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Financial Benefits Associated with the Joint Development and Use of Transit Facilities in Texas

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August 1992

METRIC (SI*) CONVERSION FACTORS

APPROXIMATE CONVERSIONS TO SI UNITS

Symbol	When You Know	Multiply By	To Find	Symbol
LENGTH				
in	inches	2.54	centimetres	cm
ft	feet	0.3048	metres	m
yd	yards	0.914	metres	m
mi	miles	1.61	kilometres	km

AREA

in ²	square inches	645.2	centimetres squared	cm ²
ft ²	square feet	0.0929	metres squared	m ²
yd ²	square yards	0.836	metres squared	m ²
mi ²	square miles	2.59	kilometres squared	km ²
ac	acres	0.395	hectares	ha

MASS (weight)

oz	ounces	28.35	grams	g
lb	pounds	0.454	kilograms	kg
T	short tons (2000 lb)	0.907	megagrams	Mg

VOLUME

fl oz	fluid ounces	29.57	millilitres	mL
gal	gallons	3.785	litres	L
ft ³	cubic feet	0.0328	metres cubed	m ³
yd ³	cubic yards	0.0765	metres cubed	m ³

NOTE: Volumes greater than 1000 L shall be shown in m³.

TEMPERATURE (exact)

°F	Fahrenheit temperature	5/9 (after subtracting 32)	Celsius temperature	°C
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APPROXIMATE CONVERSIONS TO SI UNITS

Symbol	When You Know	Multiply By	To Find	Symbol
LENGTH				
mm	millimetres	0.039	inches	in
m	metres	3.28	feet	ft
m	metres	1.09	yards	yd
km	kilometres	0.621	miles	mi

AREA

mm ²	millimetres squared	0.0016	square inches	in ²
m ²	metres squared	10.764	square feet	ft ²
km ²	kilometres squared	0.39	square miles	mi ²
ha	hectares (10 000 m ²)	2.53	acres	ac

MASS (weight)

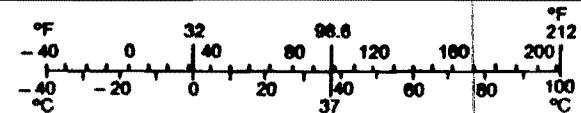
g	grams	0.0353	ounces	oz
kg	kilograms	2.205	pounds	lb
Mg	megagrams (1 000 kg)	1.103	short tons	T

VOLUME

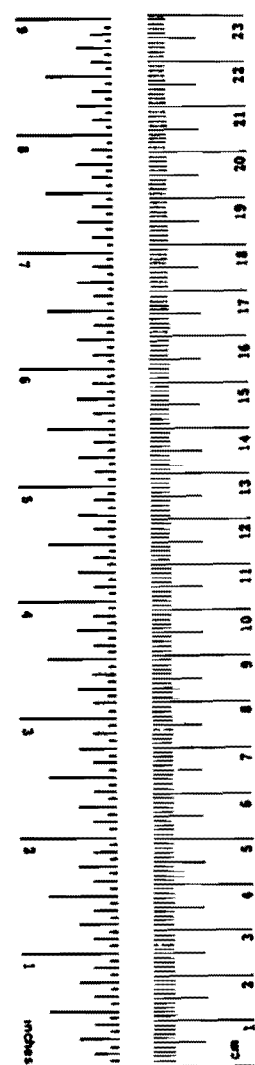
mL	millilitres	0.034	fluid ounces	fl oz
L	litres	0.264	gallons	gal
m ³	metres cubed	35.315	cubic feet	ft ³
m ³	metres cubed	1.308	cubic yards	yd ³

TEMPERATURE (exact)

°C	Celsius temperature	9/5 (then add 32)	Fahrenheit temperature	°F
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These factors conform to the requirement of FHWA Order 5190.1A.



* SI is the symbol for the International System of Measurements

Abstract

This report documents a study of the financial and other benefits associated with the joint development or use of public transit facilities in Texas. The study explores the concept of transit-related joint development and identifies the various joint development strategies employed by transit agencies throughout the country. It also provides an assessment of the financial and other benefits of selected existing joint development projects on both a national and state basis. This information was used to develop a series of general planning guidelines for identifying appropriate joint development applications in Texas. The principal tasks conducted in the study included a comprehensive review of the relevant literature, the identification and investigation of national joint development case studies, a survey of Texas transit agencies to assess their joint development experiences, and the development of the general planning guidelines.

Implementation Statement

The transit industry in Texas and across the country continues to face significant capital investment requirements. Meeting those needs during a period of limited federal, state, and local funding resources and increased demands on the industry is major concern. Transit agencies in many areas are studying and implementing a variety of innovative financing techniques to help address the capital needs of their systems. The joint development or use of transit facilities, which can be mutually beneficial for the transit system and the public- or private-sector partner, represents one of those techniques.

This study investigates the financial and other benefits associated with the joint development of transit facilities by examining previous and current experiences with the concept. The national and local experiences represent a source of guidance for current and future joint development initiatives in Texas. This report should be of use to transit agencies, service providers, the Texas Department of Transportation (TxDOT), local communities, private businesses, and other groups interested in pursuing the joint development of public transit facilities. It should be of benefit in determining if joint development is an appropriate technique for a particular transit facility, and if so, which type of joint development strategy may be the most suitable. The report also indicates the types of potential benefits that may be realized, the issues that may need to be resolved before a specific strategy can be implemented, and the applications that appear to be most feasible for use in Texas.

Disclaimer

The contents of this report reflect the views of the authors who are responsible for the opinions, findings, and conclusions presented herein. The contents do not necessarily reflect the official views or policies of the Federal Highway Administration or the Texas Department of Transportation. This report does not constitute a standard, specification, or regulation, and is not intended for construction, bidding, or permit purposes.

Executive Summary

INTRODUCTION

The use of joint development strategies with transit facilities has been the subject of growing interest throughout Texas and the United States. A number of factors have contributed to this interest, including the potential financial benefits associated with transit-related joint development. Many public transit agencies continue to explore alternative financing techniques for both capital and operating needs due to limitations in traditional funding sources. The use of joint development strategies represents one technique being considered in many areas.

This research study was undertaken to examine the experience with transit-related joint development projects at both the national level and within the state of Texas. To accomplish this, a number of activities were undertaken. First, the concept of transit-related joint development was explored and the various joint development strategies employed by transit agencies throughout the country were identified. A more detailed assessment was made of the financial and other benefits of selected existing joint development projects on both a national and state basis. Finally, the experiences from those projects were used to develop a set of general planning guidelines to assist transit agencies, service providers, TxDOT, local communities, private sector businesses, and others interested in considering joint development strategies. This Executive Summary presents a summary of the major highlights from the report.

THE JOINT DEVELOPMENT CONCEPT

Joint development represents one of several alternative financing techniques for transit. It is an application of value capture, which is an economic concept based on the theory that the public sector is entitled to share in the economic benefits resulting from a public investment. During the past two decades, an important adaptation of the value capture concept has been

transit-related joint development, which pertains to the development or improvement of public transit facilities. Transit-related joint development projects became more widespread in the early 1970s during the development of new rapid transit systems in several large cities. The technique allowed the transit agencies to use valuable excess property and development rights at their stations to generate revenue and encourage transit-oriented private development.

During the 1970s and 1980s, interest in the use of joint development strategies increased to include many different types of transit systems and projects. The term joint development became associated with a variety of innovative financing techniques that have been used by transit systems to meet their capital and operating needs. Although several definitions of the term have been used, most transit-related joint development projects share a number of common characteristics. These include a close link to the concept of property and property rights, voluntary participation motivated by the perception of mutual benefits, and potential applications with both rail and bus systems. Four joint development strategies were examined in this study. They were leasing development rights, leasing facilities, cost sharing, and negotiated land leases.

Ten national case studies were examined to identify the experiences and benefits associated with different transit-related joint development projects. The case studies covered both rail- and bus-related joint development projects. The results from the review of national experiences indicate that joint development can provide a number of benefits to transit systems and other participants. The benefits may include increased revenues to the transit system through lease payments, reduced land acquisition costs, increased ridership levels, promotion of local economic development or redevelopment, encouragement of transit-compatible land uses, and support of local and regional policies.

A telephone survey was conducted of Texas transit systems to obtain a representation of the experiences with transit-related joint development in the state. The survey identified prior joint development projects and those in the planning or development stages. In addition, the survey provided an opportunity to obtain relevant information about the local experiences with joint development strategies, and to assess the levels of interest and opportunities for future projects at each system.

CONCLUSION

The results of this research study indicate that joint development techniques have been used successfully with transit facilities throughout the country and in Texas. The project experience demonstrates that transit-related joint development has been used by a wide range of transit agencies, with different transit modes, in all sizes of communities, with different types of development, and utilizing a number of distinct strategies. Given the limited resources, it appears that transit systems in Texas will continue to explore joint development opportunities and implement a variety of joint development projects.

The research conducted in this study and the general planning guidelines should be of benefit to transit agencies, service providers, TxDOT, local communities, private sector businesses, and others interested in pursuing joint development projects in the state. The understanding of the impacts of joint development could be enriched further by the ongoing monitoring and evaluation of projects in Texas. Since many of the Texas projects are different in scale and in scope from the national case studies, this ongoing examination would provide an enhanced understanding of the benefits and impacts associated with the projects.

The results from the telephone survey indicate that there is a considerable amount of experience with joint development among all sizes of transit agencies in the state. Of the 24 transit systems covered in the survey, ten indicated prior experience with joint development projects. When asked about current activities, nine of the 24 agencies indicated that specific joint development projects were in the planning or implementation stage and five were studying potential applications. Two of the more common examples of transit-related joint development in Texas were the leasing of space in bus stations or transfer centers to intercity bus carriers, and the construction of transfer centers or park-and-ride lots on land leased from private owners. However, a variety of other projects were identified, including the general mobility projects and the HOV lanes in Houston and Dallas, which are examples of public/public joint development efforts.

GENERAL PLANNING GUIDELINES

The results from the national case studies and the survey of Texas transit systems indicate that transit-related joint development can be applied effectively. The analysis also indicated that a number of factors should be examined when transit-related joint development is being considered. The experiences were used to develop a series of general planning guidelines to assist transit agencies, service providers, TxDOT, local communities, private sector businesses, and others in evaluating the appropriateness and potential applications of different joint development strategies.

A series of five stages, or steps, were developed to guide the initial consideration of joint development and the more detailed examination of the different techniques. Each step is intended to help focus the decision-making process on the key considerations. The five stages are: examine the need for the facility and the general conditions in the area; identify the appropriate joint development strategy; examine the potential benefits; consider the possible issues; and conduct a final check on the most appropriate applications for the joint development strategy. The key elements in each stage are discussed, and a series of tables are provided to summarize the major points.

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Chapter One

Introduction

The joint development and use of public transit facilities has been the subject of growing interest throughout Texas and the rest of the United States. Although this interest may be the result of a number of factors, it appears that one of the most significant is the potential financial benefits associated with transit-related joint development. Limitations on traditional funding sources have led many public transit agencies to explore alternative financing techniques for both capital and operating needs. The joint development of transit facilities is one potentially successful approach for financing needed capital improvements.

The public transit industry in Texas and across the country continues to face substantial capital investment requirements. Meeting those needs during a period of limited federal, state, and local funding resources and increased demands on the industry is difficult. Transit agencies in many areas are studying and implementing a variety of innovative financing techniques to help address the capital needs of their systems. The joint development or use of transit facilities, which can be mutually beneficial for the transit system and the public- or private-sector partner, represents one of those techniques.

Although there has been a high level of attention given to the joint development and use of facilities associated with most major modes of public transit, there appears to be a lack of objective information about the approach and the implications of its use. In particular, there is a need for information on the costs and benefits of joint development projects, the appropriate applications of the different joint development strategies, and the issues associated with their implementation. This study was conducted in response to that need for a better understanding of the issues and the possible role transit-related joint development may play in Texas. Specifically, this study investigates the financial and other benefits associated with the joint development and use of transit facilities by examining prior experiences with the concept. Those experiences represent a source of guidance for current and future joint development initiatives in Texas.

STUDY OBJECTIVES

This study was designed to meet several objectives. The first was to explore the concept of transit-related joint development and to identify the various joint development strategies employed by transit agencies throughout the country. The second objective was to assess the financial and other benefits of selected existing joint development projects on both a national and state basis. Finally, those findings were used to develop a set of general guidelines for the identification of joint development opportunities in Texas. The guidelines may be useful to transit systems, the Texas Department of Transportation (TxDOT), local communities, private developers, and other groups interested in pursuing the joint development or use of public transit facilities. They should be of benefit in determining if joint development is an appropriate technique for a particular transit facility, and if so, which type of joint development strategy may be the most suitable. The guidelines also will indicate the types of potential benefits that may be realized, the issues that may need to be resolved before the specific strategy can be implemented, and the applications that appear to be most feasible for use in Texas.

RESEARCH APPROACH

A number of activities were conducted in order to accomplish the objectives of this study. First, a comprehensive literature review was completed on the subject of alternative financing techniques for public transit. The review included an extensive examination of the utilization of, and experience with, joint development strategies for transit facilities. The literature review also was used to identify several joint development projects from across the country for more detailed investigation. The projects were selected to provide a mix of joint development strategies, types of transit systems, and geographical distribution. In addition to those factors, the projects were selected based on their relevance to potential applications in Texas.

The selected projects were investigated using several sources of information. In addition to published literature about the projects, representatives from the participating agencies and other groups were contacted to obtain current information. Although the financial aspects of the

projects were the principal focus of this study, an assortment of other benefits have been associated with transit-related joint development projects. Indeed, the investigation indicated that many agencies considered the non-financial objectives of joint development initiatives more important than the potential financial benefits.

The selected experiences also were valuable for identifying the major issues and characteristics associated with the successful application of the various joint development strategies to transit facilities. This task included an examination of the legal, institutional, economic, and other issues associated with the joint development process. Also considered were the approaches and techniques that were used to address those issues. This study attempts to provide a realistic assessment of the factors that may limit the potential benefits of transit-related joint development, and the issues that must be addressed in its implementation.

In addition to reviewing the national experience with the joint development of transit facilities, the use of these strategies within Texas was studied. After examining the available literature, representatives from numerous transit systems in the state were contacted to obtain additional information about their experiences with joint development. All seven of the Texas metropolitan transit authorities (MTAs) were contacted, as well as 17 other city and rural transit providers in the state. Information was obtained not only on previous joint development efforts, but also on current initiatives and plans for future projects, general interest in joint development, local opportunities for such projects, and factors that may limit joint development activities.

The information gathered from both the national and state experiences with joint development was used to develop a set of general guidelines for use in identifying and evaluating the potential applications of transit-related joint development in Texas. The guidelines may be of benefit to transit operators, TxDOT, local communities, private developers, and other groups interested in pursuing the joint development or use of transit facilities. They provide guidance for determining if joint development is an appropriate technique for consideration, which type of joint development strategy may be most suitable, the potential benefits that may be realized, and the issues that may need to be resolved before the strategy can be implemented. In addition, the strategies that appear to have the greatest potential for application in Texas are emphasized.

REPORT ORGANIZATION

The remainder of this report is divided into five chapters. An introduction to the concept of transit-related joint development and definitions of the specific joint development strategies that this study focused on are presented in Chapter Two. Several national examples of transit-related joint development are reviewed as case studies in Chapter Three. Chapter Four contains the findings from a survey of Texas transit systems, including brief descriptions of some of the past and present joint development initiatives in the state. The guidelines for use in the consideration of joint development applications in the Texas are provided in Chapter Five. The final chapter provides a summary of the key elements of the study and identifies areas where additional research may be beneficial.

Chapter Two

Background

The first objective of this study was to explore the concept of transit-related joint development and to identify the various joint development strategies employed by transit agencies throughout the United States and Texas. That task was accomplished through an extensive review of the literature produced over the last two decades on joint development. This chapter summarizes the highlights of the literature review and provides an introduction to the concept of joint development as it pertains to transit facilities. In order to understand the interest in joint development by transit systems, a brief overview of the need for alternative financing in the public transit industry is presented. Following that is an introduction to the concept of joint development and the different types of joint development strategies.

REVIEW OF ALTERNATIVE FINANCING FOR TRANSIT

The limited availability of funding to meet both capital and operating needs continues to be a major concern for public transit systems in the United States. In recent years, funding at the federal, state, and local levels generally has not kept pace with the needs of the transit industry. At the same time, the demands being placed on public transportation, and thus the costs, are growing. Normal increases in equipment and labor expenses are compounded by the demands of recent legislation, particularly the federal Clean Air Act Amendments (CAAA) and the Americans with Disabilities Act (ADA). Although it appears that the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 may have the potential to address some of these funding concerns, recent congressional appropriations have not been as high as the ISTEA authorizes. It is evident that the traditional sources of revenue for public transit systems are not producing the funds necessary to maintain the desired levels of service (*I*). As a result, transit agencies in many areas are exploring a variety of alternative financing techniques for capital and operating costs.

Many of these alternative approaches are not necessarily new. The literature review conducted for this study uncovered several extensive examinations of alternative financing for transit. These previous efforts demonstrate the variety of techniques that have been developed for financing public transit systems, and suggest that their use is becoming more common. For example, *A Guide to Innovative Financing Mechanisms for Mass Transportation* was prepared for the Urban Mass Transportation Administration (UMTA, now Federal Transit Administration, FTA) in 1982 (2), and an update was published in 1985 (3). That report was intended to introduce transit agencies to an assortment of alternative funding mechanisms, with an emphasis on practical applications. The scope of the report is very broad, covering 21 different techniques that have been used to finance many types of operating and capital expenses for transit, and providing recent examples of each. In that report, the innovative financing mechanisms were grouped into six categories, as shown below.

- **Assessments:** special benefit assessments, tax increment financing, transit impact requirements
- **Taxes and User Charges:** corporate payroll tax, employee income tax, local option motor fuel tax
- **Use of Property and Property Rights:** negotiated land leases, leasing/selling development rights, leasing/selling existing facilities
- **Issuance of Debt:** certificates of participation, safe harbor leasing, vendor financing, zero coupon bonds
- **Contracted Services:** contracted taxi service, contracted fixed route service, turnkey process
- **Voluntary Participation Programs:** private donations, employer sponsored pass programs, lotteries

A similar collection of 15 alternative financing techniques for transportation operating and capital expenses was published in 1985 (4) and revised in 1987 (5). That study, however, was based on a simplified classification scheme with only four broad categories of alternative financing techniques. The first category was charges on benefiting properties, which included techniques that are used to recover a portion of the public investment from nearby property

owners. The second set of techniques was joint ventures with the private sector, which can be used when cooperation between the public and private sector appears to be mutually beneficial. The third category consisted of user charges, which seek to recover costs from system users, either directly or indirectly. Finally, the last category included marketing and merchandising approaches, which capitalize on the high exposure of transit vehicles and facilities to the general public. The specific techniques in each category are listed below.

