TRANSIT-RELATED JOINT DEVELOPMENT
IN SMALL CITIES: AN APPRAISAL OF
OPPORTUNITIES AND PRACTICE

Prepared by
The University of Iowa
Public Policy Center
in conjunction with the

MIDWEST TRANSPORTATION CENTER
Commissioned by the
Midwest Transportation Center
A Consortium of Iowa State University
and The University of Iowa

Director
Benjamin J. Allen, Ph.D.
Distinguished Professor of
Business Administration
Professor of Transportation and
Logistics and Economics
Iowa State University

Associate Director
David J. Forkenbrock, Ph.D.
Director, Public Policy Center
Professor of Urban and Regional
Planning and
Civil and Environmental
Engineering
The University of Iowa

Advisory Committee
Barbara J. Dunn, Former Executive Director, Public Transit Association
William E. Greenwood, Chief Operating Officer of Burlington Northern Railroad
Allen A. Housh, Vice President of Transportation, Cargill, Inc.
Volmer K. Jensen, Regional Administrator, Federal Highway Administration, U.S. Department of
Transportation
John R. McKenzie, President, Alter Barge Line, Inc.
Larry Miller, President, Ruan Transportation Management Systems
Darrel Rensink, Director, Iowa Department of Transportation
Lee O. Waddleton, Area Director, Urban Mass Transit Administration, U.S. Department of
Transportation

Public Policy Center
227 South Quadrangle
University of Iowa
Iowa City, Iowa 52242
Phone: (319) 335-6800
Fax: (319) 335-6801
TRANSIT-RELATED JOINT DEVELOPMENT IN SMALLER CITIES: AN APPRAISAL OF OPPORTUNITIES AND PRACTICE

A Report Prepared By

The Public Policy Center
The University of Iowa
Iowa City, Iowa 52242

David J. Forkenbrock

Erskine S. Walther

Norman S. J. Foster

Matthew W. Burt

Lawrence C. Sigel

July 1990

This study was funded by the University Transportation Centers Program of the U.S. Department of Transportation. The results and views expressed are the independent products of university research and are not necessarily concurred in by the funding agency.
PREFACE

This report is the product of a first-year research project in the University Transportation Centers Program. The Program was created by Congress in 1987 to “contribute to the solution of important regional and national transportation problems.” A university-based center was established in each of the ten federal regions following a national competition in 1988. Each center has a unique theme and research purpose, although all are interdisciplinary and also have educational missions.

The Midwest Transportation Center is one of the ten centers; it is a consortium that includes Iowa State University (lead institution) and The University of Iowa. The Center serves federal Region 7 which includes Iowa, Kansas, Missouri, and Nebraska. Its theme is “transportation actions and strategies in a region undergoing major social and economic transition.” Research projects conducted through the Center bring together the collective talents of faculty, staff, and students within the region to address issues related to this important theme.

This particular project was carried out by an interdisciplinary research team at The University of Iowa’s Public Policy Center with assistance from the Transportation Institute at North Carolina A & T State University. The Public Policy Center is a reflection of the University’s renewed commitment to applied research that seeks to advance the public interest. The Center’s projects generally involve close interaction with decision makers and resource people in both the public and private sectors.

The project is central to the Midwest Transportation Center’s theme in that it examines the potential for transit-related joint development in smaller cities. The principal investigator was Professor David J. Forkenbrock, Director of the Public Policy Center. Co-investigator was Erskine S. Walther, Research Associate at the Transportation Institute of North Carolina A & T State University. They were assisted by Norman S. J. Foster, Research Associate at the University of Iowa Public Policy Center, and Matt W. Burt and Larry C. Sigel who were students in the Graduate Program in Urban and Regional Planning at the University of Iowa while the research was conducted.
ACKNOWLEDGMENTS

This project was truly an effort involving many people. We are especially grateful to our contacts in Cedar Rapids, Iowa; Davenport, Iowa; Fargo, North Dakota; and Demopolis, Alabama. They provided us with information on their communities, the transit system serving it, and the joint development project taking place within it. They also were gracious hosts when we made site visits to their communities. Our accurate presentation of the several case studies and interpretation of the projects’ impacts has depended on their efforts. We must stress, however, that the conclusions reached are ours and are not necessarily concurred in by all those interviewed.

The University Transportation Centers Program of the U.S. Department of Transportation deserves our thanks for making it possible to carry out this research.

Joan Bevans capably typed the report, and Barbara Yerkes provided editorial assistance. They and our other colleagues at the Public Policy Center helped us complete this project in ways too numerous to mention. We thank them.
TABLE OF CONTENTS

PREFACE ................................................................................................................................. ii

ACKNOWLEDGMENTS .................................................................................................................. iii

TABLES ...................................................................................................................................... vii

FIGURES ..................................................................................................................................... viii

SECTION 1 INTRODUCTION ...................................................................................................... 1

PART I PRINCIPLES AND PRACTICAL CONSIDERATIONS ...................................................... 3

SECTION 2 EXPERIENCE WITH JOINT DEVELOPMENT ........................................................... 5

Joint Development Background ................................................................................................ 6

Large Urban Projects ................................................................................................................. 7

  General Types of Large Urban Projects ................................................................................... 7

  Generalized Findings in Large Urban Areas ........................................................................... 8

Small Urban Joint Development ............................................................................................... 9

  Bridgeport Community and Economic Development Program ......................................... 10

  Santa Cruz Intermodal Transfer Facility ............................................................................. 11

  Michigan Department of Transportation’s Intercity
      Passenger Terminal Program .............................................................................................. 12

  Greyhound Rural Connection Program .............................................................................. 13

Conclusions ............................................................................................................................... 14

SECTION 3 KEY ISSUES IN STRUCTURING A JOINT DEVELOPMENT PROJECT ................... 17

Benefits to Partners ................................................................................................................ 17

  Transit System Benefits ......................................................................................................... 17

  Benefits to Development Partner ........................................................................................ 18

A Partnership Continuum ......................................................................................................... 18

Some Small Community Strategies ........................................................................................ 19

  Public Agency Joint Development ......................................................................................... 19
Transportation Transfer Facilities .............................................. 20
Organizational Structures ....................................................... 21
  Diversification of Facility Use .............................................. 21
  Joint Transit-HSA Facility .................................................. 24
Private Sector-Based Joint Development .................................... 27
  Existing Capabilities and Facilities ..................................... 29
  Enhanced Capabilities and Facilities ................................... 29
  Non-Traditional Capabilities .............................................. 30
Summary ................................................................................. 32

PART II  CASE STUDY ANALYSIS ............................................. 35

SECTION 4  CEDAR RAPIDS, IOWA ....................................... 37
  The Community ..................................................................... 37
  Cedar Rapids Transit System ............................................... 38
  The Ground Transportation Center Project ............................ 41
    Objectives Pursued ......................................................... 41
    Chronology ...................................................................... 41
    Costs .............................................................................. 44
    Lease Revenue .................................................................. 44
    Evaluation ....................................................................... 45

SECTION 5  DAVENPORT, IOWA ............................................ 47
  The Community ..................................................................... 47
  Davenport Public Transportation .......................................... 50
  The Ground Transportation Center Project ............................ 50
    Objectives Pursued ......................................................... 50
    Chronology ...................................................................... 51
    Costs .............................................................................. 54
    Lease Revenue .................................................................. 54
    Evaluation ....................................................................... 55

SECTION 6  FARGO, NORTH DAKOTA .................................... 59
  The Community ..................................................................... 59
  Fargo and Moorhead Transit Systems .................................... 61
  The Ground Transportation Center Project ............................ 61
<table>
<thead>
<tr>
<th>Table No.</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-1</td>
<td>Cedar Rapids Travel and Demographic Characteristics, 1980</td>
<td>39</td>
</tr>
<tr>
<td>4-2</td>
<td>History of Cedar Rapids Ground Transportation Center</td>
<td>42</td>
</tr>
<tr>
<td>4-3</td>
<td>Proposed and Actual Components of Cedar Rapids GTC Project</td>
<td>44</td>
</tr>
<tr>
<td>5-1</td>
<td>Davenport Travel and Demographic Characteristics, 1980</td>
<td>49</td>
</tr>
<tr>
<td>5-2</td>
<td>History of Davenport Ground Transportation Center</td>
<td>53</td>
</tr>
<tr>
<td>6-1</td>
<td>Fargo Travel and Demographic Characteristics, 1980</td>
<td>62</td>
</tr>
<tr>
<td>6-2</td>
<td>Moorhead Travel and Demographic Characteristics, 1980</td>
<td>63</td>
</tr>
<tr>
<td>6-3</td>
<td>History of Fargo Ground Transportation Center</td>
<td>66</td>
</tr>
<tr>
<td>7-1</td>
<td>Demopolis Area Travel and Demographic Characteristics, 1980</td>
<td>74</td>
</tr>
<tr>
<td>7-2</td>
<td>Space Assignments in WAPT Facility</td>
<td>78</td>
</tr>
</tbody>
</table>
# FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-1</td>
<td>Partnership Continuum</td>
<td>20</td>
</tr>
<tr>
<td>3-2</td>
<td>Revenue Generation Utilizing Existing Capabilities</td>
<td>22</td>
</tr>
<tr>
<td>3-3</td>
<td>Human Services Approach</td>
<td>25</td>
</tr>
<tr>
<td>3-4</td>
<td>Private Sector Approach</td>
<td>28</td>
</tr>
<tr>
<td>4-1</td>
<td>Employment Changes for Major Sectors, 1978-86, in Linn County (Cedar Rapids), the Region, and the Nation</td>
<td>38</td>
</tr>
<tr>
<td>4-2</td>
<td>Ridership for Cedar Rapids Transit System, 1979-89</td>
<td>40</td>
</tr>
<tr>
<td>4-3</td>
<td>Revenue and Expense Per Rider, Cedar Rapids Fixed Routes, 1983-89</td>
<td>40</td>
</tr>
<tr>
<td>5-1</td>
<td>Employment Changes for Major Sectors, 1978-86, in Scott County (Davenport), the Region, and the Nation</td>
<td>48</td>
</tr>
<tr>
<td>5-2</td>
<td>Ridership for Davenport Transit System, 1979-89</td>
<td>51</td>
</tr>
<tr>
<td>5-3</td>
<td>Revenue and Expense Per Rider, Davenport Fixed Routes, 1983-89</td>
<td>52</td>
</tr>
<tr>
<td>6-1</td>
<td>Employment Changes for Major Sectors, 1978-86, in Cass County (Fargo), the Region, and the Nation</td>
<td>60</td>
</tr>
<tr>
<td>6-2</td>
<td>Employment Changes for Major Sectors, 1978-86, in Clay County (Moorhead), the Region, and the Nation</td>
<td>60</td>
</tr>
<tr>
<td>6-3</td>
<td>Ridership for Fargo and Moorhead Transit Systems, 1982-88</td>
<td>64</td>
</tr>
<tr>
<td>6-4</td>
<td>Revenue and Expense Per Rider, Fargo Fixed Routes, 1982-88</td>
<td>64</td>
</tr>
<tr>
<td>6-5</td>
<td>Revenue and Expense Per Rider, Moorhead Fixed Routes, 1982-89</td>
<td>65</td>
</tr>
<tr>
<td>7-1</td>
<td>Demopolis, Alabama, and Surrounding Counties</td>
<td>72</td>
</tr>
<tr>
<td>7-2</td>
<td>Employment Changes for Major Sectors, 1978-86, in Greene, Sumter, and Marengo Counties, the Region, and the Nation</td>
<td>73</td>
</tr>
</tbody>
</table>
SECTION 1
INTRODUCTION

Economic development considerations play an important role in today's governmental priorities. Joint land development between the public and private sectors is one method that is increasingly looked to for fostering economic development in local areas. Transit-led joint development has received much attention in larger cities, but experience in smaller cities has been limited and the results mixed. Given the problems communities face both in promoting economic development and in providing quality transit service, is transit-based joint development a workable concept for smaller cities? By looking at issues relevant to the question, we hope to provide insights helpful to policy makers, transit operators, and private sector investors.

To date, transit-related joint development has generally occurred in large urban areas where transit enjoys two important advantages. First, in large urban areas transit usually has a large ridership base because it is able to serve well-traveled corridors more cheaply than the automobile. Second, many large urban areas are served by light rail systems that create fixed patterns of ridership, with people entering and exiting the system at the same place every day. There is some evidence that larger urban areas can successfully encourage transit-based joint development, although the picture is not entirely clear.

Smaller cities have seldom engaged in joint development involving transit systems. While some evidence indicates that joint development in smaller cities is a workable concept, there is also evidence that the approaches seen in larger urban areas do not fit the circumstances faced by transit systems in smaller cities. Smaller cities face very different circumstances from those in larger urban centers. First, in many of these smaller cities, ridership has been falling while funding has become less available.* Second, smaller cities often do not have either the resources or economic base to facilitate large-scale development of capital facilities.

This research examines three interrelated issues:

• How can a smaller city determine the proper type and scale of transit-based joint development, given specific conditions found in the community?

• What are the likely economic development impacts of a project involving a transit facility and private businesses?

*Composition of transit riders in smaller cities often includes more special needs people, such as elderly and handicapped.
• How can a joint development project benefit day-to-day operations of the local transit system?

