A Decision-Support Framework For Using Value Capture to Fund Public Transit: Lessons From Project-Specific Analyses

MTI Report 11-14

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REPORT 11-14

A DECISION-SUPPORT FRAMEWORK FOR USING VALUE CAPTURE TO FUND PUBLIC TRANSIT: LESSONS FROM PROJECT-SPECIFIC ANALYSES

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16. Abstract

Local and state governments provide 75 percent of transit funds in the United States. With all levels of governments under significant fiscal stress, any new transit funding mechanism is welcome. Value capture (VC) is one such mechanism. Based on the "benefits received" principle, VC involves the identification and capture of public infrastructure-led increase in land value.

While the literature has extensively demonstrated the property-value impacts of transit investments and has empirically simulated the potential magnitude of VC revenues for financing transit facilities, very little research has examined the suitability of VC mechanisms for specific transit projects. This report aims to fill this research gap by examining five VC mechanisms in depth: tax-increment financing (TIF), special assessment districts (SADs), transit impact fees, joint developments, and air rights.

The report is intended to assist practitioners in gauging the legal, financial, and administrative suitability of VC mechanisms for meeting project-specific funding requirements.

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The federal government, through various transportation acts, such as the Intermodal Surface Transportation Efficiency Act (ISTEA), the Transportation Equity Act for the 21st Century (TEA-21), and, more recently, the Safe, Affordable, Flexible, Efficient Transportation Equity Act—A Legacy for Users (SAFETEA-LU), has reinforced the need for integration of land use and transportation and the provision of public transit. Other federal programs, such as the Livable Communities Program and the New Starts Program, have provided additional impetus to public transit. At the state and regional level, the past three decades have seen increased provision of public transit. However, the public transit systems typically require significant operating and capital subsidies—75 percent of transit funding is provided by local and state governments.[1] With all levels of government under significant fiscal stress, new transit funding mechanisms are welcome. Value capture (VC) is once such mechanism.

This report examines five VC mechanisms in depth: tax-increment financing (TIF), special assessment districts (SADs), transit impact fees, joint developments, and air rights.

WHAT IS VALUE CAPTURE?

Simply put, VC is the identification and capture of the increase in land value resulting from public investment in infrastructure. Normatively, VC is based upon the “benefits received” principle—i.e., those who benefit from a particular infrastructure or service should also pay for it. In the context of public transit, provision of or enhancements to public transit systems accrue accessibility-related benefits to the neighboring properties. These benefits are positively capitalized into higher land values. Since the properties benefit from the public transit systems, they should contribute toward funding the systems.[2]

The increased land value can be captured through various mechanisms, including increased property tax revenues, the sale or joint development of public land in proximity to the transit system, lease or sale of air rights above transit stations, levy of special assessments, imposition of public transit impact fees, land-value taxation, and capture of property tax increments through TIF.

Any of these VC mechanisms could potentially be used to fund transit. However, the actual use of one or a combination of them depends upon factors such as:

- The enabling environment: Does state-level enabling legislation allow the use of TIF for public transportation?
- Stakeholder support: Would the local developer community oppose transit impact fees?
- Institutional capacity: Does the local government have the financial, administrative, and technical capacity to undertake joint development?

- Revenue yield: Would transit impact fees yield adequate revenues, or would joint development be a better option? Could both be used?

- Horizontal and vertical equity: Would impact fees reduce vertical equity by increasing housing prices? Do the properties that pay special assessment fees benefit from the infrastructure funded through the fees in proportion to the fees paid? In other words, is the special assessment horizontally equitable? The beneficiary-to-pay (BTP) principle operationalizes the horizontal-equity rule in public finance. The underlying principle behind the popularity of user fees, impact fees, TIF, and special assessments, BTP calls for those benefiting from a public infrastructure or service to pay for it in proportion to the benefit derived. Operationalized through the ability-to-pay principle, vertical equity has its roots in welfare economics. In public finance, the vertical-equity rule calls for the rich to pay more than the poor for government-provided goods and services.

- The chances of voter approval for any new tax.

PURPOSE OF THIS STUDY

While the literature has extensively demonstrated the impacts of transit investments on property value and has empirically simulated the potential magnitude of VC revenues for financing transit facilities, very little research documents and analyzes project-specific application of VC mechanisms. In fact, Smith and Gehring note that "it is now time for transit/land-use research to move from hypothesis testing to practical applications of value capture" (emphasis added).[3]

The recent step in this direction was taken in 2009, when a study at the Center for Transportation Studies, University of Minnesota, reviewed the suitability of several VC mechanisms for that state.[4] While it described the VC mechanisms in great detail and assessed their suitability at the macro level, the study did not include in-depth feasibility analysis of individual-project-level VC mechanisms. For example, practitioners who would like to know whether a state allows the use of a SAD to fund public transportation would also be interested in details such as:

- The studies conducted prior to the SAD formation

- The stakeholders who supported SAD, those who opposed it, and how the local government addressed stakeholder concerns

- The proportion of project cost funded by the SAD

- The horizontal- and vertical-equity considerations addressed in the design and implementation of the SAD assessment calculation methodology

This study provides such details for 14 case studies of VC mechanisms in practice.

RESEARCH OBJECTIVE AND METHODOLOGY

Objective

Our overall research objective is to assist practitioners in gauging the legal, financial, and administrative suitability of VC mechanisms for meeting project-specific requirements. To meet this objective, the study identifies and analyzes applications of five mechanisms and develops a decision-support framework to ascertain their suitability.

Methodology

Our methodology consisted of four steps. First, five VC mechanisms were chosen for study. Then, transit systems in which each mechanism is used were selected and analyzed. Finally, findings of the case analyses were documented, and a decision-support framework (DSF) was developed. The DSF systematically assesses each VC mechanism's performance on a set of decision criteria that local governments and transit agencies should consider prior to employing that mechanism.

A few cases use multiple mechanisms. For example, both TIF and joint development are used to fund Contra Costa Centre Transit Village in Contra Costa County, CA.

For each case, the state- and local-level VC environment is analyzed, focusing on the legal and policy framework enabling use of the VC mechanism. The local government's institutional capacity to design and administer the VC mechanism is then examined. This is followed by investigation into the stakeholder support for or opposition to the mechanism.

Each case also examines the VC mechanism's impact on horizontal and vertical equity. Wherever possible, ways to address equity concerns are recommended.

Finally, the project-specific economic environment is analyzed by examining the impact of local real estate and economic conditions prevalent at the time of the VC mechanisms' use. For each case, the revenue generated by the mechanism is documented, and comments on the revenue stream's stability and growth are presented.

VALUE CAPTURE MECHANISMS AND FINDINGS FROM CASE ANALYSES

Impact Fees

Impact fees are a type of development exaction. A development exaction requires real estate developers to contribute public facilities, infrastructure, and/or services, either financially or in-kind (for example, through land donation).[5] The term impact fee is used specifically to describe financial exaction.[6]

Our review of the use of impact fees for transit nationally and our analyses of four cases (San Francisco Transit Impact Development Fee, San Francisco, CA; Portland Transportation System Development Charges, Portland, OR; Aventura Transportation Impact Mitigation

Fee, Aventura, FL; and Broward County Transportation Concurrency Fee, Broward County, FL) find the following:

- Only a few states allow transit impact fees. State- and local-level enabling legislation are critical for their use.
- Significant institutional capacity is required to design, implement, and charge impact fees. A robust nexus study helps defend the fees from legal challenges.
- In the four cases, the local governments faced moderate opposition to impact fees, primarily from the developer community.
- Impact fees met a low to moderate proportion of the transit funding needs, often not exceeding 25 percent.
- The impact-fee revenues displayed low to moderate stability. Jurisdictions with consistently strong real estate markets and ample green-field or in-fill development opportunities are likely to see strong revenue growth and low revenue volatility.
- Impact fees have low to moderate impact on horizontal and vertical equity.

Tax Increment Financing

TIF is implemented by creating a geographic district administered by a TIF authority, usually a redevelopment agency.[7] After the district is created, the assessed property value is frozen for a period of time, usually from 10 to 25 years.[8] As new funds are invested, the property values in the district increase, and so do the property tax revenues. The property-tax increment (new property tax minus the property tax on the frozen property values) is diverted to the TIF authority rather than to the agencies that would normally receive it, e.g., the city, the county, and school districts. The tax increment is reinvested in the TIF district.

Our review of TIF use for transit nationally and our analyses of four projects developed using TIF funds (Contra Costa Centre Transit Village, Contra Costa County, CA; Wilson Yard Station, Chicago, IL; Cedar Rapids Ground Transportation Center, Cedar Rapids, IA; and Portland Streetcar, Portland, OR) find the following:

- All the states except Arizona have state-level TIF-enabling legislation.[9] TIF is most commonly used to revitalize blighted urban areas. However, the condition of blight is interpreted more liberally in some states than in others. Vermont, with the most liberal legislation, allows TIF to be used for development, job creation, or even simply to increase tax revenue.
- State-level TIF-enabling legislation should be closely examined to ascertain whether it lists specific uses for TIF funds and/or whether it lists uses barred from TIF funding. If such lists exist, it is important to ascertain whether transit is permissible or barred.

- Significant institutional capacity is required to plan, create, and manage a TIF district. Institutional capacity may also be required to garner the support of the community and other public agencies at the time of the district formation.

- In the four cases, local governments faced low to moderate stakeholder opposition to TIF, generally from residents and other public agencies.

- TIF funded a moderate proportion—one-sixth to one-half—of transit project costs.

- TIF revenues displayed a moderate to high degree of stability. TIF revenues depend on property-tax increases. In turn, tax increases are impacted by real estate market conditions, the intensity of redevelopment of the TIF district, and the effectiveness of the redevelopment projects in improving the quality of the district.

- The potential for horizontal inequity is low, as TIF revenues are spent on projects that benefit the property owners within the district.

- The use of TIF for transit enhances vertical equity to the extent that lower-income persons are more likely to use public transit than higher-income persons.

Special Assessment Districts

SADs are a subset of special districts that charge property owners mandatory fees, called assessments, in exchange for the benefits provided to them.[10]

Our review of the use of SADs for transit nationally and our analyses of four projects developed using SAD funds (Seattle Streetcar, Seattle, WA; Portland Streetcar, Portland, OR; Los Angeles Red Line Segment 1, Los Angeles, CA; and New York Avenue Metro Station, Washington, DC) find the following:

- A robust legal enabling environment is required for SAD formation. Usually state-level enabling legislation and a local SAD authorizing ordinance constitute the legal environment.

- While the institutional capacity required to form and manage SADs may not be as great as that required for TIF, it is still substantial. Furthermore, significant institutional capacity may be required to garner community support at the time of SAD formation.

- Several states require the vote of the majority of property owners for SAD formation. Therefore, local governments considering a SAD as a transit funding source must examine their state and local legislation for the majority-vote requirement. If such a vote is required, the local government can decide (a) to not use a SAD in a largely residential neighborhood, (b) to conduct extensive community outreach to gauge the popular resident sentiment toward the SAD, or (c) to exempt residential properties from assessments. However, equity considerations and project funding needs should be considered when deciding to exempt properties from assessments.

- In the four cases, the SADs generated large sums of revenue for bus or light-rail transit systems. However, the revenues funded a small proportion of a higher-cost heavy-rail project, Los Angeles Red Line Segment 1.

- SAD revenues are highly stable. Usually fixed at the time of SAD formation, the assessments are collected either up front or annually.

- Ideally, all properties that benefit from the transit infrastructure should pay assessments. Furthermore, the benefit should be estimated for each property separately, and the assessment should be directly proportional to the benefit. Less-sophisticated methodologies leave room for horizontal inequities.

- The potential for vertical inequity is low to moderate. Users with low ability to pay (such as low-income households) are often exempt from paying assessments. Smaller properties are also often exempt. This exemption enhances vertical equity to the extent that the owners of smaller properties have lower ability to pay than the owners of larger properties. Furthermore, property owners may have the option to pay assessments over time and at a reasonable interest rate. The interest rate is often equal to the rate of interest paid by local governments on long-term borrowing.

Joint Development and Air Rights

A joint development involves cooperation between private and public entities—for example, a real estate developer and a transit agency or local government—to develop a project. Rights to build over an existing structure, such as a transit stop, are called air rights.

Our review of joint development and air rights to fund transit nationally and our analyses of five projects (Bethesda Metro joint development, Bethesda, MD; Dadeland South joint development, Miami, FL; Contra Costa Centre Transit Village, Contra Costa County, CA; Cedar Rapids Ground Transportation Center, Cedar Rapids, IA; and Resurgens Plaza, Atlanta, GA) find the following:

- While state- or local-level enabling legislation may not be required for undertaking joint development, a clear policy framework is helpful. At a minimum, a disposition and development agreement (DDA) forms the legal basis for a joint development.

- Significant local government/transit agency institutional capacity is required to conceptualize, plan, develop, and manage joint developments. Expertise in project finance and real estate development is critical for negotiating joint development terms, especially the lease structure.

- Our five case studies faced low to moderate stakeholder opposition, most of it from neighborhood residents who feared increased traffic congestion, air/noise pollution, and changes to the character of the neighborhood.

- The case study projects' revenue yield varied widely, ranging from a high of several million dollars annually to a low of few hundred thousand dollars. The developments

also highlight the need for careful negotiations and structuring of the lease revenue agreements by public agencies. Furthermore, consideration should be given to other objectives, such as revitalization of blighted neighborhoods and generating transit ridership.

- The public agency typically receives minimum guaranteed revenue (such as in Bethesda, Dadeland South, and Contra Costa Centre Transit Village) or receives a fixed revenue adjusted by the consumer price index (as in Resurgens Plaza). Furthermore, in two of the cases (Bethesda and Dadeland South), the transit agency also shares a percentage of gross revenue. The lease revenue stream depends on the economic conditions in such cases and hence is likely to be somewhat volatile.

- The horizontal-equity concern for joint development projects primarily revolves around whether the involved parties benefit in proportion to their stake and risk in the development. Clear joint development policy guidelines and objectives help reduce the potential for horizontal inequities.

- Since joint development is the result of a voluntary agreement between a public agency and a private developer, these entities are likely to enter only into a vertically equitable agreement.

CONCLUSION

The performance of the five VC mechanisms in our case studies is evaluated based on the criteria that transit providers should consider when designing and implementing a funding mechanism: the enabling legal environment, stakeholder support, institutional capacity, revenue yield, revenue stability, and equity. Using these criteria, we develop a decision-support matrix that should help policymakers, local governments, and transit agencies assess the suitability of these mechanisms.

Key findings that should benefit those planning to use these VC mechanisms include the following:

- TIF and SADs are the mechanisms likely to yield the highest revenue.

- Local governments may use a combination of VC mechanisms. For example, TIF and SADs fund the Portland, OR, Central Streetcar Project. TIF and joint development fund Contra Costa Centre Transit Village in Contra Costa County, CA, and the Ground Transportation Center in Cedar Rapids, IA.

- The use of TIF requires significant institutional capacity, community support, and agreement among taxing agencies.

- The use of transit impact fees is rare. It benefits from state- and local-level enabling legislation, robust nexus studies, a strong real estate market, and developer support.

- Transit impact fees and SADs must be carefully designed and implemented to minimize inequities.

- Strong real estate markets, significant institutional capacity, and clear policy guidelines are needed to undertake joint development.

I. INTRODUCTION

NEED FOR VALUE CAPTURE MECHANISMS TO FUND TRANSIT

The federal government, through various transportation acts, such as the Intermodal Surface Transportation Efficiency Act (ISTEA), the Transportation Equity Act for the 21st Century (TEA-21), and, more recently, the Safe, Affordable, Flexible, Efficient Transportation Equity Act–A Legacy for Users (SAFETEA-LU), has reinforced the need for integration of land use and transportation and the provision of public transit. Other federal programs, such as the Livable Communities Program and the New Starts Program, have provided additional impetus to public transit. At the state and regional level, the past three decades have seen increased provision of public transit. However, the public transit systems typically require significant operating and capital subsidies—75 percent of transit funding is provided by local and state governments.[11] With all levels of governments under significant fiscal stress, new transit funding mechanisms are welcome. Value capture (VC) is once such mechanism.

WHAT IS VALUE CAPTURE?

Simply put, VC is the identification and capture of the increase in land value resulting from public investment in infrastructure. Normatively, VC is based upon the "benefits received" principle—i.e., those who benefit from a particular infrastructure or service should also pay for it. In the context of public transit, provision of or enhancements to public transit systems accrue accessibility-related benefits to the neighboring properties. These benefits are positively capitalized into higher land values. Since the properties benefit from the public transit systems, they should contribute toward funding the systems.[12]

The increased land value can be captured through various mechanisms, including increased property-tax revenues, the sale or joint development of public land in proximity to the transit system, lease or sale of air rights above transit stations, levy of special assessments, imposition of public transit impact fees, land-value taxation, and capture of property-tax increments through tax increment financing (TIF).

Any one of these VC mechanisms could potentially be used to fund transit. However, the actual use of one or a combination of them depends on several factors such as:

- The enabling environment: Does the state-level enabling legislation allow the use of TIF for public transportation?
- Stakeholder support: Would the local developer community oppose transit impact fees?
- Institutional capacity: Does the local government have the financial, administrative, and technical capacity to undertake joint development?
- Revenue yield: Would transit impact fees yield adequate revenues, or would joint development be a better option? Could both be used?

- Horizontal and vertical equity: Would impact fees reduce vertical equity by increasing housing prices? Do the properties that pay special assessment fees benefit from the infrastructure funded through the fees in proportion to the fees paid? In other words, is the special assessment fee horizontally equitable? The beneficiary-to-pay (BTP) principle operationalizes the horizontal-equity rule in public finance. The underlying principle behind the popularity of user fees, impact fees, TIF, and special assessments, BTP calls for those benefiting from a public infrastructure or service to pay for it in proportion to the benefit derived. Operationalized through the ability-to-pay (ATP) principle, vertical equity has its roots in welfare economics. In public finance, the vertical-equity rule calls for the rich to pay more than the poor for government-provided goods and services.

PURPOSE OF THIS STUDY

While the literature has extensively demonstrated the impacts of transit investments on property value[13] and has empirically simulated the potential magnitude of VC revenues for financing transit facilities,[14] very little research documents and analyzes project-specific application of VC mechanisms. In fact, Smith and Gehring (p. 751) note that "it is now time for transit/land-use research to move from hypothesis testing to practical applications of value capture"[15] (emphasis added).

A recent step in this direction was taken in 2009, when a study at the Center for Transportation Studies, University of Minnesota, reviewed the suitability of several VC mechanisms for that state.[16] While it described the VC mechanisms in great detail and assessed their suitability at the macro level, the study did not include in-depth feasibility analysis of individual-project-level VC mechanisms. For example, practitioners who would like to know whether a state allows use of a special assessment district (SAD) to fund public transportation would also be interested in details such as:

- The technical and financial feasibility studies conducted prior to the SAD formation
- The stakeholders who supported the SAD, those who opposed it, and how the local government addressed stakeholder concerns
- The proportion of project cost funded by the SAD
- The horizontal- and vertical-equity considerations addressed in the design and implementation of the SAD assessment calculation methodology

RESEARCH OBJECTIVE AND METHODOLOGY

Objective

Our overall research objective is to assist practitioners in gauging the technical, financial, and administrative suitability of VC mechanisms for meeting project-specific requirements.

To meet this objective, the study identifies and analyzes applications of five mechanisms and develops a decision-support framework to ascertain their suitability.

This research should serve as a reference guide for practitioners who can review the project-specific analyses and the attendant decision-support framework (DSF) to assist in choosing the VC mechanism that would best suit their needs.

Methodology

Our methodology consisted of four steps. First, five VC mechanisms were chosen for study. Then, transit systems in which each mechanism is used were selected for in-depth analysis. Finally, findings of the case analyses were documented, and a DSF was developed. The DSF systematically assesses each VC mechanism's performance on a set of decision criteria that local governments and transit agencies should consider prior to employing that mechanism.

A review of literature indicates the existence of six major VC mechanisms:

- sale or joint development of public land that is in proximity to a transit system
- lease or sale of air rights above transit stations
- SADs
- transit impact fees
- TIF
- land value taxation (LVT)

LVT is employed primarily by a few cities in Pennsylvania. Given this limited use, the study focuses on the first five mechanisms.

Next, we identified cases of the use of each VC mechanism for in-depth study. The criteria for choosing the cases are detailed in the sections of the report that provide overviews of these mechanisms. However, in general, the following criteria were applied:

- The mechanism must be used to directly fund transit infrastructure (as opposed to funding only transit-oriented developments)
- The mechanism must already be in use (as opposed merely being considered for use by local governments)
- Sufficient data must be available
- The cases must be recent, insofar as possible

- The mechanisms must generate significant revenues

The cases are listed in Table 1. A few cases use multiple mechanisms. For example, both TIF and joint development are used to fund Contra Costa Centre (CCC) Transit Village in Contra Costa County, CA. A total of 14 cases are examined.

Table 1. List of Cases and VC Mechanisms Used

Case	Land VC Mechanism Used				
	Impact Fee	SAD	TIF	Joint Development	Air Rights
Transit impact development fee, San Francisco, CA	x				
Transportation mitigation impact fee, Aventura, FL	x				
Transportation system development charges, Portland, OR	x				
Transit concurrency fee, Broward County, FL	x				
South Lake Union streetcar, Seattle, WA		x			
Metro Red Line benefit assessment district, Los Angeles, CA		x			
New York Avenue Metro Station, Washington DC		x			
Contra Costa Center Transit Village, Pleasant Hill, CA			x	x	
Central Streetcar Project, Portland, OR		x	x		
Wilson Station, Chicago, IL			x		
Ground Transportation Center, Cedar Rapids, IA			x	x	x
Bethesda Metro joint development, Bethesda, MD				x	x
Dadeland South joint development, Miami, FL				x	x
Resurgens Plaza, Atlanta, GA					x

For each case, the state- and the local-level VC environment is analyzed, focusing on the legal and policy framework enabling use of the VC mechanism. The local government's institutional capacity to design and administer the mechanism is then examined. This is followed by investigation into the stakeholder support for or opposition to each mechanism.

Each case also examines the VC mechanism's impact on horizontal and vertical equity. Wherever possible, ways to address equity concerns are recommended.

Finally, the project-specific economic environment is analyzed by examining the impact of local real estate and economic conditions prevalent at the time of the mechanisms' use and by identifying factors that might have limited or expanded the local governments' options while designing, developing, adopting, and administering the mechanisms. For each case, the revenue generated by the mechanism is documented, and comments on the revenue stream's stability and growth are presented.

REPORT STRUCTURE

The report is organized into chapters describing each of the VC mechanisms and case studies of their use, and a concluding chapter synthesizes the study findings and develops a decision-support framework.

Overviews introduce the mechanisms, discuss their use nationally (especially to fund public transportation), outline the major considerations for using them to fund public transit, and describe the case selection process.

The case studies of specific projects (or in the case of impact fees, specific jurisdictions) illustrate the actual use of the mechanisms and also discuss various aspects of each, including the enabling legal environment, stakeholder support, horizontal- and vertical-equity considerations, and revenue yield, stability, and growth.

II. IMPACT FEES

OVERVIEW

Over the past several decades, the cost of providing new infrastructure and services has outpaced the available federal, state, and local funds.[17] Many local governments have employed innovative financing tools, such as impact fees, to close this gap.[18]

An impact fee is a type of development exaction. A development exaction requires real estate developers to contribute public facilities, infrastructure, and/or services either financially or in-kind (for example, through land donation).[19] The term impact fee is used specifically to describe financial exactions.[20]

Standardized rather than negotiated,[21] an impact fee is charged to recoup the capital costs of providing services and infrastructure.[22] The fee has various names depending upon its purpose; for example, it may be called a "capacity fee," a "facility fee," an "impact development fee," or a "utility connection fee." However, the basic principle behind all types of impact fees is the same—the developer pays money to the local government for and prior to the development of infrastructure and services that will serve a new development.

What Are Impact Fees Used For?

Impact fees are used to fund a wide variety of public infrastructure and services. Projects providing potable water and sanitary sewer facilities are the most common uses of impact fees, followed by transportation projects, such as roads and highways.[23] Impact fees are also used to fund libraries, parks, schools, police and fire facilities, and emergency medical facilities.[24]

How Widespread is the Use of Impact Fees Nationally?

Several nationwide trends over the past several decades have contributed to the increasing use of impact fees: the rapid rise in inflation beginning in the 1970s and early 1980s, which diminished the effectiveness of fixed-base taxes, such as the motor fuel tax, for funding transport infrastructure; the reduction in federal funds for infrastructure that began in the early 1980s; and property owners' opposition to property taxes.[25] In addition, Americans have come to expect a level of service that is higher than ever before, raising the cost of providing services.

These changes have shifted the fiscal burden of providing infrastructure away from the federal and state governments to local governments.[26] As a result, alternative funding mechanisms, such as impact fees, have become popular.

Impact fees are found in all 50 states.[27] Their use is not evenly distributed, however. They are used most heavily in the South and West and less commonly in the Northeast and Midwest.[28] State-level enabling legislation is not a prerequisite for charging impact fees. In fact, only half of the states have passed such legislation.

How Widespread are Transit Impact Fees?

While the use of impact fees is common for automobile-related transportation projects such as roads, highways, and bridges, such fees are not commonly used for public transportation.[29] At least 14 states prohibit transit impact fees (see Appendix A), while 20 states have adopted legislation explicitly allowing them.[30]

There are few instances of the actual use of transit impact fees. A 2008 study[31] noted two main reasons for their infrequent use. First, some state laws limit the use of impact fees to the funding of capital expenditures and prohibit their use for operations. Grants from the Federal Transit Administration may fund up to eighty percent of transit capital expenditures. Therefore, transit agencies often see little use for impact fees. Second, the entity responsible for charging impact fees is often separate from the entity providing the transit.[32] While impact fees are collected by the municipal government or county as part of the permitting or zoning approval process, many transit investments fall under the purview of a separate authority run by a state or local agency. This organizational separation of powers can complicate the appropriation of impact fees funds for transit.[33] Furthermore, close coordination is required between the municipal government and the transit agency to charge impact fees, and such coordination is rare.[34]

Legal Framework for Charging Impact Fees

From a legal standpoint, an impact fee is not a tax.[35] Furthermore, while local jurisdictions may not have the power to tax without voter consent,[36] they have broad power to protect public health, safety, and welfare under the "police power." Hence, they have relied on their police power to legally justify the use of impact fees.[37]

Characterizing an impact fee as a fee rather than a tax requires that the service for which the developer pays the fee have a direct relationship to the development. In legal terms, a fee must have a "rational nexus" and "rough proportionality" to the use for which it is assessed.[38] Two decisions by the U.S. Supreme Court, popularly known as Nolan and Dolan, held that exactions (of which impact fees are a special case) must be related to the land development (the "nexus" requirement) and that there must be "rough proportionality" between the exaction and the land-development impacts.[39]

Major Considerations for Use of Impact Fees

Political Acceptability

Impact fees may not always be politically feasible. For example, jurisdictions with low or negative population growth may view impact fees as obstacles to growth, because they increase land-development costs.[40] However, rapidly growing jurisdictions may increase existing fee rates or charge new fees to provide new growth-serving infrastructure and services without increasing the existing property owners' tax burden.[41]

Critics have also questioned the constitutionality of impact fees, especially where state-level enabling statutes do not exist. They claim that charging an impact fee is an abuse of

local governments' police power[42] and that impact fees are discriminatory, violate equal-protection principles, and infringe on property rights.[43]

Real Estate Market Conditions and Growth Rate

Impact fees are suitable for rapidly growing jurisdictions with strong real estate demand.[44] In such jurisdictions, the demands for public services and infrastructure may outstrip the local government's fiscal capacity.[45] Impact fees can facilitate growth by providing an additional revenue source for local governments.[46]

Jurisdictions in some states have relaxed or halted the imposition of fees as an incentive to developers to restart the real estate market in the current tough economic environment.

Institutional Capacity

Impact-fee-enabling legislation varies considerably among states. Many states lack clear guidance regarding the uses eligible for impact-fee funding,[47] and courts have struck down many local impact-fee ordinances, holding jurisdictions responsible for refunding them.[48] Impact fees can thus be risky for local governments in the absence of clear state legislation. Furthermore, the fees may require significant administrative and technical expertise to institute and manage.[49]

Equity Considerations

Impact fees are widely used for single-family residential development, and several studies have found that they increase housing prices.[50] In King County, WA, impact fees were shown to raise the price of new housing by 166 percent of the amount of the fees. They were found to raise the price of existing housing by 60 percent in Miami-Dade County, FL.[51] In California, where the fees are the highest in the nation, a 2008 study found that the average non-utility impact fee per single-family home was $19,536, significantly higher than the nationwide average of $11,276.[52]

Pointing out impact fees' negative impact on horizontal equity, critics note that the fees can disproportionately affect certain land uses and types of development.[53] For example, in one jurisdiction, the school impact fee per apartment was the same as the fee per single-family home, even though the apartments housed far fewer school-going children.[54]

Furthermore, in some cases, the criteria for determining impact fees may be horizontally inequitable.[55] For example, many jurisdictions charge a park impact fee per dwelling unit, even though smaller homes have lower values and tend to house fewer people than larger homes. This tends to put a greater burden on smaller homes. To the extent that lower-income households own smaller homes, impact fees also worsen vertical inequity.[56]

Finally, impact fees are often charged without adequate consideration of the ripple effects of the development that pays them. For example, a new office development may be charged an impact fee. The development may lead to an influx of construction workers and eventually of people who will work in the office buildings. In the absence of

an adequate housing supply, impact-fees-enabled rapid office growth can create a job-housing mismatch, requiring workers to live far from their jobs.[57] Courts have allowed the use of impact fees to pay for attendant housing needs and other "soft" services under the "rational nexus" principle,[58] which calls for use of the fee to mitigate the impacts caused by the fee-paying developments.

Case Study Selection Process

As mentioned earlier, impact fees are widely used to fund automobile-related transportation projects, but there are few instances of transit impact fees. This paucity of cases made the case study selection process rather simple. Recent research documents five major instances of transit impact fees (or variants of them): Portland, OR (transportation system development charge), Broward County, FL (concurrency fee), Aventura, FL (transportation mitigation impact fee), San Francisco, CA (transportation impact development fee), and Seattle, WA (transportation-mitigation payment).[59] Seattle's program is voluntary, and thus it is furthest removed from a traditional impact fee. Hence, we selected the remaining four examples as transit-impact-fee case studies.

At this time it is important to make a distinction between impact fees, SADs, and TIF. Although all three charge the user directly, they are implemented quite differently. While impact fees are charged only to new growth, SADs can be formed for existing areas (not limited to new development) based on the benefit the areas' property owners receive from a new investment (for example, a road-widening project). Furthermore, while impact fees are levied once, usually during the permitting process, SADs may charge fees more than once, such as annually. TIF is similar to both impact fees and SADs in that a particular benefit area is defined. However, TIF money is collected through traditional property-tax system, rather than as a fee.

TRANSPORTATION SYSTEM DEVELOPMENT CHARGE, PORTLAND, OR

Overview

Portland's transportation system development charge (TSDC) is levied on new developments and on property-use changes.[60] The fee helps mitigate the transportation impacts of new developments or property use by augmenting the transportation-system capacity.[61] The fee is due at the time a building permit is issued.[62]

The TSDC is used to fund a variety of transportation projects, including transit projects.[63] Unlike San Francisco's transit improvement development fee and Aventura's transportation mitigation impact fee, the TSDC may be used only for capital expenditures, not for ongoing operation and maintenance expenses.[64] The city is required to spend TSDC revenues within ten years.[65]

TSDC Time Line

Several small cities in Oregon and other states began charging transportation impact fees in the 1990s. This trend led Portland to follow suit.[66] While other cities charge the fees for

roads, Portland is probably the first city in the country to charge a multimodal fee.[67] The city built public support for the TSDC by including residents and business leaders in the early stages of fee development. Stakeholder interviews were conducted, and business leaders and interest-group representatives were appointed to the Policy Advisory Committee. The city also held community meetings to explain the TSDC, answer questions, and address residents' concerns.[68] The Policy Advisory Committee was committed to equity with regard to funding multiple transportation modes and to ensuring that all areas within the city would benefit from the charges.[69] The fee was implemented in 1997.[70]

Organizations Involved in Approving the Fee and its Revisions

The TSDC is one of four system-development charges (SDCs)—transportation, water and sewer, drainage, and parks and recreation—levied by the city.[71] The Portland Bureau of Development Services assesses the fee at the time a building permit is granted. The rates charged for all SDCs must be approved by the City Council. Fee revenues are used by four city bureaus—Environmental Services, Parks and Recreation, Water, and Transportation—to fund projects under their purview.[72]

Revenues collected from the TSDC are placed in an SDC account and are used only for qualified projects that are in the city's Capital Improvement Plan (CIP). The Portland Bureau of Transportation (PBOT) uses TSDC funds to finance transportation projects included in the CIP.[73]

What are the Current Charges?

