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Federal Transit Administration

HOW TO EVALUATE OPPORTUNITIES FOR CROSS-BORDER LEASING AND CERTIFICATES OF PARTICIPATION IN PUBLIC TRANSPORTATION

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16. Abstracts

How to evaluate opportunities to apply cross-border leasing and Certificates of Participation (COPS) is explained using general transit industry experience and case studies of individual transactions. Factors to consider in measuring benefits and costs are discussed in terms of policy issues, Federal guidelines, accounting practices, risks, and comparisions of completed financings. Tables of transit industry COPS and cross-border lease transactions to date are presented and analyzed. Cross-border leasing procurement, risk and defeasance issues are reviewed in-depth and suggestions are offered for accurately measuring net benefits and costs. Potential benefits of COPS from increased flexibility in programming capital investments are reviewed through case studies involving both large and small transit systems. Ideas for expanding the use of Section 9-supported COPS through transfers of Federal highway grants are presented and an example demonstrating the fiscal benefits of tapping Federal highway grants for transit investment is provided.

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This report is intended to serve as a companion to FTA's *Introduction to Public Finance and Public Transit* (Office of Technical Assistance, 1993) and includes numerous cross-references. Readers are encouraged to review the introductory materials it contains.

HOW TO EVALUATE OPPORTUNITIES FOR CROSS-BORDER LEASING AND CERTIFICATES OF PARTICIPATION IN PUBLIC TRANSPORTATION

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GLOSSARY

Currency Swaps: The use of purchase agreements to eliminate the risk of exchange rate fluctuations in transactions involving multiple currencies.

Defeasance: The use of deposits or the purchase of notes to meet a future financial obligation, such as the deposit of a lump sum in an interest-bearing account to fulfill the rent and purchase option payments required under a lease. Defeasance permits off-setting deposit or purchase arrangements to mitigate interest rate or currency risks in a cross-border lease. Leases which are not accompanied by defeasance arrangements are "true-funded."

Defeasance Drag: When less interest is earned on a defeasance deposit than the interest being paid on an accompanying loan, the negative differential is called defeasance drag. Defeasance drag reduces the net benefit of a cross-border lease and is the cost of removing interest rate risk from the transaction.

Like-Kind Exchange Policy: FTA's policy to permit the proceeds of the sale or trade-in of assets prior to expiration of the federal interest to be applied toward acquisition of similar replacement property, rather than refunded to FTA.

Nonrecourse Lease Revenue Bonds: Securities similar to Certificates of Participation, where the investor receives a proportionate interest in a stream of future lease payments the borrower (lessor) expects to receive but has no claim on the property underlying the lease, or any other assets, revenues or credit of the borrower.

Tranche: When the size of a transaction, or flow of deliveries from a manufacturer requires multiple closings to complete a financing, then each group, or "lot" of assets is called a tranche.

Unwind Events: Occurrences which cause all or part of a financing to terminate prior to the anticipated expiration. Examples in a lease transaction may include bankruptcy of a participant, changes in tax laws or casualty loss of underlying assets.

HOW TO EVALUATE OPPORTUNITIES FOR CROSS-BORDER LEASING AND CERTIFICATES OF PARTICIPATION IN PUBLIC TRANSPORTATION

Background and Objectives

The Federal Transit Administration (FTA) has encouraged mass transit agencies to maximize their use of innovative finance techniques* in order to reduce the costs of capital projects, as well as to permit better management of cash flows. FTA's primary role is encouragement -- the decisions on which tools to use and when to apply them are made locally.

Previously, innovative financing applications were limited to the largest transit systems. In-house staff resources and project magnitudes are great enough at the bigger agencies to justify the added expense, management attention, and risk assessments required to undertake more complex transactions.

In recent years significant educational efforts by FTA, as well as initiatives taken by the financial community to standardize documentation and facilitate market access for smaller agencies, have resulted in broader use of innovative financing techniques. As experience is gained in the future, risks can be more clearly managed, benefits more readily obtained, and specific financing mechanisms better matched to the needs of particular transit agencies at a given point in time.

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* FTA defines *innovative financing* as: "the application of financing tools not previously or widely used in the mass transit industry, or the use of conventional tools in new ways."

This FTA-sponsored guide is intended to assist federal, state and local decision-makers in applying two innovative financing techniques -- cross-border leasing and Certificates of Participation (COPS). It is assumed that the reader has had some introduction to these financing mechanisms and is now grappling with the question, ***Is this approach right for my agency and my project today?***

Detailed definitions and explanations of how COPS and cross-border leases operate can be found in FTA's recently published, *Introduction to Public Finance and Public Transit* (1993, Office of Technical Assistance and Safety, Washington, DC).

Section I provides an overview of how COPS and cross-border leases have been used in the transit industry. Section II examines issues pertaining to costs, benefits, risks and procurement in greater depth. For those readers interested in a technical discussion, Appendix A examines a sample, "true-funded" Japanese leveraged lease transaction. The Appendix includes a review of the lease structure and participants; a sample term sheet that is typically used to define the transaction among the participants; flow charts for cash flows at closing, over the lease term and upon expiration; an analysis of risks and a graph portraying exposure for costs due to early termination under various circumstances.

Evaluating financing techniques involves balancing costs and risks against benefits. There is no free lunch in finance -- some cost or risk exposure always accompanies benefits received. However, fear of the unknown can unnecessarily magnify the down-side portion of the equation, making doing nothing the "safe" alternative. Of equal or greater concern, is the "herd" phenomenon, whereby boards and managers may see other agencies undertaking transactions and feel peer pressure to jump into deals without fully recognizing all of the ramifications.

As the number of transactions grows, sensitivity to cost and benefit issues will become more sophisticated, while increasingly standardized documentation will facilitate the evaluation process. Improved understanding of when to apply innovative financing tools will permit benefits to be maximized, and the inevitable exposure for risk to be managed with increasing precision.

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SECTION I

OVERVIEW OF PUBLIC TRANSIT EXPERIENCE

1. Why Consider COPS and Cross-Border Leasing and How Do They Work?

There are two reasons to consider embarking on the unfamiliar path of creative finance: cost savings and matching cash flows to preferred expenditures. Essentially, cross-border leases are intended to yield up-front acquisition cost reductions, while COPS are used primarily to enhance cash flow management.

A. Cross-border Leasing - A Cost Savings Tool

One of the most important features of creative finance to the transit industry is its ability to reduce net project costs without having to relax specifications, reduce project scope, incur delays, or fail to fulfill a commitment to the local community. Cross-border leasing yields immediate cash benefits which can be applied to other capital priorities.

1. Description

A cross-border lease is a mechanism which permits investors in a foreign country to own assets used in the United States, lease them to an American entity, and receive tax benefits under the laws of their home country.

For a more technical description of the Japanese leveraged lease, please refer to Appendix A.

Cross-border leasing represents a financing mechanism which can offer an "up-front" cost savings to a public agency that is acquiring rolling stock, or potentially other assets. The level of cash benefit will vary as a result of many factors such as, interest rates, duration of the lease, asset type, tax laws of the foreign government involved and initial transaction costs.

The foreign owners (lessor) share their tax benefits with the transit agency (lessee) in the form of lower lease payments. The transit agency generally will receive the benefit in the form of an "up-front" savings. After transaction expenses, the "net benefit" can range from 1.5 - 5.0 percent of the cost of the assets being leased.

There is no cost to the United States Treasury for the tax benefits received by the foreign investors -- the tax revenue loss is absorbed by the government of the owner's (lessor's) home country. FTA has endorsed cross-border leasing and has issued guidelines which address considerations such as continuing control over federally-funded assets and third party competition (FTA Circular C 7020.1, April 26, 1990). Since 1988, almost $1 billion of transit rail cars, buses and locomotives in the United States have been placed under cross-border leases involving owners in Germany, Japan, France, Sweden and Denmark.

To date, cross-border transactions involving the transit industry have financed new and used locomotives, rail cars and buses. It is possible that in the future assets such as telecommunications, signal and fare collection systems may be financed through cross-border leases.

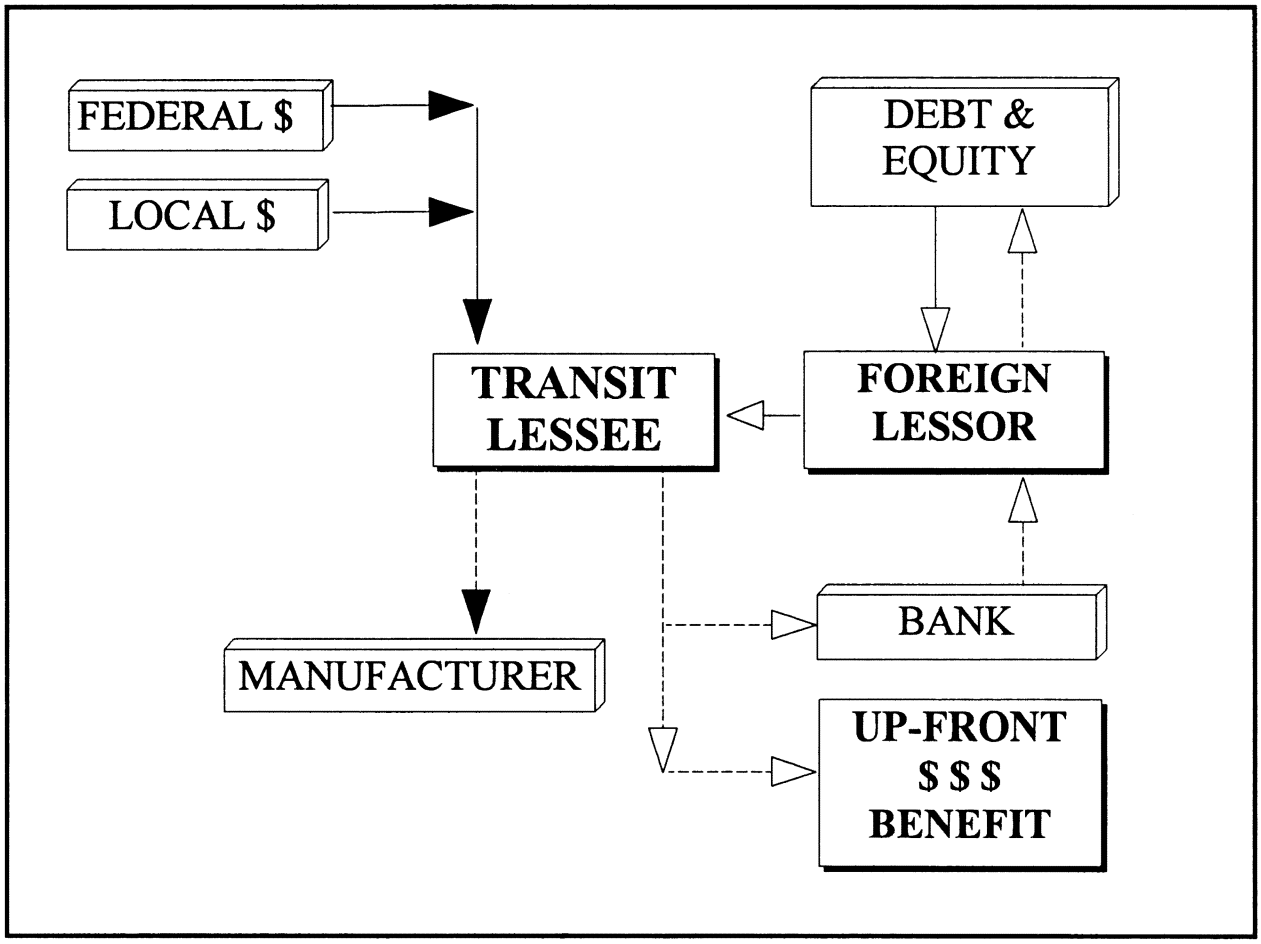
Due to the complexity and transaction costs associated with cross-border leases, deals of at least $20 million are generally required. Attempts to standardize documentation, arrange leases through manufacturers, and simplify transaction structures may permit this threshold to decline in the years ahead. The possibility for pooling arrangements that aggregate smaller equipment acquisitions will increase as transactions become more standard.

2. Mechanics

A diagram of the basic flow of funds for a defeased cross-border lease is shown in Figure 1.

FIGURE 1

Flow of Funds for Basic Defeased Cross-Border Lease



- When the new assets are delivered, the transit agency uses its local funds and federal grants to pay the manufacturer (dark arrows in Figure 1).

- The transit agency then sells the assets to the foreign owner (lessor) in exchange for an amount equal to the value of the equipment (white arrows in Figure 1). At the end of the lease a purchase option permits the lessee (transit agency) to acquire title to the asset for a nominal payment.

- The value of the underlying assets is determined by appraisal or manufacturer's invoice, and may, in some cases, include "buyer-furnished" equipment (such as radios, fare boxes and Automatic Vehicle Locator equipment) and additional agency costs incurred for conducting the procurement, monitoring manufacture and completing the acceptance process.

- The foreign investors capitalize the lease through investor equity and borrowing. About 20 - 25 percent is derived from equity and the balance is borrowed. The return on the equity invested is primarily from the tax benefits arising from depreciation of the assets and interest paid on the lessor's debt. Other sources of return include the cash flow derived from ongoing lease payments and the eventual purchase option payment, as well as any up-front fees received. Lease payments are used to retire the debt portion of the lessor's capital contribution.

- The up-front benefit is retained by the transit system and the balance typically is deposited in interest-bearing bank accounts to legally or economically defease future lease obligations. "Swap" arrangements are made at the time of closing to protect the lessee from foreign currency fluctuations. In defeased transactions, the "spread" between the cost of funds borrowed

by the lessor and interest earned by the deposit made by the lessee is "locked-in" through investment agreements. The investment agreements protect the lessee from the risk of interest rate fluctuations over the term of the lease. However, this protection comes at the cost of a reduction in benefit levels. The higher interest cost paid for the borrowed funds compared to the interest earnings on the defeasance deposit produces negative arbitrage (also referred to as "defeasance drag") which reduces up-front benefit levels. Defeasance arrangements are explored in more detail in Chapter 5. Lease structures where interest rate risks are not defeased are called "true-funded." For sample flow of funds charts for a "true-funded" Japanese leveraged lease, please refer to Appendix A.

- Under a defeased structure, lease payments are then disbursed from the bank accounts holding the balance of the funds initially paid by the lessor.

- "Defeasance" of the lease payments through the deposit arrangements permits the transit system to minimize its currency and interest rate risk exposure, as well as provide evidence to FTA of continuing control over the federally-funded assets even though title is held by a foreign lessor.

- Japanese transactions are most sensitive to title issues and require that the lessee (transit agency) ***not*** have assumed formal title to the property prior to execution of the transaction. This consideration may result in transit lessees having to establish temporary title "warehousing" arrangements through either the manufacturer, a trustee, or a related public agency. The "warehousing" simply refers to having title to equipment received from the manufacturer and entering revenue service held temporarily by a third party until the lease transaction is ready to close. This mechanism protects the tax benefits of a

Japanese lessor, while allowing lessees to place needed equipment in service prior to the closing.

Flow charts depicting the flow of funds at various stages of a "true-funded" Japanese transaction are included in Appendix A, along with a risk analysis. Sample benefit calculations, an analysis of sensitivity to interest rates, and a review of transaction costs are provided in Chapters 4 and 5. A discussion of the mechanics and risks of cross-border leases also can be found on pages 159 to 164 of FTA's, *Introduction to Public Finance and Public Transit*.

It is important to note that cross-border lease requirements will vary from country to country. These differences between jurisdictions affect the nature of the assets likely to be financed, as well as the terms and conditions involved. For example, the following chart shows several current differences between Japanese and German leases.

CROSS-BORDER LEASE COMPARISON

FACTOR	GERMANY	JAPAN
"Country of Origin" Requirement	Typical	None
Defeasance	Typical	Economic Only
Equipment Already in Service	Possible	Not Possible
Likely Type of Asset	Rail Car	Bus

The participants, structure, economic assumptions and risk sharing arrangements for cross-border leases are described in a "term sheet." A sample term sheet for a Japanese leveraged lease is included in Appendix A.

In addition to outlining the features of the lease, the term sheet also defines the terms of the loan used to capitalize the financing.

As noted earlier, there is no free lunch in finance and there are risks, under certain circumstances, that can cause lessees to lose their up-front benefits and incur additional costs, even under defeased transaction structures. Developments that would cause a lease to terminate prematurely are called "unwind events." Many unwind events are extremely rare, such as a finding that the transaction was illegal, a retroactive change in law, or bankruptcy of the defeasance bank. In other cases, such as casualty loss of the equipment, the risks can be mitigated through insurance coverage. Appendix A includes a discussion of risk allocation for Japanese leveraged leases, a table of "unwind events" and the costs they would trigger, as well as a graph portraying the rapid decline in risk exposure for premature termination as the transaction moves closer to expiration. It is interesting to note that there does not appear to be an instance of early termination of a Japanese leveraged lease for factors other than those related to the lessee (lessee bankruptcy or casualty loss of the equipment, for example).

B. Certificates of Participation - Matching Outlays and Revenues

Many financing tools are effective at matching income and outlays, rather than generating "new" revenues. In these cases, it is the "cash flow" benefit which requires careful evaluation. By filling "gaps" and allowing more, or larger projects to be undertaken sooner, financing decisions can influence project costs and the timing of benefit streams from capital investments.

Certificates of Participation (COPS) are one type of mechanism for better matching the flow of revenues and outlays. For example, if an agency must replace 50 buses in its fleet, but only has adequate revenue streams to purchase 10 in a year, issuing COPS backed by future flows of

federal and local funds could permit the full replacement acquisition to be undertaken at one time.

The benefits of completing the project on an accelerated basis would be realized in the form of:

- Potentially lower unit costs from a larger order size
- Reduced risk of higher future prices due to inflation or new mandates
- Lower operating costs from accelerated retirement of older vehicles and maintaining a more standardized fleet
- Higher quality of service to the public and potentially increased ridership
- Better conformance with mandates for air quality or service to persons with disabilities
- Net cost savings from interest earned on cash balances

COPS have been utilized by municipalities to pay for prisons, office buildings, vehicles, and even parks. Transit agencies in Los Angeles, New York and Denver have issued locally-funded Equipment Trust Certificates, COPS, and Beneficial Interest Certificates to finance buses.

One of the most recent developments in transit finance is the ability to pledge future Section 9 Federal Transit Administration grants as security for the leases underlying COPS. It is now possible for the interest expense associated with lease rents to be reimbursed by federal grants at the 80 percent matching level. Case study evaluations on how this has been

accomplished are presented in Chapter 6. Unlike cross-border leases, the framework for implementing federally-funded COPS transactions flows from FTA's Final Rule on Capital Leases (49 CFR 639, October 15, 1991).

Thus far, all COPS transactions involving Section 9 FTA grants have funded bus acquisitions and have been issued with maturities of 12 years. Given the historical experience in applying the COPS structure to finance a wide range of public investments, it is possible that future Section 9-supported transactions will encompass a broader array of capital projects and exhibit variation in maturities. For example, long term, locally-funded COPS have been used to finance an entire segment of a light rail system.

In 1985, the City of Sacramento issued $29.4 million of COPS to fund the additional costs required to complete the Sacramento Regional Transit District's light rail system. The original project budget was $131.2 million, of which 75 percent was federally-funded. When the cost to complete the system rose to $157 million, the City's share of the total project budget increased from 5.1 percent to 19 percent. The COPS were issued to cover the over-runs.

The COPS were supported by general City revenues and payments were reimbursed by the Redevelopment Agency from tax increment district proceeds. The maturity of Sacramento's COPS was 27.5 years. The proceeds were used to pay for two, one-megawatt electrical substations, construction of approximately 3.5 miles of rail line (including four stations, signals, tracks and catenary), and 15 light rail vehicles. The elements funded by the COPS represented a complete, operable segment of the light rail system.

All Section 9-supported COPS transactions thus far have involved transit agencies with dedicated tax sources. FTA's leasing guidelines require a certification of financial capacity to fund the lease obligations if: the Section 9 program is not re-authorized, Congress reduces or eliminates funding for Section 9, federal matching ratios are lowered, or the leasing provisions of federal law are modified. Investors and rating agencies also consider the full range of revenues made available by the lessee to meet its future obligations in assessing whether the risks of federal funding shortfalls, non-appropriation, or failure to re-authorize are adequately addressed. As a result, the credit value attached to the future Section 9 grants, separate and apart from other sources of local funding, is difficult to measure objectively. However, the ability to include anticipated streams of Section 9 funds at all in calculating "coverage," as well as FTA's ability to reimburse interest costs at an 80 percent federal matching level, can increase a transit agency's leverage capacity and financing flexibility.

1. Description

Certificates of participation (COPS) are related directly to leases. COPS are securities through which investors make a cash payment which entitles them to receive a share of the rent payments made by a transit agency to a lessor.

The lessor uses the up-front funds provided by the certificate holders to pay for the assets, and assigns the future rents it is to receive from the transit agency (lessee) to the certificate holders. ***The certificate holder has an interest in the stream of future lease payments only, not the underlying assets.*** By making the lessor a related agency, the lessee is able to maintain greater control over the assets than in a more conventional lease structure.

The motivation of the investor is to receive tax exempt income at slightly higher rates than full faith and credit obligations of the transit agency (lessee).

2. Mechanics

The flow of funds in a COPS transaction is portrayed in Figure 2.

- The public transit agency (lessee) enters into a lease with a trustee or non-profit entity (lessor) for the assets it wishes to acquire.

- The trustee or non-profit entity (lessor) then transfers (assigns) its rights to receive the lease payments made by the transit agency to the investors (certificate holders).

- The certificate holders purchase shares of the future rent payments (participations) that will be made by the transit agency to the trustee or non-profit entity.

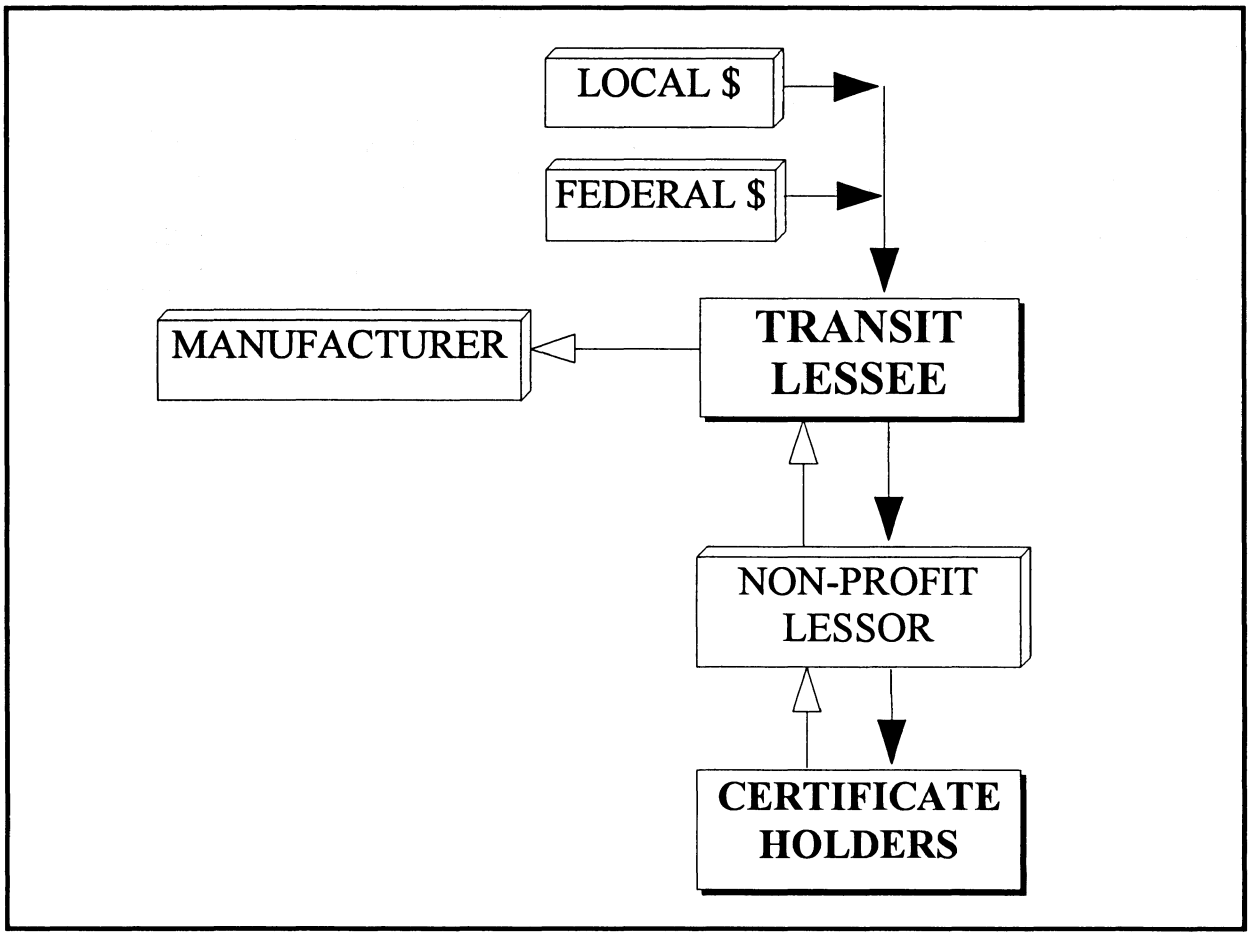
- The cash paid by the certificate holders is used to pay the vendor for the assets that will be leased to the transit agency (white arrows in Figure 2). Title is held by the lessor.

