

EXPLANATION OF CONSENT AGENDA ITEM E.1.c.(6) – June 22, 2016

ITEM

Consideration of authorizing staff to utilize the competitively bid Cincinnati/Northern Kentucky International Airport's Contract No 15-113RFP awarded to Gatekeeper Systems, Inc for commercial vehicle management (CVM) software and further authorize staff to issue purchase orders pursuant to this contract for an amount not to exceed \$350,000 over 5 years. (Lorusso/Dubea)

EXPLANATION

Background:

The Canaveral Port Authority (CPA) is requesting permission to purchase Commercial Vehicle Management Software (CVMS) to toll and effectively manage commercial traffic at the north and south cruise terminals.

Currently, there is approximately 1000 commercial limousine, TNC (Uber/Lyft), van shuttle, and bus operators permitted to service passengers at CPA's terminals. To date, CPA has not had a complete Ground Transportation Management or Commercial Vehicle Management System. The CVMS will affect our ability to:

- Facilitate and streamline the entire Commercial Vehicle Permit process while minimizing administrative efforts;
- Provide an extensive, centralized database with information related to all permitted operators, vehicles, and drivers;
- Accurately account for all commercial vehicle activity;
- Enforce ongoing commercial permit requirements;
- Invoice and collect payment;
- Make more efficient use of limited terminal curbside space and control the movement of commercial vehicles at CPA's terminals.
- Improve customer service levels and create new sources of revenues directly tied to the movement of commercial vehicles.

After evaluating multiple CVMS systems, CPA staff selected Gatekeeper Systems' CVMS. The software has been successfully implemented at more than 30 airports of all sizes, each designed and configured to meet the specific needs and requirements of the port authority. In the State of Florida, the software is operational at Port Miami, Miami International Airport, and is being installed at Orlando International Airport (OIA). CPA staff corresponded with staff at Port Miami and OIA, who both gave Gatekeeper very good reviews.

Implementation costs for Gatekeeper's CVMS will be \$85,000. The operating budget includes licensing and support of \$250,000 spread over 5 years (Year 1: \$44,000, Year 2: \$46,640, Year 3: \$49,439, Year 4: \$52,406, Year 5: \$55,549). In addition, a contingency of \$15,000 is budgeted

Current Action Details:

Consideration of authorizing staff to utilize the competitively bid Cincinnati/Northern Kentucky International Airport's Contract No 15-113RFP awarded to Gatekeeper Systems, Inc for commercial vehicle management (CVM) software and further authorize staff to issue purchase orders pursuant to this contract for an amount not to exceed \$350,000 over 5 years.

Funding Review by Finance (Pat Poston): This item contains both capital and operating expense. The initial \$85,000 for implementation will be capitalized. It is included in the FY16 Capital Budget and no change is required. [Project 1860 – Financial System Upgrade]. The annual operating expense of \$44,000 for FY16 is included in the Operating Budget and no change is required.

STAFF RECOMMENDS APPROVAL

Prepared by Mark Lorusso & Jim Dubea

Mark Lorusso

GATEKEEPER COMMERCIAL VEHICLE MANAGEMENT SOFTWARE

Introduction

The implementation of a Ground Transportation Management (GTM) System, frequently known as an Automated Vehicle Identification or AVI system, to monitor, track, control and record commercial vehicle operations at airports is an effective method of improving overall landside operations, reducing congestion as well as vehicle omissions, and collecting fees directly related to vehicle usage of airport roadways and curbside areas.

Historically, some “Ground Transportation” operating functions have been limited in their options due to the significant amounts of labor required and their paper-intensive format. However, by installing a GTM system that combines existing Radio Frequency Identification (RFID) technology with specialized software, many airports have significantly improved the results of their ground transportation operations.

The Ground Transportation Systems implemented by GateKeeper Systems, Inc., is a powerful tool that will significantly affect your airport’s ability to:

- ◆ Make efficient use of limited curbside space and control the movement of commercial vehicles at your airport.
- ◆ Create new sources of revenues that are tied to the use of your facilities.
- ◆ Improve customer service levels for your ground transportation services.
- ◆ Gather extensive information on the commercial vehicle activity at your airport

CVM Software Major Functions

The combination of RFID hardware, computer equipment, lane equipment, and software, results in a system that will greatly improve your ground transportation operation. This section discusses the major features of the system that are accessed by the GateKeeper Systems Commercial Vehicle Management (CVM) software.

To respond to the variety of airport sizes and commercial vehicle activity levels, the GateKeeper Systems CVM software is available in both Silver and a Gold version. The Silver version is intended for airports with simple roadway systems, low volumes of vehicle activity, and a desire to phase in the implementation of a GTMS solution. The Gold version will be appropriate for larger airports with a need to monitor large vehicle volumes and a desire to implement a comprehensive GTMS solution at the start. The Silver version can be expanded and upgraded by adding CVM modules and more server capacity without interrupting the operation of the original system.