- **Charges on Benefiting Properties:** connector fees, negotiated investments, special benefit assessments, transportation corporations and road utility districts, tax increment financing, impact requirements
- **Joint Ventures with the Private Sector:** land/air rights leasing, donations, cost sharing
- **User Charges:** motor vehicle taxes and fees, tolls, commercial parking taxes, taxes on motor fuels
- **Marketing and Merchandising Approaches:** advertising/marketing, concessions

Another major investigation of alternative financing for transit was completed in 1985 for the Transportation Research Board (6). That report summarizes the state-of-the-art in the use of benefit-sharing strategies by transit agencies, based on findings from seven detailed case studies and many other sources. The results document the benefit-sharing (i.e., cost- and revenue-sharing) practices by transit agencies of different types and sizes, the benefits received by the various participants in the process, and lessons related to the success or failure of benefit sharing efforts. Despite the apparently growing interest and experience with benefit-sharing strategies among transit agencies, the report cautioned that it cannot be expected to compensate fully for decreased federal involvement in most public transit systems (6). Their major recommendations for pursuing benefit-sharing strategies included the following:

- As a first step, review the opportunities for benefit-sharing within the transit agency.
- Establish an appropriate continuing structure to pursue benefit-sharing opportunities.
- Incorporate a benefit-sharing philosophy into ongoing planning and implementation processes.

- Gear the benefit measurement to the type of facility, the stage of planning, the level of impacts, and the financial goal.
- Approach the private sector in a businesslike fashion.
- Pay careful attention to design details, phasing, and coordination of planning, design, and construction.
- Use legal agreements to expedite, not delay implementation.
- Finally, be both realistic and flexible in evaluating transit agency costs and benefits.

One concept that has been closely linked to almost all innovative financing techniques for transit discussed in the literature is the increased participation of the private sector. With limitations in public funding, many transit agencies are looking to the private sector for assistance in meeting both capital and operating expenses. In addition, recent federal policies seem to support greater involvement by the private sector in transit and other public projects. Involving the private sector also addresses the theory that private businesses and land owners are among the principal beneficiaries of public investments in transportation systems, and those benefits should be shared equitably (6).

The need or desire to involve the private sector in transit has led to the development and implementation of a number of alternative financing techniques. As discussed in the next section, joint development is one of the alternative financing techniques being considered and implemented by many public transit agencies. Because it is based on voluntary participation in the concept of value capture, transit-related joint development has the potential to provide benefits for both public transit systems and private businesses.

VALUE CAPTURE AND JOINT DEVELOPMENT

Value capture is an economic concept that many public entities, including transit agencies, have used or are considering to meet their financing needs for operations and capital improvements. Value capture is based on the theory that the public sector is entitled to share in the economic benefits resulting from a public investment (7). The application of the value

capture concept by public transit agencies emerged in the early 1970s, coinciding with the planning and implementation of new rapid transit systems in several American cities. Value capture represented a means for some of those agencies to recover a portion of their capital costs by sharing in the appreciation of real estate values in the immediate vicinity of the new rapid transit stations (7).

Because of its conceptual appeal, an assortment of methods for applying the value capture theory have been explored as alternative financing techniques for transit facilities, as indicated in the previous section. Some value capture practices used in public transit, like benefit assessment districts or tax increment financing, are imposed on land owners by local governments, transit agencies, or other taxing authorities. Other value capture approaches are characterized more accurately as mutually beneficial business or real estate transactions with voluntary participation, typically involving negotiations and contractual agreements between transit agencies and other parties, either public or private (8). This second type of value, which commonly is termed joint development, served as the focus of this study.

Like value capture and other alternative financing techniques, the concept of joint development is relatively straightforward, and examples of its application to transit facilities can be recognized or imagined readily. Despite that, it appears that there is a lack of consensus on an exact definition of the term joint development; much of the literature produced about joint development contains diverse and sometimes contradictory definitions of the concept (9). The lack of a definitive definition for joint development may be due in part to the wide variety of procedures and projects that this term has been associated with over the past two decades.

In the context of this study, the term joint development was first applied in the early 1970s.[†] It was used to describe some of the value capture strategies implemented during the planning and construction of new rapid transit systems in several large cities. Those systems had

[†] Transit-related joint development is not a new concept. It was practiced on a large scale during other periods of American history. Railroad companies essentially were given enormous quantities of land for the construction of transportation links across the country. Once a rail line was completed and service was established, the company was allowed to sell the excess land to new settlers. In much the same way, urban street railway companies purchased large tracts of inexpensive land at the outer edges of expanding cities, established streetcar lines to serve them, and sold subdivided lots to the growing population (10, 11).

two characteristics that created opportunities for value capture: first, rapid transit stations often are located in areas with relatively high real estate values, and second, the construction of those stations typically required the acquisition of excess property that was not necessary for their long-term operation (12). Under those conditions, resourceful transit agencies sought ways to use their excess real estate holdings to enhance ridership and generate revenue. In most cases, their approach was to lease the right to develop the valuable agency-owned property—adjacent to, above, or within the stations—to private commercial developers (13).

The joint development of fixed transit facilities was not an effortless process, however. The experience with the early projects provides an indication of many of the issues still being addressed today. First, real estate development is not a traditional function for public transit agencies, and even large systems frequently lacked the necessary staff and resources needed to negotiate with the private sector (7). Inexperience was often a problem with the private developers as well. Many exhibited initial hesitancy, and were not accustomed to the occasional delays associated with the construction of large public works projects (7). Finally, legal questions arose concerning the private development of property acquired through eminent domain for public purposes (14). Despite those and many other site-specific problems, numerous transit-related joint development projects have been completed successfully. As experience was gained, many transit agencies adopted joint development policies and programs and increased appropriate staff resources to pursue them (15).

The early experiences with joint development projects associated with rapid transit systems led to additional value capture experimentation in other cities, with other modes, and with other types of development. The different conditions and characteristics of each location and each transit agency resulted in a diverse collection of alternative financing techniques that all have been associated with the term joint development. As a result, transit-related joint development is subject to various interpretations in the literature. Rather than provide yet another interpretation of joint development, this study focused on some of the essential characteristics of the process. The principal characteristics associated with joint development are discussed in the next section.

JOINT DEVELOPMENT CHARACTERISTICS

Although joint development has been defined in a number of different ways, the main characteristics of the concept as it has been applied to transit facility development can be identified. First, joint development projects have been pursued for numerous types of facilities and by different types of agencies and organizations. Although most of the earlier joint development projects were limited to rapid transit stations and private commercial developers, more recent projects have covered a wide spectrum of transit facilities. Further, the major participants in those projects have included an assortment of both private interests and other public agencies (12).

One characteristic that distinguishes joint development projects is that they involve the joint use or improvement of a piece of property. Property and property development rights have played a central role in all transit-related joint development projects. Transit facilities have been constructed on land owned by private developers, and private businesses have utilized property and facilities leased from public transit agencies. Some local transit authorities and planning organizations have programs and policies for station area development, which seek to influence the private development that takes place in the vicinity of a transit facility (8). Those types of programs occasionally are considered to be synonymous with transit-related joint development. However, projects of this nature fall outside the scope of the joint development definition and thus were not examined in this study.

Another characteristic of the joint development process is the voluntary participation of all parties. In order for this to occur, all the major participants in the joint development of a particular transit facility must perceive potential benefits. Thus, instead of having their involvement mandated through legal means, the participants in a joint development project are motivated by the existence, or perceived existence, of mutual benefits (13). Unfortunately, the potential benefits associated with transit-related joint development are not always evident to private sector businesses.

JOINT DEVELOPMENT STRATEGIES

The literature review identified a number of different types of projects that appeared to have the basic characteristics of joint development discussed above. Based on those projects in the literature, this study focused on four general categories or strategies of joint development. The four joint development strategies were: leasing development rights, leasing facilities, cost sharing, and negotiated land leases. The major characteristics of each strategy are summarized in this section.

Leasing Development Rights

A common joint development strategy is the leasing of surplus development rights. This can be applied when a transit agency owns a parcel of real estate that is not being utilized completely. In that situation, the agency leases the right to develop the remainder of the property to another party. Although it could involve another public entity, typically the rights are leased to a private development company for the construction of a high-intensity development that is compatible with the transit service and facility. The leases usually cover a very long term, ranging up to 99 years (2).

The leasing of excess development rights allows a transit agency to increase the yield from its real estate holdings and may have secondary benefits, such as increased ridership. In many cases the development rights are associated with real property that was acquired during the construction of a transit facility, but is no longer needed by the agency. Recognizing the potential benefits, some transit agencies have used the power of eminent domain to obtain additional property around a future station site for the purpose of pursuing value capture or joint development opportunities (5). In areas where real estate values are relatively high, another source of surplus development rights is the development potential directly above or below a transit facility. The development rights in the space immediately above a transit facility are frequently referred to as “air rights.”

Allowing additional development on the site of a transit facility is potentially beneficial to both the transit agency and the developer. For the agency, the project could produce a steady, long-term stream of revenue, without an additional major public investment (13). In some cases, the revenue potential is increased by allowing the agency to share in the profits of the private development, in addition to regular lease payments (2). The private sector generally is attracted to transit-related joint development projects by the potential savings from building on a prepared site or existing foundation, the project location, and the accessibility to transit service for employees or customers (13).

Leasing Facilities

A second joint development strategy is leasing facilities. Leasing facilities is similar to the leasing of development rights in some respects, but because it typically occurs on a smaller scale it is even more prevalent, particularly with small- or medium-sized transit systems. Using this strategy, excess space within a transit facility is leased for other purposes. An assortment of uses, including intercity bus service, retail and restaurant sales, concessions, and other services have been implemented in space leased from transit agencies. Excess space in existing facilities may become available due to shifts in demand or the services provided (2), or transit agencies may design and build new facilities with the intention of leasing space in them for other uses (3).

The leasing of transit facilities may have a variety of benefits. The exact nature and scope of these benefits will depend in part on the nature of the tenants. Leasing terminal or maintenance space to a private transportation provider or another public sector agency may generate revenue for the transit agency and economies of scale to all participants. Leasing space for some type of retail or concession activity may bring in modest income, provide valuable opportunities to small businesses, and result in services that passengers may find attractive and convenient. Although typical leasing arrangements may not generate enough revenue to cover the operating costs of the facility, they can be expected to improve the return on the public investment in the facility (3).

Cost Sharing

Cost sharing is a voluntary process in which multiple parties determine how the costs of a particular project are to be divided among the beneficiaries. In general, cost sharing for transit refers to the involvement of the private sector in the financing of the capital or operating costs of a transit facility or system (5). The concept of cost sharing as a joint development strategy is based upon the theory that, in order to maintain long-term economic vitality, the private sector is often willing to contribute to the costs of transportation facilities that are essential to their businesses (5).

Rather than generating long-term revenue, the primary benefits of cost sharing for a transit agency are reductions in the cost and time to develop necessary facilities. In addition, private contributions often may be applied toward the local share of federal funding arrangements, further maximizing the amount of funding available to a local area (1). The private sector investments may assist in bringing the needed projects to completion sooner, and have potential returns for the community in the form of increased economic activity or a rise in property values. Benefits for the private sector include maintaining and improving important elements of the local transportation system, which may enhance the economic health of the community (16).

Negotiated Land Leases

A negotiated land lease is a voluntary, mutually beneficial arrangement between a transit agency and a public or private land owner. In a negotiated land lease, the land owner agrees to lease property to the agency at a nominal rate for the construction of a transit facility such as a bus stop, transit center, or park-and-ride lot. The terms of a typical negotiated land lease for the development of a transit facility range from 20 to 99 years (3). Although the actual lease payments made by the transit agency varies among projects, it often is only a token amount (i.e., \$1 per year).

There are potential benefits for both the transit agency and the land owner in a negotiated land lease. For the agency, the arrangement can significantly reduce the costs of a new facility by eliminating the need to purchase or condemn the needed real estate (3). Private land owners are usually attracted by the impact the new transit facility will have on their adjacent projects. Large transit facilities have the potential to generate high concentrations and volumes of people, which are desirable conditions for high-intensity commercial development projects (12). In addition, assuming the facility has a positive impact on transit ridership, local traffic congestion and the need for costly parking spaces may be reduced. Public land owners may have other motives for participating in a negotiated land lease with a transit agency. The increased activity generated by the transit facility may stimulate other investment and development in the area, leading to general economic growth. More commonly, the public owner is willing to contribute the property in order to obtain a facility that will meet the needs of local citizens (12).

SUMMARY

This chapter has provided an introduction to the concept of transit-related joint development. An overview of the broader issue of alternative financing techniques for transit was presented first to establish the context for the discussion of transit-related joint development. Previous studies were reviewed and the major elements from the different approaches were discussed. Finally, the four joint development strategies examined in this study were described.

Value capture is an economic concept that has led to many alternative techniques for financing public transit. It is based on the theory that the public sector is entitled to share in the economic benefits resulting from a public investment. During the past two decades, an important adaptation of the value capture concept has been transit-related joint development, which pertains to the development or improvement of public transit facilities. Transit-related joint development projects became more widespread in the early 1970s during the development of new rapid transit systems in several large cities. The technique allowed the transit agencies to use valuable excess property and development rights at their stations to generate revenue and encourage transit-oriented private development.

During the 1970s and 1980s, interest in the use of joint development strategies expanded to many different types of transit systems and projects. Joint development was viewed as a collection of numerous innovative financing techniques to assist transit systems in meeting their capital and operating needs. The variety of projects has led to a number of different interpretations for the term joint development. Despite the lack of consensus, a number of common characteristics of joint development projects were identified. These included a close link to the concept of property and property rights, voluntary participation motivated by the perception of mutual benefits, and potential applications with both rail and bus systems. The four strategies examined in this report—leasing development rights, leasing facilities, cost sharing, and negotiated land leases—all meet these general characteristics.

Chapter Three

National Joint Development Experiences

Joint development strategies have been used by a number of transit agencies throughout the country. The experience gained during those projects represents a source of information for current and future joint development initiatives in Texas. Past experiences with transit-related joint development have produced mixed results, although lessons can be learned from both the successful and unsuccessful projects. The purpose of this chapter is to provide an overview of the experiences with a number of selected national joint development projects, particularly ones that may be relevant to applications in Texas.

SELECTED NATIONAL EXPERIENCES

The national examples are a collection of representative transit-related joint development projects from locations across the country. They were selected from a large number of projects that have been identified in previous studies of joint development and alternative financing for transit, and include a range of project types, city and transit system sizes, and major project features. A recent national survey of medium and large transit agencies found at least 144 joint development projects in various stages of operation, construction, or planning (17). Rather than attempting to mention and briefly describe every known project, this overview provides a more complete picture of a few representative examples.

Because this study was focused on the benefits associated with transit-related joint development in Texas, the national examples were selected based on their relevance to the state. Thus, there is an emphasis on projects involving agencies in small, medium, and large cities with primarily bus-only operations, although some fixed-guideway projects have been included as well. The study also is focused on joint development projects that have been completed and are operational, rather than in the planning or construction stages. In the past, many discussions of the benefits of transit-related joint development have relied on forecasted data for unfinished

projects or ones that had just been completed (18, 19). To the extent possible, the reviews in this study examined the actual experiences of the agencies during the development of the projects and after their completion.

The information for the project summaries was obtained from a variety of sources. The basis for almost all the project descriptions came from the numerous publications that have been produced about transit-related joint development. However, many of those publications are not current, and provide only forecasts of project performance. Where appropriate, that basic information was updated by referring to current periodicals and contacting individuals at the participating transit agencies.

Each project overview consists of four parts. The first part provides a general description of the project, including its location, the major components, the principal participants, and the year it was completed. Next is a more detailed description of the project features, including various costs if available. Third is an overview of the joint development process that was utilized on the project, including the roles and responsibilities of the principal participants, the major terms and conditions of any contractual arrangements, and any legal or institutional problems that arose. Finally, the major benefits of the project are discussed, with an emphasis on the financial impact to the transit agency. The selected national joint development experiences includes projects in the cities listed below.

- Washington, D.C.
- San Diego, California
- Denver, Colorado
- Santa Ana, California
- Cedar Rapids, Iowa
- Davenport, Iowa
- Fargo, North Dakota
- Santa Cruz, California
- Tacoma, Washington
- Phoenix, Arizona

Washington, D.C. — *Van Ness/UDC Metro Station*

The Van Ness/UDC Station is on the Washington Metropolitan Area Transit Authority (WMATA) rapid transit system, Metrorail. It is located near the University of the District of Columbia (UDC) on the Metrorail Red Line, which runs northwest from the central area of Washington, D.C. into Montgomery County, Maryland. The area surrounding the station is primarily residential, although there is a narrow strip of commercial development along Connecticut Avenue, a major arterial street that roughly parallels the Red Line in this part of the District. WMATA has been very active in pursuing joint development and other value capture strategies at several of its Metrorail stations. At the Van Ness/UDC Station, a private developer has constructed a mixed-use commercial development on real estate owned by WMATA. The project was completed in 1983.

Project Features

The privately financed development is located on a 1.5-acre parcel immediately adjacent to the underground Van Ness/UDC Metrorail Station. It consists of a seven-story mixed-use building, parking facilities, and several features provided for WMATA bus and rail customers. The mixed-use building has five floors of office space totalling 162,500 square feet and two floors of retail space totalling 41,500 square feet. Beneath the building is a parking ramp with room for up to 250 cars (15).

As a part of the agreement, the developer also was required to construct some transit-related components on the site. There is a direct connection to the underground Metrorail station, and five street level bus bays are provided for WMATA buses that operate on feeder routes in the surrounding residential areas. In addition, 24 parking spaces are reserved for Metrorail passenger drop-off and pick-up (15). The developer paid an estimated \$28 million for the construction of the building and other project components (15).

Joint Development

WMATA has had a significant amount of experience with joint development projects at its Metrorail stations, and those projects generate millions of dollars in income for the agency each year. Because the potential benefits of joint development have been recognized, a formal procedure has been developed for identifying and implementing joint development opportunities throughout the system. Although each project has unique characteristics, the Van Ness/UDC Station project is typical in most respects. Excess land acquired by WMATA is leased to a private real estate developer for the construction of an intensive, high quality development that will enhance the area around the station and is compatible with rapid transit services (13).

