

**Lee County Board Of County Commissioners
Agenda Item Summary**

Blue Sheet No. 20051234

1. ACTION REQUESTED/PURPOSE: Request Board endorse the Orlando Airport design model for the implementation of a transponder system for parking at the Southwest Florida International Airport and the assignment of responsibilities regarding the system's management and operation.

2. WHAT ACTION ACCOMPLISHES: Allows Lee DOT and LCPA to begin the process to allow transponders to collect parking fees electronically at the Airport Parking Facility.

3. MANAGEMENT RECOMMENDATION: Recommend Board endorse the design model, and the assignment of responsibilities regarding the system's management and operation. This same action was approved by the Board of Port Commissioners on 9/12/05.

4. Departmental Category:

CQA

5. Meeting Date: *10-11 2005*

6. Agenda:

- Consent**
- Administrative**
- Appeals**
- Public**
- Walk-On**

7. Requirement/Purpose: (specify)

- Statute**
- Ordinance**
- Admin. Code**
- Other**

8. Request Initiated:

Commissioner _____
Department Transportation
Division _____
By: Scott Gilbertson

9. Background:

The Southwest Florida International Airport (RSW) Midfield Terminal Complex includes limited transponder capabilities for the commercial vehicle lane and no transponder capabilities for the general public parking areas. The transponder system for the Midfield Terminal Complex is being installed solely for the purpose of managing commercial vehicle trips and dwell times on the commercial curb and does not integrate with the LeeWay or other transponder systems. Many challenges and questions exist when considering operating both the commercial curb and future public parking transponder systems at RSW. Meetings have been held between the consultant team, Lee County DOT, and Port Authority staff to review two models (Orlando Airport and SunPass) in regards to these questions. These parties recommend use of the Orlando Airport model. See the attached Powerpoint slides for more information.

CONTINUED ON PAGE 2

10. Review for Scheduling:

Department Director	Purchasing or Contracts	Human Resources	Other	County Attorney	Budget Services			County Manager/P.W. Director
					Analyst	Risk	Grants	
<i>S. Gilbertson</i> Date <i>9/10/05</i>				<i>JK</i> <i>9/10/05</i>	<i>RR</i> <i>9/15</i>	<i>os</i> <i>9/12/06</i>	<i>MA</i> <i>9/20/05</i>	<i>J. Lavender</i> Date _____

11. Commission Action:

- Approved**
- Deferred**
- Denied**
- Other**

RECEIVED BY COUNTY ADMIN:
<i>9/10/05</i> <i>SB</i>
FORWARDED TO:
<i>9/22</i>
<i>4:30</i>

REC'D <i>9/16/05</i>
<i>3:00 PM</i>
CO. ATTY.
FORWARDED TO:
<i>C. Mac</i>
<i>9-16-05</i>

7. BACKGROUND (Continued):

In addition, the following responsibilities are proposed:

1. Based on recommendations from LCDOT, the LCPA will design, construct and install the LCDOT recommended RSW Transponder System for the RSW Midfield Terminal Complex public parking areas, incorporating the RSW commercial curb.
2. LCPA and LCDOT staff will work cooperatively to develop a common set Business Rules for the development and operation of the RSW Transponder System.
3. Based on the design and Business rules, LCPA and LCDOT will develop and enter into a Memorandum of Understanding whereby LCDOT/LeeWay will be responsible for administering and managing the RSW Transponder System, with administrative costs reimbursed by the LCPA.