We first consider the key relationships between local economic development and transit service. We then present a series of four case studies of joint development projects. In assessing the impacts of these projects, we work toward answers to the questions posed above.

This report is divided into two parts. Part I examines principles and practical considerations in joint development projects. We first examine the literature on transit-based joint development in both large and small cities. The subsequent section advances an economic framework for examining joint development. This section ties together the theory and practice of transit-based joint development, providing a method for evaluating current and future joint development efforts. We then outline the different institutional relationships possible in joint development activities. The approaches discussed are not only a way to look at present joint development projects, but also provide insights into the many forms transit-based joint development can take.

Part II examines actual transit-based joint development applications in smaller cities. At one extreme is a rural town where the elderly and handicapped system has participated in local economic development efforts; at the other is a small urban area with a conventional fixed route bus system that has applied the approach of joint development more characteristic of larger cities. All case studies have been chosen because they represent something unique in their application of transit-based joint development. A final section draws conclusions from this study and shows how these conclusions can lead to policies that will facilitate successful transit-based joint development.
PART I
PRINCIPLES AND PRACTICAL CONSIDERATIONS
SECTION 2
EXPERIENCE WITH JOINT DEVELOPMENT

Decreasing federal support for mass transportation, combined with transit costs that have risen faster than inflation and increasing competition for state and local tax dollars, has led transit officials to search for innovative finance mechanisms. At the same time, those concerned with economic development have become interested in identifying and utilizing transit's development potential. One technique that aims to satisfy both objectives is the joint public-private development of transit-related capital facilities. The hope is that these facilities will increase ridership and also facilitate economic development by encouraging subsequent private sector investment. The reasoning is that, when sited in decayed urban areas, the sheer presence of joint development projects can foster revitalization.

Thus far, most transit-related joint development has been in large urban areas and in conjunction with fixed-rail transit (Keefer, 1983; Keefer, 1984; Page et al., 1983). Although the long-term economic significance of such projects in Boston, Atlanta, Philadelphia, and Washington, D.C. is not completely clear, these projects have so far accomplished many of their joint development objectives. That is, the transit system has recaptured, through the sale or lease of adjacent property, some of the value of the benefits created by improved access to these locations. In smaller cities, joint development with bus transit systems has been relatively limited. Joint development is even less frequent in rural areas, where transit systems and economic conditions differ fundamentally from those in urban areas. These differences are reflected in the amount of research on joint development: the question of transit joint development in smaller cities has received relatively little attention to date.

This report investigates the extent to which the joint development pioneered in large metropolitan areas that frequently have fixed-rail transit systems can be transferred or adapted to smaller cities, with their bus and van systems. In this section we define joint development, introduce various approaches to categorizing joint development activities, and describe joint development's potential benefits. We review research on large urban joint development projects and discuss the features common to successful projects. We then discuss the research on joint development projects in smaller cities, highlighting the differences in operating environments and system types that influence what kinds of projects are suitable.
Joint Development Background

Joint development has been broadly interpreted in practice and in research. For our purposes we consider "traditional" large urban transit-related joint development as "real estate development that is closely linked to public transportation services and station facilities and takes advantage of the market and locational advantages provided by them" (Keefer, 1983, p. 1). Although a wide range of public/private initiatives are possible in transportation (COMSIS Corporation, 1986), our focus here is on joint development of capital facilities, a focus consistent with the following definitions:

- Joint development is "the relationship between transit and real estate whereby each contributes significantly to the other's value" (National Council for Urban Economic Development/Urban Mass Transit Administration, 1989, p. 3).

- "Joint development refers to the planning and implementation of an income producing real estate development which is adjacent to or physically related to an existing or proposed public transportation facility" (Beltran et al., 1986, p. 5).

- "Joint development refers to the linking of private real estate development to public transportation services and station facilities; the private development tends to rely to a considerable extent on the market and locational advantages provided by the transit facility" (Urban Land Institute, 1987, p. 1).

- Joint development is defined as "public/private partnerships to stimulate or enhance development or redevelopment opportunities around rapid transit stations. That development is not exclusively land development, but also includes economic development" (Davis, Brown, and Holmes, 1985, p. 19).

- Drawing heavily on the experience in Washington, D.C., Keefer defines joint development as "a project that involves the disposition, by lease or by sale, of transit authority-owned or controlled real property interests, including air rights, which are incremental to direct transit operational needs, at or near a station area which, because of proximity to station facilities, have significant potential for commercial, residential, or related development, alone or in combination with adjoining real property interests to further an authority's development related goals and objectives" (Keefer, 1984, p. 2).

Previous studies characterize joint development as land development near an existing transit facility, taking advantage of value created by the concentration of passengers. This characterization
applies well in large urban settings; in smaller cities it may be overly restrictive and of limited practical relevance.

**Large Urban Projects**

Traditional joint development usually entails real estate development above or adjacent to transit properties, most often fixed rail stations (National Council for Urban Economic Development/Urban Mass Transit Administration, 1989; Urban Land Institute, 1987). For example, transit agencies may choose to sell or lease the air-rights above their station to hotel, retail, or office developers whose business clients will benefit from the transit interface. Even in large urban areas, a wide range of activities are possible under the general rubric of joint development, from straightforward developer contributions to transit costs, all the way to the public sector acting as a developer (Beimborn, Rabinowitz, and Lindholm, 1986).

As the case studies in this report show, however, the definition and practice of transit-related joint development continues to evolve, and joint development strategy characteristic of large urban areas is now being adapted and reconfigured to accommodate the circumstances of smaller cities. This adaptation process has spawned a spectrum, or continuum, of joint development activities.

There are several ways this continuum may be divided and activities at points along the continuum categorized. For instance, joint development activities have been differentiated according to how active or passive a role the public sector takes in development (Walther, 1984). Here we differentiate joint development activities according to resources utilized, from modest projects employing existing skills and facilities at one end of the spectrum to more intensive projects utilizing new or expanded resources at the other (see Section 3).

**General Types of Large Urban Projects**

Large urban joint development activities use two principal mechanisms, and indeed a single project may use both; these are negotiated land agreements and lease or sale of development rights.

**Negotiated Land Agreements.** Using this mechanism, private developers/land owners lease land to transit agencies for a nominal amount ($1 per year, for example) in exchange for construction of a transit facility. Such leases are most attractive to developers/land owners whose projects benefit from proximity to transit facilities; typically the projects generate large amounts of traffic and would otherwise require expensive parking. Public opposition to land leases is usually minimal, although political considerations can be important during the negotiation of the lease
terms. In these cases, transit agencies must possess the legal authority to contract with private property owners (Rice Center, 1985a, p. 19). Examples of successful negotiated leases can be found in Tacoma, Washington, and Phoenix, Arizona.

**Lease or Sale of Development Rights.** A more common arrangement is a transit system leasing or selling the right to develop space above, below, or adjacent to its facilities (Rice Center, 1985b; Rice Center, 1986a; Urban Consortium, 1982). The goal of such arrangements for the public sector is to maximize the financial yield from a transit agency's real estate portfolio by generating capital, either in lump sums or income streams over a number of years. If the agency acquired the land through eminent domain, there may be legal questions as to whether that agency also acquired the air and subsurface rights associated with condemned parcels and whether the development rights are essential to accomplishing the purpose of the public project.

**Applicability to Smaller Cities.** Both types of project attract private investment at sites where developable land is relatively scarce. In other circumstances, the site must have a special competitive advantage for the investing business. In smaller cities, land is rarely scarce and the competitive advantage at a given site is often small.

**Generalized Findings in Large Urban Areas**

Among the more widely studied large urban joint development efforts are the Gallery II in Philadelphia, Miami's Overtown development, the Buffalo Convention Center, the Market Center in Baltimore, and various joint development activities pursued by Washington Metropolitan Area Transit District (WMATA). Our focus is less on the effects of any project than on the development process itself, the factors that existed there, and the approaches adopted. Our review of the literature reveals four characteristics of successful joint development projects.

**Clear Statement of Objectives.** The local governmental unit must state emphatically that it is seriously committed to joint development. Private investors are encouraged by a uniform development policy that signals an active and consistent role for the local government. The policy can also suggest the general types of projects that are likely to be of interest, as well as the roles the local government is willing and able to play (Davis, Brown, and Holmes, 1985).

**Designation of a Land Agency.** To facilitate cooperation with private investors and other public sector entities, the local government should designate a single agency as the contact. The proceedings of Joint Development Marketplace '80—a symposium that involved 450 representatives of local jurisdictions, federal agencies, the real estate development industry, and
major lending institutions—emphasized that being confronted with numerous local agencies and officials is antithetical to successful joint ventures (Public Technology, Inc., 1980).

**Risk Assumption.** The uncertainties and complexities characteristic of large metropolitan land markets are perhaps the greatest source of risk in these projects. The public sector must thoroughly understand the risks inherent in real estate development and realistically appraise the local real estate market if joint development is to be successful (Public Technology, Inc., 1983, pp. 29, 37). Although projects in uncertain or weak markets occasionally may succeed, an agency can head-off a doomed development by being aware of market conditions. The public and private sectors must agree on a distribution of risk that is mutually acceptable and that is related to the potential return. To minimize actual or perceived risk to private investors, local governments can assemble a knowledgeable staff and reduce delay-producing requirements. The latter is particularly important because changes in the market being pursued or in the availability and cost of capital could adversely affect the viability of the project. It also is important to reduce public controversy and potential legal problems.

**Balancing Benefits with Costs.** For a joint development project to be successful, both the public agency and the private investors must be satisfied that the benefits of their participation exceed the costs. The agency does not represent the public interest by contributing whatever is necessary to acquire the private investment; it must determine how much the community will gain economically and how much the transit system will improve its ability to serve the public. Only when these benefits exceed the costs will public participation in the project produce net benefits. Our review of large urban joint development projects suggests that in some cases adequate analysis was carried out, while in other cases completing the project became an end in itself.

**Small Urban Joint Development**

The primary objective of this study is to assess the extent to which transit-based joint development in large metropolitan areas can provide guidance for smaller cities. To do so, we must determine to what extent the opportunities and problems differ in these smaller cities. Here we briefly examine a number of recent joint developments that illustrate some of the major problems facing transit agencies in smaller cities. In Bridgeport, Connecticut, the transit agency sought to use its influence to further economic development in the city. In the other three illustrations, different approaches were used to support or facilitate the development of a joint use intermodal transit terminal. In Santa Cruz, California, the public sector built a transfer facility and uses lease revenue to help pay operating costs. The state of Michigan helps communities build or
renovate intermodal facilities and aims to make them self-sustaining by leasing out space. Finally, Greyhound’s Rural Connections program offers the opposite perspective, that of a customer for these kinds of terminals, offering the potential for revenue from parcel services and feeder connections. Each of these projects is briefly discussed in turn; in the second part of this report, we examine four other projects in greater detail.

**Bridgeport Community and Economic Development Program**

Bridgeport had a 1980 population of 143,000, having declined in the post-war era like many older, industrial cities. In the early 1980s, the Greater Bridgeport Transit District introduced a Community and Economic Development Program to help revitalize the area that it served (Greater Bridgeport Transit District, 1985).

In the District’s view, joint development in a city with an all-bus transit system could not be narrowly defined as simply joint *real estate* development. This approach might be appropriate for large cities with major transit systems but was not suited to smaller cities. The new program had two formal objectives: first, to make joint development relevant to small cities with bus-oriented systems; and second, to explore the transit agency’s role as community and economic development “activist.” In essence, the District wished to increase its role in the area’s overall development and sought to “explore joint development in its broadest terms” (p. 7). Thus, instead of focusing on real estate deal-making, the District wished to strengthen the relationship between its own efforts to improve transit and other public and/or private decisions to invest in community development or revitalization around the agency’s service corridors.

The District’s efforts were concentrated in three geographic areas: downtown Bridgeport, Fairfield Center (a suburban community), and the East Side of Bridgeport. The program sought to establish citizen and merchant groups in each area that would encourage economic revitalization; promote economic development “support activities” (street fairs, farmers’ markets, joint advertising, crime watches, clean up programs); prepare funding requests for projects; and implement revitalization plans.

The findings from the Bridgeport experience are mixed. Reviewers felt the Community and Economic Development Program had two successful outcomes: “a strengthened appreciation of the role that local area economic conditions play in the District’s financial health” (p. 3) and “a readiness to participate in activities that promote community and economic development, even though those activities may not have been initiated by the District” (p. 3).
In financial terms, however, the reviewers consider the program a failure. The District did not judge the financial returns from the program sufficient to warrant a permanent Community and Economic Development staff position. In some ways, this decision may reflect a tension between the District's need to be financially solvent and its responsibility to serve the public more generally. Ultimately, the District decided that "the activist role, conceived of in this program, could not be cost-effectively supported" (p.3).

Bridgeport's experience offers a few general lessons about the applicability of joint development models developed in large cities to smaller cities with all-bus systems.

- One of the large attractions of joint real estate development around transit facilities is that a value exists at one or more specific locations that can be captured by the transit agency and the developer. In smaller cities with only buses, however, this condition may not hold. In Bridgeport, the "spreading out" of stops that characterizes bus service (due to its routing and stopping flexibility) means that few instances exist of concentrated traffic that would be attractive to a developer. Only smaller opportunities may exist for joint investments by transit agencies and developers.