- The future lease payments are made from specified sources of local revenue and federal grants received over the term of the lease (dark arrows in Figure 2).

A detailed discussion of leasing and COPS can be found in the following sections of FTA's, *Introduction to Public Finance and Public Transit*: a general review of lease financing and its transit applications is presented on pages 96 to 116; FTA-supported financing mechanisms, including COPS, are explored on pages 117 to 150, along with numerical examples for both Section 9 and Section 3-based transactions; and a sample letter approving an FTA-supported COPS transaction is shown as an appendix.

FIGURE 2

Flow of Funds in Basic COPS Transaction



C. Summary

Reducing project costs and better matching revenues and outlays are two reasons for considering cross-border leasing and COPS for financing transit investments. The advantage of reduced project costs is not difficult to recognize. Improved cash flow management tends to smooth acquisition cycles, while permitting flexibility in "stretching-out" payments when fiscal pressures at the federal or local level make pay-as-you-go appropriations more difficult to secure.

The recent history of experiences with cross-border leases and FTA-approved COPS financings is reviewed in the following chapters of this section. More detailed analysis of the risks and benefits for prospective transit lessees to consider in applying these methods is offered in Section II.

2. An Overview of Recent Industry Experience with COPS and Cross-Border Leasing

The transit industry has accumulated a considerable body of experience in using Certificates of Participation and cross-border leasing that can facilitate local decisions on how and when to apply these tools. A wide range of research has been undertaken to document COPS and cross-border leasing applications that includes a review of:

- Official Statements for most of the FTA-related Certificates of Participation (COPS) transactions
- FTA's policy circular on cross-border leasing (C 7020.1, April 26, 1990)
- FTA's Final Rule on Capital Leases (49 CFR 639, October 15, 1991)
- FTA's correspondence with COPS and cross-border issuers
- Documentation prepared by several COPS issuers and cross-border lessees regarding the costs and benefits of the transactions, and
- Personal and telephone interviews with FTA officials responsible for reviewing requests for authority to undertake innovative financing transactions, transit agency general managers and financial officers, investment bankers, legal counsel, and financial advisors.

A summary of cross-border and FTA Section 9-related COPS transactions undertaken in the transit industry is shown in the following tables.

TABLE 1
SECTION 9-RELATED COPS TRANSACTIONS
(millions of dollars)

Agency	Date of Approval	Equipment*	Equipment Cost
MTDB San Diego, CA	10/90	130 buses	$33.4
SRTD Sacramento, CA	4/92	75 buses	$27.4
LACTC/SCRTD Los Angeles, CA	6/92	333 buses	$93.5
Pierce County Tacoma, WA	12/92	27 buses	$ 6.2
LACTC/Torrance Los Angeles, CA	12/92	14 buses	$ 2.9
Riverside Transit Riverside, CA	6/93	10 buses	$ 3.4
SunLine Transit Thousand Palms, CA	6/93	17 buses	$ 5.4
	Total	**606 buses**	**$172.2**

Notes:
* In a number of cases the equipment includes spare parts, radios and fare boxes.

Tri-Met of Portland, OR also issued COPS (10/90) for the local share of 86 buses, or $4.55 million, acquired under an FTA Section 3 grant.

Sources: FTA Office of Chief Counsel Approval Letters to Grantees and information furnished by issuers to J. Parker & Associates.

October, 1993

TABLE 2
SUMMARY OF TRANSIT CROSS-BORDER LEASE TRANSACTIONS
(millions of US dollars)

Agency	Date	Asset	Origin Of Assets	Source of Financing	Equipment Cost	Benefit
MBTA Boston	6/88	Passenger Cars	Germany	Germany	$28.0	$ 1.0
MBTA Boston	12/88	Passenger Cars	Germany	Germany	$28.5	$ 1.0
MTA New York	5/89	Subway Cars	Japan	Japan	$216.0	$11.9
BART San Francisco	1/90	Subway Cars	France	Sweden	$30.0	$ 1.8
LACTC Los Angeles	3/90	Light Rail Cars	Japan	Japan	$28.5	$ 1.0
NJT New Jersey	7/90	Locomotives	Sweden	Denmark	$66.0	$ 2.7
MTDB San Diego	12/90	Light Rail Cars	Germany	Germany	$53.0	$ 1.7
BART San Francisco	1/91	Subway Cars	France	France	$180.0	$ 6.3
METRO Seattle	5/91	Dual Mode Buses	Italy	Japan	$38.0	$ 1.1
SRTD Sacramento	6/91	Light Rail Cars	Germany	Germany	$17.0	$ 0.4
MDOT Maryland	11/91	Commuter Rail Coaches	Japan	Denmark	$45.0	$ 1.4
NJT New Jersey	6/92	Commuter Rail Cars	US Owned	Denmark	$20.0	$ 0.7
SCRTD Los Angeles	9/92	Methanol Buses	US	Japan	$70.0	$ 1.0
MTA New York	92/93	Subway Cars	France	Denmark	$100.0	$ 4.3
				TOTAL	**$920.0**	**$36.3**

Benefits below line are on a "net" basis.
Sources: FTA Office of Chief Counsel & interview data gathered by J. Parker & Associates

October, 1993

The COPS data in TABLE 1 is derived from FTA approval letters and follow-up calls to individual agencies. The cross-border leasing information in TABLE 2 is based upon research performed for an earlier study, *Cross Border Leasing in the Transit Industry* (PPTN, December, 1991) and is updated with data maintained by the FTA Office of the Chief Counsel, as well as follow-up calls to individual agencies.

The cross-border lease chart restates benefit estimates for the transactions beginning with the NJT locomotive acquisition in July, 1990 on a "net" basis after transaction costs, as determined by FTA. Chapter 5 reviews potential methodological issues which could affect the benefit estimates in TABLE 2.

A. Summary of Recent Section 9 COPS Transactions

Seven Section 9-related COPS transactions involving over $172 million of equipment are identified in TABLE 1. All of the transactions involved buses and one of the deals was larger than all the rest combined. The Los Angeles County Transportation Commission (the LACTC is succeeded by the Los Angeles County Metropolitan Transportation Authority) accounts for about 60 percent of the volume of activity nationwide thus far. The California Transit Finance Corporation (CTFC), an agency formed by California public transit operators to undertake "pooled" transactions, appears to have played a role in all but the San Diego, Pierce County and Tri-Met transactions. The CTFC is reviewed in detail in Chapter 6.

The transit agencies in New York City, Los Angeles, Sacramento, and Denver have participated in similar lease and Certificate of Participation transactions involving assets that were locally-funded.

The most recent non-federally supported lease financing arrangement is the New York Metropolitan Transportation Authority's (MTA) Beneficial Interest Certificates (BICs). This complex, $88.3-million financing involves the issuance of certificates for proportionate participation in rent payments made by one of the MTA's subsidiaries, the Triborough Bridge and Tunnel Authority, on behalf of the New York City Transit Authority (the lessee) to a trustee/owner (lessor) for 375 new buses. In order to maximize its flexibility in arranging financing for assets that may be subject to future tax-oriented deal structures, the MTA typically funds its rolling stock acquisitions exclusively from non-federal sources.

Adding another dimension to the possibilities of Section 9-related COPS, Los Angeles sold Certificates of Participation totalling $118.4 million in 1992 for buses ***that were also the subject of cross-border leases.***

B. Summary of Cross-Border Leasing Experience

TABLE 2 lists eight cross-border lease transactions totalling $489 million where FTA calculated "net" benefits, five transactions involving $331 million where "gross" benefits are likely to have been reported, and one deal which totalled $100 million where "net" benefits were reported, but were not calculated by FTA. Two of the deals shown -- Seattle Metro and Los Angeles, covered buses and all the others involved rail equipment.

The FTA-calculated "net" benefit transactions in TABLE 2 yielded about 3.1 percent in benefits, while the "gross" benefit deals produced gains in the 5 percent range. The New York MTA accounted for about one-third of the total industry volume and a similar proportion of the benefits realized

in the fourteen deals shown in TABLE 2. San Francisco's BART accounted for over 22 percent of the transit industry's total cross-border lease volume and benefits.

The benefit levels reported in TABLE 2 must be considered in light of differences in the risk and term of the leases. For example, in all cases shown, the transit lessees eliminated currency risks from their transactions through "swap" arrangements that locked-in exchange rates. In most cases, the risk that interest rates on deposit balances might decline due to market factors was defeased through investment agreements that locked-in the spread between interest expense and interest earnings. However, the Seattle METRO Japanese leveraged bus lease was "true-funded" (that is, not defeased) and involved additional interest rate risk assumed by the lessee. The benefit calculations for the BART and Seattle METRO transactions are reviewed in more detail in Chapter 5.

Benefit levels shown in TABLE 2 also are affected by the term of the lease, which depends upon the life of the underlying assets for depreciation purposes. BART, Maryland DOT, New York MTA, and NJTransit closed deals involving ***used*** rail equipment. The NJT commuter rail car lease involved vehicles that underwent substantial overhaul. The duration of the Seattle METRO and Los Angeles bus transactions was six years, compared to fourteen or more on the rail equipment. Due to recent changes in Japanese tax guidelines, the depreciable life of buses has increased from five to six years, permitting the term of Japanese leveraged leases to be extended to eight years. Assets can be leased for periods 20 percent beyond their depreciation life. Generally, the longer the term of the lease, the higher the benefit to the lessee.

Although Los Angeles' Japanese cross-border bus lease shown in TABLE 2 has a life of six years, the COPS providing the domestic financing run for 12 years. Since the domestic financing arrangements under a cross-border lease can be structured independently, it is possible to create debt arrangements which permit the same assets to be the subject of separate

lease financings with different terms and maturities. However, the title issues involved are complex and require early involvement of cross-border leasing experts.

It is also possible to combine U.S. tax-exempt financing and cross-border leases in a single transaction.

In the fall of 1991, Seattle METRO's commitment to make lease payments from its sales tax revenues supported the issuance of $31.05 million of tax-exempt, Nonrecourse Lease Revenue Bonds maturing in 1997, by MLD Bus Leasing, Ltd. MLD is a Cayman Islands single purpose corporation established to act as lessor of Seattle's 80 dual-mode, articulated buses. The Bonds are considered nonrecourse in that MLD's obligation make debt service payments is limited to the funds it receives pursuant to its lease agreement with METRO.

As is typical of Japanese leveraged leases, METRO's lease payments are made partly in dollars and partly in yen. Exchange rate risks on the yen rents are defeased through currency swaps. The dollar portion of METRO's payments mirror the debt service requirements under the Nonrecourse Lease Revenue Bonds. The yen portion of METRO's lease obligation are paid directly to MLD and are not involved in the Bonds.

The owners of MLD are Japanese investors who are receiving tax benefits from their ownership of METRO's buses and thereby reducing METRO's capital costs.

Not all attempts to arrange cross-border lease financings are successful and there may be a significant amount of time expended in exploring possibilities. For example, Washington, D.C.'s WMATA spent the latter portion of 1992 and early 1993 attempting to arrange a German cross-border lease for new rail cars. After considerable study and negotiation, it was decided that the terms offered shifted more risk to the transit agency than it was prepared to accept, that some of the lessors' requirements for security exceeded WMATA's legal authority, and that the benefit levels were not adequate to compensate for these down-side considerations.

In another instance, as of the fall of 1993 the San Diego Trolley still is exploring a German cross-border lease to cover new light rail vehicles it is acquiring. These discussions have been ongoing for quite some time and also involve the potential for parallel transactions covering similar light rail equipment being supplied by the same manufacturer to new systems in St. Louis and Denver.

C. Observations from Recent Transactional Experience

From the perspective of local-elected officials, transit agency board members, general managers and state department of transportation officials, the first and most significant consideration arising from the transactions described above is the fact that there is a substantial body of experience in the mass transit field with Certificates of Participation and cross-border leasing, individually and in tandem.

This is not to suggest that what has proven to be desirable for some agencies is applicable to all, and in every situation. However, it is important to recognize that:

- There is a growing body of knowledge about transit applications of COPS and cross-border leases,

- Persons within the transit industry can be contacted regarding their experiences,

- FTA policies are in-place and have been utilized to encourage innovation, and

- Many of the most immediate issues and concerns which may come to mind in considering COPS or cross-border lease transactions already have been successfully addressed in a variety of cases.

3. General Issues in Evaluating COPS and Cross-Border Leases

There always are caveats which must be recognized in evaluating whether or not an innovative financing transaction is "right" for a particular transit agency, as well as in establishing measures for success. The selection of financial advisors, placement agents and underwriters to execute transactions also must be approached carefully in order to assure that objective decisions are reached.

One of the ideas recommended in the next section to facilitate decisions on whether or not to go forward with either COPS or cross-border lease transactions is for FTA to sponsor a clearinghouse for data on individual transactions. By monitoring the transit industry's collective experience, the "reasonableness" of anticipated costs and benefits for proposed transactions can be determined more readily. In cases where there are deviations from past experience, reasonable explanations may exist that still justify going forward. This type of evaluation framework can improve the "market" for innovation by facilitating the flow of accurate information among participants.

In examining the historical record of COPS and cross-border lease transactions closed to date, a number of general factors have been identified which should be taken into account when evaluating the costs and benefits reported.

A. The "Learning Curve"

The "learning curve" affects any new financing mechanism and operates at several different levels:

1. Novelty of the Credit Considerations and the Revenue Sources

Prior to the San Diego MTDB's COPS issuance at the end of 1990, the financial markets had not considered the credit value of future Section 9

apportionments. Similarly, investors in foreign countries originally lacked experience with transit equipment and an institutional structure involving public agencies that lose ever-increasing sums of money each year. As a result of this lack of experience, the initial transactions may be the most difficult, costly and risky.

As the level of experience increases by successfully completing more transactions and there is favorable performance under the initial deals, the risks at stake are better understood and the credit value of particular revenue sources can increase. Official statements, lease documents, and security structures can become increasingly standardized as market participants become more sophisticated. Once precedents are established efforts to innovate transaction structures, devise new applications, improve flexibility, increase benefit levels and minimize credit constraints can begin.

Future issuers benefit from the intensive work effort required by the ground-breaking transactions. Initial deals are thus more likely to yield restrictive security provisions, lower benefit levels and higher costs than subsequent transactions.

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2. Novelty of the Legal and Institutional Issues

In addition, there is the "learning curve" within FTA to the issues and nuances of new forms of financial transactions. Targeting key issues, addressing legal requirements, surfacing potential conflicts with guidelines, and developing an approval process which can be used on a regular basis involve considerable amounts of FTA staff time, as well as costly legal and financial advisory services that are billed to grantees. Preparation of

documentation that satisfies requirements as they are "discovered" is an expensive and arduous process.

Ground-breaking transactions must clear the legal and programmatic hurdles within FTA in order to succeed. The result is a high initial investment by FTA *and the issuing agencies* in staff, legal and financial advisory services. The primary beneficiaries are subsequent transactions that rely upon the precedents established and the ability to standardize documentation.

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3. Novelty to the Issuer

In many cases, an issuer may decide to experiment with a new transaction structure because it is viewed as being helpful over the long term or could facilitate a large, future project the agency is planning to implement. The actual test case brought to market initially may be a small, basic transaction in order to minimize complexities and risks.

The issuer will have to bring its staff and board members "up to speed" on the risk, policy, program and fiscal considerations at stake. Financial advisors and legal staff will have to draft documentation for the first time and proceed through a detailed review process. The credit markets may have to digest the proposed transaction and become familiar with the agency before a larger deal can be undertaken. In such an environment, it would not be unlikely for the direct and indirect costs and benefits of an agency's initial transaction to be somewhat out of balance with its subsequent experiences.

A trend toward increasing benefits and declining costs for future transactions may be observed, as staff and board members become familiar with the issues and the documentation becomes more standardized. Future deals may grow to become larger and more complex. It is through experimentation that agencies can become familiar with the financing tools available and develop new applications best suited to their needs at a given point in time.

A positive example of the spin-off benefits of the "learning curve" are the proposed FHWA/Section 9 COPS under consideration for San Juan, Puerto Rico's Tren Urbano rail project. The concept being considered involves using the transfer feature of ISTEA to shift funds from the federal highway program to Section 9, and to issue COPS under the Section 9 leasing provisions. It is largely because of the precedents established by the COPS transactions in San Diego, Los Angeles, and Sacramento that the novel, intermodal "twist" can be added without causing the level of complexity to become excessive. Familiarity of the markets with the underlying credit considerations and COPS deal structure may increase the likelihood of success, even though:

- The issue size may be greater than earlier transactions,
- Different types of assets are involved (rail cars and fixed facilities, rather than buses), and
- The maturity may be longer (possibly an average of 20 years compared to 12 years in the precedent transactions).

In addition, the precedents may make it easier to market the COPS to potential turnkey vendors for the Commonwealth's rail system. Financial

advisors to the competing consortia can examine the earlier transactions to appreciate the credit factors involved. Placing the COPS directly through a system vendor might lower transaction costs, while potentially reducing the need for credit enhancement. Therefore, as a result of prior transit industry experience, multiple goals might be achieved through the COPS strategy Puerto Rico is considering: inter-modal transfers, private sector participation, turnkey procurement, and reduced project costs.

Similarly, the recent applications of cross-border leasing to new and used equipment have set the stage for future innovations that may involve:

- Pooled cross-border leases involving smaller bus acquisitions that are executed using common documentation. Pools might be arranged through entities such as the California Transit Finance Corporation, equipment manufacturers, or other entities. MTDB in San Diego, Bi-State in St. Louis and RTD in Denver currently are attempting to close a pooled, German cross-border lease for light rail vehicles.

- Broadening the range of equipment subject to cross-border leases beyond rail cars and buses to possibly include signal, telecommunications and fare collection systems.

- Combining cross-border leases, sale-leaseback arrangements and FTA's "Like-Kind Exchange" Policy* to facilitate rail car

* The FTA "Like-Kind Exchange" Policy (*Federal Register*, August 28, 1992, Vol. 57, No. 168, page 39328; 49 CFR Ch. VI) permits grantees making acquisitions with federal funds to sell or trade-in assets prior to the end of their useful life and to use the proceeds to offset the cost of replacement property. Previously, a share of the sale proceeds proportionate to the remaining federal interest in the property had to be returned to FTA. For example, in 1993 the Port Authority of Allegheny County, PA purchased 150 buses that includes the trade-in of 150 similar buses acquired in 1983. The trade-ins, two years short of the 12-year period of federal interest, will be rehabilitated and exported overseas.

overhaul projects that yield a substantial change in the value of the refurbished equipment.

4. Summary of "Learning Curve" Considerations

All evaluations of COPS and cross-border transactions should consider "learning curve" issues:

- Was the transaction a "first of a kind" for FTA or the issuer?
- Did the experience yield precedents, or more standardized documentation that facilitated subsequent transactions for that issuer, or other issuers?
- Is there a pattern of faster approvals, lower transaction costs, more favorable interest rates, or less need for credit enhancements as more transactions occur?
- Has the issuer, or subsequent issuers, built upon initial experiences by increasing the size or complexity of future transactions?
- Did the issuer have other aims, such as setting the stage for a larger future transaction, or establishing a presence in the credit markets?

B. The "Halo Effect"

Aside from "learning curve" considerations, there is a "halo effect" which FTA has used in the past to encourage experimentation with new approaches and ideas. Transit agencies willing to submit themselves to the rigors of the "learning curve" may be rewarded by discretionary grants or other benefits which might be unrelated to the specific transaction, or occur at a future time. For example, FTA's "Over-Match Initiative" sought to reward agencies willing to exceed federal matching requirements with faster approvals and an edge in securing discretionary funding.

It is possible that all costs and benefits associated with individual transactions may not be immediately apparent from reported statistics. Particularly in cases where a transaction is being tried for the first time, it is advisable to inquire if there were there exogenous factors, such as cooperation with FTA, which permitted the issuers to justify the extra costs of breaking new ground.

The chapters in the next section explore issues and opportunities associated with cross-border leases and COPS in greater detail. Individual transactions are examined in case studies and nuances affecting costs, benefits and procurement are raised for federal, state and local policy-makers to consider.

SECTION II

ANALYSIS OF PUBLIC TRANSIT EXPERIENCE

4. Practical and Political Factors Affecting Cross-Border Leases

Initial reactions to the idea of undertaking a cross-border lease transaction often arise from the novelty of the concept to persons whose day-to-day work is outside the finance world. In many cases, the complexity of the issues and concerns over potential FTA responses can be satisfied by the history of examples that are outlined in Chapter 3, the step-by-step review of procedures contained in FTA's *Introduction to Public Finance and Public Transit* (pages 159 - 164), and the detailed example in Appendix A. It is likely that managers and board members will find colleagues at the transit systems listed earlier in TABLE 2 that already have undertaken transactions who can provide advice on how to proceed.

Since cross-border leases are relatively novel, the decision to proceed tends to involve consideration of both political and practical questions.

A. Potential Political Considerations

A decision to pursue a cross-border lease can raise political issues. During the course of research for this guidebook, some jurisdictions were reluctant to bring proposals for cross-border leases up for public scrutiny because of factors unrelated to the dollars and cents fundamentals of the transaction. For example:

- There is general resistance to transactions which necessitate establishing entities in the Cayman Islands to act as lessors. The image of the Cayman Islands as a tax haven, and its potential linkage to public agencies and elected officials appears to be a disincentive to consider a cross-border lease, regardless of the economics. ***However, it is not necessary for cross-border transaction structures to involve Cayman Island entities***

and other, more conventional arrangements can yield comparable economic benefits.

The use of Cayman Island, or other tax haven-based entities, has provided two primary advantages in cross-border transactions: 1) in a Japanese leveraged lease (JLL), withholding tax liabilities were avoided, and 2) a special purpose entity was able to issue securities without being subject to Japanese security laws (which would otherwise require the issuer to have been in existence for several years prior to the transaction).

However, withholding tax liability can be avoided under U.S./Japanese agreements simply by placing the borrowing required for the debt portion of the lease with a U.S. branch of a Japanese bank, or a Japanese branch of a U.S. bank. Similarly, defeasance structures can be created through banks which eliminate the need to issue securities for JLLs. European cross-border leases have tended to be self-defeased, thereby avoiding withholding issues entirely. Under trade agreements, most European countries enjoy greater flexibility regarding withholding tax constraints, also inherently reducing the need for special entities domiciled in tax havens. Therefore, the involvement of Cayman Islands entities is by no means a requirement for a cross-border lease.

