

ANALYSIS OF OPERATING REVENUE ENHANCEMENT OPPORTUNITIES FOR MIAMI-DADE TRANSIT PHASE II



DRAFT REPORT
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Prepared for:
Miami-Dade County Citizens' Independent Transportation Trust

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I. Executive Summary

Background and Purpose

This report was requested by the Miami-Dade County Citizens' Independent Transportation Trust (CITT) as the third in a multi-year series of studies designed to help improve the financial outlook of Miami-Dade Transit (MDT). MDT is the largest transit agency in the State of Florida and is the primary public transit agency in Miami-Dade County. It operates four modes: Metrorail, Metromover, Metrobus, and Special Transportation Services. MDT is also responsible for construction and equipment programs and projects, which have been financed, in part, through proceeds of the Charter County System Transit Sales Surtax. This ½ cent tax and the People's Transportation Plan (PTP) were approved by the voters of Miami-Dade County in 2002. The voters also approved the establishment of the CITT to oversee the expenditure of the surtax funds.

The MDT Pro-Forma financial forecast, which has been presented publicly on a number of occasions, looks at the long-term expenses and revenues projected to be available to MDT. The Pro-Forma confirms that, as debt service expenses for surtax-backed bonds increase, the amount of surtax funds available for MDT operations and maintenance reduces significantly. The August 2011 update of the Pro-Forma indicates that an operating funding gap will exist, beginning with \$36 million in 2014.

The purpose of this report is to build upon the Revenue Enhancement Opportunities Phase I report of 2010, which identified and evaluated the full spectrum of alternatives for increasing revenues for MDT. The Phase I report examined the sources of funds utilized to support transit locally, nationally and internationally, without filtering by factors such as feasibility or efficiency.

In a previous assignment, Infrastructure Management Group (IMG), with Planning and Economics Group (the "Research Team" or the "Team"), identified several financing alternatives potentially applicable in Miami-Dade County, including joint development agreements, naming rights, park-and-rides, and partnerships with the Miami-Dade Expressway Authority (MDX), Florida Department of Transportation (FDOT), Florida's Turnpike Enterprise (FTE), and other agencies or municipalities. The results of that analysis were presented in a report titled "Evaluation of Innovative Financing Opportunities for Miami-Dade Transit," delivered in November 2009.

This report, Phase II, goes beyond the Phase I framework to develop an implementation plan for the selected potential revenue streams that includes the required steps, responsibilities, cost, and challenges, as well as the likely range of revenue for MDT. This report shows the total potential revenue of the shortlisted revenue programs and how they contribute to fill in MDT's \$36 Million deficit in FY 2014.

The goal of Phase II is to analyze the following potential system and non-system revenue enhancers:

1. System Revenue
 - a. Advertising and marketing revenues, including domination advertising opportunities at rail and Metromover stations
 - b. Naming Rights
 - c. Right-of-Way Leasing, particularly for billboards and cell towers

- d. Premium fares for the new Airport Link
- 2. Non-System Revenue
 - a. *Land Development Charges—Impact Fees*
 - b. Business Licensing Fees
 - c. *Non-Transit Parking Fees*
 - d. Tolling
 - e. Utility Fees
 - f. *Local Gas Tax*

The Research Team was tasked to provide detailed information for each of these except for the three italicized revenue enhancements, which will be handled in-house by OCITT staff.

In addition, due to lack of sufficient data for analysis, revenue projections could not be made for Right-of-Way Leasing and Airport Link fares. The report does discuss key aspects of the available data in the Appendix.

Methodology

Based on Phase I research and additional literature reviews and discussions with County staff and outside experts, the Research Team developed an appropriate methodology for each of the seven revenue enhancement areas it was tasked with for Phase II work. These methodologies are detailed in the chapters below for each area and are summarized in this section.

For advertising, the Team first conducted an inventory of potential assets not currently being offered to advertisers that could generate revenue for MDT. Interviews were conducted with MDT and other County staff to assess the issues and implementation involved for each asset. The Team then utilized the industry best practice of estimating the media value of new advertising assets based on the number of “impressions” (i.e., the number of times the advertisement is viewed).

For business fees, tolling, and utility fees, the Team analyzed data regarding the current number of users and fees for each area. Models were developed for each source estimating the revenue that could be generated by either directing a portion of the revenue to MDT or adding an incremental fee that would be directed to MDT.

For all revenue enhancement areas, the Team reviewed ordinances, policies, and other documents to understand the procedures by which funds would be provided to MDT, and the issues that would affect implementation. Interviews with County staff, industry experts, and legal counsel advised this process.

Key Findings

Projected Revenue

The revenue enhancements analyzed fall into two general categories as follows:

Category 1: Market value assets

Advertising and naming rights revenues are based on estimation of the media value of assets that could be utilized for these purposes, but are not currently significant revenue sources for MDT. It is therefore possible to develop a range of likely revenue to MDT depending on assumptions of the market value. Where unit rates were available from past MDT or contracted marketing efforts, those rates were multiplied by the number of available opportunities. As shown in the following table, the Team identified a wide range of potential assets that MDT could use to increase advertising. Advertising and naming rights could yield between \$3.46 and \$13.66 million in annual revenue to MDT if all the reviewed advertising assets and naming rights were applied.

Revenue Source	Low Case		Base Case		High Case	
	Total Media Value	MDT Expected Revenues*	Total Media Value	MDT Expected Revenues*	Total Media Value	MDT Expected Revenues*
Metrorail Stations (including station pillars/billboards)	\$ 708,000	\$ 285,000	\$ 2,407,000	\$ 1,075,000	\$ 3,204,000	\$ 1,366,000
Metromover Station Ads (Station Pillars, interior walls, clocks, etc)	\$ 559,000	\$ 280,000	\$ 1,822,000	\$ 911,000	\$ 1,762,000	\$ 881,000
MetroMover Vehicle Interior Ads	\$ 415,000	\$ 249,000	\$ 715,000	\$ 429,000	\$ 948,000	\$ 569,000
Wrap Advertising on Metrorail Cars	\$ 2,500,000	\$ 1,500,000	\$ 4,896,000	\$ 2,938,000	\$ 6,000,000	\$ 3,600,000
Wrap Advertising on Metromover Cars	\$ 650,000	\$ 390,000	\$ 1,218,000	\$ 731,000	\$ 1,575,000	\$ 945,000
Surface Parking, Parking Garages, and Park and Rides (including parking pillars and wall ads; not including Kiosks)	\$ 96,000	\$ 48,000	\$ 698,000	\$ 349,000	\$ 997,000	\$ 499,000
Kiosks along Busway	\$ 168,000	\$ 101,000	\$ 672,000	\$ 403,000	\$ 1,300,000	\$ 780,000
Guideway Pillars	\$ 140,000	\$ 56,000	\$ 2,852,000	\$ 1,141,000	\$ 8,069,000	\$ 3,228,000
Wall Advertising on MDT Buildings	\$ 120,000	\$ 36,000	\$ 480,000	\$ 144,000	\$ 1,080,000	\$ 324,000
Naming Rights	\$ 267,000	\$ 200,000	\$ 495,000	\$ 371,000	\$ 949,000	\$ 712,000
Domination Advertising-MetroMover and MetroRail	\$ 630,000	\$ 315,000	\$ 1,260,000	\$ 630,000	\$ 1,512,000	\$ 756,000
Total Potential Media Value	\$ 6,253,000	\$ 3,460,000	\$17,515,000	\$ 9,122,000	\$ 27,396,000	\$ 13,660,000

*MDT expected revenues is a weighted average based on expected share of revenue from each revenue source. Each source has its own expected revenue percentage.

Category 2: Usage Fees

Tolling, business taxes, and utility fees are different in that they represent fee increases on the users of these services. The revenue potential, therefore, is dictated by the amount of increase in these fees and/or carve-out of existing revenue for transit that the County would apply. Since the amount of these increases is not known, rather than estimating potential total revenue to MDT from these sources, this report focuses on the revenue generated by an incremental use of such funds for transit (i.e., the impact of a 1% increase or a \$1.00 fee). County leaders may then select a reasonable multiple for each fee to be provided to MDT.

The following table summarizes the potential revenue of the enhancements analyzed in this report.

Tolling

Tolling - Potential Revenues to MDT		
	Per 1% Surplus Carve Out	Per 1% toll increase
MDX	\$1,141,000	\$1,197,500
95 Express	\$6,400	\$171,400
<i>Tolling Total</i>	<i>\$1,147,400</i>	<i>\$1,368,900</i>

Local Business Fees

Business license fees per transaction vary from \$37.50 to well over \$100 depending on the business classification.¹ There are different rates based on whether a business lies in an incorporated or unincorporated area of the County.

On average, business taxes were \$95.64 per transaction in fiscal 2010. A rise in average transaction cost of 1% with the same number of ratepayers as 2010 would yield just under \$160,000. At this rate, it would require an average increase per transaction of 6.25% to raise an additional \$1M annually. If the rates are raised by the maximum 5% currently allowed by law (see "Implementation" section), the additional revenue would be \$799,720. As explained below, it is important to remember that even if these additional revenues were realized, it is unlikely that all of those revenues could be applied for MDT purposes.

Utility Fees: Water, Wastewater, and Electricity

1% Water Fee Increase - Potential Revenues*	
Average Monthly Bill	\$31.00
Transportation Fee	\$0.31
Monthly Transportation Fee Revenue	\$130,329
Annual Transportation Fee Revenue	\$1,563,945
1% Wastewater Fee Increase - Potential Revenues*	
Average Monthly Bill	\$54.92
Transportation Fee	\$0.55
Monthly Transportation Fee Revenue	\$185,815
Annual Transportation Fee Revenue	\$2,229,779
Electricity Account-Based Fee Potential Revenues*	
Account Type	\$1.00/account
Residential Customers	\$885,192
Commercial Customers	\$120,379
Industrial Customers	\$1,351
Monthly*	\$1,008,149

¹ http://www.miamidade.gov/taxcollector/ol_home.asp

Annual*	\$12,097,790
Electricity Usage Based Fee - Potential Revenues*	
Account Type	Revenue per \$0.0001 charged per kWh
Residential	\$1,253,327
Commercial	\$1,377,268
Industrial	\$71,232
Annual Kilowatt Hours (Thousands)	\$2,725,559

* Figures based on annual averages and rounded.

Implementation Issues

Each chapter of this report contains details about the process and issues that will affect the implementation of the various revenue sources. The difficulty and cost of implementation varies widely depending on the rate setting rules and procedures, the legal authority for directing funds from each source to MDT, administrative and operating issues, and likely political obstacles.

For **advertising and naming rights**, most of the solutions could be implemented currently or with changes only to County zoning ordinances. Exceptions include assets with maintenance issues (such as guideway pillars). The table below summarizes the required steps for implementation of the advertising program.

Table 12
Analysis of Operating Revenue Enhancement Opportunities for Miami-Dade Transit
Summary of Required Steps for Implementation

Revenue Source	State Legislative Action	County/Municipal Legislative Action	New Physical Structures for Ads	Possible Extension of Current Contact	Significant Political Obstacles
Metrorail Stations (including station pillars/billboards)	✓	✓	✓	✓	✓
Metromover Station Ads (Station Pillars, interior walls, clocks, etc)				✓	✓
MetroMover Vehicle Interior Ads				✓	
Wrap Advertising on Metrorail Cars				✓	
Wrap Advertising on Metromover Cars				✓	
Surface Parking, Parking Garages, and Park and Rides (including parking pillars and wall ads; not including Kiosks)				✓	✓
Kiosks along Busway	✓	✓		✓	✓
Guideway Pillars	✓	✓		✓	✓
Wall Advertising on MDT Buildings	✓	✓		✓	✓
Naming Rights				✓	
Domination Advertising-MetroMover and MetroRail				✓	

Business fee changes can be implemented locally so long as the total increase does not exceed 5% every two years, per state rules. Additional increases would require state legislation. A second issue with business fees is that any funds, by law, would flow to the County General Fund, and could not be directly sent to MDT. A separate agreement or policy would be needed to provide MDT with funds equal to the amount collected for this purpose. There is a model for this with the County Maintenance of Effort, general funds provided to transit with the passage of the half-penny surtax.

Providing **tolling revenue** from the MDX system to MDT is at the discretion of the MDX board. However, the MDX board must operate within the constraints of its Indenture and bond covenants for debt it has issued for its toll road projects, which restrict the flow of funds from MDX tolls.

Procedurally, creating a dedicated source of revenue for transit through the implementation of a fee on **water, wastewater, or electric fees** is fairly straightforward and entirely controlled by the County. Politically, however, significant resistance could emerge due to the tenuous nexus between utility fees and transit and the potential regressive nature of the fees.

Conclusions

The research conducted for this report has led the Team to a number of conclusions:

1. The various revenue sources analyzed in this report could potentially generate substantial revenue for MDT. Advertising and tolling, in particular, have the most revenue potential.
2. Implementing many of the revenue sources will be challenging. Administrative, financial, and political obstacles exist to varying degrees for each potential revenue enhancement. Some of these obstacles are entirely within the control of Miami-Dade County officials, while others would require changes to state law. In addition, for advertising there are tradeoffs between revenue and the aesthetics of public spaces, as was seen when advertising along the South Miami-Dade Busway was stopped.
3. While important to maximize, system revenue sources alone have limited potential to fill the entire projected budget gap. Even in the most optimistic forecasts, half or more of the gap must be filled with other sources.
4. Tolling is a key potential new source for revenue, with the MDX conversion to open road tolling and the implementation of toll lanes on I-95 in the County by FDOT. However, restrictions in bond covenants will complicate implementation.
5. Focusing upon revenues is only one side of the ledger. A complete view would also focus on operating expenses.

II. Introduction

Background and Purpose

The purpose of this report is to analyze specific revenue enhancement opportunities identified in Phase I of this project for MDT. MDT is the largest transit agency in the State of Florida and is the primary public transit agency in Miami-Dade County. The Department operates heavy rail (Metrorail), an automated people mover system (Metromover), an extensive bus system (Metrobus), and special services for mobility impaired persons (Special Transportation Services – STS). MDT is also responsible for overseeing the design and construction of a \$526 million extension of the Metrorail system to Miami International Airport (The Airport Link) as well as the procurement of a new fleet of railcars at an estimated cost of approximately \$400 million as well as a wide range of other construction and equipment projects.

The construction and equipment programs and projects of Miami-Dade Transit have been financed largely through proceeds of the Charter County System Transit Sales Surtax. This ½ cent tax and the People's Transportation Plan (PTP) were approved by the voters of Miami-Dade County in 2002. The voters also approved the establishment of the Citizens' Independent Transportation Trust (CITT) to oversee the expenditure of the surtax funds. The CITT commissioned this report.

Surtax proceeds have also been used since the unification of the system in 2008 to fund MDT operations and maintenance. The total proceeds of the surtax in FY 2009-10 were approximately \$175 million, with over \$100 million being used for MDT operations and maintenance. The amount available for operations is the net amount of surtax proceeds after deducting the municipal share (20%), administrative oversight (1.4% in Fiscal Year 2010), payment for the People's Transportation Plan Bond Program, and the amount spent on improvements to traffic signalization and neighborhood roads and highways implemented by the Public Works Department. The majority of capital projects have been financed through the sale of long-term bonds with the Surtax as the pledged source of revenue for the bond repayment. The County was able to have lower payments in initial years and the total cost for some of the first bond issues via capitalized interest. The full, annualized payment on those bonds can occur up to two years after initial sale.

The MDT Pro-Forma, developed by the Miami-Dade County Office of Strategic Business Management (OSBM), looks at the long-term expenses and revenues projected to be available to MDT. Presented at least annually to the public, the Pro-Forma confirms that, as payment expenses for the bonds increase, the amount of surtax funds available for MDT operations and maintenance reduces significantly. The 2010 update of the Pro-Forma indicates that in 2014 a gap of \$36 million will exist, aside from assumed increases of gas taxes and millage rates. And though fare increases planned to keep pace with inflation partially address widening gaps over the longer term, experience in recent years has impacted projections in transportation funding, growth from sales tax revenue and ridership. Moreover, the Pro Forma is based on a series of assumptions that may or may not come to fruition. For more information see, the Research Team report *Review of the FY 2011 and FY 2012 Miami-Dade Transit Pro Forma*, dated October 2011.

Phase I of this report analyzed a wide range of revenue enhancement opportunities potentially available to MDT, each of which has been successfully implemented at other transit properties. This report, Phase II, analyzes several of those enhancement opportunities in more detail. This report offers more refined

revenue estimates, where possible, using benchmark data, though the estimates are generally fairly broad, intended to give an order of magnitude rather than a pinpoint estimate.

In a previous assignment, IMG, with Planning and Economics Group (the Research Team), identified a number of potential and innovative tools for financing capital projects. The results of that analysis were presented in a report titled “Evaluation of Innovative Financing Opportunities for Miami-Dade Transit,” in November 2009. Phase I of this project identified several financing alternatives potentially applicable in Miami-Dade County, including joint development agreements, naming rights, park-and-rides, and partnerships with MDX. Phase II takes several of those alternatives and analyzes them in more detail in order to understand the process needed to implement them as well as to make an estimate of the potential revenues that could be generated from those alternatives.

Research Objective

As detailed in recent reports from the County and budget documents, MDT is facing significant challenges to fund the operation and maintenance of Metrorail, Metrobus, Metromover, and STS paratransit service. Budget projections for the near term show significant gaps in funding operations unless new revenue streams are found and/or operating costs are significantly reduced. As costs for debt service payment increases in the coming years, existing revenue sources, including the Surtax, are unlikely to keep up with costs.

The objective of this study is to develop a revenue enhancing program, which would include an implementation plan and an estimate of the potential revenues, to close a certain portion of the budget gap that MDT expects starting in 2014. In phase I, the Research Team was instructed to survey the full range of revenue enhancement opportunities utilized locally, nationally and internationally, without filtering. This portion of the study, part II, takes a specific set of the potential revenue streams identified in part I, presents the steps necessary for implementation of those new revenue streams, and estimates the amount of additional revenue that MDT might expect from those sources.

Contents of This Report

This report, Phase II, goes beyond the Phase I framework to develop an implementation plan for the selected potential revenue streams that includes the required steps, responsibilities, cost, and challenges, as well as the likely range of revenue for MDT. This report shows the total potential revenue of the shortlisted revenue programs and how they contribute to fill in MDT’s \$48 Million deficit in FY 2014.

Phase II analyses the following potential system and non-system revenue enhancers:

1. System Revenue
 - a. Advertising and marketing revenues, including domination advertising opportunities at rail and Metromover stations
 - b. Naming Rights
 - c. Right-of-Way Leasing, particularly for billboards and cell towers
 - d. Premium fares for the new Airport Link
2. Non-System Revenue
 - a. *Land Development Charges—Impact Fees*

- b. Business Licensing Fees
- c. *Non-Transit Parking Fees*
- d. Tolling
- e. Utility Fees
- f. *Local Gas Tax*

The Research Team was tasked to provide detailed information for each of these except for the three italicized revenue enhancements, which are being handled by OCITT staff.

III. Revenue Enhancement Alternatives and Selection of Best Alternatives

Innovative Revenue Enhancement Study Results

The Phase I report identified a broad array of revenue techniques actually in use to fund transit operations in the U.S. and internationally. While sales taxes, property taxes, and system operating revenues are most common, the Phase I report found many other potential revenue sources, as shown in the table below. The report was conducted by undertaking an extensive review of literature on the topic, interviewing County staff, and interviewing selected transit properties and industry professionals.

System Revenue	Other Revenue Sources
<ul style="list-style-type: none">• Advertising & Marketing Revenues<ul style="list-style-type: none">- Vehicle advertisements- GPS location-driven advertising- Domination advertising- Transit shelters and bench advertising- Internet-based ads• Contract Revenues• Concessions• Naming Rights• Right-of-Way and Air Rights Leasing• Joint Development• System Parking Fees• Distance-Based Fares and Other Fare Structures	<ul style="list-style-type: none">• Property Taxes• Sales Taxes• Value Capture:<ul style="list-style-type: none">- Land Development Charges and Impact Fees- Special Taxing Districts• Digital Technology, Web-Marketing and Social Media• Payroll Levy• Business License Fees• Franchise Fees• Car Rental Fees• Gas Surcharges: Motor Fuel Tax and Local Option Gas Tax• Real Estate Transfer Fees• Non-Transit Parking Fees• Tolling and Congestion Pricing• Utility Fees• Room and Occupancy Surcharges• Excise Fees• Vehicle Fees• Vehicle Miles Traveled (VMT) Fees

For each of the revenue enhancements in the above table, the Phase I report provided a rating on 6 characteristics:

1. Prevalence: Reflects the number of transit agencies using the revenue technique
2. Operating costs (OPEX), Capital, or Both: States whether the funding source can be used for construction costs, operations/maintenance expenses, or both.

3. Potential MDT Revenue Range: Provides a rough estimate of the funding that can be achieved from the revenue source, considering local MDT conditions.
4. Complexity: Implementation of a revenue source may require legal, financial, or administrative issues to be overcome. The rating is an estimate of the time/effort needed to implement a revenue source.
5. Equity: A measure of the fairness of how the cost is distributed. Higher equity indicates revenue streams are collected from a broad base of people or that those of greater economic means bear a proportional burden to their economic ability.
6. Time to implement: Short, medium, or long-term implementation schedule.

CITT Selection of Best Alternatives

Based on the results of the Phase I report, and considering staff and consultant recommendations, the CITT selected potential revenue sources that warranted further analysis in this Phase II report. These include the following:

1. System Revenue
 - a. Advertising and marketing revenues, including domination advertising opportunities at rail and Metromover stations
 - b. Naming Rights
 - c. Right-of-Way Leasing, particularly for billboards and cell towers
 - d. Premium fares for the new Airport Link
2. Non-System Revenue
 - a. *Land Development Charges—Impact Fees*
 - b. Business Licensing Fees
 - c. *Non-Transit Parking Fees*
 - d. Tolling
 - e. Utility Fees
 - f. *Local Gas Tax*

The Research Team was tasked to provide detailed information for each of these except for the three italicized revenue enhancements, which are being handled by OCITT staff.

IV. Procedure for Evaluating Selected Alternatives

Based on Phase I research, the Research Team developed an appropriate methodology for each of the seven revenue enhancement areas it was tasked with for Phase II work. These methodologies are detailed in the chapters below for each area. However, it became clear that some adjustment to the tasks was necessary.

First, since the methodology for estimating the value of advertising and naming rights is largely the same, these two revenue streams were combined into one chapter for analysis.

Second, after a series of meetings with County staff, it unfortunately became apparent that the level of detail MDT has on its properties is not detailed enough to analyze the revenue potential of right-of-way leasing. In its inventory of 186 properties, key details such as precise location, lot size, and use are not available. The amount of legwork it would take to conduct a proper inventory was determined to be beyond the scope of this study. However, the Team did detail the data available and identified 76 properties that could be further examined with respect to their potential for right-of-way leasing. The property details are provided in the Appendix of this report.

Third, according to MDT, no revenue study exists detailing the ridership for the new Airport Link rail segment. In interviews with MDT, the Research Team learned that charging different fares for this new segment has not been considered and the data to analyze ridership is not available. While the recently-implemented fare collection equipment makes charging an increased fare possible, a study of ridership would be needed to estimate the value.

Finally, in recognition of the adjustments in scope, the Research Team conducted some additional analysis. This included examining the feasibility of concessions opportunities at Metrorail and Metromover stations. This analysis is provided in the Appendix.

V. Detailed Review of Revenue Enhancement Options

Advertising & Marketing Revenues

5.1.1. Description of Revenue Sources

With revenue from traditional sources expected to be flat or lower than in previous years, many transit agencies have been focusing on non-traditional methods to raise funds. Increasing advertising is one way to improve the financial bottom line, and one that is largely within the control of the transit property. However, advertising revenue represents a minor portion of revenue for most transit properties, including MDT where less than 1% of operating funds are derived from advertising. Advertising techniques are being improved, such as selling electronic billboard advertising along railroad rights of way or adding amenities such as retail kiosks and concession stands at rail stations. For public transit systems, every extra dollar matters. The more revenue the transit agency can generate – even in small increments – the more they can relieve pressure on passengers to make up the difference through higher fares.

Advertising programs can and do raise revenues, but in order to implement an effective advertising program, zoning regulations at the local, state and federal levels, as well as public policy factors, must be addressed. The implementation of new non-traditional programs also must consider the additional costs associated with operation and maintenance, whether or not to administer the programs in-house, and the length of time and effort for implementation versus the benefits – revenue potential. In addition, advertising can be intrusive on public space, and the tradeoff between revenue and aesthetics must be considered.

Transit agency advertising is targeted both to riders and the public that pass the advertising asset (or, in the case of transit vehicle ads, that pass by the public). In a Transit Cooperative Research Program (TCRP) survey detailed in *Transit Advertising Sales Agreements, Synthesis 51*, factors found to affect advertising sales include agency size, number of modes, size of metropolitan area, and timing of bidding of the advertising contract². The survey also showed that a large majority of the 53 transit agencies surveyed (96 percent) accepted some form of advertising, and 72 percent use an outside advertising sales contractor exclusively to sell advertising space.

According to TCRP Report 129, *Local and Regional Funding Mechanisms for Public Transportation*, advertising revenue typically represents 0.1% to 3.0% of operating revenue for a transit property. The value of pricing and contracts for advertising in a particular system is dependent on the local market and the total amount of exposures, which is the total number of potential opportunities a viewer would have to see the advertisement.

In TCRP Synthesis 32, transit agencies were surveyed and results reported on Transit Advertising Revenue: Traditional and New Sources and Structures. The report states that of the 27 transit agencies interviewed, 22 sell advertising space on their equipment and facilities. The revenue from transit advertising as a percent of the operating budget could be small, but the total dollars are significant. The four largest transit agencies, not including New York, average \$6.1 Million a year.

² Those agencies bidding their contracts during economic expansion (until 2001) received relatively higher revenues than those that bid their contracts on slower economic cycles, after 2005

It was also found that the size of the transit agency is not always the determinant factor in generating advertising revenue – although it is reasonable to assume that the more equipment and facilities one has the more revenue can be raised, a small system, with 250 buses, generates almost six percent of its \$46 million operating budget with a highly motivated sales staff, an innovative program, and a tourist location that embraces advertising.

This section reviews potential revenue programs available to Miami-Dade County Transit Department (MDT) that are not currently being pursued in the advertising area. The revenue sources identified include advertising at rail stations and on rail cars, advertising at Metromover stations and on cars, advertising at park and ride lots, advertising on pillars along the Metrorail and Metromover guideway, advertising on kiosks along the Busway, and advertising on faces of parking garages and MDT buildings.