- The private sector is often skeptical that the transit agency can act in an efficient and timely manner. Often this means that only developers who have few alternatives wish to work with the agency.

- Political constraints may have to be surmounted for a project to succeed. In the Bridgeport case, "issues of 'turf,' differences over what types of community and economic development are desirable, and the inertia caused by a pluralistic public decision-making process are stumbling blocks that can upset the most sincere efforts" (p. 4).

**Santa Cruz Intermodal Transfer Facility**

The Santa Cruz Metropolitan Transit District (SCMTD) built an Intermodal Transfer Facility in 1984 in downtown Santa Cruz (Rice Center, 1985a; Rice Center, 1986a). SCMTD operates an all-bus system, and the facility was designed to serve as the new pulse-point for the system (Rice Center, 1985a; Rice Center, 1986b; Santa Cruz Metropolitan Transit District, 1981).

The new facility is directly adjacent to a pedestrian mall in a somewhat blighted area. The facility has leasable space on the first floor (a convenience store, restaurant, and pastry shop, totalling 4,000 sq. ft.), along with a transit waiting area on the first floor lobby. On a landscaped
median between bus lanes are six 100-square-foot retail booths used by a specialty boutique, a yogurt shop, and a Mexican specialty shop. The project was built entirely with state and local funds at a cost of about $2.5 million. In 1988-89, lease revenues from private tenants totalled about $87,000, and the total operating costs of the facility were about $290,000 (Santa Cruz Metropolitan Transit District, 1989).

Like projects in larger cities, the Santa Cruz Intermodal Transfer Facility is highly capital intensive, but unlike many projects in large cities, the new facility was sited adjacent to existing private development in an area slated for revitalization. In most large cities, the location of the transit facility is a given, and private development must locate near the transit facility, not the other way around. Locating a new transit facility close to existing private development and, indeed, moving the location at all seems to be much more likely to happen in joint development projects in smaller cities than in very large cities.

The Santa Cruz facility also differs in its financing and approach to finding private sector partners. In many large cities, joint development partners finance part of the investment or, at the very least, sign lease agreements before the project begins. In Santa Cruz, the SCMTD is the landlord and private firms are tenants, rather than joint investors. The facility was built and paid for entirely by the public sector. Space above and beyond that required for transit was added only after the potential for leases was recognized. This approach—renting or selling unused space in the transit facility—is characteristic of small community joint development and obviously differs considerably from the separate, privately built and financed office or retail development around transit stations common in “traditional” joint development in large cities.

Thus, the Santa Crux project shows that smaller systems need to be and can be more flexible than large systems in the kinds of projects they contemplate. When the existing transit location is not very attractive to businesses, often small transit systems can move to better locations. However, many private investors will prefer not to invest in a new project but rather to rent space when it is completed. The flexibility necessary for undertaking joint development may involve more risk for the transit agency.

Michigan Department of Transportation’s Intercity Passenger Terminal Program

Michigan began a program in 1975 to help construct a network of safe, attractive intercity terminals throughout the state that would facilitate intermodal transfers between local and regional carriers (Michigan Department of Transportation, 1988). Although the program did not emphasize joint development between public transit agencies and private partners, one major objective of the program was to make the terminals self-supporting. By encouraging cost sharing between the
local bus or paratransit agency and the intercity rail or bus carriers that also used the terminal, and by leasing out commercial space to other tenants, the program assumed that each facility could cover its operating costs. Thus, although joint development does not have to occur with capital investment, these facilities resemble the landlord-tenant arrangement discussed earlier.

Michigan has some 250 intercity bus terminals or stations (Kuehne and Becker, 1987). Ten facilities were built or rehabilitated by the Intercity Passenger Terminal program through 1988, in cities ranging in population from 80,000 (Kalamazoo) to 6,000 (Dowagiac). The Marquette (population of 23,000) Transportation Center is typical of the projects funded. Opened in 1983 in a renovated supermarket, the facility includes a local and intercity bus terminal, a maintenance and storage area, and 10-12,000 square feet of leasable office space on the second floor. The cost of the project was $1.4 million, of which the state of Michigan contributed $750,000 and the federal Urban Mass Transportation Administration (UMTA) contributed $652,000. Rents from Greyhound, the local school district (which leases storage and maintenance space for its vehicles and office space for dispatching), and three second floor office tenants cover the operating expenses of the center and leave a small surplus. Some of the ten facilities have found it harder to recover all of their operating costs through lease income (Howard et al., 1985).

Like most smaller city joint development, the Michigan projects involve single, multi-modal facilities rather than developments around rail stations, the typical large city model. The Michigan projects also feature joint tenancy arrangements, a common feature of smaller projects. An evaluation of Michigan’s program concluded that good market research, site selection, and strong property management skills were key factors in determining the success of each facility (Rice and Anderson, 1989). Moreover, the most successful tenants for the facilities tended to be those whose businesses benefitted directly from transit passenger traffic.

In many areas, programs that support the development of intermodal facilities may have wider benefits. Many rural communities are struggling to maintain intercity bus service. Building an intermodal transfer facility may be one way to maintain or attract service, since the terminals are a major part of the industry’s costs (Fravel et al., 1987). One dilemma for local managers is that intercity bus companies may be unwilling to contribute to the operating costs of the facility, leaving these costs unmet. Balancing the need to cover these operating costs with the desire to attract intercity carriers will often be a difficult task.

**Greyhound Rural Connection Program**

In 1987, Greyhound began a Rural Connection program to link local transit systems in rural areas with its national bus network (Shultz, 1987). Although this program does not center on
joint development, in many cases a terminal-sharing arrangement was envisaged that could enable joint development in small cities.

The Rural Connection program was designed to facilitate the transfer of rural transit passengers to intercity bus service by means of operating agreements with rural transportation providers. These operating agreements include a flat ticket commission for the local transit provider and allow the local transit agency to provide package service for Greyhound. In their role as Greyhound terminal agents, the local providers sell tickets for Greyhound's routes, provide package service, and furnish waiting rooms for Greyhound passengers. For many rural transit providers, the annual commissions from ticket sales could become a significant source of revenue and reduce the cost burden of providing terminal space. When combined with lease agreements to other tenants, this arrangement could become the equivalent of the landlord-tenant approach to joint development in Santa Cruz.

The Greyhound program represents an opportunity for small providers contemplating small-scale joint development projects. In the right circumstances—if a market really exists for connecting passengers and if the costs of handling passengers can be kept low—this kind of arrangement and the revenue it generates may be the element that makes a project viable.

Conclusions

Joint development cannot mean the same thing to transit systems in small cities as it does to systems in large cities. In large urban centers, joint development usually involves major real estate projects, built near existing large transit facilities (often rail stations), where a significant amount of value can be jointly captured by the developer and the transit agency. In short, the passengers brought together by the transit facility are a valuable commodity.

In small cities, these conditions do not exist. Most small transit systems have only buses. Bus routes do not generate the kind of valuable specific sites that rail transit does: the passenger volumes are much smaller and the distances between stops shorter. Thus, few sites have the value that land near stations in large cities have, and developers are less willing to invest in joint projects near them.

Because their sites are less valuable, small transit agencies are more likely to pursue joint development not at the investment stage but at the operating stage. Although private businesses may be unwilling to invest in a project, a range of businesses may find it profitable to lease space in a public sector-financed transit facility. In Michigan, the state helps finance joint-use facilities
that are expected to be self-financing operations, utilizing lease revenues from bus companies and other tenants. Greyhound's Rural Connections program allows for this type of arrangement in smaller cities.

Although existing transit sites in smaller cities may offer little value to private developers, this cloud does have a silver lining. In many smaller cities, the transit system has the flexibility to move to private development, rather than inducing development at its current location. The weakness of a bus system—that no great value is built up at any one site—can become an advantage when the system seeks a good site for a joint development project.
SECTION 3
KEY ISSUES IN STRUCTURING
A JOINT DEVELOPMENT PROJECT

Having examined the types of transit-related development projects that have been carried out under varying circumstances, we now turn to the structure of joint development arrangements. We begin by categorizing the potential benefits to the transit system and private businesses and then examine the types of approaches that are appropriate in different situations.

Benefits to Partners

Typically, the partners in a transit-related joint development project include a public transit system and one or more private businesses, public agencies, or non-profit organizations. These partners benefit from improved access to potential clients.

Transit System Benefits

There are four reasons for a transit system to enter into a joint development agreement:

• Transit agencies often have little experience in managing or developing non-transit activities. Private sector partners can supply this expertise effectively.

• Private sector partners can bring flexibility to the project, while the public sector partner can serve the public interest by pursuing broad goals.

• Many transit agencies do not have the available capital to make large investments in areas not directly related to operations, for financial or legal reasons, or both. Joint venture partners can supply the necessary capital for development.

• Development involves risk. Transit agencies are often unwilling or unable to assume risks that do not relate to their central mission. Private developers are often much better placed to bear the risks of development.

If successful, two fundamental benefits are possible for the transit system:

• Ridership growth. By virtue of co-location with other activities, such as retail outlets or offices, more passengers may be attracted to the transit system.

• Facility improvement. By sharing capital costs, the transit system may obtain access to facilities that are superior to those it otherwise would have.
The transit system's mission is to provide good quality transportation to as many people as possible. Lower cost facilities or better facilities at no higher cost clearly improve the ability of transit to accomplish this mission. Likewise, responsive service at major activity centers makes more people better able to ride transit.

**Benefits to Development Partner**

Private sector businesses can also realize two types of benefits from transit-related joint development:

- Better access to passengers arriving or departing via public transit. Businesses that rely on high volumes of foot traffic gain by access to these passengers: retail establishments, restaurants, entertainment facilities, and various services. These businesses may gain a competitive advantage over other similar businesses that are located less centrally.

- Lower facility costs. By sharing the costs of capital facilities with the transit system, the business may be able to occupy better facilities than otherwise would be possible.

It is worth stressing that the second benefit is unlikely to be of great value if the location does not have good access to prospective customers or clients. The greater the increase in pedestrian traffic, the larger the potential economic gains for the business entering a joint development arrangement. Put another way, the more a transit system can improve foot traffic in an area, the more attractive it will be as a joint development participant. It follows that a transit system with good ridership levels will be far more attractive for a joint development project than one with relatively few passengers.

**A Partnership Continuum**

As we observed earlier, transit-related joint development has generally occurred near existing facilities—principally rail stations—in larger metropolitan areas. The competition for locational advantages is particularly great in larger cities, and access to a concentration of passengers makes these sites valuable. Moreover, many users of rail systems in large cities have comparatively high incomes. Furthermore, because of the potential for high business volumes, larger cities are especially likely to attract private capital that would be invested in joint development projects.
Somewhat different conditions usually exist in smaller cities. Competition for locational advantages is less acute in smaller central business districts. While many types of business may wish to locate on primary downtown streets, the economic value of these locations compared to others in the downtown area is limited. Likewise, transit typically achieves a lower market penetration in smaller cities. Relatively low demand densities and few obstacles to auto use prevent transit from offering the concentration of passengers that it offers in larger cities. Few riders of transit in smaller cities have strong buying power; many have low incomes and are dependent on transit for their travel. The concentration of special needs people, however, does open up access to businesses and agencies that serve them.

Figure 3-1 depicts the differences between joint development opportunities for transit systems in large and small cities. For the reasons just discussed, heavy private sector investment is most likely to occur in large cities at locations with large volumes of transit passengers, particularly those with strong buying power (e.g., suburban commuters). This condition is represented at the left end of the continuum. On the right end of the continuum is the situation most common in smaller cities. Fewer passengers arrive and depart via transit, and those who do typically have comparatively low income levels. Thus, the ability of transit to significantly contribute to the viability of business in the downtown area or elsewhere is quite limited. As a result, businesses probably will be less willing to invest substantially in transit-related joint development projects in smaller cities.

Some Small Community Strategies

The simple continuum presented in Figure 3-1 suggests that a substantially smaller portion of capital costs are likely to be provided by private sector businesses in smaller cities. This implies that, while some initial private sector capital investment is possible, other forms of joint development should be explored.

Public Agency Joint Development

In many smaller cities, the transit system carries a significant number of passengers for local social service agencies. A joint development between the transit agency and one or more of these agencies can yield a number of different benefits, depending on the characteristics of both the transit agency and the social service agencies and on the needs and mix of their clients. For example, a joint development project that relocates the social service agencies to a central site shared with the transit agency may yield the following benefits:
<table>
<thead>
<tr>
<th>Private Sector Investment</th>
<th>Public Sector Investment</th>
</tr>
</thead>
</table>

| Public / Private | Public / Private Non-Profit | Public / Public |

*Typically:*

- **Large City Systems**
  - Large Volume of Passengers
  - Passengers With Stronger Buying Power
  - More Intensive Land Use Patterns

- **Small City Systems**
  - Small Volume of Passengers
  - Passengers With Weaker Buying Power
  - Less Intensive Land Use Patterns

**Figure 3-1**

**Partnership Continuum**

- Transit service can be made more efficient if clients who previously visited several separate agencies can now be transported to a single, central site.

- Clients who needed several trips to different agencies gain by reduced travel time and improved convenience.

- If several agencies were contemplating expansion or relocation, joint development can reduce building costs for all agencies involved.