The joint development of the Van Ness/UDC Station was initiated in 1977 when WMATA applied to the Washington D.C. Zoning Commission for approval to develop a parcel adjacent to the recently built station. The process included a number of public hearings, during which some opposition to the project became apparent (20). Once those initial problems were addressed, the commission approved the application, and a prospectus for the project site was issued in 1979. Six project proposals were received, and the winning developer was selected that same year. Following the selection of the project developer, an unsuccessful bidder challenged the decision, which delayed the project somewhat. The issue was decided in favor of WMATA, and the project proceeded (13).

The 1.5-acre parcel directly adjacent to the Van Ness/UDC Station was leased to the developer for a 50-year term, with an option to renew for 49 additional years (3). According to the lease agreement, the developer is to pay WMATA a guaranteed annual rent of \$260,000, plus a percentage of the net profit from the operation of the building. At some other joint development locations, WMATA is basing the lease payments on gross building income (20).

During the design of the project, a conflict relating to the city of Washington's land use policies emerged (20). WMATA and the developer proposed an intensive type of development that would have maximized the potential for transit ridership and income. However, much of the local neighborhood believed that such development would cause additional traffic congestion

in the area. As a result, the scale of the planned development was reduced to obtain the necessary approval (13). Construction of the project began in early 1981, almost four years after the application had been submitted to the commission. The project was completed and dedicated in 1983 (15).

Major Benefits

WMATA's early experiences with joint development were quite positive for the most part. There are many factors that contributed to that success, and one of the most important is their aggressive program for identifying and implementing joint development opportunities. The long-term program has identified dozens of joint development opportunities at stations throughout the system, and a number of those projects have been completed, including the Van Ness/UDC Station (15).

There are many benefits that have been associated with the joint development program at WMATA. The major benefits to the agency include: reduced construction costs, increased revenue, and enhanced station area planning (13). Each year, WMATA receives millions in lease revenue from its joint development projects, estimated at over \$9 million in 1990 (17). At some of the projects, including the Van Ness/UDC Station, the private developer has constructed valuable transit facilities for WMATA as a part of the joint development agreement. WMATA estimates that between 25 and 50 percent of the new trips generated by its joint development projects are served by transit (13). Finally, joint development has promoted good station area planning by locating high density development as close as possible to the Metrorail stations.

The initial financial performance of the Van Ness/UDC joint development project was not as strong as anticipated. Like many other commercial developments completed in the early 1980s, the privately developed office/retail complex had trouble attracting tenants and was partially vacant for a few years (3). As a result, the building was not generating a net profit, and WMATA only received the guaranteed minimum payment of \$260,000 each year. By 1989, the annual revenue for WMATA had increased to \$283,000 (17).

San Diego, California — MTS Building

The MTS Building serves as a regional transportation center for San Diego, where three trolley (light rail transit) lines and several major bus routes converge. It is located in the southeast portion of downtown San Diego on Imperial Avenue, between 11th and 13th Avenues. In addition to a trolley transfer station, the ten-story MTS building houses the administrative headquarters of the Metropolitan Transit Development Board (MTDB) and one of its subsidiaries, San Diego Trolley, Inc. MTDB is the policy setting and overall coordinating agency for public transportation in the San Diego metropolitan area, and San Diego Trolley, Inc. is the operating agency for the regional light rail transit system. The county of San Diego was a major partner in the development of the project, and occupies a majority of the finished building. Other key project features include leasable retail space on the ground floor and an adjacent parking garage. The project was completed in early 1989.

Project Features

The core of this project is the San Diego Trolley System's Imperial & 12th transfer station, which links the South, East, and Bayside (downtown) trolley lines. Approximately 21,000 trolley passengers travel through the Imperial & 12th station each day (21). The MTS Building was constructed directly over the station, so that the trolleys pass right through the center of the ten-story tower. The trolley station and tracks occupy about half of the building's ground floor, the remaining 6,500 square feet is leased at \$15 per square foot for retail uses. Currently, the space is occupied by a restaurant and a convenience store with five-year leases (21). Above the first floor, the MTS Building consists of office space, totalling about 163,000 square feet. The second through eighth floors are used by San Diego County for various departments, and the top two floors house the administrative headquarters of MTDB and San Diego Trolley, Inc. The total employment at the site is about 1,000 people (21).

In addition to the trolley station and the ten-story office building, the MTS project includes off-street parking for up to four buses, an open public plaza, a free-standing 15-story

clock tower, and an adjacent six-level, 1,000-space parking garage. The parking garage functions as part of a citywide intercept parking program designed to reduce traffic congestion in the downtown. People who purchase monthly parking passes at the MTS parking ramp receive discounted trolley fare for downtown use (22).

Joint Development

The 2.65-acre project site was acquired by MTDB in 1983 for future use as a transfer station between two trolley lines, and eventually a third. Two years later, the MTDB Board of Directors approved the relocation of its expanding administrative headquarters from leased space in downtown to a new building on the site. The site is located in an economically depressed area containing a mix of commercial and industrial uses. Moving to the new site was expected to be economically beneficial because of lower property values. On a broader scale, the agency also was interested in experimenting with the concept of joint development for its new building (22).

The MTS Building was MTDB's first major joint development effort, and the process was approached with caution and thorough planning. The principal goals of the project were to develop a cost-effective facility to meet MTDB's growing needs and to serve as a model for future transit-related joint development projects (22). Because MTDB had no prior experience in the construction of office buildings or dealing with development companies, the agency worked with a consultant to implement a four-step process for selecting a project developer. The four steps included: request for qualifications, request for proposals, negotiations agreement, and a fixed-price development agreement. The selected developer also would be required to assemble the entire development team—including the architect, contractors, a bond counsel, and an underwriter—and to comply with federal laws pertaining to prevailing wages and the involvement of minority- and women-owned businesses (22).

The request for qualifications was distributed by MTDB in late 1985. At that time, the specifications for the project indicated a 40,000 square foot office building for MTDB, optional office space for private tenants, leasable ground floor retail space, and parking. After the

qualifications were reviewed, four developers were issued requests for proposals, and three eventually were submitted to MTDB. A development team was selected based on financial projections in the proposals, but a serious public controversy arose over the evaluation. Further investigation revealed flaws in the analysis, and the project schedule was delayed three months so additional information could be submitted and reviewed. In September 1986, MTDB selected a different developer who was proposing a 66,000 square foot building for MTDB and other non-profit tenants, along with parking and retail space (22).

During the negotiation process, the scope of the project changed significantly. The developer was having difficulty obtaining commitments for financial participation by prospective tenants. At that time the county of San Diego expressed strong interest in the project, and was prepared to occupy up to 60,000 square feet of office space, effectively doubling the size of the building. By March 1987, the proposed project had grown to ten floors and 170,000 square feet, and additional land had been acquired for a large parking garage (22). Construction of the project began in November 1987. The private sector development team used a fast-track design/build approach for the project. This required close coordination among all participants, and rapid decision-making authority for the public agency representatives. Because of the cooperative atmosphere, most problems were resolved easily, and the project was completed in March 1989, over two months ahead of schedule (21).

The project was financed by the San Diego Regional Building Authority, a Joint Exercise of Powers Agreement between MTDB and the county of San Diego. The authority issued \$43.6 million in tax-exempt lease revenue bonds, which covered the \$33.8 million construction budget, as well as interest and financing costs. The bonds were secured by the leasing of the facility to the county by the authority, which allowed the pricing of the bonds to be based on the county's superior credit rating. MTDB then subleased the top two floors of the building for its offices and the ground floor for use by retail tenants. All retail lease revenue flows back to MTDB to offset its sublease payments to the county. To help secure its financial expectations from the project, MTDB required the developer to guarantee a minimum retail lease income of \$100,000 per year for five years. Furthermore, MTDB receives income through its lease of the underlying real estate to the authority (22).

The building was completed and occupied by MTDB and the county in early 1989. The entire ground floor has been leased to a subsidiary of the development company at an annual rate of approximately \$15 per square foot. The tenant operates a convenience store and a restaurant in the 6,500 square feet of retail space, and also has subleased space to a bank for an automated teller machine (21).

After 30 years, title to the MTS Building will revert from the authority to MTDB. The county can remain as a tenant for up to 99 years, paying only its portion of the underlying ground rent to MTDB. The adjacent parking structure and its underlying property will revert to both the county and MTDB based on their relative investments in the facility (about 80/20 percent). During the life of the project, revenues from the parking garage are dedicated to property management and building operating expenses, with any surplus going to offset the debt retirement payments of the county and MTDB (22).

Major Benefits

MTDB considers the MTS Building a very successful project. It was primarily intended to reduce the agency's expenditures for needed office space. Previously, MTDB leased office space in downtown San Diego. The agency felt there was a clear financial advantage to occupying an MTDB-owned facility, rather than continuing to lease private space with escalating costs. The new site was acquired at a relatively low cost of \$19 per square foot, while land at the prior location was valued between \$75 and \$100 per square foot (22).

The joint development of the project generated many additional benefits for the agency and the other participants. For example, the unique financing arrangements allowed the MTDB to take advantage of the county's excellent credit rating for the bond issue, and the agency receives a guaranteed \$100,000 per year for five years from the retail tenants. Also, the ability of the private development company to use fast-track design/build techniques resulted in a project that was completed very quickly. The building was occupied just 14 months after the ground breaking. Because of the apparent success of the project, initial concerns by private

developers and contractors about working in partnership with the private sector were largely dispelled. Since the MTS Building was finished, the development company has been offered the opportunity to undertake a \$200 million mixed-use project that also will have an integrated trolley station (22).

The most difficult aspect of the MTS Building joint development project was selecting the development company. With the experience gained on this project, MTDB advises that developers should be chosen based on their qualifications and track record, with the assistance of knowledgeable consultants (22). The MTS Building project was almost canceled in its early stages because of controversy surrounding the financial pro formas of the different proposals, which should not have been the focus of the selection process. Significant changes in the project scope distorted that type of evaluation (22). The agency also suggests that a qualified, local development team is preferable. With high visibility projects, local developers have more at stake and thus may be more responsive (22). Finally, MTDB's experience demonstrates the benefits of setting realistic budgets and schedules, and recognizing the likelihood of changes.

Denver, Colorado — *Civic Center Plaza*

The Civic Center Plaza joint development project, which is located at the southeast end of the 14-block long 16th Street Mall in downtown Denver, has two major components. First is the Denver Regional Transit District (RTD) Civic Center Station. The station serves as a transfer point between express commuter buses and a shuttle service operated on the mall. The second component is a privately developed, 22-story office building constructed directly above a portion of the transit facility. Both components of the project were completed in late 1984.

Project Features

Recognizing the need for a major downtown transit facility, RTD purchased the Civic Center Plaza site in 1975 for \$2.6 million (13). As developed, the RTD Civic Center Station has

two levels. The lower level is the transfer area, where passengers arrive on express buses and depart on shuttles that serve the 16th Street Mall. There are nine bus bays, customer service facilities, and a passenger waiting area. The upper level is primarily an open plaza serving as an extension of the mall and an entrance to the office building. The Civic Center Station was completed in 1984 at a reported cost of \$17.6 million (20).

Some features were designed and built into the Civic Center Station to accommodate the planned joint development of the site. For instance, to satisfy the parking requirements of the office building and any other development, RTD constructed an underground parking garage on the site. The garage has about 240 spaces, and 100 of them are reserved for lease by the office building tenants. Also, the structural supports necessary for the office building were incorporated into the design and construction of the station. The total cost of the structural enhancements for joint development was approximately \$3.9 million, which was partially covered by an UMTA Urban Initiatives grant of \$765,000 (13).

The initial plan for the Civic Center Plaza joint development project was to construct two towers, an office building on the northern half of the site and a hotel to the south. The privately developed office building has 628,000 gross square feet. In order to preserve a view of the Colorado State Capitol Building from the 16th Street Mall, the office building was designed with three tiers at 22 stories, 13 stories, and 11 stories. The height restrictions on the site made the development of the planned hotel uneconomical, so it was never constructed. However, the necessary structural supports were built into the RTD Civic Center Station (13).

Another transfer station is located at the opposite end of the 16th Street Mall from the Civic Center Plaza. Approximately 36 RTD routes stop at either of the stations, which serve an estimated 18,000 peak trips each week day. As a result, 550 peak period bus trips have been removed from downtown Denver's streets. In their place, a fleet of 26 vehicles operate as free shuttles on the mall, with daily ridership over 30,000 (20).

Joint Development

RTD purchased the parcel of land for the current Civic Center Plaza in 1975. The property, which is located at 16th and Broadway Streets, was available, and RTD saw the future need for a major downtown bus terminal (13). A related project, the 16th Street Mall, was studied, designed, and built between 1977 and 1982 (20). The overall plan for the mall called for an express bus terminal on the current Civic Center Plaza site, and plans for the facility were prepared in 1978. When it became apparent that the RTD terminal would require only a portion of the site, the possibility of joint development emerged (13).

In 1981, RTD leased the air rights above the Civic Center Station site to a private developer for the construction of an office building. The process formally began in 1978, when RTD issued a request for proposals for the air rights development. After a disappointing response, the agency focused on contacting developers with previous experience in joint development, which proved to be more successful (13).

Negotiations began once the preferred developer had been identified, but the process was delayed somewhat by inexperience and turnover in the RTD negotiating staff (13). During the negotiations, RTD relied on in-house legal staff and an economic consultant. There were some specific problems that arose during the negotiations. First, the scope of the project changed when the developer was unable to arrange adequate financing for a proposed hotel on the site. Also, the developer and RTD were subjected to intense public scrutiny about the agreement, because there was some concern that the developer was unfairly benefitting from the project (2).

The negotiations between RTD and the developer proceeded for 18 months, and construction of the project finally began in 1982. Both the bus terminal and the office tower were completed and ready for occupancy in 1984 (20).

The principal terms and conditions of the agreement negotiated between the developer and RTD are summarized below (1, 2, 13).

- RTD was responsible for constructing the parking garage, the transit facility, and the necessary structural supports for the office building.
- The developer was responsible for constructing and managing the office building.
- The developer is leasing the air rights for \$400,000 per year for 15 years. During construction, the lease rate was \$100,000 per year.
- The developer is also paying RTD 38 percent of the net cash flow from the office building, after deducting a 13.5 percent return on the developer's cash investment.
- RTD retains all revenue from the parking garage. The developer is entitled to lease 100 spaces at the market rate.
- At the end of 65 years, RTD will assume ownership of the office building.

Major Benefits

The Civic Center Plaza project represents a good example of successful bus-related joint development that has produced apparent benefits for both participants. RTD invested a total of \$6.5 million on property and improvements that were leased to the developer; \$2.6 million for the land and \$3.9 million for the additional structural supports. The \$400,000 guaranteed minimum annual payment was calculated to recover 100 percent of RTD's investment over a 15-year period (2). However, because of RTD's participation in the profits of the building, it is estimated that the investment will be recovered fully before that time. In 1989, the lease revenue and profit sharing from the project totalled \$657,000 (17). The estimated total income for RTD during the first 15 years of the project is \$55 million, most of which will be profit. Furthermore, after 65 years, RTD will become the owner of the office tower (4).

The private developer was provided the opportunity to build an office tower in an area where vacant real estate is scarce, and without significant land acquisition costs. In addition, the link to a major transit facility will have a positive effect on the value of the office space (13).

Santa Ana, California — *Santa Ana Transit Terminal*

The Santa Ana Transit Terminal is located near the Civic Center in downtown Santa Ana, California, on a triangular parcel between Santa Ana Boulevard and Fifth Street. It consists of an Orange County Transit District (OCTD) bus terminal with a privately developed office building directly above it. There is also a shared parking garage adjacent to the terminal. The Santa Ana Transit Terminal was planned as a joint development project from the beginning, but it was built in three phases: the parking garage was completed in 1981, the bus terminal in 1984, and the office building in 1987.

Project Features

The first element of the Santa Ana Transit Terminal to be constructed was a four-level parking garage with 475 spaces. Approximately 100 spaces are reserved for park-and-ride passengers and carpoolers. The remainder are for the use of the office building tenants and their visitors. OCTD owns the parking garage, but it is managed and operated by the developer of the office building. The 1.3-acre site for the parking garage was purchased by OCTD in 1978 for \$785,000, and the garage was built in 1981 at a cost of \$2.4 million (13).

The OCTD bus terminal is the core of the Santa Ana Transit Terminal joint development project. It has 17 bus bays, a partially-enclosed passenger waiting area, a ticket sales/information office, a security office, and public rest rooms. The bus terminal is located adjacent to the parking garage on a 1.7-acre site that was purchased for \$1,245,000. Construction of the facility was completed in 1984 at a cost of \$2,686,500. The costs for the site acquisition and terminal construction were shared by OCTD (14%) and UMTA (86%) (13).

Several features were included in the design and construction of the OCTD bus terminal to support the later development of the office building. There was a structural foundation, a 140-by 115-foot air rights pad on the terminal roof, and space on one side of the site for a separate ground floor lobby. The additional cost of including these improvements in the construction of

the terminal was \$1 million, which was funded by the UMTA Urban Initiatives Program (70%), the city of Santa Ana (15%), and OCTD (15%) (23).

The office building is a privately financed and constructed six-story tower, located directly above the OCTD bus terminal. The building features include 113,000 square feet of office space, a ground floor entrance and elevator lobby, and a covered walkway between the second floor and the adjacent parking garage. The office building was completed in 1987 at an estimated cost of \$20 million (23).

Joint Development

Although the office building was not constructed at the same time as the OCTD bus terminal, the joint development of the site was anticipated and planned for from the outset. An UMTA Urban Initiatives grant enabled OCTD to construct the necessary structural supports and air rights pad along with the bus terminal for a modest additional investment. The conditions of the grant allowed OCTD three years from the opening of the facility to find a private developer for the office building and complete the negotiations for the joint development project (13).

Several potential developers expressed interest early on during the project planning, but the economic conditions at the time forced them to withdraw. This was not allowed to delay construction of the OCTD bus terminal itself, which was urgently needed (19). After the bus terminal was completed in 1984, OCTD renewed its efforts to find a joint development partner for the site. A consulting firm was hired to recommend a set of policies and procedures on joint development, to produce a joint development package for the Santa Ana Transit Terminal, and eventually to negotiate the air rights lease with the private developer (23).