The current TSDC rate varies by development type and also by the number of dwelling units (or beds for nursing homes), the square feet of floor area, the number of rooms for hotels, and such other criteria. The rate list and the units of measure are shown in Table 2.[74]

Table 2. Portland's Citywide TSDC Rates: July 10, 2010 - June 30, 2011

Type of Development	Unit of Measure	TSDC Per Unit ($)
Residential		
Single family (1 to 3 units)	Dwelling	2,566
Multifamily (4 or more units)	Dwelling	1,836
Senior housing	Dwelling	890
Accessory dwelling unit	Dwelling	1,284
Rowhouse/townhouse/condo	Dwelling	1,604
Nursing home	Dwelling	540
Congregate care/assisted living	Dwelling	461
Commercial-services		
Bank	sq. ft./GFA	22.21
Day care	student	227
Library	sq. ft./GFA	8.24
Post office	sq. ft./GFA	15.86
Hotel/motel	room	2,355

Service station/gasoline sales	VFP	13,182
Movie theater	screen	28,635
Carwash	wash stall	13,442
Health club	sq. ft./GFA	7.48
Marina	acre	671
Commercial-institutional		
School, K-12	student	265
University/college	student	530
Church	sq. ft./GFA	2.39
Hospital	sq. ft./GFA	4.61
Park	acre	444
Commercial-restaurant		
Restaurant	sq. ft./GFA	17.81
Quick-service restaurant (drive-through)	sq. ft./GFA	41.20
Commercial-retail		
Miscellaneous retail	sq. ft./GFA	4.33
Shopping center	sq. ft./GFA	5.45
Supermarket	sq. ft./GFA	12.99
Convenience market	sq. ft./GFA	46.33
Free-standing discount store	sq. ft./GFA	8.48
Car sales new/used	sq. ft./GFA	8.33
Commercial-office		
Administrative office	sq. ft./GFA	3.30
Medical office/clinic	sq. ft./GFA	8.69
Industrial		
Light industrial/manufacturing	sq. ft./GFA	2.08
Warehousing/storage	sq. ft./GFA	1.07
Self-storage	sq. ft./GFA	0.79
Truck terminal	acre	27,244

Source: Portland Bureau of Transportation, http://www.portlandonline.com/transportation/index.cfm?c=46210&a=386073 (accessed April 4, 2011).

TSDC-Funded Projects

Oregon's SDC legislation and Portland's laws require that SDCs be used only for projects that are included in a CIP and that "increase the capacity of the city's transportation system."[75] The following purposes are listed in the TSDC Code as eligible uses for TSDC funds:

- project development, design, and construction plan preparation
- permitting

- right-of-way acquisition, including any costs of acquisition or condemnation
- construction of new through lanes for vehicular, transit, or bicycle use
- construction of turn lanes
- construction of bridges
- construction of drainage and storm water treatment facilities in conjunction with new roadway construction
- purchase and installation of traffic signs and signals
- construction of curbs, medians, and shoulders
- relocating utilities to accommodate new roadway construction
- construction management and inspection
- surveying and soils and material testing
- construction of accessways, bicycle facilities, pedestrian connections, and walkways
- landscaping
- bus pullouts, transit shelters, fixed-rail transit systems and appurtenances
- demolition that is part of the construction of any of the improvements on this list
- payment of principal and interest, necessary reserves, and costs of issuance under any bonds or other indebtedness issued by the city to provide money to construct or acquire transportation facilities
- direct costs of complying with the provisions of ORS [Oregon Revised Statutes] 223.297 to 223.314, including the costs of developing system development charges methodologies and providing an annual accounting of system development charges expenditures[76]

The following uses are not permitted:

- any expenditure that would be classified as a maintenance or repair expense
- costs associated with the construction of administrative office facilities that are more than an incidental part of other capital improvements
- costs associated with acquisition or maintenance of rolling stock[77]

Revenue Raised from the TSDC

Gross revenues of more than $66 million have been raised since the TSDC's inception in 1997. Annual revenues reached a maximum of a little over $9 million in 2006–2007 (just before the economic recession) before falling to $2.5 million in 2009–2010. See Table 3 for the annual revenue yield.

Table 3. Annual Gross TSDC Revenues, 1997–2010

Fiscal Year	Annual Gross TSDC Revenues ($)
Original 10-year rate study and project list	
1997–1999	5,263,262
1999–2000	3,870,427
2000–2001	4,892,759
2001–2002	4,395,590
2002–2003	5,197,901
2003–2004	5,284,517
2004–2005	5,052,866
2005–2006	6,209,059
2006–2007	9,582,352
2007–2008	5,661,570
Renewed 10-year rate study and project list	
2007–2008	2,542,883
2008–2009	5,690,991
2009–2010	2,537,101
Total Gross revenue 1997-2010	66,181,278

Source: Katherine Levine, Project Controls Manager, email communication, February 18, 2011.

Between 1999 and 2007, a total of 37 transportation projects were partially funded by the TSDC. (The projects are listed in Appendix B.[78]) About 25 percent of the cost of the projects on the current CIP list is expected to be funded by the TSDC,[79] along with 100 percent of cost attributed to new growth.[80] TSDC funds have also been used to leverage federal, state, and other funding.[81]

The TSDC is not the main funding source for Portland's public-transportation capital expenditures. Rather, it is used to fill the gaps that remain after securing funds from the federal and state governments and from the assessment districts.[82] For example, the TSDC funded only about 4 percent of the Eastside Portland Streetcar Loop Project (funding sources for the project are listed in Table 4). Similarly, the TSDC funded a little more than 3.5 percent, or $2 million, of the $55 million Central City Streetcar Project.[83] The proportion of funding for the city's light-rail projects has also been small, with a little more than 3.5 percent, or $55 million, earmarked for the $1.49 billion projects.[84]

Table 4. Funding Sources for Eastside Portland Streetcar Loop Extension

Funding Source	Amount of Funding ($ millions)
Federal Transit Administration	75.00
Local improvement district	15.50
Portland Development Commission	27.68
Regional funds	3.62
SDC/other city funds	6.11
Stimulus funds	0.36
Total federal project	128.27
Vehicles from state of Oregon	20.00
Total project cost	**148.27**

Source: The Portland Streetcar Loop: Facts at a Glance, http://www.portlandstreetcar.org/pdf/loop_fact_sheet_and_map_201005.pdf (accessed August 4, 2011).

Who Pays the Fee?

Application of the TSDC is simple. The fee is charged on all new developments and property-use changes within the city, with a few exceptions, including affordable residential housing developments, which are exempted to facilitate the availability of affordable housing. However, the housing developments must meet the following criteria to qualify for exemption:[85]

For affordable rental projects:

- Developments must serve households earning at or below 60 percent of the median family income (MFI) adjusted for household size with a maximum debt burden of 30 percent for a 60-year period.

- If a proposed rental housing development has units that do not meet the above requirements or include a commercial component, the actual exemptions will be prorated as applicable to the residential portion of the development subject to the affordable-housing restrictions.

For affordable homeownership projects:

- Developments must serve households at or below 100 percent of the MFI for a family of four—$71,200 in 2011 and adjusted annually. This limit is adjusted upward for households of more than four people.

- Units must sell for less than the price cap provided by City Code, Section 3.102.090 D—currently $275,000.

- Units must sell to homebuyers who will occupy the homes as the initial occupants. Properties receiving homeownership exemptions may not be rented.

Other exemptions include the following:

- Temporary uses, which are fully exempt as long as the use or structure proposed in the new development is not used more than 180 days in a single calendar year.

- New development that will not generate more than 15 percent more vehicle trips than the previous use.

An exemption for transit-oriented development was phased out at the end of 2010 and is no longer on the list of exempted land uses.[86]

How is the Fee Calculated?

Three transportation modes are considered in TSDC calculations: motorized, transit, and non-motorized.[87] The TSDC rate for each transportation mode is based on (1) the cost per trip—the amount of money the city needs to expend over the next 10 years to build transportation-system capacity to accommodate the new-growth-related trips—and (2) the number of trips generated by the new development—the projected amount of growth in households and employment over the next 10 years.[88]

To determine the fee for each project, the TSDC rate is multiplied by the number of trips a proposed land use generates, based on nationally compiled statistics from the Institute of Transportation Engineers' Trip Generation 7th Edition.[89] The trip-generation rates for the existing and proposed uses are added together. The TSDC is not charged if the use generated by the proposed new development is within 15 percent (above or below) of the previous use of the property. However, if the TSDC for the new development is more than 115 percent of the previous property use, the applicant must pay the difference between the new TSDC and the previous TSDC. The applicant is eligible for reimbursement if the difference is less than 85 percent.[90] In such cases, the applicant must formally request the refund within 180 days of issuance of the building permit. The refund is granted promptly once the request is approved.[91]

Credits can be given for projects whose developer has contributed to a project that meets certain criteria for improving the transportation system.[92] Additionally, an alternative methodology can be proposed if an applicant disagrees with the trip-generation rates proposed by the city. If the city accepts the new methodology, the revised trip-generation rates are applied to the project.[93]

Every two years, the Bureau of Transportation reviews the amount of TSDC money collected and used. On the basis of this review, the city determines whether sufficient funds are available to finance the projects that would increase transportation capacity, and the rates are adjusted if needed. The new rates must be adopted by the City Council.[94]

Refinements Made to the TSDC

The city has refined the TSDC a few times. For example, small neighborhood restaurants are a "hot button" issue in Portland.[95] Because the fee tended to place a significant burden

on small restaurants, all restaurants with areas of less than 3,000 square feet were treated as retail, effectively reducing the fee rate from $17.81 per square foot of gross leasable area (GLA) to $4.33. Affordable-housing exemptions were also refined, placing closer scrutiny on the buyer and builder qualifications.[96]

The addition of the North Macadam Transportation System Development Charge Overlay Program was another significant change. Effective in 2009,[97] the Overlay Program allowed an additional fee to be charged in the North Macadam urban renewal area (URA). A former central city industrial area, the North Macadam URA is in need of substantial investment.[98] The Overlay Program was created to address concerns that the city would use a disproportionately large amount of the TSDC revenues there, essentially requiring the entire city to pay for investments in one specific neighborhood. An additional fee was placed on the North Macadam URA to address this potential horizontal inequity. Funds from the overlay fee can be used only within the URA. Thus, the program secures needed investments without draining funds from the other parts of the city.

Case Analysis

Enabling Legal Environment

Oregon's impact-fee-enabling legislation is one of the key contributors to the success of the TSDC. The legislation clearly allows the TSDC to be used for public transportation, putting Portland on solid legal ground to charge the fee.

More specifically, the Oregon legislation for SDCs has a clear purpose statement of intent to facilitate growth. It reads, "The purpose of ORS 223.297 to 223.314 [the code on system development charges] is to provide a uniform framework for the imposition of system development charges by local governments, to provide equitable funding for orderly growth and development in Oregon's communities and to establish that the charges may be used only for capital improvements."[99] The legislation goes on to define capital improvements, including public transportation, as uses eligible for SDC funds.[100]

Stakeholder Support

Community participation also played a key role in the success of the TSDC. The city consulted the community, businesses leaders, and interest groups while developing it, and this broad-based community participation incorporated and balanced the interests of a large variety of stakeholder groups and improved geographical and modal equity (making funding for each mode equitable).[101]

Institutional Capacity

On a day-to-day basis, the fee does not require additional administrative and technical capacity. However, significant resources were required when the fee was first implemented and again in 2007, when it was revised.[102]

Horizontal and Vertical Equity

The TSDC design is sensitive to equity issues. Addressing vertical equity (ATP concerns), the fee allows exemptions for affordable housing. It not only accommodates low-income residents but makes exemptions for middle-income households as well. For example, a homeownership project qualifies for an exemption if it serves those at or below the MFI, which was $71,200 for a family of four in 2011.[103]

The fee seems to be horizontally equitable as well. It is charged throughout the city rather than only in specific sections. Furthermore, almost all property types pay it. The fee amount is reasonable—impact fees in other states, such as California, are considerably higher. Finally, the fee treats developers fairly. It allows for credits when the developers contribute to transportation-related projects.

The TSDC could be made more equitable for residential properties if it were charged on a per-bedroom basis rather than on a per-unit basis. Currently, all residential units are charged at the same rate regardless of size or the number of residents. The fee structure unfairly impacts smaller homes with few residents by charging them the same rate as larger homes that may have many residents.

Revenue Yield, Stability, and Growth

As discussed earlier, the revenue from the fee declined significantly in recent years because of the economic recession's negative impact on real estate development. The decline shows that the yield and growth of TSDC revenues are dependent upon real estate market conditions. Furthermore, used primarily as a gap financing tool, the fee funds only a small portion of total project costs, although it covers all of the costs associated with new growth.

TRANSIT CONCURRENCY FEE, BROWARD COUNTY, FL

Overview

Florida state law requires the provision of a basic level of service and facilities "concurrent" with growth.[104] Amendments to the law in 2011 made transportation concurrency optional; before that, transportation was one of the services that had to be concurrently provided in order for municipalities or counties to approve new development.[105,106] Cities and counties in Florida must now adopt comprehensive plans that comply with the state law.

Broward County charges a transit concurrency fee to mitigate the impact of new developments on its transit system. Most of the county roads are built out, and very little unused land is available for new construction. Therefore, the fee is transit-focused.[107] It was adopted by the County Commission in 2005 as a way for new developments to pay their "fair share."[108] Fee revenues are used to pay for capital expenses and for three years of operating costs of transit projects within a new development's local district.[109] The county is divided into ten districts, which fall into two categories—standard concurrency districts and transit-oriented concurrency districts (Figure 1):[110]

1. Standard concurrency districts include areas that lack significant transit infrastructure. Roads are the dominant form of transportation in these districts, and roadway improvements are the main form of concurrency-revenue-funded improvements. Two of the ten districts are in this category.

2. Transit-oriented concurrency districts include parts of the county characterized as "compact geographic area(s) with an existing network of roads where multiple, viable alternative travel paths or modes are available for common trips."[111] Eight of the ten districts are classified as transit-oriented.

For transit-oriented concurrency districts, revenues from the fee are used to ensure that the desired transit level of service is maintained. The county enhances the level of service by reducing transit headways, developing neighborhood transit centers, and adding new bus routes.[112]

Organizations Involved in Levying the Fee

The Development Management Division of Broward County assesses the concurrency fee at the beginning of the development process. Broward County Transit (BCT) spends most of the fee revenue. The fee is levied before the jurisdictions within the county can begin processing building-permit applications. An applicant must receive a Transportation Concurrency Satisfaction Certificate from the Broward County Development Management Division to move forward with the permitting process.[113]

Who Pays the Fee?

Any development within the eight transit-oriented concurrency districts that is new, changes use, or changes floor area is required to pay the fee.[114] Since the fee is due at the beginning of the development process, the property developer has the legal obligation to pay it. The eight districts cover all parts of the county except the two standard districts. No land uses within the transit-oriented districts are exempt from paying the fee.[115]

Current Fee Amount

As shown in Appendix C, the fee varies, based on land use and development size. Residential uses are charged on per-dwelling-unit basis. The fee varies from $129 to $482 per unit. Other uses, including commercial uses, are charged on per-square-foot basis. The fees range from $521 to $1,636 per 1,000 square feet.

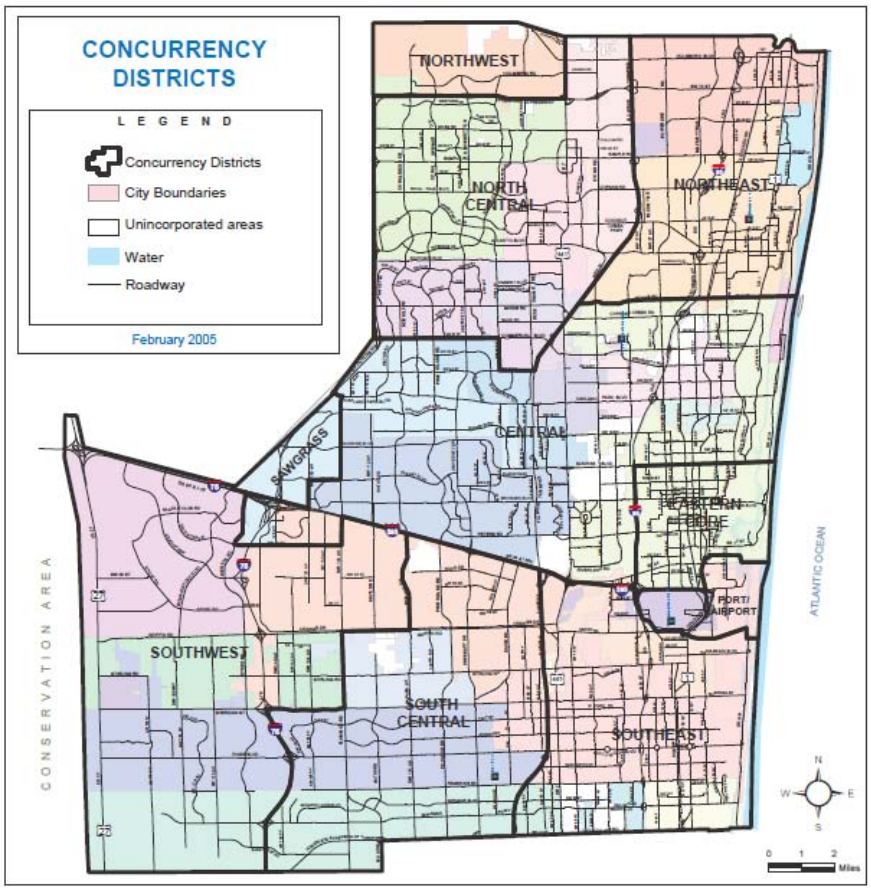

Figure 1. Transportation Concurrency Districts, Broward County

Source: http://www.broward.org/Regulation/Development/Pages/impactfees.aspx (accessed February 9, 2011).

How Is the Fee Determined?

The fee is calculated as "total peak-hour trip generation of the proposed development, multiplied by a constant (for each year) dollar figure for each district that represents the cost per trip of all the enhancements in that district listed in the County Transit Program."[116] These enhancements include the construction of bus bays, the purchase of buses, and pedestrian improvements near the transit stations. The funds are spent within the district on projects included in the County Transit Program.[117]

How Has the Fee Changed over Time?

Fee collection began in April 2005. More than $28 million was collected between April 2005 and January 2011.[118] As shown in Figure 2, the fee revenue has decreased dramatically since its peak in fiscal year (FY) 2007 (note that FY 2005 includes only six months). This revenue decline resulted from the decrease in new projects due to the housing and economic crisis.

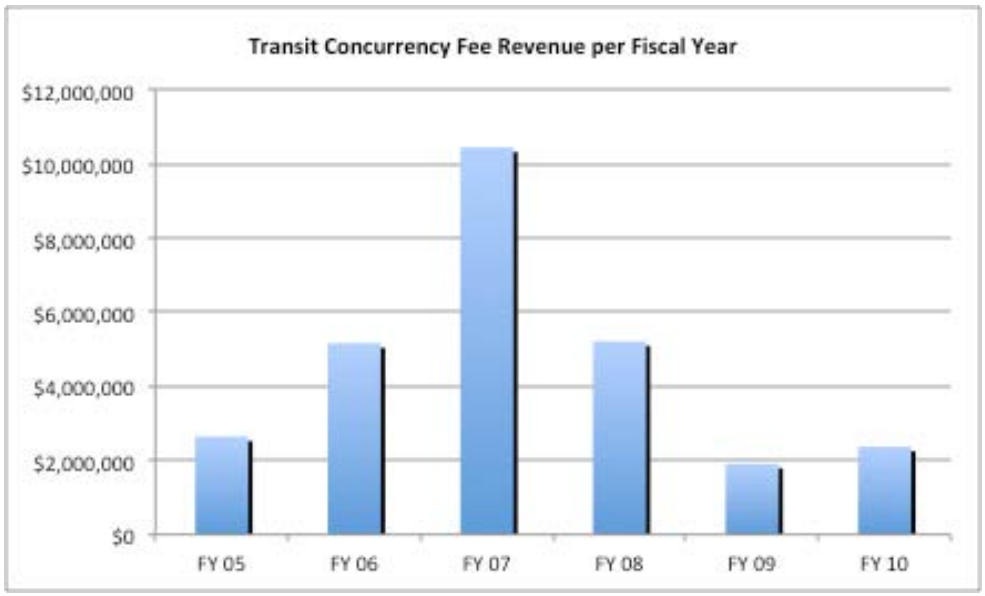

Figure 2. Broward County, FL, Transit Concurrency Fee Revenue from April 2005 to January 2011

Source: Transit Concurrency Fee revenue data received from Broward County.

Between 2005 and 2010, a substantial portion of the concurrency fee was spent on operating expenses in newly growing areas with low transit ridership. This focus on newly developing areas strained the county financially, as fare-box revenues were very low in these areas. Going forward, the county will expend transit-concurrency-fee revenues primarily on the existing transit system by funding capital facilities, such as buses, bus stops, and transit-station improvements.[119]

Use of the Fee to Fund Transit Projects

The majority of the concurrency fee is spent in two areas: capital improvements and operations.[120] For FY 2011, BCT expected that $4.9 million would be transferred from the concurrency fund to the capital budget.[121] This represents about 17 percent of BCT's FY 2011 capital budget.[122] The agency expects to use only $604,000 of the concurrency-fee revenue for its operating budget; the concurrency-fund contribution is approximately 0.5 percent of that budget.[123]

Between 2006 and 2010, the fee helped fund numerous capital projects and BCT operations throughout the county, including the following:[124]

- Upgrade of 125 bus stops
- Purchase of 10 small buses
- Three neighborhood transit centers
- Pedestrian improvements near transit stations

- 40 bus bays
- Operating costs to reduce headways along numerous routes
- Expansion of several routes
- Administrative and management expenses

Legal Basis for Charging the Fee

In 1985, Florida passed statewide growth management legislation called the Local Government Comprehensive Planning and Land Development Regulation Act.[125] This legislation laid the foundation for Broward County's transit concurrency fee. The Act mandated infrastructure concurrency, requiring services to be provided concurrently with development.[126]

In 1974, Broward County residents granted land use authority to the county.[127] Under its charter, the Broward County Council is the authority responsible for local land use planning and traffic-way plans.[128] Unlike many counties, where land use decisions rest with individual municipalities, Broward County is able to make countywide land use decisions that apply to each and every municipality within it.

Concurrency Fees as a Variant of Impact Fees

Concurrency fees essentially function in the same manner as impact fees. However, in Florida, the legislation authorizing concurrency fees is different from the impact-fees legislation. Broward County, for example, charges impact fees as well as concurrency fees. Its concurrency fees are based on Florida's growth-management concurrency law, whereas the impact fees are based on state-level impact-fee-enabling legislation. Because of their similarity, "transit impact fees" and "transit-oriented concurrency fees" are sometimes used interchangeably. Broward County has several impact fees but does not charge a transit impact fee.[129] Furthermore, jurisdictions that fall in the concurrency exception areas cannot charge concurrency fees, although they can charge impact fees.

Florida's concurrency law allows use of concurrency fees for transportation capital expenditures as well as for operations and maintenance expenses. Many states allow such fees for capital expenses only,[130] But Florida, along with California, is an exception to this practice.[131]

Case Analysis

Enabling Legal Environment

Florida's growth management act provides the legal framework for Broward County's transit concurrency fee. Furthermore, the county government has land use authority over the entire county area. This authority enables the county to implement the fee without going through the arduous process of seeking each municipality's formal approval.

Stakeholder Support

Stakeholder support was not a concern for Broward County. In fact, developers have welcomed the fee, which is transparent and known ahead of time.[132]

Institutional Capacity

Until the 2011 amendments, Florida's concurrency requirements essentially forced the imposition of transportation concurrency fees. The institutional capacity to charge the fees was thus in place—the county was already charging a variety of concurrency fees.

Horizontal and Vertical Equity

The concurrency fee enhances vertical equity to the extent that transit users have lower income than automobile users.[133]

The fee also promotes horizontally equity. The revenue from it must be spent within a localized area, so those who pay the fee benefit from it. The county did not impose it on the two districts where transit was deemed unsuitable.

However, the fee assessment methodology could be made more equitable. While other uses are assessed a fee based on their square footage, number of acres, or beds, all residential uses are assessed the concurrency fee on a per-unit basis. Although those uses are broken down into different types that have some correspondence with their size and households' ability to pay the fee,[134] e.g., apartments or mobile homes, a more equitable assessment methodology would base the fee on square footage or number of bedrooms.

Revenue Yield, Stability, and Growth

The economic recession and real estate downturn caused the transit concurrency fee to run into trouble shortly after its 2005 inception. Broward County faced a $40 million to $110 million budget shortfall.[135] As revenue from the fee and the fare-box fell, the county had to find other revenue sources to keep the transit system running. It is now using a more strategic approach wherein the fee dollars are used in the areas that have higher ridership and that can generate more fare-box revenue.[136]

TRANSPORTATION-MITIGATION IMPACT FEE, AVENTURA, FL

Overview

Aventura is located in Miami-Dade County, on the southern tip of the Florida peninsula. The city recently started charging a transportation mitigation impact fee to fund the expansion, operation, and maintenance of its public bus system, the Aventura Express.[137] The fee was approved by the City Council on September 30, 2009.[138]

While Broward County has enacted a transportation concurrency fee, the state law prohibits the Aventura from doing the same. When Florida's concurrency law was passed in 1985,

the state recognized that the concurrency fee would not be logical for all locations. The entire city of Aventura falls within a transportation concurrency exception area (TCEA), and jurisdictions within a TCEA do not have to follow the concurrency requirement. However, the state law requires any jurisdiction within a TCEA to demonstrate strategies to support and fund mobility in order to maintain the exception. This requirement, along with the inability to charge concurrency fees, prompted Aventura to charge impact fees.[139,140]

Who Collects the Fee?

Aventura's Community Development Department is responsible for collecting the impact fee. The revenues from the fee are deposited in the Transportation and Street Maintenance Fund established by the city and can be expended only on the Aventura Express. The City Manager is required to review the fee details every three years, and the City Commission reviews and adopts the City Manager's proposals.[141]

Who Pays the Fee?

The fee applies to new developments and changes of use, as well as to the redevelopment, expansion, or modification of existing uses.[142] It is assessed on almost all the developments within the city limits.[143] Exempt uses include government offices, police and fire stations, airports, seaports, parking facilities, equipment yards, sanitation facilities, water control structures, schools, parks, and other similar facilities used for government operations.[144] In addition, some accessory buildings that serve the same function as the primary building and have negligible impact on the transportation system are exempt. Finally, parking garages are also exempt.[145]

What Is the Current Fee?

A study was conducted by a private consultant to examine ways to maintain the city's level of transportation service without expanding the roads and highways. Since Aventura Express was the only public transportation solution in the city, the study recommended a transit impact fee to support it. The fee is "based on the cost required to serve the increased demand for use of the Circulator System resulting from the proposed new Development Activity."[146] In addition to the current fee schedule, shown in Table 5, a 3 percent administrative fee is charged.[147] for six types of development—residential, office, retail, tourist accommodation, industrial, and institutional. The impact of each development type on the transit infrastructure is measured by calculating the number of persons using that type. For example, Table 5 suggests that 2.175 persons per 1,000 square feet of retail space are assumed to use the city's transit system. As noted earlier, the fee revenues are spent solely on Aventura Express operations, maintenance, and capital expenditures.[148]

Table 5. Transportation Mitigation Impact Fee in Aventura, FL

Land Use (Unit of Measure)	Persons per Unit of Measure	Fee per Unit of Measure ($)
Residence (per dwelling unit)	0.972	803.05
Office (per 1,000 sq ft)	1.557	1,286.59
Retail (per 1,000 sq ft)	2.175	1,797.33
Tourist accommodation (per 1,000 sq ft)	2.720	2,247.22
Industrial (per 1,000 sq ft)	1.319	1,089.35
Institutional (per 1,000 sq ft)	2.312	1,910.09

Source: City of Aventura, Memorandum to the City Commissioner, http://www.cityofaventura.com/clerk/agendas/lpa01-13-2009/lpa01-13-2009-4A.pdf (accessed February 9, 2011).

How Has the Fee Changed over Time?

Adopted in 2009, the fee is relatively new. Therefore, it has not undergone many changes. However, some changes were made at the time it was first proposed, when it met with strong real estate developer resistance. The original fee was $1,320 for new residential dwellings and $2,115 for every 1,000 square feet of new commercial space. After negotiations with the developers, the city slashed the fee by 40 percent. The current fee is $803 per dwelling unit and $1,286 for every 1,000 square feet of commercial space. The fee revenues are also restricted to being used only for the expansion of Aventura's free shuttle service. Permitted uses include adding new buses and extending shuttle service operation hours.[149]

Fee Revenue Amount

The fee is levied at the time building permits are issued. Florida allows the use of impact fees to fund capital expenses, as well as operations and maintenance expenses. Therefore, Aventura is able to use the fee for administrative expenses as well.[150] As of the writing of this report, the impact fee had been paid only one time. The developer of a 126,000-square-foot office building paid an impact fee of $47,604 on May 27, 2011.[151]

Case Analysis

Enabling Legal Environment

Florida's impact-fee-enabling legislation (Florida Statute 163.31801), which allows impact fees to fund transit, including transit operations and maintenance expenses, made the Aventura transportation-mitigation impact fee possible.[152] Most states allow impact fees to fund only transit capital expenditures, and many states prohibit the use of the fees to fund transit at all.[153]

Revenue Yield, Stability, and Growth

The city proposed the fee in the midst of the worst real estate market and economic conditions since the Great Depression. The developers were therefore successful in having the fee reduced by almost half, delaying its implementation by several months and limiting its use.[154] The city might have encountered less developer opposition if the fee had

been proposed when the South Florida real estate market was booming or if it had waited until the real estate market improved.

Impact fees run the risk of burdening a transit system with unused or underutilized projects when the real estate market is not consistently strong. The risk is greater in states where impact-fee revenues can fund only capital expenditures. For example, a jurisdiction could be burdened with significant operations and maintenance costs if new routes are developed using impact-fee revenue. Furthermore, transit-system expansion may not occur according to plan if the impact-fee revenues abruptly decline due to a sudden weakening of the real estate market.

Stakeholder Support

Opposed to the fee from its very inception, developers were able to get it reduced. It may be difficult to garner the support of all the stakeholders in automobile-oriented cities, such as Aventura, where public transit accounts for a small portion of transportation. Stakeholder support is especially difficult to obtain during tough economic times.

Institutional Capacity

Like Broward County's concurrency fee, charging Aventura's impact fee requires moderate institutional capacity, which is paid for by the 3 percent administrative fee that is added onto the impact fee.

The opposition to the fee probably stretched local government resources in terms of staff time and salary spent addressing the developers' concerns.

Horizontal and Vertical Equity

The fee is horizontally equitable, as it is assessed on the basis of the development type and its transportation impacts. Furthermore, the assessment is based on the development's additional impacts on the Aventura Express. The nexus study seems to have fairly based the fee on an area or per-unit basis, making it vertically equitable—the larger the office space, the higher the fee. Therefore, the fee is vertically equitable to the extent that the developer's ability to pay increases with the development size.

The fee's horizontal and vertical equity could be further enhanced if the residential impact fees were charged on per-bedroom basis (or a per-square-foot-of-living-space basis) instead of the current per-dwelling-unit basis.

TRANSIT IMPACT DEVELOPMENT FEE, SAN FRANCISCO, CA

Overview

A transit impact development fee (TIDF) is levied by the city and county of San Francisco to help mitigate the impacts of new non-residential developments on the city's public transportation system.[155] The TIDF was initially established in 1981 in response to a

significant rise in downtown office development in the 1970s. This office growth was expected to bring an increase in the demand for transportation, necessitating greater emphasis on alternatives to automobile travel. It was estimated that this shift in travel behavior would put substantial new demand on the public transportation system,[156] and the TDIF would help finance the increase in capacity required to meet this demand. While the initial TIDF accommodated some growth, it was strictly limited to financing peak-hour growth in transit demand on the transit lines passing through the downtown district.

While San Francisco usually pays for its transit from the city's general fund, providing transit to accommodate the new buildings would have exhausted the funds and strained taxpayers.[157] The city therefore looked to alternative mechanisms to fund transit.[158] The TIDF was retroactively applied to include office developments built after 1979. Furthermore, it was expanded after a 2001 study concluded that developments outside of the original downtown district required the municipal railway, called Muni, to maintain and expand service; purchase, maintain, and repair rolling stock; install new lines; and service existing lines.[159]

All impact fees in San Francisco are collected by the Department of Building Inspection before building permits are issued.[160] The San Francisco Municipal Transportation Agency (SFMTA) manages and spends the TIDF revenue.[161]

With more than 5,000 employees, the SFMTA is the seventh largest transit system in the United States. It is responsible for overseeing all forms of surface transportation, as well as parking and taxi regulation, in San Francisco. Formed in 1912, Muni is run under the authority of the SFMTA. It serves the city and county of San Francisco, with 63 bus routes, seven light-rail lines, the historic streetcar F Line, and three cable car lines.[162]

What Is the Fee Used For?

The TIDF is intended to meet "a portion of the demand for additional Muni service and capital improvements for the city caused by new non-residential development."[163]

Toward that aim, the fee can be used for capital and operating expenses as the SFMTA sees fit to maintain the base level of service.[164] The official ordinance lists the following permitted uses (the list is not exhaustive, and other uses, such as payment of salaries, may also be permitted):[165]

- "Capital costs associated with establishing new transit routes, expanding transit routes, and increasing service on existing transit routes, including, but not limited to
  - Procurement of related items such as rolling stock, and
  - Design and construction of bus shelters, stations, tracks, and overhead wires
- Operation and maintenance of rolling stock associated with new or expanded transit routes or increases in service on existing routes

- Capital or operating costs required to add revenue service hours to existing routes, and related overhead costs"[166]

Who Pays the Fee?