To be sure, joint development of capital facilities will appeal to some public agencies more than others. Social service agencies, job training programs, and congregate meal providers are among the most likely to benefit by proximity to a public transit facility.

**Transportation Transfer Facilities**

A transportation center located in a smaller city could combine transit activities with an intercity bus terminal, a departure point for an airport shuttle service, and a dispatch center for
taxicab service. Such an arrangement would facilitate transfers between modes (e.g., from an intercity bus to a taxi) and would create savings in capital costs through the aggregation of multiple, compatible activities into a single facility. Moreover, a comparatively high activity level could be reached which would benefit all agencies and businesses involved.

Organizational Structures

Having argued that transit-related joint development in smaller cities cannot simply apply approaches taken in large cities, in this section we examine three approaches to joint development in its broadest sense.

Diversification of Facility Use

By working with other agencies and private businesses, the transit system can provide marketable services that cross-subsidize its normal operations. Figure 3-2 illustrates some of the possibilities that transit systems can pursue without adding skills or resources. In many cases, only minor operational modifications are required to generate a new source of revenue. Here we discuss four such possibilities: vehicle dispatch, vehicle maintenance, kiosks, and mobility-related services.

**Vehicle Dispatch.** Many transit systems use radios for dispatching vehicles. In these systems, local taxi or bus companies are potential customers for a joint service. Dispatch personnel within the transit system also could provide the service to one or more outside companies. Provided that the additional revenue produced exceeds any additional costs, the dispatching function could contribute to the system’s viability.

**Vehicle Maintenance.** For those systems that provide their own maintenance, additional revenue could be generated from maintaining other organizations’ vehicles. For example, a system could undertake for-hire maintenance of vehicles owned by local government agencies, such as the police, fire, and parks and recreation departments. In Boone, North Carolina, the ApplICARTS system provides just such a service for local agencies. Local non-profit agencies may also be potential customers for such a service. Salisbury Transit System, also in North Carolina, provides vehicle maintenance for a variety of human service agencies (HSAs). Transit systems could even offer maintenance service to the general public, particularly in rural areas where there are fewer maintenance shops available than in large cities. In Demopolis, Alabama, the transit system is considering providing this type of service (see Section 7).
Figure 3-2
Revenue Generation Utilizing Existing Capabilities
Kiosks. In areas where riders congregate or the general public often passes by, a kiosk, concession stand, or vending machines could be located, selling items such as newspapers, soft drinks, and snacks, as well as distributing information about schedules. The transit system could either employ workers to sell this material or rely on machines. In most cases, the scale of likely sales and hours of coverage will determine the choices. These projects could work well at transfer points, at major origin and destination points, at waiting areas, and at Greyhound connection or other intermodal transfer facilities.

Mobility-Related Services. Transit systems can also seek new customers for transportation-related services. In some cases, the local mobile meals program is a potential customer if the rural transportation provider can supply a cost-efficient delivery service. For those systems using vans to cover larger areas, a package delivery service also may be appropriate. Package pick up could be scheduled just like a passenger pick up, and interfaces with regional or national shipping services could take place at the system’s central location. In Tennessee, a small urban/rural system is currently providing multi-county package delivery service; in Kentucky, a system is considering developing such a service in connection with its Greyhound Connection program.

The Greyhound Connection program itself can generate net revenues for some systems, which could earn revenue not only by bringing passengers to Greyhound, but also by transporting incoming passengers to their final destinations. In some cases, trip schedules may have to be modified to allow for attractive connections, especially for systems operating fixed-route services.

Using Existing Skills and Resources. We have outlined a number of approaches that transit systems can pursue to generate additional revenue. These suggestions represent a wider array of strategies that could be used by any given system, all of which have these characteristics:

- only existing skills and facilities are needed,
- costs of implementation are relatively low,
- level of risk is relatively low, and
- revenue generated is likely to be modest at best.

Two pitfalls exist for these new services. First, since the objective is to generate additional revenue, any additional costs must be less than the revenue derived. If the system is working at full capacity (e.g., all maintenance workers are fully employed maintaining the system’s vehicles),
additional costs would have to be incurred to provide additional services. Generally speaking, only services that can use currently underutilized capacity—whether people, vehicles, or equipment—will generate net revenue.

Second, in some cases, these activities might indeed require certain new skills or resources. Running a package service is not the same as running a demand-responsive service, and offering maintenance service to the general public is not the same as providing in-house maintenance. The needs and preferences of the customers will differ, as will the quality of service they desire. Any system adding these services must investigate what potential customers will want and modify its operations accordingly.

Although these activities do not involve outside partners—the traditional meaning of joint development—they would expand the range of services offered outside the traditional field of transit operations, in the expectation that the system can generate additional revenue. However, the range of services that can be added is limited if only current skills and resources can be used. In the following discussions, we examine how these possibilities change when new skills and/or resources can be employed.

**Joint Transit-HSA Facility**

Transit agencies in small cities often transport large numbers of people for local human service agencies (HSAs). Where such cooperative relationships exist, the transit system and the HSA may wish to develop a facility to house them both. Because a significant number of riders are coming to one location, both the transit agency and the HSA can benefit by making that one location coincide with the place where transit transfers take place and/or passengers wait for transportation. In most cases, such joint development requires only improvements to existing facilities but few if any new skills.

Figure 3-3 displays a form of joint development of a mixed-use facility that builds upon the logical natural connections between rural and small urban transit services and a local HSA. Although the primary occupants of the facility would be the transit agency and the HSA, other occupants might also be attracted to the facility.

**Primary Occupants.** The primary operational advantage of this approach for a van-based transit system is that it combines normally disparate destinations, thereby reducing operating costs and vehicle mileage on passenger trips. Additionally, a waiting area in the transit facility that is connected to the HSA building could present opportunities for concessions and/or vending,
Joint Transit-HSA Facility

Primary Occupants
- HSA
  - Mental Health
  - Sheltered Workshops
  - Nutrition Centers

Transit System

Secondary/Synergistic Occupants
- Light Shopping
  - Drug Store
  - Food Store
- Light Service
  - Banking
  - Beauty Shop

General Public & Employee Parking Required

Figure 3-3
Human Services Approach
improved grouping of outbound return trips for higher passenger loads, and shorter passenger wait times for the return journey.

Fixed route systems can also benefit from such an arrangement. First, the concentration of riders at one central point can present concession and vending opportunities as well as the potential for more financially viable mixed-use opportunities. Second, if the joint facility allows for the development of a transfer point for the system, it may improve service to riders and reduce operating costs.

The HSA can benefit in a number of ways. Its clients would receive better transportation service, including more reliable arrival times. Where a number of HSAs are involved, other improvements may be possible. As different HSAs may have clients in common, these agencies may be better able to interact regarding client needs and service or to share equipment, leading to lower costs for all involved. However, a number of factors may prevent even enthusiastic partners from going ahead with this type of joint development. The HSA may already own a building or have a long lease on its existing facility, or the transit system may have an unsuitable building. Organizational or financial constraints may also discourage joint development.

**Secondary Occupants.** A joint transit/HSA facility brings together both transit riders and HSA clients, who are in many cases the same people. A number of organizations may find these people attractive customers and so wish to locate within the facility as well. In addition, stores or service retailers may also be attracted by the clients and employees of the HSAs and the transit operation. Figure 3-3 shows the retailers and services most likely to find such a location attractive: drug stores, grocery stores, and general merchandise retailers; banks; and beauty and barber services. The public parking required for the HSA and for transit system employees, visitors, and clients can also serve the retail and service operations.

In some cases, it may be desirable for the transit agency simply to locate close to an existing retail area, with covered and secured access between the two. However, this approach would not generate any additional revenue for the transit agency. This lesser scale of development may be attractive for transit systems that cannot raise the necessary capital for a joint use facility with retail space (for any of a variety of financial and non-financial reasons). This link could improve the quality of service to transit riders and HSA clients by easing access to retailing and could also generate political support from the business community who may experience increased sales with the improved connection.
For a successful transit-HSA joint use development to exist, a number of conditions should exist.

- Both the HSAs and the transit system must be able to increase their operational efficiency.

- Any retail space must generate a positive stream of income for the agency, after allowing for the costs of this space.

- New retail space should significantly improve access of HSA clients and transit riders to retailers; if it does not, few retailers will wish to move into the new facility.

- The new facility should be attractive to the general public and, ideally, should attract them to shop. This linkage should produce greater community awareness and support for the local transit service.

Any agency contemplating a joint development facility with an HSA must evaluate how many of these conditions hold and how certain and favorable the financial projections are. If the market for retail space in the area is depressed, the rent for retail space is unlikely to generate positive cash flows. If the transit agency and HSA are already located near each other, a joint site may not reduce operating costs for either by much. In essence, the agency will have to act like a private sector developer if it is to be successful in the venture: it must realistically assess its market and identify concretely how and by how much costs can be reduced.

**Private Sector-Based Joint Development**

We now turn to what is more commonly thought of as joint development: projects in which the transit agency acts as a private sector company or acts in partnership with a private sector corporation. Even here, the range of possible activities varies greatly in intensity, complexity, and scale. We begin with the activities already discussed but now cast these activities in a different setting and with slightly different results. We then increase the complexity of the project to encompass projects far removed from the starting point of simply generating additional revenue. Figure 3-4 shows the full range of joint development activities that involve the agency taking a private sector approach, beginning with existing capabilities and facilities, moving through projects involving enhanced capabilities, and ending with those requiring both non-traditional activities and substantial new facilities.
Increasing level of project complexity and difficulty
Increasing level of departure from traditional transit activities and management skills

Figure 3-4
Private Sector Approach
Existing Capabilities and Facilities

The activities we discussed earlier as means of generating additional revenue for the transit agency are depicted in Figure 3-4. The activities can now be thought of not as simple extensions of existing services to produce modest amounts of additional revenue but as semi-subsidiaries with the potential for generating more substantial revenues. For example, whereas we earlier focused on straightforward extensions of maintenance to include servicing local government fleets, we now include full-fledged facilities offering service to the general public, perhaps on a stand-alone basis.

Particularly in smaller cities with limited ability to maintain larger vehicles, maintain buildings, or dispatch transportation services, a nontraditional role for the transit system is possible. Contracts could use existing staff and facilities to maintain county road equipment, trucks from a local business, and other vehicles. Similarly, crews that maintain the transit facility and clean the vehicles could perform similar functions for other public agencies or private businesses. Dispatching local taxicabs and providing counter services for intercity bus operations also are functions that are inherently compatible with transit operations and that are capable of generating good, stable revenue flows.

Enhanced Capabilities and Facilities

Considerable potential exists for the transit system to use existing facilities in new and flexible ways that complement transit operations and generate revenue. Assuming such underutilized resources exist, the transit system must ask whether it can sell or lease the land or space, either in the current condition or with rehabilitation. If improvements are necessary, the transit system may seek out a developer or a tenant to work with before committing funds. The types of transportation-related activities that might be appropriate (see Figure 3-4) have been discussed in the context of Figure 3-3. However, other transportation-related activities are possible, such as service stations, car washes, auto body repair shops, and automotive parts stores, which cater mostly to automobile owners.

The ridership-related activities in Figure 3-4 address private sector businesses and public sector agencies that would draw customers/clients from the system’s riders. Some examples of these types of firms/agencies were shown in Figure 3-3. Other examples include fast food restaurants, sit-down restaurants, specialty clothing stores, hobby and craft shops, non-bank financial services, and any other type of business whose target market includes the people who ride the system, are HSA clients, work for the system, or drive by the location. While some businesses are clearly more suitable than others, some less obvious retailers may find this location
viable depending upon the particular characteristics of the site and the community in which it is located.

In our case studies, we describe examples of agencies that have developed, have attempted to develop, or are in the process of developing such joint arrangements. A common factor in successful cases is a mutually beneficial linkage between the transit agency and private firms or a local human service agency.

Non-Traditional Capabilities

The most ambitious activity involves developing significant non-traditional capabilities and undertaking large projects that are primarily dependent on non-transit customers for success. In this type of project, the transit agency’s role is not limited to its traditional mission of passenger transportation; the system plays the key role in organizing and leading the project. At this scale of operation, the transit system itself either becomes a property developer or hires a project manager. Because a range of new activities is required, the system must hire people with new skills, train current personnel, or contract with outside professionals. In many cases, the agency may create an organizational entity to own the new facilities, a private, for-profit management firm wholly owned by the transit system.

Several types of activities might fall into this non-traditional area (see Figure 3-4): hotels, convention centers, exhibit halls, large-scale retailing, fast-food and sit-down restaurants, and concession stands. Note that these activities do not rely on transit riders for their customer base, a major difference from the simpler projects discussed earlier. Although transit passengers are not the prime target of the new businesses, the mobility provided by the transit system could be an additional attraction to customers, and the system may gain new riders. For example, a hotel project will not expect to draw many customers from the existing transit ridership. However, the availability of easy transit connections to the community at large may give the hotel a competitive advantage over the other hotels in the area, and some hotel customers may use transit. The same logic applies to convention centers and exhibit halls. It probably does not apply to any great extent to fast-food restaurants but may apply, at least in part, to major retailing ventures.1

These more complex joint development projects clearly require skills that are not normally associated with running a transit operation, including project development and construction management. For smaller projects, especially those involving renovation of existing facilities and minor new construction, the existing transit management could acquire the necessary abilities,

1For a detailed discussion of these and related matters see Walther (1987).
provided that system operations permit the needed time to oversee the project correctly. For major new construction, specially trained personnel usually will be needed. Once construction or renovation has been completed, the additional rental space would have to be managed, so property management would become a critical new skill. For small projects, and especially those where the transit system would be the major occupant of the additional space, existing management can easily obtain this skill. For major projects, it would be necessary to contract these duties to a professional property manager or hire an in-house property manager.