The OCTD Board of Directors adopted a set of joint development policies and procedures in 1985. The stated OCTD policy is to “permit, encourage, and pursue joint development projects on district-owned properties including office, commercial, residential, and other facilities in order to promote the safety, convenience, accessibility, environmental quality, and

economic benefits of the general public.” Through its enabling legislation, OCTD has the authority to lease or sell property or facilities when it is in the district’s best interest (23).

Later that same year, a prospectus for the Santa Ana Transit Terminal project was produced and sent to over 150 potential developers. Responses were received from three teams interested in proposing, and after their qualifications were evaluated, each was sent a request for proposals. Two of the development teams submitted proposals, which were then reviewed extensively by OCTD staff and their consultants. After a preferred developer had been selected by OCTD, the parties began negotiating the details of the joint development agreement (23).

The negotiations resulted in a long-term lease of the development rights above the Santa Ana Transit Terminal. The principal terms and conditions of the agreement between the private developer and OCTD are summarized below (23, 17).

- OCTD was responsible for the construction of the parking ramp, the terminal, and the structural supports for the office building.
- The developer was responsible for financing and constructing the office building.
- OCTD receives 3 percent of the gross annual revenues and 30 percent of the net cash flow from the operation of the office building.
- The parking garage is owned by OCTD, but managed and operated by the private developer. OCTD receives 3 percent of the gross annual revenue and 30 percent of the net cash flow from the parking garage. Approximately 100 spaces are reserved for park-and-ride passengers and carpoolers.
- The lease is for 55 years, with an option to renew for an additional 44 years.
- OCTD will receive 30 percent of the net proceeds from the sale of the office building.

Major Benefits

The joint development of the Santa Ana Transit Terminal generated significant benefits for OCTD, the developer, and the city of Santa Ana. For OCTD, it allowed the construction of

an off-street transit facility at a key location in their route structure. The lease provisions establish a long-term revenue stream that is used to cover some of the operating and maintenance costs of the facility. In 1989, it generated over \$26,000 in income (17). Transit ridership has not grown as dramatically as expected, but some growth has been observed (19). Finally, it gave OCTD an image within the business community as a professional business partner, which has led to other joint development activity (23).

The private developer of the project received several benefits from its participation in the joint development process. There was no need to purchase expensive land for the development. The site was already prepared for construction, and it included landscaping, irrigation, sidewalks, street lighting, and street improvements (23). The developer also has direct access to a wide range of transit services. From a financial perspective, there is the potential for significant return to the developer if the building is sold at a later date.

Although the city of Santa Ana was not a major partner in the joint development of the Santa Ana Transit Terminal, it has benefitted directly from the project. For instance, the flow of traffic improved on nearby streets when the main bus terminal was moved off-street. Also, the project was one of the first in an area that was targeted for redevelopment, and has been followed by several other redevelopment projects (19). Finally, it is interesting to note that when OCTD acquired the sites for the parking garage and transit terminal, they were removed from the local tax base because OCTD is exempt from property taxes. However, when the privately developed office building was completed, it became eligible for taxation again (23).

Cedar Rapids, Iowa — *Transportation Center*

The Cedar Rapids Transportation Center is located in what was once a deteriorating warehouse district to the south of the central business district in Cedar Rapids, Iowa. It is a multimodal, multi-use project that includes a local bus terminal, an intercity bus terminal, a parking garage, an office building, and a small residential complex (18). The Transportation Center is a joint project by the city of Cedar Rapids, which operates the local transit system, a

private developer, and two intercity bus companies. The project was initiated in 1979 with the dual objectives of stimulating economic revitalization in the downtown area and enhancing the city's bus system. Construction began in 1982, after some initial problems stemming from the poor economic conditions of the early 1980s. The various components of the project opened over the next several years, ending with the completion of the residential complex in 1990 (12).

Project Features

The Cedar Rapids Transportation Center project has three primary components. First is a multimodal transportation center, which includes a local bus terminal, an intercity bus terminal, and a parking garage. It was opened 1984 (24). The local bus terminal occupies 5,700 square feet and the intercity terminal is 3,900 square feet, for a total area of 9,600 square feet. The combined cost of the bus terminals was about \$10 million, split between land acquisition (18%) and general construction (82%). A major portion of the funding for the facility (80%) was obtained from state and federal sources. The adjacent parking garage has approximately 500 spaces, and was built using local funds at a cost of \$2.5 million (12).

The office tower and residential complex were constructed by a private developer in coordination with the bus terminal. The office tower has 13 floors, with a total of 182,000 square feet of space. Construction of the office tower was completed in 1983, at an estimated cost to the developer of \$15 million. In the original plan, the housing complex was to have 200 units, and it was intended for elderly and handicapped tenants. Those plans were scaled-back significantly; only 40 units were actually built, totalling approximately 40,000 square feet (17). The cost of the residential complex was \$3 million, and it was not completed until 1990 (12).

Joint Development

The concept for the Cedar Rapids Transportation Center project first appeared in 1978 when the Transit Division of the Iowa Department of Transportation sponsored a feasibility study

for the involvement of private development with multimodal ground transportation centers in the state. Cedar Rapids was one of three locations selected for further study and possible implementation. The city then applied for and received an UMTA Urban Initiatives grant for the Transportation Center (24). In the original plan, the project was to have four components: a multimodal transportation center, a retail area, leasable office space, and an apartment complex.

Design work for the Cedar Rapids Transportation Center began in 1980. At the same time, three local firms were awarded contracts to develop different components of the project. Over the next year, all three developers began to experience financing problems because of the poor prevailing economic conditions. Eventually, the developers of both the housing and retail components withdrew from the project (24).

In order to save the project, the city made some significant concessions in a new development agreement. The new developer assumed control of the apartment complex and office tower development, and the retail component was eliminated. The city agreed to provide the developer with \$10 million in Industrial Revenue Bonds at an interest rate no greater than 10.0 percent. Also, the office space was allowed to be sold to tenants like a condominium, floor by floor, rather than leased (12). Each year, the city receives 15 cents per square foot of office space from the developer, and ten years after completion, the monthly lease amount per floor will be based on 1.0 percent of the value of the ground floor property. At 15 cents per square foot, the city currently receives approximately \$27,300 per year (12). No information was available on the annual income from the residential complex.

Two intercity bus companies lease space in the Cedar Rapids Transportation Center. One company has a 20-year lease with the city, while the other has only a month-to-month arrangement. Each company pays \$7.20 per square foot annually, for a total of about \$28,000. The lease rate for the intercity terminal was based on the city's cost for constructing the facility, annualized at a 12 percent interest rate (12).

Construction of the project began in 1982. The office tower was completed in 1983, followed by the intercity bus terminal a few months later. The local bus terminal opened in 1984, and the housing complex was not finished until 1990 (12).

The Cedar Rapids City Council stipulated that no new general property taxes would be allowed for financing the local contribution to the Transportation Center. Instead, a tax increment financing district was established. This allowed the local share of the construction costs to be financed with a bond issue, which is being paid off with the increased tax revenue in the district. The bond issue totalled \$4.5 million, which was spent on the bus terminal (\$2.0 million) and the parking garage (\$2.5 million) (24).

Major Benefits

The Cedar Rapids Transportation Center was initiated with two objectives: to stimulate economic redevelopment in an area near the central business district and to improve the transportation services in the city (12). Although it is difficult to attribute any other local redevelopment activity directly to the Transportation Center, there has been an improvement in the vicinity. It began with the \$15 million office tower and the \$3 million residential complex on the project site, but there is also a new \$7 million public library and about \$6.5 million in private development in a seven-block area near the site (12, 24).

The local transit system does not appear to have benefitted as significantly from the project. Ridership has not changed appreciably, and the facility has increased the operating costs of the system. Two specific factors may be limiting the potential benefits for the transit system. First, the fact that the retail component was never developed eliminated many potential transit passengers, and second, there is an abundance of parking in the central business district—including the garage build at the Transportation Center (12).

There have been some financial benefits for the city of Cedar Rapids, which operates the local transit service. It receives lease payments from both the private developer and the intercity

bus companies that occupy the Transportation Center. The total annual income from leases is over \$55,000 (12). The city also benefits from an increase in property tax revenue. Before the Transportation Center was completed, the tax increment financing district yielded \$33,000 in property taxes annually. Now the office tower alone generates over \$300,000 annually in taxes. The property tax revenue is used to service the tax increment financing bonds and for other projects in the district. A portion of the revenue is also provided to the transit system (12).

Davenport, Iowa — *Transportation Center*

The Davenport Transportation Center is a transit-related joint development project that was intended to stimulate economic redevelopment in a declining small urban community. Davenport is a city of about 100,000 people, located on the Mississippi River at the eastern edge of Iowa. The Transportation Center was built in the city's central business district, and was focused on economic revitalization—rather than simply enhancing the local transit system. As originally planned, the project was to incorporate multiple uses, including local and intercity bus terminals, a community college, and a hotel.

Project Features

The Transportation Center was built on a 3.9-acre site owned by the city of Davenport, which is responsible for the local transit system, Davenport Public Transportation (18). There were two major elements in the initial design for the Transportation Center, a two-story terminal building and an adjacent hotel. The terminal building was completed, but the hotel was not (12).

As built, the Transportation Center consists of only a two-story terminal building. The lower level of the Center houses a Davenport Public Transportation bus terminal with space for up to 15 buses, and an intercity bus terminal with room for up to ten. The entire second floor of the terminal building contains offices and classrooms for Scott Community College. The total cost of the project was approximately \$5.7 million, which was divided among federal, state, and

local sources. The federal contribution was \$4.4 million, the state of Iowa paid \$141,667, and local general obligation bonds raised the final \$1.2 million (12).

The second part of the Transportation Center project was to be a new 230-room hotel complex, built by a private developer on an adjacent portion of the city-owned site. Although there was an agreement to develop the hotel, the developer was forced to withdraw from the project for economic reasons (18).

Joint Development

Like many other examples of transit-related joint development, the Davenport Transportation Center was prompted in part by the UMTA Urban Initiatives Program. After being identified in a statewide study of potential ground transportation center sites by the Iowa Department of Transportation, the city of Davenport applied for federal funding under the Urban Initiatives Program in 1979. In 1981, the Iowa Department of Transportation committed \$141,667 to the project, along with an 80 percent federal grant of \$4.4 million (12).

After obtaining commitments for federal and state funding, the city hired a consultant to locate a private developer for the hotel component of the planned project. An interested developer was found, and contract negotiations began in 1982. As an incentive to participate, the city offered the developer a financing package that consisted of Community Development Block Grant Funds, which would be repaid at an interest rate of about 7.0 percent. There was some initial concern by the developer about the ability of the local economy to support the hotel complex and the perceptions of a joint development project with a bus facility. Despite those concerns, an agreement was reached between the city of Davenport and the developer to build a hotel complex on the site of the proposed Transportation Center (18).

Unfortunately, the local economic conditions grew worse, forcing the private developer to withdraw permanently from the project in 1983 (12). Construction of the terminal building was already underway at the time, and the project funding was in jeopardy without a private

sector participant. After negotiating with UMTA, it was agreed that the Scott Community College could qualify as the private sector participant in the project. The community college had been a willing participant in the Transportation Center throughout the process (12).

The proposed hotel would have occupied about one-third of the project site. Since that component was dropped from the project, the portion of the federal funds used to purchase the site had to be returned. That part of the site remains undeveloped (12).

When the project first opened, there were two intercity bus companies leasing space in the lower level of the Transportation Center. Soon after, one of the companies terminated its national operations and moved out. As a result, approximately 15 percent of the space in the bus terminal area was left unused, along with the potential revenue of \$15,000 per year (12).

The remaining intercity bus operator has leased space in the terminal for a ten-year period, with three five-year renewal options. The annual lease payment to the city is about \$12,000. To persuade the company to move into the new Davenport Transportation Center, the city purchased the carrier's old terminal site for \$213,937. A buyer for that site has not been located yet (12).

Major Benefits

The city of Davenport generates revenue at its Transportation Center joint development project by leasing parts of the facility to other occupants. There are three sources of revenue on the site: an intercity bus company, a local community college, and vending machines. The intercity carrier has a long-term lease for space in the intermodal bus terminal that generates approximately \$12,000 per year, Scott Community College contributes about \$2,000 per year to assist in the external maintenance of the terminal building, and nearly \$22,000 per year is generated from vending machines and electronic games in the building. That is a total annual revenue of approximately \$36,000. The annual operating cost of the facility, which includes security, utilities, maintenance, and supplies, is about \$80,000 (12).

The Davenport Transportation Center was developed primarily to promote the economic revitalization of the city's central business district. Interestingly, the facility actually may have some disadvantages for Davenport Public Transportation (12). First, some believe that the Transportation Center is too large for the current and future needs of the transit system. Second, the annual operation of the facility costs approximately \$40,000 more than it generates in revenue, which might be considered significant for a system with annual farebox revenues of only \$260,000 (12).

To date, the project does not appear to have fostered additional investment in the central business district, although the prevailing economic conditions in the early 1980s were a significant handicap (12). The immediate neighborhood around the Transportation Center was enhanced, but no significant private investment or jobs have been generated by the project. The major beneficiaries of the project may be the community college and the intercity bus company, who have new facilities, lower costs, and a valuable link to the local transit system (12).

Fargo, North Dakota — *Transportation Center*

The Fargo Transportation Center is a multimodal transit facility that is operated jointly by the Fargo, North Dakota, and Moorhead, Minnesota, public transit agencies. In addition to allowing convenient transfers between the two local bus systems, the Fargo Transportation Center houses an intercity bus terminal and an underground parking garage. It is located in the central business district of Fargo, but is only three blocks from the edge of Moorhead, which is the smaller of the two cities. The facility was developed by the city of Fargo in 1982 with the primary objective of improving the transit service and increasing ridership. Stimulating economic development was only a secondary consideration. The urbanized area containing the cities of Fargo and Moorhead crosses the Red River, which forms the border between North Dakota and Minnesota. The total population of the area is over 110,000.

Project Features

The shared local bus terminal, the intercity bus terminal, and the parking garage are the major components of the Fargo Transportation Center joint development project. The local bus terminal was designed for convenient transfers between the two municipal transit systems. Although the cities of Fargo and Moorhead have separate local transit systems, they both operate their buses out of the Transportation Center and have coordinated routes and schedules (12). The intercity bus facility is directly adjacent to the shared local bus terminal, connected by a covered walkway. One intercity carrier currently is leasing space in the city-owned facility (3). Finally, a 200-space, underground parking garage is located beneath the Transportation Center. Most of the revenue from the parking facility is funneled back into the Fargo transit system (12). In addition to the components that were constructed, there was also a proposal for a two- or three-story office building above the Transportation Center, but it was never completed (12).

The entire Fargo Transportation Center was built at a cost of \$4.7 million. An UMTA grant covered 80 percent of the costs, while the local share of \$1.1 million came from three sources: a \$560,000 Community Development Block Grant, a \$310,000 cash contribution from the Fargo Parking Authority, and a \$250,000 loan from the Fargo Parking Authority. The cash contribution was made available by the sale of a public parking garage to a private firm. It should be noted that no local tax revenue was used to finance the Transportation Center (12).

Joint Development

The initial idea for the Fargo Transportation Center came about in the late 1970s, with the start of the UMTA Urban Initiatives Program. The project was intended to provide a centralized location for the local and intercity transit services, leading to an increase in ridership (12). The city applied for an Urban Initiatives Grant in 1980 and was turned down. The next year, however, a second application for funding was approved. The federal funds were made available for land acquisition, relocation, consulting services, and construction (3).

The project passed the next major milestones in 1982. In that year, the city of Fargo used a portion of the federal funds to purchase a 2½-block parcel for the Transportation Center and began preparing the site for construction (3). Also, because the project planners believed that the Transportation Center should include intercity bus service, they began negotiations with a private carrier to lease space at the proposed facility. The intercity bus company had to be persuaded to move to the new facility, which involved finding someone else to take over the remaining 12 years of the lease at their previous terminal. Furthermore, the company was paying only \$1.00 per square foot each month, and the estimated monthly cost in the new facility was \$2.50 per square foot (12).

Although negotiations lasted about one year, an agreement finally was reached between the city of Fargo and the private carrier. The company agreed to lease space in the terminal for a period of 15 years at \$32,000 per year, with three five-year renewal options and an inflation adjustment clause. The rate was determined by estimating the annual cost to the city for operating its share of the terminal. The company is required to pay for its own improvements, property taxes, and utilities, while the city of Fargo agreed to find a new tenant for the company's previous facilities (12).

Also in 1982, a private developer proposed the addition of a two- to three-story office building to the project. Unfortunately, he was unable to obtain commitments from any potential tenants. Rather than delay the project, the city decided not to include the office building in the final design of the Transportation Center (12).

Construction of the Fargo Transportation Center began in late 1983, and it was opened in July 1984. It is jointly operated by the Fargo and Moorhead transit authorities with a revenue- and cost-sharing arrangement based on the relative size of the two cities. Fargo is responsible for two-thirds and Moorhead covers one-third (3). The gross operating costs for the Transportation Center are estimated at \$90,000 per year (12).

Major Benefits

The cities of Fargo, North Dakota, and Moorhead, Minnesota have grown into what is essentially a single urbanized area, but—for various reasons—the cities have not merged the operations of their public transit systems. Instead the systems have been coordinated to provide effective service while maintaining their independence. This is most evident in the Fargo Transportation Center, which is jointly operated by the Fargo and Moorhead transit agencies.

The facility, which also includes an intercity bus terminal and an underground parking garage, was developed to improve transit service in the area by centralizing the operations of the two systems (12). One of the most significant benefits of the project has been more convenient transfers for passengers. Before the Fargo Transportation Center was built, transferring from one municipal system to the other required a 1½-block walk, which deterred many passengers during the cold winter months (12).

Another benefit that might be associated with the project is the improvement in the business climate of the downtown area. It has been estimated that over \$70 million in private investments have been made in the city since the Fargo Transportation Center opened (12). Examples of nearby private development include a new bank building and a major hotel. Although it may not be accurate to suggest that the Fargo Transportation Center led directly to additional private investment, it was a gesture by the public officials that apparently provided some confidence for the business community (12).