5.1.2. Examples of Advertising Agencies Collecting Fees

In researching the Phase 1 Revenue Enhancement Opportunities report published in 2010 for CITT, the Research Team confirmed that advertising is a widely used form of system-generated revenue for transit properties throughout the U.S., and is one of the most common mechanisms for generating non-farebox revenue. In our interviews with other transit agencies we found that those transit agencies that have a balanced approach to their advertising program, drawing from the local as well as national markets, have a better opportunity to have a consistent program with a steady flow of revenues regardless of economic conditions. In addition, the Phase 1 study found several agencies using innovation and technology to enhance advertising revenue. These include:

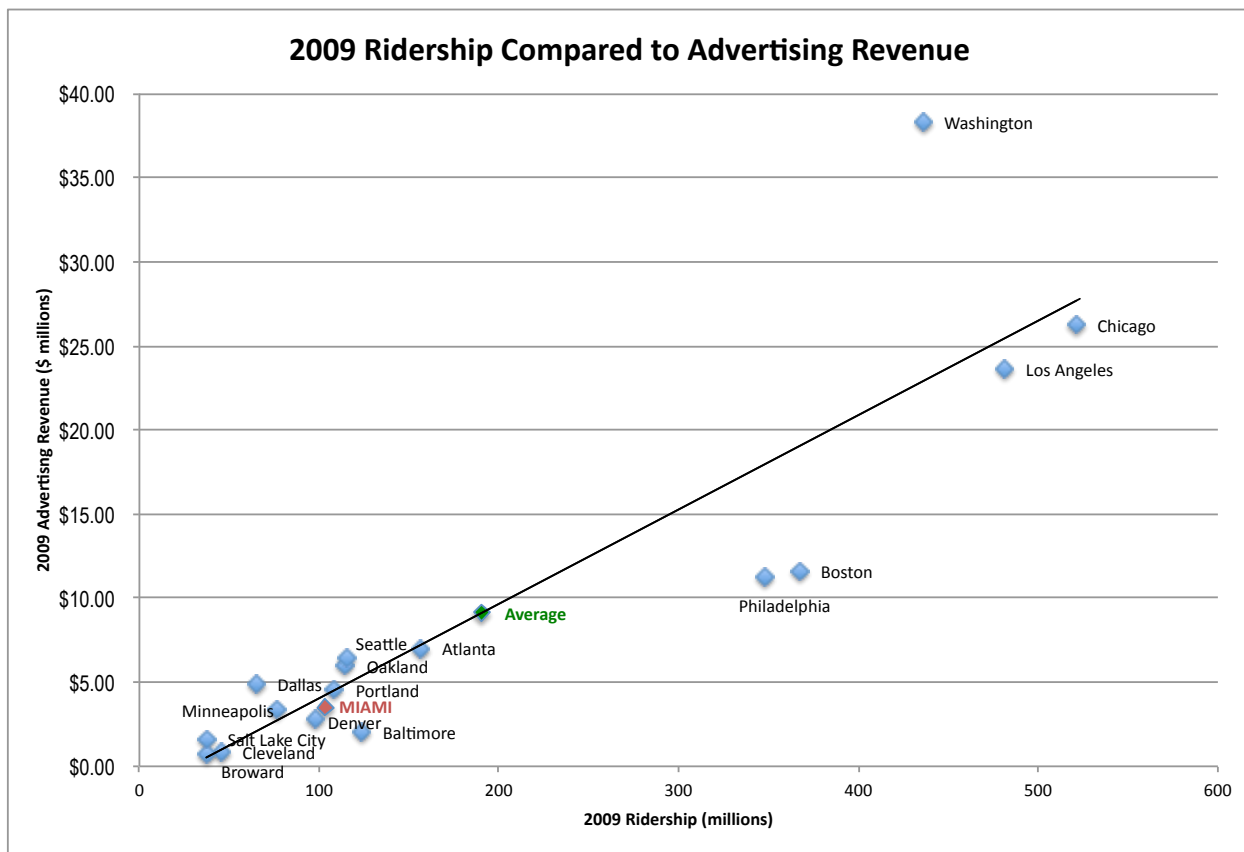
- Orlando, FL; Columbus, OH; and Hampton, VA: These agencies established in-house advertising units focused on increasing and/or enhancing bus vehicle advertising
- Atlanta, GA; Washington, DC; Montreal, Canada: These agencies undertook programs to advertise on non-traditional surfaces such as maps, fare media, bus hubcaps and hand straps, and/or leverage unsold advertising space.
- Tokyo Japan is a leader in technology, such as using electronic paper to exhibit moving pictures on genuine paper advertisements. In addition, more intensive advertising such as domination-style “train jacking” is used to allow advertisers to distinctively integrate their message into several traditional and non-traditional mediums (i.e., posters, seats, floors, windows, etc.)

The Research Team conducted an analysis of advertising revenue using the National Transit Database in order to analyze MDT's success compared to peer agencies. As shown in the table below, compared to other similar transit agencies, MDT ranks 11th out of 18 peer agencies on advertising revenue per unlinked passenger trip at 3.41 cents per unlinked passenger trip, with the highest being 8.79 cents and the lowest 1.65. MDT is also ranked 15th out of 18 in advertising revenue as a percentage of operating budget at 0.73 percent, with the highest being 2.7 percent, and the lowest 0.37 percent. This demonstrates that MDT has the potential for increasing its revenues from advertising significantly if it could grow advertising revenues to the benchmark average. If MDT could bring revenue to the peer average per unlinked passenger trip, advertising revenue would increase by about \$824,000. If MDT were able to increase ad revenue as a percent of operating costs to the peer average, the increase in revenue would be greater than \$2.3 million.

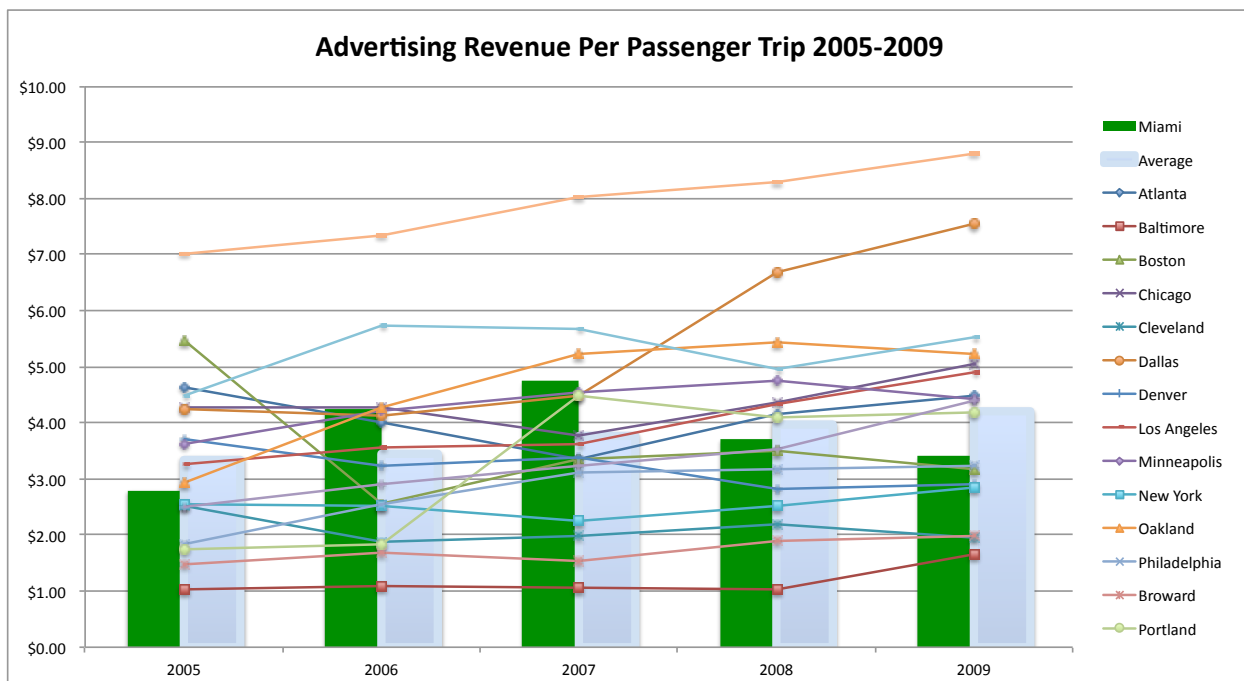
City	Ridership	2009 NTD Advertising Revenue	2009 NTD Operating Expense	Ad Revenue % OPEX	Ad Revenue per Unlinked Trip (cents)
Washington	435,858,891	\$38,319,529	\$1,417,185,044	2.70%	8.79
Chicago	521,241,837	\$26,274,914	\$1,248,920,132	2.10%	5.04
Los Angeles	481,435,588	\$23,630,097	\$1,186,620,339	1.99%	4.91
Atlanta	156,542,393	\$7,028,234	\$398,035,956	1.77%	4.49
New York	3,206,871,196	\$91,319,790	\$6,043,350,246	1.51%	2.85
Minneapolis	76,343,042	\$3,372,352	\$267,798,154	1.26%	4.42
Dallas	65,009,123	\$4,906,224	\$390,923,851	1.26%	7.55
Portland	108,551,806	\$4,542,833	\$365,328,114	1.24%	4.18
Oakland	114,654,578	\$5,986,837	\$484,177,232	1.24%	5.22
Seattle	115,834,273	\$6,398,018	\$554,394,266	1.15%	5.52
Philadelphia	348,314,656	\$11,259,113	\$1,032,868,811	1.09%	3.23
Boston	367,247,601	\$11,634,361	\$1,143,483,509	1.02%	3.17
Salt Lake City	37,218,977	\$1,633,331	\$182,937,098	0.89%	4.39
Denver	98,205,186	\$2,866,200	\$384,665,042	0.75%	2.92
Miami	103,504,590	\$3,527,689	\$480,913,876	0.73%	3.41
Broward	37,720,691	\$751,287	\$123,221,967	0.61%	1.99
Cleveland	45,612,053	\$891,789	\$229,323,300	0.39%	1.96
Baltimore	123,697,396	\$2,046,336	\$550,285,462	0.37%	1.65
Average	357,992,438	\$13,688,274	\$915,801,800	1.23%	4.20

Source: National Transit Database 2009

The graph below compares peer agency ridership to advertising revenue collected. While larger markets have the potential to generate greater advertising revenue, the agencies above the trendline are attracting greater than average revenue per rider. The chart demonstrates that some agencies, such as Washington, Dallas, Seattle and Oakland/San Francisco, are able to generate relatively more revenue per passenger. MDT falls below the trendline, indicating that advertising revenue collections per unlinked passenger trip is below average.

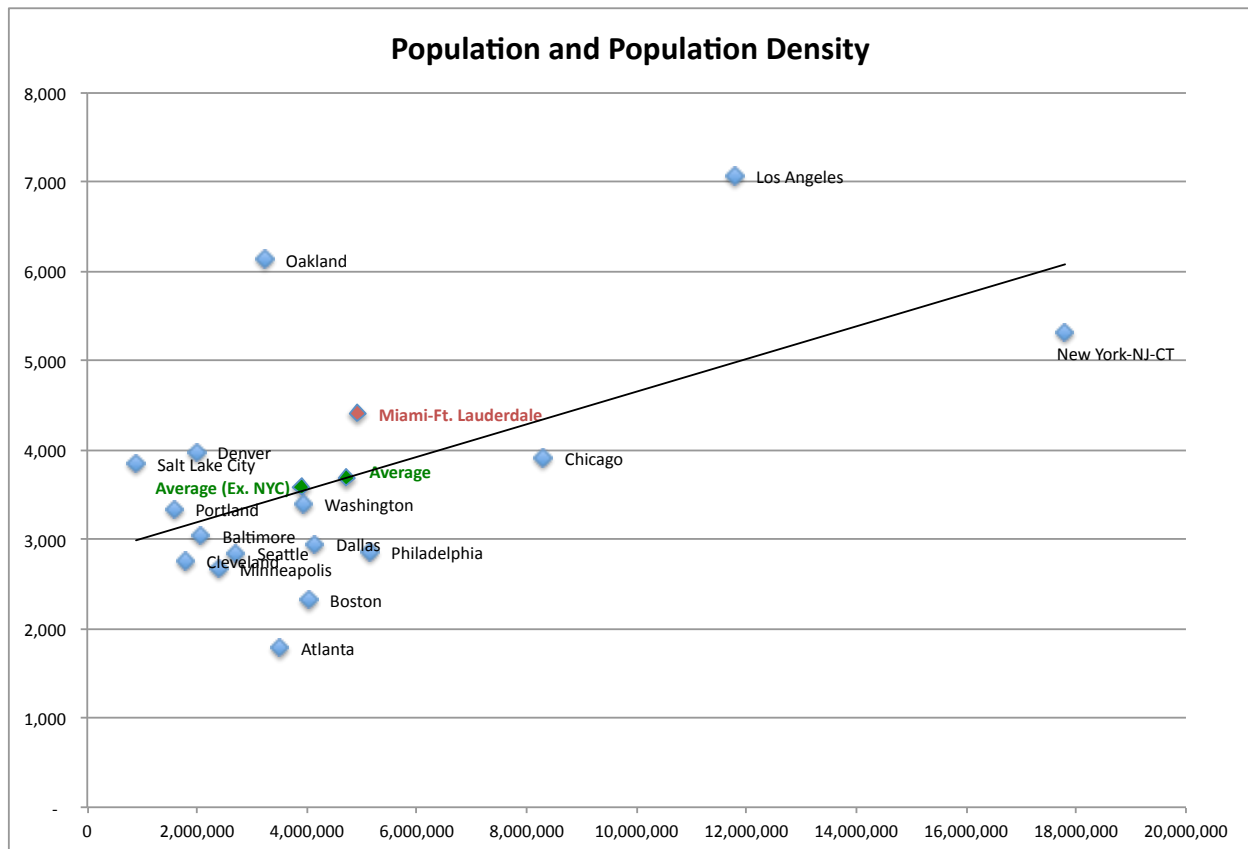


The chart below shows advertising revenue per rider from 2005-2009. MDT enjoyed substantial increases in this metric from 2005 through 2007, exceeding the peer average in 2006 and 2007. However, as the



economy faltered MDT advertising revenue fell even as peer agencies remained stable.

While each media market is distinct, the Miami area enjoys a position as a Top-20 media market; Miami-Ft. Lauderdale ranks between 12th and 16th in market size, depending on the metric (television, radio, etc.). However, the local characteristics such as several distinct urban areas, population density, and diversity can affect demand for advertising. The greater Miami-Ft. Lauderdale area is above the peer group average in population and population density, as shown in the chart below.



5.1.3. MDT Advertising Program

MDT has an ongoing advertising program that generated over \$3.5 million in 2009, a reduction in revenue from \$4.2 million in revenue in 2008. The program includes the following:

- MDT has a contract with CBS Outdoor that runs until 2014 that includes advertising on buses, both interior and exterior, posters at Metrorail stations, the interior of Metrorail cars, and advertising on kiosk panels along the South Miami-Dade Busway. The contract also includes station domination at Metrorail stations, but these advertising campaigns require Director's approval. This contract provides a minimum guarantee of \$2 Million to MDT or 60 percent of net billings, whichever is greater. In FY 2010, MDT received an amount greater than the minimum guarantee.

It is important to note that any new advertising program that is brought in by CBS and accepted and approved by the County under the current contract will provide MDT with 60 percent of net billings, except billboards. The 60-40 split of advertising revenue under the CBS Outdoor contract was provided for in the RFP competition under which CBS Outdoor was selected. This figure is somewhat below the typical share for large transit properties. TCRP Report 51 states that revenue share ranges from 10 to 80%, but that 65% is typical for large agencies. Furthermore, some agencies issue RFPs under which the revenue split is one of the selection criteria

- CBS maintains a total sales force of 12 people, four of them exclusively selling ads for MDT. The rest of the sales team members have quotas they have to meet, including a certain minimum for MDT ad space.
- MDT is in the process of awarding a contract for advertising on the 849 bus benches and shelters in the Unincorporated County. The contract will include the maintenance of the bus shelters and it will be awarded based on the highest minimum guarantee offered.
- For mobile media advertising, which includes Wi-Fi cellular advertising, the County IT Department is developing a program in-house. The revenues associated with this program will go to the General Fund, not MDT.
- MDT entered into a contract with Front Row advertising to market naming rights for the Metromover. Front row delivered a valuation report; however no naming rights deals were consummated.

5.1.4. Advertising Revenue Enhancement Analysis

This analysis focuses on new or additional advertising opportunities beyond those already being pursued by MDT. Advertising programs that are underway and will be fixed for some time are not included in the potential advertising revenue enhancements to be considered in this project. The advertising programs analyzed in detail are as follows:

- Advertising on Metrorail guideway pillars, those located in between stations along guideway and at stations outside the turnstile
- Advertising at Metromover pillars supporting the Metromover guideway, domination advertising, and advertising inside the station
- Wrap advertising on Metrorail cars
- Wrap advertising on Metromover cars
- Advertising on surface and garage parking lots at Metrorail stations, park and ride lots along Busway, and other park and ride lots, including parking area pillars, which are those associated with parking areas and garages
- Advertising on busway kiosks (tripod structures placed at intervals along the busway which can support marketing advertisements) Advertising at faces of parking garages and MDT buildings
- Selling naming rights to MDT assets
- Billboard advertising on MDT property.

For these potential advertising campaigns, this analysis includes a summary of experiences at other transit agencies with similar programs, the estimate of the potential revenues, timeline for generation of revenues, implementation schedule, cost of implementation, and the advantages and disadvantages associated with each program, including legal issues and non-monetary factors will be presented.

5.1.5. Advertising Revenue Analysis Methodology

The advertising opportunities available to MDT and reviewed in this analysis fall into two separate analysis categories:

1. Advertising programs that have no established unit rates (i.e., where MDT has not previously marketed the asset for advertising). For these assets, the potential revenue is established based on the estimated number of impressions, or people seeing the advertising; and
2. Advertising programs that have established unit rates from past MDT or contractor marketing efforts. For these assets, potential MDT revenue was estimated by multiplying the number of advertising opportunities (considering the expected occupancy rate) by the unit value.

The programs that fall under the first category are:

- Advertising at Metrorail stations – station pillars
- Advertising at Metromover stations – station pillars, domination advertising, and advertising inside station
- Advertising on surface and garage parking lots at Metrorail stations, park and ride lots along Busway, and other park and ride lots, including parking area pillars, which are those associated with parking areas and garages
- Advertising on Metrorail guideway pillars
- Advertising on Metromover guideway pillars
- Naming rights at Metromover and Metrorail stations
- Billboard advertising.

The programs under the second category include the following:

- Wrap advertising on Metrorail cars
- Wrap advertising on Metromover cars
- Advertising on kiosks along Busway
- Advertising at faces of parking garages and MDT buildings.

For the first category, the methodology to estimate potential revenue for each type of asset to MDT is as follows:

- Step 1: Inventory the system for advertising opportunities
- Step 2: Estimate the percent occupancy of the advertising assets
- Step 3: Estimate the number of “eyes on impressions” (EOI) for each advertising asset for transit patrons, drivers, and pedestrians
- Step 4: Multiply the net number of impressions by the annual media value per impression (CPM) to obtain total media value
- Step 5: Multiply the annual media value by the share of revenue expected to flow to MDT (versus the share retained by the advertising contractor)

This methodology was developed by researching advertising valuation techniques, including using academic and industry sources as well as direct outreach to advertising companies. The Team utilized the industry standard methodology to estimate the potential value of expanding MDT's advertising program to new assets. The value of outdoor advertising, whether at rail stations, on rail cars, or along the guideway, is based on the number of "impressions" – the number of people viewing of the material. Using standard industry metrics for valuing each impression, the actual revenue associated with the advertising asset can be estimated. Considerations such as demographics, socioeconomic data, applicable regulations, and the combination of aesthetic impact and community tolerance are factors that also influence the potential for revenues. Details of this methodology are provided in the Appendix. Data tables detailing the results are provided at the end of this chapter.

It is important to note that advertising opportunities are highly unique to the surrounding area, and the value is really defined by what the advertiser is willing to pay. However, the techniques described enable the estimation of a reasonable range of the potential value. Therefore, this study attempts to establish an order of magnitude estimate for the amount of revenue that might be expected from these advertising opportunities rather than an exact estimate of those revenues. The strengths and weaknesses of these advertising opportunities, including implementation issues, are discussed later in this chapter.

Billboard Advertising

Another important note is that billboard advertising on stand-alone structures differs from wall and other signage that is applied directly to MDT assets. In addition, billboard advertising does not fit into the revenue sharing models described above (a minimum guaranteed payment or percentage of sales from the start of advertising). Billboards require an initial investment to construct the billboard structure that the contracting party will want to recoup, and can have operating costs for electricity and maintenance. Furthermore, the typical billboard contract includes the lease of property rather than a share of revenue typical to other advertising contracts. However, billboard companies choose their locations carefully. Once they choose a location, they want to be there for a long period of time. Assuming a viable billboard location, major outdoor advertising companies are willing to pay for the permits, construction costs, and maintenance. Under this model, there are no expenses with a billboard and the transit agency received the income for allowing one of the well-recognized billboard companies to build and operate a billboard on the property. A key factor in the implementation of billboards is accommodating local residents' view on the appropriateness of the signs.

Despite these differences, the value of a billboard is based on the number of impressions, just as with other advertising assets. Based on industry research, the typical ground rent in an urban area is about 25% of the media value of the billboard.

5.1.6. Advertising Revenue Potential

Advertising Programs - value established based on people seeing the advertising

Metrorail Stations

The Metrorail system includes 22 rail stations about one mile apart extending from Kendall through South Miami, Coral Gables, and downtown Miami; to the Civic Center/Jackson Memorial Hospital area; and to Brownsville, Liberty City, Hialeah, and Medley in northwest Miami-Dade. The Metrorail system connects

with Broward and Palm Beach counties at the Tri-Rail/Metrorail transfer station. The system has 136 total Metrorail vehicles, though the peak vehicle requirement is far lower. Miami-Dade Art in Public places program has commissioned and installed artworks in several Metrorail stations enhancing these public spaces and displaying the area's cultural heritage.

The CBS contract includes advertising devices, bench, and wall-mounted advertising at the Metrorail stations. However, there are a number of other advertising campaigns that can be implemented at the Metrorail stations including advertising on station pillars, those located at the station but outside the turnstile or gate, concessions, and domination advertising. The CBS contract includes station domination advertising at Metrorail stations, but requires the Director's approval on a case-by-case basis. This advertising has rarely being done at the Metrorail stations. The Metromover stations are not included in the CBS contract.

When it comes to advertising, there are certain advantages that make a Metrorail station particularly well suited and valuable. These advantages include:

- Proximity to retail and commercial areas
- Proximity to areas of interest
- Available parking
- Stations that are part of a joint development projects – office, commercial and residential development
- Stations located on major thoroughfares
- Main transfer point

The following table shows the advantages of each Metrorail station. Recognizing that these advantages do not have equal value, the table indicates that six of the 22 Metrorail stations obtain high scores, and an additional seven have three of the six advantages. Details about each Metrorail station including discussion of the advantages are provided in the Appendix.

Revenue Enhancement Opportunities for Miami-Dade Transit
Property Advantages
Metrorail Stations

Metrorail Stations	Advantages						Number of Advantages
	Proximity to Retail and Commercial	Proximity to area of interest	Available Parking	Joint Development Projects	Located in Major Thoroughfares	Main Transfer Point	
Dadeland South	X		X	X	X	X	5
Dadeland North	X		X	X	X	X	5
South Miami	X		X	X	X		4
University		X	X		X		3
Douglas Road	X		X	X	X	X	5
Coconut Grove	X	X	X		X		4
Vizcaya		X	X				2
Brickell	X				X		2
Government Center	X	X				X	3
Historic Overtown/Lyric Theatre Station		X					1
Culmer		X					1
Civic Center	X	X			X		3
Santa Clara	X		X	X			3
Allapattah			X				1
Earlington Heights			X			X	2
Brownsville	X		X	X			3
Dr. Martin Luther King Jr.	X		X	X	X		4
Northside		X	X				2
Tri-Rail			X			X	2
Hialeah	X		X		X		3
Okeechobee	X		X		X		3
Palmetto			X			X	2

Data Tables

Following the identification of property advantages, the project team proceeded to estimate the advertising media opportunities; the number of impressions, or people seeing the advertising; and the annual media value by Metrorail stations. The results of this analysis are presented in a series of 11 tables, provided at in the Appendix to this report.

Table 1 summarizes characteristics by Metrorail stations and the various advertising opportunities pointing out whether or not pillars are visible, whether or not there is space for billboards, and the availability of space for wall advertising. The analysis found that while most stations have room for advertising on station pillars, billboard advertising is likely possible at only six Metrorail stations.

Following the methodology we outlined earlier, the total number of impressions at each Metrorail station was estimated by adding the patron traffic or annual boardings, the pedestrian traffic, and annual drive by traffic. The individual values for each category, and the total number of EOIs by station is presented in Table 2.

Table 2 shows some interesting aspects regarding total number of impressions at different stations. While six stations – Dadeland South and North, Douglas Road, Brickell, Government Center and the Civic Center – enjoy over a million patrons per year, these stations are not the only ones with the highest EOIs. Other stations, including South Miami, University and Coconut Grove, enjoy a higher EOI because of their location in major thoroughfares or proximity to retail and commercial areas.

Advertising inside Metrorail stations is included in the CBS contract. Therefore, opportunities for establishing new advertising programs at Metrorail stations is confined to station pillars – those located at the station but outside the turnstile or gate – and billboards. In Table 3 for each Metrorail station we have listed the number of EOs, plus the number of available stations pillars and whether or not there is appropriate space for billboards. The total number of impressions is adjusted by the value of the impression for the given advertising media – station pillar or billboard, the percent occupancy expected, and a visibility adjustment to estimate the total media value. The annual media value by Metrorail station is presented in the last column on Table 3.

It is important to note that the media value for Metrorail stations excludes all of the advertising programs that are now part of the CBS contract. The media value of approximately \$2.66 million only includes advertising on station pillars and billboards, and only on those stations where those opportunities were deemed appropriate by visual inspection by the project team and discussion with industry contacts. Revenue to MDT would depend on the split of the media value with the advertising contractor.

Domination Advertising

Domination advertising at Metrorail stations is part of the CBS contract but has not been fully utilized because it is not perceived as lucrative as other advertising mediums. Also, the contract requires that each campaign be approved by the MDT Director. In a very competitive environment, a clear and quick approval process is essential to secure the advertising contract. A more streamlined process would make it possible to sell more domination advertising and therefore increase the revenues from this alternative. CBS was able to sell a domination advertising package at the Allapattah Station for \$5,000 per month. The project team included all Metrorail and Metromover stations, assumed that this advertising program would have an occupancy rate of 50 percent, and would share 50 percent of the revenues with the vendor. The expected revenues from this program totaling \$1.26 million are included in Table 11 where the expected revenues from all programs are presented. MDT's share of revenues is estimated at \$630,000 per year. While this taps into the same revenue stream as station advertising, it would have a higher utilization rate, and thus additional revenue generation potential.

Metromover Stations

The Miami Metromover, generally referred to as Metromover, is an elevated rapid transit automated people mover train system, with the cost of riding fully subsidized by the People's Transportation Plan (PTP) and no fare required from passengers. Metromover serves Downtown Miami, Brickell, Park West and Omni neighborhoods. Metromover connects directly with Metrorail at Government Center and Brickell stations, facilitating transportation from Downtown Miami to the south and north end of the County.

The Metromover serves primarily as a fast and easy way to travel within the downtown Miami neighborhoods. The system is composed of three segments and 20 stations. The stations are located approximately two blocks away from each other, and connect a number of major buildings and places in Downtown - Adrienne Arsht Center, the Freedom Tower, Miami-Dade College Wolfson Campus, Federal Courthouse Square, the Steven Clark Center, the Main Library, the Financial District, Bayside, and the Brickell Business District. The stations offer many advantages that add value to an advertising program because of their proximity to businesses and places of interest, access to a higher income audience, and proximity to high-end housing. As a prominent, permanent fixture, the Metromover guideway is a unique asset. Located on guideway above street level and out of congestion, Metromover vehicles could be more noticeable than surface vehicles such as buses and trolley cars.

Everyone rides for free on the Metromover and cars arrive every 90 seconds during rush hours and every three minutes during off-peaks hours. The Metromover system requires about 21 vehicles in peak service, and is currently in transition as new vehicles come online replacing original vehicles. Advertising inside or outside Metromover stations is not included in the CBS contract. Therefore, the potential advertising revenues at Metromover stations are derived from station pillars (those located at the station but outside the turnstile or gate), domination advertising, and advertising inside the stations.

The project team followed the methodology outlined earlier to estimate the number of EOLs, or people seeing the advertising. Total number of impressions includes patron boardings, pedestrian traffic and drive-by traffic and is presented by Metromover station on Table 5.

An interest aspect of the Metromover stations is that one station – Government Center – has more than 2.2 million patrons, and four – Omni, Bayfront Park, College/Bayside, and Brickell – more than 500,000 patrons. However, when reviewing EOL's, which include pedestrian and drive-by traffic, there are three Metromover stations – Omni, Bayfront Park, and Tenth Street - that score more than 12.0 million EOLs, and seven – Knight Center, Brickell, Financial District, Riverwalk, College/Bayside, Government Center, and Freedom Tower – that score more than 5.0 million EOLs. In most cases, it is the drive by traffic that account for the increased number of impressions or EOLs.

Revenue potential for advertising inside the station was estimated by first taking the CBS Outdoor Metrorail billings for FY 2010 and dividing by the number of boardings or passengers, then multiplying that result by the number of boarding in Metromover stations. The potential revenue for this advertising campaign by Metromover station is presented in Table 6 under the heading of Potential Station Ad Revenue. For Metromover stations, the potential revenue from station pillars and guideway pillars was also estimated. The number pillars at each station and guideway pillars were estimated by visual inspection. Total potential Metromover pillar revenue was estimated taking into account an occupancy factor and applying a visibility factor. Table 6 shows the number of station pillars, guideway pillars, adjustment factors and revenues. The revenues from station ads and station pillars, by Metromover station, are shown on Table 6. The total revenues are estimated at \$2.10 million per year.

