existing facility.

Transportation Planning Analysis Support, Miami-Dade and Monroe Counties, Florida. Project Engineer participating in various work orders including plans review, CADD support, and data collection efforts.

SW 107th Avenue PD&E Study, FDOT VI. Serving as Project Engineer for this contract, assisting with Public Involvement activities and data collection efforts.

Languages

Spanish / English

Skills

Microsoft Standard: Word, Excel, Power Point, Project, Access; MicroStation, AutoCAD, ArcMap, Lotus Acrobat.

Edgar Montañez, EI

Field Engineering

Areas of Expertise

Highway & Traffic Design
Engineering / Power Distribution
Electrical Design Facilities

Years of Experience

With URS: 8 Years
With Other Firms: 13 Years

Education

MS / Present / Automated Control Systems / University of Florida
BS / Electrical Engineering / 1984 / Florida Atlantic University

Overview

Mr. Montanez is an Electrical/Civil/Traffic Engineer with over 20 years of experience. He is responsible for providing highway design and traffic engineering services including roadway lighting, lighting justification report, signal system design, overhead signing, signal design and timing plans, power distribution and electrical design facilities, roadside and overhead signing and pavement marking projects. Mr. Montanez has experience conducting inspection of different construction operations, approved proper materials, shop drawing approval, and proper construction techniques.

Project Specific Experience

Traffic Design Project Manager, FDOT - District VI Multi Modal Center (MIC) Interchange, Miami, Florida. Traffic Design Project Manager responsible to manage and develop three signal intersections, interconnect system, railroad pre-emption, conventional and high mast lighting, overhead sign structures, signing and marking plans for Central Blvd and LeJeune Road.

Traffic Design Project Manager, FDOT – District IV Design Build I-95 Corridor - Palm Beach Gardens, Florida. Traffic Design Project Manager responsible to manage and develop six signal intersections, interconnect system, DMS communication, conventional lighting system, overhead sign structures, signing and marking plans. Limits of project along I-95 from North of Blue Heron Blvd. to PGA Blvd. and from Keating Dr. to Sunrise Dr. along Northlake Blvd.

Traffic Design Project Manager, FDOT - District IV University Drive and Pembroke Pines Project in Miramar, Florida. Traffic Project Manager responsible to manage and develop three signal intersections, interconnect system layout, conventional lighting, overhead sigh structures, signing and marking plans. The project included design of three parking areas and layout stripping at adjacent areas to the road widening for Broward County Aviation Department and Department of Motor Vehicles.

Project Manager, Phase II - City of North Miami Beach Beautification Project. Project Manager responsible to develop decorative lighting and signalization plans. Plans included layout of receptacle outlets at tree locations and electrical control panel for the lighting, receptacles and irrigation system.

Project Manager, FDOT – District IV District-wide ISTEA Enhancement Projects. Project Manager for the final design, plans preparation and post-design services for various roadway enhancement improvements such as sidewalk, bike lane, landscaping, irrigation, drainage, traffic circles, signing, markings, signals, resurfacing, widening and roadway beautification.

Project Engineer, Ocean Grande Site Development and A1A Underpass Tunnel (St. Augustine, Florida). Project Engineer responsible to manage and develop lighting system plans for parking grounds, recreational areas and underpass tunnel. The project included design of electrical control panel room for all electrical facilities and water pump stations at tunnel.

Project Engineer, City of North Miami Beach Beautification Project. Project Engineer responsible to develop lighting, signalization and electrical control panel for irrigation and lighting plans.

Project Engineer, City of Key West, Monroe County. Project Engineer responsible to manage and develop apron lighting system, electrical wiring layout for maintenance hangers, electrical control panel room and electrical airport field signage for new runway at Key West International airport.

FDOT- District IV Plans Review, Broward County, Florida. Responsibility includes reviewing the signal, lighting, signing and pavement marking plans for constructability, bid ability, and adherence to FDOT, MUTCD, NEC, and AASHTO design criteria and standards for various phases.

Project Engineer, S.R 838 (Sunrise Boulevard) Rehabilitation and Beautification Project. From S.R. A-1-A to S.R. 7. Project Engineer in charge of preparation of signalization, lighting, signing and marking plans. The project included twelve signal intersections and signal system timing for the entire corridor.

Project Engineer, Okeechobee Boulevard Rehabilitation and Beautification Project. From the Florida Turnpike to Olive Avenue. Project Engineer in charge of preparation of signalization, signing and marking plans. The project included ten signal intersections and signal system timing for the entire corridor.

Project Engineer, Fort Lauderdale Beach S.R. A-1-A Rehabilitation and Beautification Project. From N.E. 20 Street to Las Olas Boulevard. Project Engineer responsible to develop signalization, signing and marking plans. The project included pedestrian and bike traffic considerations.

Project Engineer, S.R. 707 (South Beach Road) by Jupiter Inlet Resurfacing Project. Project Engineer responsible to develop signalization and pavement marking plans. Scope of work included traffic channelization devices and signalized intersection upgrade to minimize traffic congestion at special events during the winter season.

Hyunmin Cho, E.I. M.S.
Project Engineer

Education/Training:

Master of Science in Civil Engineering, Specializing in Transportation Engineering, University of Florida, Gainesville, Fl, USA

Master of Science in Civil Engineering, Specializing in Structural Engineering, Pukyong National University. Pusan, Korea

Bachelor of Science in Civil Engineering, Cheju National University, Cheju, Korea

Years of Experience:
2.5 Year with FTE
1 Year with other firms

Proficiencies:

- Traffic and Transportation Engineering
- Traffic Corridor Operation
- Transportation System Planning
- Traffic Flow Theory
-Geometric Design of Transportation facility
- Civil Engineering Systems

Professional Experience

Mr. Cho has conducted engineering investigations and planning work by completing well-defined tasks including collection and analysis of data; perform routine calculations, and participate in evaluating the feasibility of alternate solutions. He also has performed Data Collection Analysis for traffic, pedestrians, transit and parking for transportation engineering studies.

Types of traffic studies including traffic forecasting, traffic counts, vehicle classifications, functional classification studies, turning movement studies, speed studies, travel time & delay studies, parking studies, vehicle gap studies. He has also analyze traffic, parking, and pedestrians for existing and future conditions and assesses impacts on the surrounding roadway network

In addition Mr. Cho has experience as roadway designer in projects that involved preparation of plans in compliance with FDOT Standards, use of Microstation/GEOPACK, and proper cost estimates.

Key Projects

I – 95 Origin Destination Surveys, express lanes, Data collection.
Min-Tang Li, Ph.D., P.E. *(954)* 777-4652 October – December 2008

Annual Pavement Condition Report (2007, 2008), FDOT, District 6.
Ms. Jennifer Barrow, (305) 470-5382: June 2007 to April 2009

RRR Scoping Reports, FDOT, District 6
Ms. Jennifer Barrow, (305) 470-5382 March 3, 2007 to October 28, 2008

Traffic Safety Studies at Various Locations County Wide, Miami-Dade County, Public Works Department
Mr. David Hays, (305) 375-207: April 24, 2007 to September 25, 2007

Le Jeune Rd & Curtis Rd Signal Traffic Signal Design, Miami-Dade County, Aviation Department
Mr. Franklin Stirrup III, (305) 876-8076 January 1, 2008 – Ongoing

Davie Blvd Data Collection, FDOT, District 4
Mr. Dough O'Hara, (954) 777-4653, from October 15, 2007 to December 20, 2007

Traffic Forecasting (18-Kips Report), FDOT, District 6
Ms. Jennifer Barrow, (305) 470-5382: August 15, 2007 to February 28, 2008

South Dade Venture CDD Traffic Engineering Study, Alvarez Engineers, Inc.
Mr. Alvarez, (305) 640-1345: April 18, 2007 to December 11, 2008

IMTIAZ AHMED, P.E.
200 C2 Crosswinds Drive
West Palm Beach, Fl 33413
Ph: (561) 358-4140

Experience

1998- Present

As a Principal-In-Charge of a private practice, responsible for providing overall management, direction and coordination to the engineering team for professional services related to all civil, traffic and transportation projects undertaken. Worked on numerous projects which include roadway and signal design, site planning, traffic impact studies, and data collection for traffic engineering studies and analysis of data. Setting traffic counters, retrieving and processing data, completing turning movements counts, vehicle occupancy, class, volume and speed counts, as well as travel-time/delay counts. Served as a subconsultant on a project involving 52 count locations complying with D.O.T. requirements which included volume and turning movement counts. Supervised the crew to setup all machines, and the locations for machine setups were selected. Retrieved the data and the entire project was completed in thirty days. Analyzed data for over 500 count locations for various traffic engineering studies.