Once retail or service establishments are in place, the transit system would have to be marketed differently. Not only must the system’s transit services be marketed, but the availability of for-profit firms’ services and merchandise must also be promoted. For relatively modest projects, advertising directly related to transit promotion (i.e., where the system can take the rider) may be all that is required. Larger projects may need promotion similar to that undertaken by shopping malls. Thus, depending upon the scale of the joint development project, the advertising and promotion tasks may be handled by system personnel with additional training, by new personnel, or by contract relationships with advertising professionals.

Finally, while it is not explicitly noted in Figure 3-4, an agency must be sure that a new development brings operating efficiency gains for the transit system. Few projects can be viable or justified if there are no cost savings from transit operations. Thus, there are several common threads linking successful transit-related joint development projects in smaller cities:

- Non-traditional management skills, either new or enhanced, must be obtained.

- The transit system must be clearly oriented toward profit-making in project design, business targeting and selection, and facility management.

- Transit should play a relatively minor, but still important, role in the success of the project.

- The role of UMTA funds in the overall financing of the project must be carefully evaluated. Profit-making activities may not be an acceptable use of federal funds.

- Operational efficiencies within the transit system must be identified and realizable.

- Transit managers must be sensitive to differences between projects of differing scales.

It is important to stress that the scale and complexity of the particular project will be paramount in determining what new capabilities would be required. If existing facilities are used,
the innovation may only require enhancements of existing abilities; when major new construction is undertaken, the need for additional skills increases dramatically. In Demopolis, Alabama, the local transit operator has undertaken a project that requires little new construction, and hence few additional skills (see Section 7). The larger the scale of the project, and the further the project departs from transit-related activities, the greater the need for specialized non-transit skills and personnel.

Before going ahead with any joint venture, the transit system must deal with the issue of risk and the rationale for public involvement. Any economic activity involves risk, and many of the projects we have described are among the most risky that can be undertaken. Real estate ventures are particularly risky because most of the investment is up-front and long-lived, with the success of the project dependent on the local real estate market holding up for perhaps 20 or 30 years. Thus, the transit agency should be extremely careful to evaluate the current and future market conditions for any retail or office space it may create, and the risk of downturns should be explicitly allowed for. Moreover, riskier projects should offer the prospect of higher returns to success. In many cases, the key criterion may be how much of the initial investment could be lost in the worst possible case; agencies may want to emphasize loss-minimizing projects for both financial and political reasons.

Moreover, the agency should ask itself why the public sector needs to get involved in any given project. Is there an institutional or legal reason why the private sector has not exploited this opportunity already? Perhaps local sources of capital are scarce or the land involved in the project cannot be sold to the private sector. If no barrier to private sector action exists, the agency should be cautious. Does this mean that a profitable investment does not really exist or is there some advantage to the agency that would not be available to a private sector firm? If the agency is able to articulate clearly the factors that make the project viable under its sponsorship—factors that would not hold for a private investor—then the project is more likely to be successful.

Summary

This section has discussed the full range of joint development activities that a transit system in a small or large city could contemplate. The possibilities begin with relatively simple opportunities that can be undertaken with only minor modifications to current operations, such as limited concession operations, expanded vehicle maintenance operations, and package delivery services. More significant projects may involve the joint development of facilities with a local human service agency and private sector retail or service businesses. These facilities offer benefits to all parties, while still not requiring major departures from traditional transit operations and skills.
Finally, joint development activities with the private sector could lead to large additional amounts of revenue when successful but also are risky and represent major departures from traditional transit activities and skills. The higher potential return also entails a higher risk should the development effort not be fully realized.

We have cited examples of transit systems in small and large cities that have put some of these ideas into practice. To date, however, relatively few systems have undertaken any joint development activities. One reason may be that managers of transit systems often have little time to explore what other systems have tried and achieved and what similar opportunities (and pitfalls) exist in their community.

To address this concern, the rest of this report is devoted to case-study descriptions of four systems that have undertaken joint development projects. Together with the conceptual discussion in this and earlier sections, these descriptions give a realistic view of what is possible in joint development involving transit systems in smaller cities.
PART II
CASE STUDY ANALYSIS
SECTION 4
CEDAR RAPIDS, IOWA

The Cedar Rapids Ground Transportation Center (GTC) was one of the first transit-related joint development projects nationally in a smaller city. Completed in 1984, it was funded through the Urban Initiatives Program of the Carter Administration. Among our four case studies, the Cedar Rapids GTC is the closest to being a transfer of the large urban approach to joint development in that an attempt was made to attract private sector investment at and around the GTC.

The Community

Cedar Rapids has been, and continues to be, a center for the food processing industry. Major processors such as Quaker Oats, Archer Daniels Midland (ADM), and General Mills are located in or near the city. But Cedar Rapids' economy has diversified in recent decades and is now host to a range of industries. Rockwell International, which manufacturers avionics and communications equipment, employs several thousand people in Cedar Rapids. More recently, Teleconnect (now merged with MCI), a provider of communications services, was founded and grew rapidly in the city.

As with much of the Midwest, Cedar Rapids suffered from the agricultural recession of the early and mid-1980s. The city lost about 2.7 percent of its population from 1980 to 1990 (dropping to a population of 107,317), while Linn County, within which it is located, lost slightly less than one percent. Figure 4-1 shows employment changes in five major economic sectors for Linn County, the region, and the nation. Linn County did much worse than the region and nation in manufacturing, out-performed the region in retail and wholesale trade, and lagged in service employment growth.

Cedar Rapids is similar to the state of Iowa on some measures of transportation accessibility but more like the nation on others. Table 4-1 compares the city, its county, the state of Iowa, and the nation for several transportation and demographic characteristics. Cedar Rapids has a smaller percentage of households without automobiles than the U.S. average but a higher percentage than the state as a whole. Given Iowa's largely rural nature, it is not surprising to find that fewer people in the state use transit for commuting than do people nationwide and that more commute by transit in Cedar Rapids, Iowa's second largest city, than in Iowa as a whole. Iowans spend less time travelling to work than the average nationally. By more general demographic
Figure 4-1
Employment Changes for Major Sectors, 1978-86
in Linn County (Cedar Rapids), the Region, and the Nation*

*The region includes North Dakota, South Dakota, Nebraska, Kansas, Minnesota, Iowa, and Missouri.
Source: County Business Patterns.

comparisons, Cedar Rapids has proportionately fewer households in poverty than either the state or the nation, and it has fewer elderly. Its minority population, while proportionately higher than the state, is well below the national level.

Cedar Rapids Transit System

Cedar Rapids has undergone changes common to many cities in the past 20 years. Its downtown remains a focal point for business and commerce, but residential and commercial activity has moved to peripheral areas. These changes, together with economic difficulties, have affected the city’s transit system, which has been losing ridership. Like many other transit systems, its major purpose in the past has been to transport people downtown from residential areas. Figure 4-2 shows how ridership has changed, falling during the 1980s from just below 2 million passengers to about 1.6 million per year.

The financial condition of the transit system in Cedar Rapids has worsened in the 1980s along with the city’s economy. Figure 4-3 shows how the operating cost and farebox revenue per
<table>
<thead>
<tr>
<th></th>
<th>City</th>
<th>County</th>
<th>State</th>
<th>Nation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Households with</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 cars</td>
<td>4,206</td>
<td>10.1%</td>
<td>8.3%</td>
<td>8.3%</td>
</tr>
<tr>
<td>1 car</td>
<td>15,144</td>
<td>36.4%</td>
<td>33.4%</td>
<td>33.3%</td>
</tr>
<tr>
<td>2 cars</td>
<td>15,642</td>
<td>37.6%</td>
<td>38.9%</td>
<td>38.3%</td>
</tr>
<tr>
<td>3 plus cars</td>
<td>6,655</td>
<td>16.0%</td>
<td>19.4%</td>
<td>20.1%</td>
</tr>
<tr>
<td>Commuters using</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private vehicles</td>
<td>46,710</td>
<td>87.6%</td>
<td>87.7%</td>
<td>80.5%</td>
</tr>
<tr>
<td>Public transportation</td>
<td>2,202</td>
<td>4.1%</td>
<td>3.0%</td>
<td>1.9%</td>
</tr>
<tr>
<td>Walk</td>
<td>2,792</td>
<td>5.2%</td>
<td>5.5%</td>
<td>8.6%</td>
</tr>
<tr>
<td>Other (includes at home)</td>
<td>1,634</td>
<td>3.1%</td>
<td>3.8%</td>
<td>9.0%</td>
</tr>
<tr>
<td>Travel time to work</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-9 minutes</td>
<td>10,157</td>
<td>19.2%</td>
<td>19.5%</td>
<td>31.7%</td>
</tr>
<tr>
<td>10-19 minutes</td>
<td>27,707</td>
<td>52.3%</td>
<td>46.3%</td>
<td>38.3%</td>
</tr>
<tr>
<td>20-29 minutes</td>
<td>9,911</td>
<td>18.7%</td>
<td>20.4%</td>
<td>15.9%</td>
</tr>
<tr>
<td>30-44 minutes</td>
<td>3,745</td>
<td>7.1%</td>
<td>9.7%</td>
<td>9.3%</td>
</tr>
<tr>
<td>45 plus minutes</td>
<td>1,481</td>
<td>2.8%</td>
<td>4.0%</td>
<td>4.7%</td>
</tr>
<tr>
<td>Mean travel time</td>
<td>15.3 min.</td>
<td>16.5 min.</td>
<td>15.4 min.</td>
<td>21.7 min.</td>
</tr>
<tr>
<td>Households in poverty, 1979</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Owner-occupied</td>
<td>1,221</td>
<td>4.3%</td>
<td>4.6%</td>
<td>7.8%</td>
</tr>
<tr>
<td>Renter-occupied</td>
<td>2,195</td>
<td>16.5%</td>
<td>15.0%</td>
<td>19.4%</td>
</tr>
<tr>
<td>Population</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Over 65 years</td>
<td>12,127</td>
<td>11.0%</td>
<td>10.1%</td>
<td>13.3%</td>
</tr>
<tr>
<td>Black</td>
<td>2.3%</td>
<td>1.6%</td>
<td>1.4%</td>
<td>11.7%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>0.9%</td>
<td>0.8%</td>
<td>0.9%</td>
<td>6.4%</td>
</tr>
</tbody>
</table>

Sources:


Figure 4-2
Ridership for Cedar Rapids Transit System, 1979-89
Source: Iowa Department of Transportation

Figure 4-3
Revenue and Expense Per Rider
Cedar Rapids Fixed Routes, 1983-1989
Source: Iowa Department of Transportation
passenger on the system’s fixed routes have changed from 1983 to 1989. The farebox recovery ratio (the portion of operating costs covered by farebox revenue) fell significantly from 31 percent in 1983 to 18 percent in 1989.

The Cedar Rapids transit system has thus faced many of the same problems that many other urban systems have faced in recent years. Ridership has fallen as retail activity has dispersed from the Central Business District, and financial problems have grown because of this trend and lower levels of federal support for transit. In this context, the Ground Transportation Center was proposed as a way to spur redevelopment of downtown and also to help strengthen the transit system.

The Ground Transportation Center Project

Objectives Pursued

Two major objectives were proposed for the Ground Transportation Center (GTC) project. First, the project would help stimulate redevelopment in a blighted section of the downtown area; second, the new facility would centralize all transportation modes in the city (local and intercity buses, taxis, and special services for the elderly and handicapped).

Chronology

The GTC was conceived in the late 1970s and substantially completed by the mid-1980s. Table 4-2 shows the major events leading to the project’s adoption and completion. On March 27, 1978, President Carter announced a new urban policy intended to coordinate all federal programs related to urban areas. In particular, it stressed joint development between the public and private sectors as a way to revitalize cities; it also highlighted the role of quality mass transportation in preventing decentralization of cities and encouraging urban revitalization. In early 1979, the U.S. Secretary of Transportation announced that the Urban Mass Transportation Administration (UMTA) would be the agency to distribute available federal transportation funds under a new Urban Initiatives Program. Each project would have to meet three criteria:

- The project should extend the scope of traditional transit improvements and demonstrate a significant impact on the urban environment.

- Preference would be given to projects located in cities or sections of cities which the Department of Housing and Urban Development (HUD) had determined to be "distressed." Cities not on HUD’s list could still qualify if they could document that they met another federal agency’s definition of a distressed area.
The project must be transit related.

Shortly thereafter, the Iowa Department of Transportation (Iowa DOT) began a feasibility study to examine the climate in Iowa's seven largest cities for possible joint development projects. Cedar Rapids was one of three Iowa cites selected for closer examination in the study's second phase which was carried out by Barton-Aschman Associates.

