

ANALYSIS OF OPERATING REVENUE ENHANCEMENT OPPORTUNITIES FOR MIAMI-DADE TRANSIT



FINAL REPORT
December 2010

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





Table of Contents

I. Executive Summary	4
Background and Purpose.....	4
Methodology.....	5
Key Findings.....	6
Conclusions.....	8
II. Research Overview and Methodology	9
Background and Purpose.....	9
Research Objective	10
Methodology	10
III. Innovative Research Techniques and Tools: A Full Spectrum of Opportunities	12
Spectrum of Transit Revenue Techniques and Tools	12
Summary Matrices	12
Sales Taxes.....	20
Property Taxes	23
Advertising & Marketing Revenues.....	26
Contract Revenues.....	33
Concessions.....	35
Naming Rights.....	38
Joint Development.....	41
Air Rights Leasing	43
Right-of-Way Leasing.....	45
System Parking Fees	48
Value Capture: Land Development Charges (i.e., Impact Fees).....	50
Value Capture: Special Taxing Districts (Tax Increment Financing and Benefit Assessment Districts)	53
Digital Technology, Web-Marketing and Social Media	56
Payroll Levy.....	59
Registration and Licensing Fees	61
Corporate Franchise Fees.....	63
Car Rental Fees	64
Gas Surcharges: Motor Fuel Tax and Local Option Gas Tax.....	66
Real Estate Transfer Fees.....	68
Non-Transit Parking Fees.....	70
Tolling and Congestion Pricing.....	72
Utility Fees.....	75
Distance-Based Fares and Other Fare Structures	76
Room and Occupancy Surcharges.....	78
Vehicle Fees.....	80
Vehicle Miles Traveled (VMT) Fees.....	82
Excise Fees.....	84



VI. Appendices 89

 Annotated Bibliography..... 89

 Key Resources 89

 A. Data Resources 97

 B. Industry Interviews Overview 101



I. Executive Summary

Background and Purpose

The purpose of this report is to identify and analyze operating revenue enhancement opportunities for 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 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.

The MDT Pro-Forma, 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 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 an operating funding gap will exist, beginning with \$48 million in 2014.

The purpose of this report is to contribute to the discussion on how to close that projected funding gap. This initial effort is designed to survey the full range of revenue enhancement opportunities utilized locally, nationally and internationally, without filtering.

In a previous assignment, Infrastructure Management Group (IMG), with Planning and Economics Group (the "Research Team" or the "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. This report 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 County is not alone in the significant short, medium, and long term challenge of ensuring that a financially sustainable transit system is serving its citizens. Fortunately many insights and precedents from efforts across the nation and around the world exist. The closing of the projected funding gap may well require the use of multiple techniques and sources with continued extensive interagency collaboration, in conjunction with finding operating efficiencies and controlling costs (which is not within the scope of this assignment).

This report's research can help to guide policy decisions, and the use of the techniques described within can lead to an even stronger ongoing financial outlook.



Methodology

The methodology for this assignment consisted of the following steps:

1. Review and summarize literature on transit revenue:
 - The Research Team conducted an extensive literature review using public research reports, academic studies, the news media, and information provided by transit providers and business partners.
 - A complete list of sources, including an annotation of key sources, is provided in the Appendix of this report.
 - One key source was the *Transit Cooperative Research Program Report 129: Local and Regional Funding Mechanisms for Public Transportation* (TCRP 129), which is the only comprehensive study examining the issue of transit operating revenue. TCRP 129 provides an excellent list of funding techniques and high-level overview of implementing the techniques. This report uses TCRP 129 as a source but goes beyond that work in the following ways:
 - The current report provides detailed descriptions regarding the actual use of each technique by transit properties.
 - This report provides the most recent research available – on many techniques, such as new advertising solutions, progress has been made since TCRP 129 was published.
 - This report includes a discussion of implementation issues specific to MDT, including current efforts to enact the techniques, local and state issues, and policy discussion.
 - Additionally, the Miami-Dade County Transit Development Plan for FY 2010-19, released in December of 2009, describes potential sources of funding for MDT.
 - The list of criteria for analysis of funding and financing options is comprehensive and provides a useful framework for considering funding options.
 - A matrix of alternative funding sources is included within the report detailing how the criteria for implementation are met. The report includes a brief list of example cities for each revenue source, but no details about the implementation of the revenue funding sources utilized.
2. Interview MDT and County staff:
 - In July 2010, the Team held a series of meetings with County staff at MDT, Office of Strategic Business Management (OSBM), Board of County Commissioners and staff, and representatives of the County Manager.
3. Interview selected transit properties and service providers:
 - The Research Team interviewed transit agencies using innovative or best practice revenue generation techniques.
 - The Team also interviewed representatives from the American Public Transit Association (APTA), transit advertising providers, and other relevant businesses serving the transit industry.



4. Collate and develop a comprehensive report from the findings:
 - In developing the Operating Revenue Enhancement Report, the Team sought to develop a comprehensive “menu” of funding options, detail the prevalence, description, best practices, strengths/weaknesses, and applications to MDT.

Key Findings

The following table lists the specific techniques and tools identified in our research and described in detail later in this report. They are divided into system revenues, which are generated by the operation of the transit system, and other revenue sources, which represent subsidies to fund the system from other sources.

When reviewing the potential applicability of the different techniques, it is important to consider that the use in a particular locale depends on a variety of factors, many unique to the particular area. A good understanding of these factors is an important prerequisite in the search for enhanced transit funding. The Research Team also found that several local and regional funding sources are successfully being used by some transit agencies to support public transportation but are not currently used in others. The successful implementation of new revenue techniques requires developing a consensus of current and future transportation needs, a defined program, a public education and advocacy campaign, a broad-based community leadership, and providing assurances that resources are spent well.



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



Conclusions

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

1. The avenues for generating transit operating revenue are fairly well defined (generally sales and property taxes), and there is no single solution.
2. While important to maximize, system revenue sources alone have limited potential to fill the entire projected budget gap. Advertising, parking, and concessions represent limited revenue enhancement opportunities.
3. U.S. cities employ a wide mix of methods to close budget gaps, including creatively using revenue sources associated and not typically associated with transit such as utility fees and excise fees.
4. Value capture tools are among the most powerful non-tax revenue sources including direct tariffs on business and development through impact fees, special assessment districts, or payroll levies have the greatest revenue potential.
5. 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.
6. MDT does have a number of immediate enhancements MDT can quickly undertake to increase revenue, such as the following:
 - Aggressively pursue advertising solutions, such as bus and train wraps, domination advertising, and variable signage.
 - Reconsider selling naming rights for Metrorail and Metromover stations by revisiting the contracting options and developing partnerships.
 - Capitalize on MDT's right-of-way in highly-trafficked where advertising, billboards, and joint development opportunities are available.
 - Stay abreast of technology solutions that are at the cutting edge of transit partnerships – Wi-Fi, GPS-based advertising, social media, etc.
7. While transit funding techniques are fairly similar in the U.S. and overseas, transit is often viewed internationally transit as a federal responsibility, with accompanying funding support. In addition, many international properties aggressively pursue advertising solutions and contracting to improve financial resources.
8. Focusing upon revenues is only one side of the ledger. A complete view would also focus on operating expenses.



II. Research Overview and Methodology

Background and Purpose

The purpose of this report is to identify and analyze operating revenue enhancement opportunities 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 \$535 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 inception of the program, 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) and the amount spent on capital projects. 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, 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 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 \$48 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.

The goal of this report is to contribute to the discussion on how to close that projected funding gap. This initial effort is designed to survey the full range of revenue enhancement opportunities utilized locally, nationally, and internationally. It is not designed to filter or predetermine any potential ideas or sources. The focus of the current effort is to identify options for increasing operating revenues to the County's mass transit system, including fares, ridership, fees, and other means. In conjunction with finding operating efficiencies and controlling costs (which is not within this scope of this assignment), revenue enhancements can help MDT reduce its projected budget gap and maximize the service provided to the public.



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. This report identified several financing alternatives potentially applicable in Miami-Dade County, including joint development agreements, naming rights, park-and-rides, and partnerships with MDX.

This current report focuses on increasing operating revenues to the County’s mass transit system. To this end, the Research Team reviewed how transit properties in the U.S. and internationally fund their capital programs and operations. This report’s research can guide policy decisions and the use of the techniques described within can lead to an even stronger ongoing MDT financial outlook. The wide range of techniques pursued both nationally and around the world provides important lessons and precedents to improve the chances of success in applying techniques locally. The collaboration towards this end continues growing among many stakeholders such as the following.

- County Commissioners, Mayor’s and Manager’s Offices and many departments in addition to MDT (Finance, Planning & Zoning, Public Works, Sustainability, Strategic & Business Management, etc.)
- The Florida State Legislature, departments such as Transportation, Revenue and Community Affairs
- Other agencies such as Miami Dade Expressway Authority and Miami Parking Authority
- Business and civic organizations including Greater Miami and other Chambers of Commerce, Community Redevelopment Agencies and Downtown Development Authority
- The 34 current municipalities and potentially others in future
- Most importantly, outreach to involve the public and to engage transit customers.

Research Objective

As detailed in recent reports from the County Manager 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 begin to hit in the coming years, existing revenue sources, including the Surtax, are unlikely to keep up with costs.

The goal of this study is to identify funding sources that could increase MDT funds to pay for operations and maintenance costs. In conducting this work, the Research Team was instructed to identify a wide variety of potential revenue streams that is not filtered by political or technical feasibility. Thus, the report provides a “menu” of options that have been successfully used to fund public transportation in U.S. or around the world. This “menu” considers both traditional funding sources (such as sales taxes and system revenues), as well as mechanisms not frequently used to fund transit. Local policy makers and administrative staff can use the options in the “menu” to implement new revenue-generating initiatives to reduce the budget gap.

Methodology

The following process was used to develop the “menu” of operating revenue enhancement opportunities that might be considered for MDT:



1. Review and summarize literature on transit revenue:

- The Research Team conducted an extensive literature review using public research reports (e.g., reports from the Transit Cooperative Research Program), academic studies, the news media, and information provided by transit providers and business partners. In all, well over 100 individual sources are cited in this report.
- A complete list of sources, including an annotation of key sources, is provided in the Appendix of this report.
- One key source, the Transit Cooperative Research Program (TCRP) Report 129: Local and Regional Funding Mechanisms for Public Transportation, was the only comprehensive study examining the issue of transit operating revenue. TCRP 129 provides an excellent list of funding techniques and high-level overview of implementing the techniques. This report uses TCRP 129 as a source, but goes beyond that work in the following ways:
 - The current report provides detailed descriptions regarding the actual use of each technique by transit properties.
 - This report provides the most recent research available, particularly on many techniques like new advertising solutions, but progress has been made since TCRP 129 was published.
 - This report includes a discussion of implementation issues specific to MDT, including current efforts to enact the techniques, local and state issues, and policy discussion.
- Additionally, the Miami-Dade County Transit Development Plan for FY2010-19 released in December of 2009, is informative on the sources of funding for MDT has considered and a selection of peer agencies have considered.
 - The list of criteria for analysis of funding and financing options is comprehensive and will be productive as a full menu of revenue enhancement options is considered.
 - A matrix of alternative funding sources is included within the report showing a brief selection of example cities and revenue funding sources utilized.

2. Interviews conducted with MDT and County staff:

- In July 2010, the Team held a series of meetings with County staff at MDT, OSBM, Board of County Commissioners and staff, and representatives of the County Manager.

3. Interviews with selected transit properties and service providers:

- The Research Team interviewed transit agencies using innovative or best practice revenue generation techniques.
- The Team also interviewed the American Public Transit Association (APTA), transit advertising providers, and other relevant businesses serving the transit industry.

4. Collate and develop a comprehensive report from the findings:

In developing the Operating Revenue Enhancement Report, the Team sought to develop a comprehensive “menu” of funding options, detail the prevalence, description, best practices, strengths/weaknesses, and applications to MDT



III. Innovative Research Techniques and Tools: A Full Spectrum of Opportunities

Spectrum of Transit Revenue Techniques and Tools

The following table lists the specific techniques and tools identified in our research and described in detail later in this report. They are divided into system revenues, which are generated by the operation of the transit system, and other revenue sources, which represent subsidies to fund the system from other sources.

When reviewing the potential applicability of the different techniques, it is important to consider that the use in a particular locale depends on a variety of factors, many unique to the particular area. A good understanding of these factors is an important prerequisite in the search for enhanced transit funding. The Research Team also found that several local and regional funding sources are successfully being used by some transit agencies to support public transportation but are not currently used in others. The successful implementation of new revenue techniques requires developing a consensus of current and future transportation needs, a defined program, a public education and advocacy campaign, a broad-based community leadership, and providing assurances that resources are spent well.

Summary Matrices

This matrix, which follows the table of revenue techniques, summarizes the techniques for revenue enhancement examined during the course of this analysis and compares their relative benefits with respect to key factors for consideration in Miami-Dade County. The criteria for comparing revenue techniques was selected to address those issues that are considered most relevant for MDT and the need to formulate and implement a plan that would address revenue shortfalls identified in the medium and long term.



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

The following data points are summarized in the matrix below:

1. Prevalence: Reflects the number of transit agencies using the revenue technique
 - Low prevalence indicates that very few agencies use the technique. For some low prevalence techniques, the only case studies in use are listed. Many low prevalence techniques involve revenue streams commonly collected, but rarely used for transit.
 - Medium prevalence indicates that the technique is in common use, but likely to be less than half of U.S. transit agencies.
 - High prevalence indicates that a majority of transit agencies use the 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.
 - Low: Less than \$5 M per year in revenue is likely.



- Medium: About \$5 M to \$50 M per year is likely.
 - High: More than \$50+M per year is possible.
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.
 - Low: Revenue source can be implemented immediately (i.e., a County policy change is all that is required).
 - Medium: Some legal hurdles must be overcome, and/or public opposition is likely to exist.
 - High: Significant legal hurdles or public opposition are likely.
 5. Social Equity: Any new revenue stream must come from the wider public via taxes, fees, or fares and the business sector. Social equity is a measure of the fairness of how the cost is distributed. Higher social equity indicates revenue streams are collected from a broad base of people or that citizens bear a proportional burden to their economic ability. The rating of high, medium, or low balances these considerations.

Traditional and Innovative Transit Revenue Enhancement Techniques								
	Technique	Prevalence	Agency Examples	OPEX, Capital, or Both	Potential MDT Revenue Range	Complexity	Social Equity	Short, Medium, or Long Term
Dedicated Revenue	Sales Tax	High	Atlanta, Las Angles, Honolulu, and many others	Both	High	Low	Medium	Short
	Property Tax	High	Iowa, Indianapolis, Northern Virginia, Oakland, and many others	Both	High	Low	Medium	Short
System Based Revenue	Advertising: Vehicle Ads	Very High	Orlando, Columbus (OH), Washington, (DC), and many others	Both	Low	Low	High	Short
	Advertising: GPS Location-Driven	Low	Technology in development	Both	Low	Medium	High	Medium
	Advertising: Domination Ads	Medium	Philadelphia, Washington (DC), Tokyo	Both	Low	Medium	High	Medium
	Advertising: Transit Shelters and Benches	Very High	Sacramento, Orlando, and many others	Both	Low	Low	High	Short
	Advertising: Internet-Based Ads	Low	Future technology needed	Both	Low	Medium	High	Medium



Traditional and Innovative Transit Revenue Enhancement Techniques								
Technique	Prevalence	Agency Examples	OPEX, Capital, or Both	Potential MDT Revenue Range	Complexity	Social Equity	Short, Medium, or Long Term	
<i>Contract Revenues</i>	<i>Medium</i>	Purcellville (VA), Baton Rouge (LA), Greensboro (NC), Ames (IA) and others	Both	Low	Medium	High	Medium	
<i>Concessions</i>	<i>Medium</i>	Chicago (IL), Washington (DC), New York, San Francisco	Both	Low	Low	High	Short	
<i>Naming Rights</i>	<i>Low</i>	Tampa, Cleveland, New York, Philadelphia, Dubai	Both	Medium	Medium	High	Short	
<i>Right-of-Way Leasing</i>	<i>Medium</i>	St. Louis (MO), Washington (DC), San Francisco, Atlantic City (NJ)	Both	Low	Medium	High	Medium	
<i>Air Rights Leases</i>	<i>Low</i>	New York, Atlanta, Baltimore, Washington (DC), Denver, San Diego	Both	Low	Medium	High	Medium	
<i>Joint Development</i>	<i>High</i>	Washington (DC), New York, Atlanta, and most major transit agencies	Both	Low	High	Medium	Medium	
<i>System Parking Fees</i>	<i>Medium</i>	Chicago, Washington (DC), Denver	Both	Low	Low	High	Short	
<i>Distance-Based Fares and Other Best Practice Fare Structures</i>	<i>Medium</i>	Washington (DC), San Francisco, Seattle	OPEX	Low	Medium	High	Short	
Non-System Revenue	<i>Value Capture: Impact Fees</i>	<i>Low (for transit)</i>	Broward County (FL), Portland (OR), San Francisco	Usually Capital	Medium	Low	Medium	Medium
	<i>Value Capture: Special Tax Districts</i>	<i>Medium</i>	Washington (DC), Los Angeles, Denver	Capital and OPEX for new construction	Medium	Medium	Medium	Medium
	<i>Digital Technology</i>	<i>Low</i>	NextBus, Vancouver, San Francisco, Los Angeles, Boston	Both	Low	Medium	High	Medium
	<i>Payroll Levy</i>	<i>Low (for transit)</i>	New York, Portland (OR), Paris	OPEX	Medium	Medium	Medium	Medium



Traditional and Innovative Transit Revenue Enhancement Techniques							
Technique	Prevalence	Agency Examples	OPEX, Capital, or Both	Potential MDT Revenue Range	Complexity	Social Equity	Short, Medium, or Long Term
Registration and Licensing Fees	Low	Louisville (KY), Park City (UT)	Both	Low	Low	Medium	Medium
Corporate Franchise Fees	Low	New York, Pennsylvania	Both	Low	Medium	Medium	Medium
Car Rental Fees	Low (for transit)	Seattle (WA), Milwaukee (WI), Allegheny County (PA), Pennsylvania	Both	Medium	Low	High	Short
Gas Tariffs	Medium	Las Vegas, Texas, Ontario	Both	Medium	Low	Medium	Short
Real Estate Transfer Fees	Low	New York, Syracuse (NY)	Both	Low	Medium	Medium	Medium
Non-Transit Parking Fees	Low	San Francisco, Portland (OR)	Both	Low	Low	Medium	Short
Tolling and Congestion Pricing	Low	San Francisco, New York, Washington (DC), London, Singapore, Stockholm, Milan	Both	Medium	Low	Low	Medium
Utility Fees	Low	St. Joseph (MO), Pullman (WA), Vancouver	Both	Low	Low	Low	Short
Room/Occupancy Surcharges	Low (for Transit)	Las Vegas, New Orleans (LA)	Both	Low	Low	High	Short
Vehicle Fees	Medium	Seattle, San Francisco, New York, Raleigh	Both	Medium	Low	Low	Short
Vehicle Miles Traveled (VMT) Fees	Very Low	Germany, Federal tests in: Portland (OR), Austin (TX), Baltimore (MD), Boise (ID), Eastern Iowa, Raleigh (NC), San Diego	Both	Medium	High	Medium	Medium
Excise Fees (Cigarette taxes, lottery proceeds, liquor, beer and wine taxes, gambling taxes)	Low	Portland (OR), Pennsylvania, Allegheny County (PA)	Both	High	Medium	Low	Short



It is important to note that revenue enhancements alone will be inadequate to close the projected gaps in MDT operating budget. Achieving a financially and operationally healthy transit system requires not only new revenues and the updating of these revenue streams but also persistent evaluation of the operating and management approaches to transit operations. Although it is outside the scope of this report, a full study of ways to reduce MDT operating expenses and improve operational efficiency is necessary to develop a long-term solution to funding transit service in the County.

Many of the transit agencies analyzed for this report combined revenue enhancing techniques and tools with efficiency programs realizing that support for new fees and revenue tools can only be garnered after the transit agency has demonstrated that it is running efficiently; the only way to maintain or improve the level of service is through new revenue techniques. For example, both the MTA and Metropolitan Atlanta Rapid Transit Authority (MARTA) believe that management of labor through programs that improve “employee availability” can provide an equitable value to a significant new revenue source.¹ Since most transit properties operate significantly below 300 employee available days, and labor is the highest operating cost in transit budgets, a change in operations policy to better manage the available days could translate to \$50,000 a day in savings. Another opportunity is the standardization of equipment and parts to ease equipment maintenance burdens (sometimes referred to as “the Southwest Approach”). The standardization of equipment reduces inventory, training costs for maintenance workers and drivers, response time to equipment failures and normal maintenance costs.

¹ There is considerable amount of time consumed for injuries, training, grievances, drug/alcohol testing, restricted duty people, incident reporting, workmen’s comp, lateness and not showing up regularly. Lost time means that more people need to be hired in order insure services. Many properties have a 15 to 20% loss of employee availability. The goal should be at least 300 available days. Source: Interview with Metropolitan Atlanta Rapid Transit Authority (MARTA).



IV. Description of Revenue Techniques and Tools

This section provides a detailed description of the various techniques used to fund transit operations in the U.S. and internationally. For each revenue technique, the following data is reported:

1. **Prevalence of Use:** An estimate of the frequency of the use of the revenue technique to fund transit, prevalence is rated low, medium, or high. Note that many revenue techniques are commonly collected, but only infrequently applied directly to transit properties.
2. **Description:** A summary of the revenue technique and how it is implemented.
3. **Agency Examples:** For each revenue technique, selected agencies are highlighted with a description of how they use the technique and, where available, the revenue generated. The lists are not comprehensive, but are intended to provide an overview of properties that have experience with the technique. Agencies were selected based on the following criteria:
 - For commonly used techniques (e.g., advertising, sales taxes), agencies determined from the research to be using innovative or unique practices, cities with similar in size and transit technology to Miami were selected, or those where high-quality quantitative data was available.
 - For less common techniques, the agencies cited are often among the only examples available.
4. **Strengths and Weaknesses:** A bullet list is provided highlighting key factors to consider for each revenue technique. These include the appropriateness of the technique to Miami, complexity and cost of implementing the technique, the potential revenue, political or technical considerations, social equity, and other relevant factors.
5. **Applications to MDT:** The final part of the description highlights the County's use or consideration of the technique (if any), local issues that may affect implementation, legal concerns, and other issue to consider.

Additionally, the following table lays out a key summary of factors identified by MDT that are consistent with and considered in this report, particularly in the **Strengths and Weakness** and **Applications to MDT** sections.²

² Miami-Dade County Transit. TRANSIT DEVELOPMENT PLAN - FY 2010 - 2019. December 2009. Financial Plan.



FINANCIAL	<ul style="list-style-type: none"> • Revenue Yield: The dollar magnitude of revenues a funding alternative may be expected to generate at different rates and coverage. • Stability of Revenue Flow: The ability to generate a stable revenue stream over time which is not subject to major fluctuations. • Growth Potential: The ability to respond to growth in the economy. • Response to Inflation: The ability to respond to the general rate of inflation.
POLITICAL	<ul style="list-style-type: none"> • Public Acceptance: The anticipated degree of opposition to a funding, financing, or implementation alternative. This criterion considers the public's perception of dedicating a funding source, or issuing debt for the proposed transit investment. • Equity: The match of burden to benefits and the ability to pay, which frequently is based on the progressivity, proportionality, or regressivity of a funding/financing alternative. • Incentive and Distortion Effects: The probable impacts of a funding alternative impact on individual behaviors, location decisions and economic growth. • Benchmarking: Prevalence of applications of the funding, financing and implementation options in neighboring states and/or local jurisdictions.
LEGAL	<ul style="list-style-type: none"> • Legality: The legal status of the funding, financing and implementation alternatives with respect to state statute and an assessment of the ease of implementation. • Regulatory Authorization: The relationship of the funding, financing and Implementation options to legislative authority.
CONSTRUCTION	<ul style="list-style-type: none"> • Resource Availability: The ability of the funding and financing options to provide sufficient resources to meet the project's construction timetable. • Debt Financing Impacts: The project implementation/staging schedule's impact on debt requirements. • Timing for Service Implementation: The project implementation schedule's relationship to the opening of a minimum operating segment and the initiation of full service.
ADMIN	<ul style="list-style-type: none"> • Revenue Assessment and Collection Mechanisms: This includes the administrative structures and procedures necessary to levy and collect the funds. • Evasion Potential: The ease with which the levy can be evaded and the corresponding enforcement activities required.

Source: Miami-Dade County Transit. TRANSIT DEVELOPMENT PLAN - FY 2010 - 2019. December 2009. Financial Plan.



Sales Taxes

Prevalence

Very high. Many major U.S. transit systems are supported by a dedicated sales tax, which is frequently the primary local revenue source for the system.

Description

Sales taxes, also called excise or use taxes, are the most common method of revenue generation for transit properties. General state sales taxes range from 8.75% in California to those who have no sales tax: Alaska, Delaware, Montana, New Hampshire and Oregon.³ Municipal governments are often empowered to add an additional amount onto the statewide rate for designated local purposes, including transit operations and capital expenditures. These municipal sales tax rates can be variable and collected on specific goods and services, or on a group of goods and services designated by the local authorities. Most municipalities have utilized local sales tax rates that range from .25% to 1% in addition to the state sales tax.⁴

The following table shows the sales tax dedicated to support transit (or transportation) for selected U.S. transit properties. Many of the sales taxes are designated to support capital costs or are split between operating and capital. Since capital costs are highly variable, the table shows the amount of sales taxes collected relative to the size of each property’s operating budget in order to give a sense of the magnitude of sales tax collections.

<i>Selected Transit Systems Funded by Dedicated Sales Tax</i>			
Transit Property	Dedicated to Transit	2008 Revenue*	% of Operating Budget*
RTD (Denver, CO)	1% in Regional Transit District	\$479,196,318	127.80%
Capital Metro Transit (Austin, TX)	1%	\$153,829,029	106.40%
DART (Dallas, TX)	1% in 15 area cities	\$413,341,243	105.50%
MARTA (Atlanta, GA)	1% in Fulton and DeKalb counties	\$349,667,498	93.40%
VIA (San Antonio, TX)	¼ cent	\$119,572,707	80.40%
LYNX (Charlotte, NC)	½ cent	\$71,106,519	70.40%
LA Metro (Los Angeles, CA)	½ cent (Prop. A) + ½ cent (Prop. C) + ½ cent (Measure R)	\$792,115,316	67.50%
Regional Transit Authority (Chicago, IL)	1.25% in Cook County and 0.75% in collar counties	\$668,443,047	56.10%
MDT (Miami, FL)	½ cent	\$120,139,717	24.60%
MTA (New York, NY)	3/8 cent	\$704,400,000**	11.90%

*IMG Analysis of Data from National Transit Database

** New York MTA revenue from 2010 Annual Report, Appendix A

³ "Taxes by State." RETIREMENT LIVING INFORMATION CENTER - Retirement Communities and Senior Lifestyle Data. Web. 1 Oct. 2010. <<http://retirementliving.com/RLtaxes.html>>.