Domination advertising at Metromover stations is another advertising opportunity that could be sold. As mentioned earlier, successful selling of domination advertising requires quick response to those interested in that type of advertising campaign because of the competitive nature of the advertising environment and the many potential alternatives available. CBS has been able to sell a domination advertising package for \$5,000 a month at a Metrorail station. It is reasonable to assume that a Metromover station would bring at least that amount because the system is located in the downtown area surrounded by businesses, the government center, arena and theaters, condominiums and other major attractions. The potential revenues associated with domination advertising at Metromover stations are included in the estimate presented in Table 11.

Advertising at Surface and Garage Parking Lots at Rail Stations, Park and Ride lots along Busway, and other Park and Ride lots

The Team identified opportunities for advertising on pillars and walls at Park and Ride lots, and on billboards at surface parking lots along the Busway. The number of impressions for these assets was estimated by multiplying the number of parking spaces by the occupancy rate at each location, and

adjusting the result by the assumed daily turnover rate for each parking space. Data on number of spaces and percent occupancy was obtained from the parking patronage summary report by MDT.

Table 7 presents the results of the impressions analysis by parking site considering patrons, pedestrian traffic and drive by traffic. The parking sites considered include surface parking, parking garages, park and rides along the Busway, and park and rides at other locations like Golden Glades, West Kendall Transit Terminal, Coral Reef Drive and Florida Turnpike parking lot, and Hammocks Town Center location.

An interesting aspect of the parking sites is that out of the nine surface parking sites open, four of them have an occupancy rate higher than 65 percent and another four sites have over 30 percent. Only one location – Hialeah – falls below the 30 percent occupancy rate. One site – Dadeland South – has an occupancy rate above 90 percent. When comparing only parking garages, four of the seven have an occupancy rate of 70 percent or higher, with two of those having over 90 percent occupancy rate. Of the other three only one is below 35 percent – Okechobee.

When reviewing EOIs for the parking sites, which include pedestrian and vehicular traffic, the surface parking lots have three sites with over 30.0 million EOIs – University, Douglas and Viscaya; with two sites with over 20 million – Dadeland South and Okechobee. The EOIs for parking garages show that there is one site with over 30.0 million EOIs – the South Miami site, and all other sites have EOIs over 20.0 million except the Santa Clara site that has only 62 available spaces.

Along the Busway there are two sites with EOIs over 11.0 million – the sites at SW 152 Street and 296 Street. The other parking sites worth noting are the one located at Coral Reef Drive and the Turnpike with EOI counts over 23.9 million and the Golden Glades site with over 16.5 million EOIs.

It is important to note that, even though many parking site locations offer definite advantages because of proximity to thoroughfares and places of interest, most of the parking areas have limited number of pillars or walls to place ads on. This limits the total revenues that can be expected from these sites.

Table 8 shows the total media value by parking location including parking area pillars and walls. The number of EOIs estimated and presented in Table 7, by parking site, are adjusted here by occupancy and visibility. The total estimated media value for all parking sites is approximately \$768,650.

Advertising on Pillars between Metrorail Stations

The first steps taken to estimate the potential revenue from guideway support pillars between Metrorail stations was to drive the alignment and identify those pillars with value for advertising. Only pillars believed to have real advertising value were included in the analysis. Annual traffic was used to establish number of EOIs or impressions. The annual media value was estimated by applying industry standard impression values and adjusting by pillar occupancy rate and visibility factor. The total media value for pillars between Metrorail stations is presented in Table 9. The media value estimated for advertising on pillars between stations was approximately \$2.85 million. The pillars along US1 between the Dadeland South station and the Coconut Grove stations were found to have the higher media value.

Naming Rights for Metrorail Station

Naming rights takes advertising a step beyond the typical wall and vehicle ads. The concept is that transit properties enhance revenues by selling naming rights to private companies who stand to benefit from brand recognition. This concept is an extension of naming rights in other industries, most notably sports stadiums which have a long and growing history of big-dollar naming rights agreements.

There are examples of successful naming rights programs, including:

- 1) The TECO Line Streetcar System that signed a naming rights with Tampa Electric Co. that pays \$1,000,000 over 10 years. TECO is moving forward with naming rights sponsorships not only for the stations but also for cars
- 2) The Las Vegas Monorail System was successful in selling sponsorship to train and convention center station to Nextel Communications for \$50 Million over 12 years. The transit property is seeking sponsorship on all of its seven stations for a total program revenue of \$23 Million per year
- 3) The Greater Cleveland Regional Transit Authority signed a sponsorship program with the Cleveland Clinic and University Hospital for nine mile bus route and for revenues totaling \$11 Million over 25 years. The Authority is looking to sell naming rights to all 10 stations on the Healthline for up to \$1 Million per year.
- 4) Philadelphia, PA: The Southeastern Pennsylvania Transportation Authority (SEPTA) approved the renaming of the Broad Street Subway's Pattison Avenue station on behalf of AT&T for an estimated value of \$5.44M³ over five years, of which \$2M will pay the advertising agent and for updating system signs and schedules.
- 5) New York, NY: As a part of the development of the Barclays Center (a sports arena), the New York MTA developer brokered a \$4M naming rights deal to add their name to the end of the existing MTA station name for \$200,000 per year for 20 years. The developer will handle the name change signage and printed materials will be gradually introduced after the name change in 2012.

Agencies are looking to their entire book of assets for naming rights potential. As Donna Goodison noted in the Boston Herald, "the MBTA is considering naming rights for everything from the lines and stations of its subway, bus and commuter systems to its Web site, smart phone apps and Charlie Cards." On the other hand, it is uncertain if it is reasonable to expect revenue from naming rights deals, as deals remain relatively infrequent.

Miami-Dade Transit retained a firm to conduct a study on naming rights and sponsorship opportunities associated with Metromover stations. The firm produced a Naming Rights Marketing Report and a Naming Rights Evaluation Analysis Report, both dated July 25, 2008. The reports suggested that the County could charge rates ranging from \$2,500 a year to \$48,000, depending on the location and demographics of the station. The implementation of the program was unsuccessful, and it did not result in any naming rights deal. The reports were reviewed, and interviews with the firm were conducted to understand the methodology and appropriateness of assumptions.

In estimating the potential value of naming rights for MDT assets, the number of impressions for the Metrorail and Metromover stations annual boardings, pedestrian traffic, and vehicle traffic counts were taken into account. The vehicular traffic counts were published by the Florida Department of Transportation. Annual boardings were provided by Miami-Dade Transit Department. Pedestrian traffic was estimated as 37.5 percent of patrons or boardings. The number of impressions is adjusted by a factor based on the impact of the impression on the different categories – patrons, pedestrian traffic, and drive by traffic. A station sponsor received .65 impressions per vehicle traffic; 1 impression per foot traffic and 4

³ http://www.philly.com/inquirer/local/pa/20100625_SEPTA_approves_changing_name_of_Pattison_station_to_AT_T.html

impressions per rider. The impression factor assigned to each category take into account several factors including interior station identity, exterior station identity, station stop identity, and other miscellaneous exposures. Table 10 presents the media value of naming rights by station, both for Metrorail and Metromover station.

The Metrorail stations with the most revenue potential – with a value of over \$25,000 per year – are Vizcaya Station, University Station, Coconut Grove Station, South Miami Station, and Earlington Heights Station. Those estimated with a value between \$20,000 and \$25,000 per year include Okeechobee, Dadeland North and Dadeland South.

The Metromover stations with the most revenue potential – with value of over \$12,000 – were Tenth Street, Bayfront Park, and Omni. The stations with a value between \$6,000 and \$12,000 were the Financial District Station, Riverwalk Station, College/Bayside Station, and Knight Center.

Advertising Programs – with unit valued

Wrap Advertising on Metrorail Cars

MDT's contract with CBS includes advertising on the inside of the Metrorail cars and wall and bench advertising devices at the stations. Wrap advertising on the outside of Metrorail and Metromover cars was recently added to CBS's inventory by the County and the program began with heavy advertising from Florida Lotto, American Airlines and Wachovia Bank in August 2011. The advertising rate on Metrorail and Metromover's cars is sold for \$6,000 - \$8,000 per car per month. For successful advertising campaigns it is necessary to include a minimum of 10 cars, and most of the contracts are sold for a minimum of 52 weeks. The materials used in the wrapping of the cars can be expected to last for one year. Assuming that occupancy for wrap advertising is 50 percent of the 136 total Metrorail vehicles, and that each Metrorail vehicle wrap advertising campaign could be sold for average of \$6,000 per month, annual billings would be approximately \$4.89 Million. With the existing agreement with CBS Outdoor, MDT would receive 60 percent or approximately \$2.93 Million per year. Expected revenues for this advertising campaign are shown in Table 11, Summary of Estimated Total Media Value by Source.

Wrap Advertising on Metromover Cars

As explained above, wrap advertising on Metromover's cars was added to the CBS contract and added revenues should be coming to MDT from this new advertising campaign. Wrap advertising on Metromover cars is appealing because Metromover serves the financial district, Government Center, the Adrienne Arsht Center, and the School Board, with many convenient stops in between.

In estimating the value of this program, we assumed the lower price in the range provided by CBS Outdoor as a reasonable price. Wrap advertising on buses runs about 65 percent occupancy. The project team assumed that the occupancy on Metromover cars would be somewhat lower. Assuming that occupancy for wrap advertising is 50 percent of the 29 Metrorail vehicles in the system, and that each Metrorail vehicle wrap advertising campaign could be sold for an average of \$7,000 per month, annual billings would be approximately \$1.21 Million. With the existing agreement with CBS Outdoor, MDT would receive 60 percent or approximately \$730,800 per year. Expected revenues for this advertising campaign are shown in Table 11, Summary of Estimated Total Media Value by Source.

Advertising on Kiosks along Busway

Advertising on kiosks along Busway is included in the CBS contract, but it has scarcely used mainly because of two factors. First, effective selling requires an efficient system to turn around sponsorship agreements, since much of the potential advertising is time-sensitive. Second, in the past sponsorship agreements had to be cancelled because of objections by elected officials. Guidelines need to be checked for consistency of public policy. Negative publicity from a campaign being canceled mid-stream can have long term negative effects.

In estimating potential revenue from kiosks along the Busway a visual inspection was done to identify kiosks with value for advertising – 56 were identified, 22 with premium exposure and 34 with standard exposure. Advertising along the Busway has lots of potential and can be sold for \$2,000 per month, per kiosk. Total potential revenue includes an occupancy factor of 60 percent. Expected revenues for this advertising campaign are shown in Table 11, Summary of Estimated Total Media Value by Source.

Advertising at faces of parking garages and MDT buildings

Wallsapes, banners, or building wraps are large size ads. Every city has unique locations that can dominate the market and announce a product in an impressive way. Walls and banners are big enough to stand on their own, or they can act as the anchor point of a broader multi-media campaign. These large spaces offer the possibility to display a message in a dramatic fashion. These ads are most often located in busy urban centers, where they provide the opportunity to access important businesses and tourist audiences. They are valuable because of their ability to reach large audiences on a repeated basis as they move through their day. However, such ads can be controversial since they can intrude on public space. In estimating the value of advertising at faces of parking garages and MDT buildings we met with MDT staff to review those buildings that would be appropriate for this type of advertising campaign. The project team also made site visits to parking garages to access location, and visibility of available walls. Expected revenues for this advertising campaign are shown in Table 11, Summary of Estimated Total Media Value by Source.

5.1.7. Implementation

Process and Schedule

In general, there are three options available to implement new advertising programs. The first would be to expand the existing contract with CBS. The second would be to put together a new advertising package and go out for bids; and the third option would be for MDT to do the program in-house. The three options are explain in more detail in the following paragraphs.

Option 1: Expand Contract with CBS Outdoor

The first option would be for MDT to simply implement any of the advertising opportunities by expanding the existing contract with CBS Outdoor. In the past, MDT has added to the list of available ad space inventory. For example, the MetroMover vehicles were added to the inventory effective August 1, 2011. CBS Outdoor has already sold advertising campaigns on these vehicles and expects to be able to do the same in the future. Approval would occur via the typical County approval process, which takes approximately 6 weeks. It is unlikely that substantial changes to the terms of the CBS contract could take place without a new bid.

Option 2: Bid Advertising Package

The second option would be to create a new advertising package that includes several of the advertising mediums, and then putting that package out for bid. As in the contract with CBS Outdoor, MDT is likely to end up with a contract where they will be guaranteed a certain minimum annual payment or a certain percentage of all revenues flowing from those advertisements, whichever is greater. However, such an approach would enable the County to include new contractual terms, ideally finding ways to incentivize the contractor for success while also providing upside to the County. This process would take approximately 8 months, assuming no difficulties arose during the award process.

Option 3: Advertising Program In-House

The third option would be for MDT to do this work in-house. Most transit agencies use an outside agency for their advertising program because of the belief that full-time advertising specialists would have a broader network of clients and buyers to tap into and to capitalize on a national client based interested in their particular market. However, some transit properties consider that by having dedicated staff they are in full control of the program and can project an image that is consistent with their goals and objectives.

Implementation Issues

To expand the advertising program, MDT must accommodate (or, potentially, alter) a number of rules and regulations that govern the placement of fixed advertising signs. The sign ordinance in Miami Dade County is Chapter 33. The sign ordinance applies to both incorporated and unincorporated areas of the county, except in municipalities that by ordinance have opted out of this regulation and have adopted their own regulations regarding signs in proximity to expressways.⁴ Municipalities may establish regulations in this regard that are more restrictive than those of Chapter 33.⁵

Chapter 33 prohibits any outdoor advertising sign within three hundred feet of the right of way of any Rapid Transit System right-of-way.⁶ The ordinance also prohibits outdoor advertising signs within three hundred feet of any other outdoor advertising sign.⁷ There are additional limitations on the size and orientation of the signs.⁸ Signs which do not comply with these rules, but which are not visible from any Rapid Transit System due to an intervening obstruction are allowed assuming they comply with local ordinances regulating signage in the area.⁹

Advertising space outside of the Metrorail and Metromover stations along highways not fully owned or maintained by MDT requires approval from other parties as well. For example, Florida Department of Transportation (FDOT) has restrictions on advertising along FDOT thoroughfares (limiting type, size, etc.). Thus, all of the advertising space on the pillars along US 1, as well as any billboards along US 1, would have to follow FDOT standards and procedures. Further, as noted, local ordinances will come into play at various points along the rail lines/busway where local municipalities have opted to enact sign ordinances that are more stringent than those of the County.

It is important to note that FDOT is responsible for controlling outdoor advertising (ODA) signs on the National and State highway systems. The Department controls the location, size, height, spacing and

⁴ 33.121.11. - Applicability

⁵ Id.

⁶ 33-121.23. – Exceptions to sign prohibition (c)(1)

⁷ 33-121.23. – Exceptions to sign prohibition (c)

⁸ Id.

⁹ 33-121.23. – Exceptions to sign prohibition (d)

lighting of ODA signs but has no authority to regulate the content of advertising messages on the signs. The regulatory program is based on federal law/regulations as well as state statutes/rules. Relevant Federal law is set forth in the Highway Beautification Act while federal regulations can be found at 23 C.F.R., Section 750. The relevant State laws are found in Chapter 479, Florida Statutes. In addition to state statutes, the Department writes administrative rules to interpret the intent of the statute for the general public. Chapter 14-10 Florida Administrative Code, is the Department's rule chapter which governs outdoor advertising. Local governments often have their own ordinances which regulate outdoor advertising in each community. The Department cannot issue a permit for an outdoor advertising sign which not allowed by local ordinances.¹⁰

While current law may allow for some pillar and billboard advertising, it is unlikely to implement these revenue sources to their fullest extent without a change to the County sign ordinance. Changing a County ordinance needs to be sponsored by a commissioner and include two public hearings. It takes a minimum of 3 months to implement/amend an ordinance. An ordinance change can be started by the Citizens Independent Transportation Trust (CITT).

Regarding naming rights sponsorships, the Miami-Dade Code permits assigning a person's name to a rail or Metromover station. However, it is not permitted to assign the name of a corporation. This kind of naming rights sale would require that the rules for naming a station be amended. A new ordinance would need to be proposed and passed by the Board of County Commissioners.

Analysis of Operating Revenue Enhancement Opportunities for Miami-Dade Transit
Summary of Required Steps for Implementation

Revenue Source	State Legislative Action	County/Municipal Legislative Action	New Physical Structures for Ads	Possible Extension of Current Contact	Significant Political Obstacles
Metrorail Stations (including station pillars/billboards)	✓	✓	✓	✓	✓
Metromover Station Ads (Station Pillars, interior walls, clocks, etc)				✓	✓
Metromover Vehicle Interior Ads				✓	
Wrap Advertising on Metrorail Cars				✓	
Wrap Advertising on Metromover Cars				✓	
Surface Parking, Parking Garages, and Park and Rides (including parking pillars and wall ads; not including Kiosks)				✓	✓
Kiosks along Busway		✓		✓	✓
Guideway Pillars	✓	✓		✓	✓
Wall Advertising on MDT Buildings	✓	✓		✓	✓
Naming Rights				✓	
Domination Advertising-Metromover and MetroRail				✓	

In addition to legal issues, MDT reports potential maintenance issues with advertising on Metrorail and Metromover structures. Ads that cover structures, such as guideway pillars, can make it more difficult to inspect for damage, creating a potential safety issue and/or increasing the cost of maintenance. Painted ads are a potential solution, but are more costly to maintain and replace.

The following table summarizes key implementation issues for each advertising enhancement opportunity:

¹⁰ FDOT – Office of Right of Way Outdoor Advertising Information,
<http://www.dot.state.fl.us/rightofway/OutdoorAdvertisingInformation.shtm>

Cost of Implementation

The cost to implement these advertising opportunities varies with the type of advertising. Because local law already allows MDT to contract with advertising agencies for ads placed inside of rail and Metromover stations, implementing these options has a lower cost. This is especially true if MDT chooses to simply expand their current contract with CBS to include these options in the list of inventory on which CBS can place ads. A process is already in place for making these changes, and this has been done in a relatively efficient manner in the past.

If MDT decides to bid out these additional opportunities, costs could include significant staff time to manage the procurement process, lawyers to draw up a new contract, and other County staff to review proposals and award contract. MDT staff would have expanded ongoing contract management and oversight responsibilities that will require staff resources.

Implementing advertising opportunities that would require a change in state or County ordinance will be much more expensive to carry out. While it is difficult to make an accurate determination on exact costs, MDT could expect to employ County personnel as well as outside lobbyists and consultants over the course of several months to push the initiatives through the necessary committees and votes. There would also be costs associated with writing any new legislation, regulations, etc. In addition, the process could last as long as eight months.

5.1.8. Conclusions and Results Summary

Research and data analysis indicates that most transit agencies currently have advertising programs that generate revenue for their systems. While advertising revenues are typically small compared to the operating budget, the funds generated can be significant. In addition, there are as many opportunities to generate advertising revenue as there are pieces of equipment, property and printed material on the transit system.

Advertising policies are quite similar among transit agencies. Most of the transit agencies contract out their advertising programs. It seems fair to say that selling advertising is a lucrative business, but expertise is required to succeed. Hiring the expertise or contracting for it are the two options available.

MDT's current advertising program has shown mediocre results, with revenue below average for peer agencies compared to operating costs and per unlinked passenger trip. This may be dictated in part by the local market, which, although denser and larger than average, is spread out and diverse. However, reviewing advertising contracts to ensure the terms conform with industry best practices is recommended; in particular, it appears MDT could improve the split of revenue for advertising contracts and perhaps incentive improved performance.

Of all the revenue enhancement opportunities investigated for this report, additional advertising revenues appear to have the most promise in terms of viability and amount of funds that could be generated. However, implementing some of the programs discussed, such as advertising on guideway pillars, will not be without challenges due to zoning and signage laws, public acceptance of increased advertising penetration, and even maintenance issues (for guideway pillars).

A summary of revenues from all media programs reviewed is presented in the following table. If all opportunities were implemented, the Base Case estimate is \$9.1 million in annual MDT revenue. In all cases, more than a third of potential value is from wrap advertising on Metrorail and Metromover vehicles. Advertising on guideway pillars and at stations could provide substantial additional revenue.

Summary of Results

Revenue Source	Low Case		Base Case		High Case	
	Total Media Value	MDT Expected Revenues*	Total Media Value	MDT Expected Revenues*	Total Media Value	MDT Expected Revenues*
Metrorail Stations (including station pillars/billboards)	\$ 708,000	\$ 285,000	\$ 2,407,000	\$ 1,075,000	\$ 3,204,000	\$ 1,366,000
Metromover Station Ads (Station Pillars, interior walls, clocks, etc)	\$ 559,000	\$ 280,000	\$ 1,822,000	\$ 911,000	\$ 1,762,000	\$ 881,000
MetroMover Vehicle Interior Ads	\$ 415,000	\$ 249,000	\$ 715,000	\$ 429,000	\$ 948,000	\$ 569,000
Wrap Advertising on Metrorail Cars	\$ 2,500,000	\$ 1,500,000	\$ 4,896,000	\$ 2,938,000	\$ 6,000,000	\$ 3,600,000
Wrap Advertising on Metromover Cars	\$ 650,000	\$ 390,000	\$ 1,218,000	\$ 731,000	\$ 1,575,000	\$ 945,000
Surface Parking, Parking Garages, and Park and Rides (including parking pillars and wall ads; not including Kiosks)	\$ 96,000	\$ 48,000	\$ 698,000	\$ 349,000	\$ 997,000	\$ 499,000
Kiosks along Busway	\$ 168,000	\$ 101,000	\$ 672,000	\$ 403,000	\$ 1,300,000	\$ 780,000
Guideway Pillars	\$ 140,000	\$ 56,000	\$ 2,852,000	\$ 1,141,000	\$ 8,069,000	\$ 3,228,000
Wall Advertising on MDT Buildings	\$ 120,000	\$ 36,000	\$ 480,000	\$ 144,000	\$ 1,080,000	\$ 324,000
Naming Rights	\$ 267,000	\$ 200,000	\$ 495,000	\$ 371,000	\$ 949,000	\$ 712,000
Domination Advertising-MetroMover and MetroRail	\$ 630,000	\$ 315,000	\$ 1,260,000	\$ 630,000	\$ 1,512,000	\$ 756,000
Total Potential Media Value	\$ 6,253,000	\$ 3,460,000	\$17,515,000	\$ 9,122,000	\$ 27,396,000	\$ 13,660,000

*MDT expected revenues is a weighted average based on expected share of revenue from each revenue source. Each source has its own expected revenue percentage.

While some of the opportunities are fairly straightforward to implement, others will require a more time and expense, including the need to change local, and, potentially, state, regulations governing advertising. The current economic and political environment will have a major impact on how easy it is to implement these advertising options.

Therefore, we recommend MDT focus on the advertising opportunities that have significant revenue value and those can be most easily implemented. An aggressive wrap advertising campaign, for example could meet both of these criteria since MDT already has the authority to implement vehicle wraps and it has significant potential value. Other solutions, such as wall advertising on MDT buildings, may not have benefits that outweigh the potential implementation difficulties.

It is important to note the CITT cannot implement any of these solutions, but it could recommend that MDT do so. Requesting an official MDT advertising enhancement program plan could help kick-start this process.

Local Business Tax Fees

Description of Revenue Source

Recognizing that an efficient and effective transportation system is essential to a strong local economy, some municipalities have instituted nominal fees to help support and expand mass transit services.

Business-related fees include registration fees required for business operations, or licensing fees, which designate firms authorized to conduct certain activities or sell particular products. Most state and local governments require annual payments at the time of registration renewal. However, while requiring business registration and licensing fees is common, using these funds to support transit is not typical.

Examples of Transit Agencies Collecting Fee

Two transit agencies were identified that collect business taxes or fees to directly fund transit operations:

Louisville, KY: The Louisville Metro Revenue Commission collects a 0.2% business license fee on behalf of the Transit Authority of River City (TARC) in addition to two other license fees for Louisville Metro (1.25%) and Jefferson County or Anchorage School Boards (0.75%).¹¹

Park City, UT: Park City charges a business license fee, generally \$95 for a new application (excludes for-hire vehicles) and with renewal fees ranging from \$17 to \$22, as well as a night rental license fee.¹² In total, these two business license fees brought in approximately \$1.09M for the City's Transportation & Parking Fund (an enterprise fund) in 2010.¹³

Miami-Dade County Business Fees

As is typical in large cities, Miami-Dade County charges various taxes and fees to establish and maintain business licenses. The nature and amount of these fees depends on the nature of the business, the number of employees, and the equipment being used. However, most of the business license fees are nominal. The County office of the tax collector shows that typical fees are \$45 (in the City of Miami) to \$75 (in unincorporated parts of the county) for businesses with up to 10 employees, and \$4.50 or \$7.50 per additional employee. Some industries have higher fees, the most expensive of which is \$1,750 for cable TV franchises¹⁴, and few businesses operating in Miami-Dade County are exempt from paying the local business tax. We found no evidence that business taxes or fees are being applied to transit. More details on the various business license fees charged for each category in the County can be found in the appendix to this section.

¹¹ Louisville Metro Revenue Commission: Occupational License Fee/Tax Imposed In Louisville Metro, Kentucky, http://www.louisvilleky.gov/NR/rdonlyres/6DBF83EB-3705-4215-A49B-35CE9E7E3B80/0/REGISTRATION_BOOKLET.pdf

¹² Park City Business License Fee Schedule - July 1, 2009 through July 1, 2010.

<http://www.parkcity.org/Modules/ShowDocument.aspx?documentid=2238>

¹³ "Fiscal Year 2011 Budget." Park City Budget Department. 7/17/2010.

<http://www.parkcity.org/Modules/ShowDocument.aspx?documentid=266>

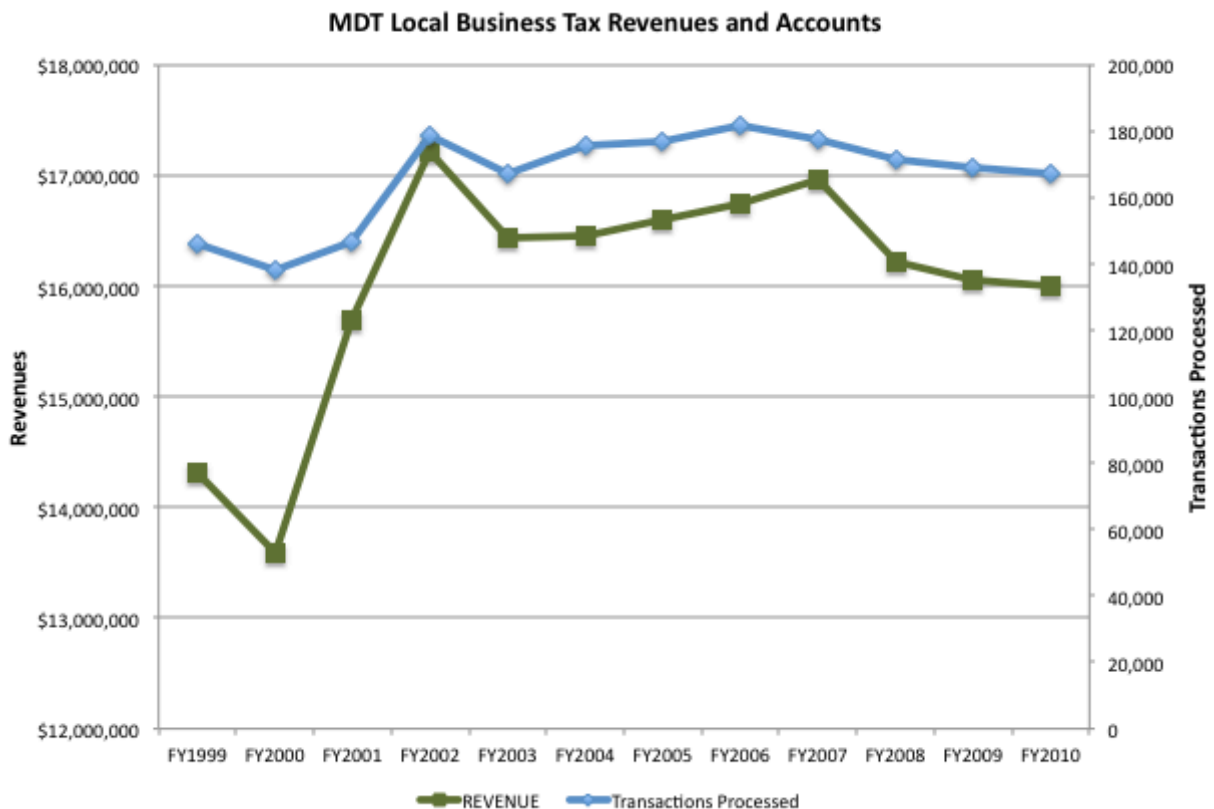
¹⁴ Local Business Tax Categories: http://www.miamidade.gov/TaxCollector/ol_categories_baselist.asp

Some businesses in Miami-Dade County may fall under more than one of the 146 categories for the purposes of the Local Business Tax. Where this is the case, the business must pay the local tax for all applicable categories. While there are approximately 95,000 businesses within the County, there are over 154,000 different local business tax accounts. These fees are charged annually.