The TIDF is assessed on all new non-residential land uses within San Francisco with areas of more than 3,000 square feet.[167] It is computed and charged prior to the issuance of the building or site permit for any new development[168] and is paid before permits are issued or, with the inclusion of a surcharge, at the time a certificate of occupancy is issued.[169] Effective through June 2013, a fee deferral program was set up in 2010 in response to the economic recession to help development continue through hard times. The deferral allows developers to defer 80 percent of the fee until just prior to the issuance of a certificate of occupancy, an estimated delay of 10 to 30 months.[170]

Payment of the TIDF is not required for:[171]

- Property owned by the city, the state, or the federal government or their agencies
- Any development in parts of the city where the TIDF is inconsistent with the redevelopment plan, including Mission Bay North or South

In addition, the following non-residential uses do not have to pay the TIDF:[172]

- Public facilities/utilities
- Open recreation/horticulture, including private non-commercial recreation use
- Vehicle storage and access
- Automotive services
- Wholesale storage of materials and equipment

What Is the Current Fee?

The assessed fee, depending on the type of land use, was $8 to $10 per gross square foot in 2010.[173] The land uses and corresponding fees are listed in Table 6.[174]

Table 6. TIDF Charge Based on Land Use as of 2010

Economic Activity Category	TIDF Per Gross Square Foot of Development ($)
Cultural/institution/education	10
Management, information, and professional services	10
Medical and health services	10
Production/distribution/repair	8
Retail/entertainment	10
Visitor services	8

Source: City of San Francisco, Ordinance 108-10: Development Impact and In-Lieu Fees (May 3, 2010), p. 59.

How Is the Fee Calculated?

Before the adoption of the TIDF in 1981, the city's Public Utilities Commission conducted a study to demonstrate the cost of providing transit for a new office development. The study found that the cost was $9.18 per square foot of new office space.[175] In 1983, a private accounting firm, Touche-Ross, conducted a cost analysis to defend the ordinance from a legal challenge and found that the cost of providing the service was $8.36 per square foot.[176] A study conducted in 2001 by the city-hired private transportation-planning firm Nelson/Nygaard (with substantial input from the city agencies) to determine whether the fee should be expanded from the downtown area to the entire city concluded that new and future non-residential uses would have enough impact on the transit system to warrant citywide application of the TIDF.[177] While the original TIDF was assessed only for office space, the new TIDF was expanded to include all non-residential land uses (with the exception of those mentioned earlier).[178]

The TIDF is based on the number of square feet of a new development.[179] "Whenever any new development or series of new developments cumulatively creates more than 3,000 gross square feet of covered use within a structure, the TIDF shall be imposed on every square foot of such covered use (including any portion that was part of prior new development below the 3,000-square-foot threshold)."[180]

After extensive research and discussion, it was agreed that the $8-per-square-foot fee would adequately cover land uses generating 6.60 trips per 1,000 square feet, and the $10-per-square-foot fee would cover land uses generating 8.25 trips per 1,000 square feet. Figure 3 outlines the methodology used to arrive at the $10 fee. The principal steps in this process are the following:

1. The total daily unlinked auto and transit trips are calculated from a travel demand model.

2. The total daily hours of transit service and the daily cost of providing transit are identified.

3. The total daily trips divided by the total cost of the trip provide the annual cost per trip ($36.32 per trip).

4. The $10-per-square-foot fee is estimated to correspond to a 45-year annuity of $299.76 (using 3.5-percent inflation and a 4.93-percent rate of return). The 45-year term corresponds to the useful life of the non-residential development that pays the fee.

5. The $299.76 annuity divided by the annual cost per trip ($36.32) yields 8.25 daily trips.

6. The trips generated by various land uses are estimated. Uses expected to generate at least 8.25 trips are assessed a fee of $10 per square foot.

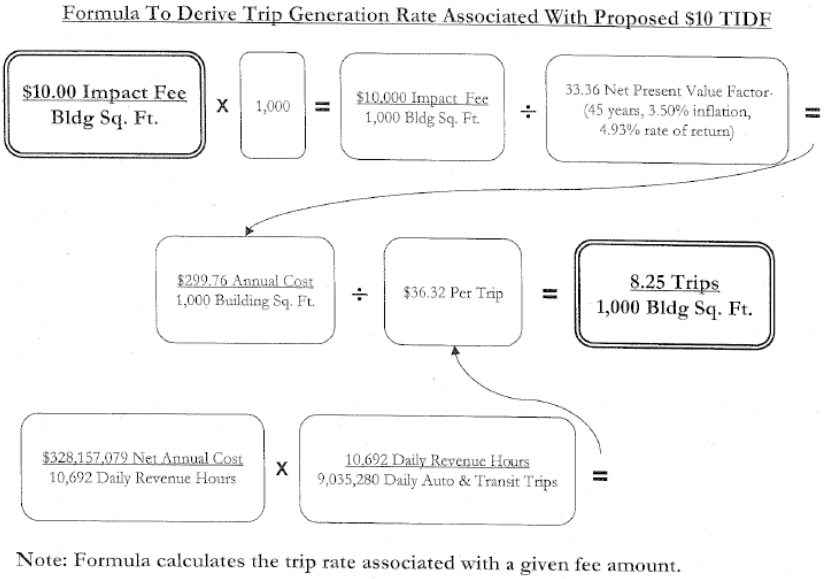

Figure 3. Illustrative Calculation of the Transit Impact Fee

Source: SFMTA, Background Documentation Transit Impact Fee, June 2004.

The fee is adjusted annually by the two-year-average change in the consumer price index (CPI) for the San Francisco/San José Primary Metropolitan Statistical Area (PMSA).[181] Additionally, every five years, the Director of Transportation at the SFMTA, in coordination with the Director of Planning, is required to prepare a report detailing whether the TIDF should be adjusted for each economic activity.[182] The Director of Transportation must also update other information pertinent to calculating the fee, such as the base service standard, cost per revenue service hour, and placement of particular land uses in economic-activity categories.[183] The report is subject to public hearings.[184]

The amount collected by the TIDF cannot exceed the capital and operating costs required to maintain the base level of service over the 45-year useful life of the development.[185] The funds are placed in a trust overseen by the Treasurer and are used for a variety of capital and operating expenses.[186]

How Has the Fee Changed over Time?

The TIDF has gone through significant changes in its 30-year history. It has expanded to include the participation of more agencies and has become more comprehensive in size and scope.[187] The original fee, which was implemented in May 1981, was $5 per square foot of office space,[188] was charged only for a small downtown district, and was assessed only for office buildings.[189]

Twenty years after the TIDF was established, a study conducted to explore the possibility of expanding its size and scope found that new developments throughout the city had significant impacts on the transit system and should therefore be incorporated. In 2004, the citywide TIDF was approved by the San Francisco Board of Supervisors and went into effect for new non-residential uses (with some exclusions).[190]

In 2009, four agencies—the San Francisco County Transportation Authority, the San Francisco Planning Department, the Office of Economic and Workforce Development, and the San Francisco County Transportation Authority—entered into a memorandum of understanding (MOU) to expand the scope of the fee. A new nexus study was commissioned to expand the TIDF into the Comprehensive Transportation Impact Development Fee (CTIDF). The nexus study comprises three parts, as defined in a memorandum from the San Francisco County Transportation Authority: "Part One of the Study would develop a legal basis for continued collection of the existing TIDF and would be managed and funded solely by the MTA [Metropolitan Transportation Authority]. Part Two of the Study would develop a legal basis for the potential future adoption of a new Comprehensive Transportation Impact Development Fee (CTIDF) that would expand upon the existing TIDF to address the effects of new development on the entire City transportation system. This part of the Study would be jointly reviewed by all four parties to this agreement but funded entirely by the MTA. Part Three of the Study would develop a legal basis for the potential adoption of a new auto trip mitigation fee that would mitigate significant transportation-related environmental effects identified pursuant to the California Environmental Quality Act. This part of the study would be jointly reviewed by all four parties to the agreement and funded by all four agencies pursuant to the cost sharing provisions described in the MOU."[191]

Case Analysis

Enabling Legal Environment

California's impact-fee-enabling legislation, called the California Mitigation Fee Act, was passed in 1989, several years after San Francisco's TIDF was implemented.[192] The legislation was passed with the intention of codifying existing "constitutional and decisional law" regarding impact fees and exactions, meaning that it codified previous court decisions that had already shaped California law.[193] The legislation is broad in its language, allowing for impact fees to be used on projects that are reasonably related to increased demand for facilities. It also specifically allows the use of impact fees for transit- and transportation-related improvements, consistent with the San Francisco TIDF.[194]

The TIDF was originally enabled by a local ordinance passed by the County Board of Supervisors. The ordinance is now covered in Article 4 of the San Francisco Planning Code.[195] It passed without the benefit of the state-level enabling legislation and was therefore vulnerable to legal challenges. The challenge described below came shortly after it was passed. The ordinance was successfully defended, and the courts upheld the fee.

The legal basis for charging the TIDF hinges on the fee's classification as an impact fee rather than a tax.[196] To be classified as a fee, the TIDF must pass the rational nexus test, meaning there must be a rational nexus, or link, between the fee and the service provided. In 1981, a class action lawsuit entitled Russ Building Partnership v. City and County of San Francisco was filed against the city for imposing the fee. The Court of Appeals and the Supreme Court of California upheld the TIDF, noting that it is not a tax but a legitimate development fee, and that there is in fact a rational nexus for it.[197]

The plaintiff argued that the $5-per-square-foot fee was unreasonable and exceeded the cost of increased transit service, hence was a "special tax," subject to two-thirds vote, and that it violated California Constitution articles XIII A and B, which place restrictions upon the imposition of such taxes.[198] The plaintiff further argued that the fee unfairly burdened office buildings built after 1979, while exempting retail stores, claiming that differential treatment of new office buildings was a violation of the equal-protection clause. It was additionally alleged that the methods used and the assumptions made to arrive at the fee amount were unsound. Another plaintiff in the case argued that the retroactive application of the fee was illegal and alleged that the fee violated the city charter.[199]

The courts, however, disagreed with all of these opinions and found the fee legal. They sided with the city on all counts and stated in their findings, "In summary, we hold that the transit fee was a lawful development fee which is not governed by California Constitution articles XIII A or XIII B, and it does not interfere with plaintiffs' due process and equal protection rights. The fee is not a double tax and does not violate section 3.598 of the city's charter. Any error in calculating the fee was harmless, and the judgment in favor of the city and against Russ Building plaintiff is affirmed."[200] The argument about the exemption of retail stores was rejected on the grounds that retail uses do not exert added strain on the transit system during peak traffic hours, while the offices do. Therefore, office developments require Muni to provide additional service.[201]

Stakeholder Support

Apart from the earlier challenges to the legality of the fee and continued rumblings from the developer community, stakeholder support for the TIDF is strong within the city's political leadership and staff. This support is evidenced by the fee expansion in 2004 and by recent discussions regarding its further expansion. San Francisco adopted the fee deferral program in 2010 to ease the fee's impact on the developers.

Institutional Capacity

The TIDF requires significant administrative and technical capacity—it has placed added administrative burden on the SFMTA and added costs for consultants and attorneys. Consulting firms were hired to conduct nexus studies, and the SFMTA presumably hired attorneys to defend the TIDF during the 1981 lawsuit.

Horizontal and Vertical Equity

The fee is fairly equitable for all parties involved. The transportation system in San Francisco is such that large new developments' transportation needs can be met only with public transit. Many of San Francisco's transit lines run at capacity during the peak commuting hours, requiring expanded service during those times.

The fee is also horizontally equitable. It is applied to all non-residential developments of over 3,000 square feet. Furthermore, there is some variation in the fee, depending on the amount of transit service needed by the type of land use. Smaller developments, which place less burden on the transit system and are also less likely to afford the fee, are excluded.

Revenue Yield, Stability, and Growth

Despite the relative strength of the San Francisco real estate market,[202] the recent downturn impacted fee revenues, which declined from a traditional annual average of between $4 million and $5 million to $2 million.[203] On a positive note, the TIDF has built-in stability measures. The fee is CPI-adjusted, which keeps it abreast with inflation. Furthermore, the fee may be reviewed and revised every five years.

The TIDF represents a small but significant component of the SFMTA revenues (see Table 7). For example, for FY 2007, the SFMTA budgeted $10.16 million of its revenue to come from the TIDF. This was 1.5 percent of the entire $678.68 million budget.[204] While a small percentage of the entire budget, the TIDF provides a much-needed stream of steady revenue. Furthermore, the percentage is likely to be higher if the transit costs associated with only new growth are considered.

Table 7. TIDF Revenues in 2004–2009

	Fiscal Year					
	FY 04	**FY 05**	**FY 06**	**FY 07**	**FY 08**	**FY 09**
Revenue from TIDF ($millions)	**9.88**	**12.80**	**10.19 (approved)**	**10.16 (proposed)**	**8.4**	**10.34**
Source	http://www.sfmta.com/cms/cmta/documents/FY2006ProposedBudget2-28-2005_v5.pdf	http://www.sfmta.com/cms/rbudget/documents/FY2007ApprovedBudgetBook_v5.pdf	http://www.sfmta.com/cms/rbudget/documents/FY2007ApprovedBudgetBook_v5.pdf	http://www.sfmta.com/cms/rbudget/documents/FY2007ApprovedBudgetBook_v5.pdf	http://www.sfmta.com/cms/rbudget/documents/FY2009-FY2010AMENDEDBUDGETBOOKoptimized.pdf	http://www.sfmta.com/cms/rbudget/documents/FY2011AND-FY2012BUDGETBOOK.pdf
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Source: SFMTA, Adopted Budgets FY 2004–2010. http://www.sfmta.com/cms/rbudget/budgindx.htm#fy20112012 (accessed September 18, 2011).

III. SPECIAL ASSESSMENT DISTRICTS

OVERVIEW

A special district is a government entity that provides one or more services but is not necessarily administered by a general governing body, such as a city or county.[205] A special district employs a cost recovery system based on the benefits-received principle.[206] For example, a water district can charge user fees; a library district can receive a portion of property taxes; and a transportation-benefit district can levy assessments.

Uses of Special Districts

Special districts have long been used to provide a variety of services and infrastructure.[207] However, their use is limited by state law, which varies significantly from state to state.[208] The most common use of special districts is for environmental and housing services, followed by provision of water and sewage services and fire protection.[209] Most special districts provide service and infrastructure in one of the following six areas: electric power, transportation, hospitals, housing and community development, water, and sewers.[210]

Growth of Special Districts

States have used special districts since the mid-19th century, and currently all 50 states do so.[211] Beginning in the early 20th century, special districts became popular as a result of rapid urbanization and the attendant need to build new infrastructure.[212] During the Great Depression, many special districts became insolvent due to falling property values. However, their use increased as the depression ended and has been growing ever since.[213] Special districts have been particularly popular in fast-urbanizing, hitherto unserviced rural areas.[214]

Special Assessment Districts: A Subset of Special Districts

SADs are a subset of special districts that charge property owners fees, called assessments, for the benefits provided to them by the SADs.[215] Like private financing, SADs are structured so that those who benefit from the improvements pay for them.[216]

Use of SADs to Fund Public Transportation

The use of SADs to fund public transportation has grown in recent decades. In the 1980s, several metropolitan areas, including Los Angeles, CA, and Washington, DC, started using SADs to finance new rail projects.[217] Other cities, including Seattle, WA, and Portland, OR, have used them to finance transit infrastructure, such as streetcars and light-rail systems, while Charlotte, NC, and Atlanta, GA, plan to use them to finance local transit projects.[218]

Properties within SADs are assessed fees based on attributes such as property value, parcel size, street frontage, and use.[219] Street-front footage, or the length of the property along the transit infrastructure, is the traditional measure of benefit in a SAD. However,

new methods of assessment are becoming more popular, as the frontage method has proven to be inequitable.[220] These new methods include the following:

- The benefits assessed, or increased value, method, which determines the increase in property value to arrive at the assessment amount.

- The zone method, which uses the proximity to the relevant amenity to determine the assessment amount. For example, properties may be divided into zones depending on their proximity to the transit infrastructure, with the fee rate increasing with proximity.

- The area method, in which assessments are proportional to the size of the land parcel on which the property is located.[221]

The infrastructure and services within a SAD can be financed using the "pay as you go" method, that is, by spending funds only as they are collected, or the "pay as you use" method, in which SAD-revenue-backed bonds (commonly called special assessment bonds) fund the project.[222] Special assessment bonds cover the expensive up-front costs of building infrastructure.[223] They are more politically feasible than general obligation bonds in some states, including California, where a simple majority is needed to approve them, rather than the two-thirds super-majority required for general obligation bonds.[224]

The Enabling Legal Framework

The state's legal requirements impact SAD formation,[225] which generally must be supported by the majority of property owners.[226] After the property owners vote in favor of the SAD, a preliminary study outlining the project details is conducted, and a city or county government votes to approve or deny SAD formation.[227] Next, each property within the SAD is assessed a fee. Property owners are given the option to appeal the fee, and if an appeal is upheld, the fee is reassessed.[228]

Other Considerations for Use

Political Acceptability

Unlike exactions and impact fees, which apply only to new developments, SADs can also affect existing developments.[229] Therefore, some states require that SADs be contiguous and include already developed properties, a requirement that makes SADs politically unpopular with current residents.[230] To reduce voter opposition, the exclusion of existing developments is becoming the norm in states that do not require contiguous application of a SAD.[231] Exempting residential properties is also a commonly used strategy to avoid resident opposition to SADs.

Government Fragmentation

The proliferation of special districts leads to multiple government agencies serving the same population, often performing similar or related services. This functional overlap

complicates coordinated service provision.[232] Furthermore, the overlap may reduce the efficiency of service provision.[233] For example, special districts have enabled the creation of "phantom cities" in California. These cities' residents use SADs to provide essential services that are typically provided by a city, thereby obviating the need to become part of a city. Critics argue that the proliferation of special districts puts a burden on nearby cities as well. The residents of "phantom cities" are often unwilling to contribute to regional initiatives, and the cities often provide a low level of service (such as poor police protection or few parks), leading to negative spillover effects.[234]

Quasi-governmental Entities with Less Public Oversight

Highlighting the undemocratic nature of special districts, critics note that voting privileges are sometimes determined based on property qualifications rather than residency.[235] Additionally, special districts can fly under the public radar, as residents often assume that they are a part of the local city or county government.[236,237] The resulting lack of public oversight may decrease transparency in the workings of the special districts.[238,239]

A Way to Bypass Bond-issuance Limits

Special districts are more likely to be created when states restrict local governments' taxing or borrowing powers, e.g., by placing limits on issuing bonds.[240] In such situations, fiscally constrained local governments may have trouble meeting their constituents' service demands.[241] Debt raised by special districts does not qualify as traditional municipal debt, so special districts can be formed to fund infrastructure and services that would normally be the local government's responsibility.

Impact of Real Estate Market Conditions

SADs need a strong real estate market to thrive. The impact of the real estate market can be particularly significant on SADs formed to fund newly urbanizing areas. These SADs typically rely on future growth, and existing property owners can bear a heavy assessment burden if the anticipated growth does not materialize.[242,243]

Equity Considerations

If not structured carefully, SADs can negatively impact vertical equity by putting a high burden on those with low ability to pay.[244] Many assessments are regressive and do not take into consideration the property owner's income level, placing a financial burden on lower-income property owners.[245]

Furthermore, assessments can reduce horizontal equity if certain properties, such as residences, are exempt from paying assessments or pay lower assessments, even though they benefit from the assessment-funded infrastructure or service.

Case Study Selection Criteria

The selection criteria for our SAD case studies include the following:

- Must be used to fund the construction, operation, or maintenance of public transportation infrastructure, such as stations, rail lines, and rolling stock
- Assessments must be a major revenue source
- A variety of transportation modes must be involved
- Data must be available

The following cases were selected for analysis: Seattle South Lake Union Streetcar, Seattle, WA; New York Avenue Metro Station, Washington, DC; and Los Angeles Metro Red Line Benefit Assessment District, Los Angeles, CA. The fourth case, Portland Streetcar, Portland, OR, uses both SAD and TIF. It is discussed among the TIF cases.

SOUTH LAKE UNION STREETCAR, SEATTLE, WA

Overview

With a population of about 608,000, Seattle is the largest city in the Seattle–Tacoma–Bellevue metropolitan statistical area.[246] The city has a relatively well-developed and diverse public transportation system, including an extensive bus system, light rail, streetcars, and monorail.[247]

Like many cities in the United States, Seattle had a streetcar system in place in the late 19th and early 20th centuries, but the system was abandoned with the advent of the automobile. In recent decades, streetcars have made a resurgence across the country, and Seattle joined this trend with the completion of the Seattle South Lake Union Streetcar (referred to in this discussion simply as the streetcar) in 2007.[248]

The streetcar operates between Seattle's downtown and South Lake Union neighborhood. It serves the Denny Triangle and Belltown neighborhoods as well.[249] With 11 stops along a 2.6-mile route (see Figure 4), it connects with Seattle's other local and regional public transit systems, including the Metrobus, Sound Transit buses, trains and light rail, and the monorail at the Westlake Hub/Pacific Place Station.[250] The streetcar line was approved by the City Council as part of a larger investment intended to revitalize the South Lake Union neighborhood.[251]

Discussions about bringing a streetcar to the neighborhood had been under way since the early 2000s.[252] The city of Seattle conducted several preliminary studies, including one of local improvement district (LID) assessment methodology (SADs are officially called LIDs in the state of Washington). After property owners approved the LID in 2005, the City Council approved funding for the project and formation of the LID.[253] The streetcar began operating in 2007.[254]

Figure 4. Route Map of the Seattle Lake Union Streetcar

Source: City of Seattle, "Streetcar Route Map," http://www.seattlestreetcar.org/map/ (accessed July 13, 2011).

Assessment Methodology and Revenue Generated

The LID funded more than half of the streetcar project. The city issued bonds to pay up front for the capital costs. The bonds are being paid back through the LID assessments.[255]

For the purposes of calculating assessments, each parcel was considered on an individual basis as if owned "fee simple," i.e., they were assessed as if the property was owned outright.[256]

The assessments are based on the estimated increase in the property value resulting from the introduction of the streetcar system.[257] They assume that traffic congestion would have prohibited certain properties from developing to their highest and best use if the streetcar had not been built.[258] That is, by building the streetcar, the city was essentially allowing property owners to use their property to the fullest extent, thereby increasing its value.[259]

The property appraisal was conducted in 2004 and published in 2006.[260] The 760 parcels considered[261] were classified into the following major groups:[262]

- Land or vacant/interim uses
- Apartments
- Condominiums
- Hotels
- Retail
- Industrial
- Office
- Other[263]

Vacant properties and interim-use properties (not developed to their highest and best use) were estimated to benefit most from the streetcar (see Table 8).[264] Apartments, condominiums, hotels, and retail uses were expected to be the next-highest beneficiaries, and properties already developed to their highest and best use (industries, offices, and other) were expected to benefit the least.[265]

Table 8. Projected Percentage Increase in Valuation Resulting from Introduction of the Seattle Streetcar

Analysis Area	Apartment	Condo	Hotel	Retail	Land	Industrial	Office
A	3.00	3.00	3.00	3.00	8.00	1.50	1.50
B	2.25	2.25	2.25	2.25	6.00	1.00	1.00
C	1.50	1.50	1.50	1.50	4.00	0.75	0.75
D	1.00	1.00	1.00	1.00	3.00	0.50	0.50
E	0.50	0.50	0.50	0.50	1.00	0.00	0.00

Source: Deborah A. Foreman and Matthew C. Sloan, "Seattle CBD to South Lake Union Streetcar Final Special Benefits Study" (May 2006).

The amount of the assessment fee for each property was based on proximity to the streetcar line. The analysis areas were grouped (see Figure 5) as follows:

- Area A: frontage on the streetcar, north of the central business district (CBD) core
- Area B: one block from the streetcar or with frontage near the south terminus
- Area C: two to three blocks from the streetcar, north of Denny Way
- Area D: two to three blocks from the streetcar, south of Denny Way
- Area E: four or five blocks from the streetcar[266]

The special assessment fee provided $25.7 million (52 percent of the total project cost). The rest of the project funding came from federal and state grants (see Table 9). As of 2007, nearly $17 million in assessment fees had been paid.[267]

Table 9. Seattle Streetcar Project Funding Sources

Funding Source	Amount Total ($)	Percent of Total Project Cost
LID assessments (net)	25,700,000	51.71
Federal/state grants	18,500,000	37.22
Maintenance base	2,200,000	4.43
Property sale	3,300,000	6.64
Total	**49,700,000**	**100.00**

Source: Allen Brackett Shedd, "Final Special Benefits Study for South Lake Union Streetcar," p. 4.

Property owners were provided the opportunity to seek amendments to the fee, and some assessments were successfully amended because mistakes were found in the assessment process. Among the largest reductions, the Pacific Place assessment was reduced by $209,235 (54 percent), the Seattle Times assessment was reduced by $156,853 (68 percent), and the Comprise Venture assessment was reduced by $141,897 (52 percent).[268,269]

Property owners were given the option of paying the fee up front or over 18 years at an interest rate of 4.4 percent. If a property is sold before the full fee is paid, the entire balance is payable at the time of closing. The 18-year payment option and the associated interest rate reflect the tenure and interest rate associated with the city-issued general obligation bonds that funded the up-front costs of the streetcar project.[270]

Figure 5. Analysis Areas in Seattle's South Lake Union District

Source: Allen Brackett Shedd, "Final Special Benefits Study for South Lake Union Streetcar," p. 15.

Case Analysis

Enabling Environment

Like Oregon, Washington has clear LID-enabling legislation that allows the use of LIDs for transportation. Without such legislation, the 12 property owners who were opposed to the LID might have had a better chance of winning a lawsuit and might have decided to go ahead with the legal challenges. The enabling legislation put the city on solid legal ground.

Stakeholder Support

LIDs require property-owner buy-in. LIDs are "personal," in that while most construction projects can disrupt traffic and inconvenience people, LIDs ask that the owners put up with the disruptions and directly fund the disruption-causing projects. Therefore, LIDs have the potential to be very unpopular.[271]

However, the Seattle Streetcar project was very popular among property owners, 98 percent of whom agreed to finance more than half of the total project cost through a LID. The streetcar was backed by few major players, including Microsoft co-founder Paul Allen's company, Vulcan; the Mayor; and the City Council.

The city was able to resolve disputes and complaints from unhappy property owners. The 12 property owners who objected to the assessment represented ownership of only 1.5 percent of the assessed value of the properties within the LID.[272] Property owners were given a chance to review their assessments with the appraisers, and most of the issues were resolved at this stage. The few still unsatisfied property owners were referred to a hearing examiner. The property owners agreed with the examiner's rulings.[273] Moreover, those who threatened to sue the city did not carry out their threat because of prohibitive legal costs.[274]

Real Estate Market

The fee was assessed in 2004 and approved in 2005. The streetcar began operating in 2007, just months before the housing crisis and the economic recession deepened. Had the LID formation process begun during the recession, say in 2009, the outcome of the entire project might have been much different. The property owners would probably have lost some of their equity during the recession and might have been less enthusiastic about paying assessments.

Institutional Capacity

Significant institutional capacity may be needed to form, implement, and manage LIDs. Specifically, capacity is required to conduct the benefit study, secure property owner buy-in, obtain City Council approval, and levy the fee.[275]

Horizontal and Vertical Equity

The large variety of property types within the Seattle LID required the city to devise a transparent and equitable benefit assessment calculation methodology, one that is bit more complex than one simply based on street frontage or parcel size. The city successfully developed a calculation methodology, basing assessments on the increase in property value if the property is developed to its highest and best use and the property's proximity to the streetcar. As each property had to be individually assessed, this methodology required much more work than simpler methodologies. However, it was viewed by property owners as bringing a sense of fairness and probably minimized opposition to the LID.

Even with a fair methodology, LIDs have the potential to adversely impact lower-income or fixed-income property owners, such as low-income senior citizens. Therefore, Chapter 84.38 of the Revised Code of Washington (RCW) and RCW 35.43.250 and 35.54.100 of the Washington legislation allow indefinite deferment of LID payments for certain qualifying senior citizens. In addition, economically disadvantaged individuals may defer payments for up to five years.

The LID assessment calculation methodology is also horizontally equitable—the amount each property pays is in proportion to the estimated financial benefit received.

Revenue Yield, Stability, and Growth

Because assessments are determined at the time a LID is established, the assessment revenues can be very reliably estimated for an already developed area. The balance assessments are due when the property is sold, so revenues can be reliably estimated even when the property owners pay over a long period.

In summary, the Seattle Streetcar case shows that even after accounting for the risk of public opposition or legal action, SADs are a low-risk financing option when used in an established urban area with a strong real estate market.

NEW YORK AVENUE METRO STATION, WASHINGTON, DC

Overview of Washington Metropolitan Area Transit Authority

The Washington Metropolitan Area Transit Authority (WMATA) was created in 1967 to build a regional transit system in the Washington, DC, area.[276] WMATA operates the regional bus and Metrorail system (see Figure 6). It acquired four bus systems in 1973, and the first Metrorail line became operational in 1976. The bus system has more than 300 routes, and the Metrorail has five lines, 84 stations, and 103 miles of track.[277] The Metrorail routes and opening dates are listed in Table 10.

Table 10. WMATA Metrorail Routes and Opening Dates

Name	Began Operating	Route
Red Line	1976	Shady Grove – Glenmont
Orange Line	1978	Vienna/Fairfax – New Carrollton
Blue Line	1977	Franconia-Springfield – Largo Town Center
Yellow Line	1983	Huntington-Fort Totten/Mount Vernon Square/7th Street – Convention Center
Green Line	1991	Branch Avenue – Greenbelt
Silver Line (planned)	2016 (planned)	Route 772 – Stadium Armory

Source: WMATA, "Metro Facts," http://www.wmata.com/about_metro/docs/metrofacts.pdf (accessed July 27, 2011).

Figure 6. WMATA Metrorail System Map

Source: WMATA, "Route Map," http://www.wmata.com/rail/docs/colormap_lettersize.pdf (accessed July 27, 2011).

New York Avenue Metro Station

The New York Avenue Metro Station was developed as a result of a partnership between the local landowners; the Washington, DC, government; the federal government; and WMATA.[278] The station is located in the north of Massachusetts, or NoMa, area on the Red Line between the Union Station and Rhode Island Ave–Brentwood stations (see Figure 7). The Red Line was in use for almost three decades before the New York Avenue Station opened in 2004.

During the 1990s, NoMa was an underdeveloped neighborhood with freight rail yards, abandoned buildings, warehouses, and vacant lots.[279] The station site was identified by the Washington, DC, planners as a prime redevelopment opportunity due to its location near

the downtown area.[280] However, as the NoMa area was already congested, the station was considered a prerequisite for the further redevelopment of the neighborhood.[281]

Figure 7. WMATA Metrorail System Map: New York Avenue Metro Station

Source: "WMATA Route Map," http://www.wmata.com/rail/docs/colormap_lettersize.pdf (accessed July 27, 2011).

Construction of the New York Avenue Station began in 2002, and the station opened in 2004 (see Table 11 for the time line).[282] The construction funds came from a variety of sources—the landowners; the Washington, DC, government; and the federal government. The property owners supported the station construction and agreed to pay assessments for 30 years to raise funds for it because they understood the benefits the station would bring to the local community, including significant investment from the federal government. [283,284]

Table 11. Time Line of Development and Construction of the New York Avenue Metro Station

1997–1998	District completes a strategic plan that identifies NoMa as a strategic investment area and identifies the need for an infill Metro station
1997–1998	Negotiations with private landowners
March 1998	DC government funds a feasibility study to explore whether an infill station could be built in the NoMa area
November 1998	The new Metro station becomes an important part of DC's strategic economic development plan
December 1998	Private landowners agree to contribute $25 million
1999	WMATA conducts a feasibility study for the station
June 1999	DC agrees to contribute $34 million to the station
October 2000	Congress commits $25 million to the project
Fall 2000	Preliminary engineering completed
Fall 2000	Design approved by the Nation Capitol Planning Commission and the Commission of Fine Arts
December 2000	Groundbreaking on the project site
November 2002	Groundbreaking on the station
November 2004	Station opens

Source: PB Consult, "New York Avenue-Florida Avenue-Galludet University Metro Station: A Case Study," p. 6.