- On the West Coast, there appears to be sensitivity to the sale of public transit assets to Japanese investors. These concerns have been attributed to international trade matters, lay-offs in the aerospace industry and adverse reaction to a cross-border lease transaction in 1990 involving Blue Line light rail vehicles operating between Los Angeles and Long Beach. An article appearing in the *Los Angeles Times* on March 23, 1993 raised a series of allegations regarding the economics of the transaction,

procurement practices used to secure professional services and travel expenses incurred by public officials. ***The Los Angeles transaction occurred during a period when the Japanese leasing guidelines were undergoing change and alternatives to the concerns identified in the article have been introduced in more current deal structures.***

B. Procurement Questions and How to Proceed

Once a transit agency decides to explore cross-border leasing, what are the next steps to be taken?

Identifying a lessor for a cross-border lease is very different from the experience in conventional municipal finance transactions. Unlike the capital markets in the United States which are extraordinarily deep, cross-border transactions may involve jurisdictions like Sweden or Denmark, which have very modest levels of equity available at any given time. Germany and Japan have larger equity markets, but tax laws and defeasance requirements, desire for manufacturing content from the lessor's country, overall economic conditions, and the appetite for tax-oriented transactions at a specific time can constrain opportunities to close cross-border leases or generate multiple, highly-competitive proposals for a given transaction.

Market participants in each country are unique and typically unrelated to the cast of players in U.S. municipal finance markets. Perhaps most importantly, the terms and conditions and transaction structures are very different from those of municipal finance. Deals may get "hung-up" on concerns which are not normally considered in domestic financings, involving such areas as defeasance arrangements or title issues.

Therefore, the first requirement is for a transit agency to work with either a financial advisor, legal counsel or placement agent who is experienced in the cross-border leasing field.

There are two general options for a public transit agency to pursue in holding a competitive procurement for a cross-border lease:

- Have staff, the agency's municipal finance advisor, and/or a specialist law firm develop a bid specification for cross-border lease proposals and make a selection based upon the highest net benefit and best risk sharing arrangements offered, or

- Hold a competitive procurement for a placement agent, who will then act on the transit agency's behalf to solicit competitive bids from equity sources in targeted countries, as well as conduct a competition for defeasance arrangements among banks or investment bankers. The placement agent will work with the transit agency's municipal financial advisor and staff to evaluate the various bids received, select the best equity terms, select the best defeasance terms, and then negotiate the best overall deal structure.

To help evaluate which approach works best for a given transit authority or for a specific transaction, it is usually helpful to understand "how the deal works" and how market participants are compensated, both of which are briefly described below. It is also important to evaluate the state, federal or local procurement regulations governing the transaction. For example, some jurisdictions can select financial advisors and underwriters based upon negotiations, while in other cases competitive bidding is required. Since a single cross-border lease can theoretically involve multiple procurements (for placement agent, equity, debt, deposits, lessee counsel, appraisers, currency-related financial products and so forth), some agencies may wish to receive proposals in the form of a complete package. In other cases, lessees may have more flexibility to work with a placement agent to "shop" for the very best deal in each, individual element of the overall transaction and maximize net benefit levels.

1. Transaction Fees and Compensation Structures

While this section offers general guidance, it is important to recognize that in cross-border leasing, as in other aspects of life, the first rule is that there are always exceptions.

In Japanese transactions, a leasing company based in Japan generally identifies the foreign investors and guarantees their performance. The leasing companies are paid fees by the equity investors and are the sources that a U.S. placement agent contacts in order to generate competitive proposals for pricing and terms. The fees paid to the leasing company by the equity investors are made separately and are not shown as a lessee transaction expense. Similarly, the fees incurred by the lessor for accountants, tax counsel or other experts in its home country are paid independently and are not treated as a lessee transaction cost.

In order to facilitate this discussion, TABLE 3 portrays a hypothetical benefit calculation for a defeased, Japanese leveraged lease. The upper portion of the table shows each of the lease payments required over the eight-year term and the 10 percent purchase option at the expiration. The semi-annual payments are divided between Yen and dollar rents. Japanese tax provisions require that level rent payments be made. Rather than portraying each payment as a specific dollar or Yen amount, TABLE 3 indicates the payments as percentages of the total lease obligation, including purchase option.

The actual payment percentages in a transaction would be determined by the duration of the lease, required return on equity, split between debt and equity, the debt interest rate, maturity and other features of the loan. The return on the investors' equity is comprised of three sources: tax benefits for depreciating the leased equipment, interest deductions for the loan and amortization of lessor expenses; the cash flow from the Yen rents and purchase option; and any up-front fees received.

TABLE 3
SAMPLE BENEFIT CALCULATION
HYPOTHETICAL ECONOMICALLY DEFEASED JAPANESE LEVERAGED LEASE

	Total Rent & Purchase	US$ Rent & Purchase	Yen Rent & Purchase
Payment	Option	Option	Option
0	0.00%	0.00%	0.00%
1	3.50%	3.50%	0.00%
2	7.00%	7.00%	0.00%
3	7.00%	7.00%	0.00%
4	7.00%	7.00%	0.00%
5	7.00%	7.00%	0.00%
6	7.00%	7.00%	0.00%
7	7.00%	7.00%	0.00%
8	7.00%	7.00%	0.00%
9	7.00%	7.00%	0.00%
10	7.00%	7.00%	0.00%
11	7.00%	7.00%	0.00%
12	7.00%	7.00%	0.00%
13	7.00%	7.00%	0.00%
14	7.00%	3.50%	3.50%
15	7.00%	0.00%	7.00%
16	7.00%	0.00%	7.00%
17	13.50%	0.00%	13.50%
	122.00%	91.00%	31.00%

NPV US$ Rent	73.80%
NPV Yen Rent	22.15%
TOTAL	95.95%
GROSS BENEFIT	**4.05%**

Less Transaction Expenses (Transaction = $30,000,000):		-1
Advisor/Arranger Fee	-1.00%	-2
Lessee Counsel Fee	-0.30%	-3
Lender Counsel Fee	-0.20%	
Lender's Up-Front Fee	-0.19%	-4
TOTAL EXPENSES	**-1.69%**	-5
NET BENEFIT	***2.36%***	
Lessee Share of Gross Benefit	58.3%	-6

Notes:

1 - Some arrangers treat a portion of, or all expenses as a reduction in gross benefit, rather than a transaction cost. As a result, net benefit may prove to be the best indicator of the transaction value.

2 - Varies based upon transaction size, expense reporting & complexity.

3 - Varies based upon transaction size, lessee relationship & complexity.

4 - Can be treated as a higher loan rate.

5 - Counsel fees can be lower if "repeat" or "same papers" transaction.

6 - FTA requires lessees to receive at least 50% of the gross benefit.

Appraisal fees also may be incurred.

The Gross Benefit calculation is made by taking a Net Present Value of the semi-annual payments using the interest rate earned on the dollar defeasance deposit as the discount rate for the dollar rents and the Yen deposit rate as the discount rate for the Yen rents. The difference between 100 percent (which is the payment made by the lessor for title to the equipment and reflects the appraised or invoiced price of the assets) and the sum of the Net Present Value of the dollar and Yen rents is the Gross Benefit achieved up-front by the lessee transit agency.

In order to determine the "net" up-front benefit, the lessee must account for transaction costs. As noted in TABLE 3 and discussed below, some or all of the transaction costs listed may be folded into the Gross Benefit calculation as a lessor expense. Just because they are not broken-out separately, or are attributed to the lessor rather than the lessee, the expenses are incurred and do result in a diminution of Net Benefit, which is the bottom-line, up-front benefit to the transit agency.

A fee is paid to the firm who identifies the lessee in the United States. This fee is in the range of one percent of the value of the transaction and is paid at closing. Normally, the fee is not paid if the transaction does not close. It is important to recognize that sometimes part of the arranger or "placement agent" fee is paid by the lessor and part is attributed to the lessee (that is, the placement agent may be paid by both parties). In other cases no placement fee may be incurred because the "agent" is owned by a particular equity source. The "agent" may then be compensated through a participation in the profit on the transaction, with the expense simply reducing Gross Benefit. In all cases, however, someone is paying the fee somewhere in the transaction structure!

It is in the area of placement agent fees that the comparison of bids for professional services, as well as differences between "gross benefit" and "net benefit" levels can begin to become distorted. For example, if a transit agency wishes to hold a procurement to select a placement agent to solicit

bids from foreign equity sources, then an important evaluation criteria might be the fees to be charged. If the fee is fully, or partially absorbed by the lessor, then those firms may have a built-in competitive advantage over firms who only collect fees through the lessee.

However, firms being partially, or completely compensated by the lessor can have a conflict of interest on the basis that they may direct deals to sources of equity offering them the highest fee, or to a parent company having an ownership interest in their business. From FTA's perspective, the calculation of transaction expenses in relation to benefits can be subject to distortion if, in certain transactions, the fees are being paid explicitly, while in others they are submerged as a reduction in gross benefit levels. ***Therefore, it is usually best for the procurement documents to require arrangers, financial advisors and placement agents to disclose all of their sources of compensation, as well as any ownership arrangements with transaction participants. Full disclosure permits potential conflicts of interest to be identified and a more accurate accounting of relative costs and benefits.***

Comparison of placement agent fees are also subject to variation for other factors. In some cases the fee may include out-of-pocket expenses, while in others out-of-pocket expenses may be billed separately. In larger transactions a cap on the fee may be negotiated. Repeat deals with documentation already accepted in the market-place may be in a position to negotiate lower fees. Complex transactions, deals involving multiple closings, or situations where title issues are present may incur higher arrangement costs. In other instances, certain legal expenses may be treated as an "out-of-pocket expense" in order to avoid an agency's restrictive procurement requirements, or to transfer exposure for costs if the deal does not close.

An *additional* financial advisory fee may be required if the transit agency uses a municipal finance firm to evaluate cross-border leasing

proposals solicited under a procurement, or to assist in negotiations required to reach a closing once a proposal has been selected.

Legal fees are incurred for lessee and lender counsel. The range of fees will be contingent upon the complexity of the transaction, the availability of existing documents from previous transactions, and to some extent transaction size. The figures shown in TABLE 3 may be treated as an average within a fairly broad range. Legal expenses tend to be paid on an hourly basis and may be charged even if the transaction does not close. In some cases, "caps" may be negotiated, particularly if the transaction is not consummated. It is normal in the cross-border leasing area for the lessee to pay for the lender's legal fees, as well as its own. This is somewhat different from the municipal finance practice, where the borrower's and underwriter's legal fees may be contingent upon closing. It may be possible to structure legal fee arrangements in documenting leases which are contingent upon closing. However, if a law firm accepts the risk of a transaction not closing, premium rates are likely to be charged. Comparisons of legal expenses between transactions must be sensitive to these potential sources of variation.

Fees also may be charged for loans to finance the lease and bank deposit arrangements to economically defease the future rent obligations. In some cases it is possible to either pay an up-front fee, or accept a higher interest rate on the loan. The test for meeting FTA's requirement that the lessee receive at least one-half of the Gross Benefit may be subject to distortion depending upon how the lender's up-front fee is presented in the calculations.

Finally, in some instances an appraiser may be required to certify the value of the assets being leased. In leases where new equipment is involved a manufacturer's invoice is usually sufficient documentation.

European cross-border lease transactions may involve higher levels of direct participation by banks, resulting in more varied roles for placement agents and fee structures.

In order to avoid wading through these possible combinations of fee arrangements, some transit agencies have elected to base their decisions on whether or not to go forward with a cross-border lease and who to engage to undertake the transaction on the basis of a comparison of bottom-line, "net benefit" offers. The discussion below outlines issues involved in assessing how to proceed, the potential roles of a placement agent/arranger and some of the benefits and disadvantages of alternative procurement strategies.

2. Potential Roles of the Placement Agent

The "finder" of the American lessee functions in either of two roles. The first is as a placement agent for the lessee who:

- Contacts various Japanese leasing companies in order to identify and negotiate equity on the most favorable terms for the client transit agency,
- Contacts potential sources of debt and a deposit bank in order to secure bids for the best possible loan terms and defeasance arrangements,
- Reviews all documentation and addresses the structural concerns that are unique to the agency or the specific assets involved, and
- Coordinates with the legal team to execute the deal and resolve issues quickly.

The perspective of the "arranger" or placement agent in this case is as a financial advisor that uses its specialized knowledge of market participants, current market conditions, and prior transactions to negotiate a deal on the most favorable terms for the transit agency. The placement agent can actually conduct multiple competitive procurements for equity, debt and defeasance arrangements on the transit agency's behalf.

The second role for the American "arranger" or placement agent can be to represent a specific lessor in preparing a proposal for the transit agency's consideration. The U.S. firm can assist the lessor in preparing a bid under a procurement being conducted by a transit agency, or will help develop an unsolicited proposal. The placement agent can organize the legal, debt and defeasance participants in order to deliver a firm bid to a transit authority for a cross-border transaction. The perspective of the arranger in this case tends to be one of representing the lessor in offering terms which are sufficiently favorable to "win" the right to execute the transaction -- not necessarily on the best terms that might be available to the lessee under existing market conditions, or those which might prevail at the time the transaction is actually going to close.

The American "arranger" or placement agent generally receives the same fee regardless of the role played -- as advocate for the lessee or representative the lessor.

3. Competitive Procurement Strategies

As explained above, in Japanese leveraged leases, a competitive procurement for the placement agent can be conducted, with the terms and conditions of the lease itself arranged through subsequent competitions for equity, debt and defeasance arrangements held with the assistance of the selected firm. This approach results in the transit agency retaining a placement agent on the basis of previous experience, fees and/or responses to specific questions related to the transaction being considered.

However, recent experience has shown that the "net benefit" to the transit agency lessee typically is what drives the decision to go forward with the transaction. As a result, some transit properties have selected placement agents on the basis of fees charged and a "net benefit" projection. As noted earlier, the fee structure for placement agents can be highly variable and fraught with conflict of interest complications that make comparisons difficult. Therefore, decision-making based upon "net benefit" calculations may appear to simplify the transit authority's evaluation of proposals, as well as its decision to go forward with a cross-border lease.

The down-side to a bottom-line, or "net benefit" procurement strategy is that if the Request for Proposals is not carefully structured, the door can be opened to "blue sky" offers based upon aggressive assumptions which are not realized in the final transaction. In many cases, the decision to consider a cross-border lease is made sufficiently in advance of the actual closing that there is a legitimate need for proposers to retain the flexibility to modify their offers if closing dates, market conditions or tax law changes occur. However, the transit authority's leverage to secure the best deal possible is ***before*** the key parties are selected. Several options are available to address this potential dilemma and are reviewed below.

4. Evaluation Factors

Cross-border leasing is a highly specialized field and there are relatively few firms that have regular practices confined to this niche. Their reputations are well-known and many have experience in the transit industry. Specialist firms will not only have the greatest likelihood of successfully identifying equity sources, their familiarity with transactional issues will give them the best chance of negotiating solutions to the complications that invariably seem to arise due to legal constraints or unique factors affecting an individual transit agency. In many instances, these stumbling blocks can grow into sources of delay or deal-killers when handled by less experienced firms, or placement agents whose expertise is primarily in other areas of finance. A knowledgeable placement agent also has a better chance of

bringing the transaction to closing quickly, reducing the risk of changing market economics (and tax laws) during a prolonged negotiation period, as well as helping to control legal expenses through faster execution.

Perhaps most importantly, dealing with regular market participants can reduce the potential that the terms and conditions offered in winning competitive proposals are not realized after a selection is made. Some of the considerations in selecting a placement agent are:

- Volume and history of successfully completed cross-border lease transactions.

- Continuous history of involvement in the cross-border field. Many firms, particularly large banks and investment banking firms, enter and exit the business depending upon market conditions or the presence of a key individual on the staff.

- Ongoing presence in overseas markets and familiarity with the countries that are the most likely sources of equity for the assets to be leased.

- Recent track record in identifying equity and closing transactions when serving as financial advisor in comparably-scaled deals covering similar types of assets.

Unique timing and market factors, as well as the experience level of individual agencies, will often dictate whether it is more advantageous to address competitive procurement issues by soliciting offers with specific lease terms, or retaining a placement agent to generate and negotiate proposals. However, some observations are possible:

- Cross-border leases are highly time sensitive. Market conditions, interest rates, the financial circumstances of a handful of possible equity sources at any moment in time, and tax law environments are all changing constantly. ***As a result, the time to begin seeking leasing proposals is within three to six months prior to taking delivery of rail assets, or once an order has been placed for buses. Japanese leveraged leases tend to be more restrictive regarding title issues and it is suggested that a cross-border lease placement agent be retained prior to making domestic financing arrangements for the acquisition, particularly when a COPS structure is contemplated.***

- Differing types of assets and legal title situations tend to point lessees toward particular countries for cross-border lease financing. For example, at this time, the inability to legally defease Japanese leveraged leases (see Chapter 5, Section B for background on defeasance) makes them more attractive for shorter-lived assets, such as buses, telecommunications equipment, or possibly computerized signal and fare collection systems. On the other hand, Japan does not require that the assets being financed have Japanese manufacturing content. Longer-lived assets, such as rail vehicles, are better-suited to the European lease markets because of greater availability of defeasance options. However, German lessors tend to require that the assets have German manufacturing content. Equipment for which title has passed to the lessee is not suited to Japanese leasing guidelines, and is more favorably viewed under the European tax environments. ***Placement agents tend to specialize in cross-border leases involving particular countries and Requests for Qualifications or Proposals should emphasize experience with transactions that are related to the assets involved. For example, hiring a firm with U.S. or European leasing experience to identify equity for a Japanese leveraged***

lease may not result in as favorable an outcome as retaining a firm with on-going presence in the Japanese market.

- When competitive proposals are sought for leases with specific terms and conditions, it is difficult to "lock-in" the final benefit levels and risk sharing arrangements at the time a selection must be made. Typically, the procurement occurs sufficiently in advance of closing that many issues will remain open to negotiation, or subject to changing market conditions. Similarly, in other cases the leases may be executed in series, or "tranches" that involve separate closings. During the time between closings changes in tax laws and market conditions can affect the benefit levels realized on each tranche.

  As a result, there is an unfortunate probability that the advantages of the selected proposal over its competitors may not be realized, or that the transaction may arrive at the decision-making stage with fewer benefits, or higher retained risks than originally envisioned. The outcome may be a decision to forgo the cross-border leasing option entirely. Since the likelihood of an extended negotiation period is greater in the absence of a placement agent, the risk of changes in terms and benefit may be relatively high under a procurement structure where formal lease proposals are solicited.

  Therefore, when a transit lessee intends to make an award based upon a "net benefit" calculation, the proposals solicited should be underwritten by credible sources of debt and equity in order to: minimize the potential for "blue sky" propositions, assure that all assumptions and risk factors are fully disclosed, and to "lock-in" the terms being offered as much as possible prior to making an award when the lessee has the greatest negotiating leverage.

Although in municipal finance underwritten bids are solicited on a competitive basis which permit no changes, in cross-border leasing it is possible for a transit authority to prepare a specification for "net benefit" cross-border lease proposals which are underwritten for the purpose of providing down-side risk protection (and screening-out unsophisticated and unrealistic offers), but retain the potential to: improve the deal during subsequent negotiations with the winning bidder and benefit from positive changes in market conditions. An underwritten "net benefit" leasing proposal will be most sensitive to changes in loan interest rates and dollar and Yen deposit rates. In a well-structured solicitation the impact of positive and negative changes in interest rates can be requested and calculated in advance by the proposers as part of their bid.

An example for a defeased Japanese leveraged lease is shown in TABLE 4. The sensitivity table presented is completely hypothetical and will vary depending upon the term of the lease, the tax law of the country involved, the return on equity required, lessor fees and other factors. However, it is the type of analysis which a bidder can provide as part of an underwritten offer to arrange a cross-border lease that the lessee can use to lock-in its benefit level as market conditions shift between the time a selection is made and when the transaction actually closes. These contingency arrangements will protect proposers from legitimate changes in market conditions, while permitting the transit authority to make a solid, objective procurement decision.

TABLE 4

SAMPLE UP-FRONT BENEFIT SENSITIVITY ANALYSIS

HYPOTHETICAL ECONOMICALLY DEFEASED JAPANESE LEVERAGED LEASE

Assumptions:
Each 10 bp change in Dollar Defeasance Drag = 25 bp change in NPV
(Dollar Defeasance Drag = Dollar Loan Rate - Dollar Deposit Rate)
Each 10 bp change in Yen Deposit Rates = 15 bp change in NPV
Eight Year Lease Term

Indicative Up-Front Benefit Before Transaction Expenses

Yen Rate	Dollar Defeasance Drag						
	-0.40%	**-0.30%**	**-0.20%**	**-0.10%**	**0.00%**	**+0.10**	**+0.20%**
5.00%	4.65%	4.90%	5.15%	5.40%	5.65%	5.90%	6.15%
4.80%	4.35%	4.60%	4.85%	5.10%	5.35%	5.60%	5.85%
4.60%	4.05%	4.30%	4.55%	4.80%	5.05%	5.30%	5.55%
4.40%	3.75%	4.00%	4.25%	4.50%	4.75%	5.00%	5.25%
4.20%	3.45%	3.70%	3.95%	4.20%	4.45%	4.70%	4.95%
4.00%	3.15%	3.40%	3.65%	3.90%	4.15%	4.40%	4.65%
3.80%	2.85%	3.10%	3.35%	3.60%	3.85%	4.10%	4.35%
3.60%	2.55%	2.80%	3.05%	3.30%	3.55%	3.80%	4.05%
3.40%	2.25%	2.50%	2.75%	3.00%	3.25%	3.50%	3.75%
3.20%	1.95%	2.20%	2.45%	2.70%	2.95%	3.20%	3.45%
3.00%	1.65%	1.90%	2.15%	2.40%	2.65%	2.90%	3.15%

Note that the values above are not based upon actual NPV calculations, but only the very general assumptions shown. Actual sensitivity tables can be constructed for individual transactions that reflect market conditions, investor equity return requirements, lease term and the tax laws of particular jurisdictions.

Similarly, delays in receiving the equipment can reduce tax benefits to the lessor and lower benefit yields for the lessee. These outcomes can be anticipated in an RFP, or by retaining a placement agent who acts as financial advisor to the lessee.

Differences in risk sharing between the lessor and the lessee also can account for variations in "net benefit." The use of underwritten proposals permits these potentially hidden costs to be identified more explicitly through the term sheet accompanying the bid.

- Many transit agencies have legal limitations regarding their ability to negotiate transactions, enter into interest rate swaps, commit a particular flow of funds to a lessor, hold deposits in banks with certain credit ratings, allow a lessor to have title to its assets, make milestone payments to a manufacturer without taking title to the work in progress, and so forth. Constraints may arise from bond covenants, board policies, enabling legislation, state constitutional provisions, or other federal, state and local government statutes. Such limitations can be identified quickly by an experienced legal counsel or placement agent and the feasibility of a transaction readily determined before great amounts of energy and time are expended. ***In many cases, counsel or a placement agent can assist the transit agency in structuring financial and title arrangements to minimize, or avoid pitfalls that preclude, or unnecessarily reduce the benefits of a cross-border lease. If the potential for complications such as those noted above exists, it is desirable for the transit authority to retain legal counsel to address these concerns prior to issuance of a Request for Proposals for underwritten offers on a "net benefit" basis. Otherwise, there is potential that the feasibility or economics of the transaction will be adversely affected.***

In summary, any procurement decision that includes "net benefit" to the agency as a selection criteria should be made on the basis of underwritten proposals from legitimate equity and debt sources. When underwritten offers are solicited, a competent legal counsel or financial advisor can prepare specifications which permit the transit lessee to reserve the opportunity to achieve improved terms, along with protection against material down-side changes in benefit levels and risk sharing. ***In many instances it may prove advantageous for the transit agency to conduct the procurement as a competitive negotiation where a wide range of bids is solicited and two or three finalists are short-listed for purposes of refining their pricing and risk sharing proposals.***

The decision of a lessee to move forward will require senior management commitment and a significant front-end investment of time and expense by placement agents to gather serious proposals. Therefore, it is important that the legal, political and intangible elements of cross-border leasing be recognized and resolved early in the decision-making process.