Administrative Functions

A simple and intuitive user interface has been developed to allow the user to navigate through the system quickly and easily. The “Home” page is shown below that is used to access all of the features and

functions of the software:



An “Account” page displays all the information being stored related to each account and vehicle or driver registered in the system.

- ◆ **Account/Vehicle/Driver/Access ID Administration-** The software enables you to create a simple or an extensive database of information on each vehicle, company, owner or driver registered in the system that can be used to maintain insurance files, violation histories, activity levels, payment data or other key information. The following functions are provided for the user to accomplish the daily tasks that are necessary to operate the system.

To reduce the amount of administrative time for the creation and editing of accounts and vehicles, the software can be configured to allow your ground transportation users to enter their own information over a secure website. Once the information is entered it is saved in a separate location for review and approval by your staff. Once approved the information is automatically saved to the live system.

- ◆ **Revenue Generation-**The software uses transaction information to develop appropriate charges, as identified by the airport. The CVM software has an extremely flexible trip fee function that allows the creation of an almost unlimited structure of fee types and levels without the development of any new software. At times the purpose of a fee is to modify behavior more than as a means to collect revenue. The CVM trip fee capabilities allow an airport to implement a wide range of business rules for fee collection. The following is a list of typical fee types can be provided by the system.
- ◆ **Vendor Website** The CVM software, has a module to provide the capability to minimize the administrative effort required by airport staff to maintain Ground Transportation (GT) Operator accounts as well as to allow these users to have access to their account activity information as needed without requesting help from the airport staff. This capability is a powerful tool that will significantly reduce the administrative effort required to keep up-to-date and accurate information for your ground transportation system. This capability is available through the implementation of a secure website that is exposed to outside users with the proper login and password. This website is an option for the airport and not required for normal operation of the CVM software.

Three basic functions are available through this website:

1. View Selected activity and Trip Charge Reports
2. Request modification to selected data fields in the account or its vehicles/drivers
3. Request the creation of a new Ground Transportation Account in the CVM software

4. Manage the “valid” vehicles for an account on a day to day basis. This applies to a situation where a company has more vehicles in their fleet than the airport allows on a specific day.

- ◆ **Payments and Accounts Receivable** -The software supports two approaches to providing the capability to generate invoices and maintain the necessary Accounts Receivable customer and accounting records.

Data Transfer to existing airport A/R - The software supports the creation of a file transfer function of the billing information created by the CVM software to the airport centralized invoicing and A/R system. The data may be output to a wide range of file formats.

Stand-Alone Accounting System- Where the airport desires to establish a separate Accounts Receivable system for ground transportation fees, GateKeeper Systems will provide “Microsoft Dynamics-GP” accounting software. This software is a full featured accounting system with extensive audit trail capabilities that can be configured for several payment options including automated credit card use.

- ◆ **System Configuration**-Many system functions can be modified or changed through the CVM software by an operator who has the necessary security approvals. All of the configuration can be done by the user without the need for any software development. Functions such as Trip Rate tables, vehicle types, size codes, use codes, and other operating parameters can be adjusted to monitor or enhance the flow of vehicles to reduce congestion on the roadways.
- ◆ **Security**- To maintain the integrity of the system and the privacy of data stored in the software, GateKeeper Systems has provided a security function that has the capability to create extensive flexibility in establishing users, user groups, and permissions to allow the access that is necessary. The permissions given to individuals or groups can be configured to restrict what people can view, create, or edit in the system.
- ◆ **Reporting**-A set of standard reports are provided with the system to provide airport management with the ability manage the various system functions and to take advantage of the significant amount of information generated by the systems. The reports help track activity levels and changes in use patterns, set rate formulas and identify violators of policies and regulations.
- ◆ **Enforcement**- A key component to the successful implementation of a GTM system is the enforcement of airport rules and regulations regarding the use of the commercial roadways at the airport. To assist with this function the CVM software has a “Citation” module that can be used to track enforcement actions taken against specific vehicles, drivers or companies. The system also has the capability to utilize a hand-held device that can read the AVI tag and access system information on that vehicle or company for verification purposes.

Operational Control Function

This segment of the software performs the tasks of real-time tracking and controlling of vehicle movements. The system can be configured for use with gated lanes where access and egress is controlled or “open” systems where the free movement of vehicles is allowed and the system monitors that activity. The software will also work in a mixed environment where some lanes are gated and others are open.

- ◆ **System Reliability and Status**- A key function in the CVM software is the built-in monitoring of the status of all of the RFID readers connected to the system. If at any time one or more readers are not receiving vehicle tag reads, the system will generate and send a notification to the proper support personnel. The screen shown below is a sample of the “Reader Activity” status display. The user can tell very quickly if any readers are in an “alarm” condition. Each reader has an allowable interval established that represents the maximum time between vehicle reads in normal operating conditions.