There has been no increase in the license rates since 1996. A surcharge was added in the 1980s to promote economic development. A recent attempt to expand the business license requirements in Miami-Dade County to include new business classes (and thus increase revenues) was unsuccessful.

Local Business Tax Revenues

As shown in the chart below, the number of County businesses applying for tax receipts has been slowly, but steadily declining over the past several years after increasing from 1999 until 2006. FY2007 there were 168,641 business tax accounts that paid for the tax receipt; by 2011 the figure decreased to 154,089 accounts.¹⁵ Revenue has followed a similar trend. The County collected \$15.99 M in FY2010 licensing fees, down from over \$17 M in FY 2007. The County is on track to collect approximately \$15.28 M in FY2011. The table in the appendix provides detailed revenues by month and year for the past several County fiscal years.¹⁶



¹⁵ <http://www.miamitodaynews.com/news/110106/story6.shtml>

¹⁶ Miami Dade County Finance Department (provided by Jurgen Teintze, Chief – Business Taxes, Credit and Collections), 354 Reports for various years.

As the chart above shows, the total number of local business tax accounts, as well as the total revenues collected each year, has declined since 2007, coinciding with the downturn in the economy. The county expects to have collected approximately \$15,281,888 in FY2011.¹⁷

Current Collections

The business tax revenues collected are divided into different categories including incorporated and unincorporated portions of the County and the Beacon Council (a public-private-partnership organization that seeks to facilitate business investment in Miami-Dade County). Approximately half of the revenues are deposited into the County's general fund. The table below shows the breakdown between incorporated and unincorporated collections, as well as distributions to the Beacon Council for the past several years through FY2011.

LOCAL BUSINESS TAX COLLECTIONS

WITHIN AREAS BY FISCAL YEAR

	2004-2005 COLLECTIONS	2005-2006 COLLECTIONS	2006-2007 COLLECTIONS	2007-2008 COLLECTIONS	2008-2009 COLLECTIONS	2009-2010 COLLECTIONS	2010-2011 COLLECTIONS
UNINCORPORATED AREAS	\$6,657,907.98	\$6,662,134.47	\$6,781,278.83	\$6,589,395.95	\$6,542,209.47	\$6,466,969.42	\$ 6,386,834.93
INCORPORATED AREAS	\$5,216,536.26	\$5,341,222.01	\$5,330,601.83	\$4,992,316.49	\$4,978,310.69	\$4,944,557.25	\$4,978,173.69
BEACON COUNCIL DISTRIBUTION	\$4,126,280.22	\$4,192,717.50	\$4,229,928.42	\$4,036,556.29	\$4,011,152.71	\$3,987,483.62	\$ 3,987,687.29
MUNICIPAL CONTRACTOR'S RECEIPT, BINGO, NIGHT CLUB, ETC.	\$651,642.84	\$579,390.98	\$595,861.94	\$570,677.53	\$511,795.65	\$519,313.72	\$ 466,530.27
TOTAL	\$16,652,367.30	\$16,775,464.96	\$16,937,671.02	\$16,188,946.26	\$16,043,468.52	\$15,918,324.01	\$15,819,226.18

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The Unincorporated Areas line item presents the level of LBT revenue collected from businesses in the unincorporated areas of Miami-Dade County. Half of that revenue is distributed to the Unincorporated Municipal Service Area (UMSA) general fund which is spent for general, unspecified purposes that involve citizens of the unincorporated area. The other half is distributed to the County-Wide General Fund. The Incorporated Areas line item presents the level of LBT revenues collected from businesses in municipalities. This is a County-wide tax which is distributed by a population formula back to municipalities and the County's County-Wide General Fund.

¹⁷ Miami Dade County Finance Department (provided by Jurgen Teintze, Chief – Business Taxes, Credit and Collections).

¹⁸ Miami Dade County Finance Department (provided by Jurgen Teintze, Chief – Business Taxes, Credit and Collections), 354 Reports for various years. The total receipts in this table differ slightly from the graph showing annual revenues. The totals in this table include a program called municipal contractor taxes, which is not Local Business Tax (LBT), but an added permitting fee program that only contractors pay. It is required only by those who will pull permits, which requires a level of competency (certified first by a County or State licensing board) and a LBT receipt. The monies are distributed to various building departments whether in the city or the County's unincorporated area, and are governed by city/county inter-local agreement. The +/- \$200,000 thousand in revenue is shown in this report as if it were LBT because the Finance Department measures total collections. However, these funds are not distributed monthly as are all other receipts. Therefore an undistributed amount exists at any one time.

Further, cities have their own LBT that they charge separately on top of this County-wide tax, producing extra LBT revenue on top of their own. The Beacon Council surcharge tax is collected from all businesses and distributed to the Council for their operating expenses.

The last line includes funds collected by type that are not really LBT, but administered by the LBT section. Every penny of the contractor's receipts, a special program, goes back to the Municipalities, allocated based on numbers of municipality-issued permits pulled by the taxed contractors. Transfer charges and late fees (in the "Etc."), as well as the Bingo permits and night club permits, stay with the tax collector to cover some of the cost of collection. Thus, none of it is available for general County purposes.

Potential Revenue Impact

Business license fees per transaction vary from \$37.50 to well over \$100 depending on the business classification.¹⁹ There are different rates based on whether a business lies in an incorporated or unincorporated area of the County.

On average, business taxes were \$95.64 per transaction in fiscal 2010. A rise in average transaction cost of 1% with the same number of ratepayers as 2010 would yield just under \$160,000. At this rate, it would require an average increase per transaction of 6.25% to raise an additional \$1M annually. If the rates are raised by the maximum 5% currently allowed by law (see "Implementation" section), the additional revenue would be \$799,720. As explained below, it is important to remember that even if these additional revenues were realized, it is unlikely that all of those revenues could be applied for MDT purposes.

Implementation

Implementation Process

Florida Code Chapter 205, Business Taxes, provides the relevant rules and regulations governing the authority to collect licensing fees. 205.053 of Title XIV requires the "appropriate tax collector" to make collections on a specific schedule and lays out the penalty levels for delinquent payments. The section also lays out possible civil actions and penalties for non-payment.

County code is also applicable. Part III, Chapter 8a, Article IX, Sec. 8A-171 of the Miami-Dade Code governs the collection of business licensing fees in the County. This section charges that "no person shall engage in or manage any business, possession or occupation in Miami-Dade County for which a local business tax is required by this article without first obtaining the required license or licenses from the County Tax Collector." Article X of the same chapter governs similarly for the unincorporated areas of the County. These articles go into detail about the various exemptions, display of the tax receipt, penalties, etc.

A state equity commission formed in 1995 sets the actual fees for each business type. This commission has determined a rate structure and the terms for raising those rates at the municipal level as found in 205.053. Currently, municipalities can raise rates by 5% every two years, and have some power to reclassify business categories. Any additional revenues generated from these rate increases or reclassifications would be governed in the same way as other general (non-surtax) revenues are currently

¹⁹ http://www.miamidade.gov/taxcollector/ol_home.asp

handled. That is, the revenue the County is entitled to would go to the general fund. In other words, these increased funds could not be set aside especially for use by MDT. However, as it did for the Maintenance of Effort of General Fund dollars for transit with the passage of the half-penny surtax, the County could ensure an equivalent increase in funding to MDT through legislative action. In any case, the other parties that have claim on revenues from this source (Cities within the County, Beacon Council, etc.) would also get their share, significantly decreasing the level of additional revenues to the County (and/or MDT).

The authority to levy business license fees in Miami-Dade County is governed by Florida state law. Because the State has not explicitly granted the right to the County to increase business license fees beyond the 5% limit mentioned above for the purpose of funding transit, County officials report that they assume that this right does not exist.²⁰ Therefore, any such increase in business license fees or surcharge for the purpose of funding transit would have to be approved at the state level.

In summary, there are two ways that MDT could receive funding from Local Business Taxes. First, through a surcharge approved at the State level. Second, through legislative action that ensures increases in MDT general fund support commensurate with the increase in the County's portion of the additional revenues from an increase in fees (under the current rules). Following are explanations of the general implementation plan associated with each option.

1. State Legislation of a Surcharge

Passing a transit-dedicated surcharge at the State level has the same process as any type of legislation. First, a representative in either the house or the senate would have to sponsor the bill. The sponsor would ensure that the bill is drafted and may find co-sponsors before sending it to the speaker of the house or the president of the senate. The speaker or president would then assign the bill to a committee whose chair might assign it to a subcommittee. Committees begin their sessions in the fall. The committee or subcommittee will hold hearings on the bill before it is sent back to the president or speaker to be scheduled for a vote. The president or speaker has the power to decide not to schedule a vote.

If a vote is successfully passed in the house or the senate, it will then go to the other chamber for a vote. If that chamber passes the bill, it then goes to the Governor for a signature or veto.

If the second chamber does not pass the bill or passes a similar-but-not-identical bill, it goes to a joint committee in an effort to resolve any differences. If the differences are resolved, it goes back to both chambers for another vote. If it is passed by both chambers, it goes to the governor for signature or veto. If the governor vetoes, it goes back to both chambers, which must pass the bill with a two-thirds vote for the bill to become law.

Even if the bill is passed, the County would likely have to take action at the BCC level to utilize their powers to raise the business tax. This could entail serious political challenges besides the process required at the County level (see below).

Having talked with lawyers who understand the current political climate and the results of recent legislative efforts, it is obvious that any change at the state level that increases taxes will be extremely difficult to pass.

²⁰ Phone interview with Jurgen Teintze, Chief—Business Taxes, Credit and Collections

Even if everything went smoothly, the process would take approximately 5-6 months to complete and would cost up to tens of thousands of dollars a month in lawyers fees to get the legislation through. Further, there would be considerable effort on the part of state legislators and sponsors of the bill at the County level for such a bill to even get to a vote.

2. County Ordinance to Dedicate a Revenue Stream for MDT Purposes

Though the CITT may offer a resolution in support of a proposal, passing a County ordinance is outside their scope of power and responsibility. The steps for passing an ordinance start with a County Commissioner sponsoring the ordinance. It will then be assigned to a committee, which generally meets monthly except in August. As at the state level, it is difficult to know which committee the proposed ordinance would be assigned to. Transit items are generally within the purview of the Board of County Commissioners' (BCC) Regional Transportation Committee, but this type of fee could easily be given to the Internal Management and Fiscal Responsibility Committee (i.e. Tax Collector item). Once the committee finishes drafting the proposed ordinance, it must be read twice at the BCC with six weeks between the two readings. A vote will then be taken. If passed, the ordinance then goes to the Mayor for signature or veto.

Cost of Implementation

There are no capital costs or ongoing operating costs associated with increasing or expanding business licensing fees since the structures for collection and administration are already in place. However, the effort required to alter business fee collection and usage could be substantial. These efforts would include lobbying the state legislature, marketing, drafting, etc. The process would go on for several months before any change is made. MDT may need to appoint or even hire someone to coordinate the effort or to perform specific tasks. Thus, even though MDT and/or CITT employees would likely be spearheading this effort, substantial costs could be associated with implementation of increasing the business tax.

Issues to Consider

One non-revenue benefit of raising revenues through business licensing fees is that those paying the fees will benefit at some level from the use of the funds. Businesses in Miami-Dade County will benefit from improved transit access to their places of business. Improved transit access stimulates economic growth generally, with more businesses and more jobs.

The principal disadvantage of this revenue source is the amount of effort and cost as compared to the potential funds that could be generated. It would likely require many labor hours over the course of months to enact the necessary State legislature action. Even if legislation were to pass, additional business tax revenue would likely be limited. Relatedly, as noted in the 2010 report, there is a risk that a large increase in business licensing fees would dissuade some businesses from locating in the County, especially if they are higher than surrounding jurisdictions.

Another consideration when considering the use of Business Fees to fund MDT purposes, is that while local business taxes are common across the U.S., using these funds for transit is not typical. Businesses have allowed themselves to be taxed for improvements (e.g., sports arenas), and their acceptance of the increase would likely be needed to make implementation politically feasible.

Conclusions and Recommendations

Business taxes and fees could provide a steady stream of revenue to MDT. However, the potential revenues are not likely to be significant compared to the size of the MDT operating shortfall. Legislative hurdles to change the fees have been difficult to overcome in the past, as demonstrated by a recent failed attempt to increase revenues from this source. The benefit of the limited amount of support additional business tax funds could contribute must be contrasted with the legislative campaign that would be required to effect the change. Gaining support for the revenue source in the business community is likely to be critical to a successful effort utilize this revenue stream. One way to do this would be to demonstrate the support of the business communities in other cities for projects that benefit the local economy.

Tolling and Congestion Pricing

TOLL REVENUE SHARING

Description of Revenue Source

To ensure that an efficient and effective transportation system is adequately funded and developed over the long-term, some municipalities have turned to surplus toll road revenue to augment transportation budgets.

Surplus toll revenue is generally defined as annual toll revenue after debt service, reserve fund requirements, assigned profit and related expenses. Tolls may be charged as fixed, variable, or dynamic rates that change depending upon the level of congestion. Toll revenues are typically dedicated to the operation and maintenance of the tolled resource and its related facilities, but surplus revenue is often an effective mechanism for efficiently and economically funding new and existing transportation that relates to the resource being tolled or the larger transportation goals of a community. With Miami-Dade Expressway Authority's (MDX) portfolio of five toll roads and the recent implementation of the Interstate-95 Express Lanes (95 Express), tolling revenue is a key potential new source of revenue for MDT.

A traditional toll charges vehicles a fixed fee or variable rates depending on distance traveled. However, a more progressive type of toll known as congestion pricing is being used in express lanes in several U.S. cities to incentivize use of public transportation and carpooling, and to ensure a sufficient minimum driving speed. These express lanes are known as HOT lanes (High Occupancy Toll), and will often provide an exemption for cars that register as a carpool vehicle and drive with more than one person. Vehicles that do not qualify as carpools or motorcycles that want to use the HOT lanes, however, have to pay the congestion-based rate, which gets higher as congestion increases. The HOT lanes use sensors to determine the speed of cars in the lane and the distance between them. As congestion increases, the rate rises, and as congestion decreases, the rate falls. As a result, HOT lanes can usually ensure that drivers travel at full speed in the express lane (50+ mph), and they also tend to improve traffic flow in the non-express lanes as well.

HOT lanes are a growing trend in the U.S.: the Bay Area in California (Santa Clara and Alameda Counties) is implementing an extensive network of HOT lanes, San Diego County implemented HOT lanes on Interstate-15, Alexandria County (VA) is currently implementing HOT lanes on the I-495 Capital Beltway outside of Washington, DC, and Miami-Dade County and the Florida Department of Transportation (FDOT) implemented HOT lanes on the Interstate-95 in 2008-09. However, HOT lanes are not without their critics, who argue that such lanes simply provide an advantage to those people in the upper socio-economic class who can afford the potentially higher rates, while precluding the poor and middle class from faster travel. Indeed, for this reason many critics refer to HOT lanes as "Lexus Lanes." The counter-point is that HOT lanes also allow everyone to value their time and use the lanes accordingly, benefitting people of all economic classes. Moreover, HOT lanes can improve travel time on the free lanes, benefitting all.

Given that MDT faces a significant operating shortfall in 2014, toll road revenues could help fill that gap and ensure that Miami-Dade County maintains and develops an efficient, effective and sustainable transportation system.

Examples of Transit Agencies Using Tolling Revenue

Transit agencies in a number of major metropolitan areas use toll revenues to directly fund transit operations:

San Francisco, CA: The San Francisco Metropolitan Transportation Commission and Bay Area Toll Authority uses tolling over key local bridges to generate approximately \$25M for transit operations and approximately \$196M for capital expenses. Additionally, the Golden Gate Bridge and Highways and Transportation District utilize a bridge toll on average of \$5.09 (2009) over the Golden Gate Bridge to fund \$47.9M in 2009 for bus and ferry transit.

New York, NY: The Metropolitan Transportation Authority (MTA) utilizes tolls on its nine bridges and tunnels to earn upwards of \$700M to fund transit.

Washington, DC: Washington Metropolitan Area Transit Authority's bonds for a new, \$5.2B extension to WMATA's Metrorail system are being supported by revenue from the Dulles Toll Road, an existing toll facility that includes the right-of-way for the new rail line. The Metropolitan Washington Airports Authority (MWAA) took over toll road operations in 2008 from the State of Virginia for the purpose of completing construction, and implemented an aggressive toll increase schedule that will raise tolls by 80% by 2012. About half the toll revenues will go to the rail project.

San Diego, CA: Revenues for the I-15 FasTrack facility in northern San Diego partially fund bus service within the corridor.

London, England: London imposes a congestion pricing charge of approximately \$12.50 to \$15.50 depending on payment promptness, for automobiles to enter the city center during regular business hours. Since the fee was implemented in 2003, traffic levels have been reduced by almost a fifth. The revenues have been used, in part, to fund frequent bus service to the city center. Video cameras are utilized to track cars entering the congestion pricing zone, and users are able to pre-pay for entries to reduce fees.

Miami-Dade County Toll Revenue

There are two potential sources of toll revenues in Miami-Dade County: MDX toll roads and the 95 Express HOT lanes. These are analyzed in turn below.

Miami-Dade Expressway Authority Tolling Revenue

The Miami-Dade Expressway Authority (MDX) was created in 1994 by the Miami-Dade County Commission to establish local control of toll revenues and to ease traffic congestion on five major roadways

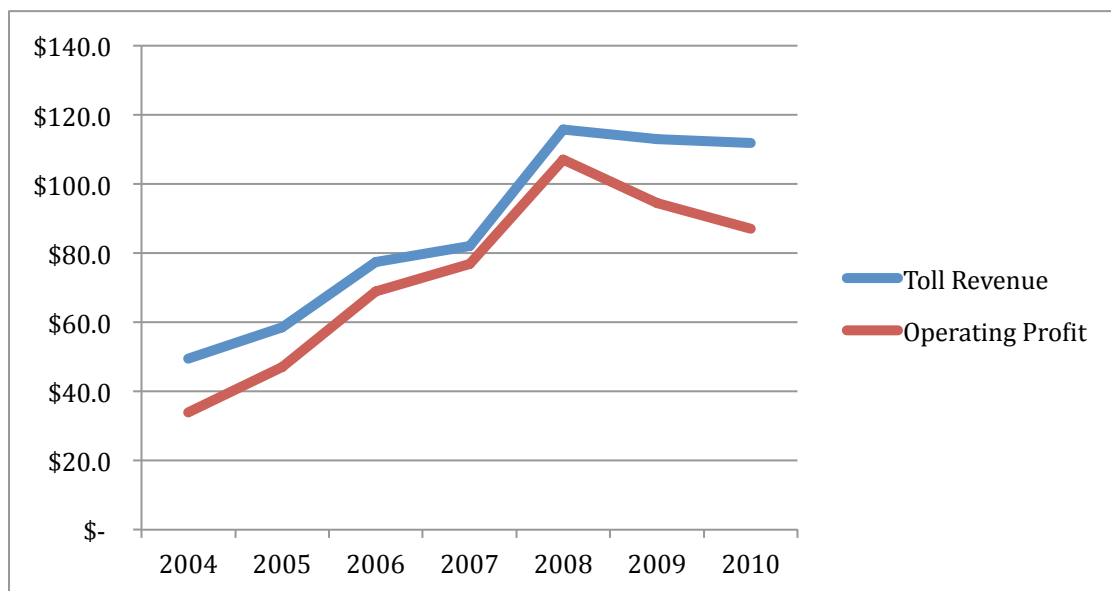
in Miami-Dade County.²¹ In 1996, with the passing of Florida legislation, MDX took over operational and financial control of five of the busiest roadways in Miami-Dade County:

- State Road 112/Airport Expressway
- State Road 836/Dolphin Expressway
- State Road 874/Don Shula Expressway
- State Road 878/Snapper Creek Expressway
- State Road 924/Gratigny Parkway

Since 1996, MDX has been tasked with maintaining, operating and enhancing its expressway system with the funds generated from tolls collected on its roadways. MDX does not receive gas taxes or other tax revenues, so nearly all of MDX's funding (95%) comes from toll road revenues.

In 2010, MDX generated \$111M in toll revenue, a 1.09% decline from 2009 (\$113M), and a 3.42% drop from a peak in 2008 (\$115M). Operating profit has also declined over the past two years: \$87M in 2010, \$94M in 2009 and \$107M in 2008. The declines resulted from lower traffic volume due to high unemployment and a lagging economy: in 2010 MDX executed 117.4 million transactions, up from 116.1 million transactions in 2009, but down from 118.3 million transactions in 2008. Even still, MDX generates significant operating profits.

MDX Toll Revenues (2004-10)
(in millions)

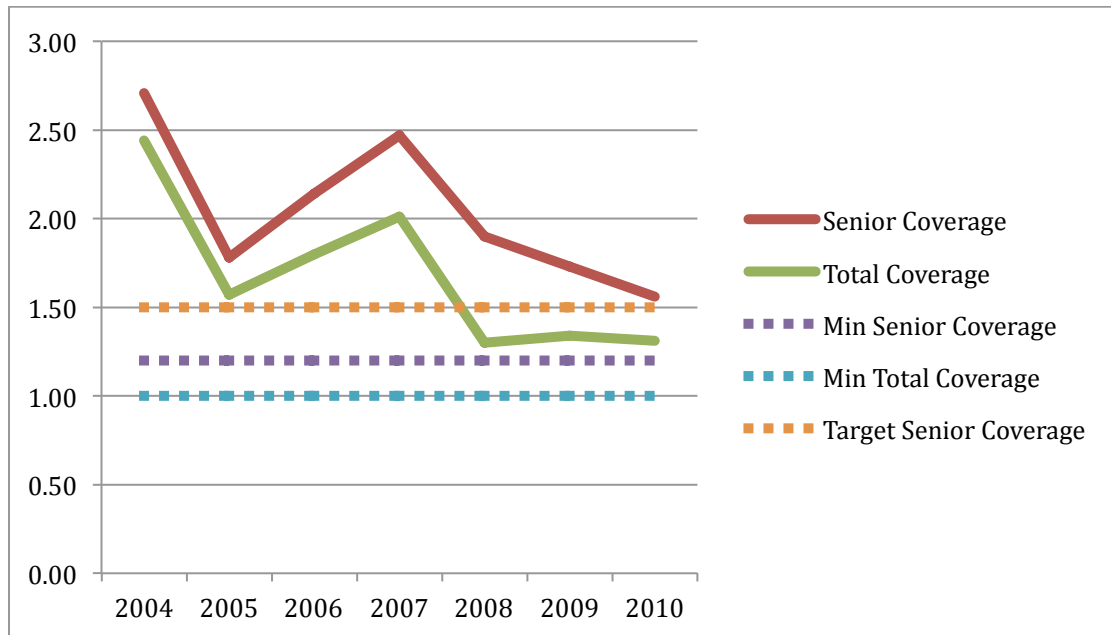


With strong operating profits, MDX is able to maintain its target debt service coverage ratios. MDX issues revenue bonds to fund improvements and increase capacity in the expressway system, and MDX's Trust Indenture requires a minimum senior debt coverage of 1.20 and total debt coverage of 1.00. However, MDX board policy is to maintain a senior debt coverage ratio of at least 1.50, as recommended by the

²¹ <http://www.mdx-way.com/about/history>

rating agencies. As indicated, MDX has consistently maintained coverage well above minimum requirements, and above its target level as well. However, in 2010 MDX got close to its minimum target level with a 1.56 senior coverage ratio. Given MDX's target ratio, any funds available to support MDT would be variable depending on how far MDX can stay above its targeted senior coverage ratio.

MDX Coverage Ratios (2004-10)



As shown, MDX has capacity to support MDT with a carve-out of surplus revenues while still maintaining its target coverage ratios, but that capacity has diminished over the last two years.

In addition, MDX's Trust Indenture includes language that allows the use of surplus revenues to finance or refinance the planning, design, acquisition, construction, maintenance or improvement of a public transportation facility or transportation facilities located in Dade County, Florida or any programs or projects that will improve the levels of service on the MDX system. MDX staff report they would be willing to carve-out toll revenue for the capital costs of transit on the MDT system, but are averse to funding any transit operations.

Alternatively, MDT could seek an incremental per-transaction fee that would generate revenues specifically dedicated to MDT. Given that MDX processed over 117 million transactions on its five existing roads in 2010, a small additional fee per transaction could yield significant funds for to help cover MDT operating shortfalls or capital expenditures.

95 Express Toll Revenue

In 2008 the Florida Department of Transportation (FDOT) implemented HOT lanes on Interstate-95 in Miami-Dade County in an effort to decrease congestion, encourage car-pooling and use of public transportation, and raise revenue for further transit investments. These managed lanes, called I-95

Express Lanes (95 Express), converted and expanded the prior HOV lanes. The HOT lanes use a congestion pricing model that charges drivers a variable rate that moves based on the amount of congestion in the lanes. The lanes also provide registered carpoolers free access.

The 95 Express northbound lane opened in 2009, and the southbound lane opened in 2010. The project is currently in Phase 2, which will extend the 95 Express to provide a continuous facility between I-395/SR-836 in Miami-Dade County and Broward Boulevard in Broward County. FDOT is authorized to implement these HOT lanes and collect tolls under a program administered by the U.S. Department of Transportation (USDOT) and the Federal Highway Administration (FHWA), which permits construction of HOT lanes in specific cases.²²

Toll rates for the 95 Express are based on traffic conditions of the lanes only. Roadway monitors are placed on the lanes to track the number of vehicles, speeds and distance between vehicles at any given time. As the lanes become more congested, the toll rates increase. Tolls are set so that they fluctuate between \$0.25 and \$3.50, but rates could reach \$7.00 in extreme circumstances. In 2010, rates ranged from \$0.25 to \$6.00, with 95% of tolls being \$2.50 or less. The revenues are used to fund operations, provide maintenance and repair to existing roads, and to continue efforts to improve the capacity and efficiency of the I-95 corridor.

The lanes have been both profitable and effective: the northbound lane collected \$4.78 million in the first year and improved traffic flows in both the paid lanes and the free lanes. In 2010, the northbound lane generated \$6.2M, and the southbound lane (opened mid-2010) generated \$2.9 million in the third and fourth quarters combined. As of May 2011, FDOT had collected almost \$23 million since it opened the northbound express lane in December 2008.²³

Based on these impressive revenues, 95 Express could seemingly be a significant source of revenue for MDT, whether by carving out a portion of existing revenues or by adding an incremental per-transaction fee. However, transit is already a major component of the 95 Express project. The FTA provided \$62.9 million in funds through an Urban Partnership Agreement to support construction of Phase 1 of the project, including \$43.4 million for conversion from HOV to HOT lanes and \$19.5 million for bus rapid transit service. In addition, toll revenue continues to support transit operations for express bus service. The 95 Express operating budget included over \$4 million for transit in FY 2011, a figure projected to grow to more than \$8 million by FY 2021. These figures represent nearly one-third of total 95 Express uses of funds in each year. With this substantial commitment to transit in conjunction with the 95 Express project already in place, further use of toll revenue for other MDT functions may not be likely. In the interest of completeness, however, the analysis below examines the possibility of using more I-95 Express funds for further transit operations.