Reasons for Landowners' Willingness to Fund the Station Costs

Prior to the station's development, several owners of the NoMa neighborhood's brownfield industrial land parcels had sought the city government's permission to develop offices on their land. Traffic on the local roads was at capacity, so the government determined that land development was possible only if a Metro station was built. Heeding the government's advice, the landowners petitioned for Metro station construction.[285] However, as public funds were scarce, the director of the DC Department of Transportation suggested that the NoMa property owners share the cost. The city government administration thought that this suggestion would not be well received by the property owners, but much to its surprise, the property owners expressed their willingness to contribute $25 million toward the construction costs. The Mayor's office was so pleased with the proposal that it simply accepted the deal without negotiating with the property owners.[286]

Building the station was logistically difficult. It had to be constructed without disrupting the already busy Red Line, which added to the project's complexity and expense. The WMATA approached key U.S. Congress representatives with a request for additional funds. The representatives expressed interest in the proposal, primarily because the federal government needed a site for relocating the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) headquarters from its existing location by 2003–2004, and the representatives liked the idea of locating it in the vicinity of the New York Avenue Station. Therefore, Congress struck a deal with WMATA. Both parties agreed on the 2003–2004 construction completion deadline.[287]

Given the deadline, the Washington, DC, Council needed to minimize property-owner opposition in order to quickly set up a SAD. As the owners of residential properties were very likely to oppose paying assessments, these properties were exempted. This exemption allowed the process to move forward quickly and enabled the construction to be completed before the 2003–2004 deadline.[288]

Stakeholder Participation Process

The supporters of the Metropolitan Branch Trail initially opposed the station construction, since it interfered with their plans to build a trail through the neighborhood that would be part of the larger eight-mile Metropolitan Branch Trail. WMATA addressed the concerns of the trail supporters by building a bridge over the railroad track to accommodate the trail.[289]

The DC Department of Housing and Community Development New York Avenue Task Force, later called Action 29, was also instrumental in garnering support for the station construction.[290] Overall, the project received wide community support.

Securing the landowners' financial support was a bit more difficult.[291] The landowners were initially willing to pay the assessment fee in exchange for credit on future property taxes. They felt they would be "double-billed" if they were required to pay assessments as well as taxes on their properties' increased value. However, the Washington, DC, government argued that a tax credit would defeat the purpose of the assessment fee. Therefore, the government hired a professional economist to investigate the landowners' double-billing claim. The economist found that the land-value gain would be more than 100 times the station cost. This finding led the landowners to abandon the double-billing charge[292] and agree to fund $25 million of the project through a SAD without receiving property tax credits.[293]

Total Station Cost

The station cost a total of $109.9 million.[294] Table 12 provides a breakdown of the project funding sources.

Table 12. Funding Sources for the New York Avenue Metro Station

Amount of Funding ($ millions)	Share of Total Cost (%)	Source
53.4	48	DC government (for station)
6.5	6	DC government (for Metropolitan Branch bicycle trail)
25.0	23	SAD private landowners
25.0	23	Federal government

Source: WMATA, "Metro's New York Ave-Florida Ave-Gallaudet U Metrorail station opens today on the Red Line," http://www.wmata.com/about_metro/news/PressReleaseDetail.cfm?ReleaseID=3182 (accessed December 10, 2011); WMATA, "Project Overview Relative to a Proposed New Station at Potomac Yards." http://www.scribd.com/doc/3424590/Potomac-Yard-Metro-presentations-080527 (accessed December 10, 2011).

A SAD was created to pay for a portion of the station cost, and the city issued general obligation bonds to cover the up-front capital costs.

The SAD was set up with the following criteria:[295]

- The assessment amount would be based on the current value of the property and would not change over time.[296]
- Properties assessed must be within one-half mile of the station but not within 1,250 feet (one-quarter mile) of the Union Station. Properties served by the Union Station would be deemed to receive no benefit from the New York Avenue Station.[297]
- Properties must be zoned as commercial.[298]
- Property owners must own more than 10,000 contiguous square feet of land.[299]
- Assessments would be retroactive to December 2000.[300]
- Residential properties would not pay assessments.[301]
- Properties exempt from paying property taxes (for example, churches and hospitals) would also be excluded from paying assessments.[302]

The assessments are collected over a 30-year period, with the annual amount being 1/30th of the total amount.[303] The assessments are calculated by multiplying a special-assessment factor (SAF) with the total assessed value for each land parcel in 2000.[304]

The SAF is determined by dividing the annual special-assessment amount by the aggregate assessed value of the properties.[305] In other words, each property pays in proportion to its year 2000 value. The SAF can be adjusted to meet the annual special-assessment collection target.[306]

Some of the owners of station-adjacent land parcels donated their land temporarily for construction staging and storage, and some donated part of their land permanently for station access.[307] These landowners greatly benefited from these strategic donations, since their land would be close to, or in some cases, right at the station entrances.[308]

The DC government issued general obligation bonds and paid $25 million from the bond proceeds to WMATA. In exchange, WMATA pledged 30 years of assessment revenues to the government.[309]

Lessons Learned

The New York Avenue Metro Station case shows that property owners' commitment to pay part of a project cost can help leverage federal funds. In this case, the federal investment also brought the local landowners on board. The federal government agreed to match their

contribution and to build a new ATF headquarters, which would employ 1,100 workers. This federal commitment made the landowners confident of the station's success.[310]

The station has been successful in attracting investment in the NoMa neighborhood. More than $1.5 billion in private investment has been planned within walking distance of the station,[311] and ridership more than doubled between 2004 and 2009 (see Table 13). The total property value in the 35-block area around the station increased more than four times in six years, from $535 million in 2001 to $2.3 billion in 2007.[312]

Table 13. New York Avenue Station Monthly Ridership

Dates	Monthly Ridership
November 2004 to October 2005	55,863
November 2005 to October 2006	71,970
November 2006 to October 2007	85,701
November 2007 to October 2008	104,404
November 2008 to October 2009	121,298

Source: WMATA, "Metro's New York Ave-Florida Ave-Gallaudet U Metrorail station opens today on the Red Line."

Case Analysis

Enabling Legal Environment

The New York Avenue Metro Station construction was made possible by the New York Avenue Metro Special Assessment Authorization Emergency Act of 2001.[313] While the Washington, DC, government had the authority to create SADs, the Act operationalized the use of this authority.[314]

Institutional Capacity

The Action 29 campaign to gain local support was an expensive endeavor. The group held numerous meetings with neighborhood and community members and went through an elaborate negotiation process with the landowners. Action 29 was able to secure a $100,000 grant from the city government and raised $140,000 in private funds.[315] Apart from Action 29's capacity to gain local support, the institutional capacity of the other major stakeholders—the DC government and WMATA—also must be considered. WMATA has a long-standing reputation of delivering joint development projects and has an entire department dedicated to them. However, the DC government's capacity to undertake such projects seems limited. This lack of capacity is evident in its hasty acceptance of the landowners' offer to contribute $25 million. A government-sponsored economic study later found that the land-value gain would be more than 100 times the station cost, reinforcing the notion that the landowners should have contributed a larger proportion of the costs.

Stakeholder Support

Stakeholder support was key to the New York Avenue Station construction. The landowner contribution paid for nearly a quarter of the total project cost.

Furthermore, the government acknowledged the standing of a broad spectrum of stakeholders and worked closely with those initially opposed to the station. In particular, the $6.5 million dedicated to building the trail bridge demonstrated WMATA's commitment to working with the community.

Horizontal and Vertical Equity

The assessment calculation methodology is very simple: the property owners pay assessments in proportion to their properties' year 2000 assessed value. Only large commercial properties (more than 10,000 square feet in area) within walking distance of the station pay assessments.

The assessment methodology is vertically equitable, as smaller commercial properties do not pay assessments. The methodology is also horizontally equitable, as only properties likely to benefit from the station pay assessments. The sphere of benefits is defined as a radius of a quarter-mile from the station.

Horizontal equity could be further strengthened by requiring all the properties that benefit from the station to pay assessments. However, residential properties were deliberately excluded to expedite the project.

Furthermore, the assessments are based on the assessed property values in 2000, not on the estimated future benefits. The assessment calculation methodology reduces horizontal equity to the extent the 2000 property values are not a good indicator of future station-related benefits.

Revenue Yield, Stability, and Growth

The proceeds of a general obligation bond provided $25 million for the station construction. The assessment-fee revenues will repay the bonds. The revenue yield is predetermined, does not need to grow over time as it is amortized over 30 years (much like a home mortgage), and there is no reason to believe that the landowners would oppose paying the annual assessments in the future.

LOS ANGELES METRO RED LINE BENEFIT ASSESSMENT DISTRICT, LOS ANGELES, CA

Overview

The Los Angeles Metrorail system is a combination of heavy- and light-rail systems operating in Los Angeles County, CA. With nearly 10 million residents, Los Angeles County is one of the largest counties in the United States.[316] The Metrorail system is operated by

the Los Angeles County Metropolitan Transit Authority (LACMTA), also known as Metro. LACMTA was created from a 1993 merger of the Southern California Rapid Transit District (SCRTD) and the Los Angeles County Transportation Commission (LACTC).[317]

Metrorail Time Line

The Metrorail's five currently operational lines opened during the 1990s and early 2000s (see Table 14 for the chronology, description, and routes). Red Line Segment 1, which is the focus of this case study, was the second segment to open, after the Blue Line, and was the only segment financed partially through a SAD.

Table 14. Metro Rail Lines in Los Angeles County

Line Name	Opened	Rail Type	Route
Blue Line	1990	Light rail	Downtown LA–Long Beach
Red Line Segment 1	1993	Heavy rail (subway)	Downtown LA Union Station–MacArthur Park
Red Line Segment 2a	1996	Heavy rail (subway)	MacArthur Park–Vermont
Red Line Segment 2b	1999	Heavy rail (subway)	Vermont–Hollywood/Vine
Red Line Segment 3	2000	Heavy rail (subway)	Hollywood/Vine–North Hollywood
Purple Line	1993	Heavy rail (subway)	Downtown LA–Mid-Wilshire District
Green Line	1995	Light rail	Redondo Beach–Norwalk and LAX
Gold Line	2003	Light rail	East LA–Pasadena via downtown

Source: LACMTA, "Past Visions of L.A.'s Transportation Future," http://www.metro.net/about/library/archives/visions-studies/mass-rapid-transit-concept-maps/ (accessed October 6, 2011); Robert P. Sechler, "The Seven Eras of Rapid Transit Planning in Los Angeles" Southern California Scenic Railway Association, January 1999, http://www.scsra.org/library/rapid-transit-history/ (accessed October 6, 2011).

Red Line Segment 1 is a heavy-rail transit system that operates in downtown Los Angeles.[318] The Red Line and the Purple Line are the only Metrorail lines that operate completely within the city limits of Los Angeles—the Red Line runs from downtown Los Angeles to North Hollywood. The Red and Purple are also the only heavy-rail lines in the county; the other three lines are light-rail lines. Red Line Segment 1 cost $1.42 billion, of which $130 million, or nine percent, was paid for by two benefit assessment districts (BADs) (SADs are called benefit assessment districts in Los Angeles), Districts A1 and A2.[319] District A1 includes four Red Line stations: Union, Tom Bradley/Civic Center, Pershing Square, and 7th Street Metro. District A2 includes one Red Line station, Westlake/MacArthur Park (see Figure 8).[320]

Assessment Calculation Methodology

Districts A1 and A2 supported two bonds, also called A1 and A2, which were passed in 1992. In 2001, two new bonds were issued to partially pay off the 1992 bonds. A1 generated $123.7 million, and A2 generated $6.5 million, to fund capital improvements.[321]

A number of other BADs were planned for subsequent segments of the Red Line, but they never materialized because of the passage of CA Proposition 218 in 1996, which requires two-thirds-majority approval from property owners to form a BAD.[322] This law has

made BAD formation next to impossible in California, especially since there is significant property-owner opposition in the already developed areas that have fragmented property ownership.

Commercial properties, including vacant land, offices, parking facilities, retail stores, hotels, and motels, have paid assessments. In District A1, properties within one-half mile of the rail stations (1,300 properties with a total area of 64 million square feet) paid the fee. District A2 is much smaller, having only 200 properties (with a total area of 3.5 million square feet) within one-third mile of the Westlake/Macarthur Station.[323]

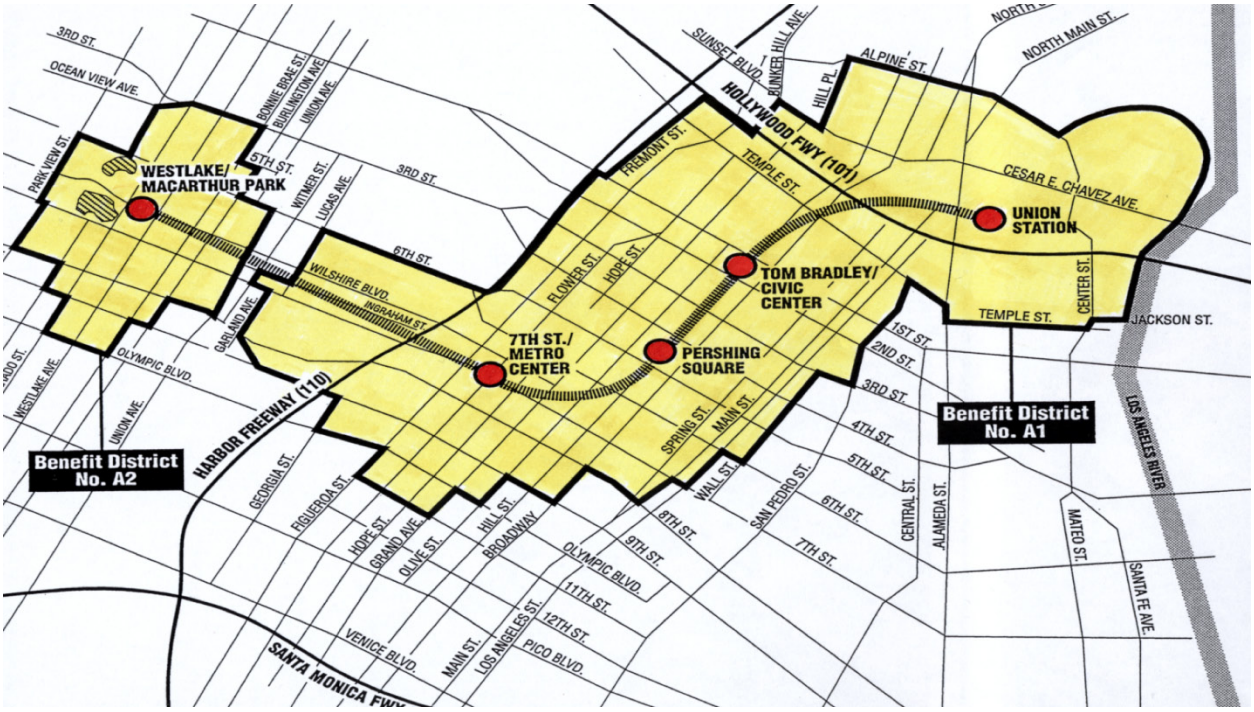

Figure 8. Districts A1 and A2 of Red Line Segment 1, Los Angeles, CA

Source: David Sikes, "Benefit Assessment Districts Program," presented at It's Time to Move LA Conference (1/10/08), http://www.movela.org/pptdocs/LACTFC_BenefitAssessment.ppt (accessed October 18, 2011).

Residential properties, religious institutions, and nonprofits were exempted from paying the fee, which was charged at a variable rate (up to $0.33) per square foot of the building or parcel, whichever is greater. Specifically, the rate was $0.17 for first five years (1992–1997), $0.27 for the next five years (1997–2002), and $0.33 for the next seven years (2002–2009), for an average of $0.25 per square foot for the entire 17-year assessment period.

Property owners were allowed to pay the fee over a 17-year period, over a five-year period, as a one-time payment in advance (with a discount), or as a one-time payment when the line opened. The fee is used to pay back the bonds that were sold to fund the up-front construction costs.[324]

The State Law Authorizing BADs for the Red Line

California State Code 3300 authorized the use of BADs for the Red Line. Unlike the Oregon and Washington codes, which apply statewide, Code 3300 was specifically written for the SCRTD (now LACMTA).[325] The code essentially gave the SCRTD the authority to create BADs with a two-thirds vote of the Board of Supervisors. The Code limits the use of assessment funds to rail transit stations and related facilities. Furthermore, it limits the bond issuance to 40 years and the interest rates on the bonds to 12 percent annually.[326] The Code has a special provision for also allowing creation of BADs through an election if 25 percent of the property owners petition for them. The property owners within a BAD can then vote for the BAD—only a simple majority is needed.[327] Cast only by the property owners, one vote is allotted per $1,000 of property value. While the LACMTA assessed the fee, Los Angeles County was responsible for levying and collecting it.[328] Districts A1 and A2 were created using the two-thirds board majority option.

Legal Challenges to the Los Angeles County BADs

There was at least one legal challenge to the Los Angeles County BADs. A challenge to their constitutionality was overruled by the California State Supreme Court in 1992. A state appellate court had previously struck down the BADs on the grounds that they violated the "one-person, one-vote" constitutional guarantee. Under CA State Code 3300, the property-owner vote was based on property value, not on the "one-person, one-vote" rule. However, the California Supreme Court ruled that the Code did not violate the constitution, stating that a BAD does not exercise general government powers, and therefore the constitutional protection does not apply.[329]

Revenue Generated from the BADs

In 1992, the LACMTA issued two sets of bonds to fund the construction of the Red Line. The A1 bonds were issued to finance the section of the Red Line in the A1 BAD, while the A2 bonds were issued to finance the section in the A2 BAD (see Figure 8). A second pair of bonds was issued in 2001 to refinance the debt. Both sets of bonds were paid in full by FY 2010.

The BAD revenues increased steadily. By FY 2005, the BADs were generating more than $20 million per year (see Figure 9). Revenue from the BADs more than doubled between 2001 and 2010.

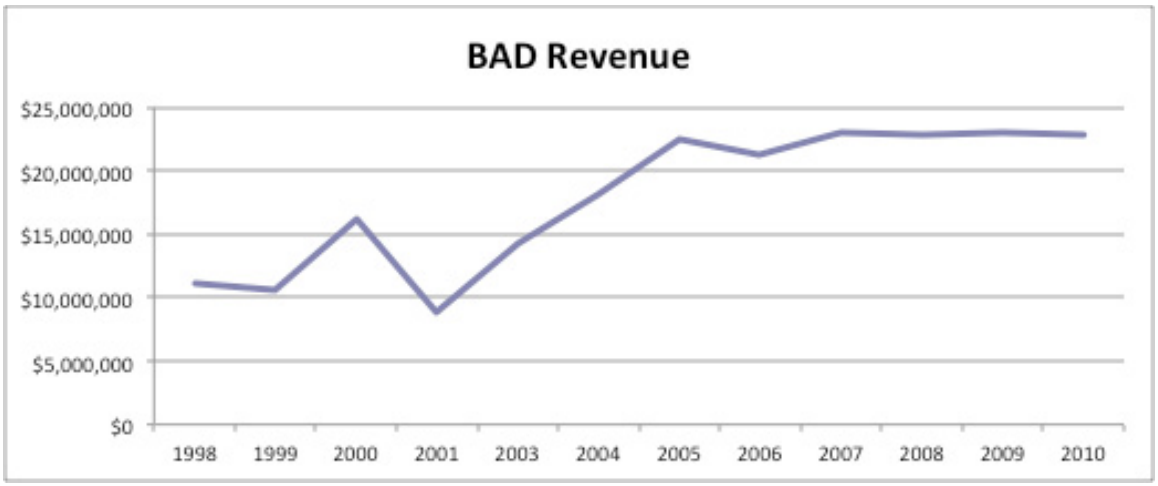

Figure 9. Los Angeles, CA, Districts A1 and A2 BAD Revenues for FY 1998 to FY 2010

Note: FY 2002 revenue information was not available.

Source: Los Angeles County Transportation Commission, "Fiscal Years 1998-2010 Budgets." Chart prepared by the authors.

Case Analysis

Enabling Legal Environment

A special state-level act was passed to enable BAD funding for the Los Angeles Metro. However, passage of Proposition 218 in California in 1996 has made the use of BADs for transit difficult. Property owners can now simply vote them down. In fact, the LACMTA did not even try to set up BADs for the Metro after the passage of Proposition 218, even though the initial plans included them for Segments 2 and 3 of the Red Line.

Institutional Capacity

Significant institutional capacity is required to set up BADs, issue bonds, levy and collect assessments, and, if required, defend them in court. Like SADs in Seattle and Portland, implementation of BADs takes staff time and resources, especially in the beginning stages, when public outreach is needed to address property-owner concerns. In the Los Angeles case, further capacity was needed to defend the BADs in a lengthy court battle.

Stakeholder Support

While Portland and Seattle used assessments to fund a large portion of their streetcar systems, funding the line was not the main impetus for creating the Red Line BAD. The BAD revenues funded a small but significant portion of the construction costs, but demonstrating local support for the project to receive federal funding was perhaps the primary reason for the BAD formation.[330]

While the Red Line BADs were successful in attracting federal funding, they met with some property-owner opposition. The Metro staff highlighted the importance of majority resident

support and unified private sector, local, state, and federal support for any assessment district's success.[331]

Horizontal and Vertical Equity

The Los Angeles BAD was assessed per square foot of the built-up area or the lot area. This calculation method may result in a fee that is not proportional to the benefit received. For example, a large hotel that operated at full capacity before the Red Line was constructed would have received little benefit but would have had to pay a very large assessment because of its sizable floor area. In contrast, a restaurant running below potential might have doubled its business, having paid only a very small assessment fee. In summary, the fee calculation methodology does not take actual benefits into account. It does not even try to account for the variations in the benefit received by different land uses but instead uses a one-size-fits-all approach. Furthermore, only commercial properties paid the fee. Residential properties benefited as well but were exempted from paying.

The fee was vertically equitable to the extent that the owners of smaller properties have lower ability to pay than the owners of larger properties. The option to pay the assessments over time further enhanced vertical equity.

Revenue Yield, Stability, and Growth

An assessment district in already developed urban areas, such as Los Angeles, typically has a predictable and stable revenue yield, because the number of assessment-paying properties is known at the time of the district formation. Furthermore, the agency in charge of establishing the assessment rate can, within predetermined limits, increase the rate in case of any revenue shortfall.

In general, assessments are likely to pay for a relatively small portion of a large rail project such as Metrorail. The Segment 1 BADs funded nine percent of the project cost. For smaller projects, such as the Seattle and Portland Streetcar projects, assessment districts might be able to fund a larger proportion of the cost. In any case, as demonstrated in Portland, Seattle, and Washington, DC, local buy-in is critical for leveraging state and federal funding. Therefore, even when BADs can fund only a small portion of a project, they can still have a significant financial impact overall.

IV. TAX INCREMENT FINANCING

OVERVIEW

TIF is a funding mechanism primarily intended to remove physical blight and enable economic development. It is implemented by creating a geographic district administered by a TIF authority, usually a redevelopment agency.[332] After the district is created, the assessed property value is frozen for a period of time, usually 10 to 25 years.[333] As new funds are invested, the property values in the district increase, as do the property-tax revenues. The property-tax increment (the new property tax minus the property tax on the frozen property values) is diverted to the TIF authority rather than the agencies that would normally receive it, such as the city, the county, and the school districts. The tax increment is reinvested in the TIF district.

Under the TIF mechanism, there are two ways to raise funds for initial infrastructure development: a pay-as-you-go approach or a pay-as-you-use (sometimes called “rebate” or “up front”) approach.[334] The pay-as-you-go approach can be a slow process, as the development is financed when the tax-increment revenue is generated.[335] The pay-as-you-use approach requires the TIF authority (or the local government) to issue bonds. Bond proceeds can be used immediately to finance development in the TIF district. This approach, while inherently riskier than the pay-as-you-go approach, is the one most commonly used, for the simple reason that TIF agencies often need money up front to kick-start capital projects.[336]

For What Purposes is TIF Used?

In most states, TIF districts can be created only to fight blight.[337] Although definitions of blight vary among states,[338] blighted areas are usually characterized by physical deterioration, unsanitary conditions, and a high rate of tax delinquency.[339] Ideally, TIF removes severe blight, directs public funds to a community plan or policy, addresses environmental remediation, and finances infrastructure.[340]

Although there is much debate about whether TIF should be used to develop areas that are not truly blighted,[341] several states use it for this purpose. For example, TIF is used to promote economic development as well as to promote redevelopment in Connecticut, Delaware, Kentucky, North Carolina, Ohio, and Vermont.[342] Vermont has the most lenient legislation, allowing TIF to be used for development, job creation, or even simply to increase tax revenue for local jurisdictions.[343]

How Widespread is TIF Use Nationally?

TIF was first used in California in 1952.[344] By 1970, a few other western states and Ohio had TIF-enabling state legislation.[345] Federal funding cuts in the 1970s, however, caused TIF use to spread quickly across the country as local governments sought ways to fill the financing void.[346] By the late 1980s, few states lacked TIF-enabling legislation, and eventually, Washington, DC, and all of the states except Arizona had enacted such

legislation.[347] However, some states, including California and Illinois, use TIF more than others.[348]

TIF can be used to fund various types of public infrastructure projects, including sewer and storm drainage systems, streets, park improvements, streetscape improvements, landscaping, libraries, environmental remediation, emergency-service facilities, schools, and public transportation.[349]

Is TIF Used to Fund Public Transportation?

Although the use of TIF to fund transit projects is growing, it is not common. A 1985 study noted that the Embarcadero Station in San Francisco was the only known use of TIF for transit.[350] Since then, several new instances of TIF use for public transit have been documented. A 2008 report identified four states in which TIF had been used to fund transit and transit-related projects—Georgia, Illinois, Oregon, and Pennsylvania.[351] The TIF areas in these states are referred to as special taxing districts, development authority districts, community facilities districts, or community management districts.[352] Several instances of TIF-funded transit-oriented developments (TODs) have also been noted.[353]

TIF can be used to fund transit or TODs in several ways. In the traditional way, a transit station or other transit infrastructure may fall completely within a TIF district. The funds collected from the district can be used to fund projects within the district, including transit projects. This is the case in Chicago, where TIF funds are being used to redevelop three transit stations.[354] Alternatively, a special transit taxing district can be created whose funds are used to pay for transit or TOD. Funding transit-related projects is the sole purpose of this type of TIF district. In Pennsylvania, for example, transit revitalization investment districts (TRIDs) are created to fund TODs. These districts differ from SADs in that they use tax increments as the revenue source, whereas SADs assess fees.

The Legal Framework

Most states require that two criteria be met before a TIF district can be formed: a finding of blight and the “but for” requirement. The “but for” requirement consists of proving that the area would not develop “but for” the creation of the TIF district.[355] Most states also require preliminary project plans, a redevelopment plan, public hearings, and plan approval by elected officials.[356]

Other Considerations for TIF Use

Stakeholder Support

Public buy-in is extremely important for TIF success. The neighborhood residents are often most affected by the TIF-produced changes. In many cases, TIF funds are used for high-impact projects, such as building demolition and construction. While some stakeholders may find such demolition and rebuilding aesthetically desirable and economically beneficial, others may be concerned about resident displacement, destruction of historic buildings, and other changes to the neighborhood character.[357]

Buy-in from other government agencies and the business community is also necessary. The Council of Development Finance Agencies (CDFA) lists four groups that are critical for TIF success:[358]

- Development authorities, used by cities to make key development decisions and administer TIF
- Finance agencies, which often lend money for TIF projects and set lending terms and conditions
- Chambers of Commerce, whose boards often comprise powerful business leaders who can provide essential support and broker TIF project deals
- Private and non-profit entities, such as energy providers, that can be key supporters as they have business interests in the TIF-funded development. Non-profit agencies are also important stakeholders. They often work closely with TIF developments (for example, TIF-aided affordable-housing developments) and can provide political and financial support

Real Estate Market Conditions

The success of a TIF district hinges on the TIF-funded development project's ability to raise property values within the district. If the property values fall, the district might face difficulty repaying the TIF-backed bonds. Therefore, the consistency of TIF revenue is important.[359] Because of the financial risk involved in TIF-funded projects, it is necessary for local governments to conduct extensive financial viability analyses of TIF districts.[360] Such analyses must show steady and continuous growth in property values within the districts.[361] In addition, it is essential that the redevelopment plan be accurate about the market conditions and carried out on schedule.[362]

Institutional Capacity

Creating and maintaining a TIF district requires significant institutional capacity. TIF is complex, often requiring the expertise of municipal-bond financing experts, economic development experts, real estate appraisers, civil engineers, financial analysts, and consulting planners.[363]

Equity Considerations

Housing prices in an area may rise due to TIF investment, pricing out many current residents. To the extent that these residents are likely to be low-income households (low-income households are likely to be concentrated in the blighted neighborhoods targeted for TIF-funded redevelopment), TIF can negatively impact vertical equity. Some states, including California, have tried to address this problem by allotting a portion of TIF funds to affordable housing. However, demographic shifts can still occur.[364]

TIF can also negatively impact horizontal equity. To the extent that property taxes would have increased without the use of TIF, the capture of the entire property-tax increment by the TIF district results in less tax revenues for other taxing agencies, such as the school district, county, or city. Therefore, TIF can negatively impact essential services such as schools or health care. It can be politically difficult to create TIF districts when tax-deprived school districts or hospital districts offer political resistance.[365] Some states, again including California, have tried to address this situation by allowing other taxing districts to share the tax increment with the TIF authority.[366]

Case Study Selection Criteria

The case study selection criteria include the following:

- TIF funding for transit projects. TIF must be used specifically to fund transit projects, such as stations or transit infrastructure, as opposed to funding only TODs.
- Geographic spread and intensity of use. The West and Midwest, especially California and Illinois, are the regions with the most TIF use. Therefore, deliberate efforts were made to include cases from these regions.
- The TIF districts must be already formed.
- Data must be available.

The following cases were selected: Contra Costa Centre Transit Village, Contra Costa County, CA; Wilson Station, Chicago, IL; and Portland Streetcar, Portland, OR. The fourth case, Ground Transportation Center, Cedar Rapids, IA, uses TIF as well as Joint Development and Air Rights. It is discussed among the Joint Development and Air Rights cases.

CONTRA COSTA CENTRE TRANSIT VILLAGE, CONTRA COSTA COUNTY, CA

The Bay Area Rapid Transit District (BART) Pleasant Hill Station is located in Contra Costa County, CA. The station is the site of a mixed-use TOD called the Contra Costa Centre (CCC) Transit Village. The village was financed through a variety of funding mechanisms, including TIF and cost-sharing agreements between the public agencies and private developers, under a public-private partnership (PPP) framework. The village facilities are all within one-quarter mile of the BART station fare gates and include the following land uses:[367]

- 422 residential apartments (including 85 affordable units)
- 100 for-sale condominiums (planned but not yet built)
- 35,590 square feet of local-resident-serving retail space
- 19,400 square feet of business conference center space (planned but not yet built)

- 270,000 square feet of office space (planned but not yet built)
- A 1,550-space parking garage (TIF-funded replacement parking for BART)[368]

BART Overview

BART is a heavy-rail-based transit system that began operating in 1972.[369] Consisting of five lines that serve 44 stations, BART provides regional transit for San Francisco Bay Area residents and connects San Francisco with the cities to the east and south.[370] With an average weekday ridership of more than 300,000, BART is one of the nation's highest-ridership rapid-transit systems.[371]

The Pleasant Hill Station is near the end of the Pittsburgh/Bay Point—SFO-Millbrae Line in the East Bay (see Figure 10).

PPP Overview

The CCC Transit Village is a product of a partnership between the Contra Costa County, the Contra Costa County Redevelopment Agency (RDA), BART, Avalon Bay Communities, Inc., and Millennium Partners.[372]

A joint powers authority (JPA) was created to manage the property, with representatives from Contra Costa County, the Contra Costa County RDA, and BART on the board of directors. The JPA is called the Pleasant Hill BART Leasing Authority. BART has leased the property in the station area to the JPA, which in turn has subleased it to the developers—Millennium Partners and Avalon Bay Communities—for 100 years. The ground-lease payments made by the developers to the JPA are shared by BART (25 percent) and the county (75 percent).[373] The lease revenues over the 100-year lease period are estimated to be from approximately $700 million to $1 billion.[374]

All property in the CCC Transit Village is BART-owned except the for-sale condominiums (yet to be built). The land is leased to the developers, and three agencies have agreed to finance different portions of the project (the finance plan is summarized in Table 15):[375]

- The county issued $135 million in bonds to finance the residential portion.
- The RDA contributed $59.5 million toward the parking garage, station infrastructure, and various other improvements.
- The developers contributed $3.9 million toward the parking garage, $11.9 million toward the residential development, and $131 million toward the office space.[376]

Figure 10. Map of the BART System

Source: Bay Area Rapid Transit, "Station List," http://www.bart.gov/stations/index.aspx (accessed July 23, 2011).

Table 15. Finance Plan for the CCC Transit Village

Funding Source	Amount of Funding ($ millions)			
	Phase I (Garage)	Phase II (Residential/Retail)	Phase III (Office)	Total
Public				59.5
RDA BART parking	45.3			
RDA backbone infrastructure		2.7		
RDA place-making		9.0		
RDA housing		2.5		
Public/private				135.0
Tax-exempt MF bonds		135.0		
Private				171.8
Backbone infrastructure	3.9	11.9	131.0	
Total	**49.2**	**186.1**	**131.0**	**366.3**

Source: James Kennedy, "Building a Heart at Contra Costa Centre: Practices and Perspectives," Summer 2008, p. 12, http://centrepoints.org/pdf/BuildingAHeart.pdf (accessed December 10, 2011).

The transit-village design is the result of a charrette process that began in 2001. The charrette involved the local community members, the county, BART, and Millennium Partners. It was an important part of the development process, as previous development efforts had failed to gain stakeholder acceptance. Championed by one redevelopment agency board member as a tool for creating a development proposal, the six-day design charrette produced the concept, design guidelines, and attendant zoning framework for the village.[377] The plan was approved by the County Planning Commission in 2005.