Tracking and Dispatch Modules

The CVM software has been developed in modules so that it can be used in either a tracking and/or dispatch mode. The tracking mode is generally used to record the activities of commercial vehicles such as shuttle busses, courtesy vehicles, Limousines, and Vans as they enter and leave on their own schedule. It tracks their access, records activity, creates charges and performs other system functions as they move about the airport under the established regulations.

The software also has an optional "Dispatch" module that is used most frequently with taxicabs. This module creates one or more "areas" or queues to move cabs from holding areas to pick-up areas in the sequence you establish and under your rules. This mode of operation can be run in an automated mode that supplies a "target" number of cabs or it can be controlled by an operator who can handle special requests and unusual demand levels immediately. The sample screen shown below illustrates a configuration with one holding area and 2 terminal pickup areas.

In either mode, the software creates the following functions:

- ◆ **Access Control-** Verify the criteria (e.g. adequate balance, authorized access to the area, valid status) for entrance, egress, and vending (opening or closing) the vehicle gates as required. This also includes a "Remote" gate vend capability that allows the operator to open the gate from a workstation if necessary.
- ◆ **Tag Status-** The software maintains the various "status" options for tags. Tags may be Valid or Invalid based on criteria such as non-payment of fees, insurance expiration or other criteria established by the airport. Time Zones and Space Zones may also be created to restrict access by time blocks and by specific locations.
- ◆ **Device Communications**—The software also contains functions for maintaining the necessary communications between the signs, video monitors, entry and exit devices, computers and other system components.
- ◆ **Vehicle Counts-** If desired, the airport can add a "Count" module that can be used with inductive loops installed in the pavement to count all vehicle traffic on a road, entry lane, or exit lane.
- ◆ **Hot Tag List-** A single vehicle or all vehicles assigned to a company can be marked to generate an immediate notification to the user if they are detected by any of the readers in the system. The notification can be used to direct enforcement personnel on the roadway to the current location of the vehicle.
- ◆ **Mobile Devices-** The system has the capability to incorporate the use of handheld wireless devices to enhance the use of the system on the roadways or areas around the terminal. A handheld RFID reader is available to support the enforcement function to verify that vehicles have active, valid tags on the vehicle. Handheld computers can also be used to expand the effectiveness of the dispatch module by giving curbside personnel the capability to send commands to the system and to monitor the status of vehicles that are being sent to pick-up locations.

GateKeeperTNC-Ops Software

With 18 years' experience automating airport land-side operations along with a keen understanding of TNC/rideshare operations, **GateKeeper Systems** has leveraged our widely used Commercial Vehicle Management software to develop GateKeeperTNC-Ops™. GateKeeperTNC-Ops™ Software receives data from the TNCs' systems, such as Lyft and Uber, when TNC vehicles are reported on your roadway through the deployment of geofence technology. The software helps you meet your oversight responsibility and provides you an opportunity to:

- ◆ Create TNC support data for airport invoice system;
- ◆ Enhance enforcement with mobile curbside application; and
- ◆ Audit vehicle trip data with Trip Charge reports.

GateKeeperTNC-Ops is an affordable, reliable, easy-to-implement option to evaluate for addressing TNC activity and revenue potential at your airport.

GateKeeper Systems, Inc.

GSI is among the first companies to provide a turnkey approach to airports for the purchase and implementation of complete access control systems. We have brought together people with extensive management experience at airports, including the ground transportation function and people with unequalled success in developing software for commercial vehicle operations and parking access control to assure the delivery of the benefits available from technology based systems. GateKeeper Systems and TransCore LC have formed a unique strategic partnership to join forces in the airport market to deliver the highest quality AVI solutions at an affordable cost.

Currently GateKeeper System has 27 airport/port customers of all sizes, using its GTM solution, including:

Albuquerque International Sunport	Philadelphia International Airport
Queen Beatrix International Airport (Aruba)	Phoenix Sky Harbor International Airport
Nashville International Airport	Port of Miami
Boston-Logan International Airport	Raleigh-Durham International Airport
Charlotte Douglas International Airport	Reno-Tahoe International Airport
Ronald Reagan Washington National Airport	Southwest Florida International Airport
Denver International Airport	San Diego International Airport
Eagle County Regional Airport	Seattle-Tacoma International Airport
Ft. Lauderdale Hollywood International Airport	Mineta San Jose International Airport
Washington Dulles International Airport	Salt Lake City International Airport
McCarran International Airport	Sacramento International Airport
Miami International Airport	John Wayne Airport
Monterey Regional Airport	Winnipeg James Armstrong Richardson International Airport
Portland International Airport	

More detailed information on the benefits of a GTM system as well as the GateKeeper CVM software, is available on the GateKeeper Systems, Inc. website- www.gksys.com In addition, a demonstration of the system can be easily arranged using a website without any special software.

If you would like more information, schedule a software demonstration, or would like to discuss how a Commercial Vehicle Management system would benefit your operation, please contact:

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