From a financial perspective, the project generates revenue in a number of ways. First, the lease agreement with a private carrier for the intercity bus terminal brings in about \$32,000 per year for the city of Fargo, and will last for at least 15 years. The lease rate was calculated to cover an estimate of the city's portion of the cost for operating the Transportation Center (12). The company also is required to pay property taxes for the space it occupies at the facility. In recent years, the annual tax bill has grown to over \$28,000 (12). The third source of revenue at the facility is the 200-space underground parking garage. The garage generates about \$72,000 in gross annual revenue, with expenses at about 50 percent of that. Most of the net parking

income of approximately \$36,000 is allocated to the transit system, but 36 percent of it must be returned to the federal government. This is required because the parking garage was built larger than necessary for the transit facility (12).

Santa Cruz, California — *Metro Center*

Metro Center is an intermodal transfer facility located in downtown Santa Cruz, California, adjacent to the Pacific Garden pedestrian mall and the local intercity bus terminal. It was built in 1984, and is operated by the Santa Cruz Metropolitan Transit District (SCMTD). SCMTD designed Metro Center to function as the pulse-point for its all-bus transit service. It also was built with leasable office and retail space, and the lease revenue is used to cover some of the operating costs of the facility.

Project Features

Metro Center is primarily a SCMTD bus transfer facility, with several routes converging there on timed-transfer schedules. The focal point for activity at Metro Center is a landscaped median or island that is surrounded by off-street parking spaces for up to 16 SCMTD buses. Shortly after the facility opened, the average daily ridership through Metro Center was almost 20,000 passengers (3).

The landscaped island contains six small concession booths, each with an area of about 100 square feet. The booths were constructed by SCMTD for the convenience of its customers and as a source of lease revenue. They are easily accessed by waiting passengers, and are leased primarily by specialty food vendors (3).

In addition to the bus facilities and concession booths, there is a two-story building on the Metro Center site. The first floor of the building has a passenger waiting area adjacent to the bus facilities, and 2,215 square feet of leasable retail space. The current tenants on the first

floor include a convenience store, a restaurant, and a pastry shop (3). The second floor has 1,777 square feet of office space that is leased as well, although there was no information available about the tenant(s).

The entire Metro Center facility was built in 1984 at a cost of about \$3.0 million, including the property acquisition. Funding for the project came from state and local sources only, no federal assistance was used (3).

Joint Development

SCMTD began planning the Metro Center facility in 1979. A location for the facility was selected adjacent to existing private development in an area being targeted for revitalization. The entire Metro Center transit facility was developed and paid for by SCMTD, with financial assistance from the state of California. There was no initial plan for joint development; the additional space was included in the project only after the potential for revenue through leasing was recognized (12). With most transit-related joint development projects, the other participants are involved early in the process, either through financing, design coordination, or the signing of long-term lease agreements. The joint development at the Metro Center project involves the leasing of existing facilities to a number of small private retailers, with SCMTD essentially acting as a landlord. Indeed, the first Metro Center tenants were selected in early 1984, only a few months before the facility opened (3). The tenants pay SCMTD monthly lease payments or 6 percent of their gross sales, whichever is higher (17).

Major Benefits

Although Metro Center was not intended to be a joint development project originally, SCMTD recognized the opportunity to generate revenue by constructing additional space at the facility and leasing it to private businesses. This arrangement is attractive to many small business owners who may be unwilling or unable to invest in new development, and prefer renting their

space (12). Because the facility was not being constructed with federal funds, many of the stipulations and restrictions that would have complicated this strategy were not present.

Given the nature of the joint development strategy used at Metro Center, SCMTD did not anticipate significant benefits beyond some income to apply toward operating expenses at the facility. When the Metro Center was built in 1984, the total projected annual expenses for building and grounds maintenance, management, utilities, and security were \$177,000 (1). By 1989, the expenses had risen to \$290,000 per year (17). Revenues from the leases also have grown since the facility opened. In 1985, the on-site leases generated over \$68,000 (3). They increased to \$75,000 in 1986, \$82,000 in 1987, and \$90,000 in 1988. The last year for which information is available is 1989, when the lease income rose to \$99,000 (17).

Tacoma, Washington — *Transit Centers*

Pierce Transit, in Tacoma, Washington, operates many of its routes on a timed-transfer basis. To enhance its services, the agency has planned an integrated network of six transit centers throughout its service area. Four of the centers have been completed, and the two others are operating out of temporary facilities. Three of the Pierce Transit transfer centers have been the result of joint development projects with local land owners. Those land owners include a local school district, a community college, and a large regional shopping center. Pierce Transit began planning the transfer centers in 1980, and the first facilities opened in late 1984.

Project Features

The first center to open was the Tacoma Community College (TCC) Transit Center, in September 1984 (3). It occupies 4.5 acres in the parking lot of the Tacoma Community College, who has leased the land to Pierce Transit for \$1 per year. The TCC Transit Center consists of 12 bus bays and two passenger loading islands with shelters for 50 passengers each. Other features include: kiss-and-ride spaces, telephones, an information kiosk, newspaper vending, a

bicycle rack, and a drivers' lounge. Eleven Pierce Transit routes serve the TCC Transit Center, and in 1990, an average of 5,237 daily passengers either boarded or alighted buses at the facility. The total cost of the facility was \$775,551, which consists of \$27,122 for consultants, \$556,980 for construction in 1984, and \$191,449 for additional improvements in 1990. Eighty percent of the project costs were funded by UMTA (25).

The next Pierce Transit joint development project to open was the Parkland Transit Center, in November 1984 (3). It was built on a 1.0-acre site leased for \$1 from the Franklin Pierce School District. The original facility had a capacity of six buses, but was expanded in 1989 to accommodate up to eight buses. There is a 50-passenger shelter with a telephone, an information kiosk, and a bike rack. The center is served by six Pierce Transit routes, and the average daily usage of the facility in 1990 was 2,327 passengers. There is also an adjacent 65-space park-and-ride lot with an average utilization of 36 percent. The total cost of the original Parkland Transit Center was \$309,000, including \$40,000 for consultants. Federal funding was obtained for 80 percent of the initial cost (25). The facility was expanded and resurfaced in 1989, at a cost of \$83,488. In late 1990, Pierce Transit purchased the one-acre site from the school district for \$270,000 (25).

The third example is the Tacoma Mall Transit Center, which opened in December 1985 (3). The center is located approximately 750 feet from the shopping mall, on 1.3 acres leased from the mall developer for \$1 per year. This facility has 12 bus bays surrounding two loading platforms, each with a 50-passenger shelter. Other features include a telephone, an information kiosk, newspaper vending, and a drivers' lounge. The project also required improvements to a nearby traffic signal for pedestrian safety and bus operations. The Tacoma Mall Transit Center is served by nine Pierce Transit routes, and was utilized by 6,142 average daily passengers in 1990. The construction of the facility cost \$619,850, and consulting fees added \$18,493 to the original cost in 1985 (25). The center was resurfaced in 1990 for \$128,478. Most of the facility costs have been covered by an 80 percent match from UMTA (25).

Joint Development

Although the Pierce Transit timed-transfer centers were developed individually, a similar joint development strategy was used in each case. First, the agency worked with a consultant to identify the area where the center should be located. Then public hearings were held on the possible sites within the area. After the site for the facility was selected, a long-term lease with a nominal payment was negotiated with the property owner. The typical lease was for a duration of 20 to 30 years at \$1 per year. Pierce Transit is designated as a municipal corporation and a public utility, and as such has the right to contract with private property owners (3).

Pierce Transit worked carefully with all parties involved in the negotiations, convincing them of the benefits of the timed-transfer centers, and used its influence in various city departments to expedite the process (3). Some details about the joint development of each facility are described in the following paragraphs.

The Tacoma Community College (TCC) Transit Center required the longest negotiation period, primarily because the property for the proposed facility was owned by the state of Washington. The negotiations involved the State Attorney General's Office, where the concepts of joint development and \$1 per year leases apparently were met with some suspicion (26). Eventually an agreement was reached, after more than six months of discussions. The negotiated land lease for the TCC Transit Center has a duration of 30 years at \$1 per year. In addition, Pierce Transit compensated the school \$101,000 for the removal of 199 parking spaces (25).

To develop the Parkland Transit Center, Pierce Transit entered into a negotiated land lease with the Franklin Pierce School District. The property for the proposed center was underutilized and had attracted the interest of some commercial developers, but the school district did not want to sell the land initially (3). A lease was arranged with Pierce Transit at a rate of \$1 per year for 20 years, with a ten-year option. However, after six years, the school district decided to sell the property, so Pierce Transit purchased it for \$270,000 (25).

Unlike the previous two transit centers, the Tacoma Mall Transit Center was developed on privately-owned land. The location was nearly ideal for a permanent transit center, but the owners of the shopping mall were not convinced of its benefits (3). To address their concerns, Pierce Transit funded a survey of shoppers after a temporary transfer center had been implemented at the mall. The findings demonstrated that 10 to 15 percent of the mall customers traveled by bus. Once convinced of the value of the transit center, the owners agreed to lease the necessary property to Pierce Transit for 30 years at an annual rate of \$1 (26).

Major Benefits

Pierce Transit has been involved in a rather successful, productive joint development program involving negotiated land leases with both public and private land owners (26). The agency is now able to provide more effective service to its customers with a system of modern transit centers. The most significant benefit is the savings from not having to condemn and purchase the needed property. The estimated value of the TCC Transit Center site is \$430,000, and the site at the Tacoma Mall is valued at over \$500,000 (3).

The land owners also benefit from the joint development arrangement. In return for their contributions of valuable real estate, the land owners obtain a new, publicly built transit facility immediately adjacent to their own developments. At the Tacoma Community College, the new transit center has been critical in reversing a decline in enrollment by improving accessibility to students. The developer of the Tacoma Mall was able to use his participation in the transit center during negotiations with the city for reduced parking requirements (3).

Phoenix, Arizona — *Paradise Valley Transit Center*

The Paradise Valley Transit Center is located adjacent to the Paradise Valley Mall, which is a large regional shopping center situated on the north side of the city of Phoenix, Arizona. The transit center functions as a convenient transfer point for Phoenix Transit local and express

bus routes, and for para-transit services. It was constructed on land leased from the owners of the Paradise Valley Mall in 1990, at the same time the mall was undergoing a major expansion.

Project Features

The Paradise Valley Transit Center occupies a full acre on the site of the Paradise Valley Mall (27). The mall functions as the focal point of a growing activity center away from the central business district of Phoenix. There is a mixture of commercial development in the immediate vicinity of the mall, and the surrounding land use is primarily single- and multi-family residential (28).

There is room for up to eight buses at the Paradise Valley Transit Center. The buses park around an elongated loop that surrounds a plaza area (28). The central plaza contains six passenger shelters, two of which are glass-enclosed and have passive solar cooling systems (27). A separate lounge is provided for the bus drivers. There are also information kiosks, public pay telephones, and both lockers and racks for bicycle storage. The transit center is connected to a shopping mall entrance by a shaded walkway. Furthermore, the facility is fully wheelchair accessible (28).

The Paradise Valley Transit Center serves as a transfer point for a number of Phoenix Transit services, including local buses, express buses, and a para-transit operation. The total average daily boarding at the facility is currently about 420, although a major change in the route structure is being planned that will increase the number of buses using the Paradise Valley Transit Center. Presently, the weekday service consists of only three local routes and one express route (28).

The estimated total cost to Phoenix Transit for the development of the Paradise Valley Transit Center was \$550,000, including fees paid to various consultants (28). Eighty percent of the funding for the project was obtained from the federal government, and the local share was covered with Arizona State Lottery proceeds funneled through the city of Phoenix (3).

Joint Development

In order to develop the Paradise Valley Transit Center in its current location, Phoenix Transit had to negotiate a lease with the owners of the shopping mall. They were able to agree on a long-term lease rate of \$1 per year for the one-acre site (28).

Since the Paradise Valley Mall and the surrounding area had become a major suburban activity center, Phoenix Transit was very interested in establishing a major transit center near the mall to improve its services and generate ridership (28). However, the agency had participated in several similar projects at other large shopping centers in the Phoenix area, so they were aware of the potential problems that might arise (3).

Phoenix Transit approached the developers of the Paradise Valley Mall when they were in the process of planning a major expansion of the mall. Initially, the mall developers indicated a lack of interest in the construction of a transit center at the Paradise Valley Mall (28). The mall development company, and their major tenants, did not perceive that the transit facility would be beneficial to their employees or customers. Because direct negotiations for the joint development of the transit center were not successful, Phoenix Transit appealed to the city for assistance (28).

Phoenix Transit was successful in obtaining stipulations on the Paradise Valley Mall expansion that required the owners to participate in the development of the transit center. In addition to leasing the one acre of property for the project, the owners of the mall were required to make some additional contributions to the transit center in the form of cost sharing. Some of those improvements included: installation of utilities to the site, rough grading of the site, upgrading the pavement for heavy vehicles, 100 shared parking spaces, extensive landscaping around the perimeter of the project, and the shaded walkway connecting the transit center to a mall entrance. The mall management also is responsible for most of the maintenance around the facility (28).

Despite the mandated participation by the mall development company, Phoenix Transit experienced some difficulty in getting the company to meet some of its obligations (28). In general, Phoenix Transit believes that if the mall developers and tenants could be shown that people who use public transportation, particularly buses, are indeed potential customers, they would embrace transit, which is really the essence of joint development (28).

Major Benefits

According to Phoenix Transit and others, the Paradise Valley Transit Center is a successful facility (27). The agency believes that it must maintain a high visibility in growing suburban activity centers if it is to continue serving the needs of the public. At the Paradise Valley Transit Center, Phoenix Transit saved a significant amount of public funds by not having to purchase the site, and more importantly, they were able to build in a more desirable location than would have been possible otherwise (28).

Despite their resistance to the project, the mall owners and tenants have invested in convenient access to the public transportation system for their customers and employees (3). There have not been any studies to determine what the actual impact of the Paradise Valley Transit Center has been on the mall. However, there is some evidence that the mall is benefiting from the transit center. For example, Phoenix Transit passengers have reported leaving their cars at a department store automotive center for repairs in the morning and catching a bus at the Paradise Valley Transit Center (28).

SUMMARY OF NATIONAL EXPERIENCES

The purpose of this chapter was to review and summarize the experiences of several transit-related joint development projects selected from across the country. The summaries provide a general description of the project, outline the project features, describe the joint development process used, and identify the major financial benefits. Table 1 summarizes that

information from the reviews of each of the selected national experiences. It indicates the joint development strategy, features, and major financial benefits associated with each of the selected examples.

The selected projects contain examples of all four joint development strategies discussed in the previous chapter, and in some cases, a single project involves more than one of the strategies. Five of the projects involve the leasing of agency-owned property or development rights associated with a transit facility. There also are five examples of agency-owned facilities being leased for other uses. Explicit cost sharing arrangements for capital transit improvements were identified in two of the projects, and another two examples involved negotiated land leases, where the transit facilities were developed on land owned by another party. The projects involving multiple joint development strategies are in Washington (leasing development rights and cost sharing), San Diego (leasing development rights, leasing facilities, and cost sharing), and Cedar Rapids (leasing development rights and leasing facilities).

This review of selected national experiences demonstrates that transit-related joint development is not restricted to rapid transit stations in large cities. Although most early projects were limited to those applications, more recent examples of successful joint development have been identified in many different cities with a variety of transit systems. In particular, there have been successful projects associated with some bus-only operations. These findings suggest that joint development may be an appropriate financing technique for some transit facilities in Texas.

The other features of the national joint development case studies showed some diversity as well. There were several examples of traditional large-scale joint development projects with private commercial development companies, including Washington, Denver, Santa Ana, and Cedar Rapids. That type of project typically involves the construction of office, retail, or mixed-use buildings, along with adequate parking facilities.

The case study in San Diego had many features of traditional large-scale joint development project, but only a small fraction of the project space is occupied by private sector businesses. The two major occupants are both public agencies who jointly financed the project

development. Most of the smaller case study projects involved leasing space to private businesses, particularly retailers or intercity bus companies. That type of arrangement is most beneficial as a passenger convenience, although the transit agency does generate some lease revenue from the private businesses. Finally, there were some examples of transit facilities built on real-estate leased from public- or private-sector land owners, such as schools or shopping malls. Although this type of joint development does not generate revenue directly, the case studies show that it does offer potentially significant savings in land acquisition.

Table 1. Summary of Selected National Joint Development Experiences.

location	joint development strategy	joint development features	major benefits
Washington, D.C. <i>Van Ness/UDC Metro Station</i>	leasing development rights cost sharing	rapid transit station bus transfer improvements seven-floor mixed-use building 250-space parking garage	lease revenue: \$283,000 (1989) contribution of station improvements
San Diego, California <i>MTS Building</i>	leasing development rights cost sharing leasing facilities	light rail transit station ten-floor mixed-use building 1000-space parking garage	lease revenue: \$100,000 (1990) reduced expenditures for office space
Denver, Colorado <i>Civic Center Plaza</i>	leasing development rights	transit bus terminal 22-floor office building 240-space parking garage	lease revenue: \$657,000 (1989)
Santa Ana, California <i>Santa Ana Transit Terminal</i>	leasing development rights	transit bus terminal six-floor office building 475-space parking garage	lease revenue: \$26,000 (1989)
Cedar Rapids, Iowa <i>Transportation Center</i>	leasing development rights leasing facilities	transit bus terminal intercity bus terminal 13-floor office building 40-unit residential complex 500-space parking garage	lease revenue: \$55,000 (1990)
Davenport, Iowa <i>Transportation Center</i>	leasing facilities	transit bus terminal intercity bus terminal community college concessions	lease revenue: \$36,000 (1990)
Fargo, North Dakota <i>Transportation Center</i>	leasing facilities	transit bus terminal intercity bus terminal 200-space parking garage	lease revenue: \$32,000 (1990)
Santa Cruz, California <i>Metro Center</i>	leasing facilities	transit bus terminal office space retail space	lease revenue: \$99,000 (1989)
Tacoma, Washington <i>Transit Centers</i>	negotiated land leases	bus transfer center community college shopping mall	land acquisition costs: \$930,000 (est.)
Phoenix, Arizona <i>Paradise Valley Transit Center</i>	negotiated land leases	bus transfer center shopping mall	land acquisition costs

Sources: 12, 13, 17, 22, 26, 28

Chapter Four

Joint Development in Texas

Following the overview of selected national experiences with transit-related joint development, the focus of this study was narrowed to the state level. The national examples demonstrated the range of joint development applications, some of which appear to be appropriate for use in Texas. Although the environment for transit in Texas is very diverse, ranging from sparsely populated rural land to major metropolitan areas, it appears that joint development may be applied effectively to transit systems throughout the state. This study found that there are existing examples of transit-related joint development in Texas, and additional projects currently are under development.