Once a transit agency has grappled with the timing, procurement and political aspects of cross-border leasing, the economic costs and benefits can be evaluated. Factors to consider in measuring "net benefits" are discussed in the next chapter.

5. Accounting for Success - Measuring the Benefits and Costs of Cross-Border Leases

Any financing transaction involves some measure of risk. FTA's *Introduction to Public Finance in Public Transit* provides insights into many of the cost and risk considerations which must be factored into cross-border lease financing decisions (such as interest rates, currency exchange and "unwind" events). Appendix A includes a more detailed discussion of "unwind" risks for a true-funded Japanese leveraged lease, as well as tables and graphs defining the cost penalties borne by the lessor and the lessee under various circumstances of early termination. The basic question a potential participant in an innovative financing deal must answer is:

Is the benefit gained under a cross-border lease sufficient to justify the risks incurred after all direct costs are considered?

Is a two percent, or $600,000 benefit after all direct costs adequate to justify pursuing a cross-border lease on a $30 million acquisition, or is the threshold 2.25, 2.5, or 3.5 percent? Ultimately, the decision on whether the benefits out-weigh the risks and direct costs is subjective. However, the answer is likely to be a function of how complicated the deal proves to be to implement, how much management and board time will be occupied, and how much residual risk, if any the agency will retain.

Accurately measuring "the bottom-line" in a cross-border lease transaction involves properly classifying costs, as well as understanding the various approaches to measuring benefits and risks. The calculation of benefits is generally related to the structure of the lease itself -- "true-

funded," economically defeased, or legally defeased. These structures are examined below.

FTA has established its own approach for determining the "adequacy" of the benefits derived from individual transactions before it will grant approval. FTA must review all proposed deals involving federal transit funds and its guidelines require that transaction costs not exceed one-half of the benefits. Unfortunately, FTA's guideline has proven to be susceptible to interpretation in classifying costs and measuring benefits.

Prior to bringing their transaction to FTA for sign-off, individual transit agencies therefore must address the larger question posed above: does the net benefit remaining after expenses adequately compensate the agency for its in-house and intangible costs, as well as any residual risks it retains? Given the wide variation in approaches to categorizing costs and calculating benefits, this question must be examined carefully.

A. Factors Affecting Benefits

In cross-border transactions, the level of benefit is most heavily dependent upon interest rates, the nature of the assets (which affect the term of lease) and market conditions. The longer the term of the lease, the higher the level of interest rates, and the greater the demand for transit assets by lessors, the more favorable the benefit levels will prove to be.

1. Market Conditions

Historically, a major proportion of the world-wide market for cross-border leasing has involved aircraft. Due to weak demand for airplanes and the deteriorating credit of many airlines, investors generally have been seeking alternatives and the result has been improved terms for transit assets. However, at a single point in time economic conditions, tax climate and

terms available for other assets competing for the same sources of equity will affect benefit levels available to transit authority lessees.

2. Interest Rates

At this time, interest rates are at an historically low level and have depressed benefits available to transit lessees. How do interest rates affect benefits? This question is best answered by viewing the benefit derived from the tax advantages of a cross-border lease as a reduction in the cost of funds required to make a particular investment, rather than as an "up-front" benefit.

For example, if the net effect of a cross-border lease is considered to be lower financing costs, then a 20 percent reduction when interest rates are at 8 percent amounts to 160 basis points. However, when interest rates are at 4 percent, the same 20 percent savings may only yield a benefit of 80 basis points. Since transaction costs tend to be linked to the value of the lease and therefore remain relatively constant regardless of interest rates, the result of lower interest rates is a contraction in net benefits. The impact of changes in Yen deposit rates and the differential between dollar loan and dollar deposit rates on net benefit levels in a hypothetical, eight-year Japanese leveraged bus lease can be seen in the sensitivity analysis in TABLE 4 in the preceding chapter.

3. Lease Term

The longer the term of a cross-border lease, the greater the depreciation benefits to the investors and the longer the opportunity to earn favorable yields on re-investment of the proceeds received in exchange for title to the assets. The lease term is usually a direct function of the assets involved. For example, in Japan buses are considered to be depreciable over a six-year period and the maximum term of a lease can be eight years. Railcars are longer-lived assets for depreciation purposes and can support leases of 14 to 18 years.

Offsetting the added benefits of a longer term lease are potential additional risks. For example, the likelihood of "unwind" or termination events occurring is greater as the term of the lease increases. Examples of potential "unwind" events include: bankruptcy (of the lessor, the lessee, or one of the banks involved), casualty loss, tax law change, or default on lease terms. Most leases are "front-end loaded" so that the potential for losing up-front benefits or incurring additional costs is greatly reduced if termination events occur later in the lease period, rather than during the early years. The risks involved, as well as a graph portraying the decline in exposure for early termination over the term of the lease, are presented in Appendix A.

However, of greatest concern to the lessee transit agency are the risks that over an extended lease term, fluctuations in interest rates and currency exchanges will consume the up-front benefit. As a result, the longer the term of a lease, the greater is the need for "defeasance."

B. Defeasance Approach and Impact on Benefits

In order to minimize the risk that anticipated benefits will not be realized (or even worse, that additional costs may be incurred), cross-border leases are set-up to be "defeased" to the greatest possible extent. Interest rate defeasance involves setting aside sufficient funds from the lessor's payment for title to meet future rent obligations and exercise of the purchase option. Currency defeasance requires "swap" or hedging arrangements that lock-in the exchange rate at a fixed level for the life of the transaction. Public agencies will almost always fix their exposure for currency fluctuations. With regard to interest rates, cross-border leases in the transit industry reflect three approaches to defeasance.

By advance-funding the lease payments and purchase option payment, defeasance "locks-in" the "spread" between interest rates paid on the lease debt, the demanded return on equity and interest earned on off-setting

deposit balances. With exchange rates fixed, defeasance permits the up-front benefit level to be readily calculated, as shown in TABLE 3 earlier. Defeasance also facilitates the lessors' (foreign investors) ability to obtain a loan for the non-equity portion of its lease capital by mitigating credit risks. The defeasance structure amounts to a form of "guarantee" that future lease obligations will be met. The longer the term of the lease, the greater the need for defeasance due to potential credit risks incurred by the lessor.

In a ***legally-defeased*** transaction, the amount required to make all future lease payments and fulfill the eventual purchase option is set-off in a special bank account that can only be used for this purpose. Legal defeasance permits the lessee (transit agency) to be freed from its future lease obligations, subject to "unwind" events. In many cases involving European cross-border leases, the deals may be "self-defeased" -- the bank making the loan to the lessor also invests the equity and holds the deposit for the lessee.

In May, 1990, the Japanese National Tax Administration issued guidelines which prohibited legal defeasance of cross-border leases involving Japanese investors. However, the guidelines do allow future lease obligations to be ***economically-defeased*** by setting aside the funds required to meet future obligations in a bank account -- as long as the account is not solely dedicated to fulfillment of the lessee's remaining lease obligations and there is no legal release of the transit agency from its future payment requirements. The greatest difference between the legal and economic defeasance is that funds in the deposit account technically can be withdrawn and used for other purposes under the economic defeasance structure.

Defeasance also is affected by municipal finance regulations which severely constrain issuers of tax-exempt debt from earning interest arbitrage on deposit balances. In some cases, this has resulted in cross-border leases capitalized with tax-exempt debt being structured as ***"true-funded"*** transactions, where no specific deposit accounts are created to fund future

lease obligations and the purchase option. Appendix A describes a true-funded Japanese leveraged lease structure in detail. In other cases, the loans supporting the lease may be structured using conventional, taxable debt and arbitrage limitations would not apply. True-funded leases tend to yield higher benefits because the lessee retains interest rate risk and defeasance drag is eliminated.

Overall benefit levels in cross-border leases will be affected by the form of defeasance involved:

- Economically-defeased leases require actual loans and deposits involving separate entities. There is always a small risk that the bank holding the deposit account will go bankrupt, leaving the lessee without access to the funds put aside to meet future lease obligations. Minimizing this risk by selecting a very secure bank (or investing in government securities) will result in lower interest rates on the deposit balances and less favorable benefit levels.

- Since banks prefer to make shorter-term rate commitments it is more difficult to secure interest rate guarantees on long term defeasance deposits. Less favorable economics on the spread between interest earned on deposits and future rent payments may occur as the defeasance period increases.

- The net effect of the offsetting equity, loan and deposit arrangements when a single bank is involved in a legal defeasance may be favorable treatment of the transaction for calculating the bank's reserve requirements, depending upon regulatory policies. As a result, the banks involved may share these ancillary benefits, allowing legally-defeased transactions to generate more favorable spreads between borrowing and deposit rates for lessees.

- Calculation of benefits in a true-funded transaction tends to be more abstract, since no "up-front" benefit per se is realized by subtracting the deposits required for defeasance from the funds received from the lessor for title to the assets. In such cases, a "net present value" of future benefits may be calculated using an implicit discount rate. However, estimating the level of benefits can be skewed by the discount rate selected.

As noted, true-funded leases tend to result in higher benefit levels than defeased transactions due to the elimination of "defeasance drag" (the spread between net borrowing costs and deposit earnings), but greater risk exposure for interest fluctuations. Other factors being equal, legally-defeased cross-border deals generally show more favorable benefits than economically-defeased transactions, while offering slightly lower risk profiles.

C. Benefit Levels Reported in The Transit Industry

A review of the data supplied by FTA for eight transactions reported in TABLE 5 shows fees and expenses ranging from a low of 0.4 percent of BART's $180 million rail car deal, to a high of 4.5 percent of Seattle METRO's $38 million, dual-mode bus transaction. In two of the transactions a larger proportion of the gross benefits were absorbed by expenses than were realized by the agency in net benefits, and in one deal the costs and net benefits were evenly split.

TABLE 5

TRANSACTION COSTS AND BENEFITS AS A PERCENTAGE OF DEAL SIZE
RECENT FTA CROSS-BORDER LEASES

Agency	Transaction Size	Fees & Expenses	Net Benefit	Gross Benefit
NJT	$ 66 million	1.5%	4.2%	5.7%
MTDB	$ 53 million	1.0%	3.2%	4.2%
BART	$180 million	0.4%	3.5%	3.9%
Seattle	$ 38 million	4.5%	2.8%	7.3%
SRTD	$ 17 million	3.0%	2.5%	5.5%
MDOT	$ 45 million	3.0%	3.0%	6.0%
NJT	$ 20 million	1.2%	3.3%	4.5%
SCRTD	$ 70 million	2.1%	2.7%	4.8%

Source: FTA Office of Chief Counsel

FTA found that the grantee made material changes in two of the transactions after approval was received and that the net benefits did not meet the criteria established for authorization. Restrictions for three years were imposed on documentation the two grantees would have to provide to undertake future transactions.

A review of several reported transactions suggests that the figures furnished to FTA in TABLE 5 are in need of refinement. Specific accounting issues in calculating "gross" and "net" benefits are discussed in the previous chapter. In addition, many of the transactions close in "tranches," or lots, which can result in variations of benefit levels depending upon the ability of the lessee to "lock-in" terms from the outset. Leases may be closed in tranches because investors often prefer deals of a particular size. Once enough equipment has been delivered to meet the desired transaction level a closing is held.

In other cases variations between projected and actual benefits may occur because equity for only part of the equipment acquisition was identified at the time the financing group was selected, or because delays in delivery from the manufacturer pushed the closing into a time period which reduced the lessor's tax benefit. Therefore, changes in market conditions and delays in taking delivery of the assets from the manufacturer can result in varying benefit levels between each tranche of a particular transaction, as well as in differences between actual and anticipated results reported to FTA.

For example, the actual benefit level reported by SCRTD on its cross-border bus leases was approximately $1 million, compared to the $1.9 million anticipated at the time the transaction was approved by FTA. The difference arose from the fact that significant delays were encountered in receiving the alternative fuel buses from the manufacturer, precluding some of the vehicles from being in the program and shifting the closings into a time period with lower interest rates. SCRTD also suffered from a change in Japanese tax guidelines which prohibited legal defeasance before the closing on the last tranche of 22 Blue Line light rail cars in 1990. The result was a different deal structure from the Japanese leveraged leases concluded on the 32 earlier vehicles.

Since fees and expenses tend to be linked to the principal amount of the lease, it is a reasonable expectation that the percentage attributable to transaction costs would be relatively consistent. Smaller transactions may be expected to have slightly higher percentages of transaction expenses because complexity does not necessarily increase with scale and certain fees may be negotiated under a cap. On the other hand, benefit levels vary substantially depending upon the tax laws of individual jurisdictions, lease term, interest rates, defeasance structure and market conditions. Therefore, it is also reasonable to expect that the realized benefits of cross-border leases would show variation.

Contrary to the findings anticipated, FTA's reported range of variation in fees and expenses is substantial and not necessarily related to deal size, while the range of variation in benefits is not nearly as large. What may be occurring?

The FTA cross-border leasing requirement is that the grantee's share of gross benefits should exceed transaction costs by a reasonable margin. The fact that the gross benefit range of variation was not as significant as the range of variation in fees and expenses potentially points to inconsistencies in the accounting treatment of costs and calculation of benefits, particularly in the Seattle METRO and January, 1991 BART transactions.

If certain costs are either not reported or treated as a reduction in gross benefits because they are borne by the lessor, then the FTA test procedure is subject to interpretation. It should be noted that in some cases, such as Japanese leveraged leases, capitalizing transaction costs to the greatest extent possible tends to raise benefit levels because the foreign investors are able to depreciate the transaction fees as well as the appraised value of the assets.

Standard procedures also are necessary to evaluate benefits in the context of the defeasance structure used in the transaction. In some cases, such as Seattle, agencies have agreed to accept somewhat higher risk levels in exchange for increased benefit.

CASE ANALYSIS: SEATTLE METRO JAPANESE BUS LEASE

The results in TABLE 5 show that Seattle METRO incurred transaction costs well in excess of net benefits, however, gross benefits are the highest of any transaction reported. At the other extreme, BART's total transaction costs are below the fee normally charged for financial advisory services alone. Fees for placement agent, and lender's and lessee's counsel typically total about 1.5 percent.

Due to the "true-funded" defeasance structure of METRO's transaction, it is reasonable to expect that benefit levels may be higher than previous industry experience would suggest for a six-year lease.

The other cross-border lease transactions listed in TABLE 5 were defeased, while METRO's was a "true-funded" deal. The added interest rate risk of a true-funded lease yields higher benefits by eliminating "defeasance drag," or the need to "lock-in" slightly higher interest rates on the debt portion of the lease than are earned on interest bearing deposits. Depending upon interest rates, the reduction in net benefits for "defeasance drag" in a relatively short-term lease might be in the range of 10 - 35 basis points. However, METRO's gross benefits were over 200 basis points higher than the average of the other transactions reported by FTA. There does not appear to be anything unusual about METRO's transaction fees to account for such a large differential in "net" benefits. Therefore, the differences are most likely explained by the method of accounting for costs and benefits compared to the other cross-border deals.

The underlying issues are:

- How was the benefit level calculated under the true-funded lease structure?

- When were transaction costs reported and when were they treated as a reduction in gross benefits or lessor expense?

For purposes of this example, it is assumed that benefit levels were calculated using accepted methodologies that involve finding the present value of the savings in METRO's borrowing costs between funding the bus acquisition with debt of comparable seniority and using the cross-border lease.

In estimating costs it is noted in the previous chapter that fees are paid by the investors (foreign investor) to leasing companies who arrange the transactions on their behalf, as well as, in some cases, guarantee performance of the investor group.

Based upon the results reported by other issuers, the FTA analysis of Seattle METRO's transaction appears to have treated certain costs normally reflected as a lessor expense or reduction in gross benefit as a lessee transaction expense.

If approximately $1 million of lessor-borne fees are shifted from being a transaction expense to being a reduction in the gross benefit, then Seattle METRO's "bottom-line" would remain exactly the same, its transaction would fit more closely with the industry trends, and it would conform to the FTA guidelines, as shown in Example 1 below.

If these fees are removed entirely from the transaction because they are more properly attributed to the lessor, the resulting boost in net benefit level might reflect the premium Seattle METRO received for undertaking a "true-funded" transaction and absorbing interest rate risk. In this case, the figures in Example 1 would show METRO

achieving the highest "net benefit" of any transit industry cross-border lease thus far. Only the actual figures will reveal which of these potential conclusions fits closest to Seattle's experience.

On the other hand, it is likely that the extraordinarily low level of expenses in the January, 1991 BART lease involving rail cars arose from the opposite case, that is reporting certain transaction expenses as a reduction in gross benefits or a lessor expense. For instance, it is not unusual for the lessor to pay a fee to a U.S. placement agent, and BART may have treated this expense as a reduction in gross benefit. Example 2 below shows that if a one percent fee for a placement agent and other related expenses is added to the transaction cost and gross benefit levels increase by a comparable amount, BART's "bottom-line" does not change, but its results fall more in line with general industry experience.

EXAMPLE 1

IMPACT OF ACCOUNTING ADJUSTMENT
SEATTLE METRO 1991 CROSS-BORDER LEASE BENEFITS

Transaction Size $38,365,836

1. As Reported to FTA:

		Percentage
Gross Benefit	$2,812,847	7.33%
Less: Transaction Costs	$1,724,258	4.49%
Net Benefit	$1,088,589	2.84%
% of Benefits Realized	38.7%	

2. Adjusted for Approximate Consistency to Other Transactions in Treatment of Costs:

		Percentage
Gross Benefit	$1,812,847	4.73%
Less: Transaction Costs	$ 724,258	1.89%
Net Benefit	$1,088,589	2.84%
% of Benefits Realized	60.1%	

3. Adjusted to Reflect Consistent Allocation of Costs and Possible Risk Premium for "True-Funded" Structure:

		Percentage
Gross Benefit	$2,812,847	7.73%
Less: Transaction Costs	$ 724,258	1.89%
Net Benefit	$2,088,589	5.44%
% of Benefits Realized	74.3%	

EXAMPLE 2

IMPACT OF ACCOUNTING ADJUSTMENT
BART 1991 CROSS-BORDER LEASE BENEFITS

Transaction Size $180,000,000

1. As Reported to FTA:

		Percentage
Gross Benefit	$7,074,000	3.93%
Less: Transaction Costs	$ 828,666	0.46%
Net Benefit	$6,245,334	3.47%
% of Benefits Realized	88.3%	

2. Adjusted for Approximate Consistency to Other Transactions in Treatment of Costs:

		Percentage
Gross Benefit	$8,874,000	4.93%
Less: Transaction Costs	$2,628,666	1.46%
Net Benefit	$6,245,334	3.47%
% of Benefits Realized	70.4%	

Once a decision is made to consider a cross-border lease, the first step in establishing a framework for making the "go/no-go" choice is to develop reasonable expectations for net benefits.

While everyone is concerned about getting a "good deal," the discussion above demonstrates that results reported by peers must be

subjected to rigorous analysis. Transactions can hardly be compared unless "apples and oranges" can be separated.

The examples above suggest the need to establish more uniform reporting standards, particularly if FTA approval is required. Quantifying the costs incurred for financial advisors, legal expenses and bank fees consistently will permit transit agencies to see if proposed expenses are in-line with industry experience. Establishing a more uniform basis for the determination of benefits is another important requirement. A national public transit clearinghouse for information on cross-border lease transactions would facilitate building this type of data base. Identifying the firms associated with each of the transactions also can help in providing quick access to market participants, as well as benchmarks for assessing performance.

Having FTA use its leverage to secure detailed, uniform transactional information would be more objective in determining if the levels of benefit and expense proposed are reasonable than the current "50 percent" guideline. At this time, the methodology for calculating benefits and transaction costs is open to interpretation, making conformance with FTA's guideline difficult. A cross-border lease data base also would be useful in improving the terms received by individual transit agencies and evaluating the "reasonableness" of bids. In addition to maintaining a data base on costs and benefits of cross-border lease transactions, FTA can act as a clearinghouse for the industry in tracking the treatment of risks.

For instance, if a transit agency receives a cross-border leasing proposal with relatively high benefit levels, is some or all of this potential gain at the expense of less favorable arrangements for sharing the risks of unwind events (including more subtle exposure for liabilities such as bankruptcy or Value Added Tax), a higher priority in the transit agency's (lessee's) flow of funds, greater control over deposit accounts, a participation in asset appreciation above the assumed residual value, or other factors included in the term sheet? Alternatively, is an offer submitted in

response to a Request for Proposals overly optimistic and unlikely to be realized at closing?

One favorable outgrowth of developing such a clearinghouse could be further advances in standardizing the documentation for cross-border leases and facilitating their application to smaller transactions. By making risk-sharing arrangements more transparent, differences between various foreign jurisdictions can be established and individual transit agencies can make go/no-go decisions faster and more accurately.

Ideally, a clearinghouse could maintain a database covering the factors below, and also offer transit agencies a limited amount of technical assistance in relating the information to their individual transactions:

- Size of transaction and gross benefit level (including methodology for calculation)
- "Repeat" or "first-time" transaction -- was documentation already available from an earlier cross-border lease?
- Anticipated benefits and terms before closing compared to actual results after closing
- Transaction expenses for placement agent, financial advisors, legal, appraisal, banking
- Special factors affecting benefits and expenses -- interest rates and exchange rates
- Credit rating of the transit agency and defeasance bank
- Country which is the source of equity
- Country where the equipment originates
- Nature of the equipment financed - new/used, bus/rail, locomotive/passenger, heavy/commuter/light rail
- Defeasance approach and interest rates for borrowing and interest-bearing accounts
- Basis for discount rate used to calculate present value benefits in true-funded leases

- Maturity
- Key risks and means of addressing, including bankruptcy, casualty, withholding tax and Value Added Tax Liability
- Methods of procurement and types of advisors used to undertake transaction:
  - Negotiated, competitive, competitive negotiation
  - Underwritten bids
  - Non-underwritten bids or "indicative" pricing proposals
  - Placement agent solicits and negotiates equity, debt and defeasance arrangements
  - Use of municipal finance advisor to select placement agent or evaluate "net benefit" proposals

6. Transit Experience in the Use of Certificates of Participation

A. The COPS Credit

The use of Section 9-supported Certificates of Participation (COPS) has strengthened the popularity of leasing buses in recent years. COPS allow investors to receive a share of the lease payments made by transit agencies to a lessor. The local transit authority sells facilities or equipment to a non-profit entity or trustee which acquires title to the assets with the proceeds from the COPS. The non-profit, tax exempt or trustee status of the lessor makes it possible for the rent payments to be passed through to the certificate holders without income tax liability. The capital paid-in by the COPS holders to the lessor is used by the transit agency to pay the manufacturer for the equipment.

The authority's lease payments are assigned to the holders of the COPS over the life of the asset. The lessor entity often is related to the lessee transit agency, permitting a high degree of control to be maintained over the underlying assets.

COPS owners have no claim to the underlying assets being financed, only the flow of lease payments made to the lessor.