Responsibilities included supervising the field office staff assigned to perform the inspection of the construction, demolition or alteration of structures to assure that all work being done according to the contract documents and with other statutes, rules and regulations imposed by governmental agencies. Inspect construction activities to insure conformance with plans, specifications and special provisions. Perform and coordinate the approval of Shop Drawings.

1988-1998, City of Hollywood, Florida

Mr. Ahmed was a City Traffic Engineer. During his tenure with the City of Hollywood he accomplished the following: Improved system effectiveness of roadways by optimizing signal timing. Initiated and designed projects for roadway re-alignment and geometric improvements at intersections. Collected traffic counts, turning movement counts, origin-destination studies, travel time studies, trip generation studies, vehicle occupancy studies, signal studies, and saturation flow rate studies at over 3,000 locations. Supervised the placement of all count locations and data retrieval.

Coordinate construction contract administration activities, such as: documenting daily construction activities; organize and record meeting minutes for weekly progress, Pre-Construction, Pre-Paving meetings; video taping and photographing construction activities (pre, in-progress, and post construction) to successfully complete and close the project.

Setup a pavement evaluation system for the roadway network for their reconstruction and resurfacing. Performed inspections for asphalt and paving operations in conformance to plans and specifications. Prepared MOT plans for all in house construction projects and reviewed MOT plans submitted by contractors for city wide construction projects.

1987-1988, City of Fort Lauderdale, Florida

As a Traffic Planning Assistant, responsible for the in house traffic data collection and analysis of various traffic engineering studies for the City. Responsible for setting traffic counters, retrieving and processing data, completing turning movements counts, vehicle occupancy, class, volume and speed counts, as well as travel-time/delay counts. Conducted over 500 locations of the above data collection throughout the City's major and minor roads. Conducted preliminary field inspections in order to identify the number of persons needed at each location and the sites with the best visibility to perform turning movement counts. Maintained and repaired the traffic counting equipment. Gave extra care and monitored each site to ensure the machines are calibrated correctly and tubes are spaced properly. Assisted the city traffic engineer in all aspects of traffic engineering and planning functions.

Education

- Master of Science in Civil Engineering, Florida International University, Miami, Florida, 1990
- Bachelor of Science in Civil Engineering, Bangalore University, India, 1985
- Bachelor of Science, Bangalore University, India, 1980

Registration

- Professional Engineer, Florida
- Certified General Contractor, Florida

SANDRA WALTERS
President

ACADEMIC BACKGROUND

Masters Degree in Marine Studies, University of Miami, Florida, 1983
Bachelor of Science in Animal Behavior and Marine Biology, University of California, Davis, CA, 1974

SPECIALIZED PROFESSIONAL COMPETENCE

Ms. Walters has 30 years of professional experience in Florida. She is qualified as an Expert Witness in Florida administrative hearings and court proceedings; has conducted and supervised environmental studies, and developed avoidance and mitigation plans, in all South Florida submerged and upland habitats; has successfully permitted projects ranging from single family homes to developments of regional impact, working with all regulatory agencies; has extensive experience in design and implementation of public participation programs and review and development of comprehensive plans; and has represented clients successfully with many agencies and government boards. She is presently serving as chair of the South Florida Regional Planning Council, appointed by governors Bush and Crist; serves on EPA's Water Quality Steering Committee for the Florida Keys; and served from 2000 to 2004 as a Governor's appointee on Florida's Acquisition and Restoration Council, which supervises purchase and management of State conservation lands.

REPRESENTATIVE PROFESSIONAL EXPERIENCE

Principal, Sandra Walters Consultants, Inc., 1996-present
Key West and Miami, FL
Provide consulting services to both public and private sector clients in areas of ecological/environmental and land use planning and permitting, including habitat evaluation, mitigation and contamination assessment and remediation; public involvement and outreach; and community and government liaison.

LAND USE PLANNING AND PERMITTING • PUBLIC INVOLVEMENT SERVICES

- **Improvements to Atlantic Boulevard and Access to Glynn Archer and Gerald Adams Schools, City of Key West**
  Member of team that is providing engineering services for three roadway segments in Key West. SWC is responsible for development and implementation of public involvement programs, including identifying stakeholders, preparing and distributing informative mailers and news releases, planning and implementing public meetings to solicit comments, and preparing final public involvement summaries; and environmental and planning elements.
- **City of Key West Bahama Village Redevelopment Plan Update**
  Member of team that updated community redevelopment plan. Primary roles—environmental and public facilities planning; and public involvement, including preparation and distribution of project newsletters and news releases; and development and implementation of proactive community involvement process.
- **City of Key West Economic Development Conveyance Application**
  Member of team that developed EDC application for surplus Navy properties. Primary roles—planning and implementing meetings with local officials and interest groups, coordination of public workshops and presentations, and public facilities and environmental data collection and analysis.
- **Stock Island-Key Haven US 1 Corridor Study, Florida Keys**
  Provided public involvement outreach and meeting coordination services for study to identify improvements to US 1 corridor segment; resulted in significant participation by user groups and relevant and effective planning charrette.
- **District 6 FDOT General Public Information Contract for Design Services, Monroe County**
  SWC is the member of the consulting team with Bermello-Ajamil which presently holds the general design services public information contract, providing services for the Florida Keys. Projects worked on to date include US Highway 1 corridors on Big Coppitt Key, from Key West to Stock Island, Big Pine Key, Cudjoe Key and Grassy Key.
- **FDOT Planning, Design & Environmental (PD&E) Studies in Islamorada, Marathon and Big Coppitt Key, Florida Keys**
  Member of team that conducted FDOT studies of roadway improvements, including turn lanes, in five-mile corridor in Islamorada, five-mile corridor in Big Coppitt Key, and Sombrero Beach Road in Marathon.

Services included public involvement, land use planning, and landscape architecture elements of study, including coordination with local staff and elected officials.

- **State Aquatic Preserve Management Plan, Florida Department of Environmental Protection**
  Responsible for principal drafting of Statewide management plan for 41 State aquatic preserves.
- **Expert Witness Testimony for Monroe County**
  Conducted thorough review of land use, environmental and permitting issues for property in North Key Largo which was subject of suit against Monroe County, prepare expert witness report, provide deposition in circuit court proceeding. Work included extensive review of several USFWS HCPs in Key Largo for effects on reasonable development expectations in area.
- **Habitat Conservation Plan (HCP) and Community Plan for Big Pine Key, Monroe County, FL**
  Represented affected property owners to develop HCP following US Fish & Wildlife Service (USFWS) guidelines for federally-endangered Key Deer on Big Pine and No Name keys in Florida Keys. The County implemented parallel process to develop community "CommuniKeys" plan that incorporates HCP into County comprehensive plan and land development regulations. System developed involves complex point system for incidental takings associated with any new structure, and requires mitigation to compensate for impacts associated with issuance of building permits.
- **Expert Planning Services for Town of Medley, Dade County**
  Served as town planning staff, providing review and support for public hearings associated with adoption of City ordinance.
- **Amendment to Alcoholic Beverage License and Major Conditional Use Approval, Parrotdise Restaurant, Little Torch Key, FL**
  Served as principal in charge of preparation, processing and successful acquisition of major conditional use approval required to expand restaurant; work included amending alcoholic beverage license to allow outdoor service, engineer design of stormwater system to serve entire property, development and fine-tuning of site plan to address work phasing in conjunction with acquisition of annual space allocations through non-residential rate of growth ordinance (NROGO) process, and representing client with planning staff and before development review committee and Planning Commission.
- **Planning Services for RV Park, City of Marathon, FL**
  Provide continuing planning services to large RV park on Grassy Key in Marathon; work has included preparation of a redevelopment feasibility study of property, participation in development of Marathon's comprehensive plan and land development regulations and representation when required, successful processing of application for determination from City planning director of vested property rights including both commercial square footage and permanent and transient residential units, and coordination with City in regard to central wastewater service on Grassy Key.
- **Rezoning and Development Agreement for 92-unit Project, City of Marathon, Florida Keys**
  Served as principal planning consultant and agent for 92-unit redevelopment project, including acquisition of property rezoning and executed development agreement from Marathon City Council. Work involved representation with planning staff, Council members and Florida Department of Community Affairs representatives; and work with Florida Department of Environmental Protection and Governor and Cabinet regarding submerged land lease for 115-slip private marina.
- **Hawk's Cay Expansion Development of Regional Impact, Florida Keys**
  Prepared and successfully processed Application for Development Approval for Hawk's Cay Expansion Development of Regional Impact to South Florida Regional Planning Council. Evaluation included environmental, public facilities, socio-economic, and traffic impacts. Provided continued planning consultation, including 1996 approval of major site plan revision and 7 year extension, approvals of three DRI revisions, and annual reports.
- **Lower Sugarloaf Key Mixed Use Development, Lower Florida Keys**
  Served as planning consultant and agent, developed and processed major conditional use application for mixed use office, workforce housing and market-rate housing project; received 8/0 positive vote from Monroe County Development Review Committee and 5/0 positive vote from Monroe County Planning Commission.
- **Development Feasibility Studies, Many Parcels throughout Monroe County**
  Conducted thorough reviews of applicable comprehensive plans and land development regulations in relation to property owner plans to develop or redevelop property, and prepared report providing specific citations.