⁴ TCRP 129



Agency Examples

Los Angeles, CA: Metro's local funding primarily comes from three sales taxes: Proposition A (1980), Proposition C (1990), and, most recently, Measure R (2008). Proposition A provides one-half of 1% tax on most County retail sales; 25% of the revenue is returned to cities for transportation purposes, 35% is for rail development and 40% is discretionary, but is primarily used for bus service. Proposition C is another one-half of 1% tax on County retail sales; 20% returns to cities for transportation, 40% for constructions as well as bus, transit and rail operations, 5% for security on bus and rail, 10% for transit centers construction, commuter rail, park-and-ride lots, freeway bus stops, and finally 25% for transit-related improvements to freeways and state highways. Measure R enacted a one-half of 1% sales tax to fund traffic relief and rail expansion beginning July 1, 2009 and continuing for 30 years.⁵

Atlanta, GA: In 1971, Fulton and DeKalb counties instituted a 1% sales tax increase to pay for operations and capital expenses for the Metropolitan Atlanta Rapid Transit Authority (MARTA) transit system. However, neighboring counties of Clayton and Gwinnett rejected the sales tax mechanism. This sales tax was originally split 50% for operations and 50% for capital expenditures.⁶

Honolulu, HI: The tax in Hawaii differs from most in that it is a general excise tax (GET), and thus is expanded beyond the sale of goods to include services (e.g. electricity, phone cards, electricity transfers, barber/hair style, buying stock, business to business, etc.). With much of the economy dedicated to services, the GET generates substantially more revenue than a typical sales tax.

Strengths and Weaknesses

- Sales taxes have enjoyed political support across the U.S. because they are locally controlled, dedicated, and incrementally collected.
- Sales taxes can provide a substantial yield in a region and are a relatively stable source of income for a transit property. However, many cities have found relying on sales taxes as a primary revenue source can lead to budget shortfalls and are now considering referenda of ½ cent to 1 cent increase in the sales tax, a difficult proposition when riders and citizens are also experiencing shortage of resources.⁷
- Since sales tax revenue is based on the cost of items sold, revenue is indexed to inflation.
- Sales taxes are used for various state needs and can represent a large portion of state revenue, particularly where there is no income tax; achieving a sustainable level of revenue from these funds requires transit funding must be a priority for state as well as local leaders.
- Revenue from sales taxes depends on the strength of the overall economy. During periods of slower growth or recession, sales tax funds may diminish, causing a strain on transit agency budgets.

⁵ "Finance/Budget | Proposition A & C and Measure R Sales Taxes." LA Metro Home. 12 Feb. 2010. Web. 15 Oct. 2010. <<http://www.metro.net/about/financebudget/taxes/>>.

⁶ "Comprehensive Annual Financial Report" (PDF). Metropolitan Atlanta Rapid Transit Authority. 2007-06-30. <http://web.archive.org/web/20080409023301/http://www.itsmarta.com/about/financial/MARTA+CAFR2007.pdf>.

⁷ Freemark, Yonah. "When the Recession Strikes, Little Maneuvering Room for Better Transit « The Transport Politic." The Transport Politic. The Transport Politic, 26 Sept. 2010. Web. 05 Oct. 2010. <<http://www.thetransportpolitic.com/2010/09/26/when-the-recession-strikes-little-maneuvering-room-for-better-transit/>>.



Applications to MDT

Local sales taxes of up to 1.5% (on top of the statewide sales tax of 6%) are permitted by Florida state law. Currently, Miami-Dade County levies a 1% tax, half for the transit Surtax and half for the County public hospital. This means that there is potential to increase the Surtax by 0.5%, which could be used to provide further funds to MDT for operating or capital expenses.

In addition, state law restricts the collection of local sales tax to the first \$5,000 of the price. For big-ticket items, such as cars, this means that much of the cost is not taxed. Eliminating this restriction would increase surtax revenue, but would require a change to the state law and could encourage buyers to go outside of the County for major purchases.



Property Taxes

Prevalence

High. However, dedicated property taxes are more often found at smaller transit properties.

Description

Property taxes are a traditional funding mechanism for transit properties across the U.S. and represent a relatively stable and dedicated source of revenue for both capital programs and everyday operations. Often transit properties receive a portion of property tax revenue along with other public services such as education, police, and public utilities.

Agency Examples

Property taxes are more common for smaller cities. Of the 50 largest transit agencies (measured by 2008 unlinked trips), only ten reported direct property tax revenue to the National Transit Database. Some examples of large transit properties funded by property tax are listed in the table below:

Major Transit Systems Funded by Dedicated Property Tax

Transit Property	2008 Revenue*	% of Operating Budget*
CTA, Chicago, IL	\$57,016,376	4.8%
MTA Bus Company, NY	\$36,005,100	6.9%
BART, San Francisco, CA	\$65,341,313	13.6%
TriMet, Portland, OR	\$9,415,635	2.8%
Metro Transit, Minneapolis, MN	\$33,985,112	13.4%
OCTA, Orange County, CA	\$21,795,286	8.6%
Oakland, CA	\$144,733,687	46.7%

* IMG Analysis of Data from National Transit Database

Iowa: The State of Iowa allows for transit districts to both issue bonds and institute a property tax within the service area. The law allows for the transit district to select the property tax rate up to 95 cents per thousand dollars of the assessed value of all taxable property.⁸ Currently, the average levy rate imposed is 81 cents per \$1000, with approximately half of the municipalities participating.⁹

Oakland, CA: The Alameda-Contra Costa Transit District has historically utilized a property tax on taxable real and personal property and approved on a yearly basis. During the late 1960s, property taxes reflected 56% of the agency's revenues¹⁰, but this had dropped to about 30% projected in the FY2009-10 Adopted Budget.¹¹ In 2002, AC Transit instituted an additional levy on all land parcels within AC Transit's district to

⁸ Iowa Department of Transportation. "Office of Public Transit, Iowa: Transit Manager's Handbook." Iowa Office of Public Transit. 2005. Web. 07 Oct. 2010. <<http://www.iatransit.com/links/handbook/chapter.asp?intChapterID=24>>.

⁹ URS. Iowa Passenger Transportation Funding Study: Final Report. Rep. Iowa Department of Transportation, Dec 2009. Print.

¹⁰ Smoother, V. "THE OAKBOOK - AC Transit History: From Streetcars to BRT." THE OAKBOOK - News, Events, Blogs and Dispatches from Oakland. 30 Jan. 2008. Web. 07 Oct. 2010. <<http://www.theoakbook.com/MoreDetail.aspx?Aid=1936&CatId=52>>.

¹¹ "AC Transit | About AC Transit | Facts and Figures | Budget." AC Transit | Home Page. Web. 07 Oct. 2010. <<http://www.actransit.org/aboutac/budget.wu>>.



maintain transit service levels. In 2002, the levy was \$24 per year, renewed in 2004 for \$48 per year,¹² renewed again in 2008 for \$96 per year until 2019.¹³ Known as Measure VV on the ballot in 2008, the parcel levy passed with 72% of the people’s vote, and a poll conducted after showed that an additional fee of \$48 (bringing the total levy to \$144 per year) would have had equivalent support.¹⁴

Indianapolis, IN: The property tax is the primary local revenue source for IndyGo, representing approximately 30% of IndyGo’s \$53M annual budget.¹⁵ The property tax cap is 1% of assessed value for property owners; however it is estimated that up to 75% of homeowners are contributing at levels under the property tax cap. In 2010, IndyGo began to see political support for raising all property up to the capped 1% level temporarily to meet pressing budget concerns.¹⁶

Northern Virginia: The Northern Virginia Transportation Authority (NVTA) collects a “Grantors Tax” on the seller of property in the NVTA region at the rate of 40 cents per \$100 valuation. This property tax is estimated to generate \$171M annually for the NVTA.¹⁷

Other Agencies Supported by Property Tax Revenue:

Ann Arbor, MI	Harper County, KS	Omaha, NE	Tampa, FL
Athens, Clark County, GA	Hood River, OR	Ontonagon, MI	Toledo, OH
Birmingham, AL	Indianapolis, IN	Orange County, CA	Topeka, KS
Chicago, IL	Lafayette, IN	Ottawa County, OH	Van Buren County, MI
Chapel Hill, NC	Lakeland, FL	Portland, OR	Van Buren, MI
Detroit, MI	Lansing, MI	Rockville, MD	White River Junction, VT
Flint, MI	Las Vegas, NV	Salem, OR	Winston-Salem, NC
Ft Wayne, IN	Lexington, KY	San Francisco, CA	Rome, Italy
Grand Rapids, MI	Licking County, OH	Santa Barbara, CA	Vancouver, Canada
Greensboro, NC	Long Beach, CA	Sarasota, FL	
Hanover, NH	Minneapolis/St. Paul, MN	Savannah, GA	

Strengths and Weaknesses

- Although property tax revenues are moderately susceptible to economic cycles, the link is not as strong as sales or payroll levies due to a lag between an economic downturn and property value assessments.
- Generally, a property tax requires only a minimal tax rate because the base is very large and can be collected with other state and local taxes.

¹² Smoother, V. "New Parcel Tax for AC Transit in November?" A Better Oakland. 20 Jan. 2010. Web. 1 Oct. 2010. <<http://www.abetteroakland.com/new-parcel-tax-for-ac-transit-in-november/2010-01-20>>.

¹³ "Measure VV: Special Tax Measure - Alameda County, CA." Smart Voter by the League of Women Voters. Comprehensive, Nonpartisan Election Information. 4 Nov. 2008. Web. 1 Oct. 2010. <<http://www.smartvoter.org/2008/11/04/ca/alm/meas/VV/>>.

¹⁴ AC Transit. "Measure AA Parcel Tax Information AC Transit Marketing." Http://www.actransit.org. 31 Oct. 2003. Web. 1 Oct. 2010. <<http://www.actransit.org/news/articledetail.wu?articleid=2dfbb57a&PHPSESSID=f4af38c00d2afc95fb8a5b73c1293e49>>.

¹⁵ IndyGo Press Release. "Two IndyGo Public Hearings on Service Reductions Scheduled for Thursday, May 20." IndyGo.Net. 18 May 2010. Web. 1 Oct. 2010. <<http://www.indygo.net/news.asp?ID=260>>.

¹⁶ "Move By Library, IndyGo Could Boost Property Taxes - Indiana News Story - WRTV Indianapolis." Indianapolis News, Indianapolis, Indiana News, Weather, and Sports - WRTV Indianapolis' Channel 6. 30 Aug. 2010. Web. 1 Oct. 2010. <<http://www.theindychannel.com/news/24818381/detail.html>>.

¹⁷ NVTA. "NVTA Fact Sheet: Taxes & Fees." Www.thenovaauthority.org/. Oct. 2007. Web. 1 Oct. 2010. <<http://www.thenovaauthority.org/PDFs/Fact%20Sheets/Taxes%20and%20fees%20Fact%20Sheet%20Final.pdf>>.



- Raising existing property taxes may have greater political acceptability rather than instituting new property tax measures.
- Increasing the property tax is simple to implement (from a technical perspective) and raises revenue immediately.
- Property taxes support many government priorities leading to greater scrutiny of increases.

Applications to MDT

Florida's constitution allows for all revenue from ad valorem taxes, which are taxes based on the market value of real and tangible personal property, to go to the local governments at the millage rate set by local tax authorities.¹⁸ The State of Florida allows for the collection of property taxes at both the state and local levels. The Florida state property tax rate is 1.2%. In 2006, the Census Bureau estimated that Florida's local and state government collected \$1,287.66 per capita in property taxes, ranking it 16th highest tax rate in the U.S.¹⁹

Although County property taxes are not legally dedicated to MDT, County General Fund revenue is used to support MDT as part of the County's commitment for ongoing support pledged when the Surtax was passed (commonly referred to as the County Maintenance of Effort). Therefore, increasing property taxes would provide additional revenue that could be applied to MDT. To this point, the most recent MDT Pro Forma assumes a 1 million increase in the tax rate to increase revenue for MDT.

¹⁸ "Florida Department of Revenue - Information for Taxpayers." Florida Department of Revenue. Web. 1 Oct. 2010. <<http://dor.myflorida.com/dor/property/taxpayers/#1>>.

¹⁹ "The Tax Foundation - Tax Research Areas Florida." The Tax Foundation - Educating Taxpayers Since 1937. 2010. Web. 07 Oct. 2010. <<http://www.taxfoundation.org/research/topic/21.html>>.



Advertising & Marketing Revenues

Prevalence

Very High. Advertising is universal among transit agencies, particularly vehicle ads, structure, and shelter advertisement. Other advertising techniques vary in market penetration.

Description

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 non-farebox revenue enhancement. Typically, transit properties lease or contract with a third party for advertising and marketing in their stations and on structures, vehicles, and printed materials such as farecards, maps, and schedules. Contracts typically are bid based on a minimum annual guarantee (MAG) of revenue or a percentage of the contractor's advertising sales, whichever is greater. However, advertising and marketing revenues can also be an in-house function, particularly where a strong local market exists.

Advertising revenue generally typically represents just 0.1% to 3.0% of operating revenue for a transit property.²⁰ 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 defined as the total number of potential opportunities a viewer would have to see the advertisement. How these exposures are manifest within and on transit property continues to change. Some examples of traditional and innovative advertising include:

- **Moving “billboards” penetrating city markets:** Transit buses and rail cars can be painted, have side advertising, headliners on the side, tails on the back, full advertising on the back, interior advertising on the ceiling and walls. The vehicle can also be fully wrapped in “King Kong” advertisements that cover the entire bus or car (picture below). This type of bus advertising has become standard practice and is now quite common for transit properties’ entire bus fleet.
- **Transit shelters and benches:** Additionally, advertising opportunities also include benches and shelters at bus and train stops that can be painted or bill boarded. Variable message signs or static advertisement can be added to stations. The variable message signs are something relatively new in the U.S. at bus stops.
- **GPS location-driven advertising:** GPS-oriented digital screen advertising can be used in transit stations and on buses for local businesses to advertise to passengers while near their location in the route. Digital advertising is also being used in stations where the images can be programmed or controlled externally. A new concept is proximity advertising, in which internet content and advertisements are made available to Bluetooth-connected devices. This has the potential to provide enhanced benefits to riders through Wi-Fi access at no cost to the transit operator, while also adding revenue from a portion of advertising proceeds.
- **Dominations and media blitz opportunities:** An entire station or bus can be converted into one advertiser’s message using “domination advertising” that includes everything from wall advertising to floor advertising to hanging banners to employees handing out samples at the station. Internationally,

²⁰ Transit Cooperative Research Program (TCRP) Report 129, Local and Regional Funding Mechanisms for Public Transportation, Transportation research Board, Washington DC, 2009. onlinepubs.trb.org/onlinepubs/tcrp/tcrp_rpt_129.pdf.



domination advertising has also been expanded to what is called "train jacking" (explained in more detail below). Naming rights deals (detailed in a separate section of this report), also play off the theme of domination, discussed later in this report.

- **Internet-based advertisements:** The increased use of web access to transit property websites and transit-related smart phone applications can provide opportunities for advertising from both those entities targeting riders and those with general local interest. Depending on the site or application development, advertisers may have the opportunity to drive ad content based on page information (i.e. routes relative to store locations) or data user information related to applications like Twitter, Facebook, and others. It is notable that independent contractors who build these web-based applications and third party contractors are making greater use of this advertising revenue source than transit properties.



Picture Credit: King Kong Bus Wrap by Advertising Agency: Bates Y&R, in Copenhagen, Denmark

Advertising as a revenue source generally represents a very small percentage of revenue generated by a transit property, yet innovations in advertising opportunities and contracting methods can alter those potential revenues significantly. Many agencies are limited by policies on where and what types of companies and products can be advertised, but maximizing every potential opportunity for advertising and tapping into the dynamic characteristics of the system can improve the public perception of an agency and increase these supplemental non-farebox revenues. Systems both nationally, like LYNX in Orlando, Southeastern Pennsylvania Transportation Authority (SEPTA) in Philadelphia, and New York MTA, as well as internationally, in cities like Tokyo and Montreal, have expanded their advertising opportunities by using combinations of advertising methods and adding more options including digital posters, light post banners, floor coverings, advertisements on clocks and near schedules, handle bars, and many others.

Additionally, some agencies are becoming savvier in contracting with third party advertising firms by considering all-inclusive proposals as well as carve-outs in addition to a general advertising contract. Transit agencies may also wish to consider and compare using in-house staff versus contracting with a third party to ensure that the agency receives the most revenue, as LYNX in Orlando did. However, transit agencies have the ability to consider a hybrid option of interior and exterior staff as well as utilize separate contracts for indoor and outdoor, bus and rail, print and media, etc.

Conversations with transit agencies confirm that a knowledgeable and committed marketing staff is necessary to get the best returns, irrespective of in-house or contracted advertising services. The level of commitment by an agency to manage the messages and how they are conveyed often corresponds with



the innovation of transit properties. Transit advertising cannot be treated as a commodity with multiyear shelf life, but must be reexamined regularly to ensure all opportunities are being maximized. Contracts have to be regularly watched and assessed against robust performance measures.

Agency Examples

Every transit system utilizes advertising with varying degrees of success. The examples below were chosen using the following filters: the size of the systems to replicate the possibility for success for the MDT; best practices; financial success, innovation and/or just doing a good job.

Orlando, FL: The Lynx system in Orlando has instituted some proactive revenue generation practices, particularly in regard to bus advertising and expanding innovative methods in a mid-sized system. Their treatment of advertising as a key product of the transit system led to their establishing an in-house advertising staff of two to design and paint buses. Although they restrict the content of their ads, the system, including about 200 buses and other ads, brought in approximately \$3M in total revenue.²¹ In 1995, Lynx was second only to Los Angeles with 70 of its 250 buses painted by a local contractor.²² In early 2010, the Lynx board rejected an offer by Signal Outdoor Advertising to build 200 covered bus stops for free in addition to paying Lynx a guaranteed amount of \$172,000 per year for the advertising revenue rights to the shelters. The Board had estimated that the transit property was capable of earning up to \$486,000 per year by building and advertising on 300 shelters that potentially could be purchased with federal stimulus funds.²³

Columbus, OH: The Central Ohio Transit Authority chose to carve out their interior bus advertising from their general advertising and utilize an in-house advertiser who received a combination of salary base and commission. The focus on local advertising and this arrangement are credited with revenues increasing from \$300,000 per year to \$1M, representing a 1.5% increase in the Authority's total operating budget.²⁴

Hampton, VA: The PENTRAN agency uses an in-house advertising staff with a successful bus and van advertising contracting method, which offers options for either individual firm advertisement rates with multi-month purchases (\$750-800 per month for a 1-2 year contract) or "adoption" programs for a vehicle, which include exclusive interior and exterior advertising (about \$250-\$300 per month).²⁵

San Rafael, CA: Golden Gate Transit estimated that outsourcing the rebuilding, maintenance, and sale of advertising for about 100 bus shelters would save about \$100,000 for cleaning and construction.²⁶

Sacramento, CA: The Sacramento Regional Transit District's shelters and benches are outsourced to a contractor in exchange for 10% of the gross advertising revenue achieved by the firm (rather than a set

²¹ Tracy, Dan. Lynx turns down offer for free bus-stop shelters. Orlando Sentinel. 1/08/10.

http://articles.orlandosentinel.com/2010-01-08/news/1001070121_1_shelters-lynx-spokesman-matt-friedman-bus-stop
²² TCRP 32

²³ Tracy, Dan. Lynx turns down offer for free bus-stop shelters. Orlando Sentinel. 1/08/10.

http://articles.orlandosentinel.com/2010-01-08/news/1001070121_1_shelters-lynx-spokesman-matt-friedman-bus-stop

²⁴ Volinski, Joel. Lessons Learned in Transit Efficiencies, Revenue Generation, and Cost Reduction, July 2003. 2nd edition.

<http://www.cutr.usf.edu/pub/reports.shtml>

²⁵ Volinski, Joel. Lessons Learned in Transit Efficiencies, Revenue Generation, and Cost Reduction, July 2003. 2nd edition.

<http://www.cutr.usf.edu/pub/reports.shtml>

²⁶ Volinski, Joel. Lessons Learned in Transit Efficiencies, Revenue Generation, and Cost Reduction, July 2003. 2nd edition.

<http://www.cutr.usf.edu/pub/reports.shtml>



guarantee). Maintenance of the facilities alone has been estimated to save the transit property \$150,000 per year.²⁷

Atlanta, GA: The Metropolitan Atlanta Rapid Transit Authority (MARTA) transit property brokered unsold advertising space in exchange with local media (television, radio, newspapers, etc.) for space or airtime in the system, estimated at a value of \$500,000.²⁸

Washington, DC: Washington Metropolitan Area Transit Authority (WMATA) and other agencies print advertisements on media such as farecards and system maps. They are also noted as a transit leader in bus wrapping.²⁹

Philadelphia, PA: Southeastern Pennsylvania Transportation Authority (SEPTA) outsources its advertising to a third party who exclusively advertises on their trains, buses, and related properties, receiving approximately \$11M in revenue based on a minimum guarantee plus the percentage over the minimum. SEPTA is running digital advertising in addition to their current interior advertising as well as looking at wider contracting opportunities for billboards.³⁰

Montreal, Canada: The Montreal region's agency uses unique advertising surfaces including hubcap ads, bus hand-straps, and whole wrapped trains.³¹

Tokyo, Japan: A new form of interior media has been released in Tokyo trains where Japanese printing companies are able to use electronic paper to exhibit moving pictures on genuine paper advertisements. The advertiser successfully used the black and white moving paper to portray a mascara wand with a vibrating applicator brush. As one marketing commentator wrote, this advertisement is "essentially a paper poster hanging from the ceiling of a subway train in which the image changes." This technology is also being used in poster banks that are connected to phone networks with internet capability and can be changed on command from the advertiser.³²

Japanese metro riders are seeing more domination-style advertising with "train jacking." Essentially, this domination advertising method allows advertisers to distinctively integrate their message into several traditional and untraditional mediums (i.e. posters, seats, floors, etc.) and overtaking a specific area (i.e. train, stations on a line, etc.). In Japan, this type of advertising has become common for trains that can use exterior wraps, interior advertising (posters, runners, etc.), and even structural advertising on seats and rails by some advertisers. In the example of Kobe' Port Liner Loop Line with IKEA advertising seen below, the company has fully utilized the window shades, the seats, coverings, etc. in this unique form of

²⁷ Volinski, Joel. Lessons Learned in Transit Efficiencies, Revenue Generation, and Cost Reduction, July 2003. 2nd edition. <http://www.cutr.usf.edu/pub/reports.shtml>

²⁸ Volinski, Joel. Lessons Learned in Transit Efficiencies, Revenue Generation, and Cost Reduction, July 2003. 2nd edition. <http://www.cutr.usf.edu/pub/reports.shtml>

²⁹ Michael Fiorella. Japan Marketing News Blog. [Japan is one step closer to making every surface an ad](http://www.japanmarketingnews.com/about-michael-fiorella.html), <http://www.japanmarketingnews.com/about-michael-fiorella.html>

³⁰ Michael Fiorella. Japan Marketing News Blog. [Japan is one step closer to making every surface an ad](http://www.japanmarketingnews.com/about-michael-fiorella.html), <http://www.japanmarketingnews.com/about-michael-fiorella.html>

³¹ Michael Fiorella. Japan Marketing News Blog. [Japan is one step closer to making every surface an ad](http://www.japanmarketingnews.com/about-michael-fiorella.html), <http://www.japanmarketingnews.com/about-michael-fiorella.html>

³² Michael Fiorella. Japan Marketing News Blog. [Japan is one step closer to making every surface an ad](http://www.japanmarketingnews.com/about-michael-fiorella.html), <http://www.japanmarketingnews.com/about-michael-fiorella.html>



domination advertising.³³ Domination advertising highlights the trade-off between maximizing revenue and retaining an image and appearance to the transit system that stakeholders find acceptable.



Strengths and Weaknesses

- Advertising is not a strong revenue generator for a transit property, but it does have the potential to increase at the rate of inflation.
- Intangible benefits from innovative advertising exist with both riders and advertisers in regard to creating a stimulating environment and creating long-term relationships with advertisers who will potentially provide consistent revenues.
- Wrapped buses draw attention to local buses potentially highlighting not only the advertisement but also to transit service being provided.
- Effective and well thought out contracts that are based on vigorous bidding provide the greatest gain for agencies.
- Advertising takes underutilized space and puts it to productive use. With the rise in internet-based communication, an opportunity also exists to use websites and other social communication tools that the transit agency has for non-transit advertising, such as businesses near stations or shelters (see Digital Technology, Web Marketing, and Social Media).
- Advertising can be sold or bartered for dollars or other services. The right to advertise can be traded for maintenance of shelters as Sacramento does or for primetime TV or radio advertisement of transit agency messages as MARTA does, thereby saving the transit agency those operating costs.
- Too much advertising can generate pushback for aesthetic reasons. Transit properties must balance revenue needs with maintaining a system that satisfies local residents tastes.

³³ Michael Fiorella. Japan Marketing News Blog. <http://www.japanmarketingnews.com/about-michael-fiorella.html>



- Disagreements over the distribution of revenue from advertising may exist when municipalities argue that advertising revenue in the city should be retained by the city.

Application to MDT

MDT has a contract in place with CBS Outdoor to provide advertising on all MDT rail cars, buses, and Metromover vehicles. The contract provides a guaranteed minimum of \$2M per year, but MDT staff report that payments have been \$11,000-\$20,000 per month higher based on the gross advertising sales. CBS Outdoor owns and maintains all of the devices and media for the program.

MDT has a separate contract to provide and advertise on approximately 1000 bus shelters in unincorporated Miami-Dade County (revenue from shelters in incorporated areas goes to municipalities). This contract will expire in fall 2010, and MDT intends to run the program in-house until a new contract is let. The contractor will not continue with MDT due to low ad revenue that does not cover the \$124,000 monthly MAG.

According to National Transit Database information, MDT collected over \$4.2M in total advertising revenue in 2008, down from \$5.2M in 2007 before the economic downturn. The table below (next page) shows the advertising revenue, and revenue per unlinked trip for selected similar transit properties. As can be seen, MDT ranks in the just below average on advertising revenue per unlinked passenger trip, but is well below average in advertising revenue as a percentage of operating budget.

As demonstrated by the variability of the benchmarking, advertising contracts have to regularly watched and assessed against robust performance measures in order to ensure that revenue is maximized.