Furthermore, given that 95 Express is sponsored at the state level by FDOT and the tolling is authorized under federal legislation, it would likely be more difficult for MDT to reach an agreement for funding than it would be to reach an agreement with MDX, which is a local authority.

Potential Revenue Impact

²² <http://www.95express.com/home/FAQ.shtm>

²³ <http://www.miamiherald.com/2011/05/30/2242696/interstate-95-express-lanes-in.html#storylink=misearch>

The following analysis looks at the revenue impact of two potential toll revenue sharing structures: a carve-out of existing surplus revenue, and the addition of an incremental per-transaction fee. In a carve-out structure, MDT would take a given percentage of surplus revenue from MDX or 95 Express. In an incremental fee structure, MDT would have a given percentage fee, or surcharge, added on top of what either MDX or 95 Express currently charges on each transaction (i.e. each vehicle that pays to drive on the road), and that fee would flow directly to MDT. The following analysis looks at each structure with both MDX and 95 Express as the potential revenue sources. Accordingly, the analysis considers four scenarios:

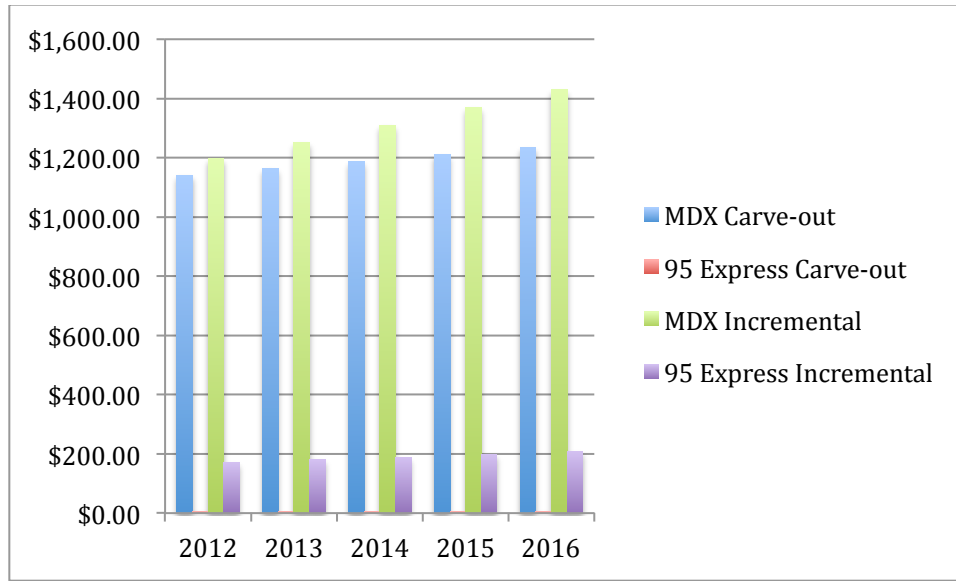
1. Carve-out with MDX,
2. Carve-out with 95 Express,
3. Incremental fee with MDX, and
4. Incremental fee with 95 Express.

To accomplish the analysis, The Project Team designed a financial model that uses historical financial data and reasonable growth assumptions to project MDX and 95 Express revenue over the coming five-year period (2012-16).

Based on the analysis, both MDX scenarios could have a significant impact on reducing the MDT's \$48M projected shortfall. Whether using the carve-out or the incremental structure, MDX has a significant amount of surplus revenue, making it the more optimal partner for toll revenue sharing. While MDX still has to meet its target senior coverage ratio, which may affect its ability to consistently provide a meaningful carve-out payment, MDX still generates significantly more revenue than 95 Express. Under either MDX scenario, the toll revenues could potentially cover in the range of 10-12% of MDT's operating shortfall if a 5% carve-out or 5-cent incremental fee was introduced. Even under less-optimistic assumptions, the revenue impact from a sharing deal with MDX would likely be significant.

The chart below depicts the revenue potential for each 1% carve-out of funds for the two toll systems or each 1-cent incremental fee per road user.

Revenue Impact: Carve-out versus Incremental
(in thousands)



The following is a look at the conclusions and assumptions of each of the four scenarios.

Carve-out with MDX

MDX has a significant amount of surplus toll revenue, so a carve-out scenario may be possible. In this scenario, we assumed a 2% annual revenue growth rate over the next five years (2012-16), and we conservatively assumed that 2011 revenue would be flat with 2010 revenue, for which we have data. Based on these assumptions, every marginal 1% of carve-out could potentially yield \$1.1-\$1.2 million in revenue. For example, if we assume a 5% carve-out of MDX's surplus revenues, MDT's potential revenue is expected to reach \$5.7 million in 2012.

MDX Carve-out: Revenue Impact 2012-16 (in thousands)

MDX Toll Roads - Carve-out					
	2012	2013	2014	2015	2016
MDX Surplus	\$114,079.9	\$116,361.5	\$118,688.7	\$121,062.5	\$123,483.7
Carve-out (%)	1.0%	1.0%	1.0%	1.0%	1.0%
MDT Revenue	\$1,140.8	\$1,163.6	\$1,186.9	\$1,210.6	\$1,234.8

Given that the projections are highly dependent on the accuracy of the aforementioned assumptions, the following is a sensitivity analysis that provides a range for the impact on MDT's 2012 revenue.

Sensitivity Analysis: MDX Carve-out on 2012 Revenue (in thousands)

		MDT Surplus Revenue Carve-out (%)				
MDX Revenue Growth Rate (%)		1.0%	3.0%	5.0%	7.0%	9.0%
	0.0%	\$1,118.4	\$3,355.3	\$5,592.2	\$7,829.0	\$10,065.9
	1.0%	\$1,129.6	\$3,388.8	\$5,648.1	\$7,907.3	\$10,166.5
	2.0%	\$1,140.8	\$3,422.4	\$5,704.0	\$7,985.6	\$10,267.2
	3.0%	\$1,152.0	\$3,455.9	\$5,759.9	\$8,063.9	\$10,367.8
	4.0%	\$1,163.2	\$3,489.5	\$5,815.8	\$8,142.2	\$10,468.5

As shown, a carve-out with MDX could potentially provide MDT with additional revenue in the range of \$3.4-\$8.1 million in 2012.

Carve-out with 95 Express

As mentioned, 95 Express already uses revenues to fund other transit needs, and therefore generates far less surplus revenue than MDX, so the impact of a carve-out with 95 Express at this point would be negligible. In this scenario, we assumed a 2% annual revenue growth rate over the next five years (2012-16), and we assumed that 2011 revenue would be flat with 2010 revenue, for which we have data. We also assumed that 95 Express' operating margin would average 5.26%, which is the average of FDOT's forecast margins over the next four years. Under these assumptions, every marginal 1% of carve-out is estimated to generate only \$6,300 in additional revenue for MDT. For example, if we assume a 5% carve-out of 95 Express' surplus revenue, MDT's potential revenue is expected to be \$32,200 in 2012.

95 Express Carve-out: Revenue Impact 2012-16 (in thousands)

I-95 Express Lanes - Carve-out					
	2012	2013	2014	2015	2016
Exp Lane Revenue	\$12,240.0	\$12,484.8	\$12,734.5	\$12,989.2	\$13,249.0
Exp Lane Surplus	\$643.8	\$656.7	\$669.8	\$683.2	\$696.9
Carve-out (%)	1.0%	1.0%	1.0%	1.0%	1.0%
MDT Revenue	\$6.4	\$6.6	\$6.7	\$6.8	\$7.0

Again, a sensitivity analysis follows to provide a range for the impact on MDT's 2012 revenue.

Sensitivity Analysis: 95 Express Carve-out on 2012 Revenue (in thousands)

		MDT Surplus Revenue Carve-out (%)				
EL Revenue Growth Rate (%)		1.0%	3.0%	5.0%	7.0%	9.0%
	0.0%	\$6.3	\$18.9	\$31.6	\$44.2	\$56.8
	1.0%	\$6.4	\$19.1	\$31.9	\$44.6	\$57.4
	2.0%	\$6.4	\$19.3	\$32.2	\$45.1	\$57.9
	3.0%	\$6.5	\$19.5	\$32.5	\$45.5	\$58.5
	4.0%	\$6.6	\$19.7	\$32.8	\$46.0	\$59.1

As shown, a carve-out with 95 Express could potentially provide MDT with additional revenue in the range of \$19,100 to \$45,500 in 2012. Given MDT's \$48 million projected operating shortfall in 2014, the potential impact of a carve-out with 95 Express is not significant.

Incremental Fee with MDX

An incremental fee may be a better option to pursue, as it may be more palatable to the revenue source than a carve-out of existing revenues. Given MDX's large traffic volumes, a per-transaction fee would bring in significant revenue to MDT. In this scenario, we assumed a conservative 2.0% annual growth rate in traffic volume (i.e. number of transactions) and a 2.5% inflation rate (assuming that the per-transaction fee would be indexed to inflation). The analysis also assumes that 2011 traffic volume will be flat with 2010 volume. Finally, the model assumes a \$0.01 per transaction fee that will be dedicated to MDT. Notably, an incremental fee may be more palatable to both parties because it removes the coverage ratio risk from MDT (i.e. the risk that MDX would not pay revenues to MDT because it wants to avoid passing below its coverage ratio threshold), and it does not require MDX to part with any of its existing surplus. Under these assumptions, each marginal \$0.01 fee will potentially yield \$1.2 million in additional revenue for MDT. For example, if we assume a \$0.05 fee per transaction, MDT's revenue potential is estimated to be \$6.0 million in 2012.

MDX Incremental: Revenue Impact 2012-16 (in thousands)

MDX Toll Roads - Incremental Fee					
	2012	2013	2014	2015	2016
Fee/Vehicle	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01
Vehicles/yr	119,751.3	122,146.3	124,589.2	127,081.0	129,622.6
Revenue	\$1,197.5	\$1,252.0	\$1,309.0	\$1,368.5	\$1,430.8

A sensitivity analysis provides a range for MDT's 2012 revenues:

Sensitivity Analysis: MDX Incremental on 2012 Revenue (in thousands)

		MDT Fee per Transaction				
		\$0.01	\$0.03	\$0.05	\$0.07	\$0.09
Annual Traffic Growth (%)	0.0%	\$1,174.0	\$3,522.1	\$5,870.2	\$8,218.2	\$10,566.3
	1.0%	\$1,185.8	\$3,557.3	\$5,928.9	\$8,300.4	\$10,672.0
	2.0%	\$1,197.5	\$3,592.5	\$5,987.6	\$8,382.6	\$10,777.6
	3.0%	\$1,209.3	\$3,627.8	\$6,046.3	\$8,464.8	\$10,883.3
	4.0%	\$1,221.0	\$3,663.0	\$6,105.0	\$8,547.0	\$10,988.9

As shown, an incremental fee with MDX could potentially give MDT additional revenue in the range of \$3.6-\$8.5M in 2012.

Incremental Fee with 95 Express

An incremental fee with 95 Express may be a potential source of additional revenue for MDT. In this scenario, we assumed a conservative 2.0% annual growth rate in 95 Express' traffic volume (i.e. number of transactions) and a 2.5% inflation rate (assuming that the per-transaction fee would be indexed to inflation). The analysis also assumes that 2011 traffic volume will be flat with 2010 volume. Finally, the model assumes a \$0.01 per transaction fee that will be dedicated to MDT. Based on these assumptions, every marginal \$0.01 fee will likely generate \$171,000 in additional revenue for MDT. For example, if we assume a \$0.05 fee per transaction, MDT's new revenue is estimated to be \$857,000 in 2012.

95 Express Incremental: Revenue Impact 2012-16 (in thousands)

I-95 Express Lanes - Incremental Fee					
	2012	2013	2014	2015	2016
Fee/Vehicle	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01
Vehicles/yr	17,136.0	17,564.4	18,003.5	18,453.6	18,914.9
Revenue	\$171.4	\$180.0	\$189.1	\$198.7	\$208.8

A sensitivity analysis provides a range for MDT's 2012 revenue under this scenario:

Sensitivity Analysis: 95 Express Incremental on 2012 Revenue (in thousands)

		MDT Fee per Transaction				
		\$0.01	\$0.03	\$0.05	\$0.07	\$0.09
Annual Traffic Growth (%)	0.0%	\$168.0	\$504.0	\$840.0	\$1,176.0	\$1,512.0
	1.0%	\$169.7	\$509.0	\$848.4	\$1,187.8	\$1,527.1
	2.0%	\$171.4	\$514.1	\$856.8	\$1,199.5	\$1,542.2
	3.0%	\$173.0	\$519.1	\$865.2	\$1,211.3	\$1,557.4
	4.0%	\$174.7	\$524.2	\$873.6	\$1,223.0	\$1,572.5

As shown, an incremental fee with 95 Express could potentially give MDT new revenue in the range of \$509,000 to \$1.2M. Though much smaller than estimates for MDX, the higher end of this range is still a significant amount of new revenue for MDT.

Based on the analysis of these four scenarios, a deal with MDX would likely have the greatest revenue impact, and an incremental per-transaction fee structure would likely have a greater revenue impact than a carve-out. Accordingly, the optimal scenario would most likely be an incremental per-transaction fee with MDX.

Implementation

Miami-Dade Expressway

The MDX Board has the power to make decisions with regards to its use of MDX's surplus revenue, insofar as bond covenants are fulfilled. Florida Code Chapter 348.0004, subsections (1)(f) and (7) state that MDX can use surplus revenues to "finance or refinance the planning, design, acquisition, construction, extension, rehabilitation, equipping, preservation, maintenance, or improvement of a public transportation facility... and intermodal facility... that will improve the transportation services within the county, or any programs or projects that will improve the levels of service on an expressway system, subject to the approval of the governing body of such county after public hearing." Accordingly, MDX could agree to provide toll revenue support to MDT fairly easily. However, interviews with MDX staff found that while MDX could support capital costs for transit, it is likely to be resistant to paying for operating expenses.

1. Implementation Process

First, MDX would have to review its bond indentures to ensure that any use of surplus revenue does not violate any of its bond covenants. As previously noted, MDX's Indenture requires a minimum senior debt coverage ratio of 1.20 and total debt coverage ratio of 1.00. In addition, rating agencies have recommended that MDX maintain a senior debt coverage ratio of at least 1.50 to preserve its ratings. Any use of surplus revenues, therefore, should not bring MDX's senior coverage ratio below 1.50; if it does, then the surplus should not be shared. MDX has historically stayed far above the 1.50 threshold, but in 2010 it reached a senior coverage ratio of 1.56, which would leave very little surplus to support MDT.

After MDX ensures compliance with its bond covenants, MDT should seek public support for the toll revenue sharing arrangement. As with most transportation initiatives, engaging the local political leaders can often help move the agreement forward. Then, MDT and MDX should negotiate a term sheet that covers the basic principles and provisions of the agreement. This includes, but is not limited to the following items: timeframe for the agreement, structure (e.g. carve-out, incremental fee), amount and how that amount changes over time (e.g. an incremental fee indexed for inflation), what happens when MDX has no surplus or sustains a loss, constraints on how the MDX funds can be used by MDT (e.g. capital or operating), and renewal and exit options for both parties.

After agreeing to a term sheet, the MDX board, MDT board and county commissioners can hold public hearings on the deal as necessary, then can vote on whether or not each respective party should move forward with the deal, given the terms. Upon approval, the contracts can be drafted in detail and signed, and MDX can begin passing revenue on to MDT.

2. *Cost of Implementation*

The cost of implementing an arrangement with MDX is relatively low. MDX, as discussed, can make the decision on its own whether or not to provide support to MDT with surplus revenues. Given MDX's latitude and independence, the process can move fairly quickly. The main cost for MDT will be the attorneys and financial advisors. In addition, there is likely to be expenses for a public relations campaign to build support for the proposal.

I-95 Express

The 95 Express lanes are run by FDOT, and they were authorized in part via the U.S. Department of Transportation (USDOT) and the Federal Highway Administration (FHWA). Because arranging an agreement to share toll revenues with MDT requires work at the state and federal level, the process will be more complicated than it was for working with MDX.

1. *Implementation Process (Carve-out)*

Completing a carve-out arrangement between 95 Express and MDT would require similar steps to those mentioned above for implementing a deal with MDT. First, 95 Express agreements with its sponsors must be carefully reviewed to ensure that it is in compliance with all covenants. Then, both FDOT and MDT should seek political support for the arrangement, after which the two parties should negotiate a term sheet. After approving a term sheet, the respective boards should vote on the deal, and the attorneys should then draft the final agreements for signing.

2. *Implementation Process (Incremental Fee)*

Imposing a dedicated fee on I-95 vehicles would require legislation at the state level. First, a representative in either the house or the senate would have to sponsor the bill that adds the fee, and the bill would move the regular Florida legislative process.

3. *Cost of Implementation*

The costs for implementing a carve-out are relatively low, especially when compared to pursuing a new law through the legislative process. The main expense for seeking a carve-out from 95 Express would be the legal and financial advisor fees, as well as any costs for public relations. The process can be fairly quick, making it superior to trying to push a dedicated incremental fee through the legislative process.

Even if everything went smoothly with the legislative process, it would take approximately 5-6 months to complete and would cost up to tens of thousands of dollars a month in lawyers fees to get the legislation through. Further, there would be considerable effort on the part of state legislators and sponsors of the bill at the County level for such a bill to even get to a vote. Because the potential revenue enhancement opportunity with 95 Express is so low, the costs outweigh the benefits, and MDT should prioritize the carve-out if it decides to work with 95 Express.

Issues to Consider

There are a number of issues that MDT must consider as it considers seeking a toll revenue sharing agreement with MDX or 95 Express:

- Potential issues with changes to MDX Bond Indentures
- Revenue Sharing Plan
- Use: Capital versus Operating
- Cost to MDT to Use Toll Lanes
- Coverage Ratio Risk

Changes to Bond Indentures

In order to obtain funds from MDX, all of its bond indentures must be reviewed and amended (as necessary) to allow for use of revenue to support MDT and broader transit purposes. Some may already allow for such use of revenues, but those that do not need to be amended to allow a revenue sharing agreement to be executed. This may prove difficult, given that bondholders may not be amenable to diverting revenue and may not be consolidated enough to create a simple negotiating entity. However, if the various agreements are similar to MDX's indenture, then it is likely that most will allow for a broad use of surplus revenues, as long as the bond covenants are met.

Revenue Sharing Plan

MDT must carefully consider how it structures the specific provisions of a revenue sharing agreement. For example, how long will it last, what limitations does MDT have on how it can use the funds, whether the carve-out is a fixed or variable rate, whether the per-transaction fee is fixed or variable, whether fee rates are tied to inflation, what happens in the event of a loss, and what are the options for extension and re-negotiation of the arrangement, to name a few. Given the many complexities, MDT must be aware of the issues and explain in the pitch how these complications can be mitigated.

Use: Capital versus Operating

In our conducting research for the Operating Revenue Enhancement Phase 1 report, THE REASARCH TEAM interviewed senior MDX staff. They stated that MDX may be willing to provide funds to support MDT, but would likely insist that the funds be used only for capital expenditures along MDX roadways, and not for operating needs. This may be problematic, given that MDT is seeking to close an operating shortfall, and should be carefully considered and negotiated prior to executing an agreement.

Cost to MDT for Use of Toll Lanes

While tolls may be a new revenue source for MDT, adding a per-transaction fee to MDX could increase costs for MDT vehicles using the toll roads as it would add to its costs. Tolls have a negative impact on MDT, as its vehicles have to pay local tolls such as on the Venetian Causeway, Rickenbacker Causeway, and facilities run by the Miami Dade Expressway Authority, Florida DOT, and Town of Bay Harbor Island. MDT staff report that these tolls cost over \$322,000 in fiscal 2010. A State of Florida exemption is required

to avoid these fees. When determining the payoff of a given incremental fee structure, MDT must consider the added cost that will fall upon MDT vehicles using the tolling routes.

Coverage Ratio Risk

As is the case with MDX, bond indentures generally require that the issuer agree to maintain coverage ratios above a certain threshold. In addition, rating agencies also suggest appropriate coverage targets that a firm should maintain in order to keep its ratings in place or even improve. As a result, in a carve-out structure MDT will carry the risk that it might not get any revenue in a given quarter or year because MDX or 95 Express is too close to its target coverage ratio. MDT should prepare for this possibility, and weigh it into its decisions regarding structure. An incremental fee structure, however, would remove coverage ratio risk from MDT because the fee would be dedicated to MDT, regardless of MDX's cost structure.

95 Express Tolling Policy

If MDT were to seek an incremental fee for 95 Express transactions, complications would ensue regarding the tolling process. 95 Express uses dynamic pricing of its tolls, which are based on an algorithm that accounts for traffic speeds and other factors to ensure free flow on the express lanes. If an increment was added, this would have to be incorporated into the tolling algorithm. However, the presence of the fee itself could impact the number of users selecting the 95 Express lanes, since the toll would be somewhat higher than the algorithm would otherwise call for. This complication could impact the ability to implement incremental fees on the 95 Express lanes.

Conclusions and Recommendations

Surplus toll revenues could be a significant source of new revenue for MDT that could significantly reduce its projected \$48 million operating shortfall in 2014. With recent implementation of HOT lanes on the I-95 corridor and the potential expansion of toll roads by MDX, the timing may be opportune for MDT to arrange an agreement to dedicate new surpluses to fund the MDT shortfall. Based on our analysis, the best option for MDT to pursue is an incremental fee with MDX, which could potentially provide MDT new revenue in the range of \$1.2 million for every 1-cent increase in toll revenue.

The next best choice would be a carve-out with MDX, which could also have a significant impact on MDT's operating shortfall, about \$1.1 million for every 1% carve-out of surplus revenue. However, this solution would be subject to the availability of surplus funds above and beyond debt coverage covenants and policies.

Seeking additional funds from 95 Express tolls is not recommended since the HOT lanes already provide substantial support for transit, little excess funding is likely to be available, and the complications of implementation are higher than for MDX.

Utility Fees

Another source of revenues that transit agencies might consider during times of flat or lower than expected revenues is utility fees. This includes dedicating a predetermined percentage or sum from the revenue streams generated by utility fees such as electricity, water, and sewer for transit purposes. While it is not common for transit agencies to dedicate utility fee revenues directly to transit needs, some agencies have availed themselves of this revenue source. Because these fees draw on a large payer base, the potential for substantial revenues is real. A very small increase in a utility rate can generate a great deal of revenue. Further, the basic steps for implementation of increased utility fees for transit purposes is not especially problematic, especially when compared to other possible revenue sources explored in this study. However, the current negative climate in the County relating to taxes is, of course, a major political obstacle that may be very difficult to overcome.

5.2.1. Description of Revenue Sources

While utility fees are a broad category of fees that include both franchise and flat taxes on a broad spectrum of utility providers (electricity, natural gas, telephone, internet, garbage collection, etc.), the revenue sources identified in this section include dedicated utility fees coming from electricity, water, and sewer rates. As seen in St. Joseph, MO, revenues from utility fees can be collected by the local government entity and then distributed to relevant transit or public works agencies. For example, a city might impose a 1 or 2% increase in the fee on sales of the water or wastewater utility in the local area. Another method for increasing rates is to charge a flat fee to every ratepayer. For example, the city might charge an additional \$1 per month to every ratepayer that lives within a certain geographic boundary. In order to gain public buy-in for increased fees, cities generally try to impose the rate increase on the ratepayers that would benefit from the use of those funds.

Because calculating the amount of revenue that will likely be generated in any year is a fairly straightforward calculation, and because projecting revenues into the future is relatively reliable, MDT can predict with reasonable accuracy the amount of revenue that will be generated in future years from an increase in utility rates.

The use of utility fees to fund transit has various strengths and weaknesses:

- Utility fees tend to be a very consistent but flat revenue source due to the regulated utility markets.
- In comparison to a motor vehicle excise or household tax, utility fees have been perceived as more politically acceptable in Pullman, WA. Unique demographics with a large student population likely promote this view.
- However, there is little direct link between utility fees and transportation.
- Fees for necessities such as water, sewer, and power can be seen as regressive taxes; because utility services are a necessity, account-based fees will affect poor constituents more than the

wealthier ones. Both Miami Dade Water and Sewer and Florida Power and Light mitigate this by charging higher unit rates to more intensive users of their services.

This report includes a summary of experiences at other transit agencies with similar programs, an estimate of the potential revenues, a timeline for generation of revenues, an implementation schedule, and an estimate of cost of implementation.

Water and Sewer Rates

Miami Dade Water and Sewer has two kinds of customers, retail and wholesale. The majority of the water sold goes to retail customers in Miami Dade County. Wholesale customers are cities that have contracted with Miami Dade for water and sewer. The tables below describes the water and sewer sales to both retail and wholesale customers for 2008-2010.

Miami-Dade Water and Sewer Department Water Production and Sales Fiscal years 2008, 2009, and 2010

System/ Customer/ Item	Water Sales - Million of Gallons		
	FY 2008	FY 2009	FY 2010
Total water pumped	112,579	114,430	114,355
Retail	65,147	66,086	64,430
Wholesale customers			
Hialeah	8,081	8,110	9,103
Miami Beach	6,848	6,489	6,952
North Miami Beach	1,013	107	100
North Miami	2,123	1,502	1,175
Opa-Locka	909	845	788
Miami Springs	771	NA	NA
Hialeah Gardens	694	695	654
Bal Harbour	447	466	455
Medley	398	393	400
North Bay Village	343	365	395
Bay Harbor Islands	358	329	317
Surfside	327	343	328
West Miami	266	290	293
Indian Creek Village	133	140	121
Virginia Gardens	63	100	98
Total wholesale	22,774	20,173	21,179
Total water sales	87,921	86,259	85,608
Water not billed to customers			
Amount	24,658	28,171	28,747
Percent of total water produced	21.9%	24.6%	25.1%

Sources: Comprehensive Annual Financial Reports and financial reports for fiscal years 2008 through 2010

Note: The service area of Miami Springs was absorbed into the Water and Sewer Department's retail service area in Fiscal Year 2008

Miami-Dade Water and Sewer Department
Wastewater Flows
Fiscal years 2008, 2009, and 2010

System/ Customer/ Item	Wastewater Flows - Million of Gallons		
	FY 2008	FY 2009	FY 2010
Total wastewater treated	109,197	109,320	107,461
Retail customers	49,646	49,671	49,315
Wholesale customers			
Hialeah	8,109	7,373	6,903
Miami Beach	8,764	8,733	7,870
North Miami	3,923	3,533	3,523
Coral Gables	1,196	1,114	1,060
Miami Springs	1,237	NA	NA
North Miami Beach	853	940	859
Opa-Locka	714	627	492
Medley	834	619	504
Florida City	431	412	404
Homestead Air Force Base	196	185	98
West Miami	131	128	144
Hialeah Gardens	607	618	801
Homestead	383	529	419
Total wholesale	27,378	24,810	23,077
Total wastewater service sales	77,024	74,482	72,392
Wastewater flow not billed to customers			
Amount	32,173	34,838	35,069
Percent of total wastewater treated	29.5%	31.9%	32.6%

Sources: Comprehensive Annual Financial Reports and financial reports for fiscal years 2008 through 2010

Note: The service area of Miami Springs was absorbed into the Water and Sewer Department's retail service area in Fiscal Year 2008

As can be seen from the tables, not all of the water and wastewater that is treated and/or pumped actually ends up being charged to retail or wholesale clients. Our analysis uses the data from actual billings in order to ensure a more accurate estimate of potential revenues from water and sewer utility fees.

While wholesale customers make up a significant portion (about 25%) of the total water and sewer services sold by Miami Dade County, our analysis only takes into account the possibility of generating revenue from retail customers. This is because all of Miami Dade's wholesale customer contracts stipulate that wholesale customers must be charged based only on the "cost of service." Thus, wholesale customers are exempt from any additional fees that Miami Dade might levy against other customers. The following table shows the wholesale customers of Miami Dade along with a date of when their contracts will expire. While it is possible that Miami Dade could include provisions that charge some sort of fee that could be used for transit purposes when these contracts are renewed, this seems unlikely due to historical precedent and the current political environment.