This portion of the report examines the experiences with joint development strategies by transit agencies within Texas. Information on previous, current, and planned joint development projects was obtained through a telephone survey of transit systems in the state. The results of the survey are summarized in this chapter. After the survey results, brief descriptions of some transit-related joint development efforts in Texas are provided. The descriptions highlight both previous efforts and projects currently being planned or implemented in the state.

TEXAS JOINT DEVELOPMENT SURVEY

In order to provide an accurate representation of the experiences with transit-related joint development in the state, a telephone survey was conducted of Texas transit systems. The objective of the survey was to identify joint development projects that had been initiated in the past, as well as any new projects in the planning or development stages. In addition, the survey provided an opportunity to obtain relevant information about the local experiences with joint development strategies, and to assess the levels of interest and opportunities for future projects at each system. It should be noted that the purpose of the telephone survey was not to compile an exhaustive inventory of joint development projects in the state.

A total of 24 Texas transit systems were included in the survey. The seven metropolitan transit authorities (MTAs) were contacted, as well as the 14 city transit systems. In addition, three rural transit systems were included based on information that they were involved in joint development projects.

For each system, an effort was made to identify and interview the appropriate individuals responsible for joint development projects. The overall responsibilities of the individuals interviewed varied considerably with the size and type of transit system. According to recent TxDOT statistics (29), the 24 systems surveyed varied considerably in size, with estimated fleet sizes ranging from two to almost 1,000 buses. The names of the participating agencies and the individuals contacted are listed in Appendix A of this report, and a copy of the survey questions are provided in Appendix B.

Each telephone interview began with a brief explanation of the purpose of the research project. Following the introduction, the interviewer asked the respondent a series of questions about the agency's prior experiences with joint development, its level of interest in the concept of joint development, its assessment of the local opportunities for joint development, and any current initiatives or future plans related to joint development activities. More detailed information about previous or current joint development projects was gathered during the final part of each interview.

The results from the survey are presented in the following sections of this chapter. An analysis of the initial responses concerning joint development experiences, interests, opportunities, and current initiatives is provided first. The next section contains an analysis of the joint development projects identified by the survey respondents, which concludes with a discussion of the general characteristics of transit-related joint development projects in Texas. Finally, the last part of this chapter is devoted to a series of brief joint development project descriptions based on the information provided by the survey respondents.

SURVEY PART I: GENERAL RESPONSES

The initial series of questions in the telephone survey was focused on obtaining general information concerning the experience with transit-related joint development projects. The results of this portion of the survey were analyzed in two groups: the seven MTAs and the 17 smaller systems. This was done because of the differences in size and operating environment between the two groups. As summarized in this section, this approach provides a better overview of the joint development projects and opportunities associated with different transit systems in the state.

Results

The first survey question focused on the level of previous experience with the joint development or joint use of facilities by public transit agencies in Texas. The distribution of the responses to this question are shown in Table 2.

Table 2. Prior Joint Development Experience by Texas Transit Agencies.

agency type	prior joint development experience		
	none	uncompleted project	completed project
MTA (n=7)	3	1	3
other (n=17)	11	2	4
total (n=24)	14	3	7

Ten of the 24 agencies surveyed (42%) indicated prior experience with at least one transit-related joint development project. Four of the seven Texas MTAs (57%) had attempted joint development projects previously, whereas six of the 17 smaller systems (35%) had prior experience. The respondents who did indicate prior joint development experience were asked if their project had been completed. Overall, seven of the ten agencies (70%) with prior experience reported that their project had been completed. The joint development project completion rate among the MTAs was three out of four (75%), compared to four out of six (67%) of the smaller systems.

The second survey question focused on the current interest in transit-related joint development activities. The respondents were asked to characterize the level of interest within their agency as either low, moderate, or high. Table 3 shows the distribution of the responses to this question.

Table 3. Level of Interest in Joint Development at Texas Transit Agencies.

agency type	level of interest in joint development		
	low	moderate	high
MTA (n=7)	0	2	5
other (n=17)	4	6	7
total (n=24)	4	8	12

Twelve of the respondents (50%) indicated that there was a high level of interest in the concept of joint development at their agencies, with eight (33%) showing moderate interest, and four (17%) indicating a relatively low interest level. Five of the seven respondents from the MTAs (71%) indicated a high level of interest in joint development, and the remaining two indicated moderate interest (29%). The responses of the smaller systems were more diverse. Seven expressed a high level of interest (41%), six indicated a moderate level of interest (35%), and four indicated a low level of interest in joint development (24%).

The focus of the third survey question was on the local opportunities for transit-related joint development. The respondents were asked to assess the opportunities for the joint development or use of transit facilities by their agencies. The responses to this question were used to grade the perceived joint development opportunities of each system surveyed—either low, moderate, or high. The distribution of the responses is shown in Table 4.

Table 4. Local Joint Development Opportunities for Texas Transit Agencies.

agency type	opportunities for joint development		
	low	moderate	high
MTA (n=7)	1	2	4
other (n=17)	8	7	2
total (n=24)	9	9	6

The local opportunities for joint development were characterized as high by six of the respondents (25%), moderate by nine of the respondents (38%), and low by the remaining nine (38%). Although the overall distribution of the responses was relatively uniform, the MTAs were skewed towards the higher opportunity ratings, with four of the seven systems rated as high (57%), two as moderate (29%), and one as low (14%). The responses from the 17 smaller transit systems were skewed in the other direction, with two high (12%), seven moderate (41%), and eight low (47%).

The final question in the initial part of the survey focused on current or planned joint development initiatives. The respondents were asked to identify current joint development activities by their agencies, including any immediate plans to study or implement joint development strategies. In the survey question, a distinction was made between general studies of potential joint development applications and participation in specific projects under development. Table 5 provides a summary of the responses to this question from the 24 Texas transit systems surveyed.

Table 5. Current Joint Development Initiatives by Texas Transit Agencies.

agency type	joint development initiatives		
	none	general study	specific project
MTA (n=7)	1	2	4
other (n=17)	9	3	5
total (n=24)	10	5	9

Of the 24 transit systems surveyed, nine indicated involvement in the planning or implementation of a current joint development project (38%), five were studying the concept but were not involved in a specific project (21%), and ten did not identify any activities or plans related to joint development (42%). Among the seven MTAs, four were involved in specific projects (57%), two were studying potential applications (29%), and one indicated no current joint development activities or plans (14%). Five of the 17 smaller systems were pursuing specific projects (29%), three were involved in general studies of the concept (18%), and nine had no current activities related to joint development (53%).

Analysis

A number of observations can be made from the responses to these initial survey questions. First, there appears to be a considerable amount of experience with joint development among all sizes of transit agencies in the state (42% of the agencies surveyed). The level of interest expressed in joint development by the survey respondents was generally high. However, a lower assessment of the local opportunities for pursuing joint development projects frequently was provided. Although it was subjective, this may represent a realistic assessment of the current joint development opportunities by many of the respondents. A more detailed analysis of the initial survey responses is provided below.

System Size and Operating Environment

One issue examined in the initial portion of the survey was the impact of transit system size and operating environment on the joint development experience, interest, and opportunities. As might be expected, transit systems in the larger metropolitan areas expressed more interest in the concept of joint development and are involved in larger, more substantial joint development projects. Specific findings about system size from the survey include the following:

- It appears that the larger transit agencies located in metropolitan areas (MTAs) are more likely to have had prior experience with joint development than systems in smaller communities (57% versus 35%). Further, most of the MTAs that have initiated joint development projects have completed them (75%).
- All the MTAs indicated a moderate to high level of interest in the concept of joint development (100%). On the other hand, the smaller transit systems showed a wide range of interest levels (e.g., high: 41%, moderate: 35%, low: 24%).
- A difference also was noted in the perceived level of joint development opportunities between the MTAs and the smaller transit systems. In general, respondents from the

larger transit systems indicated higher opportunity levels (e.g., high: 57%, moderate: 29%, low: 14%) than those from smaller systems (e.g., high: 12%, moderate: 41%, low: 47%). This difference in perceptions is—to a large extent—a reflection of the conventional wisdom that a greater number and diversity of joint development opportunities exist in larger metropolitan areas.

- Nearly all the MTAs indicated involvement in specific joint development projects or were actively studying potential applications (86%). On the other hand, about half of the smaller systems were participating in current joint development initiatives (47%).

Prior Experience

The analysis of the initial survey responses also suggested some connections between the existence of prior joint development experience, the levels of interest and local opportunities for joint development, and the extent of any current joint development initiatives. In particular, the pattern of responses from individual agencies suggested that a practical understanding of the joint development concept—via prior experience—may influence current policies and practices. The potential connections between these issues were investigated through additional analysis of the survey data, which consisted of a series of cross-classification tables. The key relationships that were hypothesized and investigated were:

- The level of interest is higher at agencies with prior experience.
- Local opportunities are rated higher by agencies with prior experience.
- Current initiatives are more likely at agencies with prior experience.

Table 6 illustrates the level of interest expressed in joint development by each respondent as a function of prior joint development experience. A majority of the systems that indicated prior joint development experience also expressed a high level of interest in joint development (70%), and the remainder indicated moderate interest (30%). Conversely, the responses of agencies with no prior experience in joint development had a nearly uniform distribution among

low, moderate, and high levels of interest. Thus it appears that transit agencies with prior joint development experiences—and presumably a better understanding of the concept—express higher levels of interest.

Table 6. Interest in Joint Development and Prior Experience.

interest in joint development	prior joint development experience	
	no	yes
low (n=4)	4	0
moderate (n=8)	5	3
high (n=12)	5	7
total (n=24)	14	10

Table 7 illustrates the observed relationship between an agency’s assessment of the local opportunities for transit-related joint development and its prior experience with joint development. The 14 agencies that indicated no prior experience also tended to express low (50%) to moderate (43%) assessments of current opportunities for joint development. Agencies with prior joint development experience generally perceived a higher level of current joint development opportunities: 50 percent indicated that they were high, 30 percent thought they were moderate, and 20 percent believed they were low.

Table 7. Local Opportunities for Joint Development and Prior Experience.

opportunities for joint development	prior joint development experience	
	no	yes
low (n=9)	7	2
moderate (n=9)	6	3
high (n=6)	1	5
total (n=24)	14	10

Finally, Table 8 illustrates the relationship between prior joint development experience and current joint development initiatives. Of the 14 agencies having no prior experience with joint development, 50 percent had no current joint development initiatives, 29 percent were actively studying the concept, and 21 percent were involved in specific joint development

projects. Among the ten agencies that did have prior joint development experience, 30 percent had no current initiatives, 10 percent were involved in general studies, and 60 percent were participating in specific projects.

Table 8. Joint Development Initiatives and Prior Experience.

joint development initiatives	prior joint development experience	
	no	yes
none (n=10)	7	3
general study (n=5)	4	1
specific project (n=9)	3	6
total (n=24)	14	10

These tables each suggest that a practical understanding of the joint development concept—through prior experience—may influence current joint development policies and practices. Of particular significance is the observation that transit agencies of all sizes with a practical understanding of the concept indicate higher levels of interest in future joint development projects. As a result, one might conclude that agencies with prior experience may be more likely to participate in future projects than those without previous experience.

SURVEY PART II: PROJECTS

The second portion of the telephone survey focused on the collection of more detailed information about specific joint development projects undertaken by the transit systems. Additional questions were asked to respondents from systems that had been involved in at least one previous joint development project, or were participating in a current joint development initiative. Fourteen of the 24 transit systems had been or currently were involved in joint development projects. The respondents from those systems were able to provide basic characteristics and information about the specific projects. The results from this portion of the survey are presented in this section. The detailed project information also was used to develop brief descriptions of numerous joint development examples from the state, which are provided at the end of this chapter.

A total of 30 transit-related joint development projects or joint use arrangements were identified and described by the 14 respondents. For each project, the respondent was asked to describe the location, the type of transit facility, the other participants in the project, and the joint development strategy employed. In addition, information about the outcome and current status of the project was obtained. This information provides a better understanding of the general characteristics associated with transit-related joint development projects in Texas.

Results

The results of the joint development project survey are presented in the tables below. In each table, the distribution of a particular project characteristic is illustrated in terms of the project status as noted at the time of the survey. Three different categories were used for project status. A completed project was one that had been planned and implemented by an agency before the time of the survey. An uncompleted project was one that was initiated before the time of the survey, but was not completed and was no longer being pursued actively by the agency. Finally, current projects were those in the process of being implemented at the time of the survey, or those being planned for implementation in the immediate future.

Table 9 shows the different types of transit facilities associated with the 30 joint development projects identified in the survey. Four of the projects were fixed guideway stations (13%), five were transit bus terminals (17%), eight were bus transfer centers (27%), eight were park-and-ride lots (27%), and the remaining five consisted of several other types (17%). The table also shows how the projects in each category were distributed. Of the four uncompleted projects, one was a transit bus terminal (25%) and three were bus transfer centers (75%). Of the 12 completed projects, one was a fixed guideway station (8%), four were bus transfer centers (33%), two were park-and-ride lots (17%), and five were other types of facilities (42%). Finally, there were 14 specific projects being planned or implemented at the time of the survey. Three were fixed guideway stations (21%), four were transit bus terminals (29%), one was a bus transfer center (7%), and six were park-and-ride lots (43%).

Table 9. Facility Type and Project Status.

type of transit facility	project status		
	previous		current
	uncompleted	completed	
fixed guideway station (n=4)	0	1	3
transit bus terminal (n=5)	1	0	4
bus transfer center (n=8)	3	4	1
park-and-ride lot (n=8)	0	2	6
other (n=5)	0	5	0
total (n=30)	4	12	14

The different participants in the joint development projects were identified from the survey responses and are listed in Table 10. The data were grouped into three general categories for this analysis. Seven of the projects were with other public agencies (i.e., cities, counties, TxDOT) (23%), 14 involved private sector businesses (i.e., developers, shopping centers, retail tenants) (47%), and nine were joint use arrangements with private intercity bus lines (30%). In terms of project status, one of the four uncompleted projects was with the private sector (25%), and three were with intercity bus lines (75%). Of the 12 completed joint development projects, four were with other public agencies (33%), five were with the private sector (42%), and three were with intercity bus lines (25%). The last category consisted of the 14 current or planned joint development initiatives—three with other public agencies (21%), eight with the private sector (57%), and three with intercity bus lines (21%).

Table 10. Joint Development Participant and Project Status.

joint development participant	project status		
	previous		current
	uncompleted	completed	
public agency (n=7)	0	4	3
private sector (n=14)	1	5	8
intercity bus line (n=9)	3	3	3
total (n=30)	4	12	14

The final project characteristic to be examined was the joint development strategy employed. Based on the descriptions provided by the respondents, no transit-related projects involving the leasing of development rights were identified in the state. Twelve of the 30 projects involved leasing facilities (40%), ten were negotiated land leases (33%), and eight were cost sharing arrangements (27%). The distribution of the four uncompleted projects shows that three involved leasing facilities (75%) and one was a negotiated land lease (25%). Three of the 12 successfully completed projects involved leasing facilities (25%), three were negotiated land leases (25%), and six were cost sharing arrangements (50%). Finally, the 14 current or planned joint development projects were distributed as follows: six involved the leasing of facilities (43%), six were negotiated land leases (43%), and two were cost sharing arrangements (14%).

Table 11. Joint Development Strategy and Project Status.

joint development strategy	project status		
	previous		current
	uncompleted	completed	
lease facilities (n=12)	3	3	6
negotiated land lease (n=10)	1	3	6
cost sharing (n=8)	0	6	2
total (n=30)	4	12	14

Analysis

Of the 24 Texas transit agencies initially contacted for this study, 14 indicated that they either had prior experience with joint development or were involved in a current joint development initiative. A total of 30 joint development projects were identified among those 14 systems. Through additional survey questions, several characteristics were determined for each of the 30 projects, including the type of transit facility involved, the major participants in the project, the joint development strategy employed, and the status of the project. The analysis of that information is summarized in the following points.

- Joint development has been used by many transit systems in Texas, and the survey results indicate that joint development interest and applications will continue to increase. Of the transit-related joint development projects identified in Texas, 53 percent had been initiated previously and 47 percent were current initiatives.
- Although most prior joint development projects in Texas were completed (75%), a significant number were initiated but not completed (25%). Therefore, it is reasonable to expect that some of the current joint development initiatives may not be completed.
- Several types of transit facilities have been associated with joint development, including fixed guideway stations, transit bus terminals, bus transfer centers, park-and-ride lots, bus stops, and HOV lanes. In Texas, prior joint development efforts have focused mostly on bus transfer centers (44%). However, current initiatives were more likely to be focused on park-and-ride lots (42%). According to the survey data, 100 percent of the prior park-and-ride lot projects were completed, compared to only 57 percent of the prior bus transfer center projects.
- Transit agencies in Texas have initiated joint development projects with a variety of participants. Previous projects have been well-distributed among public agencies (25%), intercity bus lines (38%), and other private businesses (38%). According to the survey data, the reported completion rate of public/public projects is 100 percent. Public/private ventures were completed with intercity bus companies at a rate of 50 percent, and with other private sector businesses at a rate of 83 percent. The distribution of current joint development initiatives in the state emphasizes the participation of the private sector in financing transit facilities, with 57 percent private businesses, 21 percent intercity bus lines, and 21 percent public agencies.
- Only three of the four joint development strategies examined in this study were identified in Texas—no examples of leased development rights were discussed by the survey respondents. The previous experiences with the joint development or use of transit facilities were distributed among leasing facilities (38%), negotiated land leases

(25%), and cost sharing arrangements (38%). The project completion rates of those previous efforts were 50 percent for leasing facilities, 75 percent for negotiated land leases, and 100 percent for cost sharing arrangements. The representation of the joint development strategies among current initiatives was 43 percent for leasing facilities, 43 percent for negotiated land leases, and 14 percent for cost sharing arrangements.

The survey results demonstrated the diversity of transit-related joint development projects in Texas. However, certain characteristics appear to be more readily associated with the joint development of each principal type of transit facility. This observation suggests that the facility itself plays a central role in the planning of joint development activities. The characteristics that appear to be associated with the different project types most often are summarized below.

- One of the most common examples in Texas is the joint use of a bus transfer center, in which some of the facilities are leased to an intercity bus line. Another typical joint development project involves the construction of a bus transfer center on land leased from a private owners (negotiated land lease).
- For transit bus terminals, a typical joint development project involves the leasing of facilities to intercity bus lines—similar to bus transfer centers—or to other private businesses, such as retailers.
- The joint development of a park-and-ride lot typically involves the use of land leased from private owners, or occasionally from other public agencies. In some cases, intercity bus lines have leased facilities at park-and-ride lots as well.