Table 4-2
History of Cedar Rapids Ground Transportation Center

<table>
<thead>
<tr>
<th>Date</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>March, 1978</td>
<td>President Carter announces a new urban policy, emphasizing joint public and private sector efforts to revitalize inner-city areas.</td>
</tr>
<tr>
<td>August, 1978</td>
<td>Iowa DOT begins feasibility studies for possible location of ground transportation centers in the state.</td>
</tr>
<tr>
<td>February, 1979</td>
<td>UMTA announces the Urban Initiatives Program.</td>
</tr>
<tr>
<td>August, 1979</td>
<td>Cedar Rapids submits GTC grant proposal to UMTA.</td>
</tr>
<tr>
<td>December, 1979</td>
<td>UMTA approves Cedar Rapids' GTC grant proposal.</td>
</tr>
<tr>
<td>July-September, 1981</td>
<td>Private developers withdraw from project.</td>
</tr>
<tr>
<td>October, 1981</td>
<td>New development agreement reached, project restarts.</td>
</tr>
<tr>
<td>June, 1982</td>
<td>GTC groundbreaking takes place.</td>
</tr>
<tr>
<td>November, 1982</td>
<td>Parking ramp construction begins.</td>
</tr>
<tr>
<td>June, 1983</td>
<td>Office tower opens.</td>
</tr>
<tr>
<td>November, 1983</td>
<td>Intercity terminal opens.</td>
</tr>
<tr>
<td>January, 1984</td>
<td>GTC city terminal opens.</td>
</tr>
</tbody>
</table>

Barton-Aschman's final report, submitted in 1979 to the Iowa DOT, argued that although the Cedar Rapids project was not in a distressed area by HUD's definition, it was a "blighted area"
under the state’s definition. In August, 1979, Cedar Rapids submitted the GTC grant proposal to UMTA; on December 21, 1979, UMTA approved the city’s grant. Federal contracts were signed in March, 1980.

As originally conceived, the project was to have four components: the GTC, a retail component, office space, and an apartment complex. The GTC would account for between 16,000 and 24,000 square feet and would have an attached parking ramp holding 500 cars. The retail component would utilize the second floor of the GTC, provide between 90,000 and 100,000 square feet of space, and be connected by a skywalk to a proposed downtown mall. The office tower would have between eight and 12 floors and have at least 100,000 square feet of space. The apartment complex would use air rights above the second floor retailing space.

In December, 1980, the city of Cedar Rapids hired Cannon Design, Inc. of Buffalo, New York, to complete the design. Three contracts were awarded to local firms, each responsible for developing specific parts of the project. As Iowa’s economic conditions worsened in 1981, the three developers began to experience financing problems. Interest rates rose, and the federal government reduced the availability of Industrial Revenue Bonds, prompting the developer of the housing component to withdraw from the project. In July, 1981, the developer in charge of the retailing component also withdrew, partly because the proposed downtown mall, to which the retail component would have been linked, had been cancelled.

In the fall of 1981, the city forged a new development agreement whereby the electrical contractor for the private portion of the project took over the development rights for both the apartment tower and the office building. The city agreed to provide $10 million in Industrial Revenue Bonds at an interest rate not to exceed 10 percent, a significant financial benefit to the developer. Also, the new developer could sell the office tower as a condominium, floor by floor, rather than lease the space as originally envisioned. As had been agreed to by the original developer, the city of Cedar Rapids would receive 15 cents per square foot annually for space in the office tower. Ten years after the opening of the GTC, the monthly lease amount per floor would be based on one percent of the value of the ground floor property.

The transportation element of the GTC was completed by the mid-1980s. Demolition and relocation of the structures and businesses was complete by the beginning of 1982. Construction of the GTC began in June, 1982. In June, 1983 the office tower was opened, and the intercity terminal followed in November. The city bus terminal opened in January, 1984, and the housing complex was completed in March, 1990. Table 4-3 shows how the proposals for each component of the project compare with what was actually built. Today there are three components instead of
Table 4-3  
Proposed and Actual Components of Cedar Rapids GTC Project

<table>
<thead>
<tr>
<th>Component</th>
<th>Proposed</th>
<th>Actual</th>
<th>Actual Cost (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GTC</td>
<td>16-24,000 square ft</td>
<td>9,600 square ft</td>
<td>$10.0</td>
</tr>
<tr>
<td></td>
<td>500 car ramp</td>
<td>500 car ramp</td>
<td>$2.5</td>
</tr>
<tr>
<td>Office Space</td>
<td>8-12 floors</td>
<td>13 floors</td>
<td>$15.0</td>
</tr>
<tr>
<td></td>
<td>100,000 square ft</td>
<td>182,000 square ft</td>
<td></td>
</tr>
<tr>
<td>Housing</td>
<td>200 units</td>
<td>40 units</td>
<td>$3.0</td>
</tr>
<tr>
<td>Retail</td>
<td>90-100,000 sq ft</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td>$30.5</td>
</tr>
</tbody>
</table>

Sources:

The planned four. The retail component of the project was never built, instead the space above the GTC was left open. The project today consists of the Ground Transportation Center with an adjacent parking ramp, a 15 floor office tower, and a 40 unit, market rate housing complex.

Costs

As completed, the entire GTC project cost slightly over $30 million. Of this, the GTC itself cost about $10 million. Most of the cost of the GTC was made up of general construction costs (62%) and land acquisition (18%). The federal government’s grant covered 80 percent of the total cost, while the local share was a little over 20 percent. The office building cost $15 million. The $10 million worth of Industrial Revenue Bonds at 10 percent represented a significant saving to the developer. Compared to the market interest rates prevailing at the time (about 16-18 percent), the saving was worth up to one-third of the total cost of the project over its life.

The City financed its 20 percent share of the GTC and the cost of the parking ramp by issuing $4.5 million worth of Tax Increment Financing (TIF) notes. The housing component of the project was greatly scaled back and cost about $3 million for 40 units. It was financed conventionally.

Lease Revenue

The city of Cedar Rapids receives two types of lease payments from the GTC project: from office space and from intercity bus companies, for a total of about $55,000 per year. At present, the city receives $27,300 annually from the office space: 15 cents per square foot for 13 floors at
14,000 square feet each. Air rights payments from the housing complex will contribute additional revenue in the future.

The GTC houses two intercity bus companies: Greyhound and Burlington Trailways. The city’s lease with Greyhound runs for 20 years from 1983, whereas Burlington Trailways only has a month-to-month arrangement, their original lease having run out in 1988. Both tenants pay $7.20 per square foot annually. This amount was calculated by allocating the city’s cost of the GTC (20 percent of the total) to each carrier based on the square footage used, and annualized at a 12 percent interest rate. Together, the two carriers use about 3,900 square feet of the GTC, out of a total of 9,600. Their annual rent totals about $28,000.

It is significant that prior to the removal of old buildings in the Tax Increment Financing district in which the GTC is located, $33,000 was generated annually in property taxes. Following redevelopment, the office tower produces over $300,000 per year. This tax revenue is used for projects in the district. The transit system also receives a portion of these revenues.

Evaluation

The Cedar Rapids GTC was intended to promote redevelopment of downtown—removing blight and strengthening the tax base—while helping the city’s transit system. We can examine how the transit system has been affected by the GTC, whether redevelopment has been stimulated, and whether the gains in these areas are consistent with the level of public investment that the project received.

Downtown Redevelopment. A paramount goal of the GTC project was to stimulate downtown redevelopment. It is exceedingly difficult to determine the extent to which the GTC has played a significant role in strengthening the downtown area’s economy or redevelopment. In addition to project-related development—the $13 million office tower and $3 million housing complex—a $7 million public library was built and about $6.5 million in private development has occurred in a seven-block area near the GTC site. Urban blight was eliminated, and property values increased. While it is difficult to say how much of this redevelopment can be attributed to the GTC project, the effect clearly was positive.

Transit System. The new GTC has given the transit system an impressive, modern transfer facility close to the center of downtown. Whether this has helped the system overall is difficult to tell. Overall ridership has not changed significantly since the facility opened but it could be argued that the GTC has prevented further loss in ridership. Four major factors have limited the GTC’s potential for helping the transit system. First, although the downtown has exhibited limited
growth, suburbanization continues in Cedar Rapids, so the degree to which the GTC could be expected to stimulate ridership is limited. Second, downtown Cedar Rapids has little if any parking problem, so anyone with access to an auto who works downtown has little need to use the bus. Indeed, the GTC project added 500 downtown parking spaces. Third, the fact that the retail component of the project never materialized meant that the GTC lacked a "draw" for consumers who might then use public transit for shopping trips.

**Benefits and Costs.** Overall, the GTC project required a significant amount of public support to become reality. Some 80 percent of the $10 million cost of the GTC itself was provided by the federal government, and the implicit federal support through Industrial Revenue Bonds to the office building was worth up to $5 million. Thus, about half of the $30 million that the whole project cost was contributed by the federal government. The city of Cedar Rapids contributed $4.5 million for the project through the issuance of TIF notes.

The transit system appears to have benefitted little from the project. The effect of the GTC on ridership has not been significant, given the importance of land use trends in the city and the competition from automobiles for commuting to downtown. Moreover, the GTC has meant that the transit system now has higher operating costs than previously. Our conclusion is that from the perspective of transit, whatever success the project has enjoyed is not particularly large, compared to the amount of federal and local public dollars devoted to it.
SECTION 5
DAVENPORT, IOWA

As in Cedar Rapids, the Davenport Ground Transportation Center was primarily funded by the Urban Initiatives Program. Unlike the Cedar Rapids project, it was completed on the strength of a relationship with a local community college. Whereas Cedar Rapids’ economy has been experiencing steady, if unspectacular, growth, Davenport has experienced very difficult times. The GTC was viewed primarily as a mechanism for enhancing the redevelopment potential of the downtown area. This case study sheds light on the ability of a transit-related joint development project to stimulate economic growth in a lagging smaller urban area.

The Community

The city of Davenport, with a population of about 100,000 people, is located on the Mississippi River on the eastern edge of Iowa. The four cities of Davenport and Bettendorf, in Iowa, and Rock Island and Moline, in Illinois, are known regionally as the Quad Cities, and in many ways they function as a single economic unit. Their combined population is about 350,000.

The Quad Cities have traditionally been the home of many agricultural equipment manufacturing and other agricultural-related firms. John Deere has its headquarters in Moline, Illinois. Until the late 1970s, these industries gave the area a strong economic base and were often thought of as “recession-proof.” This changed with the agricultural recession of the 1980s. As the recession worsened, several large manufacturing plants closed in the Quad Cities, and large numbers of workers were laid off at many of the remaining plants. From 1979 to 1987, the Quad Cities lost 34 percent of their manufacturing jobs and 41 percent of their jobs in durable manufacturing industries. In durable manufacturing industries, fully 17,000 jobs were lost, over ten percent of the region’s total non-agricultural employment in 1979. At one point in 1983, unemployment reached 22 percent in Rock Island County, covering that portion of the Quad Cities in Illinois. Although growth in employment in service industries made up some of these losses, the Quad Cities still lost two percent of their total employment from 1978 to 1986. This economic dislocation had effects both for the region’s population growth and its commercial centers.

Figure 5-1 shows how employment changed in Scott County, Iowa, where Davenport is located, and for the region and the nation in five major economic sectors. Employment gains locally lagged behind the nation in all five sectors: local gains were lower in services, retail trade, and FIRE (finance, insurance, real estate) industries, although the Midwest as a whole also
Figure 5-1
Employment Changes for Major Sectors, 1978-86, in Scott County (Davenport), the Region, and the Nation*

*The region includes North Dakota, South Dakota, Nebraska, Kansas, Minnesota, Iowa, and Missouri.
Source: County Business Patterns.

performed worse than the nation as a whole. In manufacturing and wholesale trades, Scott County actually lost employment and in manufacturing lost a much higher percentage of its employment than did the region or nation.

The Quad Cities lost about five percent of their population from 1980 to 1989. With these changes, it is not surprising that Davenport's Central Business District was significantly affected. Several major downtown retailers left the CBD during the 1980s. Moreover, a longer-term trend for retail activity to move the suburbs, which began in 1972 with the opening of a major suburban mall, only reinforced the pressures on downtown. Many of these changes happened just as the Davenport GTC was being proposed and built. The project was conceived in the early 1980s, just as the recession began to affect economic activity in the area. Indeed, the project was to be significantly shaped by worries about a coming economic downturn.

