

Memorandum



Date: August 21, 2012
To: Honorable Chairman Joe A. Martinez
and Members, Board of County Commissioners
From: Carlos A. Gimenez
Mayor 
Subject: Report on Feasibility of Providing Free Wi-Fi at Miami International Airport

At the June 11, 2012, Regional Transportation Committee meeting, Commissioner Dennis C. Moss requested the Miami-Dade Aviation Department (MDAD) submit a report to the Board of County Commissioners (Board) on the feasibility of providing free Wi-Fi service at Miami International Airport (MIA). The report was to include costs to create additional capacity and whether these costs could be offset through sponsorships.

Wi-Fi service has been available to passengers at MIA since early 2005, beginning with a deployment at the Miami International Airport Hotel. In 2006, MDAD initiated a competitive RFP process to select a company to develop and operate a program for paid public Wi-Fi service. On May 6, 2008, pursuant to R-461-08, a local Miami firm Electronic Media Systems Inc. (EMS) was awarded that contract. EMS and its subsidiary AWG operate public Wi-Fi services at multiple U.S. airports under various business models and have proven to be a good partner to MDAD. The current agreement expires in June 2015.

Fiscal Impact

The physical network infrastructure at MIA is owned and operated by the Department and supports a multitude of both wired and wireless customers. MDAD's total investment in the network infrastructure is estimated at \$10 million. Infrastructure improvements specifically allocable to public Wi-Fi service are estimated at \$1.4 million to date.

Operating expenses for the program are shared between MDAD and EMS. EMS is responsible for operational costs, including the portal, advertising sales, credit card processing and customer support. MDAD is responsible for costs of the network infrastructure, including maintenance and Internet circuit capacity. Annual MDAD operating expenses allocable to public Wi-Fi service are currently budgeted at \$200,000.

Revenue is generated from both network usage connections and sponsorship/advertising. Connection revenue is subdivided into retail (paying for access via credit) and roaming (access via a subscription account with a third-party such as Boingo, iPass, or T-Mobile).

MDAD receives an industry-high revenue share of 65 percent on connection revenues and a 50-percent share on sponsorship and advertising. The table below summarizes revenue generated to MDAD since the program's inception through May 2012.

<u>Category</u>	<u>MDAD Revenue</u>
Connection Revenue	
- Retail Sales	\$2,156,000
- Roaming Access	\$745,000
Sponsorship / Advertising	\$548,000
Total	\$3,449,000

The Google Program

From November 15, 2009, through January 15, 2010, Google sponsored a nationwide Holiday Program campaign providing free Wi-Fi access in 54 U.S. airports. Fees were negotiated by Google on a venue-by-venue basis, with MIA receiving one of the highest payments in the nation. However, there is little

basis for the ongoing value of sponsored Wi-Fi to be drawn from this program as the Google rates ranged all over the chart based upon negotiations with each airport. For example, the Department negotiated a very generous payment from Google, but is aware of several similar-size airports which were paid one fifth of the amount paid to MDAD. The Google program was a short-term, likely one-time offer that does not represent an accurate baseline to predict future revenue

Revenue Trends

Contrary to many forecasts, revenue from paid Wi-Fi service has continued to trend upward. Analysis suggests this is being driven by the rapid growth in mobile device adoption (iPad, tablets, smartphones). The attached chart (Attachment 1) shows this trend in detail. Credit card sales show the most dramatic growth with roaming revenue trending upward and advertising relatively stable. The most obvious exception to advertising is the effect of the Google program as discussed above.

Complimentary Wi-Fi

In 2010, the Department was tasked by the Citizens Transportation Advisory Committee (CTAC) to explore provision of free Wi-Fi access at MIA. Over the course of 2011, MDAD looked for ways to offer free Wi-Fi access to passengers while managing revenue concerns and contractual commitments. The objective of the free Wi-Fi program was three-fold. The first was to ensure that the traveling public has unfettered access to websites that may be needed to alter or complete their journey, such as hotels, car rental companies, Miami-Dade tourist sites, etc). The second was to minimize the diminution of critically needed revenue to MDAD. The third was to minimize any incremental cost to MDAD for implementing the free Wi-Fi program. During that time, EMS brought several options to the Department for consideration. As a result of negotiations between MDAD and EMS, in November 2010 MIA offered free public Wi-Fi access to Miami tourism-related websites in time for the holiday period. In conjunction with CTAC, the Department made a formal announcement of the ongoing availability of these services.