In order to obtain a better understanding of the application of joint development strategies to transit facilities in Texas, additional information about many of the projects was examined. Brief summaries of the projects were prepared using that information to illustrate some of the potential benefits and problems associated with transit-related joint development. All of the concepts discussed above are represented with examples in the following section of this chapter.

SELECTED PROJECT OVERVIEWS

This section contains brief descriptions of some of the past and present joint development initiatives in the state of Texas. These projects were identified during the telephone survey of Texas transit systems. Although this study has focused primarily on existing examples of transit-related joint development, the survey identified a number of projects currently being planned or implemented. Reviewing these current joint development efforts, as well as the prior experiences in Texas, provides further indications of how the concept may be applied.

Abilene Transit System

Several years ago, the Abilene Transit System, which is operated by the city of Abilene, considered leasing excess space at its central transfer station to an intercity bus company. The facility was not being fully utilized at the time, and leasing the excess space would allow the agency to share the operating costs. The center has a sheltered waiting area and spaces for up to 13 buses and five vans. It also houses the system's administrative offices and maintenance facilities. However, because it already had adequate facilities, the intercity bus company was not very receptive to the proposed arrangement, and the project was not pursued further.

Capital Metro and Capitol Area Rural Transportation System (Austin)

Capital Metro in Austin is in the process of developing a park-and-ride facility in Cedar Park. The Cedar Park facility is to be constructed on a site owned by Capital Metro, will contain approximately 150 parking spaces, and is expected to cost about \$600,000. If this project is implemented as planned, it also will serve as a transfer center between Capital Metro and Capital Area Rural Transportation System (CARTS), a Section 18 provider. CARTS will provide feeder service to the facility from surrounding areas, and plans to construct a satellite terminal at the Cedar Park facility with a drivers' lounge and van parking spaces. The two agencies anticipate

using a cost sharing arrangement to jointly develop the project, with CARTS paying the incremental costs for its portion of the facility, which is estimated at \$40,000.

CARTS also is involved in a number of other joint development projects in its service area. The agency has developed intermodal terminals at Smithville and Round Rock that are served by CARTS vans and intercity bus companies. CARTS owns the facilities, and generates some revenue by serving as the terminal agent for the intercity carriers. A similar intermodal project is being developed along with a park-and-ride facility at Bastrop. Finally, CARTS is studying two additional joint development projects in the San Marcos area. One is a park-and-ride facility on land that may be leased from the county for a 20-year period at a nominal rate. The project has been delayed because the county wishes to retain the right to access the property, which may be an issue if federal funding is used for the project. The second potential project is a transit center in downtown San Marcos. CARTS has identified a historical building that could be renovated into a transit facility with associated retail uses, but the project has not been discussed with the owner of the building.

Brazos Transit System

The Woodlands is a master-planned community located in Montgomery County, about 25 miles north of the Houston central business district. In 1985, The Woodlands Development Company and Montgomery County initiated the Woodlands Express, a contracted park-and-ride commuter service between the Woodlands and Houston. To complement the service, a new 661-space park-and-ride facility was developed at a cost of \$2.9 million. The facility was funded with a mixture of public and private contributions. UMTA Section 18 funds, administered by TxDOT, covered 80 percent of the cost, and Montgomery County contributed 6 percent. The remaining 14 percent consisted of real estate donated by The Woodlands Development Company. The Woodlands Express has been very successful, and the facility was improved and expanded to 900 spaces in 1990. Since 1987, the service has been managed by the Brazos Transit System, a division of the Brazos Valley Community Action Agency. Brazos Transit is planning to introduce a similar park-and-ride operation from another jointly developed facility in

Montgomery County. Current plans call for a park-and-ride lot in the vicinity of Conroe, with express bus service to several Houston activity centers.

Corpus Christi Regional Transportation Authority

For a number of years, the Corpus Christi Regional Transportation Authority has been examining the potential of a high-speed water transport system for Corpus Christi Bay. The system potentially could serve several destinations, including: the Naval Station/Southside, Ingleside/Homeport, Port Aransas, the Waterfront Business District, and Corpus Christi State University. The high-speed water transport project represents a unique and innovative role for a Texas transit agency. Because of the high profile of this type of service, joint development strategies may be appropriate, particularly at the downtown terminal. Further progress on the high-speed water transport project has been delayed because of uncertainty about the proposed Naval Homeport facility in Ingleside.

The Corpus Christi Regional Transportation Authority is currently in the process of selecting sites for two new park-and-ride facilities. The agency is interested in examining joint development opportunities associated with these projects, primarily in linking the new facilities with retail businesses. This could be accomplished either by leasing space to retailers or constructing the lots on land contributed by development companies with adjacent retail projects.

Dallas Area Rapid Transit

The Dallas Area Rapid Transit District (DART), has been involved in the joint development of some projects, and has additional activities in the planning and implementation process. The DART projects provide examples of both public/public partnerships and public/private ventures. An example of a joint public/public project is the East R.L. Thornton contraflow HOV lane. This project, which was opened in 1991, represents the joint efforts of

DART and TxDOT. DART is also participating with local municipalities in the funding of general street and intersection improvements using its dedicated sales tax revenue.

In addition, DART is pursuing joint development projects with the private sector in connection with the new light rail transit (LRT) line under construction. Currently, the agencies efforts are focused on obtaining contributions of property from private owners in the vicinity of planned transit stations on the South Oak Cliff Line. Plans for the donated land include park-and-ride lots and other facilities associated with fixed-guideway transit stations. DART also will be studying other types of joint development applications in conjunction with the LRT line and other projects.

City of Del Rio

The city of Del Rio is about to break ground for a new joint development project. The project involves the complete rehabilitation of an abandoned railroad depot that was built in the 1920s. The city acquired the depot in 1988, preventing its likely demolition. The cost of purchasing the depot is being used to offset the local share of the Section 18 project funding. Since the building was purchased, plans have been made for converting it into a joint-use, multimodal transit facility. The renovated depot will serve as a terminal and transfer point for the local bus system, two intercity bus companies, a Mexican bus line, Amtrak rail service, and taxis. This project will provide enhanced facilities for many of those services. The major benefit for the city will be the centralization of the various transportation networks, and the resulting enhancements in available services. Although the depot will produce some revenue from leases, the project is not based on financial motives. The only significant problem has been a long delay for project approval by the State Historical Commission.

Sun Metro (El Paso)

Sun Metro is the public transit agency for the city of El Paso. At the time of the survey, Sun Metro was in the process of developing a transit center at the Northpark Mall. The mall is owned by a local development company, which has agreed to donate the necessary land for the facility. The developer has been very cooperative during the process, and no major problems have arisen with the project. An earlier joint development project proposed at another shopping center was not completed because the owner/developer did not perceive any benefits from a transit center.

Island Transit (Galveston)

Island Transit, the public transit system on Galveston Island, was involved in a joint development project about five years ago. The project was a trolley terminal built in conjunction with the new Galveston Civic Center. The Galveston Trolley primarily serves visitors to the Strand area of downtown Galveston. When the city began developing a new Civic Center, the inclusion of a trolley station in the project was considered. The terminal provides easy access to the Civic Center and serves as an important link between the Strand and the new Civic Center.

Island Transit is in the process of planning another joint development project, this time with a private developer. The developer has proposed a new convention center for Galveston, and intends to fully integrate the city's trolley system into the project. Linking the convention center site to the trolley system will require an extension to the existing alignment and a new station. Current plans call for the developer to finance the entire local contribution for the necessary improvements.

Metropolitan Transit Authority of Harris County (Houston)

The Metropolitan Transit Authority of Harris County (METRO) has been involved in a number of different joint development projects, including both public/public and public/private ventures. The planning, design, construction, and operation of the Houston high-occupancy vehicle (HOV) lanes represent the most visible joint development project in Houston, and may be one of the best examples of joint public sector development in the country. The HOV lanes are being developed and operated jointly by METRO and TxDOT through an on-going arrangement. Formal contracts and agreements, as well as informal working arrangements, have been used in the process. The institutional, organizational, and contractual arrangements associated with the HOV lanes have been well documented (30).

METRO's General Mobility Program is a second example of public/public joint development in Houston. The program, which was part of the Phase 2 Mobility Plan approved by Houston voters in 1988, includes general mobility projects such as street upgrading and widening, grade separations, and signal improvements. Under the approved plan, 25 percent of the METRO sales tax is dedicated to improvements that are unrelated to public transit. Many of the projects are jointly funded with other jurisdictions, although METRO is the sole funding source on some (31).

In addition to these joint public sector projects, METRO also has been involved in public/private joint development. One example is the construction of additional space at the Addicks Park-and-Ride facility for use by an intercity bus company. In addition to the commuter parking area, the bus platform, and the passenger waiting areas, METRO constructed a shelter for the intercity buses and ticketing agents. The company is leasing the facility from METRO, and also sells METRO passes and tickets at the site. METRO has also completed two small joint development projects at Greenspoint Mall and at a Fiesta grocery store. These have been informal, cooperative ventures, through which METRO has been allowed to operate small transit centers on parts of the privately owned property.

El Metro (Laredo)

El Metro, the public transit department in the city of Laredo, is developing a downtown joint-use transit terminal. At the time of this survey, the necessary land was being acquired and financing was being arranged. The facility will be owned and operated by the city, and space will be leased to other public agencies and private businesses. The plans for the transit center call for a five-level structure. Most of the first level will consist of a bus terminal with 24 bus bays. Six of those spaces will be leased to an intercity bus company, several others will be used by a Section 18 provider, and the rest are intended for El Metro buses. Space on the first level also will be leased to at least one restaurant company. The upper four levels of the structure will house a 500-space parking ramp.

Port Arthur Transit System

At the time this survey was conducted, Port Arthur Transit was in the process of completing a joint development project that has many potential applications. The agency has planned and built a bus stop shelter near a supermarket along one of its routes. The process was initiated by the management of the supermarket, who approached Port Arthur Transit and requested that an existing bus stop be improved for the convenience of their mutual customers. In response, Port Arthur Transit suggested that the supermarket contribute to the cost of the improvements. A cost-sharing arrangement was developed in which Port Arthur Transit constructed a shelter at the bus stop (which is located in an easement), and the supermarket reimbursed the agency for the total cost.

At one time Port Arthur Transit was considering a larger joint development project in the downtown area. The city of Port Arthur, which operates the transit system, studied the potential for developing a new downtown transit terminal that would incorporate a nearby intercity bus facility and a local taxi company. The project was never completed because there was not enough interest among the other participants.

VIA (San Antonio)

VIA, the regional metropolitan transit authority in the San Antonio area, played an important role in the recently completed Tri-Party Project. The Tri-Party Project was a large-scale effort to redevelop a portion of the downtown street system in San Antonio. In addition to VIA, the major participants in the project were the city of San Antonio and the downtown businesses acting through the Downtown Redevelopment District, which generated \$5 million for the project. The total project cost was approximately \$40 million. The transit agency funded a large portion of the project using revenue from its dedicated local sales tax. Part of the project involved converting city streets to pedestrian or transit malls, which are restricted to buses and trolleys only.

Waco Transit System

A few years ago, the Waco Transit System proposed the development of a joint-use transit center with an intercity bus company. The project was never completed because the city and the private carrier could not agree on the lease payments, and the proposed location was not convenient for the private carrier's operations. More recently, the city of Waco has been planning the acquisition and renovation of a downtown office building to house several of its departments. The project also will include a parking garage and a downtown terminal for the Waco Transit System. There is a possibility that excess space in the building will be leased to other public or private tenants.

Chapter Five

Planning Guidelines

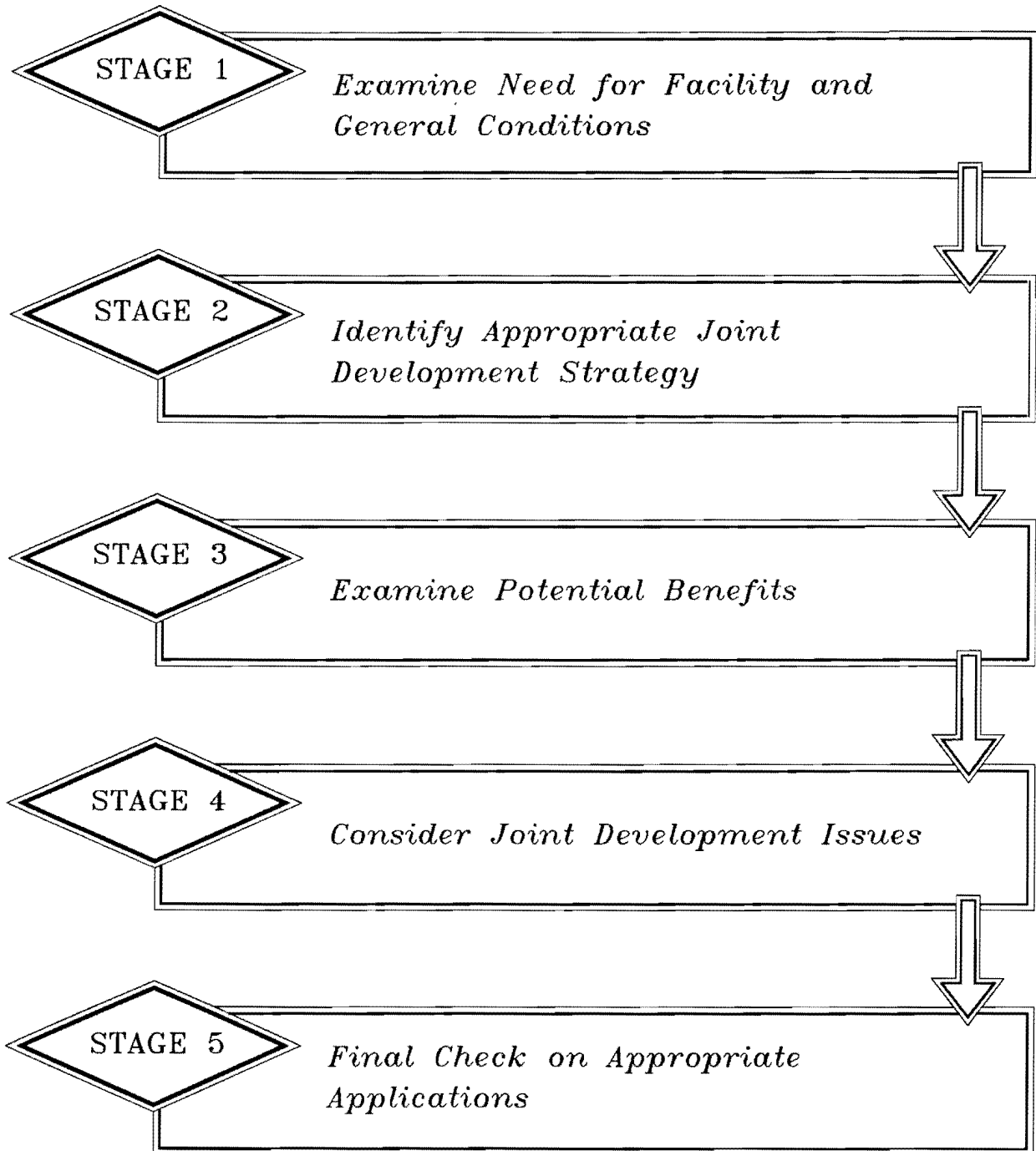
The analysis conducted in this study indicates that the joint development of public transit facilities can have a number of important benefits. These benefits may include increased revenues to the transit system through lease or rental payments, reduced costs for property or construction, increased ridership levels, promotion of economic development or redevelopment, encouragement of transit-compatible land use, and support of local and regional policies. Thus, the findings from both the national and state experiences demonstrate that joint development can be an effective strategy in many situations. However, the analysis also indicates that there are situations where joint development strategies may not be appropriate. Further, the study results suggest that a number of factors should be examined when the joint development of a transit facility is being considered.

This chapter outlines those factors and provides a series of general guidelines that can be of use to transit agencies, service providers, TxDOT, local communities, private sector businesses, and others in evaluating the appropriateness and potential applications of different joint development strategies. In order to accomplish this, a series of steps or stages are presented to guide the initial consideration of joint development and the more detailed examination of the different joint development strategies. Each step in the process is intended to help focus the decision-making process on the key factors to be considered. The five general stages in the planning guidelines are illustrated in Figure 1 and described in the following sections.

STAGE ONE — *Examine Need for Facility and General Conditions*

The joint development process is not an end or objective in and of itself. Rather, joint development represents one means of achieving an objective. In the case of transit, the objective is to assist in the development and ultimate operation of a transit capital project. Thus, before joint development should even be considered for a project, the need for the facility itself must

Figure 1. Transit-Related Joint Development Planning Guidelines



first be established. The importance of the viability of the transit capital project, regardless of the potential for joint development, cannot be overemphasized. If a facility is not needed or is not viable on its own, the pursuit of joint development is not recommended. Thus, joint development should be viewed as an opportunity to enhance and improve the implementation of a project, not to justify an unnecessary or unneeded one.

In addition to having a viable project to start with, there are a number of other conditions or characteristics that should be present for joint development to be considered as a realistic option. Many of these characteristics were evident in the descriptions of the national and state experience with joint development and have been noted in other studies (3, 6, 12, 17).

Local characteristics that should be present to enhance the potential of joint development projects include a healthy economy, a cooperative working relationship between agencies, and an entrepreneurial or flexible perspective on the part of the transit agency. Each of these characteristics is discussed briefly in the following paragraphs.

The status of the local economy and real estate market should be considered when examining the potential for a joint development project. Although some joint development projects have been undertaken to assist in revitalizing an area, a healthy local economy and real estate market should exist before joint development is considered seriously. Although economic development or redevelopment may be one of the motives for a transit-related joint development project, experience indicates that it should not be the sole objective.

The existence of cooperative working relationships between agencies can enhance the potential for joint development projects. As discussed in this report, public/public transit-related joint development projects have been pursued in many areas. These projects involve two or more agencies working together to plan, finance, and implement a project. Even in the more common public/private joint development projects, multiple public agencies are often involved. For example, a city or community development agency may assist a transit agency in certain aspects of a joint project with a private developer. Thus, good working relationships between public agencies can enhance the potential for successful completion of joint development projects.

In addition to cooperation between public agencies, joint development projects can benefit from established working relationships between the public and private sectors. Each group learns more about the restrictions and capabilities of the other from working together, and future projects can be enhanced by building on successful cooperative efforts.