Innovative advertising solutions, such as variable message signs at stations and GPS-based advertising, have been discussed by MDT staff. However, none has been implemented due to a lack of available staff and/or budgetary constraints. In addition, MDT has attempted to advertise on structures such as a power station adjacent to U.S. Route 1, but was asked to remove the signage after public resistance. Federal beautification laws, as well as local and FDOT zoning, further restrict ads on buildings and structures. A well-designed and promoted advertising program that highlights revenue potential and consistency with community goals would be a key factor in winning public acceptance to expand the advertising program in Miami-Dade County.

MDT has received at least one proposal for proximity-based advertising. This would involve installation of Wi-Fi access to all riders with content and advertisements provided to riders. The system would have no public infrastructure cost and would be visible only to those who opt-in.

The key business issues related to advertising are determining what the County and the public want to achieve with advertising, and how to balance revenue against the intrusion of advertising into public space. Advertising on Metrorail and Metromover pillars and elevated guideway may have significant revenue potential, especially where it crosses major thoroughfares such as I-95. However, using such spaces could also change the character of the local neighborhoods.

ANALYSIS OF OPERATING REVENUE ENHANCEMENT OPPORTUNITIES FOR MIAMI-DADE TRANSIT



Agency	City	2008 NTD Advertising Revenue	Ad Revenue per Unlinked Trip	Ad Revenue % of OPEX
Washington Metropolitan Area Transit Authority	Washington	\$35,299,815	\$0.083	2.64%
Dallas Area Rapid Transit	Dallas	\$4,502,506	\$0.067	1.15%
San Francisco Bay Area Rapid Transit District	Oakland	\$6,253,572	\$0.054	1.31%
King County DOT - Metro Transit Division	Seattle	\$6,083,784	\$0.050	1.12%
Metro Transit	Minneapolis	\$3,891,452	\$0.048	1.54%
Chicago Transit Authority	Chicago	\$23,003,929	\$0.044	1.93%
Los Angeles County Metropolitan Transportation Authority	Los Angeles	\$20,653,483	\$0.043	1.76%
Metropolitan Atlanta Rapid Transit Authority	Atlanta	\$6,285,855	\$0.042	1.68%
Tri-County Metropolitan Transportation District of Oregon	Portland	\$4,268,250	\$0.041	1.26%
Miami-Dade Transit	Miami	\$4,257,539	\$0.037	0.87%
Utah Transit Authority	Salt Lake City	\$1,466,669	\$0.035	0.83%
Massachusetts Bay Transportation Authority	Boston	\$12,981,157	\$0.035	1.24%
Southeastern Pennsylvania Transportation Authority	Philadelphia	\$10,840,762	\$0.032	1.11%
Denver Regional Transportation District	Denver	\$2,853,823	\$0.028	0.76%
MTA New York City Transit	New York	\$84,104,152	\$0.025	1.42%
The Greater Cleveland Regional Transit Authority	Cleveland	\$1,234,476	\$0.022	0.51%
Broward County Transportation Department	Pompano Beach	\$755,150	\$0.019	0.57%
Maryland Transit Administration	Baltimore	\$1,223,877	\$0.010	0.23%
Average		\$12,775,570	\$0.040	1.22%

Source: FTA National Transit Database



Contract Revenues

Prevalence

Moderate. While transit properties in university towns often pay for additional service, contract services are not a major activity of most large transit systems.

Description

Transit properties often can supplement farebox revenues and/or reduce operating costs by providing various contracted transportation service offerings to entities or groups beyond their primary mandate or by designating certain areas for contracted service by private companies. Depending on the transit properties location and capabilities, contracts can be established with universities, hospitality firms, sports arenas, and other businesses for transit services or other amenities. Employers, including the federal and local government or major industries, also can contract to provide specific services. For example, many universities partner with local transportation entities to provide students, faculty, and local residents convenient and direct service; examples include Pullman Transit, serving Washington State University, and Athens Transit System, serving the University of Georgia. By partnering in formal contracts, many transit systems benefit from the stable revenue source and are able to sell targeted advertising towards potentially unique ridership cohorts. In addition, revenues from contract service are paid through a fixed fee (often charged through university student activity fees) rather than a fee based on ridership. Various contract opportunities offer almost any transit property a consistent revenue stream, and does not violate FTA rules regarding using agency vehicles for charter services.

Agency Examples

Purcellville, VA: Virginia Regional Transit (VRT) has contracted out office and reception space within its new facility for the Department of Motor Vehicles (DMV), a vehicle emissions testing station and a state inspection station serving local residents. For this space, the VRT receives approximately \$1M in revenue by earning a percentage on each DMV transaction (3% on each transaction up to \$500,000 and 5% on every transaction beyond) and \$28 for each emissions test. Additionally, office and parking space is leased to a private commuter bus service to Washington, D.C. VRT also uses FTA Job Access Reverse Commute (JARC) funds and contracts with local businesses and universities to transport employees and students from Washington to Virginia.³⁴

Washington, DC: Washington Metropolitan Area Transit Authority (WMATA) estimates that about 40% of its peak daily ridership is made of the local federal workforce in the nation's capital. Although this is not a contract between the federal government and WMATA, approximately 170,000 federal employees are given between \$120 and \$230 per month in metro farecards by the federal government, which functions in practice as an "indirect contract" and create a stable revenue stream.³⁵ In addition, the employment benefit means that federal employees are less sensitive to fare increases and usually are in favor of service increases, thereby providing political support to WMATA when budgets are tight.

³⁴ Atkinson, Claire. Transit Agencies Build Innovative Revenue Streams. Metro Magazine, June 2010. <http://www.metro-magazine.com/Article/Story/2010/06/Transit-Agencies-Build-Innovative-Revenue-Streams.aspx>

³⁵ Tyson, Ann Scott. "Equity of Metro fare increases questioned." Monday, August 9, 2010; B01. <http://www.washingtonpost.com/wp-dyn/content/article/2010/08/08/AR2010080802533.html>



Baton Rouge, LA: Until late 2009, Louisiana State University represented the single largest revenue source for the Capital Area Transit System. In the spring of 2009 the student body voted to not to renew CATS contract due to poor performance. The student government contracted the service out to an out-of-state provider. The loss of the revenues has had a significant impact on CATS' ability to continue certain services and resulted in service cut backs. This demonstrates the importance of customer service for transit properties.

Greensboro, NC: Greensboro Transit Authority contracts with seven educational institutions to run the multi-institution transit service Higher Education Area Transit (HEAT), servicing 130,000 passengers.³⁶

Ames, IA: Iowa State University is responsible for 50% of the cost of CyRide, the City of Ames contributes 18%, and the remainder from other sources.³⁷

Strengths and Weaknesses

- In return for contracts with universities or other large groups, the transit property is provided with a stable and repeat customer base within an additional but confined service area.
- Encouraging transit passes as an employee benefit can increase ridership and increase popular support for expanded service and fare increases when necessary.
- Opportunities for contracts are limited to large employers and trip generators.
- Specific federal rules limit transit properties from some contracted services that are defined as charter services.

Application to MDT

MDT can pursue contract revenue opportunities with major employers and trip generators. For example, Florida International University provides free parking. A contract to use student fees to pay for transit passes could both increase ridership and revenue for MDT. Similarly, downtown law firms and other large employers could offer transit benefits, subsidized by federal tax rules, to employees.

As presented university/college service is one of the more attractive specialized bus services provided by various public transit agencies. In MDT's case these services are already provided by the private sector. When those services are rebid, MDT has an opportunity to: 1) compete for those services; 2) MDT can form a partnership with a competitor(s), 3) the existing provider can provide those services and extend them into other parts of MDT service areas. At least one advantage of a partnership is MDT's ability to open up its pass system to private sector customers, such as providing a university student with a semester transit travel pass for all the private and public stops. The passes would be purchased from student fees at the beginning of each semester and after the split with the private sector provider would be deposited prior to service delivery allowing the transit agency to collect interest.

³⁶ "Transit Finds Increasing Connections with Universities," Passenger Transport, Vol. 65, No. 46, November 19, 2007, p. 8.

³⁷ "Transit Finds Increasing Connections with Universities," Passenger Transport, Vol. 65, No. 46, November 19, 2007, p. 8.



Concessions

Prevalence

Medium. While many properties have some concessions, there are relatively few examples of major programs. Concessions programs are more common for commuter rail operations than for urban mass transit.

Description

Concessions represent opportunities for transit agencies to harness the value of customers agglomerating at stations and to capitalize on unallocated space on their properties. In addition, concessions provide riders and the local community with value-add services that make riding transit more convenient. Similar to advertising revenues, concessions are typically not a significant revenue source for transit agencies, but they do offer significant growth opportunities. Generally, a concessions agreement is structured as a competitive, multi-year lease with opportunities for extension. The available space tends to be compact but offer unique placement for some business types. A number of factors impact the value of a retail space, including locations and traffic flow, customer demographics, past and potential future design and layout, variety of concessionaires, synergy and placement of concessionaires, current concession performance and comparative areas, and passenger levels.³⁸

Overview of Concessionaire Opportunity Categories					
Communication	Convenience	Entertainment & Food	Home & Personal	Public Agency	Tourism
Banks/ATM kiosks	Car sharing	Arts and crafts	Child daycare (short-term or long-term)	DMV services	Bike tours/shop
Cell phone carrier	Convenience store	Bakery	Elderly daycare	Government resource offices	Eco-tours
Copy center	Dry cleaning	Espresso/food carts	Haircuts	Police stations	Currency exchanges
Delivery service	Film developing	Food & beverage	Jewelry	Veterans Affairs	Luggage delivery
Direct telephone lines to hotels	Flowers	Movie or venue ticket kiosks	Mini-playgrounds		One-day getaways
Express mail drop boxes	Hardware store	Music venues	Pay toilets		Remote hotel check-in kiosks
Internet service	Pharmacy	Produce market	Pet daycare		Souvenirs
Newspaper kiosks	Shoe shine/repair	Seasonal carts	Tanning		Visitor services
Remote airport check-in kiosks	Videos	Visual and performing artists			Walking tours

Types of concessions provided by TriMet Transit Property³⁹ and other sources.

Agency Examples

Chicago, IL: In 2010, the Chicago Transit Authority reported 129 concession spaces in their rail stations earning approximately \$1.2M via concessions leases, organized through an outside contractor. The CTA continues to both add “value-added services” for riders and improve the physical concession venues. In July 2010, the Chicago Transit Board announced five retail and concession spaces at rail stations on three lines that included a newsstand, a specialty coffee store, as well as a smoothie bar representing \$700,000

³⁸ ACI Primer: Concessions, http://www.aci-na.org/index/toolbox_concessions_primer

³⁹ Concessions Opportunities: Open your business at a transit center or rail station. <http://trimet.org/concessions/index.htm>



over the next five years. The new contracts were five-year contracts with one contract extension opportunity.⁴⁰

Washington, DC: Washington Metropolitan Area Transit Authority (WMATA) is entertaining eight year contract proposals from movie kiosk operators for metro stations as well as ticket and information booths by a trolley transport company which would have a minimum guarantee of \$116,000 for the first year with an option to renegotiate and a percentage of sales afterward. In total, WMATA expects to earn approximately \$900,000 for the eight-year contracts.⁴¹ Metro also has a concession for ATM machines in stations.

New York, NY: The New York MTA subway system has station concessions using excess space at about one fourth of its 470 stations⁴². These are primarily newsstands, but flower shops shoe repair, barbers, retail, and limited food are also available. Revenues at 345 separate newsstands helped generate over \$70M for MTA in rent and licensing fees across the system in 2009.⁴³ The MTA selects concessions through a competitive process by which sellers propose the level of rent paid to the MTA for each of the concession term (up to 10 years), and also considers the financial strength, management expertise, business plan, and track record of the proposer⁴⁴. Detailed financial information must be provided, including the level of staffing, sales, startup costs, and financing. The concessionaire pays all costs associated with building out sales space. The Grand Central Terminal is one of MTA's most important concession revenues with more than 90 restaurants, retail stores, and food shops.⁴⁵

San Francisco, CA: Concessions are sold at over 60 locations in BART system stations. Examples include newsstands, coffee shops, flower shops, internet cafes, dry cleaners, and hot dog carts. Fees to BART include rents for all properties, as well as a percentage of revenue for selected locations.⁴⁶

Strengths and Weaknesses

- Concessions provide a convenience to transit riders, who can purchase goods and services before, during, or after their trip.
- Concessions are a low-risk financial opportunity, since vendor contracts can be structured to provide the transit property a percentage of sales or a minimum guarantee.
- Revenue opportunities are limited, particularly for less dense cities and systems with limited ridership. Of the 50 largest urban mass transit agencies, only New York (0.12%), Chicago (0.16%), and San Francisco (0.12%) had concessions revenue that amounted to even 1/1000th of operating costs.⁴⁷
- Food and beverage concessions can lead to issues with cleanliness and litter at stations and on transit vehicles, decreasing rider comfort and increasing operating costs for cleanup.

⁴⁰ Chicago Transit Authority Press Release: CTA Signs Five New Tenants for Concession Spaces Along the Red, Blue and Pink Lines, 7/14/2010. <http://www.transitchicago.com/news/default.aspx?ArticleId=2650>

⁴¹ Alpert, David. Metro stations could get DVD kiosks and trolley tour tickets, 6/21/2010.

<http://greatergreaterwashington.org/post.cgi?id=6275>,

http://www.wmata.com/about_metro/news/PressReleaseDetail.cfm?ReleaseID=2569

⁴² Transit Cooperative Research Program, TCRP Report 31, Funding Strategies for Public Transportation, Volume 2 Casebook, Washington, DC 1998

⁴³ Metropolitan Transit Authority, website viewed October 2010. <http://mta.info/news/stories/?story=93/>

⁴⁴ Metropolitan Transit Authority concession RFP MTT 2010, October 1, 2010

⁴⁵ Metropolitan Transit Authority, website viewed October 2010. <http://www.mta.info/mta/realestate/>

⁴⁶ Bay Area Rapid Transit Authority website viewed October 2010,

http://www.bart.gov/docs/tod/Master_Station_Retail_Vendor_RFQ_QA_Revised_Exhibit2.pdf

⁴⁷ IMG analysis of 2008 National Transit Database data



Application to MDT

The County has implemented limited concessions programs that take advantage of the Metrorail and Metromover system traffic. A primary example is the newsstand at Government Center station; however, revenue from this concession does not flow to MDT. MDT has experimented with food and beverage vending machines at Arsht Center and Dadeland North stations. Projected revenue is about \$1,000 per month for each vending machine. MDT reports no significant increase in debris or cleaning costs at stations where concessions have been implemented. MDT is currently considering concessions opportunities at park-and-ride lots, and determining if ordinance changes would be needed to allow food and beverage sales on Metrorail platforms.



Naming Rights

Prevalence

Low. While common for sports venues, naming rights deals are fairly recent to transit.

Description

Naming rights refer to the contracted right of an entity to rename or establish names for transit stations or property for a specified period of time. Considered by established companies to be a long-term form of advertising, many transit properties nationally and internationally are using naming rights as an innovative revenue stream. Although naming rights are most frequently associated with sports venues (e.g., the highest U.S. naming rights agreement belongs to Citi Field ballpark in New York with a payment of \$20M per year for 20 years), naming rights deals for transit lines, bus rapid transit systems, and stations are beginning to provide significant revenue to transit properties.

Agency Examples

Tampa, FL (TECO): Managed by a partnership between Hillsborough Area Regional Transit (HART) and the City of Tampa, this 2.4-mile streetcar line opened in 2002 and is a leader in naming rights. The Tampa Electric Company paid \$1M to name the line; naming rights for three streetcars have been sold for an additional \$250,000 each to Time Warner, SunTrust Bank, and Vigo Importing Company, and naming rights for eight stations have brought in an additional \$100,000 each. The 10-year station naming rights deals have options to renew for \$150,000 each.⁴⁸

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 \$5.44M⁴⁹ over five years, of which \$2M will pay the advertising agent and for updating system signs and schedules. Critics note that in spite of the net \$3.4M in revenue from this landmark transit naming rights deal, naming rights alone could not address SEPTA's reported \$26M fiscal year end deficit.⁵⁰ Compared to SEPTA's \$680M operating budget, revenue potential is limited.

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 2012.⁵¹

Cleveland, OH (RTA): Greater Cleveland Regional Transit Authority partnered with the Cleveland Clinic and University Hospitals to rename the Euclid Corridor bus rapid transit line as the Health Line.⁵² Together, the Clinic and Hospitals offered to pay \$6.25M over 25 years for the naming rights to the new \$7.1M bus

⁴⁸ <http://www.tecolinestreetcar.org/>

⁴⁹ http://www.philly.com/inquirer/local/pa/20100625_SEPTA_approves_changing_name_of_Pattison_station_to_AT_T.html

⁵⁰ <http://www.thetransportpolitic.com/2010/06/22/philadelphia-may-accept-money-to-privatize-station-naming-pittsburgh-considers-similar-move/>

⁵¹ <http://www.nytimes.com/2009/06/24/nyregion/24naming.html>

⁵² <http://www.rtahealthline.com/healthline-what-is.asp>



rapid transit line.⁵³ Besides increasing the hospitals' visibility, the naming rights deal was aimed at having more local health professionals take transit to and from work.⁵⁴

Dubai, United Arab Emirates: Dubai Roads and Transport Authority (RTA) requested proposals for the naming rights to 23 of the 47 stations of the new Dubai Metro system as well as two lines. The RTA valued each station strategically based on a variety of factors, such as passenger demand and location; pricing began at approximately \$1.6M per year. Ten stations were awarded naming rights with the highest value being paid for the Al Qusais station on the Green Line for 10 years at about \$37M. Additionally, nine of the metro stations brokered their naming rights by constructing the respective stations. Although many stations are still available, the RTA expects in total the 23 stations and two lines naming rights will yield approximately \$817M.⁵⁵

Other Cities Considering: A number of other transit agencies are considering naming rights, including those in Los Angeles, Minneapolis-St. Paul, and San Diego.

Strengths and Weaknesses

- Revenue earned from a naming rights contract can often be used effectively for large-scale capital projects. As the naming rights contracts of Cleveland and Dubai show, transit properties that partner early with local entities for a system expansion or a new project can better leverage their working relationship during the start up, construction, and ultimately naming of a transit project.
- Naming rights revenue does not impact other financial priorities, unless other marketing rights govern.
- The semi-permanent nature of a naming rights contract, often five to twenty years, can be politically sensitive since it is arguable that naming rights contracts do not offer a substantial enough revenue source for the public space infringement in a system paid for primarily with tax payer money.
- Timing can be a strategic issue both in regards to soliciting and completing a naming rights contract. For example, the New York MTA reportedly held preliminary discussions with various firms on naming rights before completing the contract with Barclays. Additionally, the Massachusetts Bay Transportation Authority of Boston, also considered station naming rights proposals but was not successful.
- Utilizing naming rights requires well-defined contracts and risk mitigation measures for the transit authority. For example, significant funds are required to both implement and potentially change property signage; although this can be contracted to a third advertising or development agent, a sizable portion of the contract would be allocated to the agent, as in SEPTA's example. Also, by relying on naming rights revenue, the agency is accepting additional risk if the private advertiser defaults on its payment.
- Significant costs for signage and printed materials must be accounted for at the end of the contract if it is not renewed and the name changes.
- Naming rights agreements are specific to local development and economic conditions. Each deal must be individually negotiated, and success is not transferable to other assets.

⁵³ http://www.wkyc.com/news/local/news_article.aspx?storyid=99375&catid=3

⁵⁴ <http://www.streetsblog.org/2008/07/14/clevelands-health-line-setting-a-national-example-for-bus-rapid-transit/>

⁵⁵ <http://flashydubai.com/13-dubai-metro-staion-naming-rights-still-avaliable/>



Application to MDT

MDT reports that Front Row Marketing Services was contracted to market naming rights for MetroMover in 2008, but was unable to find interested parties. County staff reported concern that the contract incentives may not have been strong enough to encourage the firm to aggressively market rights. The firm produced a report that showed that prices could range from \$2,500 a year for the Third Street Station to \$48,000 for the Bayfront stop. MDT appears to have immediate naming rights opportunities for consideration.

- The Miami Intermodal Center presents an opportunity for naming rights given its high profile near the airport.
- The 1st avenue station, American Airlines Arena, Government Center, and Brickell areas are also possible candidates for naming rights.
- The County has also provided some potential naming benefits without compensation. For example, Bayside MetroMover station carries the name of the nearby Bayside Marketplace shopping center. In situations such as these, there is a balance between revenue enhancement and the need to communicate useful location information to riders.



Joint Development

Prevalence

Very high; all major transit operators take advantage of joint development opportunities. However, there are significant differences in how aggressive transit properties are and the revenue they are able to generate.

Description

The Research Team covered joint development issues in our 2009 report on innovative funding sources and financing mechanisms for transit. The following summarizes the key findings from that report, and includes additional examples.

Joint development occurs when private (or public) entities other than the transit operator provide land, assets, or funding to support transit-oriented development (TOD) near a station. For example, a real estate developer may provide parking in return for development rights near the station. Transit agencies can take direct equity stakes in projects through direct cash investments, or as is more usual, investing land in the project. Care must be taken to determine whether the transit agencies' investment is paid back based on "gross" or "net" revenues of the project, since the risk and return levels can differ widely.

Joint development is most successful near rail stations. This is less the case with bus stops, since they are often seen as impermanent since the developer is taking risk if the bus route shifts in the future. However, this is not the case with bus malls. A TOD may be created on public property under a master developer concept. However, even a well-planned TOD may take many years to fully develop. This long development period, in addition to the highly cyclical real estate market, is one reason that developers treat public-public partnerships with caution.

Agency Examples

Washington, DC: Washington Metropolitan Area Transit Authority (WMATA) has one of the most successful joint development programs among transit agencies. WMATA collects around \$6M annually in joint development revenues including \$1.6M at the Bethesda Station alone. WMATA's initial lease terms generally vary from 50 to 60 years with an option renewal to a 99-year term⁵⁶. Additionally, rent is guaranteed, even if the developer declares bankruptcy, and generally the rents also increase as surrounding properties increase in value.

New York, NY: The Port Authority of New York and New Jersey (PATH) provides heavy rail service from New Jersey to mid-town and downtown Manhattan through its PATH trains. The downtown service went directly to the basement of the World Trade Center. Before the events of 9/11, the PATH World Trade Station was a shopping mall and above that the twin office towers. Revenues from the shopping mall and the towers provided a modest revenue stream to PATH. The Trade Center is historically a valuable example of transit deriving benefit from economic value created by its service.

Atlanta, GA: Atlanta's second-largest employer, BellSouth, made a decision to consolidate its suburban offices into three sites, all within Atlanta proper, as close to Metropolitan Atlanta Rapid Transit Authority (MARTA) transit stations as possible. Developer Carter and Associates brought MARTA and BellSouth

⁵⁶ TCRP report 102, Transit Oriented Development in the United States, 2004



together, which resulted in a Joint Development agreement to create a mixed-use project around the Lindbergh Station.⁵⁷

Strengths and Weaknesses

- Joint development typically increases transit ridership and, therefore, farebox revenues.
- While development costs are a capital investment, its revenues are operating revenues and can be applied to operating expenses.
- Joint development can reduce the cost of vital infrastructure compared to using other right-of-way.
- Joint development can produce long-term, stable revenue sources.
- Long-term, exclusive contracts under many joint development deals may prevent competition.
- Joint development is most successful in conjunction with new capital projects.
- Transit agencies can take equity positions in the development, potentially increasing revenue (but also risk).

Application to MDT

Miami-Dade County adopted a joint development ordinance in 1978, a full 6 years before the Metrorail system opened. In 1982, Miami-Dade Transit entered into its first joint development agreement at its Dadeland South station. Since that time, 21 joint development projects have been initiated or completed, including at Dadeland, Coconut Grove, and South Miami. Dadeland South and Dadeland North are among the most significant projects. MDT staff report that MDT is currently reviewing the entire transit system for opportunities for new joint development.

The Dadeland North Metrorail Station is a joint development project located at 8300 South Dixie Highway. It was a joint development project initiated in 1994 by a competitive request for proposal process. The lease commenced in 1994 and expires in 2084 (a 90-year lease). Miami-Dade Transit receives the greater of either \$400,000 or 5 percent of gross revenues annually from developed phases of the project. The annual revenues for FY 2007 were \$458,000. Phase I of the project was completed in 1996. Phase B was occupied in 2000, with Phase II occupied in May 2005.

Dadeland South Metrorail Station Project is a joint development project located at US-1 between Dadeland Blvd and Palmetto Expressway overpass that includes at least four class-A office buildings and a 302-room Marriott hotel. Miami-Dade Transit receives a significant guaranteed annual rent or participation rent (percentage of total gross income) generated from all uses. The project generates over \$1M annually for MDT.

The implementation of the Dadeland projects demonstrates that, under the right circumstances, joint development can work in Miami-Dade County. However, the program was not without difficulty. A case study developed by the Transit Cooperative Research Program (TCRP) found that the structure of the land development agreement for Miami-Dade Transit's Dadeland South project proved problematic from the developer's perspective. Developers were subject to local equal opportunity and DBE rules, which added time and cost to the project.

⁵⁷ Feigon, S, Hoyt, D, Ohland, G The new transit town : best practices in transit-oriented development, 2004



Air Rights Leasing

Prevalence

Medium. Air rights less common than other joint development projects, and are typically fused in conjunction with transit-oriented development.

Description

Air rights refer to the legal capacity for a transit property to lease or sell the three-dimensional area above or around transportation property. Air rights typically refer to the development rights above a transit property, such as the area above an underground transit station, to build commercial, parking, or retail space. Air rights are most often seen as leases since transportation property is considered public property. The use of air rights is considered integral to smart growth and transit joint development projects.

Agency Examples

New York, NY: The NY Metropolitan Transit Authority (MTA) has used air rights in several projects and most recently in the 22-acre Atlantic Yards project outside Brooklyn being built over a train rail yard utilized by the Long Island Rail Road and adjacent to the MTA's Atlantic Avenue-Pacific Street subway station. Additionally, MTA may have more than \$12M worth of air rights available to commercially develop over other rail yards.⁵⁸

Washington, DC: The WMATA system has entered into several notable air rights leases over underground stations and in connection to large joint development deals. A landmark joint development and air rights project over the underground Bethesda metro station generates approximately \$1.6M in air rights for office, retail, and hotel space leases.⁵⁹ With Bethesda and Ballston metro station air rights, WMATA receives over \$2M annually.⁶⁰ Additionally, the 34 acres surrounding the White Flint station in Maryland is under a 55-year lease with a developer for \$66M that will become office, retail, park, and apartment mixed-use development continuing today.⁶¹

Denver, CO: The Denver Regional Transportation District (RTD) utilized a bus-oriented air rights leasing on 14 blocks of the Transitway Mall.⁶² RTD also used an air rights lease for office space over the underground Denver Civic Center Transit Facility.⁶³ RTD will earn \$400,000 annually for 15 years in addition to 38% of the development's profit after an initial deduction of a 13.5% return for its initial cash investment into the project. Also, RTD will own the 600,000 square foot business office building at the completion of the lease.⁶⁴

⁵⁸ Namako, Tom. "Strapped MTA's Sad Real Estate of Affairs." New York Post. 1 July 2010. Web. 1 Oct. 2010. <http://www.nypost.com/p/news/local/strapped_mta_sad_real_estate_of_c6QGSV1gbkCDsuwr8JgGcK>.