KEY WEST * MIAMI * FT. MYERS MAIN TEL: 305-294-1238, FAX: 305-294-2164, DIRECT EMAIL: SANDY@SWCINC.NET, WEBSITE: WWW.SWCINC.NET

Julio C. Bouclé, PE

Public Involvement

Areas of Expertise

Civil Project Manager
Civil and Transportation Engineering

Years of Experience

With URS: 8 Years
With Other Firms: 14 Years

Education

MS / 1989 / Civil Engineering / Florida International University
BS / 1986 / Civil Engineering / Florida International University

Registration/Certification

1994 / Professional Engineer / Florida #47671

Overview

Mr. Bouclé has extensive experience in the development of Public Involvement Plans and/or Community Awareness Plans for transportation related projects. Mr. Bouclé will develop and lead the public information program. This program may include periodic newsletters, community meetings, project website, use of media updates, public workshops, and/or public hearings at project milestones.

Currently, Mr. Bouclé is Vice President and Director of Planning and Project Development. Prior to joining URS, Mr. Bouclé worked for 15 years with the Florida Department of Transportation, District Six Office, in various capacities including Senior Project Manager with the Office of Consultant Management, and Project Development Manager with the Office of Project Development and Environment.

Project Specific Experience

Districtwide Data Collection Services, FDOT VI. Project Manager for a miscellaneous planning and statistics contract to provide support in the areas of RCI, HPMS, GIS Mapping, On-Site support, Planning Studies and SLD's.

Districtwide Project Development & Environmental Services, FDOT IV. Project Manager for a miscellaneous PD&E Services Contract.

Districtwide Efficient Transportation Decision Making Process (ETDM), FDOT VI. Project Manager for a miscellaneous ETDM support services contract, including engineering, environmental and public involvement support.

Krome Avenue South PD&E Study, Miami-Dade County, Florida. Project Manager for an Environmental Impact Statement Project that will analyze potential upgrading to the existing facility.

Big Coppitt Key PD&E Study, Monroe County, Florida. Deputy Project Manager for a Categorical Exclusion Type II Project, including engineering, environmental and public involvement functions.

Planning Analysis Consultant Services, Miami-Dade and Monroe Counties, Florida. Project Manager for the General Services Planning Contract for FDOT District VI.

Sombrero Beach Road Boulevard, Monroe County, Florida. Project Manager for the upgrade of the existing roadway, drainage, lighting, signing and corridor enhancements.

Florida's Turnpike Value Pricing Study, Miami-Dade County, Florida. Project Engineer for the master planning of roadway widening options, elevated Value Pricing Lanes implementation and general engineering segment improvements.

N.W. 7th Avenue Planning Corridor Study, Miami-Dade County, Florida. Project Manager for the master planning efforts of roadway segment improvements, area redevelopment certification and Empowerment Zone Strategic Implementation

Miami Intermodal Center, Miami-Dade County, Florida. Senior Project Manager for this $1.3 billion project that includes the reconfiguration of the existing roadway system adjacent to the Miami International Airport, including the development of an innovation light rail transit component linking the airport to the future planned MIC. This multimodal transportation hub supports surface, air and rail transportation modes and includes a 500,000 s.f. building facility, a 10,000 space parking garage, and various newly designed roadway and bridge structure systems. Extensive public involvement /coordination program had to be implemented for this project.

East/West Corridor Transit Project, Miami-Dade County, Florida. FDOT Co-Project Manager and team member of this Major Investment Study and Project Development & Environmental study for a heavy rail transit system that links the east and west sections on Miami-Dade County. This program included major highway reconstruction and rail tunneling work. This is a 1.7 billion dollars project that required a massive public involvement and coordination program.

Palmetto Metrorail Extension Project Development and Environmental Study, Miami-Dade County, Florida. Project Manager for this $87 million heavy rail system extension of the Metrorail system to the Palmetto Expressway. This project included extensive coordination with Miami Dade Transit Agency for the final design component and the financial agreements between the agencies involved.

Station Area Aesthetics Design and Development (SAADD). Project Manager for the master planning of six transit stations to support the planned East-West Corridor rail transit system. The purpose of this program was to conduct transit station development planning in parallel to efforts to complete the rail corridor.

U.S. 1/Truman Avenue/Whitehead Street Project Development and Environmental Study, Key West, Florida. Project Manager for the total reconstruction of a 2 mile corridor in the urban historic district of Key West. Project included an extensive public involvement program and the addition of many aesthetics considerations to the design.

NW 57th Avenue Project Development and Environmental Study, Hialeah, Florida. Project Manager for the PD&E Study of a five mile roadway corridor study, including road widening, drainage, utilities, right of way acquisition, canal improvements and public involvement/federal, state and local agencies coordination.

Venetian Causeway Bridge Rehabilitation Project, City of Miami, Florida. Project Manager for the PD&E study on the rehabilitation and reconstruction of ten fixed span bridges and two bascule bridges, that link Miami Beach with the mainland. Project construction cost $28 million.

7.0 Qualifications

Relevant Experience

The following section includes select examples which demonstrate our team's experience in providing Transportation Planning and Traffic Engineering Studies or similar work. In addition, where applicable, experience of team members working successfully together on similar projects is depicted in the projects listed below.

- URS - Florida Keys Carrying Capacity Study - Florida Keys
- URS - Florida's Turnpike Value Pricing Study - Miami, FL
- URS - Florida's Turnpike Widening Study - Broward County, FL
- URS - City of North Miami Beach – North Miami Beach, FL
- URS - Traffic Calming Design Services – North Miami Beach, FL
- URS - Neighborhood Traffic Studies – North Miami Beach, FL
- URS - General Engineering Consultant, Florida Department of Transportation-District 5, Orange, Seminole, Osceola, Lake, Brevard, Volusia, Sumter, Marion and Flagler Counties, FL
- URS - Greenways & Trails Master Plan - Boyton Beach, FL
- URS - Livable Communities Element - Hillsborough County, FL
- URS - Traffic Engineering Study of the Sunrise/Sunset Avenue Business District – Palm Beach County, FL
- FTE - City of Sarasota "Connecting Downtown to Bayfront" Evaluation - City of Sarasota, FL
- FTE - Bonita Springs Traffic Circulation Study - City of Bonita Springs, FL
- FTE - SW 120th Street from SW 117th Ave to SW 137th Ave. – Miami-Dade, FL
- FTE - East Kendall Charrette - Miami-Dade Urban and Planning Department, FL
- FTE - District-Wide Public Transportation Consultant Service - Florida Transportation Department District 6
- SWC - Monroe County PD&E Studies - Monroe County, FL
- SWC - Bahama Village Redevelopment Plan Update Key West, Monroe County, FL
- SWC - Key West Economic Conveyance Application, Key West, Monroe County, FL

Florida Keys Carrying Capacity Study

Location

Florida Keys

Client

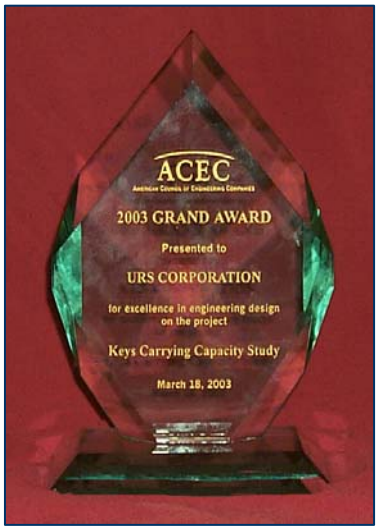
Ms. Deborah Peterson
U.S. Army Corps of Engineers
(Jacksonville District)
400 W. Bay St.
Jacksonville, FL 32202
Tel. (904) 614-5064

Project Value

Engineering Fees: $2,800,000

Project Duration

1998 - 2002



2003
ACEC National Grand Award

Project Description

The US Army Corps of Engineers and the Florida Department of Community Affairs selected URS to study conditions and develop this spatially explicit, computer-based analysis model to determine the ability of the Florida Keys ecosystems and infrastructure to withstand impacts of additional development.