The CCC Transit Village is being built in three phases:

- Phase I: replacement BART parking garage (2006–2008)
- Phase II: residential/retail (2008–2011)
- Phase III: offices (construction not yet started)

Phase I is complete, and Phase II is partially complete. The rental residential units and retail space are complete, while the for-sale condominiums have not been built. Ground has not yet been broken for two blocks of office space scheduled to be built in Phase III.

Phases II and III are victims of unfortunate timing. Housing bonds totaling $125 million were sold by the county in mid-July 2008 to pay for Phase II.[378] However, the real estate market downturn halted the development of the 100 condominiums and the Phase III office space.[379]

In spite of the downturn, the developed portions of the CCC Transit Village have done reasonably well. The village accommodates more than 2,300 residents, 5,000 employees, and 6,000 BART riders per day. Although the retail space has not done very well, the rental

residential units are fully occupied.[380] The village is projected to generate $8 million in TIF revenue annually.[381]

Station-Area Development Funds

The Contra Costa County RDA contributed TIF funds for the construction of the transit village. The largest share of the RDA funds was spent on the parking garage that was constructed to replace the surface parking lot that was displaced by the development. Additional TIF funds were used for infrastructure development.[382]

The TIF revenues came from the Contra Costa Centre redevelopment area—one of five redevelopment areas in Contra Costa County.[383] The other four areas are the Bay Point redevelopment area, the North Richmond redevelopment area, the Rodeo redevelopment area, and Montalvin Manor.

Contra Costa Centre Redevelopment Area

Located along the I-680 corridor and the BART line, the Contra Costa Centre redevelopment area includes 125 acres surrounding the Pleasant Hill BART Station. Created in 1984, the redevelopment area was planned to operate for 40 years, until 2024. The RDA was authorized to collect up to $90 million in tax increment, at which point it was required to either stop collecting the tax increment or amend the terms of the redevelopment-area formation through further legislation.[384] Tax increment from the redevelopment area rose steadily between 1986 and 2011 (see Figure 11).[385]

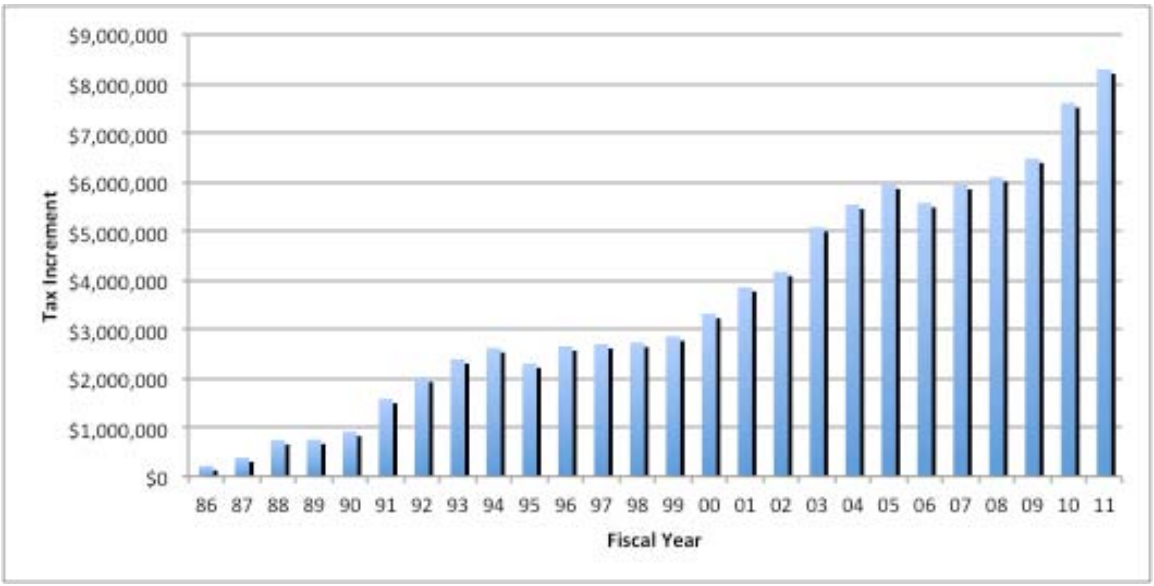

Figure 11. Annual Tax Increment Collected from the Contra Costa Centre Redevelopment Area

Source: Contra Costa County RDA, "Contra Costa County Redevelopment Agency Tax Increment History - FY 86 to date" (2011).

Historically, the redevelopment area was agricultural. However, rapid low-density suburban residential development followed soon after the beginning of BART service in 1973. Higher-density land uses started replacing single-family homes near the station in the late 1970s to take advantage of BART access.[386] A 1975 plan sought to bring some order and cohesion to the station-area development, which had been a medley of low- and high-density developments. The plan established a three-acre minimum parcel size, but several forces worked against it, including private-developer opposition and local transportation circulation problems. Therefore, the plan was scrapped,[387] and an amended plan was agreed upon by Contra Costa County, BART, the city of Pleasant Hill, and the city of Walnut Creek.[388] The plan was later re-examined and updated and was approved by the County Board of Supervisors in 1998.[389]

The updated plan's overall goals are to (1) allow high-intensity land uses with the station area as a focal point, (2) develop higher-density housing in the area north of the station (north of Las Juntas), and (3) maintain low-intensity uses in the Buskirk frontage area, which has access limitations (see Figure 12).[390] The plan seeks to redevelop the areas within three main categories: land use and development, transportation and circulation, and urban design. Some of the main goals and objectives for each category are listed below:[391]

1. Land use and development

    - Increase the density of office, retail, housing, and institutional uses
    - Integrate housing into the station area
    - Develop retail, commercial, and other public services in the station area and nearby
    - Provide opportunities for mixed land uses
    - Prohibit low-density development where inappropriate
    - Develop cooperatively with BART and the private sector to maximize station-area resources[392]

2. Transportation and circulation

    - Maximize the use of public transit for residents and businesses
    - Improve local transit service to and from the station area, including automobile access
    - Improve bicycle and pedestrian amenities and safety
    - Replace parking that is displaced by the station-area development[393]

3. Urban design

- Create a positive station appearance and an image with local identity
- Protect native oaks and incorporate them into the design
- Provide a network of open spaces
- Promote good design for functionality and personal safety
- Create a pedestrian-friendly environment through good design features[394]

Figure 12. Pleasant Hill BART Station Redevelopment Area

Source: Contra Costa County, "Amended Pleasant Hill BART Station Area Specific Plan," (October 6, 1998), p. 9, www.ccreach.org/ccc_redevelopment/PHB%20Specific%20Plan.pdf (accessed July 25, 2011).

Details of TIF for the Transit Village

Garage construction was one of the obstacles to the BART-station-area development because of BART's one-to-one parking replacement policy, which effectively requires

that any development that displaces BART parking must replace it with an equal amount of parking. This policy often requires construction of very expensive structured parking (i.e., a garage).[395] The requirement came about after a 2002 decision by BART board to provide paid parking for commuters.[396] Thus, the parking garage was a prerequisite for the development of the CCC Transit Village.

The RDA originally agreed to pay $27 million for the parking garage.[397] Construction began in 2006 at an estimated cost of $35 million.[398] By the time the garage was completed in 2008, the cost had escalated to $52 million. The RDA increased its contribution to $47 million.[399] Construction of the CCC Transit Centre began soon after the completion of the garage.[400]

Additional RDA funds paid for the backbone infrastructure, beautification, and place-making around the station:[401]

- $2.5 million was used for the backbone infrastructure.
- $4 million was used for beautification of the station to match the colors and accents of the transit village.
- $9 million was used for place-making projects, such as the plaza, street furniture, and public art.[402]

Case Analysis

Enabling Legal Environment for TIF Use

California redevelopment law allowed the use of TIF funds for station-area development.[403]

Redevelopment in California began after the passage of the California Community Redevelopment Act of 1945,[404] which was intended to help cities and counties ameliorate urban blight. Redevelopment in California was shaped by a series of laws passed in the next few years, including a 1951 amendment to the tax code that laid the groundwork for TIF by allowing future taxes to pay for redevelopment projects.[405] In 1952, the California Community Redevelopment Law was enacted, allowing the distribution of tax increment to agencies, making California the first state to allow TIF.[406]

There were 397 active RDAs in California in 2011.[407] However, effective February 1, 2012, the RDAs were dissolved. Successor agencies are managing the RDAs' liabilities and disposing of their assets.

Typical redevelopment projects include:[408]

- Affordable housing
- Roads, water and drainage systems, and public works and infrastructure

- Community centers, parks, libraries, public-safety buildings, and other community facilities
- Investment in small businesses and revitalization of downtown shopping districts
- Revitalization of run-down, blighted neighborhoods to reduce crime
- Landscaping, street improvements, and greenbelt creation[409]

Enabling Environment for Joint Development

A disposition and development agreement (DDA) and the JPA created the enabling framework for the CCC Transit Centre joint development. California state law Chapter 5, Division 7, Title 1 allows for the creation of JPAs and also allows multiple agencies to act as a single entity with a single board of directors.[410] The JPA manages the transit village and distributes revenues between its partners according to the terms of the DDA.

Stakeholder Support

Garnering stakeholder support, especially from the community, was critical for the joint development construction. Previous attempts to develop the property had failed to gain community support. For example, one proposal for high-density office space around the station was swiftly rejected by the community, as well as by BART and developers.[411] Community involvement in the CCC Transit Village design ensured that the local community was satisfied.

The project has attracted some community opposition, although not a significant amount. Citing RDA indebtedness and opposition from neighborhood residents as the primary reasons, a 2002–2003 Grand Jury report recommended that the RDA not get involved in the project. The Grand Jury noted that the RDA is interpreting its powers “liberally” by working with BART to pay for the garage.[412]

Revenue Yield, Stability, and Growth

The strength of the real estate market has influenced this development. Its plans were amended or delayed because of economic slowdowns at several points in its 40-year history. As of 2011, the real estate market was sluggish in the San Francisco Bay Area, especially in outlying areas, such as Walnut Creek and Pleasant Hill.[413] This softness in real estate demand, especially office-space demand, has delayed Phase III of the development.[414] The Phase II construction of 100 condominiums was also delayed because of poor housing demand.

Despite these shortcomings, the CCC Transit Village is a stable investment for the county, the RDA, and BART. TIF revenues have increased from $6 million in 2007, before the village was built, to more than $8 million in 2011 (see Figure 11). The county expects to receive a 7 percent return on its investment in the long term. Guaranteed to receive 25

percent of the lease payments, a new garage, and increased revenue from additional fare-box collection,[415] BART has found a stable revenue source without taking significant risk.

The lease payments allow the public agencies (the county and BART) to share future profits. They include minimum guaranteed rent (a fixed annual rent), percentage rent (a proportion of the adjusted gross income [AGI]), bonus rent (a proportion of the AGI, after the AGI reaches a minimum threshold), and participation rent (a portion of the net proceeds from the sale of condominiums).[416]

Institutional Capacity

The institutional capacity needed to set up and administer a TIF district is likely to be a major factor in a jurisdiction's ability to use TIF funding for transportation projects. The administrative costs for the CCC redevelopment area were about $0.5 million annually between FY 2005 and FY 2010 (see Table 16). Contra Costa County already had an RDA to form and administer the TIF district, but jurisdictions that do not have such an agency may need additional staff and resources.

Table 16. Administrative Costs for the CCC Redevelopment Area, FY 2005 to FY 2010

	Fiscal Year					
	FY 05	**FY 06**	**FY 07**	**FY 08**	**FY 09**	**FY 10**
Administrative expenditures ($ millions)	443,070	542,895	451,059	524,537	510,753	407,340

Source: Contra Costa County Redevelopment Agency, RDA Expenditures 2005–2010.

In addition to the administrative capacity needed for the TIF district, the joint-development portion of the project also required considerable administrative capacity to form the JPA and develop and administer the DDA.

Horizontal and Vertical Equity

Overall, the CCC Transit Centre Village has been horizontally equitable for the parties involved. The RDA receives 75 percent of the lease revenue, and BART receives the other 25 percent, along with other benefits, including increased transit ridership. Additionally, BART retains land ownership.[417] While the county's large share of the lease revenue may seem inequitable, it is fair because the county took all of the initial financial risk. Between 2008 and 2011, the county received around $1.8 million in lease revenue[418] and will continue to receive revenue over the entire course of the lease period.

The RDA benefits from the dramatically increased tax increment. As shown in Figure 11, the revenues have increased to more than $8 million annually. This number will only go up with the development of the rest of the village. Furthermore, the development has been equitable for the community residents as well.

Finally, the CCC Transit Village Centre is vertically equitable for the community, as 20 percent of the condominiums are affordable-housing units, a proportion secured by the RDA in its negotiations with the developers.

WILSON YARD STATION, CHICAGO, IL

Overview

Illinois is one of the nation's leading users of TIF. Its TIF-enabling legislation, called the Illinois Tax Increment Allocation Redevelopment Act, was passed in January 1977. As of 2006, there were nearly a thousand TIF districts in the state, about 16 percent of them in Chicago.[419]

Several conditions must be met in order to create a TIF district in Illinois (see Appendix D for the list of conditions). Blight-related requirements must be met, or the area must be designated as a conservation area (for buildings over 35 years old) or an industrial park conservation area. The presence of certain land uses, such as mines and quarries, may also qualify an area for TIF.[420] The "but for test" must also be met—the municipality must demonstrate that the conditions would not improve without the creation of a TIF district.[421] Once the requirements are met, a detailed project-area redevelopment plan must be prepared and made available for public input. Finally, the TIF proposal must be approved by the City Council or the relevant governing body.[422]

TIF Funding for Public Transportation

Illinois does not specifically prohibit the use of TIF for public transportation. Although the list of eligible uses does not include public transportation, funds have been used for transit-station redevelopment, but not for the rolling stock.

Eligible uses of TIF include the following:

- Property acquisition
- Rehabilitation or renovation of existing public or private buildings
- Construction of public works or improvements
- Job retraining programs
- Relocation
- Financing costs, including interest assistance
- Studies, surveys, and plans
- Professional services such as architectural, engineering, legal, property marketing, and financial planning

- Demolition and site preparation
- Day-care services[423]

TIF in Chicago

TIF has been used extensively in Chicago, where there were 166 active TIF areas as of June, 2011. Chicago is subdivided into seven districts, each with several TIF areas. These TIF areas cover a large proportion of the land within the districts (some cover more than half of the district area). The Housing and Economic Development Department is in charge of overseeing TIF in the city.[424]

Chicago's long history of successful TIF implementation includes working with local industries to create jobs. In fact, the Housing and Economic Development Department's stated objective is to "help local companies expand and create employment opportunities for Chicago residents."[425] Several TIF-funded programs—including TIFworks and the Small Business Improvement Fund—have provided non-repayable grants for local businesses to train employees, create new jobs, and improve buildings.[426] Recently, the city worked with a local business, Accretive Health, to create 650 new entry-level jobs in addition to retaining 175 current positions in exchange for $6 million in TIF funds. The funds were used to refurbish the company's headquarters. Without them, the company might have relocated its headquarters elsewhere.

Public Transit in Chicago, the Red Line, and Wilson Station

The Chicago Transit Authority (CTA) operates the second-largest public transportation system in the United States. The system serves the city of Chicago and 40 surrounding suburbs.[427]

Chicago is famous for its L, or elevated, trains, which have been in operation since the late 19th century. The L is a heavy-rail system that runs partly on elevated tracks and partly underground. The L system was formerly run by several competing private companies, which unified in 1924 but remained privately run. In 1947, the CTA took over operation of the L system. It then consolidated the system and streamlined its operations in order to make the system competitive with the automobile.[428]

The CTA's costs rose rapidly throughout the 1970s. The task of providing transit became increasingly difficult with rapid auto-dependent, low-density suburbanization. The CTA system ridership was at its lowest level in the 1980s and 1990s, and service was cut drastically. Several new efficiencies were introduced in the late 1990s, including the use of magnetic swipe cards and one-person train operations. These efficiencies reduced costs significantly, leading to a fiscal surplus for the first time in decades. As a result, the CTA restarted previously cut services, including night and weekend services, on some lines.[429]

Today, with 140 bus routes and eight rail lines, the CTA is the dominant bus and rapid-transit service operator in the greater Chicago area. It has one of the highest overall riderships

in the country, with about 1 million daily weekday bus riders and almost 700,000 weekday rail riders, for a combined weekday ridership of 1.7 million.[430]

The Red Line

Running North-South through the greater Chicago area, the Red Line is the Chicago's main and busiest transit line.[431] Serving 167,000 customers on weekdays and approximately 130,000 on Saturdays, the Red Line connects several popular destinations, including the major universities, sports stadiums, and the downtown loop area.[432]

Wilson Station

Wilson Station is on the Chicago L Red Line. In addition to serving the Red Line, it serves four bus connections.[433] Constructed in 1900, the station over time earned a notorious reputation as one of the worst CTA-run rail stations. A 2009 article gave Wilson Station the dubious distinction of being Chicago's "crustiest and most rotten" station.[434] Undoubtedly, it was in dire need of redevelopment.

Wilson Yard TIF District

Authorized for 25 years, the Wilson Yard TIF district was created in 2001. A 144-acre site located in the Uptown neighborhood, the area is a mix of commercial, institutional (Truman College and the CTA-owned Wilson Yard), and residential uses.[435]

The Uptown neighborhood is home to several ethnic groups who moved in the 1970s and 1980s. By 1990, about one-third of the residents were foreign-born[436] and low-income. The 1990 MFI was about half the citywide average. However, in recent years, the neighborhood has gentrified, and real estate prices have risen.

Redeveloping the Wilson Yard site is one of the TIF district's primary goals.[437] The district suffered from deteriorating buildings and traffic congestion,[438] and the site was used by the CTA for maintenance purposes. Part of the redevelopment plan for the TIF district involves moving Wilson Station from its original location north of Wilson Avenue to the Wilson Yard site.

A study in 2000 found the Wilson Yard area eligible for TIF funding.[439] Eighty-five percent of the 289 buildings in the area were more than 35 years old. The study found that several buildings were dilapidated, were below code standards, had inadequate facilities, and lacked property-value growth.[440]

The redevelopment-plan objectives included the following:[441]

- Preserve existing cultural diversity and preserve residences and businesses
- Facilitate development of vacant and underutilized land

- Redevelop the Wilson Yard site in a way that enhances the neighborhood's attractiveness
- Support Wilson Station relocation
- Improve major thoroughfares' physical condition (i.e., building conditions, streetscaping, and walkability)
- Preserve and encourage retail, commercial, and institutional uses and historically significant buildings
- Create distinctive streetscaping and landscaping that creates a cohesive neighborhood feel and support improvements in accessibility for persons with disabilities
- Encourage opportunities for women and minority-owned businesses; support locally owned businesses and jobs and training programs

Totaling close to $7 million in 2010, the TIF revenues are substantial and have funded several projects in the district (see Table 17).

After earlier attempts to renovate the station had failed, TIF funds maintenance and improvements were authorized in February 2010 through an intergovernmental agreement between the CTA and the city of Chicago. The main improvements to the station are interior and exterior repairs to the Gerber building, which houses the station and the retail concession area.[442] Other improvements include replacing the roof on the Gerber building, the electrical system, the plumbing, and the heating and cooling system.[443] Additional improvements include asbestos and lead-paint remediation, relocation of the customer assistance booth and turnstiles from the mezzanine to a first-floor location closer to the station entrance, addition of new turnstiles, light-emitting diode (LED) illumination on the exterior of the station building, new floor tiles, and walls and passageway clean-up.

The total TIF funding for these improvements cannot exceed $3 million (see line 13 in Table 17).[444] The renovations began in 2010 and are currently under way.[445] An additional $6 million in federal funds was granted in October 2011 for exterior rehabilitation and installation of a new elevator.[446]

Table 17. Projected TIF Balances for the Wilson Yard District, 2009–2011

	Year	Status	Project Amount ($)	Balance ($)
1. FY beginning cash balance	2009	Appropriated	11,447,451	11,447,451
2. Pre-acquisition account increase	2009	Appropriated	(50,000)	11,397,451
3. Professional services account increase	2009	Appropriated	(62,208)	11,335,243
4. Truman College IGA annual payment	2009	Committed	(1,135,660)	10,199,583
5. Annual debt service payment Wilson Yard notes—March 2009	2009	Committed	(3,327,457)	6,872,126
6. Broadway streetscape, widening of Broadway (Montrose to Wilson) construction	2009	Committed	(3,750,000)	3,122,126
7. Estimated incremental property-tax revenue	2010	Committed	5,164,319	8,286,445
8. Administrative costs	2010	Committed	(96,500)	8,189,945
9. Truman College IGA annual payment	2010	Committed	(1,135,660)	7,054,286
10. Arai School facility improvements and parking lot	2010	Committed	(1,491,173)	5,563,113
11. Annual debt service payment Wilson Yard notes—March 2010	2010	Committed	(3,572,867)	1,990,246
12. Clifton/Magnolia Apts. annual payment	2010	Pending	(375,000)	1,615,246
13. CTA Wilson Stop improvements	2010	Proposed	(3,000,000)	(1,384,754)
14. Estimated incremental property-tax revenue	2011	Committed	5,164,319	3,779,565
15. Administrative costs	2011	Committed	(96,500)	3,683,065
16. Truman College IGA annual payment	2011	Committed	(1,135,660)	2,547,406
17. Annual debt service payment Wilson Yard notes—March 2011	2011	Committed	(3,572,867)	(1,025,462)
18. Clifton/Magnolia Apts. annual payment	2011	Pending	(375,000)	(1,400,462)

Source: City of Chicago, "Projected TIF Balances 2009–2011," http://www.cityofchicago.org/content/dam/city/depts/dcd/general/ProjectedTIFFundBalances2009_2011.pdf (accessed December 10, 2011).

Case Analysis

Enabling Environment

The Illinois Redevelopment Act does not prohibit TIF funding for transit projects. Furthermore, Wilson Station was clearly eligible for TIF funding because it was blighted and a conservation site.

Institutional Capacity

Significant institutional capacity is needed to form and administer a TIF district. As shown in line 8 of Table 17, $96,500 was spent to administer the district in 2011. While this may seem small compared to the TIF district's annual revenue, the amount would probably be much higher for a city that lacks Chicago's experience and qualified personnel to administer the TIF.

Stakeholder Support

The city is divided into 50 wards, each represented by one alderman. The past and present aldermen and the CTA approached the city with the station redevelopment proposal. There was no significant public opposition to using TIF for station redevelopment.[447]

Horizontal and Vertical Equity

Wilson Station is an important feature of the Wilson Yard TIF district. Since TIF funds were clearly needed to refurbish the station, their use was equitable and probably welcomed by most residents and stakeholders in the neighborhood.

Furthermore, use of TIF revenues for public transportation is horizontally equitable, as it improves accessibility for all neighborhood residents. By improving access to the neighborhood and by providing more transportation options, the refurbished Wilson Station has helped other groups as well. For example, businesses should benefit from the increased foot traffic, and the college students and faculty benefit from safe and improved access to their campuses. These indirect benefits are in addition to the direct benefits that automobile users and pedestrians will receive from the improved TIF-funded roadways and streetscapes.

The use of TIF to fund public transportation in also vertically equitable to the extent that low-income people with lower ability to own an automobile are more likely to be dependent on public transportation.

Revenue Yield, Stability, and Growth

The Wilson Yard TIF district has generated substantial revenues. The impact of the economic and real estate downturn has been minimal, with slight revenue dips in 2007 and 2009 (see Table 18). Overall, annual revenues have grown more than twofold, from approximately $3 million in 2002 to $7 million in 2010.

Table 18. Annual Revenues from the Wilson Yard TIF District

	Year								
	2002	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
Revenue ($)	3,149,560	2,353,252	4,668,195	5,204,329	6,242,206	5,773,569	6,817,006	6,066,563	6,979,897
Year-to-Year Change (%)		–25[a]	98	11	24	–8	18	–11	15

[a] *The decrease in revenue is due to the fall in total assessed value of the property. The value decreased as a result of land acquisition and the removal of dilapidated structures.*

Source: Data for 2002–2008 are from 2002–2008 Wilson Yard TIF Annual Reports, http://www.aldermanshiller.com/content/view/576/170/.

Data for 2009–2010 are from the 2010 Annual Report, http://www.cityofchicago.org/content/dam/city/depts/dcd/tif/10reports/T_110_WilsonYardAR10.pdf.

CENTRAL STREETCAR PROJECT, PORTLAND, OR

Overview

Planned and built in the 1990s and 2000s, the Portland Streetcar Project was intended to link Portland's neighborhoods with quality transportation and to spur development along the streetcar lines. Four streetcar lines were built on the west side of the Willamette River in the 2000s in the Central Streetcar Project, which includes 46 stops in an eight-mile continuous loop.[448] The streetcar lines were funded with a combination of funds, including TIF and SADs.[449]

This case study discusses the use of both TIF (through URAs) and LIDs (SADs are called LIDs in Oregon) to fund this project.

Tax Increment Financing

History of Urban Renewal and TIF in Portland

A 1951 state law authorized urban renewal in Oregon. The legislation authorizes cities to use federal funding and TIF revenues to revitalize inner-city areas.[450] In 1958, Portland residents voted to create an urban renewal agency called the Portland Development Commission (PDC).[451]

Creation of URAs

In Portland, URAs—which are called TIF districts in other states—are created when community organizations and the PDC recognize that an area is in need of improvements. The state requires a finding of blight, and the residents and the PDC must come to an agreement on the URA boundaries, taking into consideration ways to "maximize the effectiveness of planned projects and programs" as well as "economic, legal, and political considerations."[452] The financial plans are developed for the URA, legal analysis is conducted, and community input is considered before the City Council approves the urban-renewal plans.[453]

Funding for URAs has completely changed since they were first created after World War II. URAs today are funded through TIF, after federal funding for urban renewal was cut back in the 1970s.[454] At that time, the Oregon legislature increased the applicability of URAs by expanding the definition of blight. However, funding was restricted two decades later, in 1991, when Oregon passed legislation that capped the property-tax rate. Measure 5, which places a tax ceiling of one percent on real market value, required many URAs to reduce tax rates.[455]

The URAs are created for a finite period, after which they expire and normal taxing rules apply. For example, the North Macadam URA was created in 1999 and will expire in 2020. Since its creation, the PDC has created 20 URAs, 11 of which are currently active.[456]

Enabling Legislation

Oregon's legislation allows TIF to be used for transportation capital investments, enabling Portland to fund a significant portion of its streetcar lines with it. Other Oregon cities have taken advantage of this legal provision as well—for example, Eugene used TIF to construct a transit center.[457] The TIF funds must be used only for capital expenditures and are prohibited from funding operations and maintenance. The following uses are permissible under the Oregon law:

- Permanent public improvements such as transportation facilities, lighting, trees, parks, utilities
- Financial and technical assistance for private reinvestment, including storefront grants, home repairs and improvements, and commercial rehabilitation incentives
- Funding partnerships for new housing and mixed-use developments
- Land acquisition (typically for key redevelopment sites or public projects)
- Planning of capital projects (including development of urban-renewal plans) and general administrative costs related to the activities of the URA[458]

URA Funding of the Central Streetcar Project

A total of five URAs have funded the Central and Eastside Streetcar projects. These URAs are highlighted by arrows in Figure 13.

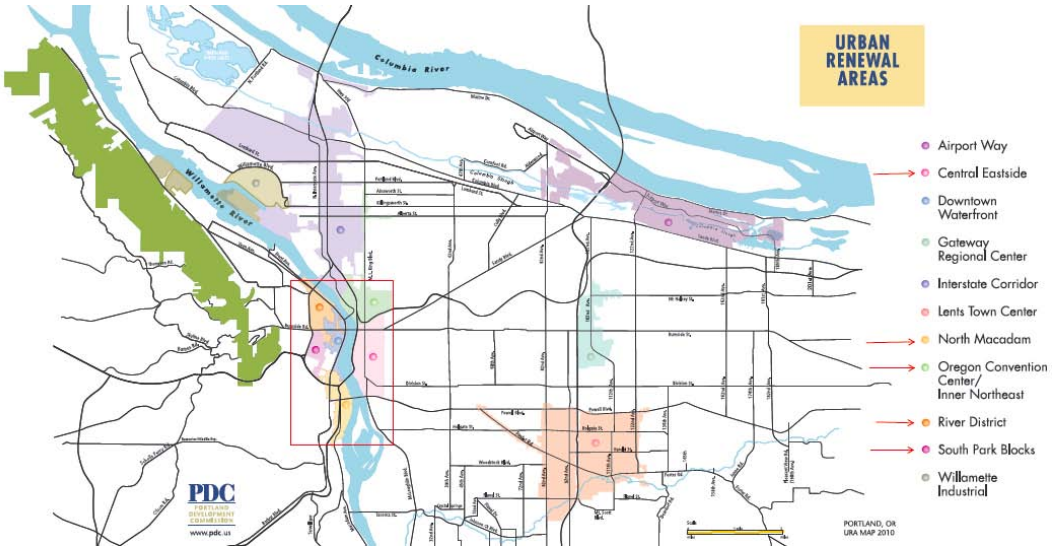

Figure 13. Urban Renewal Areas in Portland, OR

Source: PDC, "Current Projects," http://www.pdc.us/currentwork/default.asp (accessed July 16, 2011).

Three URAs funded the Central Streetcar Project: North Macadam, South Park Blocks, and River District. Funding for initial capital expenditure came from TIF-backed bonds, which were paid back with revenue collected from the three URAs.[459]

The North Macadam URA was created in 1999. At that time, the North Macadam area was largely underutilized and vacant, with some brown-field developments. It also lacked transportation access. Since then, North Macadam has turned around and has become a central city hub with new employment centers, housing, parks, and transportation options. A new biosciences facility currently in the planning stage is expected to bring new jobs. The area's successful transportation improvements have helped improve accessibility and spur growth.[460]

Created in 1985, the South Park Blocks area consists of several neighborhoods. Some of the major development goals for the area include supporting and expanding the downtown retail area, assisting the advancement of Portland State University, and preserving the West End mixed-income neighborhood.[461]

Created in 1988, the River District includes what is known as the Pearl District (the former location of the Burlington Northern rail yards), Old Town, Chinatown neighborhoods, and the Union Station area. The district has sought to create a new neighborhood at the site of the former rail yards, connect neighborhoods to the waterfront, and develop infrastructure, such as parks, the streetcar, and parking. The district is intended to be a "24-hour," dense, urban area with a mix of residential and commercial uses oriented toward the Willamette River.[462]

Annual TIF Revenues Dedicated to the Central Streetcar Project

Portland's Central Streetcar Project was developed in four phases and opened throughout the 2000s. TIF revenues were a major funding source.[463] Details of the four lines are listed in Table 19.

Table 19. URA Funding of Portland Central Streetcar Project Capital Cost

Streetcar Line	Legacy Good Samaritan Hospital to Portland State University (Phase I and II)	Portland State University to RiverPlace (Phase 3a)	RiverPlace to SW Gibbs Street (Phase 3b)	SW Moody and Gibbs to SW Lowell (Phase 3c)
Length/type of track	2.4 miles of double track	0.6 miles of double track	0.6 miles of single track	0.4 miles of double track
Service began	July 20, 2001	March 11, 2005	October 20, 2006	August 17, 2007
Capital budget ($ millions)	56.9	16.0	15.8	14.45
Funds from URA ($ millions)	7.5	8.4	3.8	1.8
Percent of capital budget from URA	13.18	52.50	24.05	12.46
URA involved	South Park Blocks	North Macadam	North Macadam	North Macadam

Source: Portland Streetcar, Inc., Portland Streetcar Capital and Operations Funding (September 2010).

Proportion of TIF Revenues Expended on the Central Streetcar Project

For the North Macadam URA, the percentage of the total revenue expended on the streetcar was highest in FY 2002 through FY 2005, when the streetcar expenditures accounted for more than half of the URA budget (see Table 20).[464]

Table 20. Percentage of North Macadam URA Expenditures on Portland Central Streetcar Project

	FY 2000-01 Actual	FY 2001-02 Actual	FY 2002-03 Actual	FY 2003-04 Actual	FY 2004-05 Actual	FY 2005-06 Revised
Total expended on streetcar ($)	23,387	28,726	1,301,113	4,512,619	6,559,490	184,949
Total project expenditures ($)	2,040,059	1,683,925	2,503,041	6,382,047	8,500,280	14,871,392
Percent of total expended on streetcar	1.15	1.71	51.98	70.71	77.17	1.24

Source: PDC, Adopted Fiscal Year Budgets (2000 to 2006), http://www.pdc.us/budget/default.asp (accessed July 16, 2011).

South Park Blocks URA revenues funded the streetcar line from Legacy Good Samaritan Hospital to Portland State University from 1998 through 2002. The funds spent per year are summarized in Table 21.

Table 21. Percentage of South Park Blocks URA Expenditures on Portland Central Streetcar Project

	FY 1998-99	FY 1999-2000	FY 2000-01	FY 2001-02
Total expended on streetcar ($)	163,671	7,915,850	8,866	196,319
Total revenue expended ($)	12,780,443	11,587,773	1,907,910	13,948,340
Percent of total expended on streetcar	1.28	68.31	0.46	1.41

Source: PDC, Adopted Fiscal Year Budgets (1998 to 2002), http://www.pdc.us/budget/default.asp (accessed July16, 2011).

Legal Challenges to TIF

The use of URA funds for the Portland Streetcar Project has not encountered legal challenges to date.[465] URA funds were previously used for other transit projects in the city, such as light-rail lines, so any legal challenges to the use of URA funds for transit were probably resolved in those projects.[466] Additionally, the enabling legislation clearly allows the use of TIF revenue for transportation capital expenditures.