Southwest Florida International Airport

Automated Vehicle Identification (AVI) System

Project Status

HM/MSXI Experience

- MSXI was the System Consultant for the Orlando Airport (OIA) Project:
 - Developed Business Rules and Requirements
 - Tracked Project Schedule
 - Provided Equipment Specifications
 - Developed and Executed Test Plan

Background of AVI

- Used for vehicle tolling for over 15 years
- Airport parking applications introduced in late 1998 at DFW
- Other airports followed - 7 today
- Pilot projects for McDonalds payments and MBTA (Massachusetts) transit park and ride fees

RSW AVI Objectives

- **Make AVI technology available to airport parkers**
- **Research other airport AVI projects**
- **Evaluate compatibility with other AVI systems (LeeWay & SunPass)**
- **Establish an AVI model that best fits the RSW market**
- **Provide recommendations for an RSW AVI program**
- **Discuss administration of an airport AVI program**

Other US AVI Airports

- US Airports (outside Florida)
- PANYNJ Airports: JFK, LaGuardia and Newark
- Albany NY
- Dallas-Ft. Worth
- Kansas City International

Other Florida AVI Airports

- Orlando International - operational since February 2005
- Palm Beach International - planned
- Fort Lauderdale International - planned

AVI Airport Models

- **Orlando Airport Model**
- **SunPass Proposed Model for West Palm Beach Airport**

Orlando Airport Model

- Orlando Orange County Expressway Authority (OOCEA) serves as home agency. Osceola County (O-PASS) and Florida's Turnpike Enterprise (SunPass) send and receive files through OOCEA using a batch system as described below.
- Toll agencies send a list of eligible transponders to airport nightly
- Airport parking system sends nightly files to toll agencies:
 - Completed AVI parking transactions
 - List of AVI vehicles remaining in parking facility and their accrued fees
- Toll agencies process files nightly:
 - Completed airport parking transactions into customer accounts
 - Replenishments into customer accounts
 - E-mail airport parking receipts to customers
 - Daily funds reconciliation
- Toll agencies transfer funds to airport weekly

Orlando Airport Model Pros & Cons

- **Pros (advantages)**
 - Operational system in production at Orlando Airport for six months
 - In first month of OIA operation nearly \$700,000 revenue via AVI (which is equal to 23% of total parking revenue)
 - Back office toll agency software easily ported from OOCEA to LeeWay
- **Cons (disadvantages)**
 - Batch system
 - SunPass has indicated they only want to participate in real time solution.
 - Requires a reliable method of determining when a vehicle enters with AVI and pays cash on exit. This can be accomplished by installing an antenna in a position where it collects reads from all AVI-equipped vehicles leaving the airport parking facility

SunPass Proposed Model

- **Basic Operating System**
 - Real time system. On exit, checks for sufficient toll account balance on the spot. If credit card on file and additional funds are needed to cover the parking fee the credit card is charged while customer is in the exit lane.
- **Pros (advantages)**
 - No need for nightly checking to determine whether the toll account balance needs to be replenished to cover accrued parking fees
- **Cons (disadvantages)**
 - Unproven/untested
 - LeeWay would require real time software and communications changes because of difference between batch and real time processing
 - Potentially higher cost and longer schedule
 - Would be more restrictive to cash-paying LeeWay customers

Other Considerations

- Interoperability with other Florida Toll Agencies is possible in the future, but would require additional interagency agreements
- Presently 4% of transponders on LeeWay toll facilities are SunPass and less than 1% are E-PASS
- Mixing airport and toll agency revenues will require increased auditing

Early Recommendations

- Utilize Orlando Airport Model as basis for RSW design
- Dynamic Situation subject to change as the project & technology evolve
- **Pros (advantages)**
 - LCDOT supported
 - Timing - 6-9 months vs. 1+ year
 - Ease of Implementation – Leeway can reuse code developed by OOCEA
 - Customer Service – available to all LeeWay customers
 - Currently Operating System – In use today
 - Business Rules – Existing guide vs. TBD
- **Cons (disadvantages)**
 - Risk of insufficient funds in AVI account on exit – not known in real time

Next Step?

- **Work with LCPA and LCDOT to develop RSW AVI Business Rules**
- **Complete the Design of the System**
- **Prepare Cost Estimate and Schedule**
- **Prepare MOU between LCPA and LCDOT for administration of the AVI System**
- **Bid and Install System**
- **Test and Operate**

Questions?