Modeling was developed to show existing conditions and to evaluate and show the effects of land use changes on the natural environment, socioeconomic conditions, and human infrastructure of the study area. The project goal was to provide USACE, DCA, Monroe County and local planning agencies with a database and regional planning tool. Project highlights include:

- Extensive user needs assessment.
- Extensive data management including identifying, collecting, assessing, organizing and assimilating datasets regarding ecosystems and species, ecological processes, water circulation modeling, and biophysical parameters.
- State-of-the-art GIS modeling using Arc 8.1, Visual Basic for Application, and MS Access (to develop a personal geodatabase).
- Development of Comprehensive Water Module which included Potable Water, Wastewater and Stormwater Elements
- Development of a one-of-a-kind simulation model with graphic interface capability. The model calculates the effect of the proposed development or restoration activity on terrestrial habitat and species, stormwater, wastewater, socioeconomics and fiscal elements.
- Extensive public involvement (multiple series of public meetings throughout the Keys).
- Formal report preparation and presentation in the technical, public, and political arenas.

Florida's Turnpike Value Pricing Study

Location

Miami-Dade County, Florida

Services

Planning Study

Client

Florida's Turnpike Enterprise
Mr. Mike Lewis
Tel: (407) 532-3999

Project Value

Construction Cost: $240 Million

Project Duration

2003

Project Description

URS provided general planning and engineering services for the master planning of highway widening options, elevated Value Pricing Lanes implementation and general engineering segment improvements for this highly congested expressway throughout the urban developed areas of Miami-Dade County. Public involvement and agencies coordination were also part of the process.

Florida's Turnpike Widening Study

Location

Broward County, Florida

Services

General Planning
Engineering Services
Master Planning

Client

Florida's Turnpike Enterprise
Mr. Mike Lewis
Tel: (407) 532-3999

Project Value

Construction Cost: $350 Million

Project Duration

2002

Project Description

URS provided general planning and engineering services for the master planning of roadway widening improvement options for the mainline of the Florida's Turnpike throughout Broward County. Agencies coordination and public involvement efforts were part of this study.

City of North Miami Beach

Location

North Miami Beach, FL

Services

Civil Engineering
Permitting

Client Contact

City of North Miami Beach
17050 N.E. 19th Avenue
North Miami Beach, Florida 33162
Mr. Hiep Huynh, PE, Capital Projects Administrator
Tel: (305) 948-2925
E-mail: hiep.huynh@citynmb.com

Project Value

$8,000,000 (est.)

Project Duration

1997 – Ongoing

Project Description

In 1997 and renewed most recently in 2007, URS signed the General Civil Engineering Services Agreement with the City of North Miami Beach. Since that time, URS has performed several task orders as listed below:

N.E. 164th Street Reconstruction (Hanford Boulevard). URS was retained as the prime consultant in the planning, design, and construction of a 4 lane arterial used mainly for the purpose of bypassing near-by N.E. 163rd Street. The roadway became the Main Street of the Fulford Center District. The enhancement included decorative lighting, streetscaping, pedestrian friendly sidewalks, new signalization, improved drainage, and roadway reconstruction. Since the original Phase 1, the project has been expanded to include the South Glades Drive renovations and all of the avenues connecting N.E. 163rd Street to South Glades Drive.

Fulford City Center Master Drainage Plan. In order to move forward with the revitalization of the Fulford City Center District, in conjunction with the reconstruction of N.E. 164th Street, the City authorized URS to conduct a district-wide drainage master plan that identified the future drainage needs taking into account the City's rezoning efforts.

Alleyway Citywide Reconstruction Program. The City and URS developed a 10-year plan to reconstruct over 130 of the City's residential alleyways. The project included the full reconstruction on single lane alleys, including the necessary drainage improvements.

Highland Drive Traffic Circles. This traffic calming project placed two traffic circles in areas where speeding became a problem. Temporary drums were placed as short term traffic circle in order to analyze the effects on the traffic and to familiarize drivers that used the area. Once this stage was done and the City approved of the results, two permanent traffic circles were installed. The construction included roadway reconstruction, landscaping, irrigation, signing, and pavement markings.

Pedestrian/Bicycle Pedestrian Safety Study. Four major developments were scheduled near the North Miami Beach Boulevard and Biscayne Boulevard intersection. URS performed a study of the effects of these developments on the pedestrian and bicycle traffic that frequented the area. The study and suggestions for improved safety conditions were presented to the City's Transportation Committee.

Traffic Calming Design Services

Project Description

URS performed traffic calming and engineering design services for a Roundabout constructed along NE 175th Street / NE 10th Avenue and NE 180th Terrace and South Glades Drive. The scope of the project included surveying, geotechnical testing, traffic design, drainage, specifications, extensive coordination, and bid documents.

Location

North Miami Beach, FL

Services

Planning Study
Engineering Design
Traffic Calming

Client Contact

City of North Miami Beach
17050 N.E. 19th Avenue
North Miami Beach, Florida 33162
Mr. Hiep Huynh, PE
Capital Projects Administrator
Tel: (305) 948-2925
hiep.huynh@citynmb.com

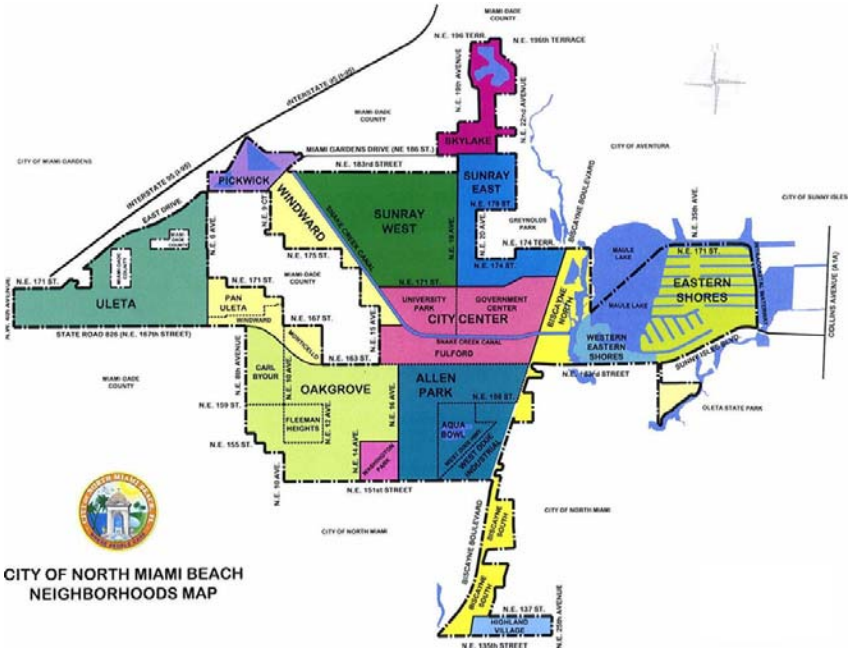
Project Value

Construction: $275,000.00

Project Duration

2000

Neighborhood Traffic Studies



Location

North Miami Beach, Florida

Services

Planning
Traffic Study

Client

City of North Miami Beach
17050 NE 18th Avenue
North Miami Beach, Florida
Ms. Ana Rijo Conde
(305) 891-6511

Project Value

$10,000

Project Duration

2002

Project Description

The scope of this contract was to recommend neighborhood traffic control measures to reduce traffic intrusion through three neighborhoods in the City of North Miami Beach. The neighborhoods studied include Breezeswept Estates, Overbrook Shores and Executive Manors subdivision. The project included data collection, traffic volume speed surveys, license plate surveys and qualitative assessments. Study scope included capacity analysis, traffic diversions, and recommendations to reduce neighborhood intrusion, porosity and speeding within the three study neighborhoods.

General Engineering Consultant – Florida Department of Transportation-District 5

Location

Orange, Seminole, Osceola, Lake, Brevard, Volusia, Sumter, Marion and Flagler Counties, Florida

Services

Planning, Design, Construction, Contractual Support/Project Control, Planning/Programming/PD&E, Design, Construction/Maintenance

Client

Florida Department of Transportation-District 5

Project Value

$16 Million

Project Duration

October 1999-May 2005
Reselected for Second Contract Term July 2004 - September 2009

Project Description

URS is serving as General Engineering Consultant for the Florida Department of Transportation, District Five. In this role, URS serves as an extension of the District's staff over a five-year period providing on-call services by supplying the manpower to complete assignments during peak workload periods; assistance in the long-range programming of work efforts; and support in administration, planning and production/operations efforts.