It is important to note that URA funds have not been used to purchase rolling stock (rail cars). Since rolling stock is not used exclusively within a specific URA, the use of URA funds to purchase it was considered a legal grey area.[467]

Local Improvement Districts

Overview

Portland has used LIDs as funding sources to help finance all phases of the Central Streetcar Project. A new LID was created for each phase, sometimes using many different assessment methodologies.[468] The LIDs are regulated by state and city laws. Formed by City Council resolution, LIDs are initiated by the property owners, one of the city's bureaus, or the City Council.[469] LIDs were approved for the Central Streetcar Project in 2000.[470] The contributions of LID funds for the various phases of the project are detailed in Table 22.

Table 22. Total Costs of the Central Streetcar Project Funded by LIDs

Phase	Total Cost ($ millions)	LID Total ($ millions)	Percent LID Funded
Phase 1 & 2	56.9	9.6	17
Phase 3a	14.4	3.0	21
Phase 3b	15.8	2.0	13
Phase 3c	13.4	4.8	36
	100.5	19.4	19

Source: E.D. Hovee & Company LLC, "Streetcar-Development Linkage: The Portland Streetcar Loop," Prepared for City of Portland Office of Transportation (February 2008), p. 11, http://www.edhovee.com/streetcar_report.pdf (accessed December 10, 2011).

Assessment Calculation Methodology

The various phases of the Portland Central Streetcar Project used the methodologies outlined in Table 23 to calculate the assessments. The methodology adopted for a particular phase depends on a number of factors, including local circumstances and the types of properties within the LID.

Table 23. LID Assessment Methodology for Portland Central Streetcar Project

Phase	Assessment Methodology
Phase 1 and 2	$30 per foot of frontage + rate x property value; 2 zones; rate varies by land use and zone
Phase 3a	Larger of: $6/$1,000 property value x total property value “or” $0.90/sq. ft. x land area; 2 zones; rate varies by zone
Phase 3b	$1.35 per square foot x land area x distance factor
Phase 3c	$3.23 per square foot x land area x distance factor

Source: LID Petitions (Vicky Diede, personal communication, July 18, 2011).

The LIDs for Phases 1 and 2 contain a large number of owner-occupied residential properties, which increased the probability of property-owner opposition. Balancing the revenue loss and the possibility of such opposition, the city decided to exempt owner-occupied residential properties from paying assessments.[471] The decision was mainly political.

As defined in the Phase 1 and 2 LID petition memos, the LIDs extend 550 to 780 feet from the street abutting the streetcar line (hereafter called the streetcar street).[472] The LIDs are divided into two zones. The first zone includes all properties within 200 feet of the streetcar street. Properties that abut the streetcar street are assumed to be zero feet away and are the properties deemed to benefit from the streetcar frontage. For these properties, the assessment is a sum of $30 times the linear feet of the property fronting on the streetcar street and property value times a base rate. The base rate varies by the principal land use of the property and the zone in which the parcel is located.

For example, an apartment complex in the first zone with a 100-foot streetcar street frontage and a value of $1 million will be assessed $8,500 ($30 x 100, or $3000, plus a $5.50 base rate x $1 million ÷ $1,000, which equals $5,500). A similarly valued apartment complex in the second zone will be assessed only $2,750 ($2.75 base rate x $1 million ÷ $1,000) because it does not enjoy streetcar street frontage and is further away than the apartment complex in the first zone.

As defined in the Phase 3a LID petition memo, the LID extends up to 720 feet (one-eighth of a mile) from the streetcar street.[473] The properties pay assessments equal to a distance factor (a number that is inversely proportional to the quotient obtained by dividing the distance from a streetcar street by 720 feet) times the larger of (a) property value times $6 per $1,000 of property value and (b) the parcel area of the property times $0.90 per square foot of parcel area.

For example, the assessments for a property with a value of $2 million and a land area of 10,000 square feet that is 100 feet from a streetcar street is $10,320, computed as follows: value method: $6.00 ÷ $1,000 x $2,000,000 = $12,000; land-area method = $0.90 per square foot x 10,000 square feet = $9,000; distance factor = 1 – (100 ÷ 720) = 0.86. In this case, the value method applies, and the assessment = $12,000 x 0.86 = $10,320.

As defined in the Phases 3b and 3c LID petition memos, the LIDs extend up to 1,320 feet (one-quarter of a mile) from the streetcar street.[474] The properties are charged assessments equal to the land area times a base rate ($1.35 per square foot for Phase 3b and $3.23 per square foot for Phase 3c) times a distance factor (a number that is inversely proportional to the ratio resulting from dividing the distance from a streetcar street by 1,320 feet).

For example, the assessment for a Phase 3b property with a value of $2 million and a land area of 10,000 square feet that is 100 feet from a streetcar street is $2,484, computed as follows: $1.35 ÷ $1,000 x $2,000,000 = $2,700, distance factor = 1 - (100 ÷ 1320) = 0.92. In this case, the estimated assessment = $2,700 x 0.92 = $2,484.

The assessment for a similar property in Phase 3c is $5,943, computed as follows: $3.23 ÷ $1,000 x $2,000,000 = $6,460, distance factor = 1 – (100 ÷ 1320) = 0.92. In this case, the estimated assessment = $6,460 x 0.92 = $5,943.

In Phases 3a, 3b, and 3c, all residential properties within the LID were assessed charges.[475] For phase 3c, Portland State University was charged a lump sum of $500,000.

Use of Assessments to Fund the Central Streetcar Project

The city issued and sold assessment-backed bonds to pay for the construction of the streetcar. According to the Oregon state law, assessments cannot be levied until the project is substantially complete. Furthermore, the property owners have the option of paying the assessments in full or over a five-, ten-, or 20-year period.[476] Therefore, the assessment funds are typically not available during the construction phase. The city issued assessment-backed bonds for the streetcar project to address this revenue-expenditure mismatch. The bonds were backed by the citywide LID construction fund.[477]

Legal Challenges to SAD

Majority property owners supported the LIDs, as they believed that the streetcar would directly benefit their property.[478] This support is evidenced by the fact that the LIDs were approved for all the phases of the Central Streetcar Project and later for the Eastside Streetcar Project.[479] Furthermore, the PDC deliberately minimized the potential for legal challenges by exempting owner-occupied residential properties from paying assessments in several LIDs.

TIF and LIDs: Major Revenue Sources for the Central Streetcar Project

Portland has used TIF and LIDs to fund a large portion of the Central Streetcar Project. Funds from TIF and LIDs combined were used for 30 percent to 71 percent of the total capital costs of the project (see Table 24). The LID funding demonstrated the local community

support, which has been effective in leveraging federal and state investments. The project received significant federal and state funding from the U.S. Department of Housing and Urban Development, the Federal Transportation Fund, and Connect Oregon.[480]

Table 24. Percentages of Portland Central Streetcar Capital Expenditure Funded with TIF and LID Revenues

	Legacy Good Samaritan Hospital to Portland State University (Phase I and II)	Portland State University to RiverPlace (Phase 3a)	RiverPlace to SW Gibbs Street (Phase 3b)	SW Moody and Gibbs to SW Lowell (Phase 3c)
Percent funded with TIF and LID revenues	30.05	71.25	36.71	45.67

Source: Portland Streetcar, Inc., "Portland Streetcar Capital and Operations Funding (September 2010)," http://www.portlandstreetcar.org/pdf/%20capital_and_operations_detail_20100908.pdf (accessed July 16, 2011).

Portland cites three main success factors in the development of the Central Streetcar Project:

- The city documented the positive impacts of the streetcar and its philosophy of development-oriented transit. Development within one block of the streetcar increased rapidly after it was built, leading to developer and resident support for the project.

- The city interviewed developers and found them confident that investment in the streetcar would attract new development.

- LID revenues helped fund 10 percent of the streetcar—property owners believed that the streetcar increases property value and were therefore willing to back it financially.[481]

The LIDs used a relatively fair methodology for calculating the assessment charges. For most of the phases, the city calculated the assessment charge based on a parcel's distance from the streetcar, as well as on the size or value of the property. This assessment methodology allows for lower-value properties to pay less (enhancing vertical equity) and also charges a lower rate to those further away from the streetcar line (enhancing horizontal equity).[482]

Case Analysis

Enabling Legal Environment

The state-level enabling legislation for both URAs and LIDs facilitated the use of TIF and LIDs. Oregon state law clearly identifies the potential uses for URA funds and allows LID formation through City Council resolution, among other mechanisms.

Stakeholder Support

Portland received broad-based stakeholder support for URA and LID formation. Furthermore, the city was able to work with the stakeholders to find solutions when problems arose. For example, those living outside the underdeveloped North Macadam URA were initially concerned that their funds would be used to subsidize it. The city addressed this concern by creating the North Macadam Overlay, which helped specify the geography where the URA funds would be expended.

The city consulted with the stakeholders prior to the LID formation, thereby securing their strong support throughout the project. Furthermore, it revised assessments whenever mistakes were made in the assessment calculation process.[483]

Finally, the city was strategic. In the Phase 1 and 2 LIDs, the city averted a potentially contentious political battle by exempting owner-occupied residential properties from paying assessments.

Institutional Capacity

LIDs and URAs both require significant institutional capacity. The bond issuance, preliminary studies, fee assessment, public relations management, and other activities involved in administering LIDs and URAs demand significant staff time and resources. The PDC is especially geared toward creating and administering URAs. As discussed earlier, cities that do not have an established and experienced redevelopment agency might find TIF time-consuming and taxing on the staff. Even greater institutional capacity could be needed if the TIF districts or LIDs are legally challenged. For Portland, the institutional capacity to administer the URAs and LIDs was in place.

Horizontal and Vertical Equity

Several steps were taken to make the LID assessment methodology vertically and horizontally equitable. Basing assessments on the size or value of the parcel advanced vertical equity. Distance and use-based charges advanced horizontal equity.

The use of TIF funds for transit advanced horizontal equity, as the funds generated by a URA were used to fund capital expenditure within that URA. Furthermore, to the extent that lower-income people benefit more from transit than higher-income people, TIF funding for the Central Streetcar Project enhanced vertical equity as well.

Revenue Yield, Stability, and Growth

URAs involved in funding the streetcar were impacted by the housing market downturn. This is especially true for URAs, such as the North Macadam and River District URAs, where condominiums constitute a large portion of the new development. TIF revenues in these areas have decreased as a result of the weakened owner-occupied residential real estate market.

In the case of LIDs, revenue is typically very stable and predictable. However, since not all the revenue is collected up front, there is always a possibility that property owners may petition for a downward revision of assessments during bad economic times.

V. JOINT DEVELOPMENT AND AIR RIGHTS

OVERVIEW

This chapter reviews the use of joint development and air rights to fund public transit in the United States, focusing on projects in which the transportation/public agencies have made significant use of air rights as a revenue source.

Joint development involves cooperation between private and public entities—often a transit agency/local government and a real estate developer—to develop a project.[484] From a local-government perspective, joint development partnerships aim to raise revenue for the transit agency and/or increase ridership.[485] Three features are unique to joint development:

- A joint development is a legally binding agreement between the two parties.
- The private party must compensate the public entity through payments or cost-sharing arrangements.
- Agreements are voluntary for all parties involved.[486]

Joint Development Benefits to the Transit Agency

Joint developments can benefit transit agencies in a number of ways.[487] First, private developers can compensate transit agencies for the right to develop on the agency land (ground-lease payments) or over the land (air-rights lease) or for the physical connection between their property and the transit station (station-connections fee). Furthermore, private developers can share the costs of construction and/or maintenance of stations and other facilities, such as heating and ventilation systems.

Apart from the more straightforward revenue and cost sharing, joint developments can bring other benefits to transit agencies, including increased transit ridership by increasing station-area density or adding destinations on transit lines. The increased ridership can, in turn, raise the transit agency's fare-box revenue.[488] Transit agencies may also enter into joint agreements to promote economic development and job growth or to create affordable or transit-accessible housing.[489]

Typical Joint Development Arrangements

Four major joint development arrangements are in use, based on the ways in which the transit agencies and the developers can derive benefit:[490] (1) revenue-sharing arrangements, (2) cost-sharing arrangements, (3) use of incentives, and (4) combinations of the three.[491]

The lease or sale of property is the most common revenue-sharing arrangement. The transit agency grants developers the right to develop or occupy a piece of agency-owned land.

Operations and construction cost sharing is the second most common arrangement; in it, transit agencies and private developers jointly pay for construction and/or ongoing operations and maintenance.[492]

The station-connection fee is the next most common; in it, tenants or landowners pay a fee to the transit agency to access the station.[493]

Incentive agreements are the fourth most common arrangement. Developers are granted density bonuses or other benefits in exchange for contributing to the transit agency's objectives. This type of agreement is most common in New York City, where density bonuses are extremely valuable to developers.[494] Other arrangements, such as negotiated private contribution[495] and equity participation, are less common and make up only a small percentage of joint development agreements nationwide.[496]

In summary, the major revenue-sharing arrangements include the following:[497]

- Leases (including air-rights leases, ground leases, and subterranean leases): The transit agency leases land or space on, below, or above the land (for example, space above a transit station) to the developer.

- Sale of land: The transit agency sells land to the developer.

- Station-connection fees: The tenant or property owner pays a fee to connect to the transit station.

The major cost-sharing tools include the following:[498]

- Incentive-based agreements (including negotiated private contributions): The transit agency grants the developer special privileges, such as a density bonus, in exchange for a fee that is typically used to fund transit infrastructure.

- Voluntary agreements (including construction cost sharing and operations cost sharing): Agreements to coordinate and fund planning, construction, or operations or other agreements that can reduce the costs to both the transit agency and the developer.

- Equity participation: The transit agency and the developer both contribute construction funds.[499]

Barriers to Joint Development

The most significant barrier to joint development is the prohibition by several states and counties—including Pennsylvania, New Jersey, and Miami-Dade County, FL—of transit agencies engaging in land use activities and real estate development. With little control over the type and intensity of uses allowed on and near transit stations, the agencies are unable to create joint development proposals that are attractive to private developers. Even if they are allowed to undertake land use activities, transit agencies may face internal

opposition. Many transit-agency board members simply do not believe that their agency should be involved in real estate development.[500]

Furthermore, transit agencies may have other policies that inhibit joint development. For example, BART has a one-for-one parking replacement policy that often requires construction of prohibitively expensive multistory parking garages to compensate for displaced surface parking.[501]

Furthermore, transit agencies may lack understanding of the complicated private real estate development process.[502] Agencies have been known to mismanage and overestimate the value of their property.[503] Furthermore, other public agencies, such as city governments or redevelopment agencies, may oppose joint development or may not view real estate development as within the purview of transit agencies and may not cooperate with them.[504]

Private developers may also lack joint development experience. Additionally, public agencies may impose requirements that developers perceive as risky, such as requiring a mix of housing types or socioeconomic groups that, in the developers' view, may negatively impact market demand.[505] Other risks involved with large-scale joint development projects include the following:[506]

- The planning process and regulations can be highly complicated and place unknown and undue burdens on developers.[507]
- The request-for-proposal (RFP) process, often employed to choose the developer, is inherently risky for developers.
- The unknowns of partnering with a transit agency may limit the expectations of developers in terms of what they can build.
- Other requirements imposed by the transit agency, such as a requirement to sell a certain number of units at below-market rate, may reduce profits.

Political opposition to joint development projects may also be a barrier. The surrounding communities may oppose them on a number of grounds, including traffic congestion, air and noise pollution, or the fear of lower-income residents moving in.[508]

History of Joint Development Projects

Joint development became popular in the United States in the early 1980s, when 10 new rail systems were completed.[509] A 1990 study reported 117 joint development projects in 24 cities throughout the country.[510] A 2010 Government Accountability Office study reports 166 such projects, of which just three agencies (Los Angeles Metro, Washington Metro, and Metropolitan Atlanta Rapid Transit) were responsible for 58.[511] Dallas, TX, San Diego, CA, and the San Francisco Bay Area have also used joint development extensively.[512]

Supportive federal policies contributed to the popularity of joint developments. The Young Amendment to the National Mass Transportation Act of 1974 allowed the use of federal

funding for joint development projects.[513] Later, the Surface Transportation Act of 1978 permitted the use of federal funds.[514] During the Reagan Administration in the 1980s, the federal government began requiring transit agencies to receive more funds from local sources and to operate more efficiently, which led them to seek funding through nontraditional sources, such as joint development.[515] Additionally, after a long period of decline, the real estate market began to revive in central cities in the 1980s and 1990s, attracting new investors and making joint development feasible in inner cities.[516]

Overview of Joint Development Projects Nationally

Joint development projects are concentrated in a small number of urban areas. WMATA has been particularly active in joint development, with over 33 completed projects since the 1970s.[517,518] It has used a diverse set of tools, including air rights, service-connection fees, and cost-sharing agreements.[519] WMATA has been successful in joint development, in part, because it created a real estate development department that actively seeks out joint development opportunities. Furthermore, rather than trying to standardize the process, WMATA considers each opportunity on its own merits.[520] It has devised a rating system to assess the potential of new sites and development guidelines to ensure project success. Seeking to attract new riders, increase revenue, and expand the tax base, these guidelines include maximizing the use of transit, linking land use to transit, mixing housing types and uses, and bringing vibrancy to urban spaces.[521]

New York City actively pursues joint development to renovate and redevelop existing transit stations,[522] primarily using cost-sharing agreements.[523] The regional transportation agency, the MTA, has worked with the planning department to provide incentives, such as floor-area-ratio bonuses, while requiring property owners to improve subway facilities adjacent to their buildings. The city Planning Department has also incentivized joint development by relaxing station-area zoning laws, i.e., by creating special districts empowered with zoning flexibility while negotiating transit improvements.[524]

Miami-Dade County, FL, has used a different cost-sharing tool, the rapid-transit zone (RTZ), to encourage joint development.[525] Created along rapid-transit lines,[526] the RTZ lessens private developers' risk by standardizing the zoning ordinances among all municipalities within the zone.[527] Miami has also encouraged joint development along rail transit corridors outside of the RTZ with incentive-based agreements, such as density bonuses, and by supporting rail stations with new infrastructure.[528]

Completing five joint developments by 2011,[529] Atlanta, GA, has encouraged joint development, especially along its Peachtree corridor, by modifying zoning ordinances to allow for greater density and taller buildings, which resulted in the construction of several new office buildings on or adjacent to Metropolitan Atlanta Rapid Transit Authority (MARTA) stations.[530]

In the San Francisco Bay Area, BART has used joint development to promote TODs near stations. Recent projects include the mixed-use CCC Transit Village and Fruitvale Station Transit Village. BART has also encouraged cooperation between other agencies and private developers to facilitate new growth at its Hayward Station.[531]

In the southern part of the San Francisco Bay Area, the Santa Clara Valley Transportation Authority (VTA), unhampered by policies such as BART's one-to-one parking replacement policy, has been able to develop TOD projects in former surface parking lots.[532]

In Southern California, San Diego has used incentive-based agreements to encourage TODs.[533] By streamlining the development process along transit corridors, the city has been able to prevent developers from building automobile-oriented developments or to require them to include affordable or senior housing in exchange for a streamlined development-permit approval process.[534]

Other Considerations for Joint Development Use

Stakeholder Acceptance

Joint developments must be acceptable to the transit agencies' board members and other decision makers and to the local communities, other public agencies, and the city or county governments.

A clear joint development policy or even an unofficial internal consensus could garner significant acceptance for joint developments. For example, an agency should identify its key goals in pursuing a joint development. Should it primarily benefit the community (for example, through the development of affordable housing) or be devoted to the most profitable use? Agencies that lack clear policy objectives can get bogged down by disagreements or lack of direction.

External stakeholder acceptance is important. Joint developments must win community support and obtain government approval. This is especially important for transit agencies operating in multiple jurisdictions. Such agencies might have to collaborate with several local governments and public agencies and win the support of multiple community groups.

Real Estate Market Conditions

Joint developments are impacted by market conditions. Weak real estate markets can reduce revenue yield. Many leases protect transit agencies from market risk by requiring minimum guaranteed lease payments.

Institutional Capacity

The institutional capacity needed for joint developments varies, based on project type and size. Nonetheless, considerable institutional capacity is usually required to conceptualize developments, determine their scope, invite developers to partner in project development, review developers' proposals, negotiate agreements with developers, and manage projects during and after construction.

Equity Considerations

The equity concern for joint development projects primarily revolves around whether the agreement benefits the involved parties in proportion to their stake and risk in the development (horizontal equity). Vertical equity concerns are few, because the concerned parties enter into joint development agreements voluntarily.

Private developers and/or transit agencies typically finance joint developments and therefore bear the project risk. Horizontal equity should be considered in the lease structure or other financial arrangements that allocate joint development benefits, costs, and risks. Horizontal equity can be achieved if the benefits are in proportion to the costs incurred and risks taken.

Criteria for Choosing Case Studies

The joint development projects examined in this study were chosen on the basis of the following criteria:

- The project must endow direct financial benefit to the transit agency through revenue- and/or cost-sharing arrangements.
- The value of transit service must be captured—in other words, the project was developed with the intention of using transit benefits, including increased real estate demand and transportation accessibility.
- The project is in, on, or contiguous to a transit station.
- Data on the project are available.
- The project is highlighted in the literature as a shining example of joint development.
- The project is in an urban area that is actively pursuing joint development.
- The project uses multiple joint development tools, including air rights.

The first three criteria excluded projects in which a public agency gained no direct financial benefit (for example, when TODs were subsidized in the hope that the development would increase transit ridership).

The following cases were chosen: Ground Transportation Center, Cedar Rapids, IA; Bethesda Metro Joint Development Project in Bethesda, MD (this is a WMATA project); Dadeland South Joint Development Project in Miami-Dade County, FL (this is a Miami-Dade Transit [MDT] project); Resurgens Plaza, Atlanta, GA (a MARTA project); and CCC Transit Village in Contra Costa County, CA (this project is on BART property). Except for the CCC Transit Village, which has been discussed among the TIF cases, the projects also use air rights as a revenue source.

GROUND TRANSPORTATION CENTER, CEDAR RAPIDS, IA

Overview of Cedar Rapids, IA

Located 30 miles north of the state capital, Iowa City, Cedar Rapids is the second-largest city in Iowa. Its population in 2010 was 126,000.[535] The three-county metropolitan statistical area is much larger, with a population of about 257,000.[536] While not a large city, Cedar Rapids has grown steadily over the past 50 years, its population increasing by about 37 percent since 1960.[537]

The city has strong ties to agricultural production—a large corn and grain processing industry is the backbone of the city's economy.[538] Facilities of large agricultural companies, including Quaker Oats, Archer Daniels Midland, General Mills, and Cargill, are located in Cedar Rapids,[539] and the railroad industry has also been important to the region.[540]

Overview of the Transit System in Cedar Rapids

Like many cities across the country, Cedar Rapids is sprawling, with residential and commercial activities located away from the urban core.[541] Iowa is largely a rural state, with high automobile ownership.[542] The Cedar Rapids public transportation system, Cedar Rapids Transit (CRT), reflects this characteristic, as many parts of the city are not served by transit (see Figure 14).

As shown in Figure 14, CRT is a bus-only transit system with 14 routes. The agency has struggled to maintain ridership, a large proportion of which is generated by work trips from the residential areas to the downtown area.[543] At the time the Ground Transportation Center (GTC) opened in 1984, ridership on the CRT system, mirroring the national trend, had been in decline for several years, and the decline continued.[544]

Overview of the Ground Transportation Center

The GTC is the central bus depot serving Cedar Rapids. It is located in the southern part of the city, near the Cedar River, and is denoted by the bus icon in Figure 14. Twelve bus lines, including intercity buses, converge on the GTC, creating an easy transfer point. Prior to 1984, bus passengers waiting to transfer stood in the open in front of the local storefronts, and buses took up large amounts of on-street space.[545] The city was in need of a public transit hub, which the GTC was intended to be.

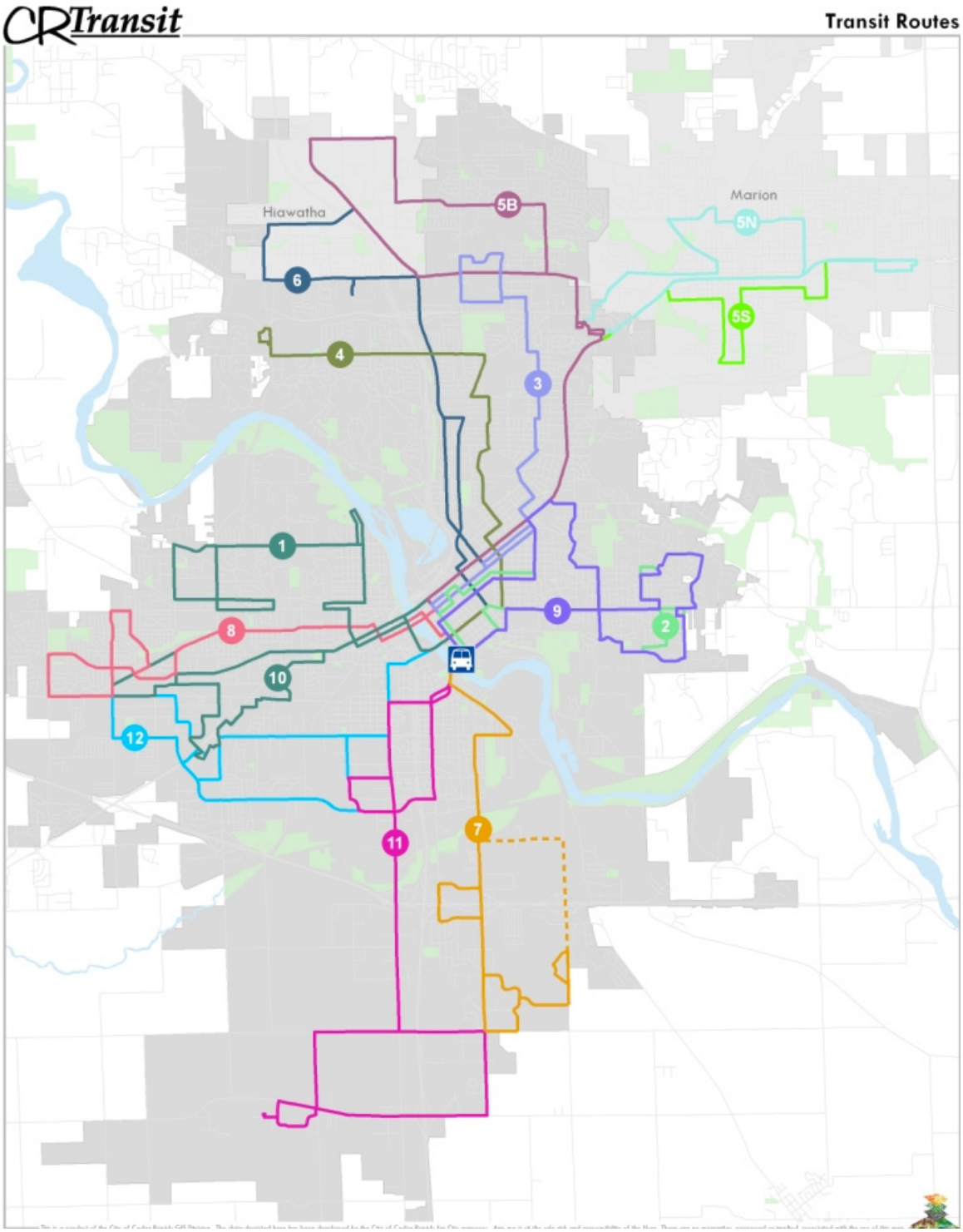

Figure 14. Cedar Rapids, IA, Transit System Route Map

Source: Cedar Rapids Transit, "Routes," http://www.cedar-rapids.org/resident-resources/Transit/routes/pages/default.aspx (accessed July 31, 2011).

The GTC development includes the following:

- An intermodal terminal with ticket offices, baggage storage, and parcel services
- Taxi stands, special minibus transit services, and car pickup/dropoff
- A 500-space parking garage connected to the GTC by a skywalk
- A 15-story, 160,000-square-foot office building
- A pedestrian mall/concourse that connects to the CBD
- A 96-unit housing project for the elderly and handicapped[546]

The GTC was developed as a joint development project. It was completed under the Urban Initiatives Program initiated by President Jimmy Carter.[547] That program attempted to coordinate federal funding for inner cities and sought partnerships between the public and private sectors to revitalize them.[548] As part of this program, the Urban Mass Transportation Administration (UMTA) was set up to distribute federal funding to selected urban transportation projects.[549] To qualify for funding, the projects needed to (1) impact the local environment beyond traditional transportation by spurring economic development, (2) be transit-related, and (3) preferably be in areas the U.S. Department of Housing and Urban Development determined to be "stressed."[550]

The Iowa Department of Transportation (DOT) examined projects across several cities throughout the state and determined that the Cedar Rapids GTC project would be a good candidate for federal funds, which were awarded in 1980.

The city had two goals in mind when planning the GTC. First, it wished to spur economic growth in the downtown area and strengthen the transit system, and it believed the GTC would be a catalyst.[551] Second, it sought to centralize all the modes of transportation, including the local and intercity buses, taxis, and paratransit.[552]

The GTC is located just south of the CBD in an area that was previously run down and underutilized, containing warehouses and rail yards.[553] The city noted that the GTC would spur economic development and growth around the CBD.[554]

The GTC construction contract was awarded to three local firms.[555] Initially, the project faced financial difficulty, as interest rates rose, and one of the firms—a real estate development firm—pulled out of the project after it was decided that a retail mall planned for the second story of the project was not feasible.[556] The retail component was to be an extension of a nearby mall, but plans for the nearby mall were canceled and so were the plans for the extension mall at the GTC. A second developer, who was involved with the housing component of the GTC, withdrew shortly thereafter, citing economic reasons.[557]

The city scrapped the original agreement and created a new agreement with a single developer, an electrical contractor. The contractor took over the development rights for the

apartment tower and office building[558] and agreed to pay the city an annual fee of $0.15 per square foot of office tower space. The developer was given the option of selling the office space as condominiums, floor by floor,[559] and the project was back on track after buyers were found for several office floors.[560]

A portion of the funds needed to build the transit portion of the GTC ($10 million) came from the UMTA funding, and the remainder of the cost was borne by the Iowa DOT and by the city, using TIF funds.[561] The office development was funded through industrial development bonds,[562] and the housing portion was financed with loans from HUD and other conventional sources.[563] The cost breakdown is shown in Table 25.

Table 25. Breakdown of Cedar Rapids, IA, GTC Building Costs

Component	Description	Cost ($ millions)
GTC	9,600 square feet	10.0
GTC	500 car ramp garage	2.5
Office space	13 floors;182,000 square feet; 40 units	15.0
Housing	200 units	3.0
Retail	Proposed but never built	
Total		**30.5**

Source: Forkenbrock et al., 1990, p. 44.

Use of Joint Development to Fund the GTC

Ground-lease Structure

Two intercity bus companies—Greyhound and Burlington Northern Trailways—leased the GTC bus bays. An initial 20-year lease was signed with Greyhound, and a five-year lease was signed with Burlington.[564] Both companies were charged $7.20 per square foot annually, calculated by allocating the city's cost of the GTC (20 percent total) to each carrier on the basis of square footage used, annualized at a 12-percent capitalization rate.[565]

Greyhound vacated the premises around 2005–2006, when it moved to its current airport location, and Burlington vacated the premises in 2009, after floods in 2008 inundated them. The space vacated by Greyhound is currently a staff parking lot, and the space vacated by Burlington is vacant. Both spaces are scheduled for major redesign in 2012.[566]

A Montessori school on the GTC premises pays an annual ground lease of $55,000 as part of a 10-year lease that was first signed in 1995. The lease was extended by two years to make up for time lost due to the floods. The school is in the middle of its first five-year renewal and has one additional five-year renewal option when the first option expires.[567]

Air-Rights Lease Structure

The air-rights lease revenues are paid by the office tower and the residential building, which were constructed on top of the GTC. Development rights were leased to the developer of the office tower for 50 years. The city receives $0.15 per square foot of office space.[568] The tower lease generates about $27,300 annually.[569] The residential building generates approximately $3,000 annually.[570]

The annual air-rights lease revenues totaled $31,708 in 2011 and have remained constant since the leases were first signed. The lease agreements do not require time-bound or inflation-adjusted revenue escalation.[571]

The entire financial burden of maintaining the GTC rests on CRT. Currently, the GTC's maintenance costs exceed the revenue generated from the ground and air-rights leases. It is believed that the original lease payments, approved by the City Council in the early 1980s, were highly favorable to the tenants, and the fact that the lease payments have not increased since has only added to CRT's burden. It is very likely that the agency in charge of GTC maintenance—the City Bus Department (as the CRT was known at that time)—was not involved in the original lease negotiations,[572] leading to the present situation.

Factors Supporting Joint Development

The joint development required cooperation from local, state, and federal agencies and the private developers.[573] The funding from the federal grant was key to leveraging additional state, city, and private funds.