⁵⁹ Transit-Oriented Development and Joint Development in the United States: A Literature Review; RESEARCH RESULTS DIGEST, October 2002—Number 52

⁶⁰ Transit-Oriented Development and Joint Development in the United States: A Literature Review; RESEARCH RESULTS DIGEST, October 2002—Number 52

⁶¹ "WMATA's Joint Development Ventures: Still Growing After 30 Years." Wwww.greenbrokereducation.com. Web. 1 Sept. 2010. <www.greenbrokereducation.com/transit-oriented-dev_13.pdf>.

⁶² Transit-Oriented Development and Joint Development in the United States: A Literature Review; RESEARCH RESULTS DIGEST, October 2002—Number 52

⁶³ Volinski, Joel. Lessons Learned in Transit Efficiencies, Revenue Generation, and Cost Reduction, July 2003. 2nd edition. <http://www.cutr.usf.edu/pub/reports.shtml>

⁶⁴ Transit-Oriented Development and Joint Development in the United States: A Literature Review; RESEARCH RESULTS



San Diego, CA: San Diego's Metropolitan Transit Development Board (MTDB) entered into a joint development air rights lease for a large office building above the Imperial and 12th Street Trolley transfer station.⁶⁵

Atlanta, GA: The Metropolitan Atlanta Rapid Transit Authority (MARTA) recoups approximately \$500,000 annually through its air rights and development contract with the underground Lenox station.⁶⁶

Baltimore, MD: Maryland MTA's first air rights joint development project was the Charles Center Plaza, a 250,000 square foot office, retail, and plaza, at the Charles Street Metro station.⁶⁷

Strengths and Weaknesses

- Air rights leases utilize vertical space of a transit property, capturing the full value of transit property
- The most valuable and creative joint developments with air rights leases typically are found at large rail systems with underground stations. However, there are exceptions like Denver RTD which utilized air rights with a bus transfer station.
- Reasons for utilizing air rights vary and include growing concerns over the environmental, economical, and social sustainability of urban sprawl in a congested and car-centered transportation system; ability to create city centers in sustainable communities; and linking business commuters directly with transit to and from workplace to living space.
- Transit agencies may take an equity position in the air rights development, accepting risk but also potentially increasing revenue.
- Air rights leases tend to be long and require strong contracts that address all risks including bond ratings, bankruptcy of the developer, and others.
- Air rights do not compete with other transit property needs since they often are joint development projects, creating new revenue sources, and offer greater
- Ensuring community stakeholders and local zoning and administrative officials are informed and are committed to an long term joint development and air rights deal is critical to the successful competition of an integrated and thriving local project.
- Depending on the air rights lease term, revenue streams may be slow to materialize.

MDT Application

Miami has seen many joint development deals including some with air rights leasing. In the development of the Miami Dadeland South station, the MDT exchanged air rights for a one acre site that the station would be built upon in addition to a 4% percent share of the gross income over the 99 year lease.⁶⁸ MDT is investigating other opportunities to use air rights to create transit-oriented development as well as a revenue source. In addition, assets such as MDT parking lots could create air rights leasing opportunities.

DIGEST, October 2002—Number 52

⁶⁵ Transit-Oriented Development and Joint Development in the United States: A Literature Review; RESEARCH RESULTS DIGEST, October 2002—Number 52

⁶⁶ Hall, P., J. Landis, and R. Cervero. "Transit Joint Development in the United States." National Transit Access Center, Institute of Urban and Regional Development, University of California Berkeley, 1992. Web. Oct. 2010.

⁶⁷ California Department of Transportation, Business, Transportation, and Housing Agency. "Statewide Transit-Oriented Development Study: Factors for Success in California." Sept. 2002. Web. 1 Oct. 2010.

⁶⁸ Transit-Oriented Development and Joint Development in the United States: A Literature Review; RESEARCH RESULTS DIGEST, October 2002—Number 52



Right-of-Way Leasing

Description

Right-of-way leasing allows a transit property to lease available space alongside or above transit service areas for non-conflicting purposes. These leases allow for the use of transit system right-of-way for fiber optic cable, utilities, and other structurally dependent businesses as well as development rights or air space rights above a transit property for billboards, hosting communication equipment, or vertical real estate in step with the system's master plan. Right-of-way leasing is a relatively new mechanism of revenue for transit properties and most often used in conjunction with transit-oriented development and other development activities. Additionally, transit service may find a potential opportunity for reduced cost for the services offered by those leasing the transit system's right-of-way as has been shown by several agencies contracting for right-of-way and communication services.

Billboards are often underutilized opportunities for a transit property advertising both within the traditional transit system property, in the property's right of way, and on any other available property. There are over 450,000 billboards across the U.S.⁶⁹ Leading advertising firms that contract with transit properties report that from 2008 to 2010, out-of-home advertising (which includes transit system advertising and billboards) has had more growth than another other advertising area except the internet.⁷⁰ Digital billboards offer an expanding opportunity in the U.S. to bring the most value for new structures and keep messages fresh and relevant to the time, location, and interests of the viewer. Additionally, digital billboards can handle more revolving content and accommodate multiple clients, showing a 70 percent profit margin rather than a 45 percent profit margin on a traditional billboard. While there are only 1,800 digital billboards operating today, it is expected to double within the next 10 years.⁷¹

Billboards are most desirable when placed on property where the gross rating point (GRP, representing how many people reach on a given day) and daily effective circulation (DEC, traffic count multiplied by the assumed number in of viewers passing) are highest such as major intersections and transit hubs. For transit properties, areas with the highest GRP and DEC might be spaces where passengers and non-passengers merge or anywhere on a transit property adjacent to major foot and road thoroughfares. Generally, the transit property would operate as the land-owner, using a long-term property lease structure (usually 5 to 20 years) with the billboard advertising agency. The permit is acquired by the advertising agency, and the structure is built and paid for by advertising agency costing up to \$300,000 to install.⁷² As the landowner, a flat fee can be arranged or a share in the revenue with the advertising agency depending on the location. Usually the property owner is receiving approximately 20% of the revenue from the billboard. Priced individually, characteristics of the property can greatly affect the structure of the lease,

⁶⁹ Duttge, Willow. "Digital Billboards Generate Revenue, Controversy - DailyFinance." Business News, Stock Quotes, Investment Advice - DailyFinance. 23 Mar. 2010. Web. 06 Oct. 2010. <<http://www.dailyfinance.com/story/television-on-a-stick-sparks-admiration-ire-from-sea-to-blink/19411603/>>.

⁷⁰ Story, Louise. "Digital Billboard Up Ahead: New-Wave Sign or Hazard?" The New York Times - Breaking News, World News & Multimedia. 11 Jan. 2007. Web. 06 Oct. 2010. <http://www.nytimes.com/2007/01/11/business/media/11outdoor.html?_r=3>.

⁷¹ Duttge, Willow. "Digital Billboards Generate Revenue, Controversy - DailyFinance." Business News, Stock Quotes, Investment Advice - DailyFinance. 23 Mar. 2010. Web. 06 Oct. 2010. <<http://www.dailyfinance.com/story/television-on-a-stick-sparks-admiration-ire-from-sea-to-blink/19411603/>>.

⁷² Copeland, Larry. "More Cities Ban Digital Billboards - USATODAY.com." News, Travel, Weather, Entertainment, Sports, Technology, U.S. & World - USATODAY.com. 24 Mar. 2010. Web. 06 Oct. 2010. <http://www.usatoday.com/news/nation/2010-03-22-visual-soup_N.htm>.



such as: the value of the property, the effect of that advertisement on the use of that property, its proximity to other similar billboards, how desirable and heavily trafficked the area is, valuable right side or left side property, and whether the location conforms to federal standards. Both the property owner and advertising agency will be consulting with the zoning office regarding local standards, and by ensuring the property meets all specifications as early as possible enables a successful lease to proceed.

However, regulations on digital billboards may be changing in response to concerns that digital billboards could distract drivers. A study by the Virginia Tech Transportation performed in 2007 found that “traffic accidents are no more likely to happen in the presence of digital billboards than in their absence.” Currently, the Federal Highway Administration is proceeding with a \$150,000 federal study, which may change federal and potentially state and local regulations. Some localities and states have taken a preemptive approach banning or placing a moratorium on digital billboards until this federal study is complete.⁷³

Agency Examples

San Francisco, CA: San Francisco Bay Area Rapid Transit (BART) entered into a contract with Metropolitan Fiber System Network Technologies, Inc. (MFSNT) in 1994 for a new telecommunications system. MFSNT provided the equipment, engineering, and construction management services and in exchange will remain the owner of the system until the contract’s expiration when ownership transfers to BART. Additionally, MFSNT had a 15-year contract giving them ownership and operating rights for the conduit system within BART’s right-of-way for 15 years. In exchange, BART earned 91 percent of the lease revenues from the conduit system during the contract and receives full ownership rights at the end of the contract. Most recently, BART signed a 20-year contract with WiFi Rail to construct and operate high-speed, fiber-optic cable in BART’s train track right-of-way.⁷⁴ As innovative rail technology, WiFi Rail is built to be faster than 3G-phone service and transit every mile.⁷⁵ After a testing period, WiFi Rail began providing customers three and one-half minutes of free wireless access in exchange for watching a 30 second advertisement clip, or riders can sign up for subscription packages without ads - \$6 for two hours, \$9 for a day, \$30 for a month, or \$300 for a year. BART receives a share of all revenue that is dependent on the number of users.⁷⁶ Additionally, BART upkeeps agreements with five major cell phone carriers that allow underground phone service throughout the entire system and some data service.⁷⁷

Atlantic City, New Jersey: The South Jersey Transportation Authority (SJTA) previously has used right-of-way leases for several highways. In 2010, SJTA announced that they would seek bidder for two billboard locations on a major highway to raise funds to finance a special project.⁷⁸

⁷³ Story, Louise. "Digital Billboard Up Ahead: New-Wave Sign or Hazard?" The New York Times - Breaking News, World News & Multimedia. 11 Jan. 2007. Web. 06 Oct. 2010. <http://www.nytimes.com/2007/01/11/business/media/11outdoor.html?_r=3>.

⁷⁴ Bay Area Rapid Transit. "BART - WiFi Rail Inc. to Provide Wifi Access on BART System." BART - Bay Area Rapid Transit. 2 Feb. 2009. Web. 1 Oct. 2010. <<http://www.bart.gov/news/articles/2009/news20090202.aspx>>.

⁷⁵ Inskeep, Steve. "Wi-Fi Provider Bids For San Francisco Transit District : NPR." NPR : National Public Radio : News & Analysis, World, US, Music & Arts : NPR. 7 July 2008. Web. 1 Oct. 2010. <<http://www.npr.org/templates/story/story.php?storyId=92278862>>.

⁷⁶ Bay Area Rapid Transit. "BART - WiFi Rail Inc. to Provide Wifi Access on BART System." BART - Bay Area Rapid Transit. 2 Feb. 2009. Web. 1 Oct. 2010. <<http://www.bart.gov/news/articles/2009/news20090202.aspx>>.

⁷⁷ Bay Area Rapid Transit. "BART - WiFi Rail Inc. to Provide Wifi Access on BART System." BART - Bay Area Rapid Transit. 2 Feb. 2009. Web. 1 Oct. 2010. <<http://www.bart.gov/news/articles/2009/news20090202.aspx>>.

⁷⁸ "SJTA Teams Up to Improve Atlantic City Greeting to Roadway Travelers." South Jersey Transportation Authority. 20 Apr. 2010. Web. 1 Oct. 2010. <http://www.sjta.com/sjta/news_item.asp?publicationID=20&ID=1646>.



Strengths and Weaknesses

- Right-of-way leasing leverages previously uncaptured value from existing assets
- Leasing does not compete with other needs since it creates new revenue
- Right-of-way leases can reduce the cost of vital infrastructure compared to using other right-of-way
- Leases can produce long-term, stable revenue sources
- Exclusive lease contracts prevent competition.

Application to MDT

Due to MDT's elevated rail, structure connected linear right-of-way is limited. Opportunities exist to use MDT right-of-way for stationary assets, such as billboards and cell towers. However, the strength of right-of-way leasing is connected linear area for communications and utilities, which MDT likely cannot offer.

Florida Power & Light is proposing to build two new nuclear power plants at its Turkey Point location, 24 miles south of Miami⁷⁹. Although technical issues could prevent it, the MDT could investigate using the Busway or Metrorail alignments transmission right-of-way.

⁷⁹ Florida Power and Light website, <http://www.fpl.com/environment/nuclear/faq.shtml>, viewed October 2010.



System Parking Fees

Prevalence

Medium. Parking fees are found in larger cities, most frequently in conjunction with rail transit.

Description

Transit agencies charge system parking fees on surface lots and structured parking facilities that they own. The main purpose of the parking fees is to generate revenue. Parking fee structures and revenue are mostly managed by local jurisdictions. However, in the case of larger systems, operation of parking is often contracted out to a parking management firm or a parking authority. Revenues typically go to parking and vehicle enforcement and general funds.

Agency Examples

Chicago, IL: In 2009, the Chicago Transit Authority (CTA) Board approved a five-year contract with Central Parking System Chicago Parking for the operation, management and maintenance of select CTA parking facilities. Under the new contract, the CTA is guaranteed \$1M annually, or up to 49.5% of net revenue, whichever is greater. Parking is available for approximately 6,600 cars at facilities adjacent to 17 CTA rail stations throughout the CTA system and the parking fees are \$5/day at Rosemont and Forest Park stations and \$4/day at all other locations.

Washington, DC: WMATA operates parking facilities at 42 Metrorail stations. Of these all 42 stations offer daily or hourly parking and 34 stations offer reserved parking for \$65 per month. At these locations, customers purchase permits to park in reserved spaces. If the spaces are not occupied by 10:00 AM, they become available for any Metro rider⁸⁰. In 2009, parking fees generated gross revenue of \$47M for WMATA (although WMATA, as the operator, is responsible for all operating costs). The parking fees vary from \$3.25 - \$4.75/ day.

Denver, CO: Denver Regional Transportation District (RTD) imposed a parking fee of \$4/day to use one of the 15 high-demand park-n-Ride lots and \$2/day at the 18 medium-demand lots for out-of-district transit riders. The parking fees have generated a revenue of \$361,000. However, the main objective of RTD to impose parking fees was to shift parking demand from the high-usage lots to some of the lesser-used lots and capture revenue from non- RTD residents who do not pay the one-percent sales tax which funds the bus and rail service.

Strengths and Weaknesses

- Fees ensure that commuters contribute/support transit services that benefit them.
- System parking fees produce indirect benefits by promoting clustered development, reduce parking demand around stations, and allow agencies to utilize the land otherwise needed for parking facilities for transit-oriented development.
- However, additional parking costs may discourage shifts from automobile to transit.
- Additional staff is needed to serve citations and collect payment.

⁸⁰ Washington Metropolitan Transit Authority website, http://www.wmata.com/rail/parking/reserved_parking.cfm, viewed July 2010



Application to MDT

Charging for parking at MDT rail stations requires a balance between generating revenue for MDT, ensuring that parking space is available for riders, and competing with other transportation options. Low downtown parking rates and high availability of spaces downtown keep the market rates very low; general parking across the street from Government Center in a garage built by the Miami Parking Authority costs as little as \$5 per day. The County budget estimates \$500,000 in revenue from MDT parking lots in fiscal year 2011.

MDT parking policy at Metrorail could be examined. At just \$10 per month, parking passes may be significantly undervalued. Furthermore, parking is charged as a flat fee at MDT stations, which may discourage users from using Metrorail for shorter trips. Finally, MDT could look into charging higher parking rates at more popular locations where parking may be scarce rather than having a flat system-wide fee. In addition to improving revenue, variable pricing can be used to increase the certainty of finding available parking at the station when needed, since riders who highly value time cannot risk riding if parking is uncertain. Coordination between the Parking Authority and MDT for future parking projects could improve transit's competitiveness.

MDT provides free parking at park-and-ride facilities for the Metrobus system and along the South Miami-Dade Busway. As a rider amenity, MDT is currently investing in park-and-ride facilities at Kendall and SW 127 Avenue and at NW 186 Street and 73 Avenue. These facilities will improve system parking options, but will not provide direct parking revenue unless parking charges are instituted, though they may increase ridership and thus farebox revenue.

The Busway corridor is distinct from other MDT facilities because parking at stops is in fairly short supply, theoretically providing some revenue opportunity. However, mode choice is often highly dependant upon price, and significant increases in parking fees may drive travelers away from transit.



Value Capture: Land Development Charges (i.e., Impact Fees)

Prevalence

Moderate. Impact fees are very common for roads, schools, and other governmental functions, but are less frequently used to fund transit.

Description

First institutionalized in the U.S. with the development of the railroads, value capture is a straightforward concept – transportation investments create access to real estate and, depending on the location, that access can have significant value. In theory, those that benefit should partially fund the investment. The public sector either assesses the future value related to the improvements, shares in the increased value with the developer, or partners with the developer to finance the transportation investment.

Land development charges (LDCs), also called “smart growth” taxes or “impact fees,” are one method to capture the value of transit investment. Impact fees are paid by developers to offset the cost of providing infrastructure and municipal services to new developments. LDCs are common for road, school, and utility infrastructure, but the benefits to transit are diminished since impact fees are typically one-time payments. Additionally, the flow of these payments is uncertain since they are highly correlated to the real estate development cycle. At least 29 states have adopted impact fee enabling acts; however using the fees for transit is allowed in at most 20 states.⁸¹ Typically, impact fees must be directly attributable to municipal improvements, and are calculated using ratios tying development to infrastructure.

Agency Examples

Broward County, Florida: The Transit Concurrency Assessment was implemented in 2003. The Broward model links the fee to the number of transit trips that would be required to offset a new development. While successful in providing funds, the Broward model also complicates transit planning by requiring bus service in each of ten transit concurrency districts to meet County standards of 30-minute bus headways, regardless of demand for service. The fee was expected to raise nearly \$11M, enough to pay for about 28 percent of County Transit Program capital and operating costs from 2006 to 2010.⁸²

Portland, OR: System Development Charges, in place since 1997, are collected in the Portland area to fund impacts for the next ten years on water/wastewater, parks, and transportation.

San Francisco, CA: The city enacted the first Transit Impact Development Fee (TIDF) in 1981 to provide revenue to Muni for capital and operating costs. Originally limited to office uses and to the downtown area, the TIDF was expanded in 2004 to include all non-residential uses throughout the city. The TIDF can be used to increase revenue hours of operation to meet service standards, as well as for capital, maintenance, and overhead costs. The TIDF now generates over \$10M per year.

The table below demonstrates some of the impacts that transit can have on increasing property value and providing a basis for funding transit projects:

⁸¹ McDaniel, James B., and Jaye Pershing Johnson. "Legal Research Digest 28: USES OF FEES OR ALTERNATIVES TO FUND TRANSIT." Transit Cooperative Research Program 28 (2008): 1-37

⁸² McDaniel, James B., and Jaye Pershing Johnson. "Legal Research Digest 28: USES OF FEES OR ALTERNATIVES TO FUND TRANSIT." Transit Cooperative Research Program 28 (2008): 1-37



International Examples
London Docklands Light Railway
<ul style="list-style-type: none"> • Open 1987, 13 km./16 stations • Beckton & Lewistan extensions totaled 50 km and cost 424M pounds • A prior assessment proved correct: 50% of capital cost was recaptured through transport costs reduction, reduction in congestion and in accident, while 50% was recaptured through overall office development and job creation.
LRT in Strasbourg, France (built 1991-94):
<ul style="list-style-type: none"> • Between 1994 and 1995, park-and-ride schemes near the city centre resulted in an increase of 100% of transit system users and draw shoppers from outside the metropolitan area. • Pedestrian accessibility and use around adjacent Place Kleber helped create larger and more accessible activities.
Helsinki Metro, Finland (1982)
<ul style="list-style-type: none"> • Price of property located within walking distance of the nearest railway or metro station increased 7.5% over other locations. • Impact was most significant at a distance of 500-750 m., as opposed to adjacent locations, where values dropped. • In the best locations, dwelling prices raised by 11%.
Vienna S-Bahn, Austria
<ul style="list-style-type: none"> • Opened 1962, 14 km • Districts located along S-Bahn corridor have witnessed increases in number of new housing units of 18,7% over 10 year period, as opposed to 4% and 10% in more remote locations.
Nantes, France
<ul style="list-style-type: none"> • Between 1985 and 1995, 25% of new offices, 13% of new commercial premises and 25% of new residential dwellings were built adjacent to LRT.
North American Examples
Portland Metropolitan Express
<ul style="list-style-type: none"> • Started in 1986, 15 miles/32 stations, plus plans for 18 miles expansion • Since 1986, \$1,9B in property development in the immediate vicinity of line.
St-Louis, Missouri
<ul style="list-style-type: none"> • Opened 1993, 18 miles/18 stations • To date, development spurred by transit system totals \$530 millions and includes major projects. • A \$1.5B expansion to LRT is expected to have a \$2,3B impact on business sales.
San Diego Trolley, California
<ul style="list-style-type: none"> • LRT which connects downtown area to Tijuana, Mexico (40 miles/34 stations): • Since construction, some 4 million sq. feet of Class A office space has been added to downtown area, with population growing from 0 to 20 000 persons.
Metro Toronto Subway
<ul style="list-style-type: none"> • Built during 1950s & 1960s • Between 1959-1964: 90% construction of all new office spaces and 40% of apartment buildings in Toronto took place along the metro lines. • Tax assessment values near City centre stations rose by 45% and by 107% around suburban stations, as opposed to 25% elsewhere. • Office space rents adjacent to the stations average 30% more than average for the City as a whole, while office rents within 500 m. of stations rose by 10% more than average.
Chicago LRT
<ul style="list-style-type: none"> • Chicago Transit Authority estimates that maintaining a “good repair” scenario in its transit system would yield \$4,6B in additional business sales, 41 209 jobs over 20 years and annual tax revenues of \$154 million. • Overall, Chicago authority projected that return on capital investment in LRT was \$6 for every \$1 spent.
Dallas Area Rapid Transit (DART)
<ul style="list-style-type: none"> • The value of property nearby the DART lines is 25% higher than similar real estate elsewhere in the area.
Other cities
<ul style="list-style-type: none"> • In Atlanta and Washington DC., real estate developments around transit stations command a premium of between \$3 and \$4 per sq. foot.



Strengths and Weaknesses

- Impact fees directly tie development to demand (and cost) for new service.
- Value capture is a long-term strategy for growth of revenue.
- Beyond financial issues, value capture mechanisms can foster coordination between various governmental divisions and agencies and the private sector for growth planning.
- Evidence suggests that LDCs are not seen as a hindrance to the business community to growth and local development, despite concern this could be the case, particularly where there is limited service by a transit agency (and thus limited benefit to paying the fee).
- Impact fees are one-time fees charged as development occurs. As the pace of growth fluctuates, income from the fees will vary, which may limit their usefulness for operating costs.
- Impact fees are limited to the transit agency's local share of costs. This reduces the amount of cost that can be charged (due to grants), and could make it complex to determine the proper amount.

Application to MDT

Miami-Dade County currently collects impact fees to fund road and utility improvements. Established in 1989, impact fees have not been used to support transit despite MDT efforts. The Board of County Commissioners took up the question of establishing a separate transit impact fee in the past two years, but nothing has been implemented. MDT staff has also discussed including operations costs should a transit fee be assessed.

Expanding the use of impact fees to include transit would be allowable under Florida law. According to a Transit Cooperative Research Program report⁸³, the enabling legislation for impact fees in Florida is the broadest in the nation. Fees are adopted by ordinance at the County or municipal level, as has been accomplished in nearby Broward County.

In addition, Florida is one of only two states that allow the use of impact fees for operating costs. Developing a methodology to calculate the operating cost can be tricky, as individual developments might not lead directly to a new service, but do increase demands on existing routes. In addition, since operating costs are ongoing, the fee must consider a specific timeframe of analysis.

⁸³ Transit Cooperative Research Program Legal Research Digest 28: Uses of Fees or Alternatives to Fund Transit, 2008.



Value Capture: Special Taxing Districts (Tax Increment Financing and Benefit Assessment Districts)

Prevalence

Moderate. Special taxing districts are often used to fund transit capital projects, but use for operating costs is less common.

Description

The Research Team covered Special Taxing District issues in our 2009 report on innovative funding sources and financing mechanisms for transit. The following summarizes the key findings from that report. Since such districts are almost always used to support new capital development, they will be of limited usefulness for operating MDT's current system.

Recognizing the value that transit adds to property is the basic underpinning of transit-oriented development (TOD). The public sector can establish capitalize on the increased property value resulting from the transportation improvement by setting up special tax districts that help fund the project.

Benefit assessment districts (BADs) are special tax assessment areas that may be created to support the construction and operation of new transit service. A typical BAD creates a zone around the station, often ½ mile, with all businesses within the zone paying a tax based on real estate valuation per square foot. Frequently residential property is exempted. Sometimes, assessments are "tiered" reflecting the fact that properties nearer to the station have higher benefit. In special cases, as with the Dulles Metrorail extension in Fairfax County, a benefit assessment district may cover an entire rail corridor.

Because businesses must pay higher rates in a BAD, they can be controversial, and are only appropriate under certain conditions. BADs are most successful where new transit service can be shown to correlate strongly with increased sales at local businesses or greater employee transportation convenience. To be approved, local ordinance often require that a majority or greater of affected property owners agree. In the New York Avenue WMATA case study (discussed below), the not-for-profit entity worked with property owners to advocate for the implementation of the assessment district. Strong local property owner support helped to facilitate project delivery. Los Angeles, Tampa, Portland and Seattle have also used BADs successfully, in the latter two cases the BADs paying for 17 and 50 percent, respectively, of streetcar project capital costs. The East-West corridor, with its higher-value real estate, is the most likely area for a benefit assessment district.

There are a number of areas where assessment districts have been used to help fund new transit. One of the earliest was in 1993, for the Metro Red Line subway in Los Angeles, where the annual assessment rate was determined by dividing the annual bond repayment by the assessable square footage. The assessment rate was levied on the gross square footage of the assessable improvement or parcel area (whichever was greater). Assessments were made about \$0.17 to \$0.30 per square foot and will terminate once the 15-year bonds are retired. Special assessments excluded certain properties including residential, non-profit and public properties. In LA the special assessments were leveraged and provided approximately 9% of the total segment one costs. More recently, a similar district was created to help fund the Portland streetcar, representing about 17 percent of the first phase of development, and



about 20 percent for each subsequent phase. In Portland, in addition to commercial real estate, non-owner occupied properties were included in the improvement district.

