



**AVIATION DEPARTMENT - Fort Lauderdale/Hollywood International Airport**  
100 Aviation Boulevard • Fort Lauderdale, Florida 33315 • 954-359-6100

**DATE:** May 7, 2014

**TO:** Brenda J. Billingsley, Director  
Purchasing Division

**FROM:** Doug Wolfe, Assistant Director of Aviation  
Aviation Department

**SUBJECT:** Request for ☐ Sole Source ☐ Sole Brand ☒ Both  
(Check the applicable box)

**RE:** Most Reasonable Source Request – CTR Parking Solutions, LLC  
Parking Guidance and Signage, Valet Parking and Parking Reservation System Modules and  
Hardware/Software Upgrades

I have reviewed the following sole source justification and concur with subject request, fully understanding the implications of Section 838.22 of the Florida Statutes:

(2) "It is unlawful for a public servant, with corrupt intent to obtain a benefit for any person or to cause unlawful harm to another, to circumvent a competitive bidding process required by law or rule by using a sole source contract for commodities or services."

(5) "Any person who violates this section commits a felony of the second degree, punishable as provided in s. 775.082, s. 775.083, or s. 775.084."

The Broward County Aviation Department (BCAD) is requesting the Purchasing Division designate CTR Parking Solutions, LLC (CTR) as a most reasonable source for the acquisition of hardware, software, services, and ongoing maintenance for the Parking Guidance, Valet Parking and Parking Reservation Systems as additional system modules for the parking revenue control equipment at Fort Lauderdale-Hollywood International Airport (FLL). In addition, there are hardware and software upgrades needed for the system at this time.

Currently, CTR is the Board approved vendor for the Parking Access and Revenue Control System (PARCS) deployed for the management of parking operations at FLL. The CTR system provides a management solution for revenue collection, access control, SunPass integration, and has modules, templates, and processes that meet the unique and changing needs of BCAD. CTR is considered one of the parking industry leaders and provides PARCS solutions at other locations including Hartsfield-Jackson Atlanta International Airport, Ronald Reagan National Airport, Southwest Florida International Airport, Palm Beach International Airport, and the Broward County Governmental Center. The functionality required by the Parking Guidance, Valet Parking and Parking Reservation Systems expand upon the base functionality of the existing PARCS equipment.

CTR was approved as the sole source equipment provider, having exclusive rights to distribute and service ZEAG equipment on the East Coast of the United States and exclusively in the State of Florida. The CTR Parking Revenue Control System was initially installed at the airport in 1999 and subsequently upgraded in 2005 and 2010, including key features such as changeable dynamic signs and the SunPass Plus Airport Tolling System integration. To date, BCAD has invested \$8,247,457.84 into the PARCS equipment at FLL.

The estimated budgeted amount for the Parking Guidance module is \$3,770,000, Valet Parking module is \$383,000 and Parking Reservation module is \$50,000 which includes the acquisition of hardware, software, installation and training services. The current PARCS system also requires hardware and software upgrades totaling \$587,000.

In addition to the most reasonable source designation, BCAD is requesting authorization to negotiate with CTR for ongoing hardware, software, services and support by amending their existing Systems and Services Agreement/Software License and Maintenance Agreement, to ensure system longevity and protect the County's investment.

Through a comprehensive market research study of both qualitative and quantitative information, BCAD has identified the key areas where upgrades in technology are needed in order to enhance customer experience and provide quality parking products. The majority of the findings from these studies can be addressed through a comprehensive upgrade to the parking revenue control and signage system. BCAD has reviewed the market for vendors that provide a product with the desired functionalities of a parking guidance system through research and site visits. The vendors and products reviewed include Parking Guidance Systems (PGS) by TCS International, Cirpark by ParkFast, and ParkAssist offered through CTR Systems.

The parking guidance and location monitoring system operates through the use of LED indicators and signage that is updated in real time, thereby reducing the time and stress associated with finding an available parking space in the garage structures. Furthermore, the guidance system drastically reduces circling time, therefore diminishing the amount of carbon dioxide emission released into the atmosphere. There are two traditional types of technology employed to accomplish this – one being a magnetic detection loop-based system that senses large metallic objects in a parking space. The other utilizes ultrasonic sensors to detect large masses within a defined space. Both TCS and ParkFast offer solutions of this nature that can deliver the desired core features and functionalities required by BCAD. However the primary deficiency with these solutions is the lack of intelligence built into the monitoring device, as the only data collected is whether the space is occupied or vacant. The CTR solution possesses key factors that distinguish it from the other systems. These factors are:

1. **Camera-based guidance system.** The most innovative technology in use today is the camera-based guidance system. This system not only determines if the space is occupied, it can also collect information on the vehicle in that parking space. This additional functionality of the guidance system allows BCAD to address two major security requirements for the technology upgrade – the license plate recognition capability and event-driven surveillance of the parking bay areas. The license plate information that is manually gathered today would be automatically collected and compared against Law Enforcement databases to identify vehicles on various watch lists. The cameras are also able to capture video of the parking bays to assist in the collection of evidence subsequent to events such as trip and fall, theft, vandalism, and damages to vehicles or County property.
2. **Integration.** The CTR ParkAssist solution provides native integration at the operational level. By utilizing a system that is integrated with the parking revenue control system at the airport, a license plate will be associated with the ticket pulled upon entry. BCAD will have the ability to implement a differential parking location pricing structure through the use of parking space monitoring and license plate recognition technology. This will allow BCAD to charge a premium for convenient closer to terminal parking spaces, or discount for exposed roof top parking spaces. It could also enhance the level of customer service and prevent revenue loss in lost ticket situations, as BCAD will have the ability to pull entry time based on the license plate captured upon entrance to accurately calculate the parking fees. Integration would also provide customers with the ability to pay for parking at automated pay on

foot machines, as well as determine the location of their vehicle by using either a smartphone application or kiosk positioned in multiple locations throughout the garages.

3. **Support and Maintenance.** All vendors can provide support and maintenance. CTR currently has onsite staff under the current agreement; leveraging this staff to support the guidance system is a preferable approach. Not only can the onsite staff respond more quickly, they have end-to-end operational knowledge of the system. Additionally, using one vendor for these types of services protects sensitive network infrastructure access and customer data by avoiding the dilution of overall security of having multiple vendors access critical airport systems and infrastructure.

The cost estimates from TCS and ParkFast were approximately \$450 per space in comparison to the estimate of \$500 per space for the camera-based system. TCS and ParkFast require a sensor and a status light over each parking space in order to capture all the vehicles. Alternatively, the CTR camera-based sensors could monitor up to 4 spaces simultaneously, consequently reducing the overall construction and long term maintenance costs. Although the magnetic loop solution is the simplest and cheapest, it is not feasible to install in the garage facilities due to post-tension cables embedded in the floors throughout Cypress and Hibiscus Garage. The installation process includes saw cutting the floor decks and sealing the magnetic detector loops just below the surface. BCAD engineers fear the process could damage the post-tension cables and jeopardize the structural integrity of the garages.

In addition, an integrated system would provide BCAD with intelligent marketing analytics through the process of monitoring and analyzing customer behaviors such as travel frequency, parking duration and parking locations. The result of the analysis would give BCAD the insight and ability to influence customer behavior through the use of variable pricing, parking duration incentives, customer loyalty program and direct marketing and promotion campaigns.

The other component of the upgrades needed for the parking systems at the airport is the valet and parking reservations system. An integrated valet system will be integral in implementing an efficient curbside valet parking service and taking the customer service experience to the next level. BCAD will be able to control and document entry and exit into the parking structures with iPod-based handhelds to eliminate false claims, revenue leaks, and streamline check in/out processes. The customer information collected upon reservation and payment is critical in the ability to create a quality customer loyalty program at the airport for additional parking products and services. An integrated valet system will enhance the customer experience by providing ticketless access, text and e-mail notification of vehicle retrieval, and secure payment with credit cards on file. Furthermore, the system will increase operation efficiency by accurately tracking vehicle movement and staff utilization, as well as the sense of security with the ability to monitor key sign in/out and location status in real time.

There are other software programs that can provide Parking Guidance and Signage, Valet Parking and Parking Reservation solutions which are not integrated components of the CTR Parking System. In order to leverage the monetary investment in these systems, integration of the Parking Guidance and Signage, Valet Parking and Parking Reservation System with the parking revenue control system is a requirement in order to manage the utilization of spaces more efficiently, provide the proper mix between short-term and long-term parking, analyze customer behavior, and provide quality parking products with customer needs in mind.

Using standalone systems would limit the functionality for BCAD and in order to attain the level of integration to meet BCAD functional requirements, the system would require customization. Any software customization would require additional research and development between the vendors on an ongoing basis which translates to time and dollars for BCAD. A major concern for BCAD in this scenario would be managing multiple vendors for the parking management system. If there is an issue or outage, BCAD would rather have one company to hold responsible for software integration and testing. From a strategic perspective, using one vendor for these types of services protects sensitive network infrastructure access and customer data by avoiding the dilution of overall security of having multiple vendors access critical airport systems and infrastructure.

Another option considered was the replacement of the entire revenue control system with one that also has the Parking Guidance and Signage, Valet Parking and Parking Reservation components. There are considerable challenges BCAD would face by moving to an alternate PARCS solution. Installing a new revenue control system from another vendor in place of the existing equipment would pose immense operational challenges, impact customer service, and impose additional costs on BCAD to transition. In order to minimize equipment downtime and loss of parking revenue, redundant infrastructure components such as servers, electrical and data connections would need to be procured and constructed to install, test and implement a new system. Prior to installing a new system, existing lane equipment would need to be powered down and demolished, thereby diminishing the capacity to assist customers at entries and exits. Two distinct PARCS systems in operation during a parallel installation in the parking facilities would amplify the confusion and anxiety for the airport customers.