Davenport is similar to Cedar Rapids, the subject of the previous case study, in many travel and demographic characteristics. Table 5-1 shows how Davenport compared in 1980 to its county, the state of Iowa, and the nation on several indicators. Davenport had relatively more household without cars than did the state, but fewer than did the nation. Commuters tend to use
<table>
<thead>
<tr>
<th>Households with</th>
<th>City</th>
<th>County</th>
<th>State</th>
<th>Nation</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 cars</td>
<td>3,980</td>
<td>10.5%</td>
<td>8.0%</td>
<td>8.3%</td>
</tr>
<tr>
<td>1 car</td>
<td>14,371</td>
<td>37.8%</td>
<td>33.8%</td>
<td>33.3%</td>
</tr>
<tr>
<td>2 cars</td>
<td>14,099</td>
<td>37.1%</td>
<td>40.4%</td>
<td>38.3%</td>
</tr>
<tr>
<td>3 plus cars</td>
<td>5,574</td>
<td>14.7%</td>
<td>17.9%</td>
<td>20.1%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Commuters using</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Private vehicles</td>
<td>41,992</td>
<td>90.8%</td>
<td>91.1%</td>
<td>80.5%</td>
</tr>
<tr>
<td>Public transportation</td>
<td>1,490</td>
<td>2.3%</td>
<td>1.6%</td>
<td>1.9%</td>
</tr>
<tr>
<td>Walk</td>
<td>2,160</td>
<td>4.7%</td>
<td>3.2%</td>
<td>8.6%</td>
</tr>
<tr>
<td>Other (includes at home)</td>
<td>1,036</td>
<td>2.2%</td>
<td>2.1%</td>
<td>9.0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Travel time to work</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0-9 minutes</td>
<td>7,796</td>
<td>17.2%</td>
<td>17.8%</td>
<td>31.7%</td>
</tr>
<tr>
<td>10-19 minutes</td>
<td>21,039</td>
<td>46.3%</td>
<td>42.1%</td>
<td>38.3%</td>
</tr>
<tr>
<td>20-29 minutes</td>
<td>11,102</td>
<td>24.4%</td>
<td>26.0%</td>
<td>15.9%</td>
</tr>
<tr>
<td>30-44 minutes</td>
<td>4,071</td>
<td>9.0%</td>
<td>10.9%</td>
<td>9.3%</td>
</tr>
<tr>
<td>45-plus minutes</td>
<td>1,408</td>
<td>3.1%</td>
<td>3.2%</td>
<td>4.7%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mean travel time</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>16.6 min.</td>
<td>17.1 min.</td>
<td>15.4 min.</td>
<td>21.7 min.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Households in poverty, 1979</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner-occupied</td>
<td>1,176</td>
<td>5.0%</td>
<td>4.4%</td>
<td>7.8%</td>
</tr>
<tr>
<td>Renter-occupied</td>
<td>2,753</td>
<td>19.2%</td>
<td>16.9%</td>
<td>19.4%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Population</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Over 65</td>
<td>10.5%</td>
<td>8.9%</td>
<td>13.3%</td>
<td>11.3%</td>
</tr>
<tr>
<td>Black</td>
<td>6.1%</td>
<td>4.1%</td>
<td>1.4%</td>
<td>11.7%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>2.8%</td>
<td>2.2%</td>
<td>0.9%</td>
<td>6.4%</td>
</tr>
</tbody>
</table>

Sources:


their cars in Davenport, although the rate of transit use exceeds that of the state as a whole. Commuting times are generally lower than those for the nation, and few people spend long amounts of time getting to work. In 1980, Davenport had relatively few owner-occupied households in poverty; for renting households, it resembled the state and nation. In more general terms, Davenport had a smaller proportion of elderly residents than Iowa and a much higher proportion of blacks than did the state.

Davenport Public Transportation

Davenport's transit system provides fixed-route bus service and contracts privately for demand-responsive van services. Dispatching and maintenance are performed in a shared facility across the Mississippi River in Rock Island, Illinois. Bus ridership in Davenport ended the 1970s at an annual level of about 1.6 million. Figure 5-2 shows how ridership for Davenport's fixed-route services changed during the 1980s as the economy lost ground. Both service coverage and ridership have fallen significantly during this period. By the end of the 1980s, ridership was about 1 million. The number of vehicle revenue hours of service fell to about 50,000 per year in 1988 from as high as 75,000 in 1984.

Figure 5-3 shows how costs and revenues have varied for Davenport's fixed-route services during the 1980s. The operating ratio fell from about 19 percent in 1984 to about 13 percent in 1989. The system has operating expenses of about $2.09 per rider (1989), with fare-box revenue per rider averaging about 27 cents.

During the early 1980s, when the GTC was being proposed, Davenport's transit system received operating assistance of about $1.6 million (1982), of which the UMTA Section 5 program contributed 35 percent, local government contributed 61 percent, and the state of Iowa contributed about 4 percent. In the same year, fare box revenues totalled $320,000.

The Ground Transportation Center Project

Objectives Pursued

The city of Davenport began a program to revitalize the city in the late 1970s. A number of factors prompted this policy. The area's economy had begun to falter after steady growth for a number of years. City government had just been reorganized and the position of city administrator created. The city's Chamber of Commerce had new leadership and strongly supported revitalization.
Figure 5-2
Ridership for Davenport Transit System, 1979-89
Source: Iowa Department of Transportation

In the downtown area, the revitalization program centered on public sector capital improvements. During the late 1970s and early 1980s, the city undertook a main street beautification project, major renovation of a large downtown hotel and City Hall, and construction of a new jail. The city was also considering two other projects for downtown: a civic center and a new Ground Transportation Center for the transit system.

Chronology

UMTA’s establishment of a new Urban Initiatives Program in 1979 led to the first proposal for a Ground Transportation Center in Davenport. The Iowa Department of Transportation (Iowa DOT), prompted by the new program, decided to investigate whether jointly developed ground transportation centers would be feasible in some of the state’s larger cities. The city of Davenport, given its policy of urban revitalization, agreed to work with consultants to prepare a feasibility plan for such a center in the city and to develop a preliminary design for a facility. Table 5-2 outlines the major events in the project’s development.
Most of the planning and development for the GTC project was undertaken by officials of the city of Davenport. The city’s transit director advised on functional elements of the new facility. Overall, the project was aimed more at redevelopment rather than simply improving a transit facility.

The Ground Transportation Center, as conceived during the early design and feasibility study phases of the project, was to have two parts. The first part, a two-story terminal, would be used for transit purposes. Davenport Public Transportation buses would share a terminal on the first floor with the intercity carriers, Greyhound and Trailways. The system’s offices and dispatch facility would remain in their existing locations. The entire second floor of the center was to be occupied by Scott Community College and contain both offices and classrooms. The second part of the project was to be adjacent to the transit terminal: a hotel would be built, connected to the terminal and to an existing parking ramp by a skywalk. The GTC would thus blend three types of tenants: both public and private bus companies, a public sector college, and a private hotel operator.
Table 5-2
History of Davenport Ground Transportation Center

<table>
<thead>
<tr>
<th>Date</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>March, 1978</td>
<td>President Carter announces a new urban policy, emphasizing joint public and private sector efforts to revitalize inner-city areas.</td>
</tr>
<tr>
<td>August, 1978</td>
<td>Iowa DOT begins feasibility studies for possible location of ground transportation centers in the state.</td>
</tr>
<tr>
<td>February, 1979</td>
<td>UMTA announces the Urban Initiatives Program.</td>
</tr>
<tr>
<td>October, 1979</td>
<td>Davenport files an application for a federal grant under the Urban Initiatives Program to build the Ground Transportation Center.</td>
</tr>
<tr>
<td>April, 1981</td>
<td>Iowa Department of Transportation commits $141,667 to the project.</td>
</tr>
<tr>
<td>June, 1981</td>
<td>President Reagan signs appropriations for the federal share (80%) of the GTC funding, which is $4.4 million.</td>
</tr>
<tr>
<td>July, 1982</td>
<td>Site preparation begins.</td>
</tr>
<tr>
<td>Fall, 1983</td>
<td>The prospective hotel developer, the private sector element of the GTC project, withdraws due to poor local and national economic conditions.</td>
</tr>
<tr>
<td>August, 1985</td>
<td>Greyhound and Trailways tenancy in the GTC begins.</td>
</tr>
<tr>
<td>September, 1985</td>
<td>GTC grand opening takes place.</td>
</tr>
</tbody>
</table>

The city of Davenport hired a private sector consultant to recruit a private developer for the hotel component of the GTC project. The consultant located an interested developer and negotiations were begun with the city. The city planned to extend financing to the developer using Community Development Block Grant (CDBG) funds, which would be repaid by the developer at an interest rate of about seven percent. The city intended to reinvest the repayments to further redevelop downtown. The potential developer of the hotel initially questioned the desirability of locating adjacent to a bus station, had serious doubts about the strength of the local economy, and was skeptical of Davenport's ability to support a luxury downtown hotel. Nevertheless,
negotiations proceeded and, ultimately, the city and developer agreed on a plan that included retail outlets and banquet/meeting rooms within a larger hotel complex.

When local economic conditions continued to worsen, the hotel developer requested that plans for the hotel be set aside for a short time so that the effect of economic changes could be assessed. In the next two months, the economy continued its decline, and the hotel developer decided in late 1983 to withdraw permanently from the project. Building work was already in progress on the transit building when the hotel developer withdrew. Without a private sector component, the project was threatened. After discussion between state, local, and federal officials, UMTA agreed that Scott Community College could qualify as a private sector participant in the project. A similar decision had already been made for a project in New York. Thus, with Scott Community College as the private sector partner, the transit terminal portion of the facility was completed as planned.

Costs

As completed, the cost of the Davenport Ground Transportation Center was slightly over $5.6 million. Of this total, $4.4 million was contributed by the federal government, $141,667 by the Iowa Department of Transportation, and $1.2 million in local municipal funds (general obligation bonds). Scott Community College was assigned the second floor and the air-rights above it. About one-third of the total site was to have been used for the hotel. Because it was not built, the share of federal funds used to purchase this area was returned to UMTA. The area remains undeveloped at the present time.

Lease Revenue

Davenport’s GTC has three sources of revenue: intercity buses, concessions, and Scott Community College. Greyhound has a ten-year lease on space in the GTC, with three five-year renewal options. In order to attract Greyhound from its previous location, the city agreed to buy the site at a price of $213,937, with the intention of reselling it to another user. As of 1990, the city still owns this site, having been unable to sell it in the intervening period. Greyhound pays about $12,000 per year for its current lease in the GTC.

Initially, two intercity bus companies, Greyhound and Trailways, located in the GTC. However, shortly after Trailways moved into the GTC, the corporation terminated its national bus service. As a result, its portion of the GTC, representing roughly 15 percent of the total square footage of the transit portion of the facility, is now empty. The revenue lost from the Trailways lease is about $15,000 per year. The GTC receives about $22,000 per year from vending and pinball concessions in the building. Finally, Scott Community College contributes about $2,000
per year to help with maintenance of the building’s exterior areas. Thus the GTC’s annual revenue is about $40,000 per year: $12,000 from Greyhound, $22,000 from concessions, and $2,000 from the community college. The center’s annual operating costs are about $80,000, covering security, utilities, maintenance, and supplies. The center thus constitutes a net operating cost for the transit system of about $40,000 per year.

Evaluation

Davenport’s GTC was intended primarily to stimulate redevelopment in the city’s downtown area. The city’s transit system would also be helped by having a modern, comfortable facility that would attract passengers. Although the severity and length of the recession that began just as the GTC was being built makes it difficult to assess the project definitively, several conclusions can be drawn from Davenport’s experience.

Transit in Davenport has not benefited from the GTC. The transit system did not propose the plan initially, its impetus being general redevelopment. Although before the GTC was built, bus transfers did take place with little real shelter for passengers, a small transfer facility would probably have been enough to improve the situation. The GTC as built has three disadvantages for the bus system. First, it is probably too large for the system’s needs, especially since Trailways left a significant portion empty soon after the center’s opening. Second, the transit system now bears an annual cost of $40,000 to pay for the building. For a system with fare box revenue of about $260,000 each year, this represents a significant burden. Third, the GTC introduces inflexibility into the bus system’s operations. If ridership patterns change in the future, as they almost certainly will, a system built around a fixed-location GTC is much harder to change to adapt to new patterns of demand.

It is very difficult to assess whether the GTC has led to more redevelopment downtown because Davenport had very little private investment of any sort for most of the 1980s. The project did substantially improve the immediate neighborhood, but very little private sector investment has taken place in the surrounding area. The project has spurred some private action to continue clearing an area of dilapidated buildings, and a 100-unit U.S. Housing and Urban Development (HUD) elderly housing high-rise is currently under construction nearby. Thus, although the facility has clearly improved the area visually and has introduced an important security presence, and so improved the area’s attractiveness for future development, to date little real development can be said to have resulted from the GTC. Given prevailing economic conditions, it would be difficult to expect much development to take place.
Davenport's project was also less successful than envisaged in harnessing joint development. With the planned hotel, the project blended public and private uses and could be held up as an example of joint redevelopment. But, without the hotel element, the project really has only a small private sector component, Greyhound, and the city had to buy its existing site to lure Greyhound to the GTC. Three factors have reduced its chances of success.

First, there are sizable differences between smaller urban communities, such as Davenport, and the large urban areas, such as Boston and Atlanta, where transit-related joint development has been successful in the past. The characteristics of large urban transit systems that help make joint developments successful—high ridership along concentrated corridors—in an environment with a strong market for land and a more steeply sloping land-rent gradient, are not present in Davenport. In Davenport, the city was willing to help finance a hotel developer; in Washington, DC, hotel developers may have been willing to pay for the right to build near a transit facility.

Second, a danger exists if joint development is pursued as an end in itself, rather than as a way for both parties to benefit. It is clearly beneficial to have local and intercity buses use the same facility, but at some point this benefit may not justify the costs involved. The city of Davenport had to buy Greyhound's existing facility for a quarter of a million dollars to persuade it to move into the GTC. It is clear that Greyhound has benefited from this arrangement, but the city may have paid a significant cost for little real gain. Partners required to invest little can usually be found, but caution should be exercised by cities and transit operators. When joint partners contribute little to the project, they will have little commitment to it if conditions worsen in the future. While the ideal joint development partner is one who invests his or her own money in the project, substituting others who have little real commitment may be of limited value to the project's overall chances of success.