For example, in June, 1992, the California Transit Finance Corporation entered into a lease with the Los Angeles County Transportation Commission (on behalf of the Southern California Rapid Transit District) that secured a $118.4 million issuance of Certificates of Participation for 333 buses. The Official Statement for the transaction affirms the basic difference between a Certificate of Participation and a conventional, asset-based lease financing:

> "THE PROJECT [BUSES AND RELATED EQUIPMENT] WILL NOT SERVE AS SECURITY FOR THE OBLIGATION OF THE COMMISSION OR THE DISTRICT TO MAKE PAYMENTS UNDER THE LEASE AGREEMENT OR THE MOU. IN NO EVENT WILL THE CORPORATION OR THE TRUSTEE HAVE ANY RIGHT TO RELET, REPOSSESS OR OTHERWISE INTERFERE WITH THE DISTRICT'S USE AND POSSESSION OF THE PROJECT." (shown as capitalized, page 9)

Even though COPS are a subordinated form of debt (that is, their claims on local tax revenues are junior to those of bond holders), they are still highly marketable when properly structured.

For example, some of the revenues identified as possible sources of funds for the LACTC's Section 9 COPS lease payments also have been pledged to the Commission's sales tax revenue bonds. As a result, the Official Statement for LACTC's Section 9 COPS includes the following caveat:

> "...THE COMMISSION MAY ISSUE AN UNLIMITED AMOUNT OF ADDITIONAL DEBT FOR WHICH THE REVENUE BOND PLEDGED REVENUES MAY BE PLEDGED AND WHICH WOULD HAVE A SUPERIOR CLAIM TO THE REVENUE BOND PLEDGED REVENUES THAN THE LEASE PAYMENTS." (shown as capitalized, p. C-14)

Nonetheless, the June, 1992 COPS received ratings of A1 (Moody's) and A+ (Fitch). How was such a high credit rating possible? The following structural factors account for the strength of the underlying security for the transaction:

1. A large measure of coverage is provided:

- Section 9 grants over the 12-year life of the COPS are anticipated to yield $47 million per year in revenues. The COPS have priority on these federal funds. With $11.75 million from local sources for the 20 percent matching share, a total of $58.75 million is available annually in comparison to net annual lease obligations ranging from $10 to $15 million. Local restrictions, however, are placed on the maximum proportion of the region's Section 9 funding which can be used for the COPS.

- The local share of the COPS payments is a maximum of $3 million, compared to $155 million in local tax revenues available under the Memorandum of Understanding between SCRTD and LACTC regarding the COPS. Funding beyond the local share would be provided from these sources if a shortfall in Section 9 apportionments occurred. *FTA regulations prohibit the pledge of fare revenues for federally-supported COPS issues.*

2. Reserves are well-funded:

- Eighty percent of the first lease payment is capitalized with proceeds from the Certificates.

- A reserve fund equal to 10 percent of the principal amount of the COPS is created.

3. The vehicles are essential to operations.

4. Extensive insurance coverage is provided.

5. The obligation of the LACTC to make its lease payments is unconditional from the revenue sources identified and not dependent upon future operation of the buses.

B. The Section 9 Connection

Section 308 of the Surface Transportation and Uniform Relocation Assistance Act of 1987 (P.L. 100-17, STURRA) authorized the use of Section 9 federal transit funds for leases of facilities and equipment at the 80 percent matching level in projects where leasing is determined to be more cost effective than purchase or direct construction. Previously, the interest portion of lease payments was treated as an operating expense and eligible for reimbursement at a 50 percent matching ratio.

The Senate Report language for Section 308 (Senate Report No. 100-3, 1987) of STURRA envisioned application of federal transit leasing for such items as: "computers, maintenance of way and other heavy equipment, maintenance of effort rail equipment, radio equipment, bus garages, property or structures for park and ride, and other buildings or facilities used for mass transit purposes."

The leasing provisions of STURRA were the subject of a Notice of Proposed Rulemaking on May 20, 1988. A Final Rule was issued by FTA (49 CFR Part 639) on Capital Leases on October 15, 1991.

The primary change reflected in FTA's Capital Leasing guidelines is the ability to treat lease payments, *including interest costs* as capital expenses eligible for reimbursement at the full, 80 percent federal matching level.

The opportunity to commit federal funds for transit investments, subject to authorization and appropriation, for extended time periods is seen by many in the transit industry as a significant benefit. Flexibility in applying federal funds toward either leases or purchases permits local decisions to be driven by capital investment needs and preferences, rather than year-to-year appropriations or matching ratio penalties. Local funds that would have been used for match in a lump-sum instead can be applied

toward making larger purchases sooner, accelerating projects which do not lend themselves to debt financing, or deposited in interest-bearing accounts to offset future lease payments.

Thus far there have been seven Section 9-supported COPS transactions that have been used to acquire 606 buses. The list of transactions is shown on TABLE 1 in Chapter 2. All of the COPS issues shown have had 12-year maturities, funded bus purchases and involved transit agencies with dedicated sources of revenue. The aim of the transit authorities who have raised capital through the sale of Section 9-supported COPS has been to make larger one-time bus purchases than a pay-as-you-go strategy would permit.

FTA's guidelines allow any asset eligible as a capital item to be leased (Section 639.11[a][1]) and the limited application of federally-supported COPS to buses is likely to broaden over time. Historically, municipalities have leased all forms of vehicles (police cars, trucks, and fire engines) and fixed facilities (prisons, city halls, garages, and even parks). FTA's *Introduction to Public Finance and Public Transit* observes that (page 110): "Leasing statutes in most states allow for the lease financing of nearly all capital assets. From a transit perspective this includes buses, rail cars, rail stations, catenary electric systems, support vehicles, transit maintenance bases, fuel storage facilities, administration buildings, bus shelters and park and ride lots. It can also include equipment, computers, desks, etc."

As noted earlier, in 1985 the City of Sacramento financed a complete, 3.5-mile at-grade light rail line segment using COPS supported by municipal revenues and tax increment district receipts. The Sacramento COPS funded tracks, stations, electrical substations, catenary, signals and 15 light rail vehicles.

In other cases, assets such as computers, have been leased in order to minimize the need to dispose of equipment subject to rapid obsolescence. Equipment and facilities required for temporary use also has been leased in

order to facilitate acquisition and minimize the uncertainties of selling used assets in the future.

Despite the growing investor acceptance of federally-supported COPS, it is likely that the financial markets still discount the future Section 9 revenues, focusing their credit analysis primarily on the non-federal flows of funds available for lease payments. As noted in FTA's *Introduction to Public Finance and Public Transit* (page 108): "...the rating agencies substantially discount the value of the FTA funding in evaluating the credit standing of the transit agency issuer, thus requiring a greater demonstration of local resources."

In addition, FTA's capital leasing guidelines impose a financial capacity test which requires that the lessee transit agency certify that it has the ability to meet future lease obligations in the absence of federal funding (Section 639.15[b][1]). Since leases for buses run for twelve years, and terms for other types of assets could extend even further, there are definite risks that over the course of a lease Congress might not re-authorize the Section 9 program, could reduce or eliminate funding for Section 9 even if it is authorized, or could lower the federal matching ratio. FTA's financial capacity certification mirrors the financial security protection sought by private investors in lease financings.

The history of the federal transit program supports a realistic assessment of risk associated with future Section 9 grants. Earlier Administrations have recommended elimination of federal transit programs entirely, as well as severe reductions in funding. There is substantial year-to-year variation in appropriations and the actual level of funding provided by Congress may bear little relationship to the amounts authorized in enabling legislation. In addition, there have been periods historically when Congress has failed to reach a consensus on a budget and the federal grant-making process has been affected.

A critical factor for transit agencies considering the use of Section 9-supported COPS is their ability to comply with FTA's financial capacity certification and the financial markets' tests for alternative sources of revenue. The value of future Section 9 funds in supporting long term lease obligations must be viewed realistically.

B. Anticipated Benefits of COPS

FTA requires that a determination of cost effectiveness be made in order to justify a lease structure instead of a traditional purchase arrangement. The calculation is made by the grantee using the guidance set forth in FTA's Final Leasing Rule (Section 639.21), and involves a self-certified net present value analysis of costs and benefits. Pages 132 to 150 of FTA's *Introduction to Public Finance and Public Transit* discuss evaluation factors to consider in selecting a financing approach, as well as specific debt instruments. Sample calculations and methodologies for making cost effectiveness calculations are also presented.

The FTA's calculation of costs and benefits for COPS transactions was reviewed for only two transactions where data was available. No formal breakdown of transaction costs was available in either case. In one of the transactions, the benefit from leasing was based upon the ability to accelerate a bus acquisition by one year and thereby realize a five percent savings from avoided inflation increases. The leasing benefit in the second case was calculated by assuming the grantee deposited the local share into an interest bearing account and earned income on the balances as payments were extended over a 12-year period.

In San Diego's COPS issue there were net present value savings over a direct purchase and a bus acquisition was enlarged. Accelerating the replacement of older vehicles yielded gains from lower bid prices for an

increased order size, as well as from the substitution of new buses for obsolete, high-maintenance equipment.

COPS have been used for relatively small scale transactions, compared to cross-border leases, and the benefit level compared to the costs appears to have been favorable.

However, many benefits associated with COPS may be more difficult to calculate because they have a more qualitative nature than say, a hard-nosed analysis of net benefit for a cross-border lease:

- Ability to undertake larger, or more projects than cash on hand would otherwise permit,
- Smoother cash flow requirements which better match revenues and outlays,
- Avoided inflation costs and better prices from larger, one-time equipment orders, and
- Reduced operating and maintenance costs from accelerated retirement of worn-out equipment.

As noted earlier, five of the seven Section 9-supported COPS transactions thus far have occurred under the aegis of an entity called the California Transit Finance Corporation (CTFC). The case studies below show how both large and small agencies have used the CTFC to issue Certificates of Participation and the benefits that motivated their transactions.

CASE ANALYSIS OF CTFC TRANSACTIONS: LACTC COPS and Cross-Border Lease, Riverside and SunLine COPS

The California Transit Finance Corporation, or CTFC, is a novel response to many of the obstacles that have made debt financing and the use of COPS difficult for many public transit agencies. Established in 1990 by the California Transit Association, CTFC facilitates pooled COPS transactions by serving as the non-profit lessor, permitting issuers to share transaction costs and standardizing documentation.

Smaller transit authorities tend to be at a disadvantage in accessing the capital markets. Transaction costs associated with smaller transactions tend to be proportionately higher, while the terms often may not be as favorable as in larger deals. Transit agencies with only a few buses may be unable to devote internal staff resources to assembling and managing the teams of experts required to close transactions. CTFC is a model for permitting joint transactions that can expand the use of COPS to a broader range of transit agencies.

Thus far, CTFC has served as a vehicle for aggregating several COPS-based bus procurements into a single transaction, has facilitated the largest COPS transaction to date, and has played a key role in a combined COPS/cross-border lease. Essentially, CTFC offers a financing infrastructure that provides benefits to transit agencies of different sizes. For the largest systems, it reduces the time and paperwork required for individual COPS transactions. For smaller organizations, it allows access to capital markets that might not be available at all, given the scale of purchases. In all instances it eases administrative burdens by sharing documentation and the costs of preparation.

CTFC is governed by a board of directors made up of California transit property officials. Additional representation is available on an advisory committee.

Through the CTFC program, COPS are issued using common agreements and a single official statement covering all of the participants. To guide its transactions, CTFC engages a financial advisor, bond counsel, underwriter, and other required professional services. Differences between transit agencies with respect to fiscal structures or even credit ratings can be accommodated through issuance of COPS in separate series.

Prior to a decision to participate, CTFC offers California transit agencies a detailed analysis of the proposed transaction including an assessment of risks, costs, and likely benefits. There is no charge for this assessment. Once the CTFC and the agency agree to proceed with the transaction, standardized documents and terms already approved by FTA are brought to bear. CTFC promotes the fact its transaction costs are lower than if an authority sets out to finance a procurement individually.

To date, CTFC has only been involved in bus purchases, although a maintenance facility project is under discussion.

CTFC transactions rely, to a great extent, on the experience of the San Diego Metropolitan Transit Development Board, which sponsored the first Section 9-supported COPS transaction listed on TABLE 1 in Chapter 2.

CTFC involvement varies from large purchases, such as the $118.3 million LACTC bus procurement, to pooled transactions for smaller organizations, such as a $3.4-million, 10-bus buy for the Riverside Transit Agency that was combined with a $5.3-million purchase of 17 buses for the SunLine Transit Agency.

In fact, over time, it is possible that these smaller transit systems will become the major participants in the COPS market. The attraction of standard documents, federal pre-approvals, along with the ability to conserve scarce local dollars, points the way for similar financing vehicles to be created in other states.

The following examples demonstrate how CTFC assisted in both large and small COPS transactions, including one with a cross-border lease component.

1. LACTC COPS and Cross-Border Lease

The Los Angeles County Transportation Commission or LACTC, now re-organized with the Southern California Rapid Transit District (SCRTD) as the Los Angeles County Metropolitan Transportation Authority (MTA), was responsible for subsidizing bus services, as well as the construction and operation of a network of light, heavy, and commuter rail lines. With about 2,500 buses, 9,000 employees, and 1.3 million weekday customers, the SCRTD is among the largest transit operators in North America.

The District has an extensive history of equipment financing transactions. In 1984 it issued $18.85 million of Equipment Trust Certificates secured by liens against buses purchased with the proceeds and a credit enhancement. A similar Equipment Trust transaction was completed in 1986 for $24.13 million. In 1991 the LACTC completed a $19.34 million COPS transaction for 60 over-the road coaches and 26 fixed-route buses through the California Special Districts Lease Finance Program on behalf of the City and County of Los Angeles and the City of Santa Clarita.

With CTFC (see description above) as the lessor, LACTC sold COPS, on behalf of the SCRTD, in the amount of $118,370,000 in July, 1992 to finance the acquisition of 333 buses. The order comprised 30

Flxible diesel buses with particulate traps and 303 TMC methanol-fueled buses. The equipment has now been accepted and the transaction completed.

Lease payments are being funded essentially through the same combination of federal and local funds that typically supports transit services in the Los Angeles region. Eighty per cent of the lease costs will come from FTA Section 9 formula capital grants. Approximately $47 million per year is projected to be available to Los Angeles under Section 9 through the remaining years of ISTEA. However, the proportion of the future grants pledged to the COPS was subject to local limitation.

Twenty per cent of the lease payments will come from local funds. Local fund sources in Los Angeles, as in the rest of California, are relatively complicated. The local share includes what are known as TDA funds (enacted in the California Transportation Development Act of 1971), which provide one-fourth of one per cent of the current state 7.25 percent sales tax for transit operating and capital expenditures in the county in which the tax is collected. TDA funds provide two sources of revenue.

Sales tax revenue is deposited into the county Local Transportation Fund, or LTF. These funds are available to the various operators in the County based on a formula. The buses acquired in this transaction are being operated by the former Southern California Rapid Transit District, which is an eligible recipient of LTF aid. While fluctuation in the apportionment of these sales taxes is expected because of recent instability in the local economy, the District estimates it will receive about $142 million in LTF funds in FY 1994. LTF funds can be used for operating or capital purposes and can be shifted from one category to another. To date, transit agencies tend to use most of their LTF dollars on operating expenses.

The District also receives TDA funds through the State Transit Assistance Program which provides assistance on the basis of population and operating revenue-related formulas. In FY 1994, the District expects to receive about $13.6 million from this program.

These revenue sources, together with certain other categories of funds available to the region, will be used to pay the 20 percent local share of lease costs.

For the most part, LACTC chose to use COPS to protect scarce local operating resources. During the last few years, public transportation in the Los Angeles area has been facing growing financial constraints. With severe clean air mandates and new rail services coming on line at the same time the local economy has weakened, a COPS issue offered the opportunity to maintain the flow of resources to avoid cutbacks in transit operations.

The cost of the 333-bus order was $93.5 million. Under a traditional FTA purchase, LACTC would have needed $74.8 million in capital grants to cover the 80 percent federal share and $18.7 million in local aid to fund the remaining 20 percent. Utilizing the COPS mechanism, LACTC instead was responsible in FY 1993 for a $15.2 million net lease payment of which $12.1 million was allocated from its FTA Section 9 grant and $3 million from local sources.

For the Commission, the primary impact of the COPS transaction was to make more than $15 million in local aid available for operating purposes. While the FTA evaluation criteria compare the long-term costs of leasing and purchasing, in all probability the true benefit to the LACTC was to avoid, or postpone a severe curtailment of service.

LACTC also achieved many of the other typical advantages of COPS transactions, which are explored below.

The Commission would not have had the resources to fund a procurement of this size all at once. With total FTA formula capital grants of about $47 million coming to the region, use of even the entire annual apportionment for just the SCRTD's project would have been insufficient to fund the $75-million federal share. The alternative would have been to supplement the federal funds with additional, but already-scarce California funds, or to stretch the purchase over two or more years.

Traditional analysis of this type of transaction would assume inflation-related increases in the cost of bus acquisitions which extend over several years. While LACTC may well have saved anywhere from two to five percent with a one-time purchase, bid prices in the transit bus market have followed a somewhat erratic pattern making inflationary impacts difficult to track. At the same time, methanol-fueled buses represent new engine technology whose costs may vary further from usual pricing trends.

LACTC's ability to finance a 333-bus order may have also generated lower per-unit costs. An order of this magnitude would have been among the largest bus purchases of the year in the U.S. market. Splitting the order into several procurements, while still representing substantial individual purchases, would likely have carried a higher cost per bus.

There is a further savings, also difficult to quantify, from a large one-time order in terms of maintaining consistent fleets. Maintenance costs tend to be lower for fleets of similar vehicles. Breaking the Los Angeles order into several smaller pieces could have resulted in more manufacturers and in a more diverse set of components and mechanic skill requirements, all of which factor into overall maintenance expenses.

The advantages of interest earnings on unexpended capital funds and the earlier retirement of older equipment should also be taken into consideration in evaluating this transaction.

LACTC also chose to conduct the procurement through the California Transit Finance Corporation. While the Commission as well as SCRTD, which was then in a subsidiary relationship, had the resources and expertise to undertake the COPS on its own, CTFC was able to add an element of simplicity. Already-standard documents, an available team of financial advisors, and FTA approvals through CTFC speeded-up the process and reduced necessary internal review and administration.

Overall, the chief benefit of the LACTC COPS was to allow the District to buy buses without a significant impact on local funds which were needed to sustain operations.

The Cross-Border Element

SCRTD also structured Japanese cross-border leases for the 303 methanol buses which resulted in a further savings of about $1 million. CTFC played a key role in this element of the acquisition as well.

In the interest of further reducing the costs of acquiring its new buses, SCRTD and LACTC decided to solicit proposals for cross-border leases. In response to concerns raised regarding the fees paid and benefits received for the LACTC's Blue Line light rail car cross-border lease in 1990, a primary objective was to minimize transaction expense. As a result, SCRTD's Chief Financial Officer solicited and evaluated proposals directly from "arrangers."

A Japanese leveraged lease (JLL) structure involving a Cayman Islands special purpose corporation was selected, with the same leasing company and U.S. "arranger" that undertook the Seattle METRO cross-border bus lease in 1991.

The SCRTD transaction was modeled on the JLL undertaken by Seattle METRO to the extent that the same documentation was used.

In the interest of minimizing fees which had to be paid directly by SCRTD, the U.S. "arranger" and the leasing company proposed to absorb all but $45,000 in legal and out of pocket expenses. The balance of the fees for SCRTD's legal counsel, lessor's legal counsel, lessor's tax counsel and Cayman Island's counsel were to be disbursed from the "arranger's" fee, which would be paid by the Japanese equity investors.

Normally in a JLL, title to the assets is sold to Japanese investors directly, or through a special purpose corporation established in a tax haven, such as the Cayman Islands. However, under the LACTC's COPS transaction, title to the buses was to be held by the CTFC for 12 years. The lease agreement between CTFC and SCRTD resolved this potential conflict by permitting the CTFC to transfer legal title to the buses "to the District or any person or entity as designated by the District" (page 24 of the COPS Official Circular).

The underwriter also made CTFC the lender in the cross-border transaction. When SCRTD received the funds from selling title to the buses to the Japanese investors' special purpose corporation, it would refund the 80 percent dollar-denominated portion to the CTFC. The CTFC would then use these dollars to fund the loan to the Cayman Islands lessor. CTFC would owe the 80 percent portion to SCRTD through a note denominated in dollars. Payments under the note by CTFC to SCRTD would match the dollar portion of the rents SCRTD would have to pay and the debt service the Japanese investors' lessor

entity was obligated to pay. By having the SCRTD and CTFC set-off the amounts owed to one another, the dollar loan for 80 percent of the purchase price would be defeased.

Due to delays in receiving buses from the manufacturer, SCRTD was not able to realize the full range of benefits anticipated when the transaction was initiated. The original schedule called for the vehicles to be delivered by December, 1992, however, buses were still arriving during the second half of 1993. Some of the buses arrived too late to be of tax benefit to the investors and yen interest rates declined during the period of delay, reducing the District's benefit level.

The COPS and cross-border financings were structured independently, with the CTFC serving as the link between the two.

2. Riverside and SunLine COPS, June, 1993

Riverside and SunLine are two small authorities serving portions of Riverside County and its municipalities, located to the east of the Los Angeles metropolitan area.

Riverside Transit primarily operates in the western portion of Riverside County with direct or contracted service both within the county and connecting to other suburban counties. Its fleet is made up of 65 buses as well as an assortment of mini-buses and vans. SunLine Transit is a little smaller, operating in the central and eastern sections of Riverside County. It has a total of 47 vehicles in its fleet.

Riverside and SunLine are a good counterpoint to the LACTC case study. As representatives of smaller transit agencies around the nation, they make up a new market for lease and COPS financing. With relatively recent COPS issues, the benefits of these transactions have not been realized as delivery and acceptance of the buses has yet to occur.

The general issues related to the acquisition of buses are relatively similar for both the Riverside and SunLine agencies. Each has a need to replace older equipment, as well as expand their fleets to keep up with increasing ridership. Riverside County has experienced significant population growth over the past decade, despite the economic slow-down.

Riverside is purchasing 10 standard transit buses with alternative fueling requirements and related equipment that are to be delivered in June, 1994. SunLine is buying 17 compressed natural gas-fueled buses and related equipment that will be delivered by the end of 1993. *The two purchases were pooled into a single COPS transaction through the CTFC.*

While the scale differs markedly, the financial structure for these two systems is similar to the SCRTD's. Traditional capital procurements have been made with 80 percent federal funds and a local match made up of TDA sales tax revenue directed through the county Local Transportation Fund and the State Transit Assistance Program.

In FY 1993, Riverside was allocated about $1.2 million in Section 9 aid, while SunLine received just over $0.5 million. Combined with available local match, Riverside in all likelihood faced the possibility of banking its resources for at least three years, or buying two to three buses per year. With a need of 17 vehicles and receiving even less federal and state funds, Sunline's procurement would have stretched over at least five years.

In these cases the opportunity to undertake a pooled COPS transaction through the CTFC was probably the only option available for one-time, larger purchases. The agencies received a number of significant benefits.

Small transit systems frequently suffer most from higher prices for limited order quantities. While even 10 and 17 buses are not huge orders, there is likely to be some cost relief even at that scale compared to instances where the manufacturer has to set-up its assembly line for a purchase of two or three vehicles.

The only other alternative would have been for Riverside or SunLine to somehow attach their orders to those of larger agencies. Meshing the differing procurement requirements and vehicle specifications of multiple jurisdictions often slows down, if not defeats joint purchasing. Because the bidding processes for these procurements are not yet complete, it is too early to assess the precise price impacts.

While the effect of inflation on the LACTC acquisition would have been limited because of the likelihood of it stretching over only two years, the certainty of an inflation penalty is much greater for Riverside and SunLine. With purchases spread over, or delayed five years or more the cost would undoubtedly go up, and perhaps significantly so.

Moreover, both Riverside and Sunline have reached the stage where they need to provide more service now. Receiving the buses sooner is therefore a significant benefit for the public.