Other services provided on this contract include:
Services include all facets of planning, design and construction to assist the District in completing their work program. Specific elements which may be included in the project include:

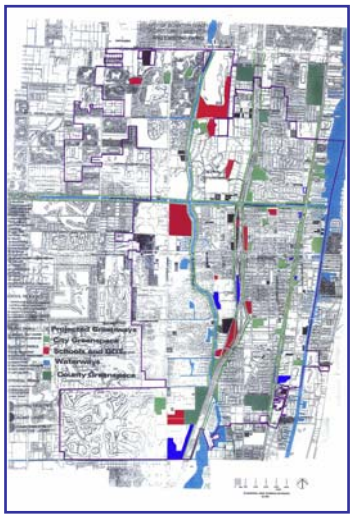
Contractual Support/Project Control – Scopes, Manhour Estimates, Production Management, Administrative Support, Scheduling, Special Projects, Document Control.

Planning/Programming/PD&E – DRI's/LGCP/EAR's/Master Plans, Data Collection, IMR's/IJR's, MIS/AIS/Action Plans, Modeling, Land Use, Transportation, Engineering & Environmental Documents, Concept Development, Public Involvement, Natural Environment, Public Transportation, Physical Environment.

Design – Roadway, Structures, Cost Estimating, Drainage, Permitting, Value Engineering, Signing/Signals/Pavement Marking, Right-Of-Way, Right-Of-Way Estimates, Architectural, Mechanical/Electrical, Utilities/Railroads, Surveying and Mapping, Lighting, Landscaping, GIS.

Construction/Maintenance – Constructibility/Biddability, Construction Scheduling, As-Built Plans, CEI Staffing/Liaison, Contract Changes/Disputes, Public Awareness, Traffic Operations, Bridge Maintenance, Materials/Pavements, Permit Operations, NPDES, Shop Drawings Reviews.

Greenways & Trails Master Plan



Location

Boynton Beach, FL

Services

Landscape Architecture / Master Planning / Land Use Planning / Traffic and Transportation Planning / Biological Assessments / GIS / Civil Engineering

Client

The City of Boynton Beach
Mr. John Wildener
100 E. Boynton Beach
P.O. Box 310
Boynton Beach, Florida 33425
(561) 742-6226

Project Value

$270,000

Project Duration

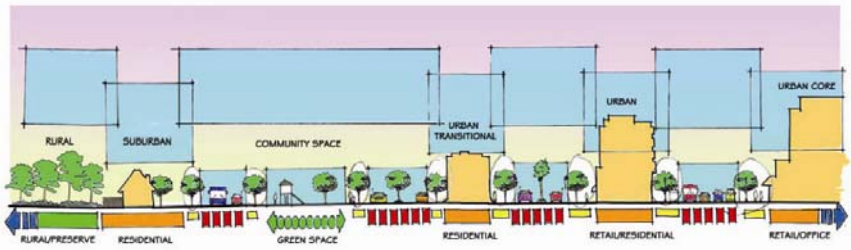
2002 – 2003

Project Description

The City of Boynton Beach selected URS to develop a Greenways and Bike Trail Master Plan. The objectives of the master plan is to connect parks, schools, homes, shops, jobs, downtown, and other cultural and natural resources together with a system of greenways, blueways, hiking trails, equestrian trails, bicycle trails, heritage trails, and wildlife corridors. The ultimate goal of the project is to enhance the quality of life for the residents and visitors of and to the City Of Boynton Beach by providing

- A sense of roots, continuity, and pride in our history and heritage.
- Clean air and water through the filtering affects of greenways.
- Flood control through the retention capacity of greenways.
- Wildlife habitat creation and enhancement.
- Opportunities for healthy recreational activities
- Safe routes for commuting to school, parks, jobs, and shops.
- Economic opportunities in greenway related markets (bicycle, kayak, canoe rentals and sales; bed and breakfast facilities; increased property values etc.)
- A reduction in crime by increasing natural surveillance.
- Greater sense of community unity and harmony by friendships made in the mutual enjoyment of the greenway experience.

Livable Communities Element



Location

Hillsborough County, Florida

Services

Urban Planning
Urban Design
Comprehensive Planning

Client

Hillsborough County City-County Planning Commission

Project Value

$25,000

Project Duration

July - October 2006

Project Description

URS Corporation was contracted by the Hillsborough County City-County Planning Commission in July, 2006 to assist in creating a new Comprehensive Plan element called Livable Communities. The Livable Communities element was intended to promote higher quality design standards in areas of new development and redevelopment throughout Hillsborough County. Design related goals, objectives, and policies as they relate to "people friendly" community design were specifically addressed. Related issues such as mixed-use development, sustainability, development clustering, and preservation of rural character and cultural development are outlined and consolidated within this element. An extension and refinement of the Comprehensive Plan, known as the Community and Special Area Studies, was also included. The plans, for particular areas of study, focused on the special and unique characteristics of the areas under study and offered strategies for providing solutions to issues they faced. Ultimately, the creation of a Livable Communities Element was intended to enhance the quality of life for Hillsborough County citizens.

Following completion of the document, the Planning Commission elected to integrate goals, objectives, and policies contained within this element as the general theme of the Comprehensive Plan update and narrow the scope of the Livable Communities Element. A compilation of the Community and Special Area Studies remains within the recently adopted Hillsborough County Comprehensive Plan Update. Each of these studies provides a vision for unincorporated communities within Hillsborough County.

Client Contact

Hillsborough County City-County Planning Commission
601 E. Kennedy Blvd., 18th Floor
Tampa, Florida, 33601-1110
Lisa Silva, Project Manager
Tel. (813) 273-3774
Fax (813) 272-6255

Traffic Engineering Study of the Sunrise/ Sunset Avenue Business District

Location

Palm Beach County, FL

Services

Planning
Traffic Study

Client

Town of Palm Beach
Mr. James Bowser
Tel: (561) 838-5440

Project Value

Construction Cost: $100,000

Project Duration

1998

Project Description

URS conducted a Traffic Engineering Study of a business district in the Town of Palm Beach. The study included identifying and assessing existing operating conditions as well as determining the impact the implementation of a one-way pair with have on Sunrise and Sunset Avenues. The study also included a preliminary conceptual design for one-way implementation.

PROJECT EXPERIENCE

Project: City of Sarasota "Connecting Downtown to Bayfront" Evaluation
Owner: City of Sarasota
Contact Person: Juan J. Florensa, P.E (941) 316-1988
Project Period: 2009 to 2010
Key Personnel: Juan Calderon, P.E, PTOE; Luou Shen, Ph.D
Scope: This project includes Long Range Transportation Plan (LRTP) FSUTMS modeling for traffic calming along Bayfront Drive Roundabouts and intersections along the US-41 corridor were proposed in the future condition. VISSIM was used for detailed operation simulation modeling after calibration. Synchro was used for signal timing. Recommendations were prepared based on alternatives comparison.

Project : Bonita Springs Traffic Circulation Study
Owner: City of Bonita Springs
Contact Person: Daryl C. walk, P.E., (941) 390-1004
Authorized: $297,000.00
Project Period: 11/2006 to 9/2008
Key Personnel: Juan Calderon, P.E, PTOE; Ravi Devaguptapu, P.E. PTOE
Scope: Provide the county with professional engineering and planning services.

Project: SW 120th Street from SW 117th Ave to SW 137th Ave
Owner: Miami Dade Public Work
Contact Person: David W. Hays, P.E., (305) 375-1019
Authorized: $23,000.00
Project Period: 1/2007 to 3/2007
Key Personnel: Juan Calderon, P.E, PTOE; Ravi Devaguptapu, P.E. PTOE
Scope: The scope of this project was to provide traffic and design engineering assessments for new alternatives. During this project six alternatives were developed including intersection improvements, pedestrian improvements and alignments.

Project: East Kendall Charrette

Owner: Miami-Dade Urban and Planning Department

Contact Person: Shailendra Singh, 305-375-2476

Project Period: 10/2006 to 3/2007

Key Personnel: Juan Calderon, P.E, PTOE; Ravi Devaguptapu, P.E. PTOE

Scope: This project involved assisting Miami-Dade County Urban Planning Department to determine possible traffic solutions in the area of concern in which major FDOT corridors such as Kendall Drive and Galloway Road can be improved through mass transit projects in conjunction with traffic calming alternatives for minor streets. Mr. Calderon was also in charge of organizing and presenting findings and recommendations in public meetings involving over 100 residents of East-Kendall. NTP 10/06 End 3/07

Project: District-Wide Public Transportation Consultant Service

Owner: Florida Transportation Department District 6

Contact Person: Shailendra Singh, 305-375-2476 (sub-consultant with URS)

Project Period: 3/2009 to 5/2011

Key Personnel: Juan Calderon, P.E, PTOE; Ravi Devaguptapu, P.E. PTOE

Scope: Provide Florida Transportation Department District 6 with professional traffic engineering and planning services.

MONROE COUNTY PD&E STUDIES

Sandra Walters Consultants, Inc. (SWC) was the public involvement coordinator for three separate consulting teams that conducted Florida Department of Transportation (FDOT) project development and environmental (PD&E) studies in the Florida Keys to meet federal NEPA standards. SWC also conducted landscape design and land use evaluation.