Finally, the joint development process often requires transit agencies to assume many non-traditional roles and responsibilities. Thus, the agency must have the legal authority to assume these responsibilities and must be able to adapt to these new roles—many of which may be more entrepreneurial in nature than those associated with the traditional operation of a transit system. Further, the joint development process involves greater risk than the roles normally assumed by transit agencies. In addition to these new responsibilities, the transit agency must maintain flexibility to respond to changing conditions and unique situations that may arise during the joint development process.

STAGE TWO — *Identify Appropriate Joint Development Strategy*

Once the need for a transit facility has been established and the local conditions have been examined, consideration can be given to the potential use of a joint development technique or strategy. As discussed in this study, joint development strategies have been used with many types of transit systems and with a variety of projects. Thus, if the initial evaluation indicates that the project is justified and the local conditions are favorable, identifying the appropriate joint development strategy is the next logical step.

Table 12 provides a summary of joint development strategies that have been used with different types of transit facilities. This table can be used to help identify those strategies that may be most appropriate for consideration with different types of transit capital projects. Although each project will have unique features, Table 12 can assist in narrowing the focus to the most appropriate strategies for various applications.

Table 12. Typical Joint Development Strategies for Transit Facilities.

joint development strategy	type of transit facility			
	fixed guideway station	transit bus terminal	transit/transfer center	park-and-ride lot
lease development rights	■	■		
lease facilities	■	■	■	■
cost sharing	■	■	■	■
negotiated land lease			■	■

■ - indicates a typical strategy for the transit facility

In examining possible joint development strategies for a transit facility, consideration also must be given to the other major participants and the possible supporting components of the project. A variety of different participants have been involved in transit-related joint development projects. In addition to providing financial benefits to the transit agency, those other participants contribute the supporting features of joint development projects that enhance the transit facilities and the overall viability of the projects. The next two tables provide a brief overview of the types of participants commonly associated with the different joint development strategies (Table 13) and with the different types of transit facilities (Table 14).

Table 13. Typical Participants Involved with Joint Development Strategies.

joint development participant	joint development strategy			
	lease development rights	lease facilities	cost sharing	negotiated land lease
commercial developer	■		■	
retail developer	■		■	■
public agency	■	■	■	■
land developer			■	■
intercity bus company		■		
retail business		■		

■ - indicates a typical participant in the joint development strategy

Table 14. Typical Joint Development Participants for Transit Facilities.

joint development participant	type of transit facility			
	fixed guideway station	transit bus terminal	transit/transfer center	park-and-ride lot
commercial developer	■	■		
retail developer	■	■	■	
public agency	■	■	■	■
land developer			■	■
intercity bus company		■	■	■
retail business	■	■		

■ - indicates a typical participant associated with the transit facility

Table 13 and Table 14 should be used to help identify the typical participants that may be involved with the different joint development strategies being considered. The tables also provide an indication of the supporting features that may be appropriate to consider with different joint development techniques. For example, a major commercial office building is probably not an appropriate element in the joint development of a park-and-ride lot. On the other hand, commercial developers are typical participants in the joint development of fixed-guideway stations.

STAGE THREE — *Examine Potential Benefits*

As discussed in this study, a variety of potential benefits may be associated with transit-related joint development projects. The specific objectives of a project, the type of joint development strategy employed, and the local conditions are just a few of the factors that may influence the nature and magnitude of the benefits realized from a transit-related joint development project. Although a single project may yield multiple benefits, not all strategies should be expected to produce the full spectrum of benefits. Further, a realistic assessment and estimation should be made of the potential benefits to be realized from any project. This step is critical to help decision-makers evaluate the viability of the project and to establish realistic expectations of the benefits from the project.

To assist in the identification of potential benefits, Table 15 provides a summary of the benefits most often associated with the different types of joint development strategies. The relative magnitudes of the potential benefits are shown for each joint development strategy, based on the findings of this and other studies. In the table, the approximate magnitudes of the potential benefits are compared within each strategy, rather than across the different techniques. For example, if leasing development rights is being considered for a project, the lease revenue and the leveraging of private investments are expected to be the major benefits. Increased ridership also may be a project objective for leasing development rights, but the relative magnitude of the benefit may not be as high.

Table 15. Potential Benefits Often Associated with Joint Development Strategies.

potential benefit	joint development strategy			
	lease development rights	lease facilities	cost sharing	negotiated land lease
leverage private investment	●	○	●	○
lease revenue	●	●		
reduce property costs			○	●
reduce construction costs			●	
property tax revenue	○	○	○	
increase ridership	○	○		○
support local policies	○	○	○	○

- - indicates a major benefit associated with the strategy
- - indicates a minor benefit associated with the strategy
- indicates a benefit that typically is not associated with the strategy

The information in Table 15 is intended to serve only as a general guide—the local economy and other conditions will influence each case. Further, the information provided in Table 15 is not intended to replace the detailed cost/benefit analysis that should be conducted for a proposed joint development project. Rather, it is intended to provide preliminary guidance in examining the potential benefits that may be expected from a particular type of project. If the anticipated project appears to offer the types of benefits desired, a more detailed cost/benefit analysis should be conducted to evaluate its feasibility.

STAGE FOUR — *Consider Joint Development Issues*

Planning, constructing, and operating transit-related joint development projects is not an easy process. Due to the often complex nature of joint development projects, problems and unresolved issues may emerge at many different points in the process. Recognizing that problems may arise—and maintaining the flexibility to respond with necessary changes—can be important factors in the joint development process.

This stage in the planning guidelines is intended to help identify potential problems or issues that may arise during the application of the different joint development strategies. It may be possible to avoid or minimize the impact of these problems by addressing them during the planning of the project. Tables 16–19 highlight the most common legal, institutional, and economic issues associated with the four different joint development strategies. Although many of the issues are common to all four joint development techniques, each has unique problems that may need to be addressed.

The purpose of these tables is to assist transit agencies and other groups interested in pursuing joint development projects in the identification of potential problems that may arise. The tables can be used to check if any of the noted issues may be concerns within an area or with a specific project. This will allow for the development of approaches to respond to and overcome those concerns, as necessary.

Table 16. Common Issues Associated with Leasing Development Rights.

legal issues	<ul style="list-style-type: none">● Changes in enabling legislation may be necessary to allow the agency to purchase and hold real estate, possibly in excess of current needs.● The authority to negotiate real estate transactions and enter into contracts with other agencies or private interests may also be required.● There may be some questions about the use of eminent domain to acquire property for the eventual use and benefit of private interests.● Restrictions on the use of lease revenue may exist for transit facilities funded through federal, state, or local sources.● The private use of publicly-owned land may have some property tax liability implications.● The project will need to be compatible with planning, zoning, and other requirements.
institutional issues	<ul style="list-style-type: none">● Good working relationships between all major participants will enhance the project at every step in the process.● It may be necessary for the transit agency to assume many new, non-traditional roles.● The transit agency must be committed to the concept at all levels.● The private sector may be unfamiliar with public sector requirements.● The responsibility for project operating and maintenance costs may need to be resolved.● The general public may question the terms offered to attract private participants.
economic issues	<ul style="list-style-type: none">● A strong real estate market is needed to attract developers.● The basis of the lease payments must be determined (e.g., gross income, net income, fixed rate).● The economic benefits may not be realized for a number of years.● The cost and time involved in planning and developing the project can be significant for all the participants.

Table 17. Common Issues Associated with Leasing Facilities.

legal issues	<ul style="list-style-type: none">● Changes in enabling legislation may be necessary to allow the lease of agency-owned facilities for non-transit uses.● The authority to negotiate transactions and enter into contracts with other agencies or private interests may also be required.● Restrictions on the use of lease revenue may exist for transit facilities funded through federal, state, and local sources.● The private use of publicly-owned facilities may have some property tax liability implications.● The project will need to be compatible with planning, zoning, and other requirements.
institutional issues	<ul style="list-style-type: none">● It may be necessary for the transit agency to assume many new, non-traditional roles.● The transit agency must be committed to the concept at all levels.● The private sector may be unfamiliar with public sector requirements.● The responsibility for project operating and maintenance costs may need to be resolved.● The general public may question the terms offered to attract private participants.● Smaller tenants may be unable to commit to a long-term lease agreement.
economic issues	<ul style="list-style-type: none">● A healthy current and future market is necessary to keep the space occupied and producing a positive cash flow.● Passenger traffic alone may not be sufficient to sustain retail tenants at a typical transit facility.● The basis of the lease payments must be determined (e.g., gross income, net income, fixed rate).● The expected lease revenue may not cover the project operating costs.● The cost and time involved in planning and developing the project can be significant for all the participants.

Table 18. Common Issues Associated with Cost Sharing.

legal issues	<ul style="list-style-type: none">● The agency should have the necessary authority to negotiate cost sharing arrangements and enter into contracts with other agencies or private interests.● In some situations, donations to non-profit, tax-exempt agencies may be tax-deductible.● The project will need to be compatible with planning, zoning, and other requirements.
institutional issues	<ul style="list-style-type: none">● Good working relationships between all major participants will enhance the project at every step in the process.● It may be necessary for the transit agency to assume many new, non-traditional roles.● The transit agency must be committed to the concept at all levels.● The private sector may be unfamiliar with public sector requirements.● The general public may question the terms offered to attract private participants.● Public/public projects may require the establishment of legal agreements between public agencies.
economic issues	<ul style="list-style-type: none">● Concessions in the project design or construction may be required to make the arrangement more attractive to the private sector.● The private sector may be skeptical of the potential long-term benefits of the project.● The agency must satisfy itself that the overall project is equitable and in the best interest of the public.● The cost and time involved in planning and developing the project can be significant for all the participants.

Table 19. Common Issues Associated with Negotiated Land Leasing.

legal issues	<ul style="list-style-type: none">● Changes in enabling legislation may be necessary to allow the agency to lease property from other agencies or private owners.● The authority to negotiate real estate transactions and enter into contracts with other agencies or private interests may also be required.● The public use of privately-owned land may have some property tax liability implications.● The project will need to be compatible with planning, zoning, and other requirements.
institutional issues	<ul style="list-style-type: none">● Good working relationships between all major participants will enhance the project at every step in the process.● It may be necessary for the transit agency to assume many new, non-traditional roles.● The transit agency must be committed to the concept at all levels.● The private sector may be unfamiliar with public sector requirements.● The responsibility for project operating and maintenance costs may need to be resolved.● Sensitivity to neighboring land uses can be enhanced by involving the general public in planning process.
economic issues	<ul style="list-style-type: none">● It may be necessary to demonstrate the long-term benefits of the project to attract private land owners.● The transit facility must be perceived as a productive use of the property.● The terms and duration of the lease agreement should be considered carefully in the context of a long-term plan by the transit agency.● In most situations, the transit agency is responsible for the cost of constructing the actual facility.● The cost and time involved in planning and developing the project can be significant for all the participants.

STAGE FIVE — *Final Check on Appropriate Applications*

The final stage in the planning guidelines is intended to summarize the previous steps and to provide a general indication of the most appropriate applications for the four joint development strategies. Although each project will have distinct characteristics and unique features, the experiences with transit-related joint development provide some typical indications of the benefits, issues, and appropriate applications associated with the different strategies. These features are summarized in Table 20.

Table 20. Benefits, Issues, and Ideal Applications of Joint Development Strategies.

strategy	principal benefits	major issues	ideal applications
lease development rights	<ul style="list-style-type: none"> ● lease revenue ● leverage private investment ● support desired land use 	<ul style="list-style-type: none"> ● inexperience ● requires high real estate values ● limited short-term benefits 	<ul style="list-style-type: none"> ● commercial/office development at a fixed-guideway transit station
lease facilities	<ul style="list-style-type: none"> ● lease revenue ● passenger convenience 	<ul style="list-style-type: none"> ● may not produce positive cash flow ● potentially high vacancy or turnover in weak economy 	<ul style="list-style-type: none"> ● leasing space at a transit terminal to an intercity bus company or other services utilized by passengers
cost sharing	<ul style="list-style-type: none"> ● reduce construction costs ● leverage private investment 	<ul style="list-style-type: none"> ● demonstrating the potential benefits to participants ● negotiating agreements with other participants 	<ul style="list-style-type: none"> ● interagency funding for major projects ● private contributions for improvements to a facility
negotiated land lease	<ul style="list-style-type: none"> ● reduce property acquisition costs ● use of preferred site 	<ul style="list-style-type: none"> ● compatibility with neighboring land uses ● negotiating long-term agreements 	<ul style="list-style-type: none"> ● bus transfer centers at shopping centers ● park-and-ride lots for bus or rail service

The information in Table 20 is intended to serve as a final check in the general planning guidelines for agencies considering transit-related joint development projects. It provides a brief review of the principal benefits, issues, and appropriate applications for each joint development strategy. Once a particular joint development strategy has been identified, Table 20 can be used to verify that the principal benefits and issues have been considered, and that the intended application is appropriate. At that point, more detailed project analysis may be warranted.

Chapter Six

Conclusion

This report has presented an examination of the use of joint development techniques with public transit facilities. The experiences with transit-related joint development projects were explored from both a national and a state perspective. The concept of transit-related joint development was reviewed, and the various strategies employed by transit agencies throughout the county were explored. Selected national case studies were examined in more detail, including a review of the financial and other benefits associated with each project. A telephone survey was conducted to obtain information on transit-related joint development projects within the state. The survey results were analyzed and a summary was provided of the experiences with transit-related joint development projects in Texas. Finally, a set of general planning guidelines were developed to assist transit agencies and other interested groups in determining the viability of potential joint development projects and to assist in the preliminary planning process.

The results of this study indicate that joint development strategies have been used successfully with transit capital projects in Texas and throughout the rest of the country. The project experience demonstrates that transit-related joint development has been implemented by a wide variety of transit agencies, with different types of transit modes, in all sizes of communities, with different types of developments, and utilizing a variety of strategies. Further, numerous benefits have been realized from the different projects. These include both financial and non-financial benefits for both the transit agency and the public or private sector partner.

Thus, joint development represents one approach for transit agencies and other groups to consider in planning, financing, and implementing major transit capital projects. However, as discussed in this report, joint development may not be an appropriate alternative in all cases. The anticipated benefits, potential issues, and costs should be examined carefully before any decision is made to pursue a particular joint development project. The general planning guidelines presented in this report should assist transit agencies, service providers, TxDOT, local communities, private sector businesses, and others in conducting this preliminary review.

The understanding of the impacts of transit joint development projects could be further enriched by additional research. For example, little monitoring and analysis has been conducted on the transit-related joint development projects in Texas. An ongoing examination of the benefits associated with these projects would greatly enhance the level of knowledge about transit-related joint development within the state. Further, since most of the Texas examples are much different in scale and scope than the national case studies, better documentation of the Texas experiences would be of benefit in Texas and throughout the country.

Given the budget constraints facing many transit systems today, it appears that joint development strategies will continue to be considered and pursued in the future. The information provided in this report will assist transit systems and other groups interested in examining potential joint development projects and conducting preliminary assessments of the feasibility of different strategies and techniques.

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**Appendix A:
Texas Transit Survey Participants**

1. Abilene Transit System - Debbie Ruggles
2. Amarillo City Transit - Wayne Pelton
3. Beaumont Transit System - Albert Eby
4. Brazos Transit System (Bryan/College Station) - Lyle Nelson
5. Brazos Transit System (Montgomery County) - Lyle Nelson
6. Brownsville Urban System - Terry LeBar
7. Capital Area Rural Transportation System (Austin) - Dave Marsh
8. Capital Metropolitan Transportation Authority (Austin) - Celia Kupersmith
9. Citibus (Lubbock) - Dusty Peters
10. City of Del Rio - Carlos Martinez
11. Corpus Christi Regional Transportation Authority - Tom Niskala
12. Dallas Area Rapid Transit - Mac Turner
13. El Metro (Laredo) - Rick Pulido
14. Fort Worth Transportation Authority - John Quinn
15. Island Transit (Galveston) - Bill Harned
16. Metropolitan Transit Authority of Harris County (Houston) - Tina Tamez
17. Port Arthur Transit System - Dale Watson
18. San Angelo Transit System - Carl Miller
19. Sun Metro (El Paso) - Bob Geyer
20. Texoma Council of Governments (Sherman-Denison-Howe) - Nancy Coffey
21. Tyler Transit System - Joe Buckman
22. VIA Metropolitan Transit (San Antonio) - Dennis Perkinson
23. Waco Transit System - Kirk Scott
24. Wichita Falls Transit System - Bob Parker

**Appendix B:
Texas Transit Survey Form**

JOINT DEVELOPMENT SURVEY OF TEXAS TRANSIT AGENCIES

INTRODUCTION

The Texas Transportation Institute, a part of the Texas A&M University System, is conducting a research project on the financial benefits associated with the joint development and use of transit facilities in Texas. Part of our research is a survey of public transit systems in the state. The purpose of the survey is to explore the experience with, interest in, and opportunities for transit-related joint development in Texas.

Would you or someone on your staff be willing to respond to a few questions about joint development?

SURVEY RESPONDENT

name: _____
agency: _____
telephone: _____

PART I: GENERAL RESPONSES

1. Does your agency have any previous experience with a transit-related joint development project? []yes. []no.

*If yes: Was the project completed successfully? []yes. []no. (also use **PART II**)*

2. How would you describe the level of interest in joint development at your agency: low, moderate, or high? []low. []moderate. []high.

3. What is your assessment of the local opportunities for joint development projects: low, moderate, or high? []low. []moderate. []high.

4. Are there any current joint development plans or initiatives at your agency? []yes. []no.

*If yes: Does it involve a specific project or is it a general study of potential joint development applications? []specific project. []general study. (also use **PART II**)*

*If **PART II** is not needed:* That is all the questions we have for you right now. Are there any additional comments that you would like to make about joint development?

Thank you for your time. I will contact you again if we need more information.

PART II: PROJECTS

That is all the general questions I have for you, but I would like to get more detailed information about the joint development projects your agency is—or has been—involved in. Please provide a brief description of each joint development initiative, even if it did not result in a completed project. In particular, we are interested in the type of transit facility involved, the major project participants, the joint development process, and the outcome of the project.

project: _____
participants: _____

facility type: _____
JD strategy: _____

notes:

project: _____
participants: _____

facility type: _____
JD strategy: _____

notes:

project: _____
participants: _____

facility type: _____
JD strategy: _____

notes:

Are there any additional comments that you would like to make about joint development?

Thank you for your time. I will contact you again if I need more information.