We consider developer impact fees a subset of an assessment district. An impact fee is a fee assessed on new development within a jurisdiction as a means to defray the cost to the jurisdiction of expanding and extending public services to the development. Since it is a one-time fee, it has less benefit from transit, which needs both capital and operating costs funding.

Tax Increment Financing Districts (TIFs) are a long-standing local tool used for specific projects to transform blighted areas into more productive ones. TIF use future increases in property values resulting from the investments in that particular area or project(s). Often TIFs are used to finance specific transportation projects and create funding for transportation projects that were considered unaffordable without the new revenues generated. Florida has been using TIFs under the "Community Redevelopment Act" since 1969.⁸⁴

Similar to a benefit assessment district, a TIF district is a special assessment zone. However, unlike a BAD, property owners in the TIF pay no surcharge on their property taxes. Rather, the TIF district retains any increases in real estate (or income) taxes as property values rise due to the new transit service. Because they do not involve additional taxes, TIF districts are more politically palatable than BADs. However, they are not without controversy since they will eventually result in subsidizing development by creating tax-privileged districts. Furthermore, a TIF district may be appropriate in an economically disadvantaged neighborhood that will enjoy growth due to transit. Many North Corridor stations, for instance, where new transit service will be a component of a larger neighborhood revitalization, may be appropriate for TIF districts.

Special Assessment Districts are new levies (often only on business properties) to fund transportation improvements. Unlike TIFs, such districts generate revenue immediately, but also increase the tax burden for the affected properties.

⁸⁴ Part III, Chapter 163, Florida Statutes, the of 1969," represents the state's response

The funds deposited in the redevelopment trust fund may be expended only in the redevelopment area pursuant to the approved redevelopment plan in conformance with the requirements of Section 163.387(6), Fla. Stat., which includes but is not limited to the following:

- (a) Administrative and overhead expenses necessary or incidental to the implementation of a community redevelopment plan adopted by the agency.
- (b) Expenses of redevelopment planning, surveys, and financial analysis, including the reimbursement of the governing body or the community redevelopment agency for such expenses incurred before the redevelopment plan was approved and adopted.
- (c) The acquisition of real property in the redevelopment area.
- (d) The clearance and preparation of any redevelopment area for redevelopment and relocation of site occupants as provided in s. 163.370.
- (e) The repayment of principal and interest or any redemption premium for loans, advances, bonds, bond anticipation notes, and any other form of indebtedness.
- (f) All expenses incidental to or connected with the issuance, sale, redemption, retirement, or purchase of agency bonds, bond anticipation notes, or other form of indebtedness, including funding of any reserve, redemption, or other fund or account provided for in the ordinance or resolution authorizing such bonds, notes, or other form of indebtedness.
- (g) The development of affordable housing within the area. The development of community policing innovations



Strengths and Weaknesses

- TIF districts are common in Miami and elsewhere to access increasing real estate values near transit.
- Funding from TIFs takes many years to come to fruition. The new asset must be built, and revenue is dependent upon rising property assessments. Conversely, special taxing districts provide funds immediately.
- Special assessment districts are most commonly used for new transit development. Implementing a new tax to fund existing service would be politically challenging.
- Equity issues can arise. Questions that need to be answered are whether housing is included, how small businesses should be treated, and the geography of the special tax district.

Application to MDT

The State of Florida permits TIFs under the "Community Redevelopment Act" of 1969.⁸⁵ Miami-Dade County currently uses value capture techniques to fund improvements, including TIF transportation districts and impact fees to fund road and utility improvements. The recent real estate softening actually creates an opportunity for TIFs, since they create a low baseline of property values that will create TIF revenue as values rise.

In the current economic situation, it is important to note that TIFs fluctuate because they rely on property taxes increasing as property values rise, which is not guaranteed. In 2009, the Miami and Broward communities saw property values in Miami-Dade fall 13.4% against 2008 values and Broward saw a 12.1% decline against 2008.⁸⁶ Taxable property values in Miami-Dade County stemming from new construction reached \$2.6B, down from \$8.4B the year before.⁸⁷ The risks inherent with TIF financing are highlighted by the potential foreclosure of a TIF-backed hotel/shopping complex in Cleveland.⁸⁸

⁸⁵ Part III, Chapter 163, Florida Statutes

⁸⁶ <http://www.miamiherald.com/2010/06/01/1658978/property-values-cities-take-big.html#ixzz0qr6kflKY>

⁸⁷ <http://www.miamiherald.com/2010/06/01/1658978/property-values-cities-take-big.html#ixzz0qr72mUjP>

⁸⁸ "Failed Cleveland TIF on Hot Seat", The Bond Buyer, August 18, 2010



Digital Technology, Web-Marketing and Social Media

Prevalence

Low. Such tools are cutting-edge, yet unproven for producing transit revenue.

Description

The widespread use of the internet on computers, cell phones and other mobile devices has both operational and potentially revenue impacts to transit agencies. On an operational side, providing real-time information on schedules, delays, and other key transit events to a broadly dispersed customer base can enhance customer service. As NextBus's systems and other technologies demonstrate (see below), these digital approaches may help reduce operating costs.

On the revenue side, digital technology could present a new opportunity to supplement existing revenue sources. As a key regional "content" provider, a transit agency could attract a high share of internet traffic, as a local newspaper, weather website, or influential blogger can. The obvious opportunity would appear to be digital advertising on websites or banners on cell phones. In general, however, few transit agencies are earning significant if any revenue from such advertising. While significant internet advertising revenues eludes many of even the most sophisticated private media companies, many transit agencies do not solicit advertising on their websites. Furthermore many provide their critical information—real-time arrival information—to third parties for other websites or for cell phone applications. According to City-Go-Round, over 123 U.S. transit agencies provide "open data,"⁸⁹ including Miami-Dade Transit, while 701 do not.

Nevertheless, as digital technology evolves, it is important for transit agencies to pay close attention to new opportunities in this domain. Below are some examples of how agencies are experimenting in this area, if not earning revenues.

Agency Examples

NextBus: NextBus combines GPS data with predictive software to provide passengers accurate arrival times of buses and other transit vehicles on the web and their cell phones. Used by numerous U.S. transit agencies, including San Francisco Muni, Denver RTD, WMATA in DC, MBTA in MA, NextBus provides first of all customer service as do other scheduling services. However, some transit agencies have found that by providing accurate arrival times, passengers do not wait at bus stops as long or they would have to otherwise, improving the total transportation time. In some cases, this reduces the need for agencies to provide as much service on a particular route; agencies that have to reduce service for budget reasons may use technologies like NextBus to reduce the impact on their customer base.

Vancouver, Canada: Vancouver's transit provider, Translink has commissioned a group of university students to develop a video game app, "Carbon Chaos," as both entertainment for riders waiting for a bus and a promotional tool to win younger passengers to go to their website and learn about using their system. While the game is not branded as a Translink product, it has a clear link to the Translink website for users who wanted to learn more about transit.

⁸⁹ "City-Go-Round. "City-Go-Round: All Transit Agencies with Open Data." Web. 1 Sept. 2010. <<http://www.citygoround.org/agencies>>.



San Francisco, CA: San Francisco's BART has developed several means to both draw in passengers and reach out to organizations and activities along its lines. Through myBart.org it provides a weekly email message on free or discounted events occurring within walking distance or a short transit ride from a BART station as well as a dedicated website which provides information on these events and destinations. It also organizes free ticket giveaways for certain events. Business partners include non-profit art institutions, the professional baseball team, and a grocery chain. Furthermore, BART has partnered with Foursquare (foursquare.com), a location-based social network that aims to encourage people to explore their neighborhoods, find their friends and reward people for going to certain locations through the award of points. Those who visit certain places the most in a period, become the "mayor" of that location. Businesses are now awarding Foursquare members for the number of times they check in, like a free drink at a bar, free bread sticks at Pizza hut, or certain retail discounts.

Los Angeles, CA: Los Angeles Metro recently launched the first official transit-related Facebook page, intended to inform the public about Metro's planned \$8B, 10-mile subway extension. With approximately 3,500 people who "like" the site, this is not a major Facebook venue. Nevertheless, the site complements LA Metro's website, providing links to daily transit forecasts and advisories, information on planning decisions, and other related transportation events such as bicycle rides. Following Facebook's format, Facebook users can post comments on its "wall." As with many similar transit Facebook pages, these comments can range from complaints about poor bus service to comments on a new proposed rail line. LA Metro is officially open to all comments, even negative ones, although it does delete comments that are defamatory, harassing, off topic and/or are advertising.⁹⁰

The potential benefit of Facebook presence for transit agencies is that they can be a focal point around which Facebook members coalesce. As private firms have found, people like to be associated with others that have similar interests. For instance, Levi's has a Facebook site for some of its specific products, which are extremely popular. Transit agencies may consider doing the same, providing the ability for users to "like" certain bus routes or stations, similar to how tee FourSquare is focused on certain locations.

Boston, MA: The Massachusetts Bay Transportation Authority (MBTA) recently launched its smart card, the "Charlie Card," which stores values for single or multiple-rides. As with similar smart cards of other transit agencies, riders load the card with value using cash, credit or debit cards, or tokens at in-station fare vending machines or at retail sales terminals, MBTA ticket offices and eventually, online. The MBTA has considered using such a card to pay for parking, as Washington Area Metropolitan Transportation Authority (WAMTA) does with its SMART Card. In addition, the MBTA is considering how to differentially price parking fees depending on whether the passenger uses the transit system or just parks in the garage. Beyond parking, transit agencies could also link their smart cards to other smart cards by gas stations, grocery, or drug stores. The verdict is still out whether Americans will adopt such cards as Europeans have to a greater extent. Another potential, related technology, is making cell phones "virtual" smart cards as the Japanese are increasingly doing,⁹¹ using "near field technology" to allow users to pay for a broad variety of products. The recent emergence of cell phone airline tickets using barcode technology is perhaps a first step in this direction in the U.S. All of these technologies could—hopefully in the near future—better link transit use to other commercial applications. Where transit becomes an integral part of the reason to use

⁹⁰ "Sidebar: Facebook, Twitter, YouTube and Crowdsourcing", Josh Stephens, InTransition Magazine, Spring/Summer 2010, www.intransitionmag.org/Spring-Summer_2010

⁹¹ "A New Payment Option," Floyd Diaz and Eneko Aldama, Mass Transit, September/October 2010, pp. 74-80.



this technology, creating clear value, it will then be able in a stronger position to keep some of that value for itself.

Strengths and Weaknesses

- Digital technologies potentially offer great operational benefits, leading to material cost savings.
- They may also create new commercial venues in which transit can currently participate.
- Currently, few transit agencies are earning significant, if any, revenues from these technologies; the greatest benefits currently are in customer service—providing real-time information that reduces schedule uncertainty.
- Location-based social media may help transit agencies better integrate themselves with the commercial fabric of the communities which they serve, and in so doing, be able to capture some of that value for their own systems.

Application to MDT

As with all technology, MDT needs to follow key trends in how and when it will be feasible for adoption. The same is true for digital technologies. At the least, MDT should consider building upon its current website and linkages to Facebook, Twitter, and YouTube with location-based social media.



Payroll Levy

Prevalence

Low. There are very limited examples of the use of payroll levies to support transit.

Description

Payroll levies are collected by a state agency along with other federal and local taxes either from the employer who is benefiting from local transit for their employees or from the employees who are benefiting from public transit. These levies generally use a fixed charge or percentage of total taxes. They are not commonly used for transit unless in large metropolitan areas with established service.

Agency Examples

Portland, OR: The Oregon Department of Revenue administers a payroll levy on employers for the Tri-County Metropolitan Transportation District (TriMet) and Lane County Mass Transit District (LTD). The transit payroll levy is based on the gross payroll for service within the transit property areas.⁹² In 2010, the payroll rate increased to 0.6818% (\$6.818 per \$1,000) of the wages paid by an employer or the net profit from self-employment; this increase was authorized through provisions in the original 2003 legislation that allowed for an annual 1/100 of a percent increase in the rate over 10 years.⁹³

New York, NY: The Metropolitan Commuter Transportation Mobility Tax, a MTA payroll levy, was enacted in 2009, on employers and self-employed individuals and allows jurisdictions to levy a 0.34% tax on payroll expenses for all covered employees. It is expected to raise approximately \$1.5B annually.⁹⁴ The levy is collected within the MTA transportation district, which is comprised of New York City and its seven surrounding counties (Dutchess, Nassau, Orange, Putnam, Rockland, Suffolk, and Westchester). The levy is administered by the New York State Tax Department of Taxation and Finance and collected under the same collection mechanism as the state income tax withholding.

Paris, France: First instituted in 1971, a regional payroll levy is collected from all firms with over nine employees in municipal areas. The fees range up to 2.6% of salaries in Paris, yet are lower in smaller cities. The levy provides about half of the non-fare revenue for the transit system.⁹⁵

Strengths and Weaknesses

- More directly connects the transportation costs of employees within a transit service area to employers, giving businesses a stakeholder role in the transit system.
- Payroll levies are an efficient way to collect funds using already institutionalized methods and have a high yield in comparison to other revenue mechanisms.
- Payroll levies may increase with inflation and can contribute a significant amount of revenue even with a relatively low rate.

⁹² Department, By. "Department of Revenue: Business Taxes Home Page Transit Payroll Taxes for Employers." Oregon.gov. Web. 20 Sept. 2010. <<http://www.oregon.gov/DOR/BUS/IC-211-503.shtml>>.

⁹³ "TriMet: Payroll and Self-Employment Tax Information." TriMet: Public Transportation for the Portland, Oregon, Metro Area. Web. 20 Sept. 2010. <<http://trimet.org/taxinfo/>>.

⁹⁴ "Employers – Metropolitan Commuter Transportation Mobility Tax (MCTMT)." Department of Taxation and Finance. Web. 20 Sept. 2010. <<http://www.tax.state.ny.us/mctmt/emp.htm>>.

⁹⁵ TCRP 129



- Payroll levies are likely to be controversial politically.
- The legal basis for local payroll levies could be an issue.

Applications to MDT

Miami does not currently have a payroll levy to support local projects. Instead, businesses are taxed through a corporate income tax. State law would need to be reviewed, and possibly altered, to allow a local payroll levy to support MDT. Support for initiatives popular among local businesses, such as MetroMover service, could be good candidates for payroll levies.



Registration and Licensing Fees

Prevalence

Low. While such fees are commonly charged, they are not frequently directed to transit.

Description

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 their intercity transit network. Business-related fees include registration fees, which are 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 for or at the time of renewal. Fees vary by locality. Although requiring business registration and licensing fees is common, using these funds for transit is not typical.

Agency Examples

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%).⁹⁶

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.⁹⁷ In total, these two business license fees brought in approximately \$1.09M for the City's Transportation & Parking Fund (an enterprise fund) in 2010.⁹⁸

Strengths and Weaknesses

- Registrations and licensing fees links the transportation costs of employees directly to employers.
- Business licensing fees, even at moderate rates, show a low yield in comparison to other revenue sources such as payroll levies.
- Business licensing fees may affect a company's decision to locate in a jurisdiction, especially if they are higher than surrounding jurisdictions.

Applications to MDT

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 tax receipt 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 up to 10 employees, and \$4.50 or \$7.50 per additional employee.

⁹⁶ 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

⁹⁷ Park City Business License Fee Schedule - July 1, 2009 through July 1, 2010.

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

⁹⁸ "Fiscal Year 2011 Budget." Park City Budget Department. 7/17/2010. <http://www.parkcity.org/Modules/ShowDocument.aspx?documentid=266>



Some industries have higher fees, the most expensive of which is \$1,750 for cable TV franchises⁹⁹. However, we found no evidence that business taxes or fees are being applied to transit.

MDT staff report that downtown businesses would support a return of nominal fares to the MetroMover to make the system cleaner and safer-feeling for riders. Since replacing the fare collection equipment would be expensive, a business fee structure could be considered to offset costs.

⁹⁹ Local Business Tax Categories: http://www.miamidade.gov/TaxCollector/ol_categories_baselist.asp



Corporate Franchise Fees

Prevalence

Low. Only two examples were found where franchise fees support transit directly.

Description

Corporate franchise fees are levied on the net worth of corporations, calculated by the value of the corporation's shares, profits, and assets usually on an annual basis. Although some corporate franchise fees are targeted at specific industries like motor fuels, most franchise fees apply to all corporations and are often used in lieu of a corporate income tax. Often these funds are not dedicated entirely to transit but rather fund a general pool used for state and local government purposes that include transit.

Agency Examples

Pennsylvania: The State of Pennsylvania levies an oil company franchise tax on taxable fuels at the rate of 153.5 mills for liquid fuels and 208.5 mills for fuels.¹⁰⁰ Collected by the distributors, this revenue is utilized with other state funds for transit and other purposes.

New York, NY: MTA collects a 9% corporate franchise tax in addition to a 17% corporate surcharge linked to the Statewide Dedicated Funds Pool, with 34% of that pool supporting transit.¹⁰¹ This tax is colloquially referred to as the long-lines tax. The Mass Transit Operating Assistance fund was created by Section 88-a of State Finance Law. The downstate Mass Transit Operating Assistance (MTOA) fund account provides funding to transit systems in the 12-county New York metropolitan transportation commuter district and consists of revenues from the following sources: a portion of the Petroleum Business Tax (PBT); the MTA Corporate Tax Surcharge; a 1/4 Percent Sales Tax in the MTA region; and the Long Lines Tax.¹⁰²

Strengths and Weaknesses

- Generally, states with high corporate income taxes do not have either no or low franchise fees or have very low ones; choosing between the two often lies within state jurisdiction rather than local one.
- Franchise fees can be targeted to specific industries or areas, which often leads to a higher approval rating if the policy is seen as capturing externalities.
- Corporate franchise fees are directly linked to the state of the local economy and the ongoing valuations of the market.
- Although industries or businesses are paying them, these fees are usually passed along to consumers while producing less revenue than other mechanisms.

Applications to MDT

With few examples in other jurisdictions, incorporating a franchise fee would likely require significant public education program and a review of the legal issues in Florida and the County.

¹⁰⁰ Pennsylvania Department of Revenue. "Oil Company Franchise Tax." Pennsylvania Department of Revenue. 2010. Web. 1 Oct. 2010. <http://www.portal.state.pa.us/portal/server.pt/community/oil_company_franchise_tax/14437>.

¹⁰¹ TCRP 129

¹⁰² "Public Transportation Bureau." New York State Department of Transportation. 2010. Web. 1 Oct. 2010. <<https://www.nysdot.gov/divisions/policy-and-strategy/public-transportation/state-transit-operating-assistance>>.



Car Rental Fees

Prevalence

Low. Car rental fees are common at airport locations, but revenue is restricted to airport uses.

Description

Car rental fees used for transit are typically minimal fees paid by the renter to the rental car company and collected via state revenue departments along with any other applicable city, state or county taxes. Most car rental fees are less than one to two percent of the rental car purchase.¹⁰³ These revenues are often used for local projects or specific initiatives that can include special transit projects, capital improvements funding, or general revenue.

Agency Examples

Seattle, WA: The State of Washington passed enabling legislation to define taxes that the regional transit authority could levy including a retail sales and use tax, a motor vehicle excise tax, an employer tax, and a sales and use tax on retail rental cars. Sound Transit utilizes a 0.8% rental car tax rate bringing in approximately \$2.55M in 2009. The assessed rental car average annual growth rate is 2.4%. The state legislation allows for the authority to collect up to 2.17%, rather than the current rate of 0.8%, and in their 2010 Financial Plan, the authority states that an increase up to the allowed level of 2.17% would produce approximately \$5M in revenue without requiring voter approval.¹⁰⁴

Milwaukee, WI: In 2009, the Southeastern Regional Transit Authority (SERTA) in Wisconsin was created and authorized to collect a rental car fee to fund the planning of the Kenosha-Racine-Milwaukee Commuter Rail. Until the construction period starts, the SERTA can collect a \$2 fee for administrative costs, and after construction begins, the fee can increase up to an \$18 vehicle rental fee per transaction (indexed to inflation) in Kenosha, Milwaukee, and Racine counties. The \$2 car rental fee was initially estimated to generate as much as \$800,000 per year.¹⁰⁵

Allegheny County, PA: In 2007, Allegheny County enacted a \$2 rental car fee to support Port Authority Transit Services in addition to a 10% tax on poured alcohol. Together, the county estimated this would generate approximately \$30M per year and provide the majority of the county's portion of transit funding to the Port Authority.¹⁰⁶

Pennsylvania: The Public Transportation Assistance (PTA) Fund is used in the State of Pennsylvania to support mass transportation with the collection of several taxes and fees. The PTA taxes and fees include a tire fee, motor vehicle rental fee, and motor vehicle lease tax and other state and local taxes. The motor vehicle rental fee is \$2 per day for any period less than 30 days.¹⁰⁷

¹⁰³ TCRP 129

¹⁰⁴ www.soundtransit.org/Documents/.../2010_Financial_Plan_4-8-2010.pdf

¹⁰⁵ http://www.sewisrta.org/pdfs/2006/2006-02-20_budget_fiscal.pdf

¹⁰⁶ <http://www.post-gazette.com/pg/07339/839200-28.stm#ixzz0wUjJVBYL>

¹⁰⁷ http://revenue-pa.custhelp.com/cgi-bin/revenue_pa.cfg/php/enduser/std_adp.php?p_faqid=661&p_created=1043854140&p_topview=1



Strengths and Weaknesses

- Car rental fees are collected with other state and local fees, making them functionally efficient fees with low administration costs.
- Since car rental fees are not typically imposed on constituents, they are not as politically sensitive as other fees.
- When priced on a percentage of rental costs basis, the car rental fees are sensitive to inflation allowing them to keep up with transit operations cost.
- Car rental fees are not steady revenue sources and fluctuate with the seasons, the hospitality industry, and the economy overall.
- The percentage of the population that rent cars is fairly low requiring a larger tax to achieve a higher yield.
- Car rentals are often a result of business activity in a city where a tax can be seen as a disincentive for business to be conducted in the local economy.
- The link between car rentals and transit service is indirect.

Application to MDT

- Car rental fees have been discussed by political leaders and candidates as a potential funding solution in Florida by those involved with Lynx in central Florida, as well as those who will be involved in the new SunRail commuter rail system in the Orlando area.
- Currently, the only local County rental car fees are a \$4.60 per day customer facility charge (CFC) for vehicles rented at Miami International Airport. Those funds, however, are directed for airport-related projects, including the construction of the Miami Intermodal Center. The State of Florida charges a \$2.00 per day rental car fee, but such funds would likely be difficult to direct to MDT.



Gas Surcharges: Motor Fuel Tax and Local Option Gas Tax

Prevalence

Medium. Many municipalities charge a local gas surcharge, with some examples to support transit.

Description

Gas surcharges include both motor fuel taxes and also local option gas taxes. Motor fuel taxes are usually a state tax on gasoline and diesel sales at rates that vary from 4 to 36 cents per gallon.¹⁰⁸ Motor fuel tax revenues vary in use from state to state, mostly focused on road and highway funding, and are in addition to the federal gas tax. However, the local option gas tax is often a state-led initiative by legislators to enable local communities to collect a tax up to a certain amount on every gallon of gasoline sold in the area to fund specific projects or public services such as education, transit, roads, and others.

Agency Examples

Texas: Proposals were put forward in Texas in 2009 to raise the local gasoline tax by 10 cents a gallon to pay for local transportation projects, including rail and roads. Previously, these gas tax revenues had been directed to education, but the additional tax would focus on easing congestion through these projects.¹⁰⁹ Although this measure did not pass, it is still being considered a viable political option to be considered in upcoming legislative sessions.¹¹⁰

Las Vegas, NV: The Regional Transportation Commission of Southern Nevada (RTC) serves the region both as a transit operator but also as a planning agency and receives a 9 cent per gallon motor vehicle fuel tax in addition to a 1-cent jet fuel tax.¹¹¹

Ontario, Canada: The Ontario gas tax provides two cents per liter to the province's 90 transit systems. Started in 2004, the funds have raised more than \$1.3B in gas tax funds for large and small municipalities. The funding is distributed at a ratio of 70 per cent ridership and 30 per cent population to allow for larger and smaller transit properties to be supported.¹¹²

Strengths and Weaknesses

- Gas surcharge revenues are historically stable, notwithstanding acute changes in the oil supply or natural disasters, since short term gas purchases are not very responsive to price shifts. However, several factors may affect this stability, including potential vehicle fuel efficiency improvements as well as increased use of transit due to rising gas prices and congestion.

¹⁰⁸ Transit Cooperative Research Program (TCRP) Report 129, Local and Regional Funding Mechanisms for Public Transportation, Transportation research Board, Washington DC, 2009. onlinepubs.trb.org/onlinepubs/tcrp/tcrp_rpt_129.pdf.

¹⁰⁹ Local-option gas tax approved by House committee, By Peggy Fikac - Express-News,

http://www.mysanantonio.com/news/local_news/Local-option_gas_tax_approved_by_House_committee.html

¹¹⁰ Viewpoint: Transportation funding eyed for 2011 and beyond, Chris Riley - Leon Valley Mayor, Web Posted: 07/01/2010 12:00 CDT, http://www.mysanantonio.com/community/opinion/transportation_funding_eyed_for_2011_and_beyond_97436259.html

¹¹¹ Goldman, Todd, Sam Corbett, and Martin Wachs. Local Option Transportation Taxes in the United States. Rep. no. UCB-ITS-RR-2001-3. University of California Transportation Center, Mar. 2001. Web. 14 Sept. 2010. <<http://www.its.berkeley.edu/publications/UCB/2001/RR/UCB-ITS-RR-2001-3.pdf>>.

¹¹² Urban Transportation Task Force. "Urban Transit in Canada: Taking Stock of Recent Progress." Council of Ministers. Oct. 2009. Web. 1 Oct. 2010. <www.comt.ca/english/urbanprogress.pdf>.



- Unlike many taxes and fees there is a nexus between gas surcharges and transit. Transit can help to alleviate traffic congestion, benefiting drivers who pay the surcharge. Furthermore, increasing the cost of gas can encourage increased ridership, which is an important policy consideration.
- Gas surcharges, like other sales taxes, are regressive in nature, and increases may have an impact the transportation options of the poor.

Application to MDT

In Florida, motor fuel taxes range from 15.6 cents to 18.1 cents per gallon, depending on the county. The State of Florida tax accounts for 9.1 cents, with local option taxes accounting for the remainder. Local option gas tax can be up to 12 cents per gallon. The local option taxes are: 1) a county local option fuel tax of one to six cents per gallon-all counties have a tax of at least 3 cents and 59 counties are at the maximum of six cents per gallon; 2) ninth cent fuel tax of one cent levied by an extraordinary vote of the commission or by referendum-thirty seven counties levy this tax; and 3) county local option motor fuel tax of one to five cents; 11 counties levy this tax, with the maximum rate of 5 cents.