- **Sombrero Beach Road PD&E Study**
  - Public involvement & landscape design
  - Contact: Vilma Croft, (305) 470-5240
  - Dollar Value: $350,000.00
  - Duration: 18 months (completed)
- **Lower Matecumbe Key PD&E Study**
  - Public involvement & land use evaluation
  - Contact: Vilma Croft, (305) 470-5240
  - Dollar Value: $566,000.00
  - Duration: 24 months (completed)
- **Big Coppitt Key PD&E Study**
  - Public involvement & landscape design
  - Contact: John Dovel, (305) 470-5342
  - Dollar Value: $409,680.00
  - Duration: 18 months (completed)


NEWSLETTER

Sombrero Beach Road Being Studied to Improve Roadway Problems


NEWSLETTER

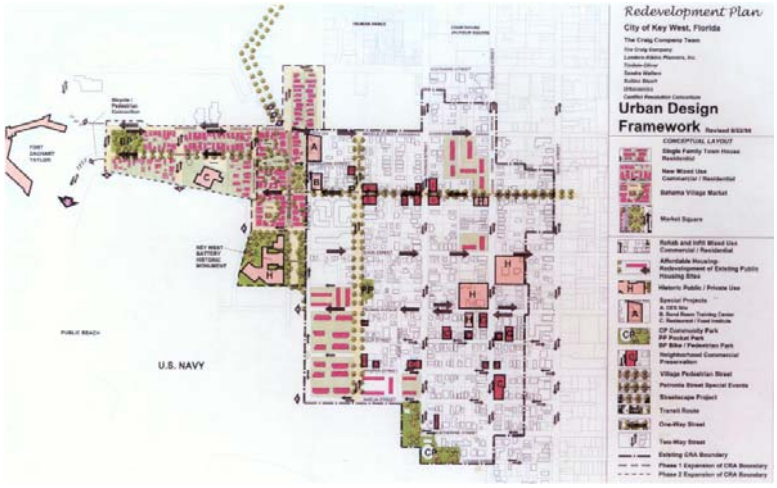
SWC responsibilities include:

- developing public involvement plans according to FDOT guidelines,
- designing project logos,
- setting up and participating in project kickoff meetings with local government and agency officials,
- developing and maintaining project websites,
- developing and distributing initial press packages describing the process and project history,
- assembling and maintaining stake-holder contact lists,
- reviewing local media for related news stories,
- designing and distributing newsletters and press releases,
- responding to all requests for information and comments,
- organizing and facilitating Community Advisory Committee (CAC) meetings for projects,
- organizing public workshops, one-on-one stakeholder meetings, and the final public hearing,
- providing information hotlines for public questions and comments,
- analyzing land uses in the project vicinity, and
- creating landscape design meeting FDOT requirements that utilizes low maintenance, xeriscape vegetation

GENERAL EMAIL SWC@SWCINC.NET • WEBSITE WWW.SWCINC.NET
MAIN OFFICE: 6410 FIFTH STREET, SUITE 3, KEY WEST, FL 33040 • PH 305-294-1238 • FAX 305-294-2164
SE FLORIDA: 1031 IVES DAIRY ROAD, SUITE 228, MIAMI, FL 33179 • PH 305-651-7061 X368 • FAX 305-651-5732
SW FLORIDA: 4790 S. CLEVELAND AVE., #2102, FT. MYERS, FL 33907 • PH 239-985-9762 • FAX 239-985-9763

BAHAMA VILLAGE REDEVELOPMENT PLAN UPDATE
Key West, Monroe County, FL

Sandra Walters Consultants, Inc. (SWC) was in charge of public information during the update of the Bahama Village Redevelopment Plan in Key West. SWC wrote, designed, printed and distributed by direct mail newsletters to area residents regarding project workshops and milestones; wrote and distributed news releases to local media; participated in design and implementation of a hands-on public involvement program process which included active mapping and ranking of community concerns; and coordinated issue scoping meetings with area business leaders.



SWC was also responsible for public facilities and environmental planning elements of the project, and contributed as a technical consultant in all community and land use planning elements. The neighborhood borders directly on the Truman Waterfront parcel recently conveyed by the Navy to the City. SWC collected and assessed detailed environmental and public facilities data, and planned land uses in this parcel, in relation to Bahama Village redevelopment goals and concerns.

This historic black neighborhood in Key West, Florida contains a mix of homes, businesses and affordable housing projects. Residents were concerned to maintain the unique community character and avoid "gentrification," while improving access to and participating in Key West's vibrant tourism-based economy.

Owner's Name & Address:

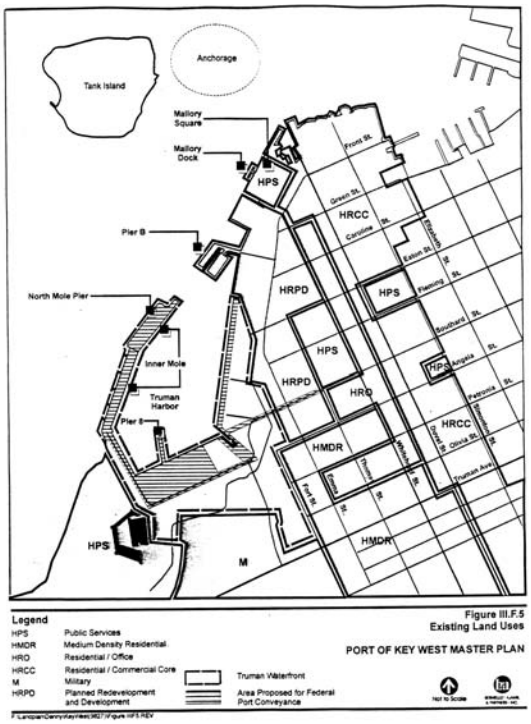
Bill Harrison, Director (305-293-8337)
Key West Local Redevelopment Agency
P.O. Box 149
Key West, FL 33040

Completion Date: **1998**
Cost: **$70,000**

KEY WEST ECONOMIC CONVEYANCE APPLICATION Key West, Monroe County, FL

The City of Key West has prepared several applications to acquire sites from the U.S. Navy as part of nationwide military downsizing and disposing of surplus properties. As part of this process, an economic development conveyance application was prepared for Navy lands, which consists of three areas—the former Navy mess hall, which will address needs of homeless service groups and the adjacent historic Bahama Village neighborhood; a site intended to integrate Bahama Village with the rest of the waterfront property that is slated for mixed retail and residential uses; and a site planned for affordable housing development.

Sandra Walters Consultants, Inc. served as the local project coordinator, and provided the local project office for the consulting team. SWC was responsible for setting up and participating in meetings with stakeholders who were interested in the property and provided information regarding economically viable uses for the parcels and costs of development. In addition, SWC prepared sections of the application related to contamination remediation on the property.



Owner's Name & Address:

Bill Harrison, Director (305-293-8337)
Key West Local Redevelopment Agency
P.O. Box 149
Key West, FL 33040

Completion Date: **2000**

Cost: **$80,000**

GENERAL EMAIL SWC@SWCINC.NET • WEBSITE WWW.SWCINC.NET
MAIN OFFICE: 6410 FIFTH STREET, SUITE 3, KEY WEST, FL 33040 • PH 305-294-1238 • FAX 305-294-2164
SE FLORIDA: 1031 IVES DAIRY ROAD, SUITE 228, MIAMI, FL 33179 • PH 305-651-7061 X368 • FAX 305-651-5732
SW FLORIDA: 4790 S. CLEVELAND AVE., #2102, FT. MYERS, FL 33907 • PH 239-985-9762 • FAX 239-985-9763

8.0 Representative Experience – Similar Projects

Similar Experience

The following section includes select examples and client references of URS' experience in providing Carrying Capacity Traffic Study projects.

- Florida Department of Transportation-District 6, Traffic Engineering Consultant – Miami-Dade and Monroe Counties, FL
- City of Wilton Manors – General Engineering - Wilton Manors, FL
- City of Miami - Master Plan Corridor Study – SR 7 / NW 7th Avenue – Miami, FL
- Monroe County Planning Department – Monroe County, FL

Traffic Engineering Consultant – Florida Department of Transportation-District 6

Location

Miami-Dade and Monroe Counties, Florida

Services

Traffic Engineering, Roadway Safety, Preliminary Design, Contractual Support/Project Control, Public Involvement Support

Client

Florida Department of Transportation-District 6
Mr. Ramon Sierra, PE
Traffic Operations Office
Tel: (305) 470-5722

Project Value

$1.5 Million

Project Duration

March 2009-December 2009

Project Description

URS is serving as Traffic Engineering Consultant for the Florida Department of Transportation, District Six. In this role, URS serves as an extension of the District's staff over a maximum five-year period providing task work order type services by completing traffic studies, which identifies operational and safety improvements: preliminary design plans; preliminary cost estimate; public involvement support; and support in administration. URS has completed nine (9) capacity analysis studies to date.