The federal leadership, along with the leadership exercised by the Mayor of Cedar Rapids, played an important role in the development of the GTC. The Mayor had seen the power of joint development in previous projects executed using air rights on the north side of the city and foresaw the potential for joint development at the GTC site.[574,575] He worked hard to convince private investors to invest in the underutilized warehouse district and rail yards and also used political connections to secure federal grant funds.[576]

Use of TIF to Fund the GTC

TIF Use in Iowa

Iowa began using TIF in 1958,[577] and there were about 1,500 TIF districts in Iowa by 1997.[578] As is the case in most states, Iowa law requires TIF to be used only in blighted areas.[579] Iowa law does not prohibit TIF use for transit projects.[580]

Cedar Rapids set up a TIF district and issued $4.5 million in TIF bonds to fund the GTC project.[581] Of this amount, $2 million was used for the GTC building, and $2.5 million was used to pay for a parking-garage ramp.[582]

TIF and GTC as a Catalyst for Downtown Redevelopment

The downtown area flourished after the GTC was built. While it is difficult to conclude that the GTC alone resulted in the downtown's transformation, it was certainly an important positive influence.

The CBD has seen several significant investments since the GTC's construction. A major office building was renovated, a warehouse was converted into a high-tech center, a new YMCA was created, and a data-processing company set up corporate headquarters. A new federal courthouse was also located downtown. The city built an $8 million library and a waterfront park, refurbished a historic firehouse, and built a new science museum.[583] These city projects were financed partly with TIF funds. The success of the Cedar Valley Montessori School in the GTC surprised many who were initially wary of locating a school at a transit station. The GTC has proved to be a convenient location, as many parents employed in the downtown area can easily drop their children at the school on their way to work.[584] Many business leaders have attributed the downtown's positive transition to the GTC and TIF.[585]

Case Analysis

Enabling Environment

The federal government's UMTA program triggered the development of the GTC, and city and state leadership took advantage of the program. The local investments were supplemented with TIF funds, and the state-level enabling legislation did not exclude TIF funding for transit.

Institutional Capacity

While the city had the required institutional capacity to create a TIF district, it lacked the capacity to negotiate financially viable lease terms. In all fairness, the city probably had little leverage in attracting tenants to what was at that time an undesirable location. However, it could certainly have negotiated a lease structure that would have allowed it to share future revenue streams in exchange for less lease revenue up front.

Horizontal and Vertical Equity

The use of TIF advanced horizontal equity, because the GTC benefited the entire TIF district. As discussed earlier, the CBD area has improved significantly since the construction of the GTC. Not only has transportation infrastructure improved, several public services have been also provided, including a library, a museum, a fire station, and an elementary school.[586] Furthermore, new infrastructure, including sidewalks, curbs, and landscaping, has improved the neighborhood and attracted new investment.[587]

To the extent that lower-income people are more likely to take transit than higher-income people,[588] they also benefit more from the GTC. Therefore, TIF funding for the GTC enhanced vertical equity as well.

As mentioned earlier, the equity concern for the joint development projects primarily revolves around whether the agreements benefit the involved parties in proportion to their stake and risk in the development (horizontal equity). Of particular concern is whether public sector agency interests have been protected.

An analysis of the lease structures (both the air and ground leases) shows that the city may have been unable to strike a favorable deal for its constituents. The lease revenues are not inflation-adjusted, nor do the leases allow the city to share future profits. Combined, these two factors have led to the current situation in which the lease revenues do not cover the maintenance costs.

Stakeholder Support

The GTC received support from three main stakeholders: private developers, the city, and property owners within the TIF district. The downtown property owners stood to gain from the GTC construction, and the city stood to achieve its transportation and economic development objectives. The project was a mixed bag for the private developers. When plans for a retail mall fell through, the private developers withdrew, but fortunately, another developer was interested in taking on the project after negotiating new terms.

Revenue Yield, Stability, and Growth

TIF and joint developments are effective when used together, because they can feed off each other. Public and private investments can revitalize a blighted area. The area, in turn, can produce tax revenues to pay for the public improvements, which can attract further investments into the area. Done right, a single major joint development like the GTC can set off an investment cycle.

At the project level, the GTC has not generated significant revenue for the city. This is partly a result of flawed lease structuring and partly due to the ground realities. One could argue that the market for the office space and residential real estate may not be strong in smaller cities that are dependent on a manufacturing and agricultural economy. Hence, such cities might be limited in their ability to negotiate favorable lease revenues.

BETHESDA METRO JOINT DEVELOPMENT, BETHESDA, MD

Overview of WMATA's Public Transportation System

Located approximately nine miles northwest of downtown Washington, DC, the 3.5-acre Bethesda Metro Joint Development (BMJD) is built above the Bethesda Metrorail subway station, on the Metro Red Line (see Figure 15).[589] The station opened in 1984, and the joint development was constructed a year later.[590]

Figure 15. Bethesda, MD, Metrorail Station Map

Source: WMATA, "Rail Map," http://www.wmata.com/rail/maps/map.cfm (accessed May 4, 2011).

Overview of WMATA's Joint Development Policy

WMATA has a long history of using joint development to spur economic growth, facilitate TOD development, and create a long-term revenue source for itself.[591] Its projects are intended to create dense and pedestrian-friendly mixed-use communities that integrate transit with land use and reduce dependence on automobiles.[592]

As of 2010, 33 joint development projects had been developed at 27 Metrorail stations. The total lease revenues from these projects since the opening of Metrorail in 1976 exceed $250 million.[593] Indeed, revenues from them have been a significant source of income for WMATA in recent years (see Table 26).

Table 26. Revenue from WMATA Joint Development Projects

	Fiscal Year							
	2011	2010	2009	2008	2007	2006	2005	2004
Revenue ($ millions)	6.450a	9.848b	8.161b	8.8	10.5	7.8	4.71	3.47

Source: WMATA, Comprehensive Annual Financial Reports 2009 and 2010, http://www.wmata.com/about_metro/public_rr.cfm (accessed May 4, 2011); WMATA, "Monthly Financial Report, January 2005," http://www.wmata.com/about_metro/board_of_directors/%20board_docs/031005_IIa_Monthly_Financial_Report_-_Jan_2005.pdf (accessed May 4, 2011).

aWMATA, Approved in FY 2011 budget, p. III-1, http://www.wmata.com/%20about_metro/docs/FY2012_Proposed_Budget.pdf (accessed July 6, 2011).

bWMATA, "Approved in FY 2011 budget," p. III-1, http://www.wmata.com/%20about_metro/docs/FY2012_Proposed_Budget.pdf%20-%20page%20III-1 (accessed July 6, 2011).

Despite the fact that joint development projects bring in revenues of several million dollars annually, this represents less than one percent of WMATA's billion-dollar-plus annual operating budget (see Table 27).

Table 27. Percentage of WMATA Operating Budget Provided by Joint Developments

	Fiscal Year						
	2010	2009	2008	2007	2006	2005	2004
WMATA operating budget ($ millions)	1,358	1,360	1,200	1,130	1,040	940	909
Percent of operating budget revenue from joint development	0.73a	0.60a	0.73	0.93	0.75	0.50	0.38

Source: WMATA, "Comprehensive Annual Financial Reports, FY 2004-2010," http://www.wmata.com/about_metro/public_rr.cfm (accessed October 23, 2011).

aWMATA, "Approved in FY 2011 budget," p. III-1, http://www.wmata.com/%20about_metro/docs/FY2012_Proposed_Budget.pdf%20-%20page%20III-1 (accessed July 6, 2011).

Overview of the Bethesda Metro Joint Development

Bethesda, MD, is an affluent suburb of Washington, DC. The BMJD, which sits on top of the Bethesda Metrorail station,[594] contains one 17-story office tower with 368,000 square feet of office space, 41,600 square feet of retail space (including a 19,000-square-foot food court), a 390-room hotel, and a five-story garage with 1,305 parking spaces.[595]

Bethesda Metro Center Limited Partnership (BMCLP), a Maryland-based organization, owned, operated, and maintained BMJD until 1999, after which the majority partner in BMPCL—CRI—sold its stake to the Meridian Group, Inc. At present, the Meridian Group owns and operates the BMJD.[596]

On December 1, 1981, the BMCLP entered into a lease agreement with WMATA, pursuant to which the BMCLP leased the land on which BMJD is built for 50 years. The lease can be renewed at the BMCLP's option for an additional 49 years.[597]

Generating minimum annual lease revenue of $1.6 million, BMJD is WMATA's most successful joint development project.[598] Apart from air-rights lease revenues, WMATA also gains from sharing the construction and operations costs.[599] The lease agreement requires the BMJD's owner (earlier BMCLP, now Meridian Group) to pay WMATA a minimum annual rent of $1.6 million. Furthermore, since 1986, the owner has been obligated to pay WMATA additional rent in an amount equal to 7.5 percent of annual gross revenue in excess of $31 million.[600]

Case Analysis

Enabling Environment

Joint developments for WMATA are intended to work in tandem with the Metrorail system. This coordination is achieved by integrating land use with transportation through the development of TODs. The TODs are sought out not simply to increase revenue but to provide transit riders as well.

Furthermore, WMATA has developed joint development policies and guidelines (last updated in 2008) that lay out the following:

- Roles and responsibilities of various stakeholders involved in the joint development process
- The procedure for selecting developers for the joint development projects
- Community involvement in scoping and developing projects, following guidelines to facilitate the success of TODs[601]

While these guidelines are in place to ensure project success, joint development projects are limited by zoning and community acceptance.[602] WMATA operates in several jurisdictions, but it is unable to control the local zoning ordinances and is therefore able to engage in joint development only in locations with supportive local zoning.[603]

Institutional Capacity

WMATA's Planning and Joint Development Department manages the joint development program. The department staff proactively identifies joint development opportunities.

WMATA also actively solicits potential developers through its request for qualifications (RFQ)/RFP process. The RFQ/RFP process is outlined in documents describing WMATA's joint development policies and guidelines. These documents are available on WMATA web site.

In summary, by devoting significant staff and financial resources, WMATA has created substantial institutional capacity to identify, develop, and manage joint development projects.

Horizontal and Vertical Equity

As mentioned earlier, the equity concern for joint development projects primarily revolves around whether the development agreements benefit the involved parties in proportion to their stake and risk in the development (horizontal equity). Of particular concern is whether the interests of the public sector agency, in this case WMATA, have been protected.

Analysis of the lease structure shows that WMATA may not have been able to strike a favorable deal for its constituents. First, the minimum guaranteed lease revenue ($1.6 million) is not inflation-adjusted. For a long-term lease (a 50-year term followed by an option for another 49-year term), this results in progressively declining lease revenue, in constant dollars.

Furthermore, apart from the minimum guaranteed revenue, WMATA shares BMJD revenues only when the annual gross revenue exceeds $31 million. For several years in the 1980s and 1990s, the gross revenue fell well short of $31 million (for some years, it was as low as $17 million). In those years WMATA had to settle for the minimum guaranteed revenue of $1.6 million. In hindsight, setting an inflation-adjusted minimum-gross-revenue target might have been to WMATA's advantage.

Stakeholder Support

It is difficult to ascertain from primary sources whether the joint development encountered community or political opposition when it was developed. An in-depth search for newspaper articles did not reveal stakeholder opposition. In fact, a March 6, 1980, Washington Post article titled "Hotel, Commercial Complex Planned Atop Bethesda Metro Station" reported widespread support for the project, saying that it "won almost universal praise from county officials, business people and Bethesda residents, a surprise to many planners accustomed to hearing citizens oppose high-rise development near their homes." Furthermore, the article cites the large buffer zone between the joint development project and the residential areas as key to the resident support.[604]

Revenue Yield, Stability, and Growth

The revenue yield from the BMJD is stable and substantial, as WMATA is guaranteed a minimum revenue of $1.6 million. However, the upside revenue potential is limited because WMATA shares only 7.5 percent of annual gross revenue in excess of $31 million, and this revenue sharing has occurred only sporadically over the last 30 years.

DADELAND SOUTH JOINT DEVELOPMENT, MIAMI, FL

Miami-Dade Transit Overview

Miami Dade Transit (MDT) provides transit service to Miami-Dade County, FL. Serving a population of nearly a quarter million people, MDT is the 14th-largest transit provider in the country and the largest in Florida.[605] It operates four transit services: Metrobus;

a downtown Miami people-mover system, Metromover (an automated fixed-guideway system); a paratransit service; and Metrorail.[606]

The Metrorail is a 22.6-mile-long elevated rapid-transit heavy-rail system (see Figure 16). The Metromover is a 4.4-mile-long elevated system that serves the downtown Miami area. The Metrobus has more than 90 routes, including the South Miami-Dade Busway, which is a fully separated bus rapid-transit (BRT) system running along U.S. Highway 1. More than 326,000 riders board the combined MDT system on weekdays.[607]

Figure 16. Miami Dade Transit Metrorail System Map

Source: MDT, "Metrorail Map," http://www.miamidade.gov/transit/rail_stations.asp (accessed December 5, 2011).

Overview of Dadeland South Station

Opened for service in 1984, the Dadeland South Station (hereafter called Dadeland South) is at the southern terminus of the Metrorail Green Line, currently the only Metrorail line. A new line, the Orange Line, is under construction. It will provide service to the Miami International Airport beginning in 2012.[608] In addition to Metrorail, numerous bus lines serve Dadeland South.[609]

Joint Development Details

The Dadeland South Metrorail Station joint development was MDT's first joint development project.[610] It includes office, retail, and hotel space, along with a shared parking garage that has 1,100 parking spaces for Metrorail riders.[611] The project broke ground in 1982 and was built in four phases (the construction schedule is shown in Table 28).[612]

Table 28. Phases of the Dadeland South Station Joint Development

Phase	Year Opened	Type of Development
Phase I and III	1984	Datran Center I & II – Class A Office buildings with 476,000 rentable square feet, 35,000 square feet of retail space (511,000 square feet total) and 35,000 parking spaces, 1,100 designated as Park and Ride
Phase II	1984	Miami Marriott Dadeland Hotel and Conference Center with 302 luxury hotel rooms
Phase IV A	2005	Dadeland Centre I – 18-story 152,014 square feet Class A office building (8 floors offices, 9 floors parking)
Phase IV B	2008	Dadeland Centre II – 15-story, 119,516 square feet, Class A office building with 8 floors of office space, 6 floors of parking and ground floor retail

Source: MDT, "Joint Development Projects," http://www.miamidade.gov/transit/about_joint_dadeland_south.asp (accessed December 5, 2011).

The Dadeland South joint development began as a public-private venture between the Green Company and MDT.[613] The Green Company, which owned the land where the parking garage is located, approached MDT with a joint development proposal at the time the Metrorail was being planned.[614] The proposal required the Green Company to donate its entire six-acre property if MDT allowed it to retain air rights to the property.[615] The developer prepared this proposal because a part of the land might have been acquired by MDT anyway (through eminent domain or other means) to provide a parking garage for the station (the line and the station are on land given to MDT by the Florida DOT. In turn, the DOT received the land from Florida East Coast [FEC], a rail company. The FEC land had been vacant since 1935, as the Dadeland South section of the rail road was not in use). Recognizing the significant land-development potential once the station opened, the developer approached MDT with a land-swap proposal under which the developer agreed to transfer land ownership to MDT in return for air rights. The developer gained in two ways: It secured development rights, and it did not have to pay property taxes on the land, which now belonged to MDT. Apart from the lease revenue payable to MDT, the developer would pay property taxes only on the value of the improvements on the land.

Under the terms of the agreement, the air rights are to be maintained by a 99.5-year lease which began in 1982—a 55.5-year lease followed by the option to renew for an additional 44 years.[616] As part of the lease terms, MDT annually receives the greater of $400,000 or a percentage of gross revenue specified as follows: 4 percent of the gross revenue from Phases 1 and 3, 2 percent from Phase 2, 1.5 percent from Phase 4A, and 1 percent from Phase 4B.[617]

In addition to the lease revenue, the county receives substantial property-tax revenue.[618] The annual-lease-revenue data for 2000–2010 are shown in Table 29.

Table 29. Annual Lease Revenue from the Dadeland South Station Joint Development, 2000–2010

	Year										
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Lease revenue ($)	832,906	887,018	821,344	831,568	858,759	925,010	994,732	1,086,343	977,268	938,643	893,696

Source: Abel Lera (Miami-Dade Transit), interview with Shishir Mathur, October 04, 2011.

In addition to the revenue sharing, both parties entered into cost-sharing agreements, which included (1) sharing the excavation costs and the cost of constructing the station's foundation; (2) sharing the cost of the parking garage; and (3) sharing some of the operating costs.[619] The station and buildings also share a common ventilation system and auxiliary generators. The county attributes $4 million in savings to the cost-sharing measures.[620]

Case Analysis

Enabling Environment

Even before the Metrorail became operational in 1984, the Miami-Dade Board of County Commissioners recognized coordination of land use and transportation as vital to a viable rail system.[621] Therefore, it adopted Ordinance No. 78-74 (Fixed-Guideway Rapid Transit System—Development Zone) in 1978.[622] Seeking to develop a cohesive transit-conducive zone along the heavy-rail corridors, the ordinance states: "The Board of County Commissioners for Miami-Dade County, Florida, hereby declares and finds that the uncoordinated use of lands within the County threatens the orderly development and the health, safety, order, convenience, prosperity and welfare of the present and future citizens of this County."[623] The ordinance removes zoning authority for areas that are in close proximity to the rapid-transit system from the local municipalities and hands it over to the county.[624]

Furthermore, the county's Comprehensive Plan calls for the use of joint development. The transportation element of the Comprehensive Plan implores MDT to use joint development as a funding source for operating expenses.[625] Furthermore, it calls for locating transit corridors and stations in areas conducive to joint development, stating "In the siting of transit stations in future rapid transit corridors, major consideration will be given to the opportunities for joint development and/or redevelopment of prospective stations sites, and adjacent neighborhoods, offered by property owners and prospective developers."[626]

This policy framework called for a series of studies to explore the possibility of joint development called the Station Area Design and Development (SADD) studies. Conducted during the planning of the Metrorail system, the SADD studies were undertaken collaboratively by the county, MDT, and local municipalities. The studies set up guidelines for future development and inventoried existing uses around station areas.[627]

In spite of the clear policy direction, the next wave of joint developments did not occur until more than a decade later. Some commissioners felt that the MDT land should be used for social purposes, such as affordable housing, while the others believed that the land should

be developed to the highest and best use. Over time, the commissioners have come to realize the importance of joint developments making a profit for the private developers. Hence, recent joint development projects have been developed to their highest and best use.[628]

Institutional Capacity

MDT's joint development program requires significant institutional capacity. The county set up a special office of leasing to conduct the SADD studies and to manage and market the development sites.[629] Furthermore, the agency continues to employ staff to identify, negotiate, and manage joint development projects.

Horizontal and Vertical Equity

The equity concern for the joint development projects primarily revolves around whether the joint development agreement benefits the involved parties in proportion to their stake and risk in the development (horizontal equity). Of particular concern is whether the interests of the public sector agency, in this case MDT, have been protected.

Analysis of the lease structure shows that MDT has been able to strike a favorable deal for its constituents. The minimum guaranteed lease revenue ($300,000) is inflation-adjusted, and for a long-term lease (55.5 years followed by renewal option for another 44 years), this results in progressively increasing lease revenue in nominal dollar terms.

Furthermore, MDT has the opportunity to share joint development profits. It gets the higher of the inflation-adjusted $300,000 or four percent of the gross revenue. In fact, as shown in Table 29 above, the lease revenues were significantly higher than the minimum guaranteed revenue between 2000 and 2010.

The joint development agreement has some weaknesses, however. First, it does not give MDT the power to penalize the Green Company for construction delays. In fact, the entire joint development took well over two decades (1984 to 2008). Second, the developer sold development rights to a third party for a much higher value, and the agreement did not require the Green Company to share the sale profits with MDT. These weaknesses were rectified by MDT when it crafted the agreement for the subsequent joint development, Dadeland North.[630]

Stakeholder Support

The developer gained from the joint development agreement in two ways: It secured development rights to property that might have been acquired by MDT anyway, and it did not have to pay property taxes on the land, which now belonged to MDT. Apart from the lease revenue payable to MDT, the developer paid property taxes only on the value of the improvements on the land. Thus, the developer supported the joint development, and there is no evidence that the other major stakeholders—the local community and other public agencies—opposed the development.

Revenue Yield, Stability, and Growth

Lease revenues for 2000–2010, though stable, were moderately impacted by the economic and real estate market downturn. The revenues peaked in 2007 at $1.1 million, then dropped to a little less than $1 million in 2008, before further declining to a little below $900,000 in 2010. However, the revenues are still above their 2004 levels.

In addition to the lease revenues, the county receives property- and sales-tax revenues from this development.

RESURGENS PLAZA, ATLANTA, GA

MARTA provides regional and local transit in the Atlanta metropolitan area. It, along with others, operates a heavy-rail regional subway system that serves about 260,000 weekday passengers and a bus system that serves about 220,000.[631]

The MARTA rail system has four lines: Red Line, Gold Line, Blue Line, and Green Line (see Figure 17). The system opened in 1979, with lines running east-west. Two years later, a north-south line opened, followed by additional lines that opened in 1992, 1996, and 2000.[632] Lenox Station, on the Gold Line, opened in 1984 and is the site of Resurgens Plaza.[633]

Overview

Completed in 1988, Resurgens Plaza is a 27-story Class A office building located in the dense business district within Atlanta's upscale Buckhead district. The building's north side is at street grade, and its south side is connected to the Lenox MARTA Station, with access from the building's third floor. While MARTA's current parking policy seeks to limit parking in its new TODs, Resurgens Plaza predates this policy. The building's first ten floors are parking decks. A lobby on the third floor connects the building to the Lenox Station, while the remaining 17 floors contain offices.[634] The building was 95 percent occupied until 2010, when it lost one of its major tenants, the law firm of Fisher & Philips. After that, default was imminent, and the building's $82 million loan was transferred to a special servicer.[635,636]

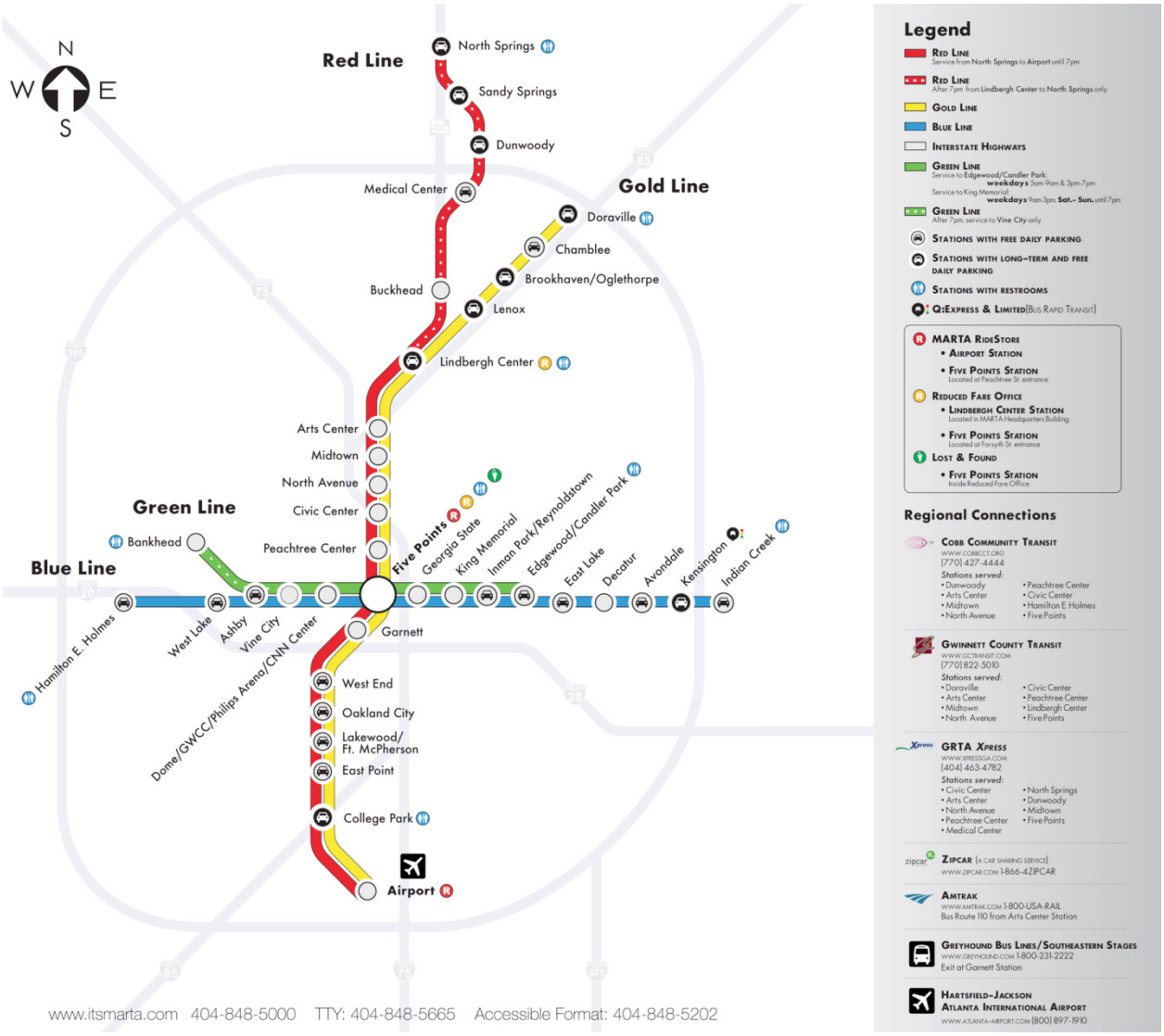

Figure 17. MARTA Rail Map

Note: The Lenox Station is located on northeast section of the Gold Line.
Source: MARTA, "Rail Map," http://www.itsmarta.com/uploadedFiles/Schedules_And_Maps/Rail_Map/MARTARailMap2010.pdf (accessed 8/20/2011).

Overview of MARTA's TOD Policy

MARTA has a policy of promoting smart growth and TOD, in part because the transit system is expected to expand dramatically in the near future, with new streetcar, commuter-rail, light-rail, and BRT lines. The opportunities for TODs will therefore greatly expand.[637]

In 2010, the agency formalized its plan to develop areas near stations in order to take advantage of these TOD opportunities. The process of implementing a joint development starts with an evaluation of the potential opportunities in the agency's inventory of station properties. When a potential development site has been chosen, MARTA staff meet with the local municipality and county officials to determine if the development is consistent with the local plans and zoning. If the finding is affirmative, MARTA commissions property

appraisal, taking into account any restrictions on the property. After the property is appraised, the agency selects a developer by issuing an RFQ. An RFP is released once qualified developers are chosen through the RFQ process. If more than one property is included in the RFQ, qualified developers can be awarded more than one development site.[638] In some cases, MARTA will also consider unsolicited development proposals. It also has special provisions for working on proposals from other government agencies whereby it may bypass a competitive bidding process and work directly with the government agency.[639]

Once the developer is selected, MARTA and the developer negotiate a joint development agreement (JDA). The JDA "governs the legal and business" relationship between the agency and the developer and must be approved by the MARTA board.[640] MARTA retains ownership of its joint development properties but may make exceptions for projects that cannot move forward without property sale.[641]

MARTA also has policy guidelines intended to create socially and environmentally responsible developments. For example, it includes a requirement for 20 percent of the development to consist of affordable housing in its RFPs for housing developments with more than 10 units. The agency places low priority on planning for automobile access to its stations, limits parking, and encourages sustainable building practices.[642]

Overview of MARTA's Office Dealing with TODs

The Office of Transit Oriented Development & Real Estate is the arm responsible for overseeing MARTA's joint development projects. The goals of the TOD development program include (1) increased revenue and ridership for MARTA; (2) acting as a catalyst for new development; (3) reducing dependence on automobiles; and (4) providing new services and amenities for customers.[643] The agency seeks to develop high-quality, compact, viable, and sustainable development within one-quarter to one-half mile of the transit stations. MARTA has developed five successful joint development projects, including Lindbergh City Center, Resurgens Plaza, and St. Joseph's Doctor Building.[644]

Air-Rights Details

The deal between the developer of Resurgens Plaza, Resurgens Plaza South Associates, and MARTA provides MARTA with $120,000 annually, with increases based on the CPI. In exchange, the developer obtained the right to build over the station.[645] By 2001, the air-rights lease totaled $177,000; it is currently estimated to be close to $200,000. The lease was signed for 50 years, with an option for 50 additional years, and includes only development rights over the station.[646,647]

Factors Supporting Air-Rights Development

The real estate market in Atlanta was booming during the 1980s, and the Atlanta metropolitan area added some 400,000 jobs between 1980 and 1988.[648] Developers had many opportunities for less-costly development in the suburbs, which did not give MARTA much leverage in negotiating development deals. Other types of less-costly development on

MARTA property, such as ground development, were not allowed by the agency's charter, which states that the agency cannot purchase land for non-transit-related purposes. This is why MARTA has pursued primarily air-rights joint developments.[649]

More-Effective Air-Rights Development

MARTA has learned some lessons as it has gained experience with joint developments. Its policy on parking and automobile access has shifted since the booming real estate market period of the 1980s. Resurgens Plaza, while located on a transit station, devotes ten floors of the building to parking. Such a generous parking provision reduces building tenants' incentive to use transit. Furthermore, it increases project cost. MARTA has taken steps to correct this problem with its new TOD development policy.

Case Analysis

Enabling Environment

MARTA's charter provides very strict joint development rules. It prohibits MARTA from using its condemnation powers to purchase property for anything other than transit-related purposes.[650] In practice, the agency cannot pursue joint developments when land has to be purchased. Because the agency is new and does not own large tracts of undeveloped land, air-rights development over stations is the only type of joint development it can pursue.[651]

Institutional Capacity

By devoting an entire office to joint development, MARTA has shown its commitment toward building significant institutional capacity to undertake such development.

Horizontal and Vertical Equity

The air-rights lease revenue ($120,000 annually) seems low for a project the size of Resurgens Plaza. Furthermore, unlike MDT (in the case of Dadeland South), MARTA does not share joint development gross revenue. On a positive note, the lease revenues are CPI-adjusted.

It is important to note that the rail system was new and had low operations and maintenance costs at the time the lease agreement was negotiated.[652] The low cost of running the transit system allowed MARTA to lease air rights at a low price.[653]

Stakeholder Support

There is no published evidence of stakeholder opposition to the construction of Resurgens Plaza.

Revenue Yield, Stability, and Growth

The MARTA staff believed that the revenue yield, although small (approximately $200,000 in 2010), would be stable and would grow with the CPI, even if the building went into foreclosure.[654] The building indeed went into foreclosure on December 6, 2011.[655]

VI. DECISION-SUPPORT FRAMEWORK

This report is intended to assist practitioners in gauging the suitability of VC mechanisms for meeting transit funding requirements. This chapter distills the findings from the case studies presented in Chapters 2 through 5, introduces a decision-support matrix, and provides a scenario to illustrate the application of the matrix.

IMPACT FEES

Enabling Environment

The impact-fees cases analyzed in this report (San Francisco TIDF, Broward County transit concurrency fee, Aventura transportation mitigation fee, and Portland TSDC) indicate the usefulness of state-level acts and local-level ordinances enabling the use of impact fees (the case-analysis findings are summarized in Table 30 at the end of this section). These acts and ordinances specify the projects and expense types eligible for impact-fees funding. Several states do not allow impact fees to fund transit, while some (including San Francisco TIDF) allow impact fees to fund only capital expenditures. Another allowable expense type is found in Aventura, FL, where the fee can fund both capital and operating expenses, and a 3-percent surcharge funds administrative expenses.

Strong and unambiguous legal provisions, accompanied by a robust nexus study, defend the fees in case of lawsuits. In summary, there is a strong need for an appropriate legal enabling environment.

Institutional Capacity

All four cases demonstrate the need for moderate institutional capacity to design and charge impact fees. Institutional capacity is also frequently required to convince the political leadership and the community (especially the developer community) about the need for a transit impact fee. As seen in Aventura, legal challenges to the fee can stretch an impact-fee-charging jurisdiction's institutional capacity even further.

Stakeholder Support and Opposition

Of the four major stakeholder groups—residents, the business community, developers, and public agencies—the developer community is most likely to oppose transit impact fees. This opposition was evident in Aventura and in San Francisco, where in 2010, developers were allowed to defer impact-fee payments for three years.

In summary, local governments can expect a moderate level of stakeholder opposition to transit impact fees, primarily from the developer community.

Revenue Yield

In Portland's TSDC—the best-case scenario—the fee is expected to fund 25 percent of all transit projects' capital cost over the next 10 years. This translates into funding 100

percent of the cost attributable to new growth. Broward County's transit concurrency fee is expected to fund 17 percent of the capital costs for FY 2011. This percentage would be even higher if only cost attributable to new growth is considered. In the worst case (Aventura), the fee had generated only $47,000 as of the writing of this report. However, it must be noted that Aventura has not seen permit activity since 2009. Therefore, the transportation costs attributable to new growth should be negligible, if not zero. In San Francisco, although the impact fee traditionally generates approximately $4 million to $5 million annually, it constitutes less than two percent of the transit-agency operating budget.

An impact-fee revenue yield is dependent upon its geographical and property-development base. For example, the San Francisco TIDF was initially charged only in the downtown area but was later expanded citywide. Currently, almost all property types pay impact fees in San Francisco, except for government-owned buildings and properties within specific redevelopment areas.

Broward County goes one step further by not exempting any properties. Similarly, apart from a few exceptions (such as affordable-housing developments), all properties pay the fee in Portland.