Electricity Rate Fees

Electricity is almost exclusively provided by Florida Power and Light (FPL) in Miami-Dade County. FPL has been offering Floridians power since 1925. It is now the largest electric utility in Florida, servicing around 4.5 million customers. Over 1 million of those customer accounts come from Miami-Dade County, where FPL sells approximately 27 billion kilowatt hours of electricity annually²⁴. Those sales are divided into different categories of customers: residential, commercial, and industrial. Each of these classifications is divided into subcategories with each having different rates for electricity usage. The table on the next page describes the basic categories of customers and their consumption of electricity from 1995-2008.²⁵ Average annual growth in consumption between 2003 and 2008 was -0.096% per year over the past five years for residential customers, -2.218% for industrial, and 1.571% for commercial customers.

²⁴ Florida Power & Light data

²⁵ More recent data was not available at the time of writing.

Consumption of Electricity in Miami-Dade County, 1995-2008
FPL's Southern Division

Electric Consumption					Customers						
Year	Annual Kilowatt Hours (Thousands)	Annual Residential Consumption (Thousands kwh)	Annual Commercial Consumption (Thousands kwh)	Annual Industrial Consumption (Thousands kwh)	Total Electric Customers*	Residential Customers	Average Annual Residential Consumption (kwh)	Commercial Customers	Average Annual Commercial Consumption (kwh)	Industrial Customers	Average Annual Industrial Consumption (kwh)
1995	21,544,095	10,259,932	10,226,450	830,257	845,536	742,492	13,818	100,243	102,016	2,029	409,263
1996	21,555,422	10,270,270	10,237,815	813,704	855,192	751,042	13,675	101,437	100,928	1,893	429,849
1997	22,467,341	10,573,683	10,823,248	835,678	863,463	758,058	13,948	102,794	105,291	1,745	478,807
1998	23,528,845	11,284,401	11,165,702	851,676	871,614	765,393	14,743	103,697	107,676	1,601	532,132
1999	23,362,413	10,890,308	11,343,986	829,755	882,428	775,966	14,035	104,049	109,026	1,465	566,386
2000	23,951,899	11,234,637	11,662,859	822,746	896,736	788,839	14,242	105,561	110,484	1,357	606,335
2001	24,328,587	11,411,103	11,853,991	825,091	908,597	798,815	14,285	107,514	110,255	1,268	650,531
2002	25,512,650	12,122,334	12,334,011	813,025	920,563	809,506	14,975	108,708	113,460	1,311	619,999
2003	26,379,216	12,593,363	12,739,949	796,854	936,083	823,210	15,298	110,320	115,482	1,482	537,628
2004	26,251,400	12,311,664	12,874,047	817,432	951,090	835,301	14,739	113,151	113,778	1,532	533,688
2005	26,637,264	12,494,973	13,037,166	849,268	966,906	848,446	14,727	115,731	112,651	1,575	539,275
2006	27,092,059	12,614,845	13,344,722	885,109	979,084	859,113	14,684	117,145	113,917	1,639	539,947
2007	27,733,223	12,889,041	13,771,556	817,684	998,204	875,901	14,715	119,467	115,275	1,628	502,211
2008	27,255,592	12,533,270	13,772,677	712,322	1,008,149	885,192	14,159	120,379	114,411	1,351	527,126

Source: Florida Power & Light, 2009

* Figures based on annual average and not just taken at end of year



5.2.2 Transit Agencies Which Have Dedicated Utility Fee Revenues for Transit Purposes

As mentioned above, charging dedicated utility fees with the purpose of directing that revenue toward transit purposes is not particularly common in the U.S. However, there are agencies that do use utility fees to fund transit initiatives. Here are three examples of these agencies with a short description on how they assess the fees.

St. Joseph, MO: The City of St. Joseph assesses a utility franchise fee, a 1% fee on the gross sales of utility companies serving the local area. This group of companies includes basic utilities like electricity providers, water providers, and natural gas providers, but also includes cable companies and communications companies. In 2009 St. Joseph collected about \$1M through this franchise fee, which provided funds directed to public transportation.²⁶

Pullman, WA: Pullman Transit operates primarily through a 2% utility fee on natural gas, electric, telephone, water, sewer, and garbage in a small local area. The fee is remitted from the utilities and is authorized by the State of Washington to be increased up to 6% if needed.

Vancouver, British Columbia: BC Hydro ran the transit system in Vancouver until it was taken over by BC Transit in 1980. During the time it ran the system, BC Hydro charged a small fee on utility bills to pay for transit service.

While Miami Dade County has not utilized this type of fee for transit purposes, it has used fees on utility bills for other purposes. Miami Dade currently collects a utility services fee on water bills to fund two programs. The first is the county regulatory functions in the department of environmental resources management. Second, utility fees are a source of funding for the county solid waste department where the funds are used for the protection of ground water projects relating to landfills and landfill closure. This fee was implemented about 20 years ago and is an important source of funding. The revenues constitute close to 5% of the total water bill of retail customers. The fee is assessed on the total water utility bill. A percentage of the bill is charged to the customer. This fee was imposed on the basis of the nexus between the programs funded by the fee and the preservation of groundwater quality, which is essential to the successful operation of the County's water system. As mentioned above, there are over a dozen wholesale customers that are not charged this utility fee because their contracts have a cost of service provision.

5.2.3 Methodology and Potential Revenue

Several factors associated with potential revenue that might be generated from water, sewer, and power fee increases were examined. Data regarding water and sewer rates and projections was much easier to obtain than similar data for power. Each of these sources was analyzed separately in a way that made best use of the information at our disposal. The estimates for water and sewer revenues were generated using a more sophisticated methodology while attempting to avoid false precision. That is, for water and sewer, more assumptions were used to modify the estimates in a way that better reflected the real world. These assumptions include number of customers, volume of service (gallons of water), and rate fees based on level of consumption. Data for power rates, however, was much more limited, which led to a more general analysis of potential revenues from increased power rates. These analyses are described in more detail below along with a description of their potential output.

²⁶ FY2009 YEAR END FINANCIAL REPORT, www.ci.st-joseph.mo.us/.../CAP_Agenda_Packet_062509_FINAL.pdf



5.2.3.1 Water

2010 was used as the base year from which rates, the number of retail customers, and water usage were estimated in future years. A customer's water bill is determined by the amount of water consumed by that customer, multiplied by a rate schedule for different levels of consumption. The rate schedule for 2010 is shown below. Rates were taken from the Miami Dade County Water and Sewer website to calculate a per 1,000 gallon fee schedule.

Water Consumption Fee Per 1,000 Gallons	
0-4487 gallons	\$0.49
4488-7479 gallons	\$3.01
7480-13463 gallons	\$3.90
13464+ gallons	\$5.16

Customer levels used in our analysis are based on 2010 numbers. The number of retail customers in 2010 was 420,367. There was a dip in the customer base during 2009 from 2008, and there have been periods of growth and decline over the past decade. Based on conversations with MDT personnel the customer base in Miami Dade County is not expected to grow or decrease appreciably over the next decade. For this reason, our analysis assumes that the retail customer base will remain essentially the same throughout the years of the analysis.

The water usage rate in our analysis is based on 2010 usage rates, the latest available. Total water usage billed to retail customers in 2010 was 66.430 billion gallons. This means that the average customer used 153,270 gallons during 2010, or an average of about 12,772 monthly. Plugging this average usage into the rate schedule found above, we find that the average monthly bill will be almost exactly \$31.00.

To simplify our estimate of the amount of potential revenue available from an increase in water rates, we chose an increase of 1% for each customer's bill, equating to \$0.31 per customer per month under our assumptions. This 1% would constitute the dedicated revenue source to be used for transit initiatives. This number can easily be multiplied by any rate MDT might consider to quickly obtain an estimate (e.g. if MDT is considering a 2% additional fee, simply double the 1% estimate to \$0.62 per customer per month). The table below shows the amount of annual revenue that MDT could expect from a 1% rate increase for various future years, including 2014 when the expected shortfall will occur.

Average Expected Annual Fee Revenues*	
Water Usage (Gallons)	64,429,544,000.00
Retail Customers	420,367.00
Average Retail Customer Annual Usage (Gallons)	153,270
Average Retail Monthly Usage (Gallons)	12,772
Average Monthly Bill	\$31.00357
Transportation Fee	\$0.31
Total Average Retail Monthly Bill	\$31.31
Total Average Retail Annual Bill	\$375.76



Monthly Transportation Fee Revenue	\$130,329
Annual Transportation Fee Revenue	\$1,563,945

*Based on 2010 Base Year Data

5.2.3.2 Sewer

2010 was used as the base year from which rates, the number of retail customers, and sewer usage were estimated in future years. In Miami Dade County, a customer's sewer bill is determined by the amount of wastewater put into the sewage/drainage system by that customer, multiplied by a rate schedule for different levels of use. Rates were taken from the Miami Dade County Water and Sewer website to calculate a per 1,000 gallon fee schedule. The rate schedule based on 2010 rates is shown below.

Sewer Fee Per 1,000 Gallons	
0-4487 gallons	\$1.84
4488-7479 gallons	\$5.90
7480+ gallons	\$6.22

Customer levels and sewer usage are based on 2010 numbers. The number of retail customers for sewer in 2010 was 338,368. This number is noticeably smaller than the number of water customers in Miami Dade due to the significant percentage of water customers that use septic tanks for their wastewater needs. As with water customers, there was a dip in the customer base during 2009 from 2008. Also as with water, based on conversations with MDT personnel the customer base in Miami Dade County is not expected to grow or decrease appreciably over the next decade. For this reason, our analysis assumes that the retail customer base for sewer will remain essentially the same throughout the years of our analysis.

For the same reason, the sewer usage level in our analysis is based on the latest usage data available. Total sewer usage by retail customers in 2010 was 49.315 billion gallons. Thus, the average customer put 145,745 gallons down the drain during 2010, or an average of about 12,145 gallons monthly. Plugging this average usage into the rate schedule found above, we find that the average monthly bill will be approximately \$54.92.

To simplify our estimate of the amount of potential revenue available from an increase in sewer rates, we chose an increase of 1% for each customer's bill, equating to \$0.55 per customer per month under our assumptions. This 1% would constitute the dedicated revenue source to be used for transit initiatives. This number can easily be multiplied by any rate MDT might consider to quickly obtain an estimate (e.g. if MDT is considering a 2% additional fee, simply double the 1% estimate to \$1.10 per customer per month). The table below shows the amount of annual revenue that MDT could expect from a 1% rate increase for various future years, including 2014 when the expected shortfall will occur.

Average Expected Annual Fee Revenues*	
Wastewater Usage (Gallons)	49,315,442,000
Retail Customers	338,368
Average Retail Customer Annual Usage (Gallons)	145,745



Average Retail Monthly Usage (Gallons)	12,145
Average Monthly Bill	\$54.92
Transportation Fee	\$0.55
Total Average Retail Monthly Bill	\$55.46
Total Average Retail Annual Bill	\$665.57
Monthly Transportation Fee Revenue	\$185,815
Annual Transportation Fee Revenue	\$2,229,778

*Based on 2010 Base Year Data

5.2.3.3 Electricity

The analysis for potential revenue from electricity fees is more general than those for water and sewer. This is partially due to the difficulty in finding the necessary information to make a more detailed analysis based on electric power use by customers. Whereas with water and sewer we were able to gather information relating to rates by level of usage and a relatively small set of different customer types, electricity customers are composed of several dozen categories and subcategories with different rate schedules for usage levels. The data we were able to gather on the basic categories included data on number of customer accounts and level of usage, but there was not sufficient detail to take our analysis to the level of the water and sewer estimates. However, the next level of detail likely would have given information on a large number of business types and usage levels that would require an equally large number of assumptions for a more sophisticated analysis. This could breed false precision, making the analysis less useful although more complex. Using simpler metrics which do not necessitate many assumptions to arrive at an estimate may have been the best methodology in this case regardless of the amount of information we were able to collect.

Thus, our analysis is based on real data and presents a good starting point for any proposal to raise revenues from electricity rates. The steps to make our estimate of potential revenue from electricity fees include the following:

1. Estimate total number of accounts and energy usage in 2014 and beyond
2. Create a range of potential charges per account and per kWh of usage
3. Multiply the estimated total number of accounts and usage by their respective fee range

Because we were only able to obtain data through 2008 relating to number of accounts and energy usage, we had to extrapolate the data to estimate numbers for 2010 and beyond. As noted in section 6.1.1, the number of accounts grew annually by about 1-2% from the mid 90s to 2008. However, these were on average boom years for Miami, and that rate of growth, as noted in our water and sewer analysis is not expected over the next decade. Thus, we have chosen to use a 0% growth rate for the number of accounts and the level of usage. The following table presents data relating to the number of accounts and usage.

Customer Accounts and Energy Usage	
Residential Customers	885,192
Commercial Customers	120,379
Industrial Customers	1,351
Total Electric Customers*	1,008,149



Annual Residential Consumption (Thousands kwh)	12,533,270
Annual Commercial Consumption (Thousands kwh)	13,772,677
Annual Industrial Consumption (Thousands kwh)	712,322
Annual Kilowatt Hours (Thousands)	27,255,592

* Figures based on annual average and not just taken at end of year

If MDT is able to generate fees based on a per account charge, the calculation of potential revenue is simple. For each dollar per month per account, \$1,008,149 is generated monthly and \$12,097,788 annually. If only \$0.50 is assessed monthly per account, these numbers come to \$504,075 and \$6,048,894 respectively. MDT might choose to try to have different charges based on the type of customer. This would obviously change our estimate. However, our simple range of \$0.50 to \$1.00 gives a useful base estimate from which to extrapolate to different rate schemes.

The charge for energy usage is different by account type. For example, residential customers pay a different rate than commercial and industrial customers and vice versa. Further there are various rates for different types of commercial and industrial customers at different levels of usage. In order to produce an estimate that can also be used to easily calculate potential revenues for other levels, we used a fee of \$0.0001/kWh. At this level, the fee would generate \$2,725,559 annually with residential, commercial, and industrial customers contributing \$1,253,327, \$1,377,268, and \$71,232 respectively.²⁷ The tables below summarize the potential revenues from a fee on electricity by account and by usage.

Account-Based Fee Potential Revenues*		
Account Type	\$0.50/account	\$1.00/account
Residential	\$442,596	885,192
Commercial	\$60,189	120,379
Industrial	\$676	1,351
Potential Monthly Revenues*	\$504,075	1,008,149
Potential Annual Revenues*	\$6,048,895	12,097,790

* Figures based on annual average and not just taken at end of year

Usage Based Fee - Potential Revenues*		
Account Type	Consumptions (Thousands kWh)	Revenue per \$0.0001 charged per kWh
Residential	12,533,270	\$1,253,327
Commercial	13,772,677	\$1,377,268
Industrial	712,322	\$71,232
Annual Kilowatt Hours (Thousands)	27,255,592	\$2,725,559

* Figures based on annual average and not just taken at end of year

²⁷ Figures based on annual average and not just taken at end of year. Thus, numbers do not add perfectly.



It is important to note that an account-based fee would be regressive, since it would have the same levy on all bills regardless of usage or ability to pay. A fee based on kilowatt hours does not have this issue.

Summary of Potential Revenues

Given the caveats for each source of revenue and the varied types of analysis, we do not present a cumulative total of expected revenues. However, the following table summarizes the potential revenues explored above.

1% Water Fee Increase - Potential Revenues*	
Average Monthly Bill	\$31.00
Transportation Fee	\$0.31
Monthly Transportation Fee Revenue	\$130,329
Annual Transportation Fee Revenue	\$1,563,945
1% Wastewater Fee Increase - Potential Revenues*	
Average Monthly Bill	\$54.92
Transportation Fee	\$0.55
Monthly Transportation Fee Revenue	\$185,815
Annual Transportation Fee Revenue	\$2,229,779
Electricity Account-Based Fee Potential Revenues*	
Account Type	\$1.00/account
Residential Customers	885,192
Commercial Customers	120,379
Industrial Customers	1,351
Monthly*	1,008,149
Annual*	12,097,790
Electricity Usage Based Fee - Potential Revenues*	
Account Type	Revenue per \$0.0001 charged per kWh
Residential	\$1,253,327
Commercial	\$1,377,268
Industrial	\$71,232
Annual Kilowatt Hours (Thousands)	\$2,725,559

* Figures based on annual average and not just taken at end of year. Thus numbers do not add perfectly.

5.2.4 Implementation

Procedurally, creating a dedicated source of revenue for transit through the implementation of a fee on water, wastewater, or electric fees is fairly straightforward. However, it would be a challenge politically. This would be true in any political climate, but is especially true at this time with the County generally averse to new taxes. The fact that there is no clear nexus between water, sewer, and electricity use and transit might make this type of a tax seem unreasonable.



Further, taxing both water and sewer would artificially discriminate between customers of water and sewer since there are many water customers who are not sewer customers (use septic tanks, etc.). A tax on just water or just electricity could seem arbitrary given the lack of a concrete nexus to transportation.

Process and Schedule

In order to implement a fee increase for any of these options, the Board of County Commissioners would have to pass an ordinance. There is no larger state or federal process necessary. Changing a County ordinance requires sponsorship by a commissioner to get it into committee, and two public hearings. Just this portion of the process will take a minimum of three months.

The cost of passing an ordinance would depend on the political pressures and education process needed to support passage. While it is difficult to make an accurate determination on exact costs, MDT could expect to employ County personnel as well as consultants over the course of several months to push the initiative through the necessary committees and votes. There would also be costs associated with writing the ordinance. The full process could last as long as eight months if it is successful at all.

A change in County ordinance is inherently political, and the current climate surrounding any sort of tax increase makes an ordinance which increases fees on basic utilities could become a political lightning rod. Thus, while the basic steps associated with passing an ordinance are relatively straight forward, actually executing those steps could be extremely difficult or impossible.

6.5 Conclusion

While fees on utilities present advantages not found with other revenue sources being studied, there are significant challenges that may make it difficult or impossible to pass any ordinance allowing utility fees to be used for MDT purposes.

Utility revenues are generally very consistent and draw from a large payer base. This provides potential for a large and predictable revenue stream. Small fees to each customer can quickly generate millions of dollars of revenue, which is assessed from the payer group that will enjoy the benefits of MDT improvements. However, utility fees function do not have a strong nexus to transit. This, combined with the current negative political climate concerning new taxes means any initiative to implement this kind of fee for MDT purposes will encounter heavy opposition. Utility providers will likely strongly resist using such fees for transit.



VII. Conclusions and Recommendations

This analysis found that substantial new revenues are theoretically possible to close the MDT operating gap. However, many of these solutions have significant implementation challenges, including legal and administrative barriers, and the likelihood of public opposition.

Increasing advertising is the lone area solely within MDT's control. The advertising solutions with the highest revenue potential include increased ads at Metrorail and Metromover stations, wrap advertising on Metrorail cars, advertising on elevated guideway pillars, and selling domination advertising for Metrorail and Metromover stations. Guideway pillar advertising may have operations and maintenance issues, but the other solutions depend only upon local zoning and the public's willingness to accept increased advertising.

User fees for tolls, utilities, or local business fees could generate revenue for MDT, but may be more complex to implement. MDX tolls are the highest priority in this group, both because of the significant revenue potential and because of the nexus between transportation modes. However, the MDX board approve any fees, and such approval will be subject to bond covenants. Utility and business fees are less commonly used for transit, and are likely to face more significant political hurdles.

The research conducted for this report has led the Team to a number of conclusions:

1. The various revenue sources analyzed in this report could potentially generate substantial revenue for MDT. Advertising and tolling, in particular, have the most revenue potential.
2. Implementing many of the revenue sources will be challenging. Administrative, financial, and political obstacles exist to varying degrees for each potential revenue enhancement. Some of these obstacles are entirely within the control of Miami-Dade County officials, while others would require changes to state law.
3. While important to maximize, system revenue sources alone have limited potential to fill the entire projected budget gap. Even in the most optimistic forecasts, half or more of the gap must be filled with other sources.
4. Tolling is a key potential new source for revenue, with the MDX conversion to open road tolling and the implementation of toll lanes on I-95 in the County by FDOT.
5. Focusing upon revenues is only one side of the ledger. A complete view would also focus on operating expenses. It should be noted that focusing on revenues is only half the equation. The other primary driver is, of course, operating expenses. MDT and the County have been engaged in a series of cost cutting and reduction efforts..



VIII. Appendices

Appendix A: Detailed Methodology for Estimating Advertising Revenue

The following is a detailed description of the methodology used to estimate potential advertising revenue enhancements for the assets discussed in the Advertising chapter.

Step 1: Inventory of Assets

The Research Team conducted a detailed inventory of the number of advertising opportunities for the assets considered in this analysis. The inventory consisted of visual inspection of the Metrorail and Metromover alignments, stations, and parking garages to determine the number potential advertising locations. Results of this analysis are provided in Tables 3 and (Metrorail) and Table 6 (Metromover).

Step 2: Estimate the Occupancy Rate

Based on discussion with MDT, advertising companies and experts, and the Team's research and judgment, the percentage of advertising assets with advertising sold was estimated. The occupancy rate assumptions are detailed in the analysis tables for the relevant assets.

Step 3: Eyes On Impressions Estimate

Assigning value to outdoor advertising mediums starts with an analysis of the number of people who could potentially view the ad. This will include patron traffic at the facilities, pedestrian traffic, and drive-by traffic. The total number of potential viewers is assigned a visibility adjustment factor that describes the percentage of potential viewers that are expected to actually see the ad. This measure is called "Eyes on Impressions" or EOIs,²⁸ which represents the average number of persons who are likely to notice an ad viewed on an outdoor display. EOIs have become the standard terminology, though calculating an EOI value for any particular advertisement involves a fair amount of subjective judgment.

Assigning a visibility adjustment factor involves analyzing the various factors impacting whether an ad will be seen. The key factors that determine the likelihood that a display and its advertising will be noticed include:

- Format
- Display Size
- Roadside Position
- Angle to the Road
- Street Type Distance from the Road

In general, visibility adjustments will range from .35 to .70 for the majority of outdoor advertisements (meaning that 35% to 70% of passers-by will view the ad). Some displays, based on their characteristics, may have adjustments near 1.0, where others will have adjustments near 0.10. More particularly:

²⁸ The Traffic Audit Bureau for Media Measurement or TAB developed the EYES ON initiative with strong support from outdoor industry buyers and sellers.



- Format and size matters most when units are in the same position and distance. Bulletins (14' x 48' billboards) will be seen by 68 percent of people passing and posters (10'5" x 22'8") will be seen by 59 percent of people passing by.
- An important factor is the distance of the unit to the people that would be seeing it. A bulletin would be placed at a distance of 160 feet for 59 percent of people to see it while a poster would be placed at a distance of 100 feet for the same percentage of people to notice.
- In the case of a bulletin, the closer the bulletin is to the viewing public the higher the percentage of people that would see the advertising. If a bulletin is placed 70 feet from the viewing public, approximately 70 percent of people would see it. If placed at 125 feet, only 61 percent would see it, and if placed at 200 feet only 55 percent of people passing would see the advertising.
- For posters or billboards placed on the side of the road, which side of the road they are placed matters. If a poster is placed on the right hand side of the road, 59 percent of the people going by will see it in contrast to 43 percent if placed in the left hand side of the road.
- It is also important to place the advertising at close to a parallel position to the road. The impact could be 59 percent for those ads positioned parallel to the road vs. 46 percent for those that are not.

Once an acceptable EOI estimate is established for an advertisement, this value is then multiplied against a cost figure, generally expressed as a Cost per Thousand (CPM) impressions, to determine how much a particular advertising mode, length of time, and location should be worth. The CPM will depend on many factors including the demographics of the EOI pool, size and location of the advertisement. Cost per thousand (CPM) impressions for outdoor media can be expected to average 0.362 cents for posters and 0.65 for bulletins.

The first step in estimating EOI was to estimate the amount of traffic (passenger, pedestrian, and auto) that would pass the ads over the course of a year. The largest number of people passing the ads was from auto traffic. These estimates were made by analyzing 2010 FDOT road traffic data.²⁹ The average daily traffic (ADT) immediately surrounding the advertising opportunity was recorded from this online resource. Note that traffic data is not available at every intersection; the closest ADT point was used to estimate traffic passing advertising locations. Ridership data for the Metrorail and Metromover stations was provided by MDT. Available spaces at the surface and garage parking lots and other park and ride lots, and the percent occupancy, was also provided by MDT.

Pedestrian traffic is not collected by MDT or FDOT, so estimating a figure was not as straight forward. The team utilized the same methodology as Front Row, a marketing firm that completed a 2008 study for MDT on potential revenues emanating from similar advertising opportunities in the mass transit system. This involves using a fraction of the total ridership numbers as the value for an estimated pedestrian count, in this case, 37.5%. The total count of auto, pedestrian, and ridership traffic represents the total possible exposure for an ad at a particular location and is represented by number of impressions.

This number was then discounted by the application of a visibility adjustment factor. The table below shows the adjustment factors applied to each of the advertising categories examined in this study. The Research Team assigned reasonable values for each category based on the factors and considerations

²⁹ see: <http://www2.dot.state.fl.us/FloridaTrafficOnline/viewer.html>



explained above. The Research Team confirmed with CBS Outdoor Marketing that the numbers assigned are reasonable for the Miami Dade market.

Category	Visibility Adjustment
Station Pillars	0.75
Guideway Pillars	0.55
Billboards	0.80
Wall Signs	0.80
Kiosks	0.25

These visibility adjustment factors were then multiplied by the total number of potential viewers for each advertising type and location to get an estimated annual EOI.

Step 4: CPM Estimate

The next step was assigning an appropriate CPM for each category of advertisement. As with the visibility adjustment factor number, it is not within the scope of this project to determine exact CPMs for all of the advertising opportunities for this study. The team broke the various opportunities into various categories. It is possible that a more in-depth marketing study would create additional categories with various CPMs based on factors not reviewed in our analysis. However, using the basic principles explained above, the team assigned CPMs that were confirmed by CBS Outdoor Advertising to be reasonable for the Miami Dade market. Below is a table that shows the CPMs assigned to each category of advertising.

Category	Cost per Thousand (CPM)
Station Pillars	\$2.72
Guideway Pillars	\$2.72
Billboards	\$3.62
Wall Signs	\$7.24
Kiosks	\$1.81

These CPMs were then multiplied by the annual EOI figures for the various advertising opportunities to reach estimated revenue values.

Step 5: Multiply the annual media value by the share of revenue expected to flow to MDT

As with current advertising contracts, MDT will not collect all of the revenues generated from these advertising campaigns. It is expected that for each advertising medium studied there will be one or more contractors responsible for the actual work of marketing the ad spaces, selling the ad opportunities, and managing their implementation. It is likely that no matter how the different advertising space opportunities



are bundled to contractors, each advertising medium will have a distinct arrangement for the share of revenue that will flow to MDT. Below is a table that represents the revenue shares assumed in our analysis. Where possible, these percentages are based on current contracts between MDT and outside advertising contractors. Where no current arrangement exists, the sharing arrangement is based on our conversations with MDT staff and with contractors familiar with these types of contracts in other major US cities. The share of the revenue streams that MDT will own for these projects impacts directly and substantially on the bottom line to MDT for any advertisements implemented. Note that some assets, such as billboards, could see an increase in MDT revenue share once the capital costs of implementation have been amortized.