From a cost perspective, the replacement of the Parking Revenue Control System would come with a significant initial expenditure for BCAD. Implementing and maintaining a new parking revenue control management system would require BCAD to incur additional expenses for new licenses, as well as significant time and monetary investment for training both technical and user level staff. BCAD obtained estimates for similar systems from vendors who attended the annual National Parking Association convention in Chicago. A conservative estimate for a system with comparable complexity and features to the current system we have in place today would be \$10-11 million dollars for the base system, not including any additional modules. The cost estimate to replace the entire system with a solution that includes parking guidance, valet and parking reservation components would be \$15-16 million dollars with an implementation schedule of 2-4 years.

This extensive timetable needed for preparing specifications, bidding through a competitive process, and installing a redundant infrastructure to support a phased, parallel implementation would force the airport into a lost revenue situation. BCAD estimates that under a conservative 2.5 year implementation schedule for a new system, the potential lost revenue for the airport would be \$8.8 million dollars. If the parking guidance, valet and parking reservation modules can be acquired through an amended agreement with CTR, BCAD estimates a six month implementation schedule once the amended agreement is finalized. By expediting the implementation schedule of the parking guidance, valet and parking reservation modules through CTR as a most reasonable source, BCAD projects an additional \$3.5 million dollars in revenue per year.

BCAD is requesting the Purchasing Division's concurrence to amend the existing CTR Agreement to include hardware, software, services, and maintenance for the Parking Guidance, Valet Parking and Parking Reservation Systems as additional system modules for the parking revenue control equipment. BCAD has a long standing relationship with CTR Systems and their high quality of work and professionalism. BCAD considers their prices to be fair and reasonable for these systems based on comparative pricing of similar systems through research conducted by BCAD staff. BCAD has no intention to go beyond the scope of this work and does not intend to use this procurement as growth for additional work with CTR Systems.

Based on the information above and the analysis completed by BCAD, we are requesting approval for the most reasonable source acquisition of the Parking Guidance and Signage, Valet Parking and Parking Reservation modules with CTR Systems. BCAD is also requesting authorization to negotiate with CTR for ongoing hardware, software, services and support by amending their existing Systems and Services Agreement/Software License and Maintenance Agreement, to ensure system longevity and protect the County's investment.

**\*\* DO NOT WRITE BELOW THIS LINE. FOR PURCHASING DIVISION USE ONLY**

I [INSERT PURCHASING AGENT NAME], Purchasing Agent, concur with the above request, which has been examined by me, and the required due diligence has been performed (See Procurement Code Section 21.34 Sole Source Procurement, and 21.35 Sole Brand Procurement).

Date: 5/22/14

☐ Only one source  
☒ Only one reasonable source  
☐ Rejected – See additional information

☐ Sole Brand  
☐ RFI Attached

Estimated Cost: \$ 4,790,000

Additional Information: \_\_\_\_\_

EXHIBITS: (Attach Supporting Documentation)

Office of Economic and Small Business Development

The Office of Economic and Small Business Development has accepted the Sole Source designation for this project, and the Sheltered Market Requirement does not apply:

N/A      YES ☐      NO ☐

Signature/Title: Glenn Marcos  
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Date: 2014.05.23 16:55:22 -04'00'

Assistant Purchasing Director

Approved by the appropriate Award Authority

Approved for OESBD: \_\_\_\_\_

Date: 5/23/14

Date: \_\_\_\_\_

This is a request to have the Director of Purchasing approve the only reasonable source negotiation with CTR Parking Solutions , LLC (CTR) for the acquisition of hardware, software services and ongoing upgrades to the CTR Parking Guidance and Signage, Valet Parking, and ongoing maintenance for the parking guidance, valet parking and parking reservation systems upgrades needed at the Fort Lauderdale-Hollywood Intl. Airport (FLL) at this time. Currently, CTR is the Board approved sole source, standardized provider of the parking access and revenue control system at FLL (June 25, 2002, Item 10A). The estimated budget amount of the requested modules is \$4,790,000. FLL presently has approximately \$8,247,458 invested in the CTR system. Installation of the additional modules is estimated to require roughly six months. The cost estimate to replace the entire system with the requested upgrades is estimated to be between \$15,000,000 - \$16,000,000 with a 2 - 4 year implementation time. In addition to the savings of upgrading the existing system, it is estimated that approximately \$3.5 million would be lost in additional revenue during the two-four year implementation of a new system.

Based upon the above business case, this agent recommends approval of Broward County Aviation Department to go forward with negotiations with CTR for the requested upgrades on an only reasonable source basis, and take the finalized amendment, to the existing license and maintenance agreement, to the Board of County Commissioners for approval.

Note- Aviation will be requesting for the Board to authorize the Director of Purchasing to approve and execute the Second Amendment.

Glenn  
Marcos

Digitally signed by Glenn Marcos  
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