The existence of the CTFC was the only reason transit systems of this size were able to successfully pursue COPS financing. The ratio of fees and administrative costs to actual equipment purchase prices generally is higher for small transit systems who have probably never utilized anything but the simplest, pay-as-you-go financing strategies. CTFC offered a one-stop-shopping possibility where the acquisition could be assessed and administered without the need to create new documents, solicit an advisory team, analyze the market, and line-up

investors. Additionally, Riverside and SunLine were able to combine their COPs in one transaction -- albeit in two series -- and basically share what would have otherwise been redundant expenses.

Once completed, the actual and anticipated benefits of the Riverside/ SunLine transaction should be compared to better understand its applicability elsewhere in the U.S.

7. Questions to Consider in Applying COPS

The previous section reviewed the factors which caused transit agencies to turn to the Section 9-supported COPS financing mechanism and the experiences of both large and small issuers in implementing their transactions. Based upon these observations, what are some relevant factors for local, state and federal policy-makers to consider in evaluating future federally-supported COPS financings?

A. Are the cost and benefit calculations being assessed related to the underlying aims of FTA's COPS initiative?

The fundamental goal of the FTA's capital leasing program has been to provide grantees with the flexibility to adapt their future cash flows to the investment needs of their agencies. The flexibility is based upon recognition that transit agency capital budgets are likely to be "lumpy," with heavy outlays required in certain years to fund expansion or replacement projects. The expenditures must be made over a concentrated time frame in order to undertake construction or acquisitions on the most economically-efficient basis. The federal requirement for approval, however, is a demonstration of cost effectiveness, the key component of which is a net present value analysis that compares leasing with purchasing the assets.

The models used in FTA's, *Introduction to Public Finance and Public Transit* and those employed in the cost effectiveness analysis for several of the transactions reviewed portray the case for COPS-based lease financing. From a federal perspective, however, the larger goal of improved capital investment decision-making and cash flow management must be considered.

While grantees can "lock-in" the anticipated interest earnings on the local share of a COPS transaction and any reserve balances through investment agreements with banks (or structure defeasance arrangements

which permit the underlying debt to be re-funded if interest rates decline), the 80 percent federal portion of the annual lease payments is "true-funded." As a result, FTA is incurring risk exposure for interest rate changes -- if interest rates decline below the rate assumed in the cost effectiveness test, the U.S. Treasury will, in effect, be borrowing at higher rates than the current market. The opposite would be the case if general interest rates rose above the level anticipated when the COPS were proposed. Since the cost effectiveness test is made from the perspective of the grantee, the federal risk exposure for interest rate fluctuations is not necessarily incorporated into the calculations.

Therefore, a key consideration is whether or not capital programs are actually being modified -- are Section 9 Programs of Projects and Transportation Improvement Plans being adjusted to show more capital investment is occurring sooner as a result of federally-supported COPS financings? Alternatively, if local resources are constrained by recession and economic problems, does the COPS structure permit previously-planned capital expenditure levels to be maintained?

If so, then the down-side interest rate risks incurred by the FTA may be offset by the benefits of more rational capital budgeting and expenditure decisions at the state and local levels, as well as the ability to sustain needed capital replacement and improvement programs during periods of economic turbulence. The impact of individual COPS issues on implementing regional investment priorities can be determined by examining plans for capital expenditures before and after the transactions are proposed.

On the other hand, if COPS are used to reduce near-term capital outlays of state and local funds and the balances are shifted to reducing operating deficits, as appears to have been the case in the Los Angeles transaction described above, is this practice consistent with the objectives of federal leasing policies and do the benefits warrant the cost of FTA's interest rate risk exposure?

B. How are benefits being counted?

By definition, the benefits arising from the application of COPS will be more intangible than those attributed to cross-border leases. How can the value of accelerating capital projects be fully quantified?

The calculations reviewed regarding anticipated inflation savings, for example, appear to be subject to interpretation. It is possible that year-to-year cost fluctuations may be more influenced by the level of factory capacity being utilized, ancillary equipment required by mandates (wheel chair lifts), and whether or not the vehicles have alternative fuel power plants than by order size or general inflation. In instances where cost savings from reduced maintenance and parts inventories are indicated, have before-and-after calculations been made to quantify the differences experienced once the new equipment is placed in service?

If COPS are applied to fixed facilities, is the same form of analysis appropriate to apply? Unfortunately, in many cases, the issue may not be accelerating a capital project, but whether or not the project is undertaken at all. The benefits to the public from new or improved service are difficult to quantify objectively and should be the subject of a consensus methodology between grantees and FTA.

Working through a methodology to objectively assess the benefits of adjusting capital program outlays by employing federally-supported COPS should be just one element of a much broader effort to make capital investment decisions in the transit industry on a more business-like, quantitative basis. It is not a matter of FTA approving individual projects, but for the transit industry to have reasonably sophisticated capital budgeting tools for making informed investment decisions *at the local level.*

The types of issues that need to be addressed in developing capital budgeting models include:

- If investments are made to reduce maintenance costs, then are the savings actually realized in the form of lower operating outlays? If so, what is their magnitude and how long does it take to recover the cost of the investment? Is an analysis made prior to the investment decision, and what internal evaluations are conducted afterward to verify that the anticipated benefits are realized? For example, if COPS are issued to accelerate the retirement of older buses that are prone to break-down, do future operating budgets reflect the anticipated savings?

- If a list of possible capital projects is formulated, how are the projects ranked in priority and how are they sequenced?

- If service expansion or improvement is contemplated, on what basis are such decisions made and how are route priorities established? How are benefits to the public quantified in terms of new routes, more frequent headways, better vehicles or fewer in-service breakdowns?

- How can choices among projects be developed:

  Can an investment in automatic vehicle locator equipment yield comparable service with a reduced fleet? Can it result in lower outlays for field supervision and non-revenue vehicles?

  Will investing in high tech maintenance facilities reduce labor requirements or the number of shops?

By sharing experiences and documenting costs and benefits, the data can be generated to facilitate real-world capital budget analysis. Again, FTA can play a useful role in providing a clearinghouse for this information. Through access to industry-wide data on costs and benefits of various capital projects and vehicle acquisition approaches, FTA can assist grantees in

optimizing their returns on capital investment, as well as making more informed judgments on financing strategies.

Using the comparative data may prove to be a better basis for assessing cost effectiveness and "reasonableness" than attempting to set formal guidelines. Any formal guideline can become more or less relevant as financial and operating conditions change over time, and as methodological variations begin to creep into the evaluation process.

In cross-border leases benefit levels can be calculated directly from the interest rate factors and transaction costs. As a result, the focus on transaction expenses is very strong: every extra expense produces a reduction in cash benefits, which is the very reason for undertaking the transaction. However, in COPS, the benefits are more related to better matching cash flows with capital investment needs. While transaction expenses are an important consideration in evaluating the actual cost of funds (effective interest rate), the decision to proceed with a COPS financing involves broader capital investment decisions related to the outlays and benefits of the underlying projects themselves.

C. How significant is having a dedicated revenue source in successfully executing a Section-9 COPS transaction?

All of the Section-9 COPS transactions to date have involved agencies with dedicated sales tax revenues. Similarly, most, if not all, of the non-federally supported COPS transactions by transit issuers were undertaken by agencies who have dedicated sources of revenue. In one instance, Philadelphia's SEPTA leased commuter rail maintenance facilities at a time when it did not have access to dedicated revenues (which are now provided under Pennsylvania's recent Act 26 legislation). SEPTA's financing had back-up credit support from the City of Philadelphia.

It is likely that an agency without dedicated revenues can meet FTA's financial capacity criteria as well as pass muster with the credit agencies, if it obtains a credit back-up from its principal state and local funding sources. The COPS issue would then be rated primarily as an appropriations risk of the supporting local or state entity providing capital and operating subsidies.

D. Are Section 9-related COPS potentially of greater value to smaller transit agencies?

Based upon the transactions closed thus far, it appears that smaller agencies may be deriving proportionately greater benefits from the ability to increase bus order sizes than the bigger agencies. The absolute level of dollars flowing to the smallest transit systems is often insufficient to support economic levels of investment and purchase order quantities. The alternatives, as noted in the case studies above, are to spread-out purchases, undertake joint procurements with other agencies, or wait until adequate funds are "saved-up" to initiate needed projects.

States and regional planning bodies ultimately must consider whether it is economically efficient to sustain public transit agencies functioning below a certain scale of operations. If economics or politics results in a determination that these systems will be part of the provider network over the long term, then mechanisms such as financial transaction pooling, joint-use facilities (maintenance bases), and joint purchasing agreements are needed to assure their future cost effectiveness. The California Transit Finance Corporation is an excellent model for states and regional entities to consider in structuring such arrangements.

E. What are the barriers to broader applications of COPS to assets other than buses?

Given the costs, benefits, and procedures already in place for applying FTA-supported COPS to bus purchases, what obstacles exist for the application of this concept to facilities (depots, shops, parking garages, rail stations, intermodal transfer facilities, headquarters buildings), other equipment (IVHS/ITIS, dispatch, automatic vehicle locator, and fare collection) and more sophisticated rolling stock (LRVs, locomotives, heavy rail cars, and commuter rail coaches)?

The precedents for application of leasing to assets other than buses is well established in both public transit and municipal finance practices in general. For facilities and rail-related assets, the lease term is likely to extend beyond 12 years. For example, Sacramento's COPS for its light rail segment had a maturity of 27.5 years, with two-thirds of the principal payable in the last year. This compares to the structure of the FTA-supported COPS transactions closed thus far, with maturities of 12 years and level annual principal payments.

The primary consideration in applying FTA-related COPS to longer term assets is the value added by the Section 9 funds. If the reliability of Section 9 grants is perceived to be limited by the financial markets and FTA's financial capacity criteria are taken seriously, then higher interest expenses and lower credit ratings may result, diminishing the amount of up-front capital which can be derived by leveraging future Section 9 funding.

Therefore, seeking to finance assets with lives beyond 12 years becomes less of a Section 9-related consideration and more of a local finance question: is the agency better off issuing lease-type debt on a subordinated basis, or using its senior debt capacity to achieve the most favorable interest rates? The answer will vary depending on the agency's available debt capacity, its credit rating, the nature of its capital investment needs in relation to its anticipated revenues, and market conditions at any point in

time. For an agency without a dedicated revenue source, the same questions must be answered by the state, county, city or regional governmental unit that is appropriating the underlying funding.

At the other end of the spectrum, for short-lived assets, it is possible that the format of the "lease vs. buy" cost effectiveness calculation tends to favor purchases. The period over which interest can be earned on invested balances is reduced, short term interest rates tend to be lower, and the net present value calculations may not prove to be as attractive. Given the increasingly high technology content of transit equipment, it is important that this potential area of analytical bias be evaluated. Financial structures which encourage rapid deployment of new technologies and system up-grades will become increasingly essential to controlling the costs of transit services, as well as offering improved services to the community. The differences in cost on a net present value basis must be balanced against the high risk of rapid obsolescence associated with new technologies (either as a result of system up-grades, or the exit of a vendor from the marketplace leaving "orphan" equipment behind). Properly factoring the risks of asset ownership into the financing equation may encourage broader use of FTA-supported leases for shorter-lived assets.

F. Are there other provisions of ISTEA which can facilitate federally-supported COPS transactions?

One of the greatest uncertainties in leveraging Section 9 funds is the degree to which future grants are discounted in the financial markets. On the other hand, any form of federal guarantee would trigger the loss of tax exemption on interest and raise borrowing costs significantly. The difficulty rests in seeking to identify a stable stream of federal revenues without incurring the disadvantage of a loss of tax exemption.

One approach to supplementing the credit value of Section 9 funding is to incorporate the transferability features of ISTEA legislation which permit

federal highway funds to be shifted to programs operated by the Federal Transit Administration.

Federal highway funds can be transferred up to certain authorized levels through actions taken by states and regional planning bodies (MPO). Additional funds can be shifted with authorization from the Secretary of Transportation. In certain cases, the federal highway funds are apportioned directly to larger urbanized areas and local officials have a relatively high degree of control over how the funds are expended.

The federal highway program offers only limited capability to borrow against future revenue streams through its advance construction program. Funds must be repaid within a few years from future apportionments under currently-authorized legislation -- commitments beyond the existing authorization period are not possible. ***Therefore, the only option to substantially increase the leverage potential of federal highway grants is to use the ISTEA transfer provisions in connection with FTA's Section 9 leasing program.***

Federal highway funds have a longer and more stable history of appropriations than the federal transit program. With a dedicated national tax, contract authority arising from trust fund revenues and a solid constituency, investors accord a stream of future grants from the federal highway program a higher value than a stream of Section 9 grants.

Several strategies may be possible to apply ISTEA's transfer features to increase the leveraging potential of Section 9-supported lease financing.

It is possible for a transit agency to secure a pledge from the recipient of federal highway grants in its region that shortfalls in anticipated Section 9 funding earmarked for a COPS issue would be made-up with transfers of federal highway apportionments. The federal highway funds would be used as a credit support for the annual Section 9 grant. Each year, the state or regional body could set-aside funds for transfer in the event of a Section 9

shortfall. If the shortfall did not occur, the funds would be re-programmed for other transit or highway projects. If the federal highway funds were transferred due to an insufficiency of federal transit apportionments, then a "reverse transfer" could be effected under ISTEA to repay the highway program when the transit funds became available.

This credit-support approach would increase the "coverage" available to COPS holders, bring to bear a highly credible supplemental revenue source, and avoid a direct federal guarantee. The result would be less reliance on local revenue sources in making the credit assessment, as well as the potential for longer term commitments.

Appropriation risk would be present with regard to the potential imposition of obligation ceilings on highway trust fund apportionments. Authorization risk would exist relative to the transfer provisions of the ISTEA legislation, potential federal matching ratios, as well as continuation of the highway program itself. These risks would probably be sufficient to avoid the appearance of a federal guarantee, but still represent an attractive credit.

Another possible approach under ISTEA could involve establishing a COPS program for a major capital investment project, such as a rail system, that was supported by transfers from federal highway apportionments. This approach is under consideration by the Commonwealth of Puerto Rico in financing part of the cost of a rail project in San Juan.

If a state or regional body is contemplating large investments in highways and mass transportation, it may prove to be advantageous to fund the highway projects with state and local revenues and finance the transit projects through leases supported by transfers of federal highway apportionments to the Section 9 program.

The following example demonstrates the benefits of using federal highway apportionment transfers to fund large transit projects, while preserving state and local debt capacity for highway investments.

CASE EXAMPLE: FHWA/SECTION 9 COPS

Assume that a state department of transportation must make a $100 million outlay for a rail project in a particular fiscal year. Assume further that the state expects to meet this obligation from a $30 million increment in its regular gasoline taxes and by shifting $70 million in highway projects from bond funding to Federal Highway Administration (FHWA) grants. The shift of highway projects from bonds to federal grants would free-up local resources for the rail project. The bond funds can be used for either roads or transit. The following calculations show that the result would be a one-time, 37 percent cut in planned highway investment from $270 million to $170 million.

However, it is possible that by transferring federal highway funds to the Section 9 federal transit program and issuing COPS to lease the rail assets, only $10 million in highway investment, or less than 4 percent of the annual program, would have to be deferred each year over the life of the COPS. The smaller annual deferments often prove less disruptive to capital investment plans than a large, one-time outlay. In using FHWA-supported Section COPS, the road projects programmed for construction with federal highway grants would be shifted to local bond funds.

The following calculations demonstrate the benefits and issues involved in alternative leveraging scenarios:

COPS IMPACT ON HIGHWAY INVESTMENT OUTLAYS

Assumptions:

- $100 million is required for rail transit in a given fiscal year.
- $10 million debt service is required annually for $100 million in bonds or lease payments for COPS.
- The State's federal highway apportionments have shown stability or growth for 25 years.
- The State's revenue bond covenants have a debt service coverage requirement of 1.5.
- The State has a $30 million increase in local revenues from growth in existing taxes and fees.

State Highway Revenues in Current Fiscal Year:

Incremental Local Funds	$ 30 million
FHWA Apportionment	$ 80 million
TOTAL	$110 million

AVAILABLE FOR NEW HIGHWAY COMMITMENTS $110 million

CASE 1. No Bonds or COPS

Incremental Local Funds	$30 million
Federal Highway Funds	$80 million
Total Investment Funds Available	$110 million
Rail Transit Drawdown	($100 million)
Net Funds Left For Highways	**$10 million**

CASE 2. With Bonds But No COPS

Maximum New Debt Service @ 1.5 coverage:		$20 million
Maximum Amount of New Bonds	$200 million	
"Free" Revenue Not Needed for Debt Service	$10 million	
Less This Year's Debt Service	($20 million)	
Subtotal - Local Funds for Investment	$190 million	
Federal Highway Funds	$80 million	
Total Investment Funds Available	$270 million	
Rail Transit Drawdown	($100 million)	
Net Funds Left For Highways	**$170 million**	

CASE 3. With Bonds and COPS

Maximum New Debt Service @ 1.5 coverage:	$20 million	
Maximum Amount of New Bonds	$200 million	
"Free" Revenue Not Needed for Debt Service	$10 million	
Less This Year's Debt Service on Bonds	($20 million)	
Less This Year's Debt Service on COPS	($ 2 million)	- 20% Local
Subtotal - Local Funds for Investment	$188 million	
Section 9 COPS	$100 million	
Federal Highway Funds	$80 million	
Less This Year's Debt Service on COPS	($ 8 million)	- 80% Federal
Subtotal - Federal Funds for Investment	$172 million	
Total Investment Funds Available	$360 million	
Rail Transit Drawdown	($100 million)	
Net Funds Left For Highways	**$260 million**	

SUMMARY

Funds Available for Highway Investment After $100 Million Rail Transit Outlay

CASE 1 - No Leverage	=	$ 10 million
CASE 2 - Bonds but No COPS	=	$170 million
CASE 3 - Bonds and COPS	=	$260 million

The sample calculations demonstrate that without any leverage, the State would only be in a position to make $110 million in new highway commitments from its incremental revenues and federal highway apportionments, with just $10 million left after the rail outlay. Funds for the rail project would come from the $30 million increment in state tax revenues and $70 million in local funds shifted out of the highway program. The $70 million of local resources would be replaced by federal highway grants. The net result would be $10 million in new federal highway obligations and $70 million of road projects previously programmed for local funding that would now have to be part of the federal program.

By issuing bonds with its growth in tax revenues, the State's highway investment program for the year could have totalled $270 million after conservatively subtracting debt service for the first year. However, the rail outlay reduced the funds available for highway improvements by $100 million to only $170 million.

With the issuance of bonds supported by the growth in tax revenues and $100 million of COPS backed (for the 80 percent federal share) by future federal highway apportionments, the State would be able to make the $100 million rail outlay and $260 million in new highway commitments -- only a 3.8 percent reduction in highway commitments over what would be possible without the rail transit expenditure.

For the State to proceed, the following questions would have to be considered:

Would the Federal Highway Administration approve?

The level of annual transfers in this example does not require federal authorization, the decision is made by the State or MPO. The issue of making future commitments to effect transfers might require some attention at FHWA headquarters. Once shifted to the Section 9 program, FTA guidelines would apply.

What credit issues would arise?

Is the 10:1 coverage ratio of federal highway grants to annual COPS payments adequate to avoid having to provide additional security from a credit enhancement or a junior pledge of local revenues? What types of reserve requirements might be required?

What would be the State's coverage ratio if it had to make the COPS payments without the federal funds? Would the State's credit rating be affected unless additional tax revenues were raised? Could the State certify to FTA that it could support the COPS payments without the federal funds?

How strong of a pledge to make future transfers from the federal highway program to the FTA Section 9 program for the COPS payments would the State have to make?

Over how long of a maturity could the State issue its Section 9 rail COPS? Could the lease financing of rail vehicles, stations, electrical equipment, shop facilities, or a complete segment of the line secure a reasonable credit rating if a maturity comparable to Sacramento's light rail COPS (27.5 years) was proposed? How seriously does the credit market perceive the risks of re-authorization of the federal highway program, continuation of the transferability feature, or reductions in future apportionments?

Could the Private Sector Help?

Would vendors for the rail transit system be willing to accept the federal highway/Section 9 COPS on better terms than ordinary investors? Could paying the vendors in COPS for rail equipment reduce the need for debt service reserves, credit enhancement, or a junior pledge of local gasoline tax revenues? Would the vendors accept a longer maturity period than would be possible otherwise? Would transaction costs be reduced?

General FTA-Supported COPS Outlook

Opportunities to build upon the important base of experience with Certificates of Participation established by the California Transit Finance Corporation, the San Diego Metropolitan Transit Development Board, and their team of underwriters, financial advisors and legal counsel now exist. Pooled transactions for smaller agencies, standardized documentation, improved understanding of costs, risks, and benefits, and better appreciation by the financial markets of the credit issues posed by federal grants should result in broader applications of lease financing by agencies of all sizes to an expanded range of assets.

APPENDIX A

True-Funded Japanese Leveraged Lease Description

The information in Appendix A was developed with Capstar Partners, Inc., a New York-based investment banking firm specializing in leasing and related transactions. No representation or warranty, express or implied, as to the accuracy or completeness is made by Jeffrey A. Parker or Capstar Partners, Inc. A sample Term Sheet has been prepared for demonstration purposes only and is not intended to serve as the basis for any specific financing. This presentation has been prepared solely for information sharing with the public transit industry.

Overview

A Japanese leveraged lease ("JLL") provides tax advantaged financing for the acquisition of a new asset by allowing the lessee to benefit from the asset's depreciation in Japan. During the lease term, title to the asset is held by a foreign lessor for the benefit of Japanese investors who, by way of a 20 to 25 percent equity investment in the lessor company, are entitled to claim tax deductions for (i) 100 percent of the asset's depreciation under Japanese law and (ii) the interest paid pursuant to the lessor's non-recourse borrowing of the remaining 75 to 80 percent of the asset's purchase price.

At the end of the lease term, title can revert to the lessee by its exercise of a fixed price purchase option. Japanese equity investors not only earn a large portion of their return from the rental and purchase option cash flows, but also receive a significant tax deferral benefit, much of which is passed on to the lessee through reduced rentals. Lease payments are made in two currencies: (i) the currency in which the loan is denominated (U.S. dollars); and (ii) Japanese Yen. Most lessees choose to defease the Yen portion of the lease and leave the U.S. Dollar funding in place. However, both the U.S. dollar and Yen portions of the rentals and the purchase option

may be "economically defeased" or prepaid by the lessee placing deposits at closing date.

For the purposes of this appendix, it is assumed that the lessee defeases the Yen portion of the transaction and keeps the U.S. Dollar loan in place as its "true" funding.

Economic Benefit

The benefit from a Japanese leveraged lease is typically calculated as a "present value" benefit to the lessee. This calculation determines the present value of all payments made pursuant to the lease, assuming a discount rate, in the case of a "true-funded" JLL, equal to (i) the lessee's normal U.S. Dollar debt rate and (ii) the Yen Deposit rate, in the case of Yen-denominated payments due under the lease.

Lessee Purchase Option

The maximum purchase option at the end of a Japanese leveraged lease term is 10 percent of lessor's cost for any equipment (other than aircraft, where a maximum residual of 45 percent is allowed). As such, U.S. tax counsel view Japanese leveraged leases as having a so-called "bargain" purchase option. This structure transfers the risk of change in residual value from the lessor to the lessee, further qualifying the lease from an accounting perspective as a debt financing for the lessee. Even if the lessee under a JLL chooses not to exercise the purchase option, the alternative is to pay the lessor the amount of any shortfall between the price at which the lessor can sell the asset and the 10 percent purchase option. Given that the lessee has typically provided for the purchase option through a Yen deposit and does not realize any economic benefit by not exercising the purchase option, it will almost certainly elect to acquire the assets. For U.S. tax purposes, the lessee is considered the owner of the equipment.