	MDT Share of Revenue
Billboards	25%
Ads/Station Domination Ads (pillars, interior walls, clocks, etc)	50%
MetroMover Vehicle Interior Ads	60%
Pillars along Guideway	40%
Metrorail Stations - Concessions	45%
Wrap Advertising on Metrorail Cars	60%
Wrap Advertising on Metromover Cars	60%
Kiosks along Busway	60%
Wall Advertising on MDT Buildings	30%
Naming Rights	75%
Concession	100%



Appendix B: Metrorail Station Characteristics

The Research Team conducted a visual analysis of each Metrorail station in order to define the potential for advertising opportunities. Some key characteristics that affect the potential for additional advertising opportunities at each Metrorail station follow:

- Dadeland South - the southernmost station in the system. It has a parking garage with 1,060 spaces plus surface parking with an additional 200 spaces. This station is located adjacent to South Dixie Highway (US1), just a few blocks away from Kendall Drive and the Dadeland Mall. It opened to service May 20 1984. It serves an average of 6,655 passengers per day. There is only two other stations with approximately the same number of boardings, Dadeland South and the Civic Center. This station is part of a joint development consisting of a four-phase mixed-use project which evolved into three class-A office buildings, a 305-room Marriott Hotel, and a shared-used parking garage.
- Dadeland North - located on the intersection of South Dixie Highway and 83rd Street. It has garage parking with 1,975 spaces. This station connects with many bus routes including the Killian KAT, the Sunset KAT and other popular bus routes. This station is also part of a very successful joint development program that includes two market-rate rental apartment buildings, and a 14-story office building. Phase I and II that included the two apartment buildings are occupied. Phase III is pending.
- South Miami - located at 5949 Sunset Drive, adjacent to US1, close to the South Miami Hospital and Shops at Sunset Place. The station is centrally located and enjoys lots of vehicular and pedestrian traffic from non-Metrorail patrons. This station is part of another joint development project. The project consists of four phases; but only the first phase, which consists of refurbishment of existing garage, has been completed. Future phases include an 8-story office building, 13,000 sq. ft of ground-floor retail space, and 3-story market-rate rental apartments.
- University Station – located on Ponce de Leon across from the University of Miami and close to Lowe Art Museum, Gusman Hall and Doctors Hospital. The station has surface parking along US1 to serve 401 patrons. This is a very popular station and serves as an efficient connection between the University of Miami Main Campus and the Miller School of Medicine and the University of Miami Hospital.
- Douglas Road Station - This station is part of another joint development project. The 5-story office building houses administrative, technical, and support personnel for Miami-Dade Water and Sewer Department who purchased the land and the building. This station has surface parking with 226 spaces. This station serves as a transfer point to the Coral Gables Trolley.
- Coconut Grove Station – located at the corner of US1 and 27th Avenue. It serves Coconut Grove, Streets of Mayfair, Dinner Key Auditorium, and Miami City Hall. It has surface parking with 204 spaces. The Coconut Grove area is popular with everything from gallery walks and outdoor dining, to sailing regattas and festivals.



- Vizcaya Station – located within a residential enclave is located on 3201 SW First Avenue. It has surface parking with 93 spaces. The station connects through bus service to Downtown FIU South and the area of Westchester. The station has direct access to the Vizcaya Museum and Gardens and the Miami Science Museum: Planetarium.
- Brickell Station – provides access to the Brickell business district and financial centers close to the Downtown area. The area has traditionally been known as a financial district, but in recent years, construction of numerous condominium and apartment towers in Brickell, has made it an upscale residential neighborhood. The recent construction has also enlarged the urban core of Brickell from Brickell Avenue west to the Metrorail line, with new office and residential towers. The station does not have parking available.
- Government Center Station is at the Stephen P. Clark Government Center and in the heart of the Downtown area. It is close to the Federal Courthouse Square, Miami-Dade County Courthouses, Miami-Dade Library, the Downtown Bus Terminal, and the Miami-Parking Authority to name a few. Transfer to Metromover is available at this station. There is no parking available. This station has the most boarding seeing an average of about 10,778 boarding per day.
- Historic Overtown/Lyric Theatre Station located at 100 NW 6th Street, in the Downtown area. This station has no parking available. It is close to the Overtown's Historical Lyric Theatre and the Ninth Street Pedestrian Mall. The station connects by bus to the Port of Miami.
- Culmer Station – located at 701 NW 11 Street does not have parking available for Metrorail patrons. This station serves a number of community organizations like Culmer Headstar, Culmer Community Action Center, and the Culmer Overtown Branch Library.
- Civic Center Station – located on NW 12 Avenue in an area of high vehicular and pedestrian traffic. The station serves well known medical and research centers like Jackson Memorial Hospital, Bascom Palmer, Veterans Hospital, Cedar medical Center, University of Miami Hospital and Clinics, and the Miami Projects. The station is also close to the Miami-Dade Justice Building/Courts and the Miami-Dade County Jail.
- Santa Clara Station – is part of a joint development adjacent to a 17-story apartment building. Transit users can access the 61 spaces reserved for transit customers. The station is close to the Miami-Dade Community College Medical Center Campus and LindseyHopkins Technical Education Center.
- Allapattah Station – located on NW 12th Avenue and 35th Street has surface parking with 66 spaces. The Allapattah Station is approximately five miles east of the Miami International Airport with most of its businesses and educational institutions located on Northwest 36th Street. The area has a well established textiles market with several garment manufacturing and the largest open-air food distribution center in Miami. It also has a number trades represented ranging from auto repair, carpentry, and upholstery shops.



- Earlington Heights – located on NW 41 Street has garage parking with 95 spaces. This station is the primary link to the Miami Intermodal Center (MIC), which is a regional transportation hub of the Florida Department of Transportation (FDOT) that is now under construction. The facility will connect local and regional transportation networks to the Miami International Airport (MIA), including Tri-Rail, Amtrak, Intercity bus, Metrobus, taxis, and tour buses to MIA. The MIC will also house the airport's rental car facilities. The connection between the Earlington Heights Station and MIA will be via a 2.4 mile-long elevated guideway. There are a number of improvements being done to this station
- Brownsville Station – located on NW 27th Avenue is the site of a joint development – the Brownsville Transit Village - now under construction. The project will feature 467 affordable housing units, with five midrise apartment buildings, townhomes and a parking garage, as well as ground-floor commercial space and Metrorail station improvements, such as an additional passenger drop-off lane and attractive landscaping.
- Dr. Martin Luther King, Jr. Station – on NW 27th Avenue is part of a joint development that includes the Dr. Martin Luther King Jr. Plaza Office Building. Several Miami-Dade County agencies lease office space at this building. It has garage parking with 643 spaces.
- Northside Station – located on NW 79 Street is close to the Northside Shopping Plaza, the USA Flea Market and the People's National Bank. It has surface parking available.
- Tri-Rail Station – serves as a point of transfer for patrons traveling north to Broward and Palm Beach County and south to the Miami International Airport. The station also serves as a transfer point for the Amtrak Train Station and it is about 5 blocks away from Hialeah Hospital. It has surface parking with about 39 parking spaces available.
- Hialeah Station – located just south of Hialeah Park and Race Track and about six blocks from Hialeah Hospital offers surface parking with about 321 spaces. This station was open to service May 19 1985.
- Okeechobee Metrorail Station located in the Hialeah Warehouse/Factory District was opened to passenger service on May 1, 1985. The station used to be the northwestern terminus of the Metrorail system until Palmetto Station was added to the line in 2003. This station has a garage with 863 spaces, plus additional surface parking with 149 spaces.
- Palmetto Metrorail Station is located in the Northwest area of the County near the town of Medley. It opened to service on May 30, 2003. It is located adjacent to the Palmetto Expressway (SR 836) with surface parking for 710 patrons.



Appendix C: Concessions

Concessions

From site visits to each of the Metrorail stations we observed that concessions are minimal or nonexistent, except at Government Center, and some stations like Palmetto Metrorail station that have newspapers and snack machines. MDT is exploring this revenue source and it has instituted a Concessions Pilot Program on seven transit stations: Dadeland South, Dadeland North, Historic Overtown/Lyric Theatre, Culmer, Dr. Martin Luther King, Jr., and the Palmetto Metrorail stations. The footprint for the concessions is approximately 8' X 4', and the type of concession included is vending machines for snacks and cold beverages. The expected revenue per station is \$500 per month per station. Table 4 presents the potential revenues from concessions. The potential annual revenue for each of the Metrorail stations was estimated at \$6,000 per year. The total for all the stations was estimated at \$102,000 on an annual basis. An important consideration for this revenue source is that requires minimum effort on the part of MDT because the vendors provide and maintain the machines. It is also viewed as an "amenity" to the patrons rather than just another source of revenue for the transit agency. Concession revenues at Metromover stations were not estimated due to a lack of space on the Metromover station platforms for concession machines. This conclusion was reached by the project team after visual inspection of the Metromover station platforms.

Vending machines have been installed in a number of transit agencies and they are providing new much needed revenues. If it is true that the amount from vending machines and other non-traditional revenue sources is a small percentage of transit agency budgets, it is also true that at a time of increasing demands on ever-shrinking dollars, the chance to leverage revenue from passive sources is welcome. Also, vending machine vendors provide and maintain the machines and the transit agency needs only to provide the space. As an example, the Charlotte Transit Authority in North Carolina installed newspaper vending machines on buses serving an express route as a 6-month experiment to see what the customer response would be to that amenity. Metro-North Railroad, a subsidiary of New York State's Metropolitan Transportation Authority, placed a total of 279 cellular phones in service aboard some of its trains. The "Rail-call" phones average 5,000 calls a week. The call cost is \$1.75 per minute, plus tax, to anywhere in the continental United States. In Vancouver, B.C., commuter trains have a designated "Cappuccino Car." On the West Coast Express, each of the five trains that operate in the morning and afternoon peak period has one car featuring a private vendor who sells coffee and muffins. This passenger amenity translates into happier riders and an additional revenue source for the transit agency. Last year, MARTA started selling concessions – soda, water, juice, cookies and chips – and the program is generating about \$200,000 per year, according to MARTA's chief of business support services. The retail initiative would build on that effort by offering space to coffee shops, fast-food chains, dry cleaners or other businesses that could offer amenities to riders passing through MARTA stations on a regular basis.

Revenues from concessions certainly fall in the non-traditional advertising revenue category. However, in a survey conducted for the Transit Cooperative Research Program, TCRP Synthesis 32, on transit advertising revenues, it was found that more than half of the twenty-six transit properties surveyed reported revenue from vending machines and pay phones. One-third of the agencies own their own rights-of-way and 63 percent of them lease those rights-of-way to utility and communication companies to lay fiber optic cables, pipelines, telephone, and other transmission wires.



Appendix D: MDT Property Analysis

Originally planned to be part of the detail analysis, lack of data removed right-of-way leasing from the scope of work for this study. The details available on MDT property are provided here.

Miami-Dade Transit has an inventory of 186 properties. Some of the properties are used by MDT but are owned by other Departments in the County. The details for each property in the property inventory provided include municipal folio number, owner mailing address, address/description, and remarks. Many of the properties include an address with multiple lots and those addresses sometimes include lot numbers. Where there is no lot number it is not possible to determine exactly where the property is. Where there is a lot number, finding the exact location requires going to the County's property files to obtain the exact location. For example the power room in the Freedom Tower property at 175 NW 6 Street, is located in Lot #22. The information does not include the size of the parcel or lot.

The owners listed, and the number of properties associated with each owner, are the following:

- Miami-Dade Transit Agency – 111 NW 1st Street, Miami, or 701 NW 1st Court, Miami – 169 properties
- Miami-Dade GSA – 111 NW 1st Street, Miami – 11 properties
- Miami-Dade Housing Agency – 1401 NW 7th Street, Miami – 1 property
- Miami-Dade Public Works – 111 NW 1st Street, Miami – 2 properties
- School Board Miami – 5901 NW 27th Avenue, Miami – 1 property
- Miami-Dade Right of Way Department – 111 NW 1st Street, Miami – 2 property

The properties that would have potential for right-of-way leasing would be the 169 properties owned by Transit. The breakdown by type of property is as follows:

- Metrorail right-of-way – 40 properties
- The Busway – 30 properties along US1
- Park and Ride- One on US1 and SW 85 Street, and 6 on SW 296 Street
- Lehman Center – 6601 NW 72nd Avenue – 6 properties
- Property North of Lehman Center Yard – 2 properties
- MDT facilities maintenance at 7500 NW 27 Avenue
- MTA North Division at 6099 NW 27th Avenue
- MDT Central Division at 3300 NW 32 Avenue
- Central Division parking lot at 3298 NW 35 Street
- MDT Coral Way Division at 2775 SW 74 Avenue
- Central Pump Station at 3201 NW 31 Street
- MDT Bird Road property – Olympic Heights lots 1-4
- Northeast Division at 360 NE 185 Street
- Melrose Park at NW 33 Avenue and NW 34 Street
- Melrose Heights at NW 33 Avenue and 34 Street – Lots 23 and 24
- Parcel at SR 934 Ramp



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- Parcel at NW 70 Street
- Parcel at NW 69 Avenue
- Parcel at NW 68 Street
- Parcel at 9590 NW 27th Avenue – 3 properties
- Portion of NW 79 Avenue right away – 8 properties
- Portion of NW 79 Place – one property
- Portion of NW 77 Street right-of-way – 6 properties
- Right of way in Medley – 5 properties

Many of the MDT properties have been examined, and conclusions on their value, for additional revenue potential have been addressed in the Advertising section of this report, for example metrorail stations, guideway pillars, and garages. A few other properties were eliminated because of the site location – for example, the Coral Way Division. There are 76 properties that could be further examined with respect to their potential for right-of-way leasing.



Appendix E: Current Business Fees

The following table details the fee schedule levied on Miami-Dade County businesses:

Local Business Tax Receipts			
Categories	Cost of Receipt		Notes
	City	Unincorp.	
Administrative Office/Operation Center	\$45.00	\$75.00	1 to 10 emp.
	\$4.50	\$7.50	Each add'l emp.
Adult Day Care Facility	\$45.00	\$75.00	1 - 10 emp.
	\$4.50	\$7.50	Each add'l emp.
Advertising Space Rental	\$45.00	\$75.00	1 to 10 spaces
	\$4.50	\$7.50	Each add'l space
Amusement Facility / Device (non coin)	\$37.50	\$62.50	1st unit
	\$22.50	\$37.50	Each add'l unit
Apartments / Hotel / Motel	\$60.00	\$100.00	5 to 10 units
Boarding Home			
	\$3.00	\$5.00	Each add'l unit
Assisted Living Facility	\$150.00	\$250.00	
Attorney	\$70.00	\$110.00	
Attorney Branch Office	\$45.00	\$75.00	1 - 10 emp.
	\$4.50	\$7.50	Each add'l emp.
Auctioneering Service	\$45.00	\$75.00	1 - 10 emp.
	\$4.50	\$7.50	Each add'l emp.
Auditorium / Playhouse / Stadium	\$450.00	\$750.00	
Auto / Truck / Van Sales	\$45.00	\$75.00	1 - 10 emp.
	\$4.50	\$7.50	Each add'l emp.
Auto / Truck / Van Service			Same as above
Auto Tag Branch	\$150.00	\$250.00	
Bail Bonds Business	\$150.00	\$250.00	
Automated Teller Machine	\$60.00	\$100.00	
Bank/Savings/Trust Co.	\$270.00	\$450.00	
Banking Facility	\$150.00	\$250.00	
Barber / Beauty Shop / Service	\$45.00	\$75.00	1 - 10 emp.
	\$4.50	\$7.50	Each add'l emp.
Blood Bank	\$60.00	\$100.00	
Body / Paint / Repair Shop	\$45.00	\$75.00	1 - 10 emp.
	\$4.50	\$7.50	Each add'l emp.
Cable TV Franchise	\$1,050.00	\$1,750.00	
Carnival / Circus (sponsored)	\$37.50	\$62.50	1st unit
	\$22.50	\$37.50	Each add'l emp.
Carnival / Circus (not sponsored)	\$120.00	\$200.00	Per day
Catering Service	\$45.00	\$75.00	1 - 10 emp.
	\$4.50	\$7.50	Each add'l emp.
Cemetery / Crematories	\$270.00	\$450.00	

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Local Business Tax Receipts			
Categories	Cost of Receipt		Notes
Child Day Care Facility	\$45.00	\$75.00	1 - 10 emp.
	\$4.50	\$7.50	Each add'l emp.
Cleaner / Laundry / Alterations			Same as above
Clinic / Medical Center / Dialysis	\$150.00	\$250.00	
Coin Operated Machines			
Collection / Credit Service	\$45.00	\$75.00	1 - 10 emp.
	\$4.50	\$7.50	Each add'l emp.
Commercial/ Indus/ Office Space	\$75.00	\$125.00	1 - 250,000 aggregate sq. ft.
	\$225.00	\$375.00	250,001 & up
Communications			
Contractors / Construction Industry	\$45.00	\$75.00	1 to 10 emp.
	\$3.00	\$5.00	Each add'l emp.
Consultant	\$60.00	\$100.00	
Courier Drop Box	\$37.50	\$62.50	1st box
	\$22.50	\$37.50	Each add'l box
Cruise Line / Dinner Cruise	\$120.00	\$200.00	Per ship
Dealer in Intangible Personal Property	\$150.00	\$250.00	
	\$4.50	\$7.50	Each add'l emp.
Dealer Used Motor Vehicle Parts	\$150.00	\$250.00	
Eating Establishment	\$45.00	\$75.00	1 to 30 seats
	\$90.00	\$150.00	31 to 74 seats
	\$135.00	\$225.00	75 to 149 seats
	\$180.00	\$300.00	150 & over
Educational / Training Institution	\$45.00	\$75.00	Up to 10 emp.
	\$4.50	\$7.50	Each add'l emp.
Electrolysis Service			Same as above
Employee Leasing Service	\$150.00	\$250.00	
Entertainment / Fitness			
Farmers Market	\$270.00	\$450.00	
Film Industry	\$270.00	\$450.00	
Finance / Investment / Holding Co.			
Flea Market	\$270.00	\$450.00	
Fortune Teller	\$450.00	\$750.00	
Funeral Home	\$45.00	\$75.00	1 - 10 emp.
	\$4.50	\$7.50	Each add'l emp.
Guard Patrol Agency			Same as above
Hall for Hire	\$270.00	\$450.00	
Health / Dental (Prepaid) Maintenance Organization	\$270.00	\$450.00	
Health Testing - Invasive	\$45.00	\$75.00	1 - 10 emp.
	\$4.50	\$7.50	Each add'l emp.
Health Testing - Non Invasive			Same as above
Home Health Care Agency	\$150.00	\$250.00	
Home Health Care Provider	\$60.00	\$100.00	
Hospital / Emergency Room	\$60.00	\$100.00	1 - 10 emp.

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Local Business Tax Receipts			
Categories	Cost of Receipt		Notes
	\$3.00	\$5.00	Each add'l emp.
Ice Cream Vendor	\$60.00	\$100.00	
Insurance Adjuster	\$60.00	\$100.00	
Junk Dealer / Junk Yard	\$150.00	\$250.00	
Liquified Petroleum Gas			
Locksmith Service	\$45.00	\$75.00	1 - 10 emp.
	\$4.50	\$7.50	Each add'l emp.
Lunch Wagon / Truck	\$60.00	\$100.00	
Manufacturing	\$45.00	\$75.00	Up to 10 emp.
	\$4.50	\$7.50	Each add'l Emp.
Massage Establishment			Same as above
Mobile Home Park	\$60.00	\$100.00	5 - 10 spaces
	\$3.00	\$5.00	Each add'l space
Moving / Storage (Local)	\$45.00	\$75.00	1 - 10 emp.
	\$4.50	\$7.50	Each add'l emp.
Multiple Service Business	\$150.00	\$250.00	
Nursing / Convalescent Home	\$270.00	\$450.00	
Packing / Processing (Farm Products)	\$45.00	\$75.00	1 to 10 emp.
	\$4.50	\$7.50	Each add'l emp.
Pari-Mutuel Wagering	\$1,050.00	\$1,750.00	
Parking Facility	\$45.00	\$75.00	30-Jan
	\$90.00	\$150.00	31 - 74
	\$135.00	\$225.00	75 - 149
	\$180.00	\$300.00	150 and up
Passenger Transportation Service	\$45.00	\$75.00	1 - 10 emp.
	\$4.50	\$7.50	Each add'l emp.
Pawnbroker	\$450.00	\$750.00	
Peddler	\$60.00	\$100.00	
Permanent Exhibit / Admission Facility	\$270.00	\$450.00	
Pest Control Service	\$45.00	\$75.00	1 - 10 emp.
	\$4.50	\$7.50	Each add'l emp.
Pharmacy Retail			Same as above
Physical / Occupational Therapy Ctr			Same as above
Prescription Drug Wholesaler			Same as above
Private Investigative Agency			Same as above
Professional Assn./ Branch Office			Same as above
Professionals			
Repossessing Service	\$45.00	\$75.00	1 to 10 emp.
	\$4.50	\$7.50	Each add'l emp.
Sales (Non-Retail)	\$45.00	\$75.00	1 to 10 emp.
	\$4.50	\$7.50	Each add'l emp.
Sales (Retail)	\$45.00	\$75.00	1 to 10 emp.
	\$4.50	\$7.50	Each add'l emp.
Satellite TV	\$1,050.00	\$1,750.00	



Local Business Tax Receipts			
Categories	Cost of Receipt		Notes
Scrap Metal Processing	\$150.00	\$250.00	
Self Storage	\$150.00	\$250.00	
Service Industry	\$45.00	\$75.00	1 to 10 emp.
	\$4.50	\$7.50	Each add'l emp.
Slaughter House			Same as above
Tangible Property Dealer	\$45.00	\$75.00	1 to 10 emp.
	\$4.50	\$7.50	Each add'l emp.
Tattoo Studio			Same as above
Affidavit from a Lic. Medical			
Field Professional (F.S. 877.04)			
Temporary Employment Agency	\$150.00	\$250.00	
Time Share Property	\$60.00	\$100.00	5 to 10 units
	\$3.00	\$5.00	Each add'l unit
Title Insurance / Abstract Co.	\$150.00	\$250.00	
Towing Truck	\$60.00	\$100.00	1 - 10 trucks
	\$3.00	\$5.00	Each add'l truck
Traveling Junk Dealer	\$60.00	\$100.00	
Used Motor Vehicle Parts Dealer	\$150.00	\$250.00	
Veterinary Clinic	\$60.00	\$100.00	



Appendix F: Advertising Data Tables

Table 1
Analysis of Operating Revenue Enhancement Opportunities for Miami-Dade Transit
Summary of Advertising Opportunities
Metrorail Stations

Station	Parking	Columns	Space for Billboards	Walls for Advertising - Inside Station	Space for Concessions and Market
Dadeland South	Garage and Surface	Not Visible	No	No	Yes
Dadeland North	Garage	Yes	No	Yes	Yes
South Miami	Garage	Yes	No	No	Yes
University	Surface Parking	Yes	No	No	Yes
Douglas Road	Surface Parking	Yes	Yes	Yes	Yes
Coconut Grove	Surface Parking	Yes	No	Yes	Yes
Vizcaya	Surface Parking	Yes	Yes	No	No
Brickell	No Parking	Yes	Yes	No	Yes
Government Center	No Parking	Not Visible	No	Yes	Already Exist
Historic Overtown/Lyric Theatre Station	No Parking	Not Visible	No	No	No
Culmer	No Parking	Yes	No	Yes	Yes
Civic Center	No Parking	Yes	No	Yes	No
Santa Clara	Garage - ground level of the 17-story apartment building	Not Visible	No	No	No
Allapattah	Surface Parking				
Earlington Heights	Garage	Yes (about 10)	Yes	No	No
Brownsville	Surface Parking	Yes	No	No	No
Dr. Martin Luther King Jr.	Garage	Yes	No	Yes	Yes
Northside	Surface Parking	Not Visible	No	No	Yes
Tri-Rail	No Parking	Yes	No	Yes	Yes
Hialeah	Surface Parking	Yes (about 30)	No	Yes	Yes
Okeechobee	Surface Parking	Yes (about 6)	Yes	Yes	Yes
Palmetto	Surface Parking	Yes	Yes	Yes	Yes

Note: Information from MDT reports and visual inspection of Metrorail Stations



Table 2
Analysis of Operating Revenue Enhancement Opportunities for Miami-Dade
Transit
Number of Impressions
Metrorail Stations

Metrorail Stations	Annual Patron Traffic	Annual Pedestrian Traffic	Annual Drive by Traffic	Number of Impressions
Dadeland South	1,910,202	716,326	19,892,500	22,519,028
Dadeland North	1,729,049	648,393	21,170,000	23,547,442
South Miami	952,262	357,098	31,572,500	32,881,860
University	507,405	190,277	30,741,760	31,439,442
Douglas Road	1,086,430	407,411	31,755,000	33,248,841
Coconut Grove	521,765	195,662	35,222,500	35,939,927
Vizcaya	363,509	136,316	35,222,500	35,722,325
Brickell	1,085,638	407,114	4,891,000	6,383,752
Government Center	3,085,397	1,157,024	1,715,500	5,957,921
Historic Overtown/Lyric Theatre Station	378,881	142,080	2,628,000	3,148,961
Culmer	315,489	118,308	0	433,797
Civic Center	1,645,591	617,097	7,847,500	10,110,188
Santa Clara	204,035	76,513	7,847,500	8,128,048
Allapattah	507,354	190,258	7,847,500	8,545,112
Earlington Heights	401,000	150,375	28,652,500	29,203,875
Brownsville	260,901	97,838	12,957,500	13,316,239
Dr. Martin Luther King Jr.	407,404	152,777	12,957,500	13,517,681
Northside	471,160	176,685	9,855,000	10,502,845
Tri-Rail	441,832	165,687	8,577,500	9,185,019
Hialeah	475,673	178,377	10,950,000	11,604,050
Okeechobee	382,503	143,439	20,805,000	21,330,942
Palmetto	304,253	114,095	4,745,000	5,163,348

Footnotes:

- 1) Number of boardings provided by Miami-Dade Transit Department
- 2) From Front Row Marketing Services Report dated 2008
- 3) Pedestrian traffic calculated using methodology developed by Front Row (Annual Patron Traffic multiplied by 0.375).
- 4) Vehicular traffic values obtained from the Department of Transportation.