- Miami-Dade County currently charges a Local Option Gas Tax (LOGT): a six-cent tax on gas, gasohol and diesel. All legitimate transportation uses are allowed and can be used both for Public Works Department and Miami-Dade Transit needs. The funds are distributed between the County and municipalities pursuant to interlocal agreements based on a formula and the gas tax collected within the County. The County's share for FY 2011 is approximately \$39.5M.
- Miami-Dade County also charges a local option motor fuel tax, referred by the County as the Capital Improvement Local Option Gas Tax. As noted above, this tax can be up to 5.0 cents, but the County currently only charges 3.0 cents on gas and gasohol. Revenue from this tax may be used for capital transportation projects by either Public Works Department or Miami-Dade Transit. These funds are also distributed between the County and cities pursuant to interlocal agreements based on a formula and the gas tax collected within the County. The County's share for FY 2011 is approximately \$18.6M.
- Once the full five-cent LOGT is charged for capital, no further increases in the tax will be allowed without a change in state law as well as County approval.



Real Estate Transfer Fees

Prevalence

Low. Charging real estate transfer fees is fairly common (35 states and the District of Columbia charge such fees). However, funding transit directly with this fee is rare.

Description

Real estate transfer fees, also referred to as mortgage recording fees, are assessed on real property when ownership of the property is transferred between parties in the jurisdiction of the state or local government. Historically, mortgage-recording fees were applied to an official real estate purchase or sale that would be recorded in the public record by government officials. Whether state or local fees, real estate transfer fees generally apply to all residential, commercial, and industrial real estate. These revenues are used by local and state governments for improving low income housing, preserving open spaces, subsidizing local transit, and funding other public use projects.

Agency Examples

New York, NY: The New York Metropolitan Transportation Authority (MTA) receives capital and operating assistance through several mortgage recording taxes, which are collected by New York City and the seven other counties within the MTA's service area, at the rate of 0.30% on certain real estate mortgages. In addition, The MTA also receives an additional mortgage recording tax of one-quarter of one percent of certain mortgages secured by real estate improved or to be improved by structures containing one to nine dwelling units in the MTA's service area. Furthermore, MTA's New York City Transit division receives operating assistance directly from New York City through a mortgage recording tax at the rate of 0.625 of one percent of the debt secured by certain real estate mortgages and through a property transfer tax at the rate of one percent of the assessed value of certain properties.

Mortgage recording tax proceeds are first used to pay MTA's operating expenses. Remaining funds, if any, are allocated 55% to certain transit operations and 45% to commuter railroads operations.

Linked directly to the real estate markets, mortgage recording taxes rose significantly throughout the early part of the millennium and then declined precipitously starting in 2008 to less than half of its value at the end of 2009. If the mortgage recording tax and the urban tax had remained at the 2007 levels of \$937 M combined, this would have amounted to approximately 15% of MTA's 2010 operating costs.

Syracuse, NY: Central New York Regional Transportation Authority (CNYRTA) which operates transit service in Syracuse NY and the surrounding region receives a mortgage recording tax of 0.25% on mortgage debt. This amounted to around \$5.8 M in 2010 or approximately 10% of the Authority's consolidated operating expenses. The Authority has been seeking to double this tax levy proportion as revenues from this source have declined in the last two years.

Strengths and Weaknesses

- By investing in a property with access to transit, the buyer is gaining value from the available transit facilities and, therefore, is helping pay for that value via a fee associated with the purchase of the property.



- Mortgage recording fees are responsive to inflationary market forces and can, therefore, be effective revenue sources that keep pace with transit operations costs.
- When using a mortgage-recording fee to fund transit, a transit property is accepting the risk of fluctuations in the real estate market. For example, in 2008, NY MTA saw mortgage-recording taxes fall \$9M below projections and commercial real estate taxes by \$23M.¹¹³
- The mortgage recording fees are linked to the ownership turnover rate of the real estate market, which can slow dramatically even while property prices hold fairly, steady. Also, urban markets with more transit also tend to have higher numbers of renters which do not.
- Critics suggest that the mortgage recording fees are relatively disconnected revenue sources for transit and are not cost effective for agencies that need reliable revenue streams.

Application to MDT

Florida real estate transfer fees are \$0.70 per \$100 of consideration, except in Miami-Dade County where the fee is \$0.60 per \$100. In 2004, the real estate transfer fees generated \$1.95B¹¹⁴. The tax primarily is used to fund state operating costs.

As New York City region and Syracuse demonstrate, real state transfer fees can be material funding sources for both large and medium-sized transit agencies. Like a sales tax, the tax is sourced from throughout the region that benefits from the transit service. However, even more than a sales tax, the tax is extremely sensitive to changes in the real estate market. To mitigate this risk, a transit agency can seek a balance of regional taxes, as New York MTA does, with a combination of mortgage recording, mobility, petroleum tax receipts in addition to operating grants and fare-based revenue.

Although it may require legal action by the state legislature, the reduced stamp tax in Miami-Dade County provides a potential opening to raise new revenue. Political issues are the complicating factor, as such fees could be seen as depressing property values in a time when they are already down.

¹¹³ http://findarticles.com/p/articles/mi_m3601/is_36_54/ai_n25431386/

¹¹⁴ "State Real Estate Transfer Taxes." Released: February 16,2006. <http://www.taxadmin.org/fta/rate/Realtytransfer.html>



Non-Transit Parking Fees

Prevalence

Low. Although parking is taxed in many cities, there are only a few examples of directly providing such funds to transit.

Description

Although outside the direct control of MDT, parking fees and taxes at sites other than transit stations represent a potential transit funding source. In addition to raising revenue, transit agencies use street/non-transit parking fees as an effective parking management tool to discourage commuter parking in key locations, increase access to convenient short-term parking, and encourage commuters to shift from automobile to public transit. Revenues from parking (whether directly from public meters and garages or from taxes on private parking), can be used to fund transit related improvements. Parking taxes in U.S. cities range from 6-31% of revenues, according to a 2010 Victoria Transport Policy Institute study. In addition, the City of Chicago has a flat tax rate based on the fee for parking (over or under \$5.00).

Agency Examples

San Francisco, CA: Revenues from city-managed on street and garage parking spaces, as well as parking fines, help support San Francisco Municipal Transportation Agency (SFMTA or “Muni”) operations. In addition, the City imposes a 25% tax on all commercial off-street non residential parking transactions, with proceeds provided to general revenue and senior citizen funds as well as transit¹¹⁵. In 2007, SFMTA implemented a new parking management program known as “SFpark” using an \$18.4M grant from U.S. DOT. According to Proposition A, approved by San Francisco voters in 2007, 80 percent of city parking revenues—including potential new revenues generated under SFpark—must be used to support transportation programs, including Muni operations.¹¹⁶ SFMTA collects about \$30M a year in revenue from parking meters and about \$90M a year in parking tickets, although only \$17M of that is meter-related (half of the rest of the fines are from street-sweeping tickets).¹¹⁷ A key innovation in San Francisco is requiring the use of a designated revenue control system at private parking lots that records the transaction and revenue for the city. This has substantially reduced leakage and auditing costs.

Portland, OR: The City of Portland has used \$18M (2004 figure) parking revenue generated by street parking meters, City-owned parking garages, parking permits, and parking citation fines to fund various transit related projects. In 2005 the City paid for the Transit Mall redevelopment by increasing the parking fee to \$1.25/hour.¹¹⁸ The City also raised \$28.5M from bonds backed by parking revenues to fund the \$56.9M Portland Streetcar project.¹¹⁹

Various U.S. Cities: Some cities collecting parking taxes that do not necessarily apply funds directly to transit include Chicago (flat fee based on cost), Baltimore (11% of the price of parking), Los Angeles (10%), Oakland (10%), New Orleans (12%), Pittsburgh (31%), and Cleveland (0.8%).¹²⁰

¹¹⁵ Parking Taxes: Evaluating Options and Impacts, Victoria Transport Policy Institute, July 2010

¹¹⁶ Transit Cooperative Research Program (TCRP) Report 129, Local and Regional Funding Mechanisms for Public Transportation, Transportation research Board, Washington DC, 2009. onlinepubs.trb.org/onlinepubs/tcrp/tcrp_rpt_129.pdf.

¹¹⁷ <http://www.baycitizen.org/transportation/story/meet-your-new-parking-meter/>

¹¹⁸ www.portlandonline.com/transportation/index.cfm?a=95525&c=47376

¹¹⁹ <http://www.trainweb.org/mccann/streetcar.htm>

¹²⁰ Parking Taxes: Evaluating Options and Impacts, Victoria Transport Policy Institute, July 2010



Strengths and Weaknesses

- Promotes efficient use of existing parking facilities if the price of parking is tied to the demand for spaces
- Encourages use of public transit by increasing the cost of parking at non-transit facilities
- Generates new revenue without investment by the County in facilities
- Since both the public and private sectors provide parking, there is an opportunity to diversify revenue options
- As part of the transportation system, there is a direct link between parking and transit
- Private garage operators will likely be resistant to new fees
- Raising the cost of parking downtown could push business activity to locations with free parking, many of which are in suburban areas.

Application to MDT

As described under the System Parking Fees section, MDT's ability to attract transit riders and generate revenue from parking at Metrorail stations is made more difficult by the plentiful, low-cost parking options available in downtown Miami. Implementing fees on parking at non-transit locations would provide both a direct revenue benefit to MDT (assuming the fees were directed to transit), and make MDT services relatively more competitive with driving downtown.

The City of Miami has a 20% tax on commercial, non-residential, off-street parking. While reports show this has not degraded downtown business activity, parking lot owners report having to absorb the fee in many locations, reducing their income.¹²¹

¹²¹ Parking Taxes: Evaluating Options and Impacts, Victoria Transport Policy Institute, July 2010



Tolling and Congestion Pricing

Prevalence

Low. While tolling of roads, bridges, and tunnels is a common practice around the world and in the U.S. to fund transportation projects. Such funds, from managed lanes or tolling, are rarely applied directly to transit.

Description

Tolls may be charged as fixed, variable, or dynamic rates that change depending upon the level of congestion. Tolls have a twin benefit of producing revenue that could be directed toward transit and encouraging alternate transportation modes, including transit by raising the cost of driving. Tolls are often effective mechanisms for efficiently and economically funding new and existing transportation that relates to the resource being tolled or larger transportation goals of a community.¹²²

A more progressive type of toll known as “congestion pricing” or a “congestion charge” is being used in cities, such as London, to incentivize forms public transport while relieving road congestion. Congestion pricing is a method of levying a fee based on the supply and demand on a transportation facility. Congestion pricing uses market economics theories of pricing to limit externalities (congestion, pollution, etc.). Based on policy objectives, congestion charge revenues can be used to fund the facility on which the congestion pricing mechanism is located, or they can be directed to other transportation facilities such as transit. First introduced in Singapore in 1975, congestion pricing can be used in city centers, on major thoroughfares into the city center, or individual lanes.

Increasing innovative congestion pricing options is a priority of the Federal Highway Administration (FHWA), which has provided \$59 million in grants for tolled and priced roads and transportation facilities since 2005 under its Value Pricing Pilot program. Details on approximately 80 projects under the VPP program (including the I-95 Express Lanes in Miami-Dade County), are available online at http://ops.fhwa.dot.gov/tolling_pricing/value_pricing/index.htm

Agency Examples

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.¹²³ 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.¹²⁴

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

¹²² <http://www.fhwa.dot.gov/ohim/tollpage/history.htm>

¹²³ http://www.mtc.ca.gov/library/AnnualReport-08/MTC_AR_2008.pdf, page 21

¹²⁴ <http://goldengate.org/organization/documents/fy09-cafr.pdf>, page 28



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 project¹²⁵.

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.

Singapore: Singapore has been charging a congestion fee since 1975. The fee differs from London in that it is charged for each crossing into the designated area, rather than a single fee for the day.

Milan, Italy: Milan charges a fee of up to approximately \$12.70 on vehicles entering the three square mile inner city.

Stockholm, Sweden: Made permanent in August 2007 after a seven-month trial, the Stockholm congestion fee varies by time of day from free (between 6:30PM and 6:30AM) up to 20 Kroner (about \$2.72) during peak times (7:30-8:29 AM and 4-5:30 PM). The charge is collected via video, with pre-registered drivers billed at the end of the month.

Strengths and Weaknesses

- Congestion pricing as a fee can be inequitable, placing a heavier economic burden on those who live inside an area only accessible by the transportation system.
- Depending on the congestion pricing rate scale, many businesses within the system or directly connected to the transportation system can be negatively impacted by these policies.
- Tolling is an effective funding mechanism but requires a clear goal aligned with political interests.
- Policy goals such as increasing transit ridership and reducing automobile use can be advanced through tolling and congestion pricing. Such discussions require coordination between multiple stakeholders about transportation, a benefit in and of itself since transportation and land use planning are of segregated.
- Congestion pricing can be politically controversial, pitting suburban stakeholders against the center city, as demonstrated by the controversy in New York City over a London-style congestion pricing program for parts of Manhattan.

Application to MDT

The Florida Department of Transportation recently implemented one of the latest tolling initiatives in Miami-Dade County with the opening of the I-95 HOT lanes in 2009 northbound and in 2010 southbound. The lanes generated \$4.78 M on northbound section in first year¹²⁶, improving traffic flows not only in the paid lanes, but also in the free lanes. Expansion of the HOT lanes to the Broward County line is currently in process. While this new toll may represent a missed opportunity for MDT funds, it may be possible to add to the toll or partner to share in future toll revenues.

¹²⁵ "Tolls increased 40% on Dulles Toll Road, northern Virginia." Tollroads News. Web, 2 Jan. 2010

¹²⁶ <http://www.miamiherald.com/2010/01/14/1426237/going-south-on-i-95-express-lane.html>



The Miami-Dade Expressway Authority (MDX) Ordinance and 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 System.¹²⁷ MDX staff report they would be willing to use toll revenue for the capital costs of transit on the MDX system, but are averse to funding any transit operations. With over 116 million transactions on its four existing roads in fiscal 2009, a small additional fee per transaction could yield significant funds for transit.

The Miami-Dade Metropolitan Planning Organization (MPO) has proposed converting the South Dade Busway into a congestion-priced toll facility that would also allow the current BRT service to continue. MDX has been selected by the MPO to further study the implementation of managed lanes along the South Dade Busway. Although there are significant obstacles to this arrangement on the local and federal levels, this would provide the opportunity to fund improvements to the Busway, such as grade-separating intersections, through toll funds.

A range of legal and political hurdles would have to be overcome to implement a congestion fee for downtown Miami. The boundaries of the fee area could be highly controversial. Despite the traffic issues in the County, the fact that employment and other trip-generating locations are spread among a number of areas could make defining key congestion pricing zones problematic.

Tolls also 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 allow transit vehicle usage without tolls.

Though not tolling per-se, the County has implemented a red light camera program where violators are automatically charged for running a red light. According to a County commission staff member, the revenue for this program may not yet have been dedicated, and could be put toward transit funding.

¹²⁷ Florida Statutes, Title XXVI, Chapter 348, Part I: "FLORIDA EXPRESSWAY AUTHORITY ACT" <http://www.leg.state.fl.us/statutes/index.cfm?App_mode=Display_Statute&URL=0300-0399/0348/0348.html>.



Utility Fees

Prevalence

Low. While such fees are commonly charged, they are not frequently directed to transit.

Description

Utility fees are a broad category of fees that include both franchise taxes and flat taxes on a broad spectrum of utility providers – electricity, natural gas, telephone, internet, water and sewer, garbage collection, etc. As seen in St. Joseph, revenues from utility fees are often collected by the local government entity and are then distributed to relevant transit or public works agencies.

Agency Examples

St. Joseph, MO: The City of St. Joseph uses a utility franchise fee, which assesses a 1% fee on the gross sales of utility companies serving the local area. Utility companies include basic utilities like electricity providers, water providers, natural gas providers, but also include cable companies and communications companies. In 2009, the City earned about \$1M for its transit fund.¹²⁸

Pullman, WA: Pullman Transit operates primarily through a 2% utility fee on natural gas, electric, telephone, water, sewer, and garbage in the 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, Canada: 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.

Strengths and Weaknesses

- Utility fees tend to be a very consistent but flat revenue source due to the regulated utility markets.
- In comparison to the motor vehicle excise or household tax, a utility fee has been perceived as more politically acceptable in Pullman. Unique demographics with a large student population likely promote this view.
- There is no direct link between utility fees and transportation.
- Fees for necessities such as water/wastewater, power, and gas tend to function as regressive forms of taxes. Since utility services are a necessity, the fees will affect poor constituents more than the wealthier ones.

Application to MDT

Charging utility fees to support transit would be logistically feasible to implement, but would require political support, and, most likely, legislative changes. Franchise fees in Miami-Dade County require a referendum unless they are associated with a specific service with a rational nexus to the fee. Examples of such service fees are the storm water fee, the disposal facility fee, and the utility service fee.

¹²⁸ FY2009 YEAR END FINANCIAL REPORT, www.ci.st-joseph.mo.us/.../CAP_Agenda_Packet_062509_FINAL.pdf



Distance-Based Fares and Other Fare Structures

Prevalence

Moderate. Distance-based fares are found through zone-based systems (frequently on longer, commuter-style transportation systems), and where the fare collection infrastructure exists to support smart card technology.

Description

Traditionally, transit fares have been charged as a set price per ride. Modern fare media has enabled the implementation of more sophisticated fare policies. This may include higher fares for longer travel distance, or varying price by the time of day, or the level of congestion on the system. This enables transit properties to maximize revenue by charging riders who consume more transit service a higher fare, and helps to ensure the most efficient use of available resources.

Agency Examples

Washington, DC: The Washington Metropolitan Area Transit Authority (WMATA) uses a number of unique fare structures, including distance-based fares which charges higher fares for long trips. In addition WMATA fares are higher during peak hours (opening until 9:30AM, 3PM-7PM, and after midnight). Under this policy, a trip can range from \$1.95 to \$5.00 during rush hour or \$1.60 to \$2.75 during off-peak times. In August 2010 WMATA further segmented fares by implementing “peak-of-the-peak” pricing, which charges riders a 20-cent surcharge for trips between 7:30 and 9:00 AM and between 4:30 and 6PM.

San Francisco, CA and Seattle, WA: San Francisco’s BART and Sound Transit charge distance-based fares, but do not differentiate by time of day of travel.

Strengths and Weaknesses

- Transit service and stations are sized to accommodate peak demand (e.g., headways, size of platforms, number of escalators, etc.). Variable fares establish a link between the resources consumed and the fee paid.
- Charging higher peak-period fares charges the most time-sensitive users the greatest price.
- Sophisticated fare collection equipment is required to charge variable fares.
- Implementing variable fares complicates fare policy decisions, which are often controversial.
- Variable fares require more rider education, such as signage and brochures, since the fare structure must be communicated to transit users.

Application to MDT

The implementation of a new fare gate system for Metrorail in 2009 enables MDT to alter the ways it collects fares. Currently, Metrorail fares are a flat fee regardless of route or time of day. The new fare gates would enable distance-based fares, variable pricing based on time of day, or other fare structures to be implemented. Distance-based fares would not be entirely new to the County; bus service was charged on a zone system prior to 1978,

The implementation of the smartcard system has created additional revenue opportunities for MDT through its partnership with Tri-Rail. MDT is paid \$250,000 to \$275,000 to provide back-office support for Tri-Rail under a local agreement. In addition, the new fare collection equipment may facilitate MDT in



collecting revenue from Tri-Rail passengers who transfer to the system. MDT is working with the South Florida Regional Transportation Authority on this arrangement, under which up to \$500,000 in new revenue is expected from Tri-Rail link up services.



Room and Occupancy Surcharges

Prevalence

Low. Although almost universally levied, room and occupancy fees are very rarely used for transit.

Description

Room and occupancy surcharges (also called “tourist taxes”), are levied on the rental of rooms or lodging for a period generally less than 30 days. Depending on the area, these rates can vary by timing or have a standard fee attached. In 2009, the National Business Travel Association (NBTA) reported that, on average, a night in hotel costs \$95.61, of which \$13.12 is comprised of local and state taxes. The NBTA found that hotel room tax rates ranged from 10.05% in Burbank, CA, up to 17.91% in New York, NY.¹²⁹ Most occupancy taxes are collected by businesses and then redistributed by either the local government or the state to programs or purposes such as tourism, construction, and new development. Some entities have utilized room and occupancy taxes to include transit and transportation related activities, but these taxes are more commonly used to fund development and tourism projects.

Agency Examples

New Orleans, LA: The City of New Orleans has a total hotel tax of 13% with an additional fee of \$2.00 per day; of this 13% the Regional Transit Authority receives 1%.¹³⁰

Las Vegas, NV: A room tax is being used for road improvements on the Las Vegas Strip as well as relocation of a freight rail line in downtown Reno.¹³¹

Strengths and Weaknesses

- Room and occupancy surcharges are common throughout the U.S., with more frequent use in larger cities that have more tourism and development.
- These types of surcharges are politically well received at either the state or local level due to their emphasis on linking visitors to tourism investments.
- Occupancy surcharges are typically paid by visitors, which limits the direct impact on local residents although it can affect local business to a certain degree.
- Collection is straightforward with low implementation costs since preexisting hotel tax collection systems can be used.
- Room and occupancy surcharges are generally based on value of the room, which ensures occupancy tax revenue is sensitive to inflation.
- The link between “tourist taxes” and public transportation is often not direct, although some transit systems (e.g., streetcars) may have high non-resident ridership.

Application to MDT

Miami-Dade County charges various tourist taxes to fund tourist infrastructure and selected other projects. These include the Convention Development bed tax (3%), a Tourist Development Room Tax (2%), and a

¹²⁹ Yu, Roger. Taxes on hotel rooms are rising. USA TODAY. 4/5/2010. http://www.usatoday.com/travel/hotels/2010-04-05-1Ahoteltax05_ST_N.htm

¹³⁰ www.sfcvb.org/media/downloads/research/Summary_of_Hotel_Tax.pdf

¹³¹ <http://www.its.berkeley.edu/publications/UCB/2001/RR/UCB-ITS-RR-2001-3.pdf>



Professional Sports Franchise Facility Fee (1%), as well as a Tourist Development Surtax of 2% on hotel/motel food and beverage sales. However, like most metro areas, County revenues are targeted toward tourist infrastructure such as arts and entertainment centers, stadiums, tourism and convention marketing. Together, all Miami tourist taxes generated over \$81M in revenue in fiscal 2009, and are being used for tourist-related facilities and purposes.¹³² However, none of these funds are dedicated toward transit.

Miami has two unique transit-related components that support tourism, providing a direct link between visitors and transit expenditures, and thus provide a basis for using tourist taxes dollars for transit:

- The MetroMover provides transportation to hotels, the convention center, American Airlines Arena, Brickell business district, and Government Center that is convenient for visitors.
- The Miami Intermodal Center (MIC), currently under construction, will provide connectivity to Miami International Airport.

¹³² Miami Dade County, Revenue Data, <http://www.miamidade.gov/taxcollector/library/Tourist%20Taxes.xls>



Vehicle Fees

Prevalence

Medium. These frequently levied fees help fund state transportation systems, which often includes transit. However, there are fewer examples where a portion of revenue is dedicated to transit.

Description

Generally, states, cities, or counties have one or more vehicle-related fees that include fees on the title, registration, tags, emissions, or inspection of a vehicle. Also, these fees can be flat rate charges or weighted by characteristics like age, weight, or value. Vehicle fees are commonly used to make up a significant portion of state transportation funds, which can be designated to transit entities but are not often directly slated to transit properties. Similar to a local option gas tax, states like California have passed legislation to allow local entities to collect a vehicle registration charge for transit-related purposes if approved by constituents.

Agency Examples

Seattle, WA: Sound Transit used both a motor vehicle excise fee of 0.03%, which is levied, by the state Department of Licensing on the value of the vehicle when it receives a license. Together with the 0.08% rental car tax (discussed in additional section), Sound Transit collected \$69.9M in 2009.¹³³

San Francisco, CA: The San Francisco County Transportation Authority (SFCTA) has moved to utilize recent state legislation (CA Senate Bill 83) allowing statewide entities authorized as congestion management agencies, of which SFCTA is one, to collect an annual \$10 vehicle registration fee in their county.¹³⁴ The SFCTA must receive voter approval on November 2, 2010, (Proposition AA Vehicle Registration Fee) to begin to use the fee. SFCTA has estimated that the fee could generate up to \$5M per year.¹³⁵ Although not approved for use yet, this state allocated funding source may set the precedent for other states seeking local transportation funding.

New York, NY: MTA raises \$100M in revenue from new or higher fees to vehicle registrations, car rentals fees and taxi fees. Recent increases to balance the MTA operating budget included a 50-cent increase in the taxi base rate from \$2.50 to \$3.00, a \$2 charge on driver's licenses, raising the vehicle registration fee by \$25, and a 5 percent sales tax on rental cars.¹³⁶

Raleigh, NC: The Triangle Transit Authority receives dedicated revenue from a \$5 annual vehicle registration fee which was authorized in 1991. This fee was structured to be able to increase as high as \$10 by with the agreement of both the Triangle Transit board and the North Carolina legislature.¹³⁷

¹³³ Sound Transit Adopted 2010 Budget. 12/1/09.

<http://www.soundtransit.org/Documents/pdf/about/financial/2010/FinalAdopted2010Budget.pdf>

¹³⁴ SB 83 Additional Vehicle Registration Fee Expenditure Plan. 7/15/10.

<http://www.sfcta.org/images/stories/Programming/SB83/sb83%20expenditure%20plan.pdf>

¹³⁵ Vehicle Registration Fee for Transportation Improvements Overview - August 2010.

http://www.sfcta.org/images/stories/Programming/SB83/sb83_fact_sheet_081010.pdf

¹³⁶ Beck, Graham, "Will the Bailout Plan Save the MTA?", Gotham Gazette, May 11, 2009

¹³⁷ Miami-Dade County Transit. TRANSIT DEVELOPMENT PLAN - FY 2010 - 2019. December 2009. Financial Plan.

http://www.miamidade.gov/transit/improve_10year.asp



Strengths and Weaknesses

- Transportation is funded by vehicle registration fees in many jurisdictions across the U.S. Utilizing a local option vehicle fee for transit has low implementation costs since it can be collected with other vehicle registration fees.
- Additionally, the general public already associates vehicle fees to transportation funding, perhaps increasing political acceptability of such a fee.
- Allowing vehicle fees internalizes the cost of congestion and pollution to car users while incentivizing potential solutions like transit.
- There is no natural linkage between vehicle fees and public transportation, since the fees are likely too small to significantly reduce the amount of auto ownership.