Other services provided on this contract include:
Services include all facets of traffic engineering, preliminary design to assist the District in completing their work program. Specific elements which may be included in the project include:

Contractual Support/Project Control – Scopes, Manhour Estimates, Production Management, Administrative Support, Scheduling, Special Projects, Document Control.

Traffic Engineering – Traffic Operation Improvement Studies, Roadway Safety Improvement Studies, Concept Development, Public Involvement, Public Transportation, Physical Environment.

Preliminary Design – Roadway, Structures, Cost Estimating, Signing/Signals/Pavement Marking, Right-Of-Way, Right-Of-Way Estimates, Utilities/Railroads, Lighting, Landscaping.

City of Wilton Manors General Engineering

Location

Wilton Manors, Florida

Services

Stormwater Drainage Design
Traffic Engineering Studies
Water and Sewer Studies
Construction Administration

Client

City of Wilton Manors
Mr. David Archacki
Director of Public Services
524 NE 21st Court
Wilton Manors, Florida 33305
Tel. (954) 390-2190

Role of Firm

Prime

Project Value

TBD

Project Duration

Ongoing

Project Description

URS is providing technical support to the City of Wilton Manors. The services include stormwater drainage, water and sewer design, and traffic engineering studies.

Drainage Improvements to NE 24th Street

Engineering-in-charge of retrofitting an existing inadequate neighborhood drainage system with an improved capacity system capable of both adequately draining the storm water runoff, and satisfying Broward County DNRP permitting criteria.

Water and Wastewater Capacity Study

URS conducted a utility study to evaluate the capacities of the City of Wilton Manors' existing potable water distribution and sanitary sewer collection systems that provide service to approximately 12,900 residents. The Study provided the City with estimated capacities for the existing systems, recommended upgrades to support future population growth and provided estimates for the construction of the infrastructure required to meet the anticipated future requirements.

Traffic Engineering Studies

Traffic-calming applications were analyzed and proposed to enhance the quality of life for the residents of the City. Not only was unnecessary cut-through traffic eliminated, but opportunities to improve the aesthetic quality of the City were identified.

Master Plan Corridor Study – SR 7 / NW 7th Avenue

Location

Miami, FL

Services

Master Planning / Transportation Studies

Client

City of Miami
Ms. Lilia Medina, AICP
Assistant Transportation Coordinator and Project Manager
444 SW 2nd Avenue, 10th Floor
Miami, FL 33130
(305) 416-1080

Project Value

$10 Million (Construction)
$93,743 (Fee)

Project Duration

2001 - 2003

Project Description

URS provided master planning services in support of efforts to improve roadway/mobility, parking and transit corridor improvements, new transit hub, bike/pedestrian circulation, area redevelopment certification and Empowerment Zone Strategic Implementation Recommendations.

The objective was to develop a Master Plan Corridor Study along State Road 7/NW 7th Avenue between NW 54th Street and NW 95th Street to improve the efficiency of the transportation system. In addition, the project analyzed various approaches to reduce environmental impacts of transportation, reduce the need for costly future infrastructure investments and identify strategies to encourage private sector development patterns including transit-oriented development that achieve these goals. The Master Plan's strategies and recommendations also included improvements and enhancements to the corridor.

The project identified innovative approaches to mobility along the north-south NW 7th Avenue corridor as well as the east-west NW 62nd Street corridor, with emphasis in the transit-oriented development projects.

The newly released Liberty City/Model City Empowerment Zone Neighborhood 2001 Strategic Implementation Recommendations, April 2001, will be used as part of the analysis in the corridor study. Measure of the short and long-term results of the project will largely be a function of the acceptance of the deliverables through the public participation process and review by the participating agencies.

The Master Plan included a vision for the ultimate impact of pedestrian, bicycle and transit improvements and transportation enhancements for the corridor. The project goals and objectives included analysis and recommendations for the NW 7th Avenue corridor to promote infill development, adaptive reuse of commercial buildings and new construction using design guidelines and development standards.

Monroe County Transportation Planning Services

Location

Monroe County, Florida

Services

Transportation Planning

Client

Monroe County Board of County Commissioners
Mr. Tim McGarry, AICP
(305) 289-2500

Project Value

$150,000.00

Project Duration

2002 to 2003

Project Description

URS provided Monroe County Planning Department with professional traffic engineering and transportation planning services by providing general planning assistance with reviews of site plans and traffic impact reports, performing travel time and delay studies along US-1, and providing other congestion management assistance.

The URS completed four main tasks including: two travel time and delay study runs during the peak seasons of the years 2002 and 2003; provided continued assistance in site plan reviews; and attended public hearing related to DRC reviews and county commission hearings. URS completed a revision worked on revising the level of service methodology for US-1, and on providing congestion management assistance related to identifying critical intersections and corridors and proposing solutions to alleviate the problems.

9.0 References

Per the RFQ, listed below are four (4) URS references of Carrying Capacity Traffic Studies or similar work which have been completed within the last seven (7) years.

1. Florida Department of Transportation-District 6
Mr. Ramon Sierra, PE
Traffic Operations Office
Tel. (305) 470-5722

Project Description: URS is serving as Traffic Engineering Consultant for the Florida Department of Transportation, District Six. In this role, URS serves as an extension of the District's staff over a maximum five-year period providing task work order type services by completing traffic studies, which identifies operational and safety improvements: preliminary design plans; preliminary cost estimate; public involvement support; and support in administration. URS has completed nine (9) capacity analysis studies to date. Project Duration: March 2009 – December 2009.

2. City of Wilton Manors
Mr. David J. Archacki
Director of Public Services
524 NE 21st Court
Wilton Manors, Florida 33305
Tel. (954) 390-2129

Project Description: URS provides ongoing general engineering services to the City of Wilton Manors. As part of this contract, URS has conducted site development reviews, traffic calming studies for seven areas of the City, analysis to develop an ordinance to amend the impact fee associated with providing Sanitary Sewer connection to new development in the city, among others. Project Duration: 2002 – Ongoing.

3. City of Miami
Ms. Lilia Medina, AICP
Assistant Transportation
Coordinator and Project Manager
444 SW 2nd Avenue, 10th Floor
Miami, FL 33130
Tel. (305) 416-1080

Project Description: Develop traffic studies and concept plans to improve roadway and intersection operation and safety, including minor design plans. Project Duration: 2001 – 2003.

4. Monroe County Planning Department
Mr. Townsley Schwab
Planning Director
2798 Overseas Highway, Suite 400
Marathon, Florida 33050
Tel. (305) 289-2500

Project Description: Provide planning and engineering services, including review of traffic impact studies and site plans. As part of these services, URS has conducted the U.S. 1 Arterial Travel Time and Delay Study, including data collection for years 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005 and 2006. The U.S. 1 Arterial Travel Time and Delay Study's primary objective is to monitor the level of service on U.S. 1 for concurrency management purposes pursuant to Chapter 163, Florida Statutes and Section 9.5-292 of the Monroe County Land Development Regulations. Project Duration: 2002 – 2003.

In addition, we have provided below client references provided by our sub-consultants.

1. Miami-Dade Public Works
David W. Hays P.E., Project Manager
111 NW 1st Street, Suite 1510
Miami, FL 33128
Tel. (305) 375-1019

Project Description: FTE was contracted to provide traffic and design engineering assessments for new alternatives. During this project six alternatives were developed including intersection improvements, pedestrian improvements and alignments. Project Duration: 1/2007 - 3/2007.

2. City of Bonita Springs
Daryl C. Walk, P.E.
9101 Bonita Beach Road
Bonita Springs, FL 34135
Tel. (941) 390-1004

Project Description: FTE was contracted to provide the county with professional engineering and planning services. Project Duration: 2006 – 2008.

3. City of Sarasota
Juan Florensa, P.E., Project Manager
1761 12th Street, Sarasota, FL 34236
Tel. (941) 316-1988

Project Description: FTE was contracted to this project which includes Long Range Transportation Plan (LRTP) FSUTMS modeling for traffic calming along Bayfront Drive Roundabouts and intersections along the US-41 corridor were proposed in the future condition. VISSIM was used for detailed operation simulation modeling after calibration. Synchro was used for signal timing. Recommendations were prepared based on alternatives comparison. Project Duration: 2009 – 2010.