Based upon MDAD discussion with CTAC, unlimited, sponsored, free access to the public is currently provided to the following websites:

- All MIA airlines
- All MIA car rental partners
- Select local hotels
- Select local community, tourism and government
- Miami International Airport

EMS has also negotiated more than 50,000 free sessions since the program's inception by working with sponsors such as American Express, Lowes and Hewlett Packard. These sessions are implemented only when a premium value can be negotiated with the sponsor as this is critical to preserve the viability of the primary paid-revenue stream.

The current semi-free program appears to have created a negative impact on revenues as suggested in the attached revenue chart. However, insufficient time has elapsed since program launch and the subsequent CTAC/MDAD press release to accurately predict medium-to-long-term financials of this program. The Department remains comfortable with initial projections.

Projected Fiscal Impact of Full-Scale Complimentary Wi-Fi

In addition to exploring and implementing some of the revenue opportunities associated with complimentary Wi-Fi as discussed above, MDAD has conducted parallel analysis of the projected financial impact of implementing a full-scale free Wi-Fi program.

It is clear from research of other airports that free Wi-Fi access decreases revenue and carries higher costs required to support the increased usage. For example:

- 1) During San Francisco's paid Wi-Fi program, annual revenue approached \$2 million but have since been reduced to \$250,000 even though the operator is making a \$500,000 investment in network upgrades and absorbing approximately \$200,000 annually in operating expenses.

- 2) Los Angeles Airport indicated a projected annual income loss of \$750,000 associated with its conversion to a free Wi-Fi program. In addition to significantly higher annual operating costs, Los Angeles projects a minimum investment of \$700,000 to upgrade its network.

Further analysis of the industry indicates the following usage increases when converting from paid to free access:

- User sessions grow approximately 10 times from the current two (2) percent of enplaning passengers to approximately 20 percent.
- Bandwidth demand grows approximately 30 times exponential to user growth.

Revenue associated with free Wi-Fi is generally derived from sponsors willing to fund a complimentary session for a user in exchange for viewing in advance a 30-second video or similar advertisement. There is a simple supply-and-demand relationship to be managed in terms of attaining the best price for free sessions. From analysis of other airports, this model has a revenue potential of approximately one fifth the current value per session which, combined with a projected 10 times session increase, would leave MDAD with approximately 50 percent of today's revenue before tackling increased costs.

Therefore, the Department is currently projecting total impact of a full transition to free Wi-Fi as follows:

Category	Cost
Capital Expenditures	\$1,000,000
Operating Costs Increase (Annual)	\$250,000
Revenue Decrease (Annual)	\$600,000
Projected Impact – Year 1	(\$1,850,000)
Projected Impact – Year 2+	(\$850,000)

Because the Department has an Agreement in place with EMS for operation of the Wi-Fi network expiring in June 2015, modifications to the Wi-Fi program will require considerations to this Agreement which may negatively impact the Department financially.

In addition, it should be noted that seamless Wi-Fi service (full integration with no impact or degradation of service) is delivered throughout the Miami International Airport Hotel, generating approximately 10 percent in additional revenues paid to the Hotel which will be similarly impacted. This is relevant in that MDAD receives revenue generated from the hotel. Wi-Fi was established in the hotel to increase its viability and rating as a world-class airport hotel.

Please feel free to contact me or Jose Abreu, P.E., MDAD Director, at (305) 876-7077 should you have any further questions.

Attachment

c: Jack Osterholt, Deputy Mayor
Jose Abreu, P.E., MDAD Director

MDAD Public Wi-Fi Contract - MDAD Net Revenue Analysis by Source - Monthly