Applications to MDT

The State of Florida currently uses a 12-month registration with an initial registration fee of \$225 (charged when applicant does not have a Florida registration to transfer) and then renewed biennially at an annual cost of \$46.15 to \$70.65.¹³⁸

In 2004, the State of Florida Department of Highway Safety & Motor Vehicles estimated that 13M passenger cars and trucks were registered.¹³⁹ However, there is no ability for local counties to charge vehicle fees. Therefore, state legislation would be required to add a fee for MDT.

Vehicle fees are used to support transportation for the disadvantaged in Florida and the County. Funding for the program is supported by \$1.50 from each vehicle license tag sold and \$1.00 voluntary donation from tag renewals. These funds, as well as other sources such as revenue from parking tickets in handicapped spaces, are placed in the Transportation Disadvantaged Trust Fund (TDTF), which provided \$7.2 million to the County in FY 2008.

¹³⁸ <http://www.flhsmv.gov/dmv/faqmotor.html#4>

¹³⁹ Motor Vehicles Facts & Figures, http://www.flhsmv.gov/reports/facts_mv.html



Vehicle Miles Traveled (VMT) Fees

Prevalence

Very Low. Although theoretically a strong revenue source, there are currently no VMT fees collected in the U.S.

Description

Vehicle Miles Traveled (VMT) fees are collected based on the total miles driven by cars rather than the gas consumed; this fee structure is often proposed as a “value capture” alternative to the current federal gas tax. VMT fees are based on the idea that taxes levied on consumption are not as comprehensive as those based on distance and could have important incentive effects on traffic (less congestion), the community (more multimodal centers), or the environment (less pollution emissions from the number of vehicle miles traveled). Under the system, car owners are charged a rate per mile traveled that is accounted for using a simplified global positioning system (GPS) receiver or odometer to assess distances. Rates may vary based on vehicles classes, types, consumption rates, or other factors VMT can be converted to a congestion pricing charge or a weight-distance fee to reflect an individual’s vehicle wear and tear on the road system.

Agency Examples (Used or Tested)

U.S. Federal: A \$16.5M Federal Highway Administration Road User Fee Pilot Program pilot study of mechanisms and approaches to replacing fuel taxes with mileage fees was conducted over two years across several states. Cities were study was tested: Portland, OR (more below); Austin, TX; Baltimore, MD; Boise, ID; Eastern IA; Raleigh, NC; and San Diego, CA.¹⁴⁰

Portland, OR: As part of the Road User Fee Pilot Program pilot project (discussed above), VMT was used on 280 vehicles in Portland with an odometer using GPS technology to assess distance and costs at gas stations. The pilot used a 1.2 cents VMT fee per mile for off-peak driving and 10 cents per mile in congested areas.¹⁴¹ This test showed a resulting reduction in vehicle miles traveled.

Germany: A VMT is used on the country’s highway system for large trucks, which are outfitted with GPS units in the vehicles to allow for automatic VMT collection.¹⁴²

Strengths and Weaknesses

- Yields for VMT fees are expected to vary based on market forces similar to other “value capture” techniques like road and bridge tolling, congestion pricing, and emission fees.
- Fuel efficiency, although regarded positively for the environment, has already begun to impact federal gas tax revenues, leading to less revenue to maintain both road and transit transportation. Consideration of electric cars further encourages consideration of VMT.
- VMT collected for transit, in comparison to other methods, is considered an effective “value capture” method that redistributes incentives to limit road use.

¹⁴⁰ Kuhl, J. “Road User Charge Study.” Public Policy Center, University of Iowa, Iowa City, 2007.

¹⁴¹ Oregon Department of Transportation. Road User Fee Pilot Program. Oregon Administrative Rules, Division 80. http://arcweb.sos.state.or.us/rules/OARS_700/OAR_731/731_080.html.

¹⁴² National Surface Transportation Policy and Revenue Study Commission 2007



- Concern for the privacy of citizens while collecting information on VMT is a key political issue. However, successful state testing of VMT in Oregon used a one-way GPS signal that does not allow tracking and did not identify locations. ¹⁴³
- VMT may capture less than other tax methods in more heavily populated areas since the distance traveled may be smaller while gas consumption would be high for cars idling on congested roads.
- Since the policy goal for VMT fees is to reduce automobile use, it creates synergy to fund transit with these fees.
- VMT has higher implementation, technology, and administration costs to input GPS, odometer, or equivalent equipment in all cars in addition to any reading and transmission equipment and maintenance across the area. In Oregon, officials estimated that it might take an estimated \$20M to establish a commercially viable VMT program. ¹⁴⁴
- Charging VMT fees raises issues about the distribution of revenue. If one locality charges a VMT fee and another does not, it is unclear how drivers from out of the area could be charged. Similarly, drivers may pay regular gas taxes in other localities and then be subject to VMT charges in the home locality.
- VMT requires tracking driving of individual cars. This raises privacy concerns, as the government would obtain information about the amount of miles travelled, and potentially the locality where cars are driven.

Application to MDT

Despite the theoretical benefits of a VMT fee, the complexity and privacy concerns has impeded its implementation in the U.S. and around the world. VMT charges, therefore, represent a potential concept for the future rather than for near-term revenue enhancement.

¹⁴³ <http://www.csmonitor.com/Commentary/the-monitors-view/2009/0227/p08s01-comv.html>

¹⁴⁴ http://www.gazettetimes.com/news/local/article_4f21fc65-edce-568d-8236-cb1d084cecc5.html



Excise Fees

Prevalence

Low. While such fees are commonly charged, they are not frequently directed to transit.

Description

Excise fees refer to those taxes levied on goods and services for a whole community's benefit; the tax revenues are often allocated to a public good or service. Goods historically included were alcohol, tobacco products, prostitution, and gambling; more contemporary excise fees discussed nationally relate to sodas, fast food, caffeinated products, and candy. Across the U.S., each state levies a state excise fee on cigarettes at rates varying from cents to a few dollars, and over 450 localities collect cigarette taxes where they are used for a variety of purposes, such as healthcare and prevention programs. In many states, liquor also carries a state excise fee at varying rates ranging from \$1.50 to \$12.80 per gallon, whereas wine typically has an excise fee of 11 cents to \$2.50 per gallon.¹⁴⁵ Additional local taxes are occasionally levied on alcohol, such as in Minneapolis that taxes alcohol sold within the downtown district. A majority of the states have lottery and casino taxes, estimated to provide up to \$5.5B in 2009 to state and local governments, which are levied to significantly support public transportation, particularly for the elderly.¹⁴⁶ These excise fees are often at the state level and are then allocated to localities. Only recently have states and some cities, such as Portland, Oregon, begun to utilize excise fee revenues for social programs including transit.

Agency Examples

Allegheny County, PA: In 2007, Allegheny County Council adopted county taxes that included a 10 percent tax on poured alcoholic drinks and a new \$2-a-day levy on car rentals to support the Port Authority Transit.¹⁴⁷

Pennsylvania: The State of Pennsylvania provides a percentage of lottery revenues to fund the Free Transit Program, a 65+ senior transit program in off-peak hours, in addition to providing the Shared-Ride Program, where seniors pay 15% of the fare and the Lottery fund covers the remaining 85% of the fare. In FY2008-09, the Lottery reported that \$154.6M was granted to the Free and Shared-Ride Programs, funding approximately 37.1 million free rides and 4.8 million shared rides.¹⁴⁸

Portland, OR: The City of Portland uses state cigarette tax revenues for funding with Portland's MAX light rail transit system. In 1996, Tri-Met collected a cigarette tax in total of \$1.79M, representing 1.2% of the operating revenue sources.¹⁴⁹ In 2005, Tri-Met collected \$1.17M, representing 0.38% of the operating revenue sources, and in 2007, the property collected \$844,000 in cigarette taxes.¹⁵⁰

¹⁴⁵ State Tax Rates on Distilled Spirits. (January 1, 2010). www.taxadmin.org/fta/rate/liquor.pdf

¹⁴⁶ American Gaming Association. Industry Information - Fact Sheets : Statistics on TAX PAYMENTS - COMMERCIAL CASINOS, http://www.americangaming.org/Industry/factsheets/statistics_detail.cfv?id=10

¹⁴⁷ Rujumba, Karamagi. Pittsburgh Post-Gazette, County adopts drink and car rental taxes: After heated debate, budget passes with two new levies for transit, 12.05.07. <http://www.post-gazette.com/pg/07339/839200-28.stm>

¹⁴⁸ PA Lottery: Lottery-Funded Benefit Programs, <http://www.palottery.state.pa.us/content.aspx?id=62>

¹⁴⁹ TriMet Fact Sheet, <http://www.rosecitytransit.org/more/facts96.html>

¹⁵⁰ Facts about TriMet, October 2005. www.cts.pdx.edu/prof_courses/LRT_Policy/trimetfactsheet.pdf



Trenton, NJ: The State of New Jersey levies an 8% tax on the total gross gaming revenues (minus the amount paid out as winnings and adjusted for uncollectible patron checks), which goes into the Casino Revenue Fund (“CRF”) and is administered by the Casino Control Commission.¹⁵¹ In 1995, the revenue yield was \$288.8M, and in 2009, New Jersey’s casino resort industry reported \$3.9B in gross revenue providing \$295.3M for the CRF. In 2004, the CRF allocated 4% of the total fund, approximately \$25M, to the Senior Citizens and Disabled Residents Transportation Assistance Program.¹⁵² In 2010, the Commission allocated 7.5% of the CRF, approximately \$30.2M, to this transportation program which funds, based on a formula, paratransit services for the elderly and disabled in 21 New Jersey counties. NJ Transit reported that the CRF funded 40% of almost 4 million rides per year are provided through these countywide paratransit systems. Additionally, the Commission recommended that increase in funding by 1%, to total 8.5% of the CRF for senior transportation citing increasing costs to operating costs while showing an increasing demand for service by seniors.¹⁵³

Strengths and Weaknesses

- Although rarely used for transit, excise fee revenues are more politically feasible when redirected for social causes (public education, college education, senior transportation, etc.). With city congestion and climate change issues rising to the forefront of the social and political agenda, these types of revenues may begin to be redirected to transit more frequently.
- Excise fees make harmful activities more expensive, theoretically reducing participation.
- Excise fees are limited by both the revenue base and by the number of facilities or areas in which gaming is conducted. In New Jersey, even with an 8% tax on gaming revenues, the total represents less than 5% of state revenues. To obtain an equivalent amount of revenue a charge on a larger base could be much lower.
- Excise fees are considered to be morally conflicting since the state and local residents are receiving revenue from potentially addictive activities related to alcohol, cigarettes, and gambling.
- Many studies have been conducted around the regressive nature of excise fees, since lower income participants who partake spend a greater proportion of their income than other participants.

Application to MDT

The State of Florida collects most excise fees on products purchased within the County. This includes excise fees on liquor sales (\$6.50), taxes on tobacco products (\$1.35 per pack for cigarettes and \$1 per ounce for smokeless tobacco). The County receives some excise fee funds through its regular sales taxes and the Tourist Development Surtax, which includes a 2% tax on all food and beverages served by restaurants and other retail establishments. However, neither of these taxes charges more for excise fee products than other consumables.

Gambling is legal in various forms in Florida. State gambling revenue totaled more than \$138 MM from slot machines, \$957 MM from pari-mutuel wagering (dog racing, horse racing, and jai alai), and \$104 MM from card rooms.¹⁵⁴

¹⁵¹ MADHUSUDHAN, RANJANA G., BETTING ON CASINO REVENUES: LESSONS FROM STATE EXPERIENCES, [http://ntj.tax.org/wwtax/ntjrec.nsf/0/5656d5c72099e54185256863004b1f37/\\$FILE/v49n3401.pdf](http://ntj.tax.org/wwtax/ntjrec.nsf/0/5656d5c72099e54185256863004b1f37/$FILE/v49n3401.pdf)

¹⁵² New Jersey Casino Revenue Fund 2004, <http://www.state.nj.us/casinos/about/commrepo/docs/crf.pdf>

¹⁵³ 2010 Annual Report New Jersey Casino Revenue Fund Advisory Commission, <http://www.nj.gov/casinorevenue/reports/crfacannrpt2010.pdf>

¹⁵⁴ Florida Department of Business and Professional Regulation, <http://www.myfloridalicense.com/dbpr/pmw/PMW-statistics.html>



Miami-Dade voters approved a measure to allow slot machines at horse tracks in 2008, with funds directed to the Florida Educational Enhancement Trust Fund. Florida also collects taxes on gambling concerns such as jai alai and dog racing. However, competition from Native American-run casinos has impacted gaming companies, and forced the state to reduce taxes to keep those industries competitive.^{155,156} The reduced revenue from gambling taxes will make it difficult to redirect funds from these sources toward transit. MDT staff suggest that excise fee increases for transit may be most likely if the proceeds fund a particular service such as STS or GoldenPass.

¹⁵⁵ "Dog tracks and jai alai frontons offered tax break", St. Petersburg Times, April 14, 2010

¹⁵⁶ Florida Gaming losses deepen as jai alai struggles, South Florida Business Journal, August 17, 2010



V. Conclusions

A substantial amount of information is available on efforts to enhance revenue for transit. Current references that discuss funding include overview listings of definitions (e.g., Transit Cooperative Research Program's Report 129), academic focus on individual techniques ("Taxing Property Values for Transit"), individual case compilations ("Lessons Learned in Transit Efficiencies, Revenue Generation, and Cost Reduction") and news reports. This study goes further in order to support the collaborative processes and decisions of local stakeholders by compiling relevant context and applicability for a full range of revenue enhancement techniques.

It is critical to note the scale of the challenge makes it clear there is no single solution to solve revenue shortages. As quoted in TCRP 129, the City of New York Independent Budget Office in 2007 suggested what may be the bottom line revenue strategy for most transit agencies in the future, "it is likely that remedying the problem will require a mix of actions and sources that will spread the burden across a broad range of the region's businesses and residents."

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

1. The avenues for generating transit operating revenue are fairly well defined. Nearly all agencies' local funding is generated primarily by sales and/or property taxes. There is no single solution to solve revenue shortages. Miami's sales surtax, at a half-penny, is not atypical but is lower than the 1%+ charged in many cities (e.g., Dallas, Atlanta, Chicago). Property taxes are not dedicated to MDT, but do become general fund revenues that are used, in part, to support transit.
2. System revenue, while important to maximize, will not fully close the projected budget gap.
 - There are many innovations in advertising, but, on average, transit properties generate revenue equal to only 1.2% of operating costs through advertising, and very few have boosted that figure above 2%. Still, MDT is on the low end at 0.87%
 - Naming rights sales provide an opportunity to boost revenue without affecting taxpayers, as recent success in Tampa, Cleveland, Philadelphia, and elsewhere has shown. MDT is currently pursuing this option through its contract with Front Row.
 - Given the competition of downtown parking and the policy implications of making transit more expensive, there is limited revenue growth potential for system parking or fare changes.
 - Concessions would provide a customer service benefit, but are likely limited additional revenue.
3. U.S. cities employ a wide mix of methods to subsidize transit operations. Many cities have used a mixture of such sources to close budget gaps, including creatively using fees and charges not typically associated with transit such as utility fees, and excise fees. Miami-Dade County should fully explore the full range of alternatives available and determine which may be most appropriate for the community.
4. Value capture tools are among the most powerful non-tax revenue sources. Direct tariffs on business and development through impact fees, special assessment districts, or payroll levies have the greatest revenue potential. However, gaining support for new revenues is typically linked to



expansion of service. Tax increment districts are a more politically benign method to capture value, but revenue may not be reliable. Broward County has demonstrated that it is possible to include transit capital and operating costs in the development impact fee.

5. Tolling is a key potential new source for revenue. With the MDX's conversion to Open Road Tolling and FDOT's implementation of toll lanes on I-95 in the County, there appears to be an opportunity to form a partnership that could provide a revenue stream to MDT. Other transit properties, including New York MTA, San Francisco, and many international cities have successfully applied toll revenue for transit operations and capital.
6. There are a number of enhancements MDT may be able to undertake quickly to increase revenue, such as the following:
 - Aggressively pursue advertising solutions, such as bus and train wraps, domination advertising, and variable signage.
 - Sell naming rights for Metrorail and Metromover stations. MDT currently has a contract to pursue naming rights, but must carefully oversee the contractor and develop partnerships to implement this solution.
 - Capitalize on MDT's right-of-way in highly-trafficked areas such as the I-95 corridor, the US-1 corridor along the Busway, and elevated structures along Metrorail. In these areas, advertising, billboards, and joint development opportunities are available. Resistance from local stakeholders to advertising has hampered such efforts in the past, so strong public communication and commitment will be needed.
 - Stay abreast of technology solutions that are at the cutting edge of transit partnerships. Wi-Fi, GPS-based advertising, social media may present opportunities to grow revenue.
7. The Research Team examined international transit operations in Europe, Asia, and Latin America. In general, Europe and Latin America are more likely to contract out transit operations. At the same time, they tend to view transit as a federal responsibility, and consequently, these properties experience a greater national participation in federal funding. Some countries, such as Japan, witnessed an unprecedented growth in their advertising revenues from "dynamic advertising" on their equipment, primarily rail. Therefore, U.S. rail agencies including MDT should continue to learn from international experience with contracting and greater advertising experimentation. However, this analysis should be in context with the differences in U.S. and international funding, making a direct comparison challenge.
8. 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. It will be necessary to continue and possibly broaden the scope and reach of these efforts.



VI. Appendices

Annotated Bibliography

The following is a summary of academic and other expert sources the Research Team reviewed to develop a menu of funding options for MDT. The annotated bibliography is divided into sections for domestic U.S. research and international research.

Key Resources

1. Alternative Ways of Funding Public Transport

Ubbels, B., et al., "Alternative Ways of Funding Public Transport," European Journal of Transport and Infrastructure Research, Vol. 1, No. 1, pp. 73–89, Technische Universiteit Delft, Netherlands, 2001.

This paper explores alternative, increasingly implemented, sources of funding, i.e., local charges or taxes that are leveraged to support public transport (such as local sales taxes, parking charges etc.). Based on an overview of several case-studies all over the world, there is a large potential for applying unconventional charging mechanisms, including: cross subsidization (a profit sharing method for all local utilities where the profits from other utilities cover expenses of the loss-making public transport) and using parking fee revenues for a dedicated public transport fund (Heathrow, Stansted and Gatwick airports have passengers contribute an average 25 pence for every parking transaction). The range of innovative revenue sources discussed include: concessions, turnkey development, new fare structures, value capture strategies, use of property rights, employment taxes, leasing techniques and hypothecated taxes (local), taxation, cross subsidization, etc.

2. Transit Advertising Revenue: Traditional and New Sources and Structures

Transit Cooperative Research Program, TCRP Synthesis 32, Transit Advertising Revenue: Traditional and New Sources and Structures, Washington, DC, 1998.

This report covers innovative techniques in advertising highlighting opportunities to generate advertising revenue from advertising on pieces of equipment, property, and printed material at the transit agency.

This synthesis of transit advertising was based on a literature search, interviews, and survey data obtained from 26 U.S. transit agencies and 1 foreign agency. Some of the key findings of this report:

- Most agencies have revenue-generating advertising programs (22 out of 27 agencies).
- Advertising revenue as a percent of operating budget is small with annual income ranging from \$1,000 in Dayton, OH to \$17M in NY City; the four largest agencies not including NY average \$6.1M a year.
- Transit agencies for the most part are contracting out their advertising programs; all of the large U.S. transit agencies in the survey population contract out. Six agencies do their own in-house sales. Notable is LYNX system (Orlando), a small agency with an in-house program generating a



sizable annual revenue stream. The contract term at most other agencies varies from 2 to 15 years, averaging 5 years for about half the contracts.

- All transit systems with outside contracts monitor the contractors for compliance.
- Foreign transit agencies seem to be more aggressive in trying new advertising projects—agencies in London, Dublin, and Montreal have allowed everything from fully-wrapped trains to stair tread and hubcap ads and Coca-Cola handstraps. Agencies in Asian countries also seem more willing to explore new ways to earn revenue from advertising, from ads hanging from the ceilings of Kyoto subway cars to taped advertisements played on tourist buses in Nikko, Japan.
- Revenue sources other than ridership and advertising include concessions, parking fees, joint development projects, sales taxes, excess land sales, fuel sales, fiber optics, utilities and communications cables, criminal fines, and interest income. LYNX said it makes money painting and designing vehicles for other agencies and companies.
- Transit agencies don't have a solid fix on the costs associated with managing their advertising program. Further study is recommended on this subject.

3. Transit Cooperative Research Program – TCRP Project 51 – Transit Advertising Sales Agreements

Transit agencies in the United States accept and display advertising on their property and vehicles. Although the primary purpose is raising revenues, transit advertising serves other purposes as well, such as promoting transit services and providing advertising space for nonprofit agencies. This report includes information provided by 53 transit agencies. Total revenues from advertising sales averaged 1.5 percent of total operating funds. Advertising revenues appear more significant if viewed in light of fare revenues; total advertising revenues were 4.4% of the agencies' total revenues from fares. This report documents and summarized transit agencies' experience with advertising sales and current practices for advertising sales, contracting and display. Of the transit agencies surveyed the types of advertising most used in buses are exterior at 95%, interior 79%, and wraps 23%. Rail car interior and station advertising plays the dominant role in advertising on rail property. One-third of the agencies carry advertising on the exterior of rail cars. Exterior rail car advertising is not necessarily attractive to advertisers because many rail lines operate in tunnels and outdoor rail lines often run through thinly populated areas. There is significant range in revenues derived from advertising sales. The range reported goes from \$50,000 for small transit agencies to revenues ranging from \$3.5M to \$20M for large transit agencies in top 20 media markets such as NJ Transit and Massachusetts Bay Transportation Authority in Boston.

4. Practical Measures to Increase Transit Industry Advertising Revenues

TCRP Project B-33, "Practical Measures to Increase Transit Industry Advertising Revenues," Transportation Research Board, Washington, DC, <http://rip.trb.org/browse/dproject.asp?n=11725>

Transit advertising accounts for less than 0.5 percent of US advertising spending. Because this source of operating revenue for public transit agencies is such a small fraction of total operating revenues, it has received little focused attention in the past. However, with the current shift of media dollars out of tradition media, and into non-traditional media, which includes on-line advertising, transit agencies are now considering whether or not their advertising assets could be making a greater contribution to their operating revenues. Currently transit advertising revenue is around \$800M. The purpose of this report is to



understand advertising decision makers' perceptions of transit advertising and develop strategies for improving these perceptions and increasing transit advertising revenues.

The outlook from organizations that track media trends is that the shifting of dollars out of traditional media and into non-traditional formats will continue, despite an overall decline in advertising spending due to the recession. However, as a medium in competition with billboards, newspapers, the internet, and other new media still in development, transit advertising still has quite far to go. It seems that, among others, transit advertising has serious image and product deficiencies. Also transit advertising sales materials are not as effective as they could be at "making the case" and transit advertising's positioning is neither highly motivating nor differentiated from billboards. So while transit has the makings of a sought-after medium, in its current shape, it lacks credibility, relevance and distinctiveness in today's advertising market. The article presents a number of recommendations including promoting the benefits of transit media, conducting qualitative research with media planners to take full advantage of the media potential for increasing its role in operating revenues.

5. Local and Regional Funding Mechanisms for Public Transportation

TCRP Project B-129, "Local and Regional Funding Mechanisms for Public Transportation,"
Transportation Research Board, Washington, DC, 2009.
http://onlinepubs.trb.org/onlinepubs/tcrp/tcrp_rpt_129.pdf

The purpose of this report was to compile a comprehensive list of funding sources that are in use or have the prospect of being used to support public transportation. The project was carried in two phases. The first phase focused on examining the literature and grouping the revenue techniques in categories. The second phase incorporated interviews to ensure that a comprehensive list of funding sources was compiled. The long list of funding sources were put together in five distinct categories: 1) traditional tax and fee based transit funding sources; 2) common business activity and related funding sources; 3) revenue streams from projects; 4) new user or market-based funding sources; and 5) financing mechanisms. The interviews focused on the revenue techniques in the first two categories "traditional taxes and fees" and "common business, activity, and related funding sources." A database was developed and attached to the report.

Important details gleaned from the review showed that fares and other earned income account about 51 percent of revenues, and virtually all of these funds are used for operations. It also showed that local dedicated sources accounted for nearly 18 percent and included sales taxes, property taxes, gas taxes, income taxes, tolls, and others. The report compared funding sources by system size and type of agency. The report also suggested a number of steps in enacting new funding sources for public transportation.

6. Transit Impact Development Fee

SFGov, San Francisco, Chapter 38: Transit Impact Development Fee,
www.municode.com/content/4201/14131/HTML/ch038.html.

In 1981, the City of San Francisco enacted an ordinance imposing a "Transit Impact Development Fee" (TIDF) on new office development in the downtown area of San Francisco. The imposition of the fee was based on the "Transit Impact Development Fee (TIDF) Study" showing that while new office construction will have a substantial impact on San Francisco MUNI (MUNI) services, new development and new land



uses will also require MUNI to increase the number of revenue service hours. In 2001, additional TIDF studies concluded that new non-residential uses in San Francisco would generate demand for a substantial number of auto and transit trips by the year 2020 and recommended that the TIDF be extended to apply to most non-residential land uses. The study recommended that the TIDF be extended to apply to most non-residential land uses and that a new TIDF should be created which would range from \$8 to \$10 depending on the type of facility developed. Additionally, the TIDF study recommended that the City enact an ordinance to impose transit impact fees that would allow the transit agency to maintain its base service standard as new development occurs throughout the city. The proposed ordinance would require sponsors of new development to pay a fee that is reasonably related to the financial burden imposed on the transit agency for new development. The financial burden is measured by the cost that will be incurred to provide increased service to maintain the applicable base service standard over the life of such new development. Impact fees are estimated for each economic activity category and exclude facility maintenance and operations expenses. Impact fees are paid at issuance of certificate of occupancy, and as a condition precedent to issuance of any certificate of final completion. The ordinance allows for providing a credit for prior uses eliminated on the site and does not apply to the portions of the property that are exempt from real property taxation. The fees are reviewed every five years.

7. Innovative Techniques in the Planning and Financing of Public Transportation Projects

Eno Transportation Foundation, TCRP Research Results Digest 77: Innovative Techniques in the Planning and Financing of Public Transportation Projects, Transportation Research Board of the National Academies, Washington, DC, May 2006.

Overview of the mission that investigated innovative techniques in the planning and financing of public transportation projects in Spain, Denmark, the People's Republic of China and Japan, and their ability to demonstrate new ideas or unique approaches to handling public transportation challenges.

8. Funding Strategies for Public Transportation

Transit Cooperative Research Program, TCRP Report 31, Funding Strategies for Public Transportation, Volume 2 Casebook, Washington, DC 1998

Addresses the current state of funding for public transportation in the United States, the various circumstances that have contributed to today's funding environment, and specific strategies that transit agencies are pursuing to identify new sources of funding. The final report provides a national perspective on public transportation funding while the casebook presents case-level information on innovative methods for generating revenue for public transportation capital and operating costs.