4. City of Key West
John Jones, Director of Engineering, Assistant City Manager
1024 James Street
Key West, FL 33040
Tel. (305) 797-0484

Project Description: SWC has worked on a number of important projects at the City of Key West, including but not limited to the following: Monitoring at the Key West Mooring Field to assess whether vessel use caused impacts to underlying seagrass communities, including preparation of semi-annual and annual reports; Environmental compliance monitoring during seawall replacement along South Roosevelt Boulevard; Contamination assessments and mitigation planning for a fuel leak at the City Hall property; and Preparing and processing permit amendments to allow the area off of City-owned Mallory Dock to be added to the Navy Key West Harbor maintenance dredging project.

Appendix A. Forms

In the following pages we have provided the requested forms and documentation listed below:

- Anti-Kickback Affidavit Form
- Public Entity Crimes Form
- Acknowledgement of Addendum No. One
- Acknowledgement of Addendum No. Two
- URS State of Florida Certificate
- URS Professional Engineering License

ANTI-KICKBACK AFFIDAVIT

STATE OF FLORIDA

SS:

COUNTY OF MONROE

I the undersigned hereby duly sworn, depose and say that no portion of the sum herein response will be paid to any employee of the City of Key West as a commission, kickback, reward or gift, directly or indirectly by me or any member of my firm or by an officer of the corporation.

BY: _____
Carlos Garcia, PE - Principal-in-Charge

sworn and prescribed before me this 14th day of April, 2010

NOTARY PUBLIC, State of Florida

GAYLE S. PAYNE
MY COMMISSION # DD 938652
EXPIRES: December 15, 2013
Bonded Thru Notary Public Underwriters

My commission expires:

Gayle S. Payne

SWORN STATEMENT PURSUANT TO SECTION 287.133(3)(A)
FLORIDA STATUTES, ON PUBLIC ENTITY CRIMES

THIS FORM MUST BE SIGNED AND SWORN TO IN THE PRESENCE OF A NOTARY PUBLIC OR OTHER OFFICIAL AUTHORIZED TO ADMINISTER OATHS,

1. This sworn statement is submitted to

by Carlos Garcia, PE - Principal-in-Charge

(print individual's name and title)

for

URS Corporation Southern
(print name of entity submitting sworn statement)

whose business address is

7650 Corporate Center Drive, Suite 401, Miami, FL 33126

and (if applicable) its Federal Employer Identification Number (FEIN) is

59-2087895 (if the entity has no FEIN, include the Social Security Number of the individual signing this sworn statement):

2. I understand that a "public entity crime" as defined in Paragraph 287.133(1)(g), Florida Statutes, means a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity or with an agency or political subdivision of any other state or of the United States, including, but not limited to, any bid or contract for goods or services to be provided to any public entity or an agency or political subdivision of any other state or of the United States and involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, or material misrepresentation.

3. I understand that "conviction" as defined in Paragraph 287.133(1)(g), Florida Statutes, means a finding of guilt or a conviction of a public entity crime, with or without an adjudication of guilt, in any federal or state trial court of record relating to charges brought by indictment or information after July 01, 1989, as a result of a jury verdict, nonjury trial, or entry of a plea of guilty or nolo contendere.

4. I understand that an "affiliate" as defined in Paragraph 287.133(1)(a), Florida Statutes, means:

    1. A predecessor or successor of a person convicted of a public entity crime: or

    2. An entity under the control of any natural person who is active in the management of the entity and who has been convicted of a public entity

crime. The term "affiliate" includes those officers, directors, executives, partners, shareholders, employees, members and agent who are active in the management of an affiliate. The ownership by one person of shares constituting a controlling interest in another person, or a pooling of equipment of income among persons when not for fair market value under an arm's length agreement, shall be a prima facie case that one person controls another person. A person who knowingly enters into a joint venture with a person who has been convicted of a public entity crime in Florida during the preceding 36 months shall be considered an affiliate.

5. I understand that a "person" as defined in Paragraph 287.133(1)(e), Florida Statute means any natural person or entity organized under the laws of any state or of the United States with the legal power to enter into a binding contract and which bids or applies to bid on contracts for the provision of goods or services let by a public entity, or which otherwise transacts or applies to transact business with a public entity. The term "person" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in management of an entity.

6. Based on information and belief, the statement which I have marked below is true in relation to the entity submitting this sworn statement (indicate which statement applies).

X Neither the entity submitting this sworn statement, or any of its officers, directors, executives, partners, shareholders, employees, members, or agents who are active in the management of the entity, nor any affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July, 1989.

_____The entity submitting this sworn statement, or one or more of its officers, directors, executives, partners, shareholders, employees, members, or agents who are active in the management of the entity or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 01, 1989.

_____The entity submitting this sworn statement, or one or more of its officers, directors, executives, partners, shareholders, employees, members, or agents who are active in the management of the entity or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 01, 1989. However, there has been a subsequent proceeding before a Hearing Officer of the State of Florida, Division of Administrative Hearings and the Final Order entered by the Hearing Officer determined that it was not in the public interest to place the entity submitting this sworn statement on the convicted vendor list. (attach a copy of the final order)

I UNDERSTAND THAT THE SUBMISSION OF THIS FORM TO THE CONTRACTING

OFFICER FOR THE PUBLIC ENTITY IDENTIFIED IN PARAGRAPH ONE (1) ABOVE IS FOR THAT PUBLIC ENTITY ONLY AND, THAT THIS FORM IS VALID THROUGH DECEMBER 31 OF THE CALENDAR YEAR IN WHICH IT IS FILED. I ALSO UNDERSTAND THAT I AM REQUIRED TO INFORM THE PUBLIC ENTITY PRIOR TO ENTERING INTO A CONTRACT IN EXCESS OF THE THRESHOLD AMOUNT PROVIDED IN SECTION 287.017, FLORIDA STATUTES, FOR THE CATEGORY TWO OF ANY CHANGE IN THE INFORMATION CONTAINED IN THIS FORM.

(SIGNATURE) Carlos Garcia, PE - Principal-in-Charge

April 12, 2010
(DATE)

STATE OF Florida

COUNTY OF Miami-Dade

PERSONALLY APPEARED BEFORE ME, the undersigned authority
Carlos Garcia who, after first being sworn by me,
(name of individual)
affixed his/her signature in the space provided above on this
12th day of April, 2010

NOTARY PUBLIC

My commission expires:

GAYLE S. PAYNE
MY COMMISSION # DD 938652
EXPIRES: December 15, 2013
Bonded Thru Notary Public Underwriters

ADDENDUM NO. ONE

Request for Qualifications
Carrying Capacity Traffic Study

To All Bidders:

The following change is hereby made a part of RFQ 10-009 as fully and as completely as if the same were fully set forth therein:

The City has assembled available traffic and transportation studies on the Planning Department Webpage in an effort to provide background references for the Carrying Capacity Traffic Study RFQ 10-009. Please review the transportation studies prior to submitting your response. The link is as follows:

http://www.keywestcity.com/egov/apps/services/index.egov?path=details&action=i&id=247

All Bidders shall acknowledge receipt and acceptance of this Addendum No. 1 by acknowledging Addendum in their proposal or by submitting the addendum with the bid package. Bids submitted without acknowledgement or without this Addendum may be considered non-responsive.

Signature

URS Corporation Southern
Name of Business

ADDENDUM NO. 2

To All Bidders:

The following change is hereby made a part of RFQ 10-009 Carrying Capacity Traffic as fully as completely as if the same were fully set forth therein:

All Requests for Information shall be submitted no later than April 10th, 2010.

All Bidders shall acknowledge receipt and acceptance of this Addendum No. 1 by acknowledging Addendum in their proposal or by submitting the addendum with the bid package. Bids submitted without acknowledgement or without this Addendum may be considered non-responsive.

Signature

URS Corporation Southern
Name of Business

State of Florida
Department of State

I certify from the records of this office that URS CORPORATION SOUTHERN is a corporation organized under the laws of California, authorized to transact business in the State of Florida, qualified on April 9, 1981.

The document number of this corporation is 848780.

I further certify that said corporation has paid all fees due this office through December 31, 2010, that its most recent annual report was filed on January 4, 2010, and its status is active.

I further certify that said corporation has not filed a Certificate of Withdrawal.

Given under my hand and the Great Seal of Florida, at Tallahassee, the Capital, this the Fifth day of January, 2010

Secretary of State

Authentication ID: **500164119235-010510-848780**

To authenticate this certificate, visit the following site, enter this ID, and then follow the instructions displayed.
https://efile.sunbiz.org/certauthver.html

State of Florida
Board of Professional Engineers

URS Corporation Southern

Is authorized under the provisions of Section 471.023, Florida Statutes, to offer engineering services to the public through a Professional Engineer, duly licensed under Chapter 471, Florida Statutes.

Expiration: 28-Feb-11
Audit No: 22820110612

Certificate of Authorization

CA No: 2

DISPLAY AS REQUIRED BY LAW