Termination of the Lease

As previously mentioned, a Japanese leveraged lease provides the lessee with an option to purchase the asset upon expiry of the lease for a fixed purchase option price and upon early termination of the lease in certain circumstances. Such instances typically include a lessee or a lessor default, a casualty with respect to the asset, the imposition of increased costs due to a change in law, any illegality associated with the transaction, or the denial of tax benefits in Japan. These potential outcomes are examined in the Risk Allocation section of this Appendix. It is worth noting in this regard that the amount payable upon early termination depends upon which party is nominally responsible for causing the termination, and that in today's market, a transaction can be structured where the Japanese investors will not expect an indemnity for a loss of their tax benefits.

Equipment and Lease Term

Typically, Japanese leveraged leases can be considered only for new acquisitions of equipment. The maximum term for a Japanese leveraged lease is 120 percent of the statutory depreciable life of the asset in Japan, rounded up to the next full year. Buses, for example, have a depreciable life for Japanese tax purposes of six years, so that the maximum lease term for a Japanese leveraged lease is 120 percent of its depreciable life (rounded up), or eight years.

Withholding Tax Issues

Since a Japanese leveraged lease is viewed by U.S. tax authorities as a debt financing, the rent payments will be characterized as return of principal and payment of interest. The payment of interest may be subject to U.S. withholding taxes unless any one of the following conditions is met:

(i) interest is paid to a U.S. individual or corporation;

(ii) the payment of interest qualifies for the Portfolio Interest Exemption wherein payments of interest to individuals and corporations, but not to banks, are not subject to withholding taxes. Although many lenders in Japanese leveraged leases may be banks, the payment of interest is characterized as being made to the lessor, which will be a special purpose company or corporation, not a bank; or,

(iii) interest is paid to a lender who is headquartered in a foreign jurisdiction which qualifies for a treaty exemption from U.S. withholding taxes, such as Holland, France, and the U.K.

Tax counsel are often reluctant to rely solely on the Portfolio Interest Exemption for the assurance that U.S. withholding taxes can be avoided and transactions generally must be structured with lenders which are headquartered in treaty-qualified countries, as determined by the IRS.

Japanese withholding tax may apply between payments from the lessor to the lender but may be avoided if the lender is either a Japanese branch of a non-Japanese financial institution, or a foreign branch of a Japanese financial institution.

Participants

The participants in "true-funded" Japanese leveraged leases consist of a lessee, lessor and lender - much as in most leveraged leases. However, a closer look reveals that some of these participants have unique characteristics and must conform to certain requirements. Developing an understanding of these participants and the requirements to which they are subject provides insight into the transaction mechanics as well as to how a transaction may be negotiated.

Structurally, the lessor (the "Lessor") is a special purpose company located outside of the U.S. that is controlled by a major Japanese leasing company (the "Parent"). The Parent will arrange the participation of one or more Japanese corporate investors (the "Equity Participants"), each of whom will enter into separate Tokumei Kumiai ("TK") agreements with the Lessor. Unlike the U.S. lease equity market for big ticket assets, which is dominated by finance company subsidiaries of large corporations and banks, the Equity Participants in a Japanese lease are typically smaller corporations.

These Equity Investors tend to be passive investors who will rely on the Parent to negotiate the transaction for them. Japanese lessors are generally very accommodating with respect to terms and conditions. In addition, the Parent will support the Lessor's obligations pursuant to a legally binding comfort letter (the "Comfort Letter").

The lenders providing loans in JLL transactions (which are non-recourse to the lessor) are most typically banks. This has been the case both because the bank market has historically been the most efficient source for financing and certain banks have structural advantages with respect to withholding tax issues.

Flows of Funds

The following diagrams portray the flow of funds in a "true-funded" JLL at the time of closing, during the lease term, and at expiration.

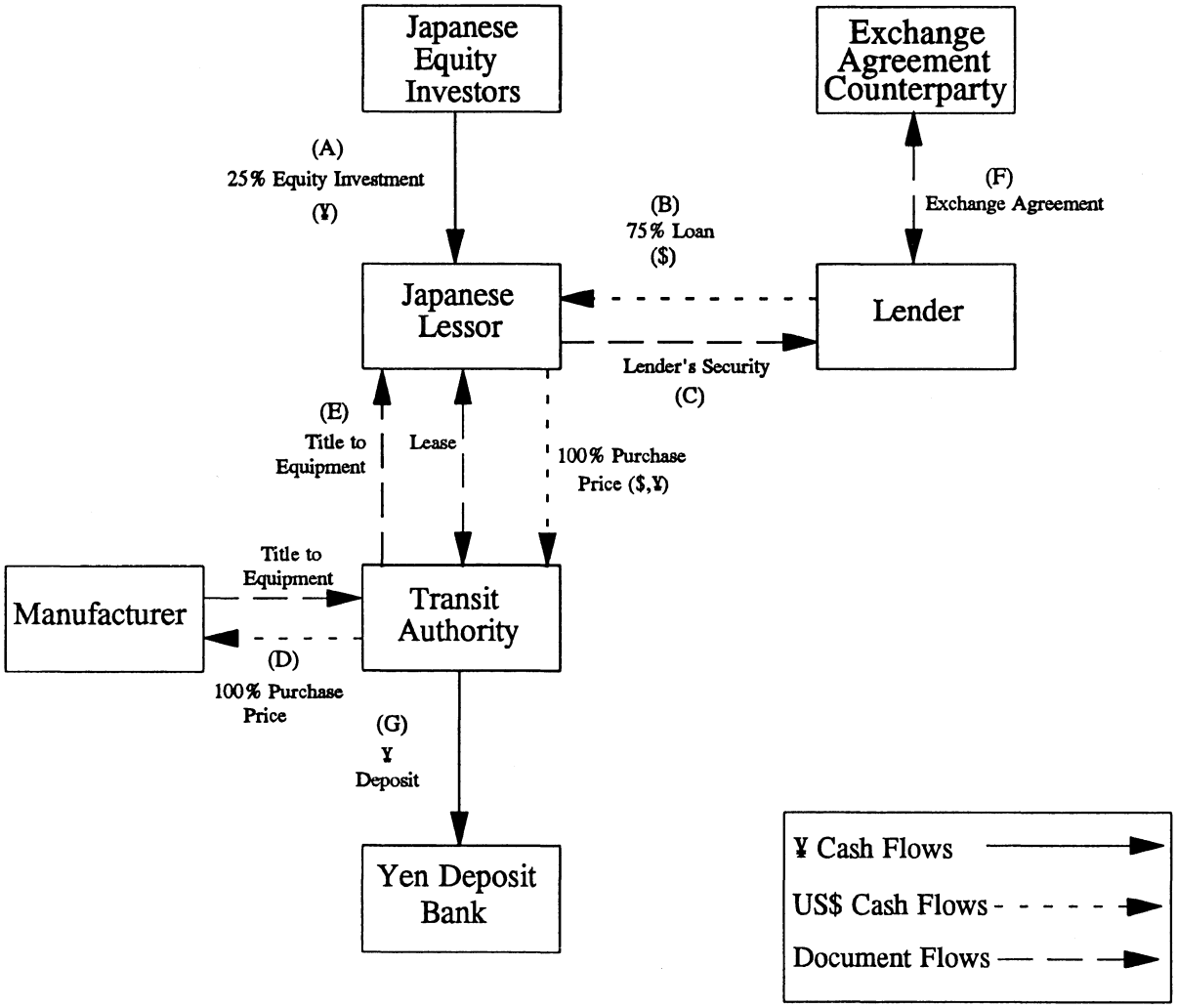
Description of Cash Flows at Closing (True-Funded Lease):

Lessor's Funding: A Japanese special purpose company (the lessor) funds its purchase of the equipment with **(A)** an equity investment in Yen from Japanese equity investors equal to 20 percent of the equipment cost and **(B)** a loan for 80 percent denominated in U.S. dollars. As security, the lender receives **(C)** a first priority interest in the equipment and an assignment of the debt-related portion of the lease payments.

Purchase of Equipment: Upon **(D)** assignment of the equipment purchase contract and **(E)** payment of the purchase price, the lessor takes title to the equipment and leases it to the lessee.

Interest Rate/Currency Exposure: The debt rate in the lease is fixed. The lender may enter in to a Exchange Agreement with an Exchange Agreement counter-party in order to receive a floating rate of return **(F)**. To hedge its Yen currency exposure, the lessee may **(G)** place a Yen deposit which, with interest, will produce cash flows sufficient to pay the Yen portion of the rents and purchase option.

CASH FLOWS AT CLOSING
(True-Funded JLL)



Description of On-Going Cash Flows (True-Funded Lease):

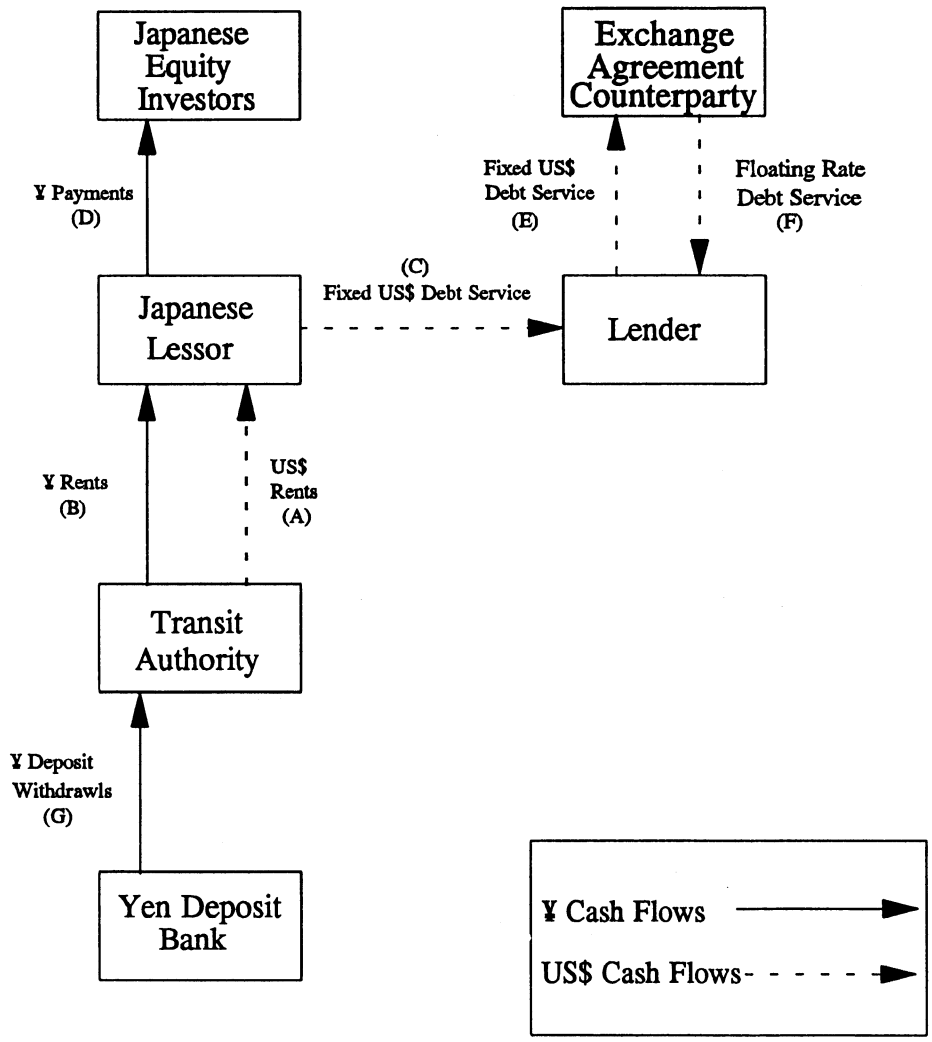
Rental Payment Structure: The lease provides for level, semi-annual rent payments to the lessor which are denominated in two currencies: **(A)** U.S. dollar rents in amounts equal to the debt service due on the loan; and **(B)** Yen rents. Having defeased the yen rents at closing, this obligation is paid as due from the Yen deposit **(G)**. The lessee is left with fixed rate debt service on the loan.

The lessor pays the lender the U.S. rent amounts due under the loan **(C)**, and pays the Japanese equity investors Yen payments **(D)** which, when combined with the Japanese tax benefits, provide an acceptable after-tax return to the investors. In return for paying the Exchange Agreement counter-party fixed interest due under the loan **(E)**, the lender receives a floating rate of return **(F)**.

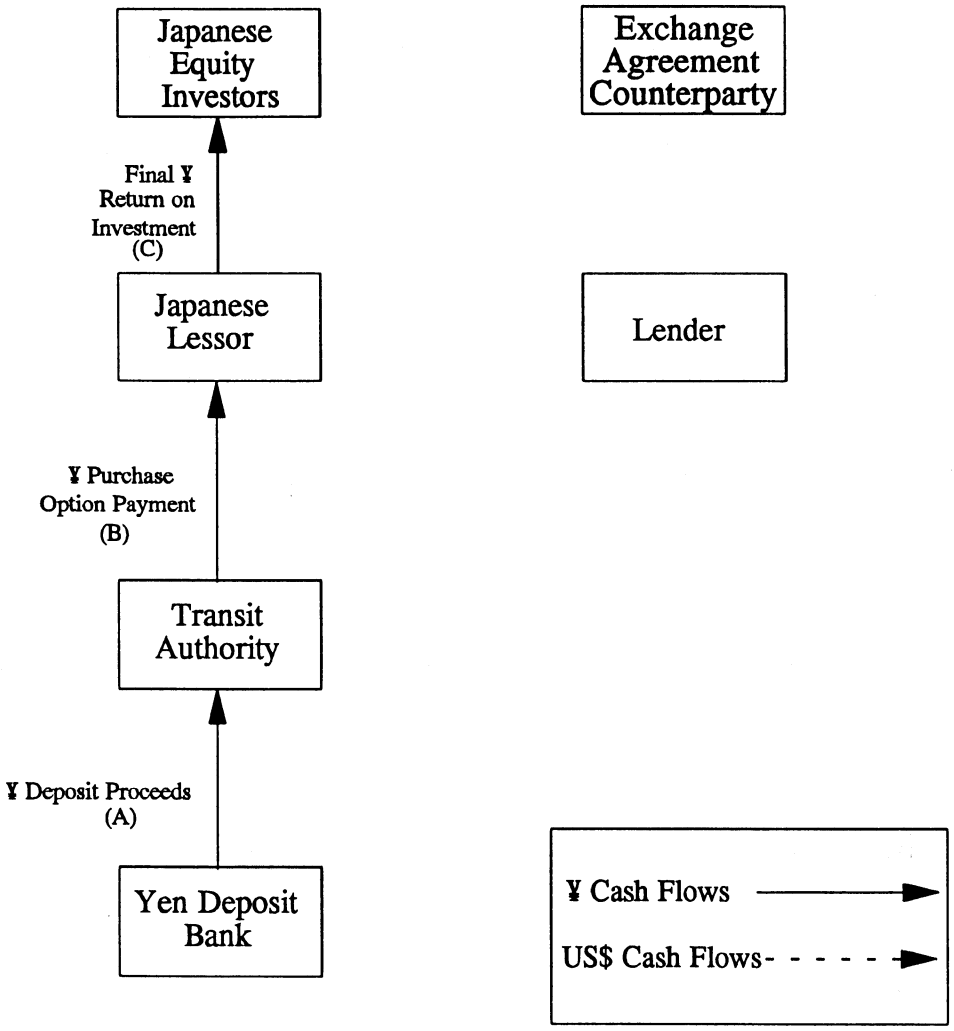
Description of Final Cash Flows (True-Funded Lease):

Purchase Option: The lessee has an option to purchase the equipment for a fixed amount, which it must pay whether or not it wants to take title to the equipment. The maturing proceeds of **(A)** the Yen deposit equal **(B)** the amount of the Yen purchase option payment and **(C)** is paid by the lessor to the equity investors.

ON-GOING CASH FLOWS
(True-Funded JLL)



FINAL CASH FLOWS
(True-Funded JLL)



Risk Allocation

In properly managed JLL transactions, not only are risks clearly enumerated in the documents, but a specified "exit price" matrix is negotiated, setting forth prices for unwinding the transaction depending on the nature of the event.

A critical component of any cross-border financing is the jurisdiction in which the lessor takes its tax benefits. Under a JLL, the lessor bears almost all responsibility for Japanese tax law. The lessee has no on-going tax indemnification responsibility. This includes attacks on the structure of the transaction by the Japanese tax authorities, changes in tax rate and other changes in tax law.

The risks in Japanese leases are clearly defined. A specified "exit price" matrix is negotiated, setting forth prices for unwinding the transaction depending on the nature of the event. Events causing a termination of the transaction can be grouped into three general categories:

(i) events attributable to the lessee or the lessee's jurisdiction;

(ii) events attributable to the lessor or the lessor's jurisdiction; and

(iii) events not attributable to either the lessee or lessor or their respective jurisdictions.

Events attributable to the lessee or the lessee's jurisdiction include Events of Default, Events of Loss, the imposition of a U.S. withholding tax or U.S. illegality. The exit price in such cases is known as "Stipulated Loss Value" which is calculated as the sum of (i) the Yen amount sufficient to maintain the Equity Participants' originally anticipated after-tax yield and (ii) the outstanding principal balance of the Loan, together with accrued interest.

In Japanese leases, events which are not under the lessee's control are considered to be extremely unlikely. Termination events attributable to the lessor or the lessor's jurisdiction are broadly categorized as "Lessor Events of Default" or "Lessor Unwind" and involve an exit price called "Unwind Value." Lessor Events of Default include a failure by the lessor or its parent (the equity underwriter) to lift liens and other acts which impair the lessee's quiet enjoyment of the equipment or its title to equipment at the end of the lease term. A Lessor Unwind occurs when the lessor terminates the transaction as a result of a change in its assumed tax benefits, Japanese illegality or the imposition of Japanese taxes after the Closing Date. **The Unwind Value is calculated to preserve the lessee's up-front benefit**, or more precisely, as the sum of (i) the outstanding principal balance of the Loan, together with accrued interest, and (ii) an amount in Yen equal to the market value of the Yen Deposit.

The third category of termination events consists of "Involuntary Termination" events which are not attributable to either the lessee or the lessor or their respective jurisdictions. Consequently, the burdens are shared between lessee and lessor. Examples include the illegality of, or increased costs associated with the continued participation in the transaction by the Lender. The exit price for Involuntary Terminations is "Termination Value," which is computed as the sum of (i) the outstanding principal balance of the Loan, together with accrued interest, and (ii) such additional Yen amount as may be required to preserve **one half** of the Equity Investors' originally anticipated after-tax yield. Standard Japanese lease documentation will also require each of the participants, to negotiate in good faith to restructure a transaction in order to avoid an Involuntary Termination.

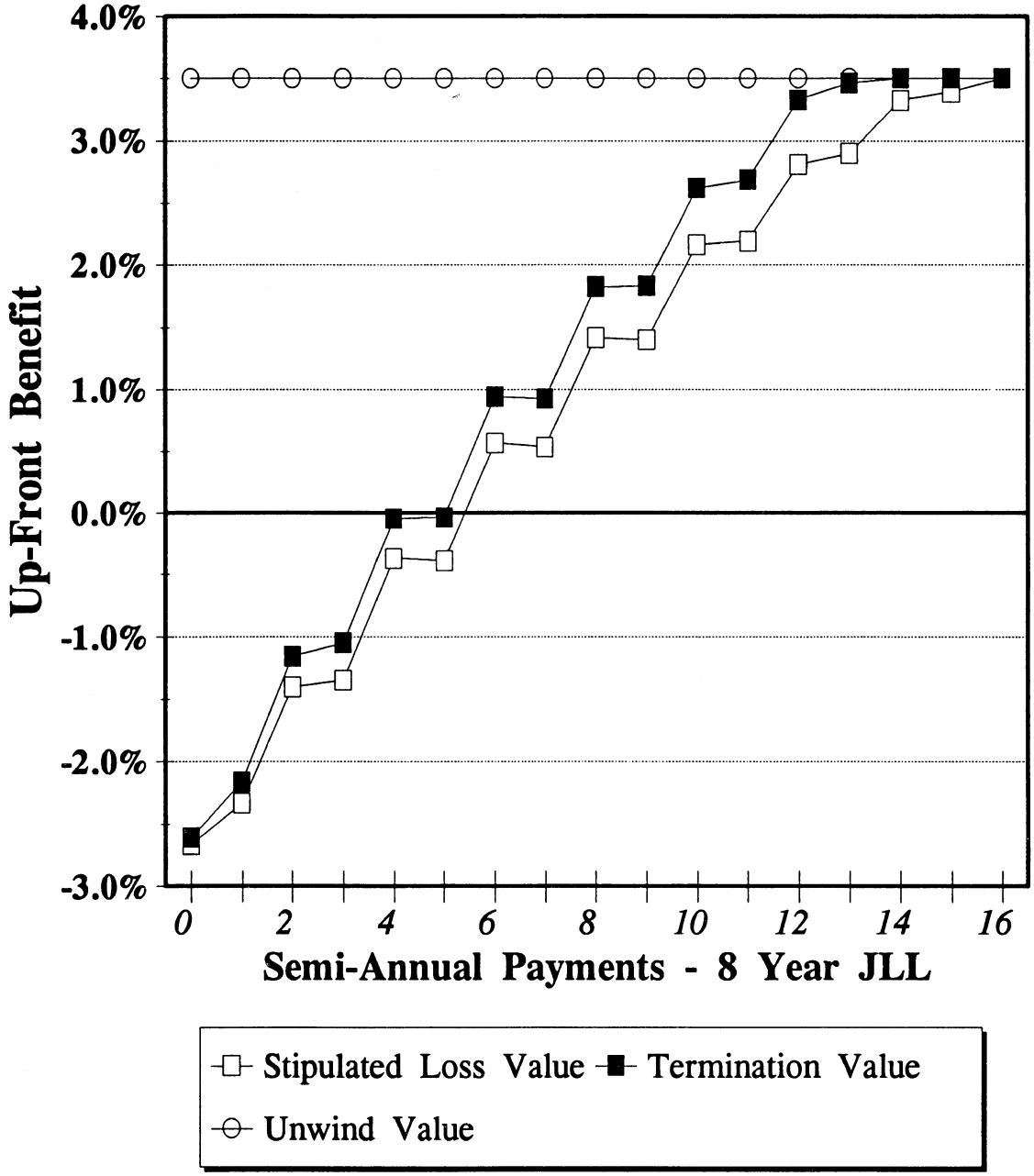
An early lease termination due to events attributable to the lessee or an Involuntary Termination can reduce and even eliminate the lessee's Net Present Value (NPV) benefit in a JLL transaction. The earlier the termination, the greater the potential reduction in NPV benefit. The following graph shows how NPV benefit will be affected over an indicative, eight-year lease under each of the three early termination payment scenarios. ***There do not appear to be any instances thus far of early termination of a JLL for reasons other than lessee defaults and casualties.***

The following table summarizes the different termination events and the exit prices which are applicable under a generic risk allocation scenario. This structure provides both the lessee and lessor with an effective risk management framework. While the exit prices define the potential costs of possible unwind events, it should be recognized that the likelihood of these situations arising is generally remote.

A placement agent will help negotiate the precise definition of the events and responsibilities outlined above and ensure that the exit values are properly calculated.

Early Termination Payment Obligations

Note: Calculations are Hypothetical



SUMMARY OF LEASE TERMINATION EVENTS

Termination Event	Payment/Transfer of Title
Expiration of the Lease - Purchase Option is exercised.	The Lessee pays the **Purchase Option Price** (equal to the Stipulated Loss Value). Title to the Equipment transfers to the Lessee.
Expiration of the Lease - Purchase Option is not exercised.	The Lessee pays **Stipulated Loss Value.** The Equipment is sold for cash and the amount of any net proceeds is rebated to the Lessee up to the amount of the Stipulated Loss Value.
Loss of the Equipment	The Lessee pays the **Stipulated Loss Value.** Any insurance or other recoveries are for the Lessee's account. Title to the Equipment transfers to the Lessee.
Voluntary Termination/U.S. Withholding Taxes	The Lessee pays the **Stipulated Loss Value.** Title to the Equipment transfers to the Lessee.
Lessee Event of Default	The Lessee pays the **Stipulated Loss Value.** Title to the Equipment transfers to the Lessee upon payment of all amounts owed under the Lease.
Involuntary Termination	The Lessee pays the **Special Termination Value.** Title to the Equipment transfers to the Lessee.
Lessor Event of Default	The Lessee pays the **Unwind Value.** Title to the Equipment transfers to the Lessee.
Lessor's Unwind/Japanese Withholding Taxes	The Lessee pays the **Unwind Value.** Title to the Equipment transfers to the Lessee.

