DEPARTMENTAL INPUT
CONTRACT/PROJECT MEASURE ANALYSIS AND RECOMMENDATION

☐ New ☐ OTR ☐ Sole Source ☒ Bid Waiver ☐ Emergency Previous Contract/Project No.

R-99-17 Skytrain APM O and M

Contract
☐ Re-Bid ☐ Other **(LEGACY)**

LIVING WAGE APPLIES: ☐ YES ☒ NO

Requisition No./Project No.: **RQAV2000033**

TERM OF CONTRACT: **5 years w/ 1, 5-year OTR**

Requisition /Project Title: **Skytrain APM O and M**

Description: The Contractor shall provide all the labor, materials and equipment required and shall perform all the work described as "Operations and Maintenance for the North Terminal Automated People Mover (APM) System at MIA.

Issuing Department: **AV** Contact Person: **Tiondra Wright** Phone: **305-869-1596**

Estimate Cost: **$231.4 M**

GENERAL FEDERAL OTHER

Funding Source: **General**

ANALYSIS

Commodity Codes: **Unknown**

Contract/Project History of previous purchases three (3) years
Check here ☒ if this is a new contract/purchase with no previous history.

	EXISTING	2ND YEAR	3RD YEAR
Contractor:	Crystal Mover Services, Inc.		
Small Business Enterprise:			
Contract Value:			

Comments:

Continued on another page (s): ☐ Yes ☒ No

RECOMMENDATIONS

	Set-aside	Sub-contractor goal	Bid preference	Selection factor
SBE				

Basis of recommendation: ***In an effort to ensure the continued participation of small businesses for this service, as has been done in the current contract, MDAD has recommended that a 5% SBE goal be placed on this renewal contract.***

Date sent to SBD: 07/13/2020

Signed: Phillip A. Rincon

Date returned to DPM:

North Terminal Skytrain APM Market Research and Justification

PURPOSE OF THE PURCHASE:

The County is seeking to procure a contract for continuous operation and maintenance for the North Terminal SkyTrain (APM) System. MDAD is including an additional 4 car train purchase in order to support operations and heavy maintenance requirements. Due to the reductions in MDAD's budget because of the Covid pandemic, this purchase has been moved to FY 2022 budget.

The term of this agreement will be for a five-year term, with 1, five-year option to renew and an allocation totaling $231.4M. Below is breakdown of the cost:

- Regular O&M of APM System $73,027,000
- Vehicle Overhaul $6,635,000
- Refurbishment/Replacement $131,310,000
- New 4-car train & Adtl. O&M $20,500,000

Note: In an effort to ensure the continued participation of small businesses for this service, as has been done in the current contract, MDAD has recommended that a 5% SBE goal be placed on this renewal contract.

Based on the information and research below, we are recommending that the County proceeds with a non-competitive agreement with the current incumbent, Crystal Movers Services, Inc. (CMSI) for a five- year term with one, five-year Option to Renew. This term structure is similar to other APM System contracts in various airports across the United States. A non-competitive award would provide uninterrupted services, provide continuity to the heavy overhaul schedules, and minimize risk and liability to the County. The non-competitive route is consistent with industry practices due to the transition logistics, financial impact, proprietary barriers, system safety, and overall risk associated with proceeding with a new vendor.

APM SYSTEM CONTRACT TIMELINE:

- 1999 - Project was competitively bid including O&M pricing (Phase 2) with an anticipated start date for O&M of the Skytrain System in September 2005.
- January 2010 to June 2010 - MDAD reviewed available options for the O&M Contract including engaging the County's Miami-Dade Transit Department (now the Department of Transportation and Public Works (DTPW)) to perform O&M. It was determined that it would be in the best interest of the Airport and the County to award Phase 2 O&M to CMSI.
- June 15, 2010 - MDAD prepares Resolution No. R-694-10 for BCC approval including the original Contract language for an initial 5 year period with options for 5 separate 1 year extensions.
    - This approach was amended by the BCC Resolution No. R-694-10 (June 15, 2010) to require that any extension to the initial 5 years of O&M were subject to BCC approval.

    - Resolution No. R-694-10 approved award of the O&M services to Crystal Mover Services for an initial 5 year period only (September 14, 2010 - September 14, 2015).
- 2015 - MDAD begins to consider a grievance filed by TWU against the airport (original grievance was in 2014) indicating their rights to perform O&M for the MIA Mover APM. MDAD begins to review this option and other options for continued O&M services of the MIA Mover and any potential TWU claims on the Skytrain APM.
- September 2015 - With the O&M contract with CMSI expiring on September 14, 2015, MDAD Contract Modification I.0. 3-38 was issued to extend the current O&M provisions for a period of no more than 180 days in order to allow MDAD sufficient time to process and obtain BCC approval for a proposed new (OTR) 5 year O&M Contract with CMSI. (This Contract Modification ultimately extended O&M services with CMSI through March 2016).
- October 15, 2015 - Resolution No. R-1065-15 was amended by Trade and Tourism Committee from the proposed new (OTR) term of 5 year contract for CMSI to a period of 1 year. On December 1, 2015, BCC approved Resolution No. R-1065-15 extending O&M services to CMSI for a one year period (March 1, 2016 - March 1, 2017).
- February 7, 2017 – BCC approved Resolution No. R-99-17 extending the O&M services for a 4-year term to CMSI (March 1, 2017 - March 1, 2021).