ANALYSIS OF OPERATING REVENUE ENHANCEMENT OPPORTUNITIES FOR MIAMI-DADE TRANSIT

Table 3
Analysis of Operating Revenue Enhancement Opportunities for Miami-Dade Transit
Value of Impressions
Metrorail Stations

Metrorail Stations	Total Impressions ¹	Number of Potential Advertising Media		Annual Media Value						
		Station Pillars ²	Billboards ³	Annual Media Value per Station Pillar Impression ⁴	Annual Media Value per Billboard Impression ⁴	Percent Occupancy of Station Pillars	Percent Occupancy of Billboard Space	Station Pillar Visibility Adjustment	Billboard Visibility Adjustment	Total Media Value
Dadeland South	22,519,028	0	0	\$ 0.002000	\$ 0.010000	100%	95%	85%	45%	\$ -
Dadeland North	23,547,442	0	0	\$ 0.002000	\$ 0.010000	100%	95%	85%	45%	\$ -
South Miami	32,881,860	6	0	\$ 0.002000	\$ 0.010000	100%	95%	85%	45%	\$ 335,395
University	31,439,442	2	0	\$ 0.002000	\$ 0.010000	100%	95%	85%	45%	\$ 106,894
Douglas Road	33,248,841	0	1	\$ 0.002000	\$ 0.010000	100%	95%	85%	45%	\$ 142,139
Coconut Grove	35,939,927	4	0	\$ 0.002000	\$ 0.010000	100%	95%	85%	45%	\$ 244,392
Vizcaya	35,722,325	0	1	\$ 0.002000	\$ 0.010000	100%	95%	85%	45%	\$ 152,713
Brickell	6,383,752	10	1	\$ 0.002000	\$ 0.010000	100%	95%	85%	45%	\$ 135,814
Government Center	5,957,921	4	0	\$ 0.002000	\$ 0.010000	100%	95%	85%	45%	\$ 40,514
Historic Overtown/Lyric Theatre Station	3,148,961	0	0	\$ 0.002000	\$ 0.010000	100%	95%	85%	45%	\$ -
Culmer	433,797	0	0	\$ 0.002000	\$ 0.010000	100%	95%	85%	45%	\$ -
Civic Center	10,110,188	10	0	\$ 0.002000	\$ 0.010000	100%	95%	85%	45%	\$ 171,873
Santa Clara	8,128,048	0	0	\$ 0.002000	\$ 0.010000	100%	95%	85%	45%	\$ -
Allapattah	8,545,112	4	0	\$ 0.002000	\$ 0.010000	100%	95%	85%	45%	\$ 58,107
Earlington Heights	29,203,875	6	2	\$ 0.002000	\$ 0.010000	100%	95%	85%	45%	\$ 547,573
Brownsville	13,316,239	0	0	\$ 0.002000	\$ 0.010000	100%	95%	85%	45%	\$ -
Dr. Martin Luther King Jr.	13,517,681	6	1	\$ 0.002000	\$ 0.010000	100%	95%	85%	45%	\$ 195,668
Northside	10,502,845	0	0	\$ 0.002000	\$ 0.010000	100%	95%	85%	45%	\$ -
Tri-Rail	9,185,019	20	1	\$ 0.002000	\$ 0.010000	100%	95%	85%	45%	\$ 351,557
Hialeah	11,604,050	8	1	\$ 0.002000	\$ 0.010000	100%	95%	85%	45%	\$ 207,422
Okeechobee	21,330,942	6	2	\$ 0.002000	\$ 0.010000	100%	95%	85%	45%	\$ 399,955
Palmetto	5,163,348	8	2	\$ 0.002000	\$ 0.010000	100%	95%	85%	45%	\$ 114,368
	371,830,643	0.000841061		Total:						\$ 3,204,384

Footnotes:

- 1) Total traffic represents the sum of boardings, pedestrian traffic, and vehicular traffic
- 2) Number of pillars associated with the station itself; estimated by visual inspection
- 3) Billboard spaces available for advertising estimated by visual inspections
- 4) Annual Media Value established by applying industry standard impression values



Table 4
Analysis of Operating Revenue Enhancement Opportunities for Miami-Dade Transit

Potential Revenues from Concessions
Metrorail Stations

Station	Concessions		Total Revenue Potential per Station
	Space	Potential Annual Revenue	
Dadeland South	Yes	\$ 6,000	\$ 6,000
Dadeland North	Yes	\$ 6,000	\$ 6,000
South Miami	Yes	\$ 6,000	\$ 6,000
University	Yes	\$ 6,000	\$ 6,000
Douglas Road	Yes	\$ 6,000	\$ 6,000
Coconut Grove	Yes	\$ 6,000	\$ 6,000
Vizcaya	Yes	\$ 6,000	\$ 6,000
Brickell	Yes	\$ 6,000	\$ 6,000
Government Center	Already Exist	\$ -	\$ -
Historic Overtown/Lyric Theatre Station	No	\$ -	\$ -
Culmer	Yes	\$ 6,000	\$ 6,000
Civic Center	No	\$ -	\$ -
Santa Clara	No	\$ -	\$ -
Allapattah	Yes	\$ 6,000	\$ 6,000
Earlington Heights	Yes	\$ 6,000	\$ 6,000
Brownsville	No	\$ -	\$ -
Dr. Martin Luther King Jr.	Yes	\$ 6,000	\$ 6,000
Northside	Yes	\$ 6,000	\$ 6,000
Tri-Rail	Yes	\$ 6,000	\$ 6,000
Hialeah	Yes	\$ 6,000	\$ 6,000
Okeechobee	Yes	\$ 6,000	\$ 6,000
Palmetto	Yes	\$ 6,000	\$ 6,000
Total:			\$ 102,000

Note: Space availability obtained by visual inspections



Table 5
Analysis of Operating Revenue Enhancement Opportunities for Miami-Dade Transit
Number of Impressions
Metromover Stations

Metromover Stations	Annual Patron Boardings¹	Annual Pedestrian Traffic³	Annual Drive By Traffic⁴	Adjusted Total Number of Impressions
School Board	353,400	132,524.81	3,431,000	3,916,924
Omni	725,516	272,068.50	11,680,000	12,677,585
Eleventh Street	78,919	29,594.63	5,475,000	5,583,514
Park West	172,631	64,736.63	5,475,000	5,712,368
Freedom Tower	179,095	67,160.63	5,475,000	5,721,256
Government Center	2,296,949	861,355.85	2,628,000	5,786,305
Miami Avenue	248,442	93,165.56	2,409,000	2,750,607
Third Street	86,382	32,393.25	3,139,000	3,257,775
Knight Center	205,993	77,247.38	6,570,000	6,853,240
Bayfront Park	907,428	340,285.50	12,775,000	14,022,714
First Street	404,678	151,754.25	1,715,500	2,271,932
College/Bayside	616,120	231,045.00	5,475,000	6,322,165
Collee North	386,614	144,980.18	3,029,500	3,561,094
Arena/State Plaza	146,222	54,833.25	3,029,500	3,230,555
Riverwalk	140,180	52,567.50	6,570,000	6,762,748
Fifth Street	102,470	38,426.25	4,380,000	4,520,896
Eighth Street	174,841	65,565.38	4,015,000	4,255,406
Tenth Street	230,972	86,614.31	12,045,000	12,362,586
Brickell	573,495	215,060.66	4,891,000	5,679,556
Financial District	261,600	98,100.00	7,336,500	7,696,200

Footnotes:

- 1) Number of boardings provided by Miami-Dade Transit Department
- 2) Pedestrian traffic calculated using methodology developed by Front Row (Annual Patron Traffic multiplied by 0.375).
- 3) Vehicular traffic values obtained from the Department of Transportation.



ANALYSIS OF OPERATING REVENUE ENHANCEMENT OPPORTUNITIES FOR MIAMI-DADE TRANSIT

Table 6
Analysis of Operating Revenue Enhancement Opportunities for Miami-Dade Transit
Value of Impressions
Metromover Station Ad, Station Pillars, and Guideway Pillars

Metromover Stations	Annual Patron Boardings	Total Impressions ¹	Annual Media Value per Impression ²	Metromover Station Pillar % Occupancy	Metromover Guideway Pillar % Occupancy	Number of Viable Station Pillars by Station	Number of Viable Guideway Pillars Between this and the Next Station	Metromover Station Pillar Visibility Adjustment	Metromover Guideway Pillar Visibility Adjustment	Potential Station Ad Revenue	Total Potential Metromover Pillar Revenue
School Board	353,400	3,916,924	\$ 0.002000	80%	60%	3	12.89	85%	65%	\$ 4,311	\$ 55,377
Omni	725,516	12,677,585	\$ 0.002000	80%	60%	3	12.89	85%	65%	\$ 8,851	\$ 179,234
Eleventh Street	78,919	5,583,514	\$ 0.002000	80%	60%	3	12.89	85%	65%	\$ 963	\$ 78,939
Park West	172,631	5,712,368	\$ 0.002000	80%	60%	3	12.89	85%	65%	\$ 2,106	\$ 80,761
Freedom Tower	179,095	5,721,256	\$ 0.002000	80%	60%	3	12.89	85%	65%	\$ 2,185	\$ 80,887
Government Center	2,296,949	5,786,305	\$ 0.002000	80%	60%	3	12.89	85%	65%	\$ 28,022	\$ 81,806
Miami Avenue	248,442	2,750,607	\$ 0.002000	80%	60%	3	12.89	85%	65%	\$ 3,031	\$ 38,888
Third Street	86,382	3,257,775	\$ 0.002000	80%	60%	3	12.89	85%	65%	\$ 1,054	\$ 46,058
Knight Center	205,993	6,853,240	\$ 0.002000	80%	60%	3	12.89	85%	65%	\$ 2,513	\$ 96,890
Bayfront Park	907,428	14,022,714	\$ 0.002000	80%	60%	3	12.89	85%	65%	\$ 11,070	\$ 198,252
First Street	404,678	2,271,932	\$ 0.002000	80%	60%	3	12.89	85%	65%	\$ 4,937	\$ 32,120
College/Bayside	616,120	6,322,165	\$ 0.002000	80%	60%	3	12.89	85%	65%	\$ 7,516	\$ 89,382
Collee North	386,614	3,561,094	\$ 0.002000	80%	60%	3	12.89	85%	65%	\$ 4,717	\$ 50,346
Arena/State Plaza	146,222	3,230,555	\$ 0.002000	80%	60%	3	12.89	85%	65%	\$ 1,784	\$ 45,673
Riverwalk	140,180	6,762,748	\$ 0.002000	80%	60%	3	12.89	85%	65%	\$ 1,710	\$ 95,611
Fifth Street	102,470	4,520,896	\$ 0.002000	80%	60%	3	12.89	85%	65%	\$ 1,250	\$ 63,916
Eighth Street	174,841	4,255,406	\$ 0.002000	80%	60%	3	12.89	85%	65%	\$ 2,133	\$ 60,162
Tenth Street	230,972	12,362,586	\$ 0.002000	80%	60%	3	12.89	85%	65%	\$ 2,818	\$ 174,781
Brickell	573,495	5,679,556	\$ 0.002000	80%	60%	3	12.89	85%	65%	\$ 6,996	\$ 80,297
Financial District	261,600	7,696,200	\$ 0.002000	80%	60%	3	0	85%	65%	\$ 3,191	\$ 31,400
Total:										\$ 101,158	\$ 1,660,782

Footnotes:

Metromover Station Total:

\$ 1,761,940

- 1) Total impressions represent the weighted sum of parking space occupancy, pedestrian traffic, and vehicular traffic
- 2) Annual Media Value established by applying industry standard impression values



ANALYSIS OF OPERATING REVENUE ENHANCEMENT OPPORTUNITIES FOR MIAMI-DADE TRANSIT

Table 7
Analysis of Operating Revenue Enhancement Opportunities for Miami-Dade Transit
Number of Impressions
Surface Parking, Parking Garages, and Park and Rides

Location Name	Address	Patrons				Pedestrian Traffic		Drive by Traffic		Adjusted Total Number of Impressions
		Available Spaces ¹	Percent Occupancy ²	Daily Occupancy Adjustment Factor	Impressions	Pedestrian Traffic ³	Pedestrian Impression Factor Calculation	Annual Traffic ⁴	Traffic Impression Factor Calculation	
Surface Parking										
Dadeland South	9150 Dadeland Boulevard	200	91%	1.7	80,444	716,326	716,326	19,892,500	25,860,250	26,657,020
University	5400 Ponce de Leon	401	73%	1.7	129,387	190,277	190,277	30,741,760	39,964,288	40,283,952
Douglas Road	3100 Douglas Road	226	86%	1.7	85,907	407,411	407,411	31,755,000	41,281,500	41,774,818
Vizcaya	3201 SW First Avenue	93	65%	1.7	26,719	136,316	136,316	35,222,500	45,789,250	45,952,285
Allapattah	3501 NW 12 Avenue	66	32%	1.7	9,335	190,258	190,258	7,847,500	10,201,750	10,401,343
Brownsville	Parking lot closed	0	0%	1.7	-	97,838	97,838	12,957,500	16,844,750	16,942,588
Northside	3150 NW 79 Street	282	49%	1.7	61,076	176,685	176,685	9,855,000	12,811,500	13,049,261
Hialeah	125 E 21 Street	321	26%	1.7	36,889	178,377	178,377	10,950,000	14,235,000	14,450,267
Palmetto	7701 NW 79 Avenue	710	45%	1.7	141,219	114,095	114,095	4,745,000	6,168,500	6,423,814
Okeechobee	2005 Okeechobee Road	149	34%	1.7	22,392	143,439	143,439	20,805,000	27,046,500	27,212,330
Parking Garages										
Dadeland South	9150 Dadeland Boulevard	1060	91%	1.7	426,353	716,326	716,326	19,892,500	25,860,250	27,002,929
Dadeland North	8300 South Dixie Highway	1975	88%	1.7	768,196	648,393	648,393	21,170,000	27,521,000	28,937,589
South Miami	5949 South Dixie Highway	1774	50%	1.7	392,054	357,098	357,098	31,572,500	41,044,250	41,793,402
Dr. Martin Luther King, Jr.	6205 NW 27th Avenue	643	62%	1.7	176,208	152,777	152,777	12,957,500	16,844,750	17,173,734
Earlington Heights	2100 NW 41 Street	95	71%	1.7	29,813	150,375	150,375	28,652,500	37,248,250	37,428,438
Okeechobee	2005 Okeechobee Road	863	34%	1.7	129,692	143,439	143,439	20,805,000	27,046,500	27,319,630
Santa Clara	2050 NW 12 Avenue	61	94%	1.7	25,344	76,513	76,513	7,847,500	10,201,750	10,303,607
Park and Rides along Busway										
	Busway at SW 152 Street	126		1.7	-		-	13,870,000	18,031,000	18,031,000
	Busway at SW 168 Street	168		1.7	-		-	182,500	237,250	237,250
	Busway at SW 112 Avenue	450		1.7	-		-	164,250	213,525	213,525
	Busway at SW 244 Street	95		1.7	-		-	164,250	213,525	213,525
	Busway at 296 Street	139		1.7	-		-	11,862,500	15,421,250	15,421,250
Park and Rides at Other Locations										
	Golden Glades	1542	58%	1.7	392,496		-	16,060,000	20,878,000	21,270,496
	West Kendall Transit Terminal	40	70%	1.7	12,376		-	-	-	12,376
	Kendall Drive and SW 150 Avenue - Kendall Cruiser	109	14%	1.7	6,630		-	16,790,000	21,827,000	21,833,630
	Coral Reef Drive and Florida Turnpike - Connecting to Coral Reef MAX	95	54%	1.7	22,542		-	23,907,500	31,079,750	31,102,292
	Hammocks Town Center - SW 104 Street and 152 Avenue - Killian Kat	50	180%	1.7	39,780		-	15,165,750	19,715,475	19,755,255

Footnotes:

- 1) Number of spaces available on parking patronage summary report by MDT
- 2) Percent occupancy available on parking patronage summary report by MDT
- 3) Pedestrian traffic gathered from Busway boardings numbers for the noted locations.
- 4) Vehicular traffic values obtained from the Department of Transportation.



ANALYSIS OF OPERATING REVENUE ENHANCEMENT OPPORTUNITIES FOR MIAMI-DADE TRANSIT

Table 8
Analysis of Operating Revenue Enhancement Opportunities for Miami-Dade Transit
Value of Impressions
Surface Parking, Parking Garages, and Park and Rides

Location Name	Address	Total Impressions ¹	Number of Potential Advertising Media		Annual Media Value						
			Parking Area Pillars ²	Walls ³	Annual Media Value per Pillar Impression ⁴	Parking Area Pillar Occupancy Rate	Parking Area Pillar Visibility Adjustment	Annual Media Value per Wall Impression ⁴	Wall Ad Occupancy Rate	Wall Ad Visibility Adjustment	Total Media Value
Surface Parking											
Dadeland South	9150 Dadeland Boulevard	26,657,020	-		\$ 0.00200	100%	75%	\$ 0.01000	70%	45%	\$ -
University	5400 Ponce de Leon	40,283,952	-		\$ 0.00200	100%	75%	\$ 0.01000	70%	45%	\$ -
Douglas Road	3100 Douglas Road	41,774,818	-		\$ 0.00200	100%	75%	\$ 0.01000	70%	45%	\$ -
Vizcaya	3201 SW First Avenue	45,952,285	-		\$ 0.00200	100%	75%	\$ 0.01000	70%	45%	\$ -
Allapattah	3501 NW 12 Avenue	10,401,343	4		\$ 0.00200	100%	75%	\$ 0.01000	70%	45%	\$ 62,408
Brownsville	Parking lot closed	16,942,588	-		\$ 0.00200	100%	75%	\$ 0.01000	70%	45%	\$ -
Northside	3150 NW 79 Street	13,049,261	-		\$ 0.00200	100%	75%	\$ 0.01000	70%	45%	\$ -
Hialeah	125 E 21 Street	14,450,267	18		\$ 0.00200	100%	75%	\$ 0.01000	70%	45%	\$ 390,157
Palmetto	7701 NW 79 Avenue	6,423,814	-		\$ 0.00200	100%	75%	\$ 0.01000	70%	45%	\$ -
Okeechobee	2005 Okeechobee Road	27,212,330	-		\$ 0.00200	100%	75%	\$ 0.01000	70%	45%	\$ -
Parking Garages											
Dadeland South	9150 Dadeland Boulevard	27,002,929	-		\$ 0.00200	100%	75%	\$ 0.01000	70%	45%	\$ -
Dadeland North	8300 South Dixie Highway	28,937,589	-	3	\$ 0.00200	100%	75%	\$ 0.01000	70%	45%	\$ 273,460
South Miami	5949 South Dixie Highway	41,793,402	-		\$ 0.00200	100%	75%	\$ 0.01000	70%	45%	\$ -
Dr. Martin Luther King, Jr.	6205 NW 27th Avenue	17,173,734	4		\$ 0.00200	100%	75%	\$ 0.01000	70%	45%	\$ 103,042
Earlington Heights	2100 NW 41 Street	37,428,438	3		\$ 0.00200	100%	75%	\$ 0.01000	70%	45%	\$ 168,428
Okeechobee	2005 Okeechobee Road	27,319,630	-		\$ 0.00200	100%	75%	\$ 0.01000	70%	45%	\$ -
Santa Clara	2050 NW 12 Avenue	10,303,607	-		\$ 0.00200	100%	75%	\$ 0.01000	70%	45%	\$ -
Total:								\$ 997,496			

Footnotes:

- 1) Total traffic represents the sum of boardings, pedestrian traffic, and vehicular traffic
- 2) Number of pillars associated with the Parking areas/structures; estimated by visual inspection
- 3) Walls available for advertising estimated by visual inspections
- 4) Annual Media Value established by applying industry standard impression values



ANALYSIS OF OPERATING REVENUE ENHANCEMENT OPPORTUNITIES FOR MIAMI-DADE TRANSIT

Table 9
Analysis of Operating Revenue Enhancement Opportunities for Miami-Dade Transit
Value of Impressions and Value of Impressions
Pillars Between Metrorail Stations

Metrorail Stations	Drive by Traffic		Number of Guideway Pillars between this station and next station ¹	Annual Media Value			
	Annual Traffic	Impression Factor		Value per Impression	Guideway Pillar Occupancy Rate	Guideway Pillar Visibility Adjustment	Total Media Value
Dadeland South	19,892,500	25,860,250	15	\$ 0.002000	50%	65%	\$ 252,137
Dadeland North	21,170,000	27,521,000	35	\$ 0.002000	50%	65%	\$ 626,103
South Miami	31,572,500	41,044,250	30	\$ 0.002000	50%	65%	\$ 800,363
University	30,741,760	39,964,288	35	\$ 0.002000	50%	65%	\$ 909,188
Douglas Road	31,755,000	41,281,500	35	\$ 0.002000	50%	65%	\$ 939,154
Coconut Grove	35,222,500	45,789,250	80	\$ 0.002000	50%	65%	\$ 2,381,041
Vizcaya	35,222,500	45,789,250	0	\$ 0.002000	50%	65%	\$ -
Brickell	4,891,000	6,358,300	15	\$ 0.002000	50%	65%	\$ 61,993
Government Center	1,715,500	2,230,150	0	\$ 0.002000	50%	65%	\$ -
Historic Overtown/Lyric Theatre Station	2,628,000	3,416,400	0	\$ 0.002000	50%	65%	\$ -
Culmer	-	-	5	\$ 0.002000	50%	65%	\$ -
Civic Center	7,847,500	10,201,750	15	\$ 0.002000	50%	65%	\$ 99,467
Santa Clara	7,847,500	10,201,750	35	\$ 0.002000	50%	65%	\$ 232,090
Allapattah	7,847,500	10,201,750	10	\$ 0.002000	50%	65%	\$ 66,311
Earlington Heights	28,652,500	37,248,250	20	\$ 0.002000	50%	65%	\$ 484,227
Brownsville	12,957,500	16,844,750	35	\$ 0.002000	50%	65%	\$ 383,218
Dr. Martin Luther King Jr.	12,957,500	16,844,750	27	\$ 0.002000	50%	65%	\$ 295,625
Northside	9,855,000	12,811,500	25	\$ 0.002000	50%	65%	\$ 208,187
Tri-Rail	8,577,500	11,150,750	20	\$ 0.002000	50%	65%	\$ 144,960
Hialeah	10,950,000	14,235,000	20	\$ 0.002000	50%	65%	\$ 185,055
Okeechobee	20,805,000	27,046,500	0	\$ 0.002000	50%	65%	\$ -
Palmetto	4,745,000	6,168,500	0	\$ 0.002000	50%	65%	\$ -
Total:							\$ 8,069,120

Footnotes:

1) Number of pillars estimated by visual inspection. Represents number believed to have real advertising value

ANALYSIS OF OPERATING REVENUE ENHANCEMENT OPPORTUNITIES FOR MIAMI-DADE TRANSIT



Table 10
Analysis of Operating Revenue Enhancement Opportunities for Miami-Dade Transit
Naming Rights Potential Revenues
Metrorail Stations

Metrorail Stations	Patrons		Pedestrian Traffic		Drive by Traffic		Number of Impressions	Value of Naming Rights by Station
	Annual Boardings ¹	Times Impression Factor ²	Pedestrian Traffic ³	Times Impression Factor ²	Annual Traffic ⁴	Times Impression Factor ²		
Dadeland South	1,910,202	1,910,202	716,326	716,325.75	19,892,500	25,860,250	28,486,778	\$ 42,730
Dadeland North	1,729,049	1,729,049	648,393	648,393.38	21,170,000	27,521,000	29,898,442	\$ 44,848
South Miami	952,262	952,262	357,098	357,098.25	31,572,500	41,044,250	42,353,610	\$ 63,530
University	507,405	507,405	190,277	190,276.88	30,741,760	39,964,288	40,661,970	\$ 60,993
Douglas Road	1,086,430	1,086,430	407,411	407,411.25	31,755,000	41,281,500	42,775,341	\$ 64,163
Coconut Grove	521,765	521,765	195,662	195,661.88	35,222,500	45,789,250	46,506,677	\$ 69,760
Vizcaya	363,509	363,509	136,316	136,315.88	35,222,500	45,789,250	46,289,075	\$ 69,434
Brickell	1,085,638	1,085,638	407,114	407,114.25	4,891,000	6,358,300	7,851,052	\$ 11,777
Government Center	3,085,397	3,085,397	1,157,024	1,157,023.88	1,715,500	2,230,150	6,472,571	\$ 9,709
Overtown/Lyric	378,881	378,881	142,080	142,080.38	2,628,000	3,416,400	3,937,361	\$ 5,906
Culmer	315,489	315,489	118,308	118,308.38	0	-	433,797	\$ 651
Civic Center	1,645,591	1,645,591	617,097	617,096.63	7,847,500	10,201,750	12,464,438	\$ 18,697
Santa Clara	204,035	204,035	76,513	76,513.13	7,847,500	10,201,750	10,482,298	\$ 15,723
Allapattah	507,354	507,354	190,258	190,257.75	7,847,500	10,201,750	10,899,362	\$ 16,349
Earlington Heights	401,000	401,000	150,375	150,375.00	28,652,500	37,248,250	37,799,625	\$ 56,699
Brownsville	260,901	260,901	97,838	97,837.88	12,957,500	16,844,750	17,203,489	\$ 25,805
Dr. Martin Luther King	407,404	407,404	152,777	152,776.50	12,957,500	16,844,750	17,404,931	\$ 26,107
Northside	471,160	471,160	176,685	176,685.00	9,855,000	12,811,500	13,459,345	\$ 20,189
Tri-Rail	441,832	441,832	165,687	165,687.00	8,577,500	11,150,750	11,758,269	\$ 17,637
Hialeah	475,673	475,673	178,377	178,377.38	10,950,000	14,235,000	14,889,050	\$ 22,334
Okeechobee	382,503	382,503	143,439	143,438.63	20,805,000	27,046,500	27,572,442	\$ 41,359
Palmetto	304,253	304,253	114,095	114,094.88	4,745,000	6,168,500	6,586,848	\$ 9,880
MetroMover Stations								
School Board	353,400	353,400	132,525	132,524.81	3,431,000	4,460,300	4,946,224	\$ 7,419
Omni	725,516	725,516	272,069	272,068.50	11,680,000	15,184,000	16,181,585	\$ 24,272
Eleventh Street	78,919	78,919	29,595	29,594.63	5,475,000	7,117,500	7,226,014	\$ 10,839
Park West	172,631	172,631	64,737	64,736.63	5,475,000	7,117,500	7,354,868	\$ 11,032
Freedom Tower	179,095	179,095	67,161	67,160.63	5,475,000	7,117,500	7,363,756	\$ 11,046
Government Center	2,296,949	2,296,949	861,356	861,355.85	2,628,000	3,416,400	6,574,705	\$ 9,862
Miami Avenue	248,442	248,442	93,166	93,165.56	2,409,000	3,131,700	3,473,307	\$ 5,210
Third Street	86,382	86,382	32,393	32,393.25	3,139,000	4,080,700	4,199,475	\$ 6,299
Knight Center	205,993	205,993	77,247	77,247.38	6,570,000	8,541,000	8,824,240	\$ 13,236
Bayfront Park	907,428	907,428	340,286	340,285.50	12,775,000	16,607,500	17,855,214	\$ 26,783
First Street	404,678	404,678	151,754	151,754.25	1,715,500	2,230,150	2,786,582	\$ 4,180
College/Bayside	616,120	616,120	231,045	231,045.00	5,475,000	7,117,500	7,964,665	\$ 11,947
Collee North	386,614	386,614	144,980	144,980.18	3,029,500	3,938,350	4,469,944	\$ 6,705
Arena/State Plaza	146,222	146,222	54,833	54,833.25	3,029,500	3,938,350	4,139,405	\$ 6,209
Riverwalk	140,180	140,180	52,568	52,567.50	6,570,000	8,541,000	8,733,748	\$ 13,101
Fifth Street	102,470	102,470	38,426	38,426.25	4,380,000	5,694,000	5,834,896	\$ 8,752
Eighth Street	174,841	174,841	65,565	65,565.38	4,015,000	5,219,500	5,459,906	\$ 8,190
Tenth Street	230,972	230,972	86,614	86,614.31	12,045,000	15,658,500	15,976,086	\$ 23,964
Brickell	573,495	573,495	215,061	215,060.66	4,891,000	6,358,300	7,146,856	\$ 10,720
Financial District	261,600	261,600	98,100	98,100.00	7,336,500	9,537,450	9,897,150	\$ 14,846
								\$ 948,893

Footnotes:

- 1) Number of boardings provided by Miami-Dade Transit Department
- 2) From Front Row Marketing Services Report dated 2008
- 3) Pedestrian traffic calculated using methodology developed by Front Row (Annual Patron Traffic multiplied by 0.375).
- 4) Vehicular traffic values obtained from the Department of Transportation.



ANALYSIS OF OPERATING REVENUE ENHANCEMENT OPPORTUNITIES FOR MIAMI-DADE TRANSIT

Table 11
Analysis of Operating Revenue Enhancement Opportunities for Miami-Dade Transit
Summary of Estimated Total Media Value by Source

Revenue Source	Low Case		Base Case		High Case	
	Total Media Value	MDT Expected Revenues*	Total Media Value	MDT Expected Revenues*	Total Media Value	MDT Expected Revenues*
Metrorail Stations (including station pillars/billboards)	\$ 708,000	\$ 285,000	\$ 2,407,000	\$ 1,075,000	\$ 3,204,000	\$ 1,366,000
Metromover Station Ads (Station Pillars, interior walls, clocks, etc)	\$ 559,000	\$ 280,000	\$ 1,822,000	\$ 911,000	\$ 1,762,000	\$ 881,000
MetroMover Vehicle Interior Ads	\$ 415,000	\$ 249,000	\$ 715,000	\$ 429,000	\$ 948,000	\$ 569,000
Wrap Advertising on Metrorail Cars	\$ 2,500,000	\$ 1,500,000	\$ 4,896,000	\$ 2,938,000	\$ 6,000,000	\$ 3,600,000
Wrap Advertising on Metromover Cars	\$ 650,000	\$ 390,000	\$ 1,218,000	\$ 731,000	\$ 1,575,000	\$ 945,000
Surface Parking, Parking Garages, and Park and Rides (including parking pillars and wall ads; not including Kiosks)	\$ 96,000	\$ 48,000	\$ 698,000	\$ 349,000	\$ 997,000	\$ 499,000
Kiosks along Busway	\$ 168,000	\$ 101,000	\$ 672,000	\$ 403,000	\$ 1,300,000	\$ 780,000
Guideway Pillars	\$ 140,000	\$ 56,000	\$ 2,852,000	\$ 1,141,000	\$ 8,069,000	\$ 3,228,000
Wall Advertising on MDT Buildings	\$ 120,000	\$ 36,000	\$ 480,000	\$ 144,000	\$ 1,080,000	\$ 324,000
Naming Rights	\$ 267,000	\$ 200,000	\$ 495,000	\$ 371,000	\$ 949,000	\$ 712,000
Domination Advertising-MetroMover and MetroRail	\$ 630,000	\$ 315,000	\$ 1,260,000	\$ 630,000	\$ 1,512,000	\$ 756,000
Total Potential Media Value	\$ 6,253,000	\$ 3,460,000	\$17,515,000	\$ 9,122,000	\$ 27,396,000	\$ 13,660,000

*MDT expected revenues is a weighted average based on expected share of revenue from each revenue source. Each source has its own expected revenue percentage.