Sample Term Sheet

The overall transaction structure and risk allocation framework of a cross-border lease is set forth in the term sheet. In effect, the term sheet provides an outline of all the aspects of the transaction discussed thus far. A sample term sheet for a true-funded JLL follows.

JAPANESE LEVERAGED LEASE
SUMMARY OF TERMS AND CONDITIONS
(True-Funded Transaction)

Participants and Structure

1. Lessee:	A public transit authority.
2. Equipment:	Approximately _____ new buses (the "Buses") each bus being an "Item of Equipment".
3. Delivery Dates:	Delivery of the Buses has commenced as is expected to continue through late January 1994. Between the Delivery Date and Closing Date, title to the Equipment will be held by _____ (the "Interim Title Holder") under an interim title holding arrangement (the "Title Holding Arrangement").
4. Closing Date(s):	Assumed to be _____.
5. Lessor's Cost:	Assumed to be approximately $ million. The total transaction size will depend upon (i) how many Items of Equipment have been delivered and placed in service prior to the effective date of the Title Holding Agreement, and (ii) whether the Lessor will agree to finance those Items of Equipment

which had been placed in service prior to the effective date of the Title Holding Agreement. The Lessor's Cost will be supported by an invoice from the manufacturer. In addition, the Lessor may obtain an appraisal, at its own cost, to confirm that Lessor's Cost is equal to the fair market value of the Equipment.

6. Lessor: A special purpose company (the "Lessor") that will be controlled by a major Japanese leasing company selected by the Lessee (the "Parent"), which will support the Lessor's obligations pursuant to a comfort letter (the "Comfort Letter"). Among other things, the Comfort Letter will provide that the Parent will ensure that:

(i) The Lessor will be properly managed and not be engaged in any other business;

(ii) The Lessor will remain solvent at all times during the Lease Term and perform its obligations in the operative documents;

(iii) The Lessor will not create or cause to be created any liens on the Equipment (other than those contemplated herein);

(iv) The Lessor's interest in the Lease shall not be transferred without the consent of Lessee and the Lender; and

(v) The Parent will not dilute its interest in the Lessor without the consent of Lessee and the Lender.

7. Equity Participants: The Parent will arrange the participation of one or more Japanese corporate investors (the "Equity Participants"), each of whom will enter into separate Tokumei Kumiai ("TK") agreements with the Lessor.

8. Lender: A Japanese branch of a major non-Japanese bank or a U.S. branch of a major Japanese bank selected by the Lessee. The Lender will be chosen so as to qualify for exemption from U.S. withholding taxes.

9. Funding: On the Closing Date, the Lessor will take title to the Equipment from the Interim Title Holder for payment of cash consideration equal to Lessor's Cost, as evidenced by an invoice, a full warranty bill of sale from the Interim Title Holder and such other documentation as may be satisfactory to the Lessor. Upon taking title to the Equipment, the Lessor will immediately enter into a net lease (the "Lease") of the Equipment to the Lessee. The Lessor's Cost will be funded through the Loan and the Lessor's equity capital (the "Equity Portion" of Lessor's

Cost), which will contributed by the Equity Participants.

10. Yen Deposit: On the Delivery Date, the Lessee will place a Yen Deposit with a bank selected by the Lessee and acceptable to the Lessor (other than the Lender) that will be sufficient to pay the Lessee's future scheduled Yen payments due on each payment date under the Lease. The Yen Deposit will carry a fixed rate of interest determined according to market conditions on the Delivery Date ("Yen Rate") and will be in an amount equal to the present value of the scheduled Yen denominated Rent and Purchase Option Price due under the Lease. The Yen Deposit will be pledged to the Lessor as security.

The Lease

11. Lease Term: Eight years from the Closing Date.

12. Rent: Rent will be paid semi-annually in arrears as set forth in an attached schedule. The portion of the Rent used to pay debt service will be paid in U.S. Dollars. The balance will be paid in Yen.

13. Net Lease: The Lease will be a net lease in which the Lessee will be responsible for all costs and expenses associated with the delivery, use, lease, financing or ownership of the

Equipment including maintenance, insurance, and taxes other than Japanese taxes.

14. Quiet Enjoyment: So long as no Event of Default has occurred and is continuing under the Lease, each of the Lessor, the Equity Participants and the Lender will agree not to interfere with the Lessee's quiet enjoyment of the Equipment.

15. Title/Registration: The Equipment will either be registered in the name of the Lessor as owner and show the Lessee as operator of the Equipment or will be registered in the name of the Lessee and show the Lessor as legal title holder.

16. Lessee Events of Default: The Lease will specify such events which, following customary cure periods, will constitute default by the Lessee ("Lessee Events of Default"). Lessee Events of Default will be standard for international lease transactions of this kind.

Upon a Lessee Event of Default, the Lessee will pay Stipulated Loss Value (as defined below), together with all other amounts as may then be due under the Lease, and the Lease will terminate.

17. Lessor Events of Default: Events of default by the Lessor ("Lessor Events of Default") will be subject to

customary cure periods and will include, but not be limited to its failure to:

(i) remove any liens attaching to the Equipment that are attributable to it;

(ii) protect the Lessee's quiet enjoyment rights; and

(iii) convey title to the Equipment to the Lessee upon either (a) the early termination of the Lease or (b) the exercise by the Lessee of its Purchase Option, subject to the conditions set forth below under Transfer of Title.

In the event of a Lessor Event of Default, the Lessee may terminate the Lease upon payment of the Unwind Value.

18. Event of Loss: In the event of loss of all of the Equipment (an "event of Loss"), the Lease shall terminate and title will be transferred to the Lessee upon payment by the Lessee of the Stipulated Loss Value. The Lessee will retain the proceeds from any insurance after such payment.

19. Purchase Option: Upon the expiration of the Lease, the Lessee will, upon giving the Lessor not less than 60 and not more than 180 days prior written notice, have an option to purchase the

Equipment (the "Purchase Option") for a price equal to 10 percent of Lessor's Cost (the "Purchase Option Price") payable in U.S. Dollars and Yen components.

20. Return of Equipment: If the Lessee does not exercise its Purchase Option it will:

(i) return the Equipment to a location to be mutually agreed-upon in good operating condition that is as good as when delivered, normal wear and tear excepted; and

(ii) pay the Lessor an amount equal to Stipulated Loss Value.

In such event, the Lessor shall appoint the Lessee as its exclusive agent to sell the Equipment for cash at a public or private sale and shall refund to the Lessee the net sales proceeds up to the amount of the Stipulated Loss Value.

21. Voluntary Termination: On any Rent payment date on or after four years from the Delivery Date, the Lessee may, upon not less than 180 days prior written notice, voluntarily terminate the Lease and purchase the Equipment upon payment to the Lessor of the Stipulated Loss Value. The Lessee may also terminate the Lease by paying Stipulated Loss Value in the event of

the imposition of an onerous U.S. withholding tax.

22. Involuntary Termination:

The Lessee may (and in the case of illegality, will) terminate the Lease and purchase the Equipment by paying Special Termination Value in the event of:

(i) an increase in any cost or tax (other than U.S. withholding taxes) on the payments due under the Lease or the Loan; or

(ii) the illegality of the continued participation in the Lease or the Loan of any of the Lessor, the Lessee or the Lender.

Notwithstanding the above provision, the participants will agree to work in good faith to resolve any circumstances that could give rise to an Involuntary Termination so as to permit the continuation of the Lease or the Loan, as the case may be.

23. Lessor's Unwind:

The Lessor may terminate the Lease and require payment from the Lessee of the Unwind Value in the event of:

(i) any change in, or disallowance of the Assumed Tax Benefits;

(ii) if as a result of any change in law occurring after the Delivery Date, Japanese value-added, sales or consumption tax is imposed upon the Lessor or the Equity Participants; or

(iii) the imposition of Japanese withholding taxes.

24. Transfer of Title: Upon termination of the Lease and payment by the Lessee of the applicable Stipulated Loss, Termination or Unwind Value, or Purchase Option Price, as the case may be, together with any other amounts then due and payable under the Lease, title to the Equipment will transfer to the Lessee. Lessor will warrant that title will be free and clear of all liens, encumbrances or security interests created or incurred by the Lessor or the Lender.

25. Stipulated Loss Value: The Stipulated Loss Value will be denominated in U.S. Dollars and Yen components and will consist of:

(i) the outstanding principal balance of the Loan, together with accrued interest; plus

(ii) an additional Yen amount sufficient to maintain the Equity Participants' originally anticipated after-tax yield.

26. Special Termination Value:

The Special Termination Value will be denominated in U.S. Dollars and Yen components and will consist of:

(i) the outstanding principal balance of the Loan, together with accrued interest; plus

(ii) such additional Yen amount as may be required to preserve for the Equity Participants an after-tax yield equal to one-half of the originally anticipated after-tax yield.

27. Unwind Value:

The Unwind Value will be denominated in U.S. Dollars and Yen components and will consist of:

(i) the outstanding principal balance of the Loan, together with accrued interest; and

(ii) an amount in Yen equal to the market value of the Yen Deposit (i.e. net of any breakage costs).

28. Governing Law:

Japanese law.

29. Lessee Representations: The Lessee will agree and represent that, during the term of the Lease, (i) the Lessee has not provided and will not provide funding or has not arranged and will not arrange for any other institution to provide funding to the Lender with respect to the Loan and (ii) the Lessee will not provide funding to a third party for the purpose of that third party assuming or guaranteeing the obligations of the Lessee under the Lease.

The Loan

30. Principal Amount: Approximately 75% of Lessor's Cost.

31. Denomination: U.S. Dollars.

32. Final Maturity: Not to exceed 8 years.

33. Amortization: To be optimized according to a schedule provided by the Lessor.

34. Interest Rate: Assumed to be ____%. Interest will be payable semiannually in arrears on a fixed rate basis, computed on the basis of a 360 day year and twelve 30 day months.

35. Security: The Loan will be non-recourse to the Lessor and secured by the following security arrangements (the "Security"):

(i) A first priority lien over the Equipment (the "Lien");

(ii) A security assignment of the Lessor's rights under the Lease for the portions of (a) Rent and (b) Purchase Option Price, Stipulated Loss Value, Special Termination Value or Unwind Value that are payable by the Lessee in U.S. Dollars; and

(iii) A pledge over the Lessor's account into which all U.S. Dollars payments will be made by the Lessee.

Other Conditions to Closing

36. Other Terms & Conditions: The documentation will contain such other terms and conditions as are customary in transactions of this type, including, but not limited to general indemnification with respect to claims arising out of the ownership, use or operation of the Equipment, maintenance, modifications and improvements, insurance, event of loss, representations and warranties, events of default, the exercise of remedies and standard Eurodollar loan increased cost provisions.

37. Conditions to Closing: Closing of the Lease will be subject to the satisfaction of the following conditions:

(i) Internal approval by the Lessee, Lessor and Lender;

(ii) Satisfactory documentation;

(iii) Receipt by Lessor of the favorable opinion of its tax advisor and legal counsel; and

(iv) No adverse change in Japanese leasing rulings such as tax law, regulations, guidelines or self-regulation by the Japan Leasing Association or in the interpretation or application thereof by the Japanese National Tax Administration toward Japanese Leveraged Leasing before closing.

APPENDIX B

FTA Technical Assistance in Innovative Financing

With most New Start fixed guideway projects tapping dedicated tax revenue sources, and more and more bus properties being supported directly by dedicated taxes, the issuance of transit-related revenue bonds has become increasingly common. This phenomenon has brought transit managers into more regular contact with investment bankers, producing an "infrastructure" of expertise within the transit industry and the financial community to execute more sophisticated financing strategies.

At the same time, the imperative to preserve bond ratings has tended to enforce financial discipline, making the federal role in capital project planning more of a limited partner.

The FTA "Overmatch Initiative" reinforced the "limited partner" federal role by encouraging localities to exceed required matching ratios with the promise of reduced red tape and a higher probability of success in seeking discretionary funding.

As federal participation in a large, "program of projects" is reduced, it becomes more appropriate for spending limits to be set by financial market forces, rather than an FTA edict which could prove susceptible to Congressional intervention.

FTA's support for the use of innovative approaches to project finance has been institutionalized in recent policies and procedures, as well as changes in law:

- Normalizing the Section 9 grant-making process has permitted realistic cash flow planning.

- Self-certification and triennial revenue cycles have tended to reduce the more stifling side-effects of federal guidelines.

- Breathing life into under-utilized leasing and advance construction features of federal legislation has raised new possibilities for accelerating the pace of capital programming, while smoothing-out the costs of meeting capital replacement cycles to match anticipated flows of funds.

- Permitting public transit agencies with major equipment acquisition programs to tap foreign tax benefits using cross-border leases.

- Establishing the "Like-Kind Exchange" policy to free-up cash values in rolling stock funded with federal grants.

- Testing turnkey procurement methods to determine if the industry can benefit from new approaches to planning, building and operating large capital projects.

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) offered additional possibilities for innovation by permitting highway/transit transfers, as well as creating a more favorable climate for private sector involvement in the provision of transportation facilities and services.

Unfortunately, ISTEA's extensive list of demonstration programs and earmarked projects also has heightened the need for greater attention to cash flow management by stepping-up the pressure on available federal resources.

In addition, ISTEA has produced new requirements at the regional level for financial planning. Local Transportation Improvement Programs are now expected to be more than wish lists, if not actually completely

funded. The ability to transfer funds between highway and transit projects, as well as from transit projects back to highway programs, opens new options for improving the management of annual cash flows for all transportation construction, reducing the "pipeline" of unspent federal grants, and providing credit enhancement for securities backed by future federal apportionments and appropriations.

New legislative language has reinforced the emphasis on assuring adequate financial capacity to undertake major capital projects, and focused greater attention on determining cost effectiveness. Calculation of cost/benefit factors is growing in complexity as ISTEA breaks down barriers between modes and overlays broader public policy objectives on transportation investment priorities, such as clean air considerations, reductions in the growth rate of vehicle miles of travel, safety, and land use/economic development considerations.

In addition to new legislative opportunities for creative finance and requirements for more sophisticated planning, the need for greater emphasis on improved financial forecasting incorporated into the FTA project development process has been demonstrated in recent years:

- The impact of financing the capital cost and operating losses of new rail systems on existing local transit services has been detrimental in some cities.

- The depreciation and capital replacement liabilities of maturing rail systems, such as BART and WMATA, are emerging before long-planned "system maps" are built-out.

- The inevitable susceptibility of dedicated revenue sources and general fund support to economic recession has been demonstrated nationally. Shortfalls in dedicated tax revenues have been compounded by lower farebox receipts caused by job

losses in urban areas, as well as unrealized investment income projections due to falling interest rates and reduced annual revenue flows.

- Finally, a disparity between actual and anticipated costs and benefits of a number of rail systems has caused the project planning process to undergo re-thinking.

The bottom-line of recent experiences with innovative finance is a more realistic set of expectations regarding the contributions which are possible. For example, FTA at one time sponsored a Technical Assistance program specifically for projects which did not require any federal assistance. Private equity and joint development were promoted as techniques to permit dramatic reductions in federal participation through cost savings, as well as revenues from new sources.

The results are in, and while many of the concepts have merit in certain applications, expectations for potential benefits proved to be well in excess of market realities. Private equity is not possible for projects which generate net losses and for whom "bankable" revenue projections have never materialized. Joint development was found by FTA's Office of Budget and Policy research to support less than two percent of project capital costs (*Transit Joint Development in the U.S.: An Inventory and Policy Assessment*, University of California at Berkeley, 1992). Recently, WMATA, one of the most successful agencies in concluding joint development agreements shut-down its Joint Development Section as a cost cutting measure. Land lease income was found to decline as projects experienced financial difficulties during the current real estate market shake-out.

Virtually none of the projects accelerated for private sector implementation have gone forward, and many lost credibility in over-selling the potential for private investment. A notable exception is the 42nd Street trolley line in New York City, which is now advancing toward a franchise

competition among pre-qualified vendor teams. In many instances, such as the Hudson River Waterfront and Boston South Piers fixed guideway systems, formerly "private" projects are being advanced as public sector initiatives, complete with Congressional earmarks and full, Alternatives Analysis studies.

In trying to develop realistic expectations of what new financing methods can contribute to transit capital programs, FTA has initiated a technical assistance effort to evaluate recent innovative financing transactions. The evaluation effort is also intended to assist individual transit agencies, states, and regional planning organizations in making realistic assessments of financial capacity and maximizing the benefits which can be derived from the limited funds available for transportation improvements. FTA is sponsoring research to analyze specific transactions involving Certificates of Participation, cross-border leasing, joint development and short term financing.

FTA has recently published a series of guidebooks and educational materials to assist transit agencies in using new financing and project implementation methods:

- *Introduction to Public Finance and Public Transit* (Office of Technical Assistance and Safety, January, 1993) - technical assistance guide

- *Procedures and Technical Methods for Transit Project Planning*, Part II, Chapter 8 - Financial Analysis (Office of Planning, October, 1992) - update of financial planning guidelines for major capital projects

- *Turnkey Procurement Issues and Opportunities* (Office of Technical Assistance, June, 1992) - guidebook on innovative procurement methods

- *Asset Management in the Transit Industry* (Office of Technical Assistance, March, 1991) - guidance on financial capacity analysis

- *Cross-Border Leasing in the Transit Industry* (PPTN, Washington, DC, December, 1991) - handbook on cross-border leasing

- The Office of Budget and Policy also sponsored a detailed study to document and quantify the opportunities and limitations for joint development (*Transit Joint Development in the U.S.: An Inventory and Policy Assessment*, University of California at Berkeley, 1992).

These research and technical assistance initiatives flow from the FTA Strategic Plan's objectives (*Six Year Plan for a National Program of Transit Planning and Research*, December, 1992):

- Increase and stabilize financial capacity at all levels.

- Promote the development of intermodal transportation resources at federal, state and local levels.

- Expand the use of inter-modal market-pricing techniques.

- Encourage diversification in the sources of transportation revenue, including private sector financing.

The mechanisms identified for study under the FTA Office of Technical Assistance and Safety evaluation effort affect the first and last goals FTA has identified. The program also responds to the objectives FTA has set forth to meet these goals:

- Encourage the quest for new capital resources;

- Promote interagency cooperation at all levels as a way of securing access to additional resources;

- Provide financial support in the way of planning and/or research funding to grantees willing to demonstrate options such as congestion pricing;

- Review the existing program requirements to determine whether purely administrative barriers are preventing more widespread adoption of creative financing techniques, and eliminate such barriers where feasible;

- Design and conduct appropriate demonstrations in new financing techniques; and

- Provide technical assistance to expand financial capabilities within the transit community.

Based upon these goals and objectives, FTA established Project Evaluations as one of the target areas in its *Six Year Plan* to "assess the full range of impacts in a manner that the findings and conclusions, as well as the approach, are transferable to other locations." The Plan goes on to state:

> "Evaluations will also be conducted on noteworthy projects that have an innovative financing process. Federally funded construction projects that involve value capture techniques would be candidates for evaluation. Evaluations of meritorious, innovative financial management processes will also be done. Candidates could involve innovative cash management techniques or revenue forecasting methods." (p.III-13)

This guidebook is part of the FTA's innovative finance evaluation effort and is designed to help transit agencies, state governments and federal policy-makers assess when and how to apply cross-border leasing and Certificates of Participation.

APPENDIX C

Research Materials

Approval Letters for COPS Transactions from FTA:
- Tri-Met, September 12, 1990
- MTDB, October 19, 1990
- LACTC, September 17, 1991
- SRTD, April 2, 1992
- LACTC, June 12, 1992
- Pierce County Transit, December 14, 1992
- LACTC, December 1, 1992

Asset Management in the Transit Industry, FTA Office of Technical Assistance and Safety, March, 1991

California Transit Finance Corporation Certificates of Participation 1992 Series B, Official Statement, June 18, 1992

Capital Leases; Final Rule, Federal Register, Department of Transportation, 49 CFR 639, Part IV, October 15, 1991

City of Sacramento 1985 Certificates of Participation, (Sacramento Light Rail Transit Project), Official Statement, June 11, 1985

Cross Border Leasing in the Transit Industry, PPTN, Washington, DC, December, 1991

Cross Border Leasing Guidelines, FTA C 7020.1, April 26, 1990

Financing Turnkey Mass Transit Projects, Jeffrey A. Parker, Commissioned by FTA Office of Technical Assistance and Safety, June, 1993 for Conference on Turnkey Implementation in Miami, FL

FTA Office of Budget & Policy Approval Memorandum - Pierce Transit COP's, June 23, 1992 and amendment of August 14, 1992

Introduction to Public Finance and Public Transit, FTA Office of Technical Assistance and Safety, January, 1993

Like Kind Exchange Policy: 49 CFR Ch. VI, Change in Policy on Sale and Replacement of Transit Vehicles; Rule, Federal Register, Vol. 57, No. 168, August 28, 1992, pages 39328-29

Listing of Cross-Border Lease Transactions Involving FTA Grantees, FTA Office of Chief Counsel, Undated

Los Angeles Times, article: Complex County Rail Car Venture Turns Sour, March 23, 1993, p. B-1.

MLD Bus Leasing, Ltd., Lessor to Municipality of Metropolitan Seattle Nonrecourse Lease Revenue Bonds, Official Statement, September 19, 1993

Moody's Municipal Credit Report - San Diego MTDB Certificates of Participation, December 12, 1990

OMB Circular No. A-94, Revised October 29, 1992, Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs

Passenger Transport, article: DOT Policy Change Designed to Stimulate Vehicle Sales, August 3, 1992, p. 1

Passenger Transport, article: Puerto Rico is Advancing COPS Innovation, March 29, 1993, p. 14

Passenger Transport, article: PATransit Trading in the Old, October 18, 1993, p. 7

Procedures and Technical Methods for Transit Project Planning, Part II, Chapter 8 - Financial Analysis, FTA Office of Planning, October, 1992

Sacramento Regional Transit District 1992 Certificates of Participation, Draft Official Statement, by California Transit Finance Corporation, February, 1992

San Diego MTDB Certificates of Participation, Official Statement, December 1, 1990

Six Year Plan for a National Program of Transit Planning and Research, FTA Office of Technical Assistance and Safety, December, 1992

Transit Joint Development in the U.S.: An Inventory and Policy Assessment, University of California at Berkeley, 1992, FTA Office of Budget and Policy

Triborough Bridge & Tunnel Authority Beneficial Interest Certificates, Official Statement, April 8, 1993

Turnkey Procurement Issues and Opportunities, FTA Office of Technical Assistance and Safety, June, 1992

Interviews:

Rita Daguillard, Esq., FTA Office of the Chief Counsel
Alvin Doehring, Treasurer, WMATA, Washington, DC
John Hackett, Capstar Partners, Inc., New York, NY
Trudy Levy, Esq., FTA Office of the Chief Counsel
Paul Marx, FTA Office of Budget and Policy
Murphy McCalley, Director of Finance & Administration, MTDB
Roman Novack, Maryland Department of Transportation
Thomas Rubin, Treasurer, Los Angeles MTA
David Seltzer, Lehman Brothers, Philadelphia, PA
Josh Smith, Finance Department, Seattle METRO
Ron Wainshal, Capstar Partners, Inc., New York, NY
Randy Watts, SunLine Transit, Thousand Palms, CA

*U.S. G.P.O.:1994-301-717:80620