  Special Note: To address the requests by the Committee/Board to review synchronization of procurements, MDAD began preparation of a combined O&M agreement for both APM systems. In the same timeframe the Transit Worker Union (TWU) formally filed a grievance asserting that the TWU was required to be provided the opportunity to handle the O&M on the MIA Mover and potentially other MIA APM Systems with Transit (now DTPW) employees. On September 26, 2017, after several months of discussions and negotiations it was determined to be in the Airport and County's best interest to keep O&M services with CSMI. The determination was based on the criticality of the APM System to airport operations, system service availability, liability, responsibility, and safety. A settlement was reached with TWU in the amount of $3,600,000 whereby the TWU relinquished any perceived rights to operate and maintain the airport APM's. The settlement was unanimously approved by the BCC on January 23, 2018.

BEST INTEREST OF THE COUNTY/UNIQUENESS OF THE PRODUCT:

CMSI is a local firm with their headquarters based in Miami, Florida. CMSI in coordination with MHI/MHIA is the only O&M provider authorized by MHI (the Original Equipment Manufacturer (OEM)) to perform O&M on their equipment. MDAD purchases a large majority of parts through the OEM. A third party would still need to procure those parts from the OEM causing MDAD to incur markups to those parts. Additionally, the 10 trains under the maintenance contract are currently under perpetual heavy overhaul for the

remaining life of the system. The anticipated completion date for the current six year overhauls extends beyond the current contract expiration to August 2021. This will be followed immediately by the next 3 year overhaul and so on for the life of the system.

CMSI has been consistently responsive in all aspects of the services required in the current O&M agreement, operating above minimum contract requirements. For example, in the critical System Service Availability component of the existing agreement, the contract requirement is 99.5%, they've produced 99.75%. System Service Availability and the overall safety of the APM System is heavily dependent on detailed knowledge of the proprietary systems and their operational requirements. There have been 2 recent instances in which a third party took over the O&M of APM Systems and they were not successful. Here at MIA, one of two trains overshot the station resulting in the total loss of the vehicle and other APM equipment. MDAD incurred significant cost for this incident and the System had to be completely replaced by MDAD with a new APM System. At another airport, an O&M worker was killed due to lack of knowledge of proper operational requirements during maintenance. The System was turned back over to the OEM.

MARKET RESEARCH:

Market Research was conducted to review similar airports' APM Systems. Each APM System reviewed had its own unique characteristics, physical layouts and technical requirements, so direct comparison from one specific system to the next is not practical; however, some correlation can be drawn. Exhibit A provides an overview of eleven major APM Systems in the United States that have been procured or significantly extended since 1999, including three APM Systems at Miami International Airport. Six of the eleven APM Systems procured have extended original contracts with the Original Equipment Manufacturer (OEM). The other five APM Systems are still in their original contract with the OEM. Additionally, in comparing the pricing proposed for the North Terminal APM System, the yearly maintenance price per car and per station both fall at the midpoint as compared to other Systems. Price per staff and per mile are above the midpoint; however, it is noted that the North Terminal System is a very condensed system with 4 split international/domestic stations and 14 switches over a system less than a mile in length. Based on this information, it can be concluded that the pricing provided is well within industry standard.

Lastly, MDAD reviewed the cost associated with replacing this APM system with new a new system. System replacement costs are roughly estimated to be around $170 - $200M and with another $200M for the O&M costs associated for the new system (not including the potential purchase of 4 additional vehicles). This estimate does not include the costs associated with rebuilding the stations and tracks that will be necessary to accommodate any new technology being purchased. Moreover, there will be operational deficiencies associated with an approximate 3-year period in which no train service would be available to the airport due to different technologies and requirements for the systems being transitioned. Once the new system is implemented, at around 6th year following the installation of the new system, heavy overhauls would begin anew, thus initiating the proprietary component of that new system. Consequently, although a replacement

system would be new, it would lead to the identical position with proprietary technology once heavy maintenance cycles begin and leave the airport without an APAM system for approximately 3 year. Lastly, MIA Mover staff under a separate contract with MDAD is based on shared management and resources with the Skytrain APM System. A change to a new system would also potentially lead to CMSI requesting additional compensation on the MIA Mover O&M to replace partial staff in full.

PROPOSED ACTIONS:

The Department will continue to assess the County's needs and monitor the market prior to future acquisitions. The APM industry is a very small competitive market utilizing highly proprietary and safety sensitive technologies which require detailed knowledge unobtainable from a third-party supplier. With the understanding of the complexities and liabilities of the APM Systems, the Department has competitively bid two additional APM contracts which have both included fixed pricing for 15 years of O&M. In this manner, the Department establishes a highly competitive bidding environment utilizing all available/interested APM Suppliers at the time of bid.