In summary, transit impact fees meet varying proportions of transit-funding needs, from all (in the case of Portland and Broward County) to very low (in the case of Aventura).

Revenue Stability

The revenues from impact fees are likely to grow under the following scenarios: (1) the fee rate increases; (2) the magnitude of property development/redevelopment/expansion increases; and (3) the fee base (the geographical area or the fee-paying property-development types) increases. The case study findings show that real estate market conditions dictate the probability of realization of any of these scenarios or combinations of them.

In the cases of Broward County and Portland, the fee amount peaked at a little more than $10 million by the middle of the last decade before plummeting to $2 million by the end of the decade. Similarly, even though Aventura started charging the fee in 2010, only one development has paid it. Furthermore, the real estate downturn led San Francisco to institute a TIDF deferral program in 2010, resulting in a decrease in annual revenues from an average of between $4 million and $5 million to $2 million.

The case studies also suggest a few strategies to enable revenue growth. For example, San Francisco conducts periodic fee review to ascertain whether the fee meets the transit funding requirement. Its fee is also CPI-adjusted and therefore increases with inflation.

In summary, impact-fees revenues display low to moderate stability in the cases analyzed for this report. Jurisdictions with a consistently strong real estate market and ample green-field or in-fill development opportunities are likely to see strong revenue growth and low volatility.

Potential for Horizontal Inequity

The potential for horizontally inequitable impact fees is low to moderate in all the cases analyzed. In Broward County, the fee is levied in the eight districts where transit is a viable transportation mode, while impact fees are charged citywide in San Francisco, Portland, and Aventura because the fee revenues fund transit service citywide.

In all the cases, the fee rate varies by property type. This variation reflects the properties' differing transit impacts. For example a 1,000-square-foot industrial warehouse is likely to generate fewer transit riders than a similar-sized office building.

Horizontal equity is negatively impacted in San Francisco, where residential developments are exempt from paying the fee. It is highly unlikely that residential developments do not generate any transit riders. In fact, recent efforts in the city are aimed at expanding the fee to include residential developments. Similarly, exempting public buildings from paying the fee (as is the case in Portland) also impacts horizontal equity.

Potential for Vertical Inequity

The ability-to-pay (ATP) principle operationalizes vertical equity. The potential for application of vertically inequitable impact fees is low to moderate in all four cases. Users with low ATP (such as Portland residents living in affordable housing developments and small-business owners in San Francisco) are exempt from paying the fee. However, Broward County and Aventura do not provide such exemptions.

Finally, in three cases (Broward County, Portland, and Aventura), the fee paid by residential properties is charged on a per-housing-unit basis. Impact fees based on number of bedrooms or per square foot of living space would be more vertically equitable. The ATP of a household living in a one-bedroom condominium is clearly likely to be less than that of a household living in a five-bedroom mansion.

The findings of the case analyses are summarized in Table 30.

Table 30. Impact Fees Case-Analyses Findings

Cases	Case Study Comparison Criteria: Existence of Enabling Env.	Existence of Inst. Capacity	Resident Opposition	Business Community Opposition	Developer Community Opposition	Other Public Agency Opposition	Revenue Yield	Revenue Stability	Potential for Horizontal Inequity	Potential for Vertical Inequity
San Francisco, CA	High	Moderate	Low/none	Low/none	Moderate	Low/none	Moderate	Moderate	Moderate	Low/none
Broward County, FL	High	Moderate	Low/none	Low/none	Low/none	Low/none	High	Low/none	Low/none	Moderate
Aventura, FL	High	Moderate	Low/none	Low/none	High	Low/none	Low/none	Low/none	Low/none	Moderate
Portland, OR	High	Moderate	Low/none	Low/none	Moderate	Low/none	High	Low/none	Low/none	Low/none

High
Moderate
Low/none

TAX INCREMENT FINANCING

Enabling Environment

All of the states except Arizona have TIF-enabling legislation.[656] Most states require the finding of "blight" for TIF use, although some interpret the condition more liberally than others. Vermont has the most liberal legislation, allowing TIF to be used for development, job creation, or even simply to increase tax revenue.

However, the mere presence of state-enabling legislation is often not sufficient. Some legislation, like Oregon's, specifies permissible uses for TIF funds. Therefore, the enabling legislation should be closely examined to ascertain whether such a list exists and, if so, whether transit is included.

Institutional Capacity

All the cases of TIF use examined here (CCC Transit Village, Wilson Yard, Portland Streetcar, and the Cedar Rapids GTC) demonstrate the existence of and need for significant institutional capacity to plan and create a TIF district. Institutional capacity may also be required to garner the support of the community and public agencies at the time of TIF-district formation.

Furthermore, institutional capacity is required to track TIF usage for legal-compliance purposes. For example, none of the four cases used TIF funds to purchase rolling stock, as it was unclear whether a capital expenditure for items that are mobile (and hence likely to cut across TIF district boundaries) would be permissible under the TIF-enabling regulations.

Ample institutional capacity exists in the case study cities and county. The Contra Costa County Redevelopment Agency is in charge of TIF in Contra Costa County, the PDC in Portland, the Housing and Economic Development Department in Chicago, and Economic Development Services in Cedar Rapids.

Stakeholder Support and Opposition

Of the four major stakeholder groups, residents and other public agencies are most likely to oppose TIF. The surrounding community opposed TIF use in the CCC Transit Village and the Portland Streetcar Project. None of the cases faced opposition from other public agencies or local governments.

In the case of CCC Transit Village, a civil Grand Jury recommended that the redevelopment agency not get involved with the project, citing agency indebtedness and opposition from neighborhood residents as the primary reasons. The Grand Jury noted that the redevelopment agency was interpreting its powers "liberally" by working with the transit agency (BART) to pay for construction of a garage.[657]

In Portland, residents living outside the underdeveloped North Macadam URA were initially concerned that their funds would be used to subsidize it. However, the city was able to address this concern by creating the North Macadam Overlay. The overlay helped specify the geography where the URA funds would be expended.

In summary, the local governments in the case studies were met with low to moderate stakeholder opposition to TIF.

Revenue Yield

In the best-case scenario, the Portland Streetcar Project, more than half of the TIF districts' revenues were used. TIF funded approximately one-fifth of the total $103.5 million project cost.

In the case of the CCC Transit Village, TIF funds ($60 million) constituted the entire public contribution and one-sixth of the entire $366 million project cost. TIF revenues of $3 million are earmarked for Wilson Yard Station renovation. Finally, TIF funded approximately 15 percent of the $30.5 million Cedar Rapids GTC project cost.

In summary, TIF funded a moderate proportion of the case-study transit-project costs.

Revenue Stability

TIF revenues depend upon property taxes, which in turn are impacted by real estate market conditions, the intensity of redevelopment of the TIF district, and the effectiveness of the redevelopment projects in improving the quality of the TIF district.

Data were available to analyze TIF revenue stability for three cases (CCC Transit Village, Wilson Yard, and Portland Streetcar). While the TIF revenues are very stable in the CCC Transit Village and Wilson Yard, the TIF districts involved in funding the Portland Streetcar have been impacted by the housing market downturn. This downturn is pronounced in the North Macadam and River districts, where condominiums constitute a large portion of the new development.

In summary, TIF revenues can be expected to display a moderate to high degree of stability.

Potential for Horizontal Inequity

TIF can cause horizontal inequity in two ways. First, horizontal inequity can result if the TIF-funded improvements do not accrue benefits to property owners within the TIF district. The potential for horizontal inequity for this reason is low in all four case-study projects. All of the projects benefit the property owners within the districts, even the CCC Transit Village, where the benefits from the BART parking garage spill outside the district. In this case, creation of the parking garage was a prerequisite to the development of the village, which has benefited the surrounding property owners by providing much-needed vibrancy to the area.[658] The Cedar Rapids GTC acted as a catalyst in the redevelopment of its

surrounding area, the CBD. Finally, the surrounding community benefits from the TIF-funded renovation of the Wilson Yard Station.

Second, to the extent that property taxes would have increased even without the use of TIF, the capture of the full property-tax increment by the TIF district results in less tax revenues for other taxing agencies, such as the school district, county, or city. Thus, TIF can negatively impact other essential services. Although we do not have pre-TIF-district empirical data for the case-study projects, anecdotal evidence suggests that at least two of the projects—the Cedar Rapids GTC and Portland Streetcar—were key to their districts' revival. Therefore, it is highly unlikely that property taxes within these districts would have increased without the use of TIF.

Potential for Vertical Inequity

TIF use for transit enhances vertical equity to the extent that the transit projects benefit lower-income people more than higher-income people. However, TIF can cause vertical inequity if housing prices in the TIF district rise as a result of TIF investment, pricing out residents with low ATP. The TIF district for the CCC Transit Village addresses this potential vertical inequity be apportioning 20 percent of the TIF revenues for affordable housing.

The findings of the case analyses are summarized in Table 31.

Table 31. TIF Case-Analyses Findings

Cases	Case Study Comparison Criteria: Existence of Enabling Env.	Existence of Inst. Capacity	Resident Opposition	Business Community Opposition	Developer Community Opposition	Other Public Agency Opposition	Revenue Yield	Revenue Stability	Potential for Horizontal Inequity	Potential for Vertical Inequity
Contra Costa Centre, CA	■	■	▒	□	□	□	▒	■	▒	□
GTC, Cedar Rapids, IA	■	■	□	□	□	□	▒	No Data	□	▒
Streetcar Project, Portland, OR	■	■	▒	□	□	□	▒	▒	□	▒
Wilson Station, Chicago, IL	■	■	□	□	□	□	■	■	▒	▒

■ *High*
▒ *Moderate*
□ *Low/none*

SPECIAL ASSESSMENT DISTRICTS

Enabling Legal Environment

State-level SAD-enabling legislation exists in the cases of the Seattle Streetcar, Portland Streetcar, and Los Angeles Red Line. Furthermore, the powers granted by the state-level legislation are operationalized through local ordinances. For example, in Seattle, the City Council passed a local ordinance (No. 122424) authorizing the activities required to finance, construct, and maintain the streetcar project. Similarly, the District of Columbia Home Rule Act provides the authority to levy special assessments. This authority is operationalized through the New York Avenue Metro Special Assessment Authorization Emergency Act of 2001.

In summary, a robust legal enabling environment is required for SAD formation.

Institutional Capacity

All the case studies demonstrate the need for significant institutional capacity to plan, form, and manage SADs and to garner community support. For example, Action 29 proactively advocated for the New York Avenue Metro Station. In addition to holding several community meetings, the group raised substantial funds. The city did not initially have adequate financial and analytical capacity, and as a result, when the landowners offered $25 million for station construction, the city was unable to recognize the possibility of negotiating a higher contribution.

In summary, while the institutional capacity required to use SADs may not be as great as the capacity required to use TIF, it is still substantial.

Stakeholder Support and Opposition

Of the four major stakeholder groups, residents are most likely to oppose SADs. In principle, any property owner (residential or non-residential) could oppose SAD if she or he believes that the benefits from the transit project are less than the assessments charged. However, the case analyses show that non-residential property owners are likely to appreciate the benefits of transit projects. In fact, the owners of brown-field industrial land championed construction of the New York Avenue Metro Station, and the business community welcomed Portland Streetcar.

Some property owners initially opposed the SAD for the Seattle Streetcar Project, and several SADs formed to fund Portland Streetcar exempted residential property owners from paying assessments in order to preempt opposition from them.

Several states require majority property-owner vote for SAD formation. Therefore, local governments considering SAD as a transit funding source must first examine their state and local legislation, and if such a vote is required, they can decide to not use SAD in a largely residential neighborhood, to conduct extensive community outreach to sense the resident sentiment toward a SAD, or simply to exempt residential properties from paying

assessments. However, equity considerations and project funding needs should weigh in the decision to exempt properties from paying assessments.

Revenue Yield

SADs funded substantial project cost in all four cases analyzed here. The Seattle Streetcar SAD, estimated to generate $25.7 million, would fund more than half (51.71 percent) of the project. The SADs for the New York Avenue Metro Station and Portland Streetcar would fund one-quarter and one-fifth of the project costs, respectively. Finally, although they funded only nine percent of the project cost, SADs for Los Angeles Red Line Segment 1 led all four cases in terms of actual revenue, generating $130 million.

In summary, a SAD can be expected to generate large sums of revenue for transit projects. However, as a proportion of project cost, SAD revenues might fund a small part of capital-intensive transit projects, such as heavy-rail projects.

Revenue Stability

SAD revenues are highly stable. Usually determined at the time of the SAD formation, the assessments are either collected up front (as in the cases of Portland Streetcar and Seattle Streetcar and the Los Angeles Red Line) or collected annually (as in the case of the New York Avenue Metro Station).

In all four cases, the revenues have been collected according to the schedule. Indeed, the SADs for the Los Angeles Red Line were dissolved after they lasted their predetermined period and generated the required revenue.

In cases where the assessments are to be paid over a long period (usually 15 to 30 years), property owners could successfully advocate for lower assessments, thereby making revenue growth a little volatile.

Potential for Horizontal Inequity

The assessment-fee calculation and collection methodology needs to be carefully designed to reduce horizontal inequities. Of the cases examined for this report, Seattle's assessment calculation methodology ensures the greatest horizontal equity, as it bases assessments on the estimated benefit derived by each property. A less-sophisticated methodology was adopted in Portland, where gross indicators such as parcel size, value, property use, and proximity to transit are employed as proxies for the potential benefit derived by the properties. Still simpler methodologies are used for the Los Angeles Red Line and the New York Avenue Station. In the former, the parcel and building size are used to determine the benefit, and in the latter, the 2000 assessed property value is used.

Furthermore, apart from the SAD for Seattle Streetcar and a few SADs for Portland Streetcar, the SADs exempt residential properties from paying assessments. Moreover, public buildings are commonly exempt. To the extent that residential and public properties benefit from transit infrastructure, such exemptions cause horizontal inequities.

In summary, all properties that benefit from the transit infrastructure should, ideally, pay assessments. Furthermore, the assessments should be based upon the benefit received by each property. Less-sophisticated methodologies leave room for horizontal inequities.

Potential for Vertical Inequity

The potential for vertical inequity is low to moderate in all the cases analyzed. In Seattle, users with low ATP, such as qualifying senior citizens, are exempt from paying assessments, and other qualifying low-income property owners can defer payments for four to five years. Similarly, in the cases of Portland Streetcar and the Los Angeles Red Line, property owners have the option of paying assessments over an extended period (five or 17 years in the Los Angeles Red Line case, and five-, ten-, or 20 years in the Portland Streetcar case) at a reasonable interest rate that often equals the rate of interest paid by the local government on long-term borrowing. Finally, exempting smaller properties enhances vertical equity to the extent that the owners are likely to have lower ATP than the owners of larger properties. In the case of the New York Avenue Station SAD, properties with areas of less than 10,000 square feet are exempt from paying assessments.

The findings of the case analyses are summarized in Table 32.

Table 32. SAD Case-Analyses Findings

Cases	Case Study Comparison Criteria: Existence of Enabling Env.	Existence of Inst. Capacity	Resident Opposition	Business Community Opposition	Developer Community Opposition	Other Public Agency Opposition	Revenue Yield	Revenue Stability	Potential for Horizontal Inequity	Potential for Vertical Inequity
Seattle Streetcar	■	▒	▒	□	□	□	■	■	□	□
LA Metro Red Line	■	▒	□	□	□	□	■	■	▒	▒
Portland Streecar	■	▒	▒	□	□	□	■	■	▒	▒
NY Avenue Metro Station	■	▒	□	□	□	□	■	■	▒	□

■ High
▒ Moderate
□ Low/none

JOINT DEVELOPMENT AND AIR RIGHTS

Enabling Legal Environment

While state- or local-level enabling legislation may not be mandatory to undertake joint development, a clear policy framework is helpful. At the minimum, a DDA forms the legal basis for joint development. For example, a DDA and the creation of the JPA formed the enabling framework for the CCC Transit Village joint development.

WMATA and MDT have a long history of coordinating frameworks to guide joint development. WMATA has developed joint development guidelines, whereas local ordinances and a county comprehensive plan provide the guiding framework for MDT. Recently developed TOD guidelines provide a similar policy framework for MARTA. Of the cases analyzed, only Cedar Rapids lacks such a policy framework.

Institutional Capacity

All the cases analyzed—WMATA's Bethesda Metro joint development, MDT's Dadeland South Station joint development, Contra Costa County's CCC Transit Village, MARTA's Resurgens Plaza, and the Cedar Rapids GTC—demonstrate the need for significant local-government/transit-agency institutional capacity to conceptualize, plan, create, and manage joint developments. Except for Cedar Rapids, and to some extent MARTA, the local governments in the cases had the requisite institutional capacity at the time of joint development construction.

Project finance and real estate development expertise are critical to negotiate joint development terms, especially the lease structure. The lack of such expertise in Cedar Rapids and Atlanta led to simple lease structures that favor private developers.

Stakeholder Support and Opposition

Of the four major stakeholder groups, residents are most likely to oppose joint developments. They may fear that joint developments will increase traffic congestion and air/noise pollution and will change the character of the neighborhood.

Resident opposition is well-documented in the case of CCC Transit Village and suspected in the case of Resurgens Plaza. In fact, resident opposition held-up development of CCC Transit Village for nearly two decades before a design charrette process finally drew consensus among the community. The residential neighborhood to the south of Resurgens Plaza is suspected of having opposed the joint development.[659]

Revenue Yield

The revenue yield from joint development projects can vary widely. For example, CCC Transit Village is estimated to yield approximately $700 million to $1 billion over 100 years, providing the local government a seven percent return on investment. Similarly, Bethesda generates $1.6 million annually for WMATA. However, the lease revenues from all WMATA

joint developments (which totaled $10 million in 2010) constitute less than one percent of the agency's $1.4 billion annual operating budget.

If not structured well, lease revenues may be meager. The approximately $86,000 annual revenue from the Cedar Rapids GTC does not even cover the project's maintenance expenses.

In summary, transit agencies need to carefully negotiate and structure lease revenue agreements. Furthermore, consideration should be given to other, non-fiscal policy objectives (such as revitalization of blighted neighborhoods and transit-ridership generation).

Revenue Stability

In all cases except Cedar Rapids, the public agency receives either minimum guaranteed revenue (Bethesda, Dadeland South, and CCC Transit Village) or CPI-adjusted fixed revenue (Resurgens Plaza). In two cases (Bethesda and Dadeland South), the transit agency also shares a percentage of the gross revenues. WMATA receives 7.5 percent of gross revenue when the annual revenue exceeds $31 million. MDT receives the higher of $300,000 (CPI-adjusted) or 4 percent of the gross revenue. Sharing of the gross revenues makes the lease revenue stream dependent upon economic conditions and therefore a little volatile. For example, the Dadeland South revenues peaked at $1.1 million in 2007 before falling to $900,000 in 2010.

At the other extreme, the revenues from the Cedar Rapids GTC are not CPI-adjusted, nor does the city share the gross revenues. Therefore, the lease revenues are declining in constant dollar terms.

Potential for Horizontal Inequity

The horizontal-equity concern for joint development projects primarily revolves around whether the joint development agreement benefits the involved parties in proportion to their stake in the development and their risk. Viewed from this perspective, CCC Transit Village, Bethesda, and Dadeland South are highly equitable, while Resurgens Plaza and the Grand Rapids GTC do not seem to benefit the public agency in proportion to its stake in the development.

Furthermore, the equity assessment becomes difficult when the benefits can be both fiscal (lease revenues) and non-fiscal (for example, neighborhood revitalization).

Potential for Vertical Inequity

The potential for vertical inequity is low. The private developer is usually the entity that must either pay lease revenue to the public agency or share the construction and maintenance costs. Furthermore, the public agency and the private developer voluntarily agree to participate in the joint development process and are unlikely to enter into a vertically inequitable agreement.

The findings of the case analyses are shown in Table 33.

Table 33. Joint Development and Air Right Case-Analyses Findings

Cases	Case Study Comparison Criteria: Existence of Enabling Env.	Existence of Inst. Capacity	Resident Opposition	Business Community Opposition	Developer Community Opposition	Other Public Agency Opposition	Revenue Yield	Revenue Stability	Potential for Horizontal Inequity	Potential for Vertical Inequity
Bethesda Metro Station joint development	High	High	Low/none	Low/none	Low/none	Low/none	Moderate	High	Low/none	Low/none
Contra Costa Centre	High	High	High	Low/none	Low/none	Low/none	High	High	Low/none	Low/none
Dadeland South Station joint development	High	High	Low/none	Low/none	Low/none	Low/none	Moderate	Moderate	Low/none	Low/none
Resurgens Plaza	High	Moderate	Moderate	Low/none	Low/none	Low/none	Low/none	High	Moderate	Low/none
GTC, Cedar Rapids	Low/none	Low/none	Low/none	Low/none	Low/none	Low/none	Low/none	Low/none	Moderate	Low/none

High
Moderate
Low/none

DECISION-SUPPORT MATRIX

Table 34 codifies the findings from the cases analyzed and from the overview of VC. This information can provide some insights for decision makers who must choose one of the VC mechanisms or a combination of them.

In addition to the ten comparison criteria discussed above, two criteria need to be considered when choosing a VC mechanism: (1) whether the transit infrastructure is to be provided in a new or an existing urban area and (2) the geographical size of the area that will benefit from the transit infrastructure. For example, while TIF is most commonly used to revitalize existing blighted urban areas (hence the “E” in column 3 of the TIF row in Table 34), impact-fee revenues are expected to be substantial for newly urbanizing areas (hence the “N” in column 3 of the Impact-fees row).

Table 34. Decision-Support Matrix

Land Value Capture Tool	New (N) or Existing (E) Development	Benefit Area Size	Existence of Enabling Env.	Existence of Inst. Capacity	Potential for Resident Opposition	Potential for Business Community Opposition	Potential for Developer Community Opposition	Potential for Other Public Agency Opposition	Revenue Yield	Revenue Stability	Potential for Horizontal Inequity	Potential for Vertical Inequity
Impact fees	N	M/L	■	▒	□	□	■	□	▒	□	▒	▒
TIF	E	M/L	■	■	▒	□	□	▒	■	■	□	▒
SAD	N/E	M/L	▒	▒	▒	□	□	□	■	■	▒	▒
Joint development and air rights	N/E	S/M/L	▒	■	■	□	□	□	▒	■	▒	□

Note: S = Small; M = Medium; L = Large.

■ High
▒ Moderate
□ Low/none

The following simple scenario illustrates application of the decision-support matrix.

Scenario

A city would like to develop a light-rail transit system to serve its automobile-oriented inner core. The inner core is largely non-residential and not blighted. The real estate market cannot be considered strong, although it is not very weak either. The state-level legislation allows TIF and impact-fee funding for transit. Furthermore, the city is making several efforts to retain existing office and commercial development in its inner core and is hesitant to put an additional financial burden on the non-residential property owners. The city does not have well-developed joint development guidelines but has undertaken a few such projects in the recent past.

Decision Support Matrix Application

The legal environment and the large transit-benefit area allow use of all five VC mechanisms. However, the inner-core is already developed, the real estate market is not strong, and the city does not want to financially burden property owners. As a result, impact fees are neither likely to generate significant revenue nor to be politically feasible. Therefore, the city can choose one or a combination of the remaining mechanisms—TIF, SAD, and joint development and air rights. It might want to assess property-owner support for SADs and TIF. If property owners are not opposed, then all the remaining VC mechanisms are available for use.

TIF and SADs are capable of generating revenues that can fund a moderate to large portion of the transit-system costs. Joint development and air rights can be used to generate additional revenue that can be used to fund station construction and increase station-area density. However, joint development alone cannot be a significant funding source for the entire transit system. The city might then want to assess whether other property-tax-supported agencies (such as the county government and the school district) are likely to oppose TIF. If strong opposition is likely, the city might want to go ahead with a SAD and joint development and air rights. However, if the opposition to TIF is weak or can be addressed (for example, by allowing other taxing governments a share of TIF revenue), then both TIF and SADs can be used as major funding sources (as was the case in the Portland Streetcar Project), with supplemental revenues generated from the joint development and air rights.

CONCLUSION

As the trends of decreased federal funding and fiscal belt-tightening continue at all levels of government, transit agencies and municipalities need alternative revenue sources to fund transit projects. VC mechanisms can provide revenue for projects that may otherwise lack funding. Over the past several decades, VC has increasingly caught the attention of transit providers as an alternative source of funding. However, determining which mechanisms are suitable for a particular transit project can be difficult, especially since some mechanisms have not been widely used.

Our case studies of uses of VC mechanisms were evaluated using the following criteria: enabling legal environment, stakeholder support, institutional capacity, revenue yield, revenue stability, and equity. The decision-support matrix we have developed should help policymakers, local governments, and transit agencies decide which mechanisms would suit their particular needs.

Key findings of the study include the following:

- Revenue yield from TIF and SADs is likely to be the highest among the five VC mechanisms.

- Local governments often use a combination of two VC mechanisms—for example, TIF and SAD fund the Portland Central Streetcar Project; TIF and joint development fund CCC Transit Village and the GTC in Cedar Rapids.

- The use of TIF requires significant institutional capacity, community support, and agreement among taxing agencies.

- Transit impact fees are rarely used. Their use benefits from state- and local-level enabling legislation, robust nexus studies, a strong real estate market, and developer support.

- Transit impact fees and SADs need to be carefully designed and implemented in order to minimize inequities.

- Strong real estate markets, significant institutional capacity, and clear policy guidelines are needed to undertake joint development.

APPENDIX A:
STATES' USE OF TRANSIT IMPACT FEES

In a 2008 study (Smith, 2008), 14 states were found to have state-level enabling legislation that prohibits by omission the use of impact fees for transit: Alabama, Georgia, Idaho, Illinois, Indiana, Montana, Nevada, New Hampshire, Pennsylvania, South Carolina, Texas, Utah, Virginia, and Washington. Among the states with no impact fee legislation, the study found seven with unfavorable court decisions regarding the use of impact fees for transit: Connecticut, Iowa, Louisiana, Massachusetts, Minnesota, Mississippi, and New York. The same study found 20 states in which use of impact fees for transit is allowed: Arkansas, California, Colorado, Florida, Hawaii, Kansas, Maine, Maryland, Nebraska, New Jersey, New Mexico, North Carolina, Ohio, Oregon, Rhode Island, Tennessee, Vermont, West Virginia, Wisconsin, and Wyoming.

APPENDIX B:
PROJECTS FUNDED BY TSDC DURING 1999–2007

Project List		
1.	S/N Light Rail Improvements (citywide)	$5,000,000
2.	Central City Street Car	$3,042,625
3.	Citywide ITS	$1,000,000
4.	Hawthorne Fastlink	$1,674,300
5.	SE Foster Fastlink	$1,964,095
6.	Division Fastlink	$4,378,903
7.	N Macadam Area	$8,210,850
8.	Lower Albina Overcrossing	$3,186,140
9.	SE Water Ave Ext	$3,005,690
10.	SE Tacoma	$640,730
11.	SE Foster Intersections	$7,003,605
12.	Gateway Regional Center	$3,149,982
13.	NE Marine/122nd	$1,683,116
14.	East End Columbia/Lombard Connector	$16,850,505
15.	Cully Boulevard	$1,653,038
16.	NE 47th/Columbia	$2,847,586
17.	N Lombard St Overcrossing	$10,106,816
18.	N Going St Rail Overcrossing	$2,588,100
19.	SW Palatine St	$672,228
20.	Columbia/MLK Intersection	$681,100
21.	SW Multnomah/Garden Home	$908,215
22.	I-405/Kerby St	$1,624,652
23.	SE Foster/Woodstock	$1,341,332
24-34.	SW Capitol Hwy	$5,289,050
35.	SW Vermont	$3,638,766
36.	Steel Bridge Pedestrian Way	$1,500,000
37.	N Marine Drive	$2,300,000
	GRAND TOTAL:	**$95,941,424**

Source: Portland Bureau of Transportation. http://www.portlandonline.com/transportation/index.cfm?c=46210&a=179039 (accessed December 10, 2011).

APPENDIX C:
TRANSIT-ORIENTED CONCURRENCY FEES, 2010

Type of Development	Unit	Ordinance 2003-22
Single Family	Dwelling Unit	$482
Townhouse	Dwelling Unit	$268
Garden Apartment	Dwelling Unit	$290
Mobile Home	Dwelling Unit	$268
High Rise/Midrise	Dwelling Unit	$176
Retirement Community	Dwelling Unit	$129
Hotel/Motel	Room	$340
Office: < 50,000 sq.ft.	1,000 sq.ft.	**********
Office: 50,000 + sq.ft.	1,000 sq.ft.	**********
Office	1,000 sq.ft.	$699
Industrial	1,000 sq.ft.	$379
Industrial	Acre	$6,581
Commercial : 20,000 sq.ft. or less	1,000 sq.ft.	$1,636
Commercial : > 20,000 sq.ft. and < 200,000 sq.ft.	1,000 sq.ft.	**********
Commercial : > 200,000 sq.ft.	1,000 sq.ft.	**********
Commercial : > 20,000 sq.ft.	1,000 sq.ft.	$1,195
Hospital	1,000 sq.ft.	$521
Park	Acre	$266
Church	1,000 sq.ft.	$315
Marina	Boat Berth	$90
Nursing Home	Bed	$95
Golf Course	Acre	$144
Auto Dealership	1,000 sq. ft.	$1,339
Bank	1,000 sq. ft.	$3,161

Source: Broward County. Transit Impact Fee Schedule Effective October 1, 2010. *www.broward.org/Regulation/Development/Documents/TransitFees.pdf (accessed April 14, 2011).*

APPENDIX D:
CONDITIONS FOR CREATION OF A TIF DISTRICT IN ILLINOIS

Illinois law requires that certain conditions be met before a TIF district can be created. The area must be either blighted, a conservation area, or an industrial conservation area. For improved land (land that is not vacant) to be considered a blighted area, five of the following conditions must be met:

- Dilapidation
- Obsolescence
- Deterioration
- Illegal use of individual structures
- Structures below minimum code standards
- Excessive land coverage and overcrowding of structures and community facilities
- Lack of ventilation, light, or sanitary facilities
- Inadequate utilities
- Excessive land coverage
- Deleterious land use or layout
- Environmental cleanup needed
- Declining equalized assessed value
- Lack of community planning

For the vacant land, two of the following conditions must be met:

- Obsolete platting
- Diversity of ownership
- Tax and special-assessment delinquencies
- Environmental contamination
- Declining equalized assessed value

- Deterioration of structures or site improvements on adjacent land

Source: Illinois Tax Increment Association, "What Conditions Must Exist for an Area to Be Designated for TIF?" http://www.illinois-tif.com/FAQ15.asp (accessed August 6, 2011).

ABBREVIATIONS AND ACRONYMS

AGI	Adjusted Gross Income
ATF	Bureau of Alcohol, Tobacco, Firearms and Explosives
ATP	Ability to Pay
BAD	Benefit Assessment District
BART	Bay Area Rapid Transit District
BCT	Broward County Transit
BMCLP	Bethesda Metro Center Limited Partnership
BMJD	Bethesda Metro Joint Development
BRT	Bus Rapid-Transit
BTP	Beneficiary-To-Pay
CBD	Central Business District
CCC	Contra Costa Centre
CDFA	Council of Development Finance Agencies
CIP	Capital Improvement Plan
CPI	Consumer Price Index
CRT	Cedar Rapids Transit
CTA	Chicago Transit Authority
CTIDF	Comprehensive Transportation Impact Development Fee
DDA	Disposition and Development Agreement
DOT	Department of Transportation
DSF	Decision-Support Framework
FEC	Florida East Coast
FY	Fiscal Year
GLA	Gross Leasable Area
GTC	Ground Transportation Center
ISTEA	Intermodal Surface Transportation Efficiency Act
JDA	Joint Development Agreement

JPA	Joint Powers Authority
LACMTA	Los Angeles County Metropolitan Transit Authority
LACTC	Los Angeles County Transportation Commission
LED	Light-Emitting Diode
LID	Local Improvement District
LVT	Land Value Taxation
MARTA	Metropolitan Atlanta Rapid Transit Authority
MDT	Miami-Dade Transit
MFI	Median Family Income
MOU	Memorandum of Understanding
MTA	Metropolitan Transportation Authority
PBOT	Portland Bureau of Transportation
PDC	Portland Development Commission
PMSA	Primary Metropolitan Statistical Area
PPP	Public-Private Partnership
RCW	Revised Code of Washington
RDA	Redevelopment Agency
RFP	Request for Proposal
RFQ	Request for Qualifications
RTZ	Rapid-Transit Zone
SAD	Special Assessment District
SADD	Station Area Design And Development
SAF	Special-Assessment Factor
SAFETEA-LU	Safe, Affordable, Flexible, Efficient Transportation Equity Act–A Legacy For Users
SCRTD	Southern California Rapid Transit District
SDC	System-Development Charges
SFMTA	San Francisco Municipal Transportation Agency
TCEA	Transportation Concurrency Exception Area

TEA-21	Transportation Equity Act for the 21St Century
TIDF	Transit Impact Development Fee
TIF	Tax Increment Financing
TOD	Transit-Oriented Development
TRID	Transit Revitalization Investment District
TSDC	Portland's Transportation System Development Charge
UMTA	Urban Mass Transportation Administration
URA	Urban Renewal Area
VC	Value Capture
VTA	Santa Clara Valley Transportation Authority
WMATA	Washington Metropolitan Area Transit Authority

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