9. Survey of State Funding for Public Transportation Final Report

American Association of State Highway and Transportation Officials, Survey of State Funding for Public Transportation Final Report, 2007.

Provides a summary of state transit funding for the 50 states and the District of Columbia. Information includes funding sources, amounts, programs, eligible uses and allocation, and per



capita state transit funding. The report also includes an overview of the results of transit-related state and local ballot initiatives held in 2006.

10. The Economic Effects of Public Transport

Walmsley, D., and G. Gardner. The Economic Effects of Public Transport. Transport Research Laboratory in TRIS Database: "Taxing Property Values for Transit," 1993.

Studies from Western Europe, North America, and various developing countries show how changes in the organization and financing of public transport affect patronage and urban development. Its general findings could apply, perhaps on a smaller scale, to other improvements in public transport such as bus ways. It considers funding from: (1) revenues, (2) taxation, (3) land-value capture, (4) advantages and disadvantages of assured funding, and (5) the involvement of private capital. Besides improving public conveyance, rapid transit systems can also improve the environment and the "image" of a city, as well as encourage new urban development and enhance safety. Bus transit deregulation in the United Kingdom illustrates how market disciplines can be applied to bus operation, and how privatization might affect public transport. The report offers recommendations"

11. Local Option Transportation Taxes in the United States, Institute of Transportation Studies

Corbett, Sam, Goldman, Todd, and Wachs, Martin, Local Option Transportation Taxes in the United States, Institute of Transportation Studies, University of California at Berkeley, Berkeley, California, March 2001 and <http://repositories.cdlib.org/its/reports/UCB-ITSRR-2001-3/>.

Provides overview of the laws that all 50 states have used to authorize local option transportation taxes, the extent to which local areas have adopted them, and how the revenues are used and governed. Hotel taxes are used in Nevada, Louisiana, and South Carolina to fund transportation projects. Colorado, Illinois, Idaho, Maryland, Nevada, and Washington have used impact fees to fund transportation improvements.

12. Fueling Transportation Finance: A Primer on the Gas Tax, Center on Urban and Metropolitan Policy

Puentes, Robert and Prince, Ryan, Fueling Transportation Finance: A Primer on the Gas Tax, Center on Urban and Metropolitan Policy, Transportation Reform Series, The Brookings Institution, Washington, DC, March 2003.

This report focuses on the gas tax collected and used federally and by the states. Highlights of the report include: the history and use of the gas tax, the changing market and economy of the gas tax which has stabilized gas expenditures, the raising of gas tax below the rate needed to keep pace with inflation, various restrictions of gas taxes for certain types of transportation, and finally the distribution requirements by some states that limit the ability to focus on urban transportation issues.

13. Funding Transport Systems: A Comparison Among Developed Countries



Nakagawa, D., and R. Matsunaka. *Funding Transport Systems: A Comparison Among Developed Countries*. Pergamon, 1997.

The authors argue that private railroads that manage real estate within rail corridors have greater ability to enhance profits. A discussion of how to fund systems in various countries highlights the policies and financial systems established in developed countries (Germany, France, UK, USA, Japan). The authors offer a methodology for comparing the structure of financial resources as well as investment calculations to sustain and support the given transport system. Additionally, the book analyzes national priorities regarding transportation in addition to how those priorities inform transportation improvements.

14. Using Value Capture To Finance Infrastructure And Encourage Compact Development

Rybeck, Rick, "Using Value Capture To Finance Infrastructure And Encourage Compact Development," *Public Works Management & Policy*, Washington, DC, April 2004, pp. 249–260, <http://pwm.sagepub.com>.

This article examines Washington, D.C.'s attempt to utilize value capture to fund a portion of a new infill Metrorail station. It then looks at the impact of property tax reform on sprawl and compares value capture using a split-rate property tax with other techniques for transportation infrastructure finance such as tax-increment financing. Both theoretical models and practical experience lead to the conclusion that a value-capture, split-rate property tax can help make transportation infrastructure investments self-financing.

15. A Quiet Crisis in Transportation Finance Options for Texas

Wachs, Martin, "A Quiet Crisis in Transportation Finance Options for Texas," *Testimony before the Texas Study Commission on Transportation Finance*, Austin, TX, April 19, 2006.

The article outlines the background of the transit system and the issues that have come from it. It also states that there is a wide variety of public policies available that elected officials – at the federal, state, and local levels – can use to address the chronic cost/revenue squeeze in transportation finance. These include greater reliance on borrowing, shifts to alternative forms of user fees, such as electronic tolls or mileage based charges, greater reliance on general taxes and fees that are not directly linked to use of the transportation system, or some combination of these approaches.

16. Innovative Financing in Transit

United States Federal Transit Administration (USFTA). (2003) "Innovative Financing in Transit." Online. Internet. Available: http://www.fta.dot.gov/planning/metro/planning_environment_3532.html. Accessed 21 July 2003.

The report discusses Joint Development, Turnkey contracting, State Infrastructure Banks (SIB) and FTA's Innovative Financing Initiative. Turnkey procurement appears to be an excellent mechanism for major transit projects, particularly light rail or rapid rail startups. Various projects undertaken by agencies such as MBTA, FTAFC, BWATC had innovative proposals that adapted available methods



within the Federal grant program to overcome local difficulties ranging from insufficient local funding to operating inefficiencies.

17. Surface Transportation Funding, Options for States

National Conference of State Legislatures, Surface Transportation Funding, Options for States, Washington, DC, May 2006

Provides detailed information about transportation funding options for state legislatures to include sources and distribution of surface transportation funding (federal, state and local contributions), identifies obstacles to transportation funding, analyzes options available to raise additional funds or to leverage existing resources, trends in state transportation funding approaches, and a comparative analysis to give states tools to consider revenue sources of which they have not taken full advantage.

18. Report on Innovative Financing Techniques for Transit Agencies

“Report on Innovative Financing Techniques for Transit Agencies,” TCRP Legal Research Digest No. 13, Transportation Research Board, Washington, D.C., August 1999.

The report explores the nature of "innovative financing techniques" for transit agencies and describes situations in which such techniques have been used. It describes various types of joint venture options, leases, and bonds that can be used. Some of the techniques discussed include: certificates of participation for FTA Section 9 funds, joint development, cross-border leases of transit vehicles, fare box revenue bonds, state revolving loan funds, and state infrastructure banks.

19. The Fuel Tax and Alternatives for Transportation Funding

Transportation Research Board, The National Academies Press, Special Report 285, The Fuel Tax and Alternatives for Transportation Funding, Washington, DC, 2006

Assesses the revenue-generating prospects of fuel taxes and other user fees and identifies alternatives to the present finance arrangement. In judging the merits of the present finance system and alternatives, the Transportation Research Board study committee focused on how finance arrangements affect the performance of the transportation system by influencing the decisions of travelers and government investment and management decisions. This criterion led the committee to give special attention to methods of charging fees that could be directly related to the cost of providing services—in particular, tolls and mileage charges.

20. The Impact of the Miami Metrorail on the Value of Residences Near Station Locations

Gatzlaff, Dean H., and Mark Smith. “The Impact of the Miami Metrorail on the Value of Residences Near Station Locations.” Land Economics 69(1) (1993).

Both of the extensions were planned in the path of existing built-up neighborhoods where it was hoped that redevelopment would occur. For a study methodology, the researchers chose to examine home resales, those having sold more than once over the past 18 years. They looked for



price changes after the announcement of the new line. The anticipated presence of transit service did perceptibly lift nearby site values, but only in the south-side neighborhoods, where recent capital investments had been activating the redevelopment market. Compare this study with the downtown Miami study of retail sales increases.

This paper examines the impact of the development of the Miami Metrorail system on residential property values proximate to its station locations by comparing repeat-sales indices and applying regression methods. Using both methods, the findings show residential values were, at most, only weakly impacted by the announcement of the new rail system. As a city with decentralized employment and land-use, Miami's rail system plays an indirect role in urban revitalization through improved accessibility to the core for CBD/downtown commuters. However, Miami has consistently had lower ridership than expected, which potentially indicates a minimal change to commuter accessibility, and that may directly correlate with this study's result – Miami Metrorail has only had a marginal impact on property values in the short term.

21. Report on Uses of Fees or Alternatives to Fund Transit

Transit Cooperative Research Program Legal Research Digest 28: Uses of Fees or Alternatives to Fund Transit, 2008 provides detailed insight into the legal issues surrounding the use of development impact fees in the U.S. to fund transit capital and operating expenses. The report details state enabling legislation, the underlying legal methodologies for implementing impact fees, and provides numerous case studies of state laws and local implementation of impact fees. As an alternative to impact fees, the report also discusses the legal underpinnings and state laws regarding tax increment financing (TIF) districts.

22. MDT Transit Development Plan – FY 2010 - 2019

Miami-Dade County Transit. *Transit Development Plan – FY 2010 - 2019*. December 2009. Financial Plan.

In December of 2009, MDT released the fiscal year (FY) 2010 – 2019 Transit Development Plan which is a strategic and operation guidebook for MDT's use over the next ten year planning horizon. Within the plan, a Financial Plan is articulated with various peers named, lays out well articulated criteria for assessing the value of funding opportunities, and has a selection of examples of revenue enhancement measures.



A. Data Resources

1. "13 Dubai Metro Station Naming Rights Still Available." *Flashy Dubai - Night Life, Beaches, Hotels, Entertainment, Shopping and Business Information for Dubai*. 25 Feb. 2009. Web. 14 Sept. 2010. <<http://flashydubai.com/13-dubai-metro-staion-naming-rights-still-avaliable/>>.
2. "2005 Regional Transit Authority Legislation - Sections 77.971-77.973 Wisconsin Statutes." 2006 Fiscal Budget. Southeastern Regional Transit Authority, 20 Feb. 2006. Web. 14 Sept. 2010. <http://www.sewisrta.org/pdfs/2006/2006-02-20_budget_fiscal.pdf>.
3. "2009 Toll Roads in the United States." Federal Highway Administration. U.S. Department of Transportation. Web. 14 Sept. 2010. <<http://www.fhwa.dot.gov/ohim/tollpage/history.htm>>.
4. "2010 Annual Report of the New Jersey Casino Revenue Fund Advisory Commission." The State of New Jersey, May 2010. Web. 14 Sept. 2010. <<http://www.nj.gov/casinorevenue/reports/crfacannrpt2010.pdf>>.
5. "CHAPTER 163, Part III." Flsenate.gov. Florida Senate, 2010. Web. 14 Sept. 2010. <http://www.flsenate.gov/Statutes/index.cfm?App_mode=Display_Statute&URL=0100-0199/0163/0163PartIIIContentsIndex.html&StatuteYear=2010&Title=-2010-Chapter 163-Part III>.
6. "Concessions Opportunities." TriMet: Concessions Opportunities. TriMet. Web. 15 Sept. 2010. <<http://trimet.org/concessions/index.htm>>.
7. "Facts about TriMet." Portland State University. Center for Transportation Studies, Oct. 2005. Web. 14 Sept. 2010. <www.cts.pdx.edu/prof_courses/LRT_Policy/trimetfactsheet.pdf>.
8. "FY08 Monthly Financial Report (February 2008)." Washington Metropolitan Area Transportation Authority. Finance, Administration and Oversight Committee, 10 Apr. 2008. Web. <www.wmata.com/about_metro/.../041008_Completemonthlyreport.pdf>.
9. "Hotel Occupancy Taxes and Fees - Competitive Cities." San Francisco Convention and Visitors Bureau, June 2010. Web. 15 Sept. 2010. <www.sfcvb.org/media/downloads/research/Summary_of_Hotel_Tax.pdf>.
10. "Inventing the Future." TECO Line Streetcar System. Tampa's TECO Line Streetcar System, Apr. 2004. Web. 14 Sept. 2010. <www.tecolinestreetcar.org/news/inventing_the_future.pdf>.
11. "Lottery-Funded Benefit Programs." Pennsylvania Lottery. Web. 14 Sept. 2010. <<http://www.palottery.state.pa.us/content.aspx?id=62>>.
12. "New Jersey Revenue Fund." The State of New Jersey, 2004. Web. 14 Sept. 2010. <<http://www.state.nj.us/casinos/about/commrepo/docs/crf.pdf>>.
13. "PMW - Statistics." DBPR: Florida Department of Business and Professional Regulation. Division of Parimutuel Wagering. Web. 15 Sept. 2010. <<http://www.myfloridalicense.com/dbpr/pmw/PMW-statistics.html>>.
14. "Portland Streetcar." TrainWeb.org. Web. 14 Sept. 2010. <<http://www.trainweb.org/mccann/streetcar.htm>>.
15. "Public Transportation Assistance Fund (PTA) Taxes and Fees." Pennsylvania DOR. 29 Jan. 2003. Web. 14 Sept. 2010. <http://revenue-pa.custhelp.com/cgi-bin/revenue_pa.cfg/php/enduser/std_adp.php?p_faaid=661&p_created=1043854140&p_topview=1>.
16. "State Motor Fuel Tax Rates." Taxadmin.org. Federation of Tax Administrators, 1 Jan. 2010. Web. 14 Sept. 2010. <<http://www.taxadmin.org/fta/rate/mf.pdf>>.
17. "State of Oregon: Road User Fee Pilot Program." Oregon.gov. Oregon State Archives. Web. 14 Sept. 2010. <http://arcweb.sos.state.or.us/rules/OARS_700/OAR_731/731_080.html>.
18. "State Real Estate Transfer Taxes." FTA Bulletin. Federation of Tax Administrators, 16 Feb. 2006. Web. 14 Sept. 2010. <<http://www.taxadmin.org/fta/rate/Realtytransfer.html>>.



19. "Tax Payments on Commerical Casinos." American Gaming Association. State Gaming Regulatory Agencies, May 2010. Web. 14 Sept. 2010. <http://www.americangaming.org/Industry/factsheets/statistics_detail.cfv?id=10>.
20. "Tourist Taxes.xls." Miami-Dade County, FL, USA, 4 Sept. 1998. Web. 15 Sept. 2010. <<http://www.miamidade.gov/taxcollector/library/Tourist%20Taxes.xls>>.
21. "Transporting the Nation's School Children." NASDPTS - National Association of State Directors of Pupil Transportation Services. Aug. 2000. Web. 15 Sept. 2010. <<http://www.nasdpts.org/paperTransit.html>>.
22. "Tri-Met Fact Sheet." Rosecitytransit.org. Tri-Met. Web. 14 Sept. 2010. <<http://www.rosecitytransit.org/more/facts96.html>>.
23. "Verizon MCImetro Fiber Optic Lease Agreement. Renewal." Washington Metropolitan Area Transportation Authority. Finance, Administration and Oversight Committee, 14 Feb. 2008. Web. <www.wmata.com/about_metro/.../021408_3HFINALVerizon.pdf>.
24. "What It Is." RTA Healthline - Euclid Corridor Transportation Project. Web. 14 Sept. 2010. <<http://www.rtahealthline.com/healthline-what-is.asp>>.
25. 2008 Annual Budget. Rep. Metropolitan Transportation Commission, 2008. Web. 14 Sept. 2010. <http://www.mtc.ca.gov/library/AnnualReport-08/MTC_AR_2008.pdf>.
26. 2010 Financial Plan. Rep. Central Puget Sound Regional Transit Authority, Nov. 2005. Web. 14 Sept. 2010. <http://www.soundtransit.org/Documents/pdf/about/financial/2010/2010_Financial_Plan_4-8-2010.pdf>.
27. Atkinson, Claire. "Transit Agencies Build Innovative Revenue Streams." Metro Magazine. June 2010. Web. 15 Sept. 2010. <<http://www.metro-magazine.com/Article/Story/2010/06/Transit-Agencies-Build-Innovative-Revenue-Streams.aspx>>.
28. Bandell, Brian. "Florida Gaming Losses Deepen as Jai Alai Struggles - South Florida Business Journal." South Florida Business Journal. 17 Aug. 2010. Web. 15 Sept. 2010. <<http://southflorida.bizjournals.com/southflorida/stories/2010/08/16/daily19.html>>.
29. Chicago Transit Authority. CTA Signs Five New Tenants for Concession Spaces Along the Red, Blue and Pink Lines. CTA. 14 July 2010. Web. 15 Sept. 2010. <<http://www.transitchicago.com/news/default.aspx?ArticleId=2650>>.
30. City of St. Joseph, Missouri Water Protection Program. Rep. St. Joseph,: Community Advisory Panel, 2009. City of St. Joseph, Missouri Water Protection Program Agenda Packet. Community Advisory Panel, 2009. Web. 14 Sept. 2010. <www.ci.st-joseph.mo.us/.../CAP_Agenda_Packet_062509_FINAL.pdf>.
31. Comprehensive Annual Financial Report For the Fiscal Years Ended June 30, 2009 and 2008. Rep. Golden Gate Bridge, Highway and Transportation District. Web. 14 Sept. 2010. <<http://goldengate.org/organization/documents/fy09-cafr.pdf>>.
32. Fikac, Peggy. "Local-option Gas Tax Approved by House Committee." San Antonio Express-News. 13 May 2009. Web. 14 Sept. 2010. <http://www.mysanantonio.com/news/local_news/Local-option_gas_tax_approved_by_House_committee.html>.
33. Fiorella, Michael. "Japan Is One Step Closer to Making Every Surface an Ad." Japan Marketing News. 27 Apr. 2009. Web. 14 Sept. 2010. <<http://www.japanmarketingnews.com/>>.
34. Freemark, Yonah. "Philadelphia May Accept Money to Privatize Station Naming; Pittsburgh Considers Similar Move « The Transport Politic." The Transport Politic. 22 June 2010. Web. 14 Sept. 2010. <<http://www.thetransportpolitic.com/2010/06/22/philadelphia-may-accept-money-to-privatize-station-naming-pittsburgh-considers-similar-move/>>.
35. Fried, Ben. "Cleveland's Health Line Setting a National Example for Bus Rapid Transit." Streetsblog New York City. 14 July 2008. Web. 14 Sept. 2010. <<http://www.streetsblog.org/2008/07/14/clevelands-health-line-setting-a-national-example-for-bus-rapid-transit/>>.



36. Geiger, Daniel. "MTA Feels the Pinch of Dip in Mortgage Recording Tax - Real Estate Weekly Articles | Find Articles at CBS MoneyWatch.com." MoneyWatch.com. CBS, 7 May 2008. Web. 14 Sept. 2010. <http://findarticles.com/p/articles/mi_m3601/is_36_54/ai_n25431386/>.
37. Goldman, Todd, Sam Corbett, and Martin Wachs. *Local Option Transportation Taxes in the United States*. Rep. no. UCB-ITS-RR-2001-3. University of California Transportation Center, Mar. 2001. Web. 14 Sept. 2010. <<http://www.its.berkeley.edu/publications/UCB/2001/RR/UCB-ITS-RR-2001-3.pdf>>.
38. Grynbaum, Michael. "M.T.A. Sells Naming Rights to Subway Station." *The New York Times - Breaking News, World News & Multimedia*. 23 June 2009. Web. 14 Sept. 2010. <http://www.nytimes.com/2009/06/24/nyregion/24naming.html?_r=2>.
39. Haggman, Matthew. "South Florida Property Values, Cities Take Big Hit." *The Miami Herald*. 2 June 2010. Web. 14 Sept. 2010. <<http://www.miamiherald.com/2010/06/01/1658978/property-values-cities-take-big.html#ixzz0qr72mUtP>>.
40. Hering, Hasso. "Kulongoski to Pursue Mileage Tax." *Corvallis Gazette-Times. Albany Democrat-Herald*, 28 Dec. 2008. Web. 14 Sept. 2010. <http://www.gazettetimes.com/news/local/article_4f21fc65-edce-568d-8236-cb1d084cecc5.html>.
41. *Hotel Occupancy Taxes and Fees - Competitive Cities*. Rep. San Francisco Convention and Visitors Bureau, June 10. Web. 14 Sept. 2010. <www.sfcvb.org/media/downloads/research/Summary_of_Hotel_Tax.pdf>.
42. Klas, Mary Ellen. "Dog Tracks and Jai Alai Frontons Offered Tax Break - St. Petersburg Times." *Tampa Newspapers: The Times, TBT & Tampabay.com. St. Petersburg Times*, 14 Apr. 2010. Web. 15 Sept. 2010. <<http://www.tampabay.com/news/politics/stateroundup/dog-tracks-and-jai-alai-frontons-offered-tax-break/1087200>>.
43. Kuhl, J. "Road User Charge Study." *Public Policy Center, University of Iowa, Iowa City*, 2007.
44. Madhusudhan, Ranjana G. "Betting on Casino Revenues: Lessons from State Experiences." *National Tax Journal* 49.3 (1996): 401-12. *National Tax Journal*. Sept. 1996. Web. 14 Sept. 2010. <[http://ntj.tax.org/wwtax/ntjrec.nsf/0/5656d5c72099e54185256863004b1f37/\\$FILE/v49n3401.pdf](http://ntj.tax.org/wwtax/ntjrec.nsf/0/5656d5c72099e54185256863004b1f37/$FILE/v49n3401.pdf)>.
45. McAllister, Brett. "Primer: Concessions." *Airports Council International*. Web. 15 Sept. 2010. <http://www.aci-na.org/index/toolbox_concessions_primer>.
46. Nussbaum, Paul. "SEPTA Approves Changing Name of Pattison Station to AT&T | Philadelphia Inquirer | 06/25/2010." *Philly.com: Philadelphia Local News, Sports, Jobs, Cars, Homes*. 25 June 2010. Web. 14 Sept. 2010. <http://www.philly.com/inquirer/local/pa/20100625_SEPTA_approves_changing_name_of_Pattison_station_to_AT_T.html>.
47. Riley, Chris. "Viewpoint: Transportation Funding Eyed for 2011 and beyond." *San Antonio Express-News*. 1 July 2010. Web. 14 Sept. 2010. <http://www.mysanantonio.com/community/opinion/transportation_funding_eyed_for_2011_and_beyond_97436259.html>.
48. Rose, Joseph. "Remember Webtrends' Cyclist 'road Tax' Campaign?" *Www.portlandonline.com. City of Portland Office of Transportation*, 19 Nov. 2009. Web. 14 Sept. 2010. <www.portlandonline.com/transportation/index.cfm?a=95525&c=47376>.
49. Roth, Matthew. "Meet Your New Parking Meter." *The Bay Citizen*. 22 July 2010. Web. 14 Sept. 2010. <<http://www.baycitizen.org/transportation/story/meet-your-new-parking-meter/>>.
50. Rujumba, Karamagi. "County Adopts Drink and Car Rental Taxes." *Post-Gazette.com. Pittsburgh Post-Gazette*, 5 Dec. 2007. Web. 14 Sept. 2010. <<http://www.post-gazette.com/pg/07339/839200-28.stm#ixzz0wUjJVBYL>>.



51. Rujumba, Karamagi. *Pittsburgh Post-Gazette*, County adopts drink and car rental taxes: After heated debate, budget passes with two new levies for transit, 15 Dec. 2005. <http://www.post-gazette.com/pg/07339/839200-28.stm>
52. Savas, E. S., and E. J. McMahon. *Competitive Contracting of Bus Service: A Better Deal for Riders and Taxpayers*. Rep. no. 30. Manhattan Institute for Policy Research, Inc, Nov. 2002. Web. <http://www.manhattan-institute.org/html/cr_30.htm>.
53. *Shared Resources: Sharing Right-Of-Way for Telecommunications*. Rep. no. #FHWA-JPO-96-0015. Final Report ed. U.S. Department of Transportation, 1996.
54. *State Tax Rates on Distilled Spirits*. Rep. Federation of Tax Administrators, Feb. 2010. Web. 14 Sept. 2010. <www.taxadmin.org/fta/rate/liquor.pdf>.
55. Sun, Lena H. "New Rules Close Doors On Metro Shuttle Buses." *Washingtonpost.com*. The Washington Post Company, 23 May 2008. Web. 15 Sept. 2010. <http://www.washingtonpost.com/wp-dyn/content/article/2008/05/22/AR2008052203659_pf.html>.
56. The Monitor's Editorial Board. "A Road Map to Better US Roads." *CSMonitor.com*. The Christian Science Monitor, 27 Feb. 2009. Web. 14 Sept. 2010. <<http://www.csmonitor.com/Commentary/the-monitors-view/2009/0227/p08s01-comv.html>>.
57. The Washington Metropolitan Area Transit Authority. *Metro Considers Retail, Food and Beverage Sales in Rail Stations*. Metro - About Metro. 7 May 2009. Web. 15 Sept. 2010. <http://www.wmata.com/about_metro/news/PressReleaseDetail.cfm?ReleaseID=2569>.
58. Tri-County Metropolitan Transportation District of Oregon – 2009 Annual Report. Rep. Tri-Met, 2009. Web. 14 Sept. 2010. <http://www.trimet.org/pdfs/publications/TriMet_2009_Annual_Report.pdf>.
59. Tyson, Ann Scott. "Equity of Metro Fare Increases Questioned." *Washingtonpost.com*. The Washington Post Company, 9 Aug. 2010. Web. 15 Sept. 2010. <<http://www.washingtonpost.com/wp-dyn/content/article/2010/08/08/AR2010080802533.html>>.
60. Urban Transportation Task Force. "Urban Transit in Canada: Taking Stock of Recent Progress." *Council of Ministers*. Oct. 2009. Web. 1 Oct. 2010. <www.comt.ca/english/urbanprogress.pdf>.
61. *Vehicle Mileage Fee Primer*. Rep. Texas Department of Transportation, Dec. 2009. Web. 14 Sept. 2010. <utcm.tamu.edu/mbut/documents/VMT_Primer.pdf>.
62. Wendel, Kim. "RTA's Euclid Corridor 'Healthline' Opens." *WKYC.com* | Cleveland, OH | WKYC-TV -- News & Information for Northeast Ohio from Channel 3 News. 24 Oct. 2008. Web. 14 Sept. 2010. <http://www.wkyc.com/news/local/news_article.aspx?storyid=99375&catid=3>.
63. Yu, Roger. "Taxes on Hotel Rooms Are Rising." *USATODAY.com*. 5 Apr. 2010. Web. 15 Sept. 2010. <http://www.usatoday.com/travel/hotels/2010-04-05-1Ahoteltax05_ST_N.htm>.



B. Industry Interviews Overview

The following organizations were interviewed in conjunction with this report:

- American Public Transportation Association (APTA)
- Metropolitan Atlanta Rapid Transit Authority (MARTA)
- Southeastern Pennsylvania Transportation Authority (SEPTA)
- Titan Advertising
- Houck Advertising, Inc.
- Pullman Transit
- The Port Authority of New York & New Jersey
- Veolia Transportation