Third, the severity of the economic downturn in Davenport during the 1980s makes it likely that any joint development in downtown would have had difficulty in succeeding. A hotel development downtown would be risky in the best of times; as a recession approached, it would have been a reckless gamble. In good times, joint development projects will always be easier to cement, in bad times, few may want to be involved. Although cities will probably always worry more about getting projects underway as economic conditions worsen, it should be borne in mind that the risks associated with such projects are bound to be higher in difficult times.

The overall cost of Davenport's GTC cannot be justified by the benefits it has brought about to date. The project cost over $5 million, which implies an annual cost of about $600,000 over 20 years at ten percent interest. The transit system has benefitted little from the project:
ridership has not been stimulated, and the system must carry the net operating costs of the GTC. For a system with fare box revenue of about $260,000 per year, assistance of $600,000 per year could probably have been used in other ways for far greater benefits. As an economic stimulus to Davenport, the project cannot be said to have had much effect, but the economy was so depressed that this is understandable. A large amount of federal investment has been made in a facility that has had no real effect on the area's economy and that possibly has harmed the agency it was intended to help, the transit system. The lesson of Davenport is that joint development should not be pursued for its own sake and at any cost; joint development will only succeed where the conditions are right and both partners stand to benefit for undertaking the project.
SECTION 6
FARGO, NORTH DAKOTA

Fargo had rather different objectives in mind in pursuing a ground transportation center than did Davenport. Rather than seeing the Ground Transportation Center primarily as a means for promoting joint public-private development in the downtown area, the main objective in Fargo was to strengthen the transit system. By working with the federal government, the city of Fargo, and private businesses, the Fargo and Moorhead transit systems sought to build a centrally-located center that would encourage increased ridership. A secondary objective was to play a role in redevelopment of a particular part of the downtown area.

The Community

The city of Fargo, North Dakota (population 61,000), is located on the eastern border of North Dakota, directly across the Red River from Moorhead, Minnesota. Fargo is the largest city in North Dakota and is a regional center. Together, the cities of Fargo and Moorhead are home to three colleges: North Dakota State University (NDSU) in Fargo and Concordia College and Moorhead State in Moorhead. Fargo is both the financial center of North Dakota and a regional retail center. Five major banks have offices in downtown Fargo. As population has gravitated to Fargo from rural areas in North Dakota, the city has drawn retailing activity with them. Fargo now serves as a retail attraction for a wide area in both North Dakota and Minnesota. Cass County, which includes Fargo, has almost one quarter of the state’s non-government work force.

Some of the recent trends in employment in the cities of Fargo and Moorhead can be seen in Figures 6-1 and 6-2. Cass County, dominated by the city of Fargo, has seen employment growth near the national average from 1978 to 1986, as Figure 6-1 shows, and has out paced the surrounding seven-state region. Indeed, Fargo has had a higher percentage growth in employment than the region in services and in retail trades, and it grew proportionately faster than both the region and nation in the FIRE (finance, insurance, and real estate) sector. Only in wholesale trade did Fargo lag behind both the region and the nation in relative employment growth. Moorhead, on the other hand, has not fared as well. Total employment in Clay County, which includes Moorhead, actually fell during the early 1980s. Although employment gains in services and FIRE industries outpaced both the region and the nation, significant losses in retail and wholesale trades, and especially manufacturing, more than offset these increases.
**Figure 6-1**
Employment Changes for Major Sectors, 1978-86, in Cass County (Fargo), the Region, and the Nation*

* The region includes North Dakota, South Dakota, Nebraska, Kansas, Minnesota, Iowa, and Missouri.
Source: County Business Patterns.

**Figure 6-2**
Employment Changes for Major Sectors, 1978-86, in Clay County (Moorhead), the Region, and the Nation*

* The region includes North Dakota, South Dakota, Nebraska, Kansas, Minnesota, Iowa, and Missouri.
Source: County Business Patterns.
The urban area comprising Fargo and Moorhead has grown in population in recent years: from 91,000 in 1970 to 105,000 in 1980 and 110,000 in 1985. Tables 6-1 and 6-2 show how Fargo and Moorhead compare to their counties, states, and the nation on several travel and demographic indicators. Households in both North Dakota and Minnesota typically had more cars in 1980 than the average U.S. household; a smaller percentage had no cars and larger percentages had two or more cars. Both Fargo and Moorhead had fewer cars per household than did their respective states, but they had more than the nation as a whole. As might be expected, transit was not as important in commuting patterns in Fargo and Moorhead as in the nation, and commuting times in both cities were typically significantly shorter than in the nation as a whole. In both Fargo and Moorhead, significantly smaller proportions of owner-occupied households were in poverty in 1979 than in the state or nation. Both cities also had slightly lower proportions of elderly than the nation and far smaller minority populations.

**Fargo and Moorhead Transit Systems**

Fargo and Moorhead maintain independent transit systems that provide both demand-responsive and fixed-route services. The two systems cooperate closely through the Metro Area Transit organization. Although this means that the two systems use cooperative advertising and coordinate routes and scheduling, they are funded and operated as separate organizations. The Fargo transit system carries about 500,000 passengers each year, and Moorhead’s serves about 300,000. Moorhead’s ridership has been slowly increasing in recent years, while Fargo’s has stabilized. Figure 6-3 shows how ridership has varied for both systems over the last several years.

The two systems’ fixed route services are similar in their operations. Figures 6-4 and 6-5 show recent trends in passenger revenue and expenses per rider and the percentage of expenses covered by passenger revenues. Both Fargo’s and Moorhead’s farebox recovery ratios (the portion of operating expenses covered by passenger fares) have varied in the range of 20-25 percent in recent years. Moorhead’s expenses are a little higher than Fargo’s ($1.90 per passenger versus $1.70).

**The Ground Transportation Center Project**

**Objectives Pursued**

Fargo’s community leaders saw the Ground Transportation Center as an opportunity first to advance public transportation and secondarily to help revitalize the area where the facility was to be built. The GTC would facilitate transfers between the Fargo and Moorhead transit systems, thereby improving area-wide service. Before the Center, transfers between the two systems
Table 6-1  
Fargo Travel and Demographic Characteristics, 1980

<table>
<thead>
<tr>
<th></th>
<th>City</th>
<th>County</th>
<th>State</th>
<th>Nation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Households with</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 cars</td>
<td>2,146</td>
<td>9.1%</td>
<td>7.9%</td>
<td>7.2%</td>
</tr>
<tr>
<td>1 car</td>
<td>9,470</td>
<td>40.1%</td>
<td>35.7%</td>
<td>30.1%</td>
</tr>
<tr>
<td>2 cars</td>
<td>8,413</td>
<td>35.6%</td>
<td>37.8%</td>
<td>38.9%</td>
</tr>
<tr>
<td>3 plus cars</td>
<td>3,573</td>
<td>15.1%</td>
<td>18.6%</td>
<td>23.8%</td>
</tr>
</tbody>
</table>

| **Commuters using**  |         |        |       |        |
| Private vehicles     | 25,113  | 81.7%  | 81.8% | 72.9%  | 84.1% |
| Public transportation| 726     | 2.4%   | 1.7%  | 0.7%   | 6.4%  |
| Walk                 | 3,507   | 11.4%  | 10.5% | 14.4%  | 5.6%  |
| Other (includes at home) | 1,399 | 4.6%   | 6.0%  | 12.0%  | 3.9%  |

| **Travel time to work** |         |        |       |        |
| 0-9 minutes            | 7,939   | 26.4%  | 26.7% | 41.4%  | 17.9% |
| 10-19 minutes          | 17,310  | 57.6%  | 53.6% | 39.6%  | 33.7% |
| 20-29 minutes          | 3,266   | 10.9%  | 12.7% | 9.2%   | 19.9% |
| 30-44 minutes          | 793     | 2.6%   | 4.0%  | 5.5%   | 16.9% |
| 45 plus minutes        | 729     | 2.4%   | 3.0%  | 4.3%   | 11.6% |

| **Mean travel time**   |         |        |       |        |
| 13.3 min.             | 14.0 min.| 13.2 min.| 21.7 min.|

| **Households in poverty, 1979** |         |        |       |        |
| Owner-occupied          | 316      | 2.5%   | 3.8%  | 9.9%   | 7.9% |
| Renter-occupied         | 2,163    | 19.7%  | 19.3% | 20.5%  | 21.8% |

| **Population**          |         |        |       |        |
| Over 65                 | 9.8%    | 9.6%   | 12.3% | 11.3% |
| Black                   | 0.2%    | 0.2%   | 0.4%  | 11.7% |
| Hispanic                | 0.6%    | 0.6%   | 0.6%  | 6.4%  |

Sources:
<table>
<thead>
<tr>
<th></th>
<th>City</th>
<th>County</th>
<th>State</th>
<th>Nation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Households with</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 cars</td>
<td>978</td>
<td>10.0%</td>
<td>8.3%</td>
<td>9.8%</td>
</tr>
<tr>
<td>1 car</td>
<td>3,617</td>
<td>36.9%</td>
<td>32.0%</td>
<td>34.1%</td>
</tr>
<tr>
<td>2 cars</td>
<td>3,435</td>
<td>35.0%</td>
<td>38.0%</td>
<td>37.4%</td>
</tr>
<tr>
<td>3 plus cars</td>
<td>1,774</td>
<td>18.1%</td>
<td>21.6%</td>
<td>18.7%</td>
</tr>
<tr>
<td><strong>Commuters using</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private vehicles</td>
<td>11,020</td>
<td>76.7%</td>
<td>77.2%</td>
<td>79.6%</td>
</tr>
<tr>
<td>Public transportation</td>
<td>461</td>
<td>3.2%</td>
<td>2.3%</td>
<td>5.5%</td>
</tr>
<tr>
<td>Walk</td>
<td>2,324</td>
<td>16.2%</td>
<td>14.2%</td>
<td>8.0%</td>
</tr>
<tr>
<td>Other (includes at home)</td>
<td>567</td>
<td>3.9%</td>
<td>6.3%</td>
<td>6.8%</td>
</tr>
<tr>
<td><strong>Travel time to work</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-9 minutes</td>
<td>4,334</td>
<td>30.3%</td>
<td>30.0%</td>
<td>24.6%</td>
</tr>
<tr>
<td>10-19 minutes</td>
<td>7,490</td>
<td>52.4%</td>
<td>45.0%</td>
<td>35.5%</td>
</tr>
<tr>
<td>20-29 minutes</td>
<td>1,570</td>
<td>11.0%</td>
<td>13.4%</td>
<td>19.9%</td>
</tr>
<tr>
<td>30-44 minutes</td>
<td>395</td>
<td>2.8%</td>
<td>6.9%</td>
<td>13.6%</td>
</tr>
<tr>
<td>45 plus minutes</td>
<td>499</td>
<td>3.5%</td>
<td>4.8%</td>
<td>6.4%</td>
</tr>
<tr>
<td><strong>Mean travel time</strong></td>
<td>13.4 min</td>
<td>15.0 min</td>
<td>17.9 min</td>
<td>21.7 min</td>
</tr>
<tr>
<td><strong>Households in poverty, 1979</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Owner-occupied</td>
<td>195</td>
<td>3.3%</td>
<td>6.4%</td>
<td>7.0%</td>
</tr>
<tr>
<td>Renter-occupied</td>
<td>1,105</td>
<td>28.6%</td>
<td>28.0%</td>
<td>19.7%</td>
</tr>
<tr>
<td><strong>Population</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Over 65</td>
<td></td>
<td>9.3%</td>
<td>10.0%</td>
<td>11.8%</td>
</tr>
<tr>
<td>Black</td>
<td></td>
<td>0.5%</td>
<td>0.3%</td>
<td>1.3%</td>
</tr>
<tr>
<td>Hispanic</td>
<td></td>
<td>1.0%</td>
<td>1.0%</td>
<td>0.8%</td>
</tr>
</tbody>
</table>

Sources:


Figure 6-3
Ridership for Fargo and Moorhead Transit Systems, 1982-1988*
*Moorhead's ridership figures are inclusive of transfers; Fargo's are exclusive of about 40,000 transfers per year.

Figure 6-4
Revenue and Expense Per Rider, Fargo Fixed Routes, 1982-88
Source: City of Fargo
required a one and a half block walk. Given the harsh winter climate in Fargo and the nature of the neighborhood, the walk was a serious deterrent to passengers using transit. Furthermore, it was felt that an attractive new transit facility would help convey a progressive image, helping transit to occupy a more central position within the community.

Leaders felt that downtown revitalization would be promoted by the facility because the area surrounding the project was unattractive and in serious need of redevelopment. The leaders hoped that the new transit center would spur private investment in adjacent parcels.

**Chronology**

Table 6-3 shows some of the important milestones in the project’s completion. As with Cedar Rapids and Davenport, the project took about six years from conception to opening. The process began in 1978, at a time when the city of Fargo was experiencing a serious decline in the downtown tax base. Commercial vacancies hovered near the 40 percent level, and great concern existed as to what actions could best reverse the local economic downturn. Following the advice of a consultant, the city established a Tax Increment Financing district that included the eventual
<table>
<thead>
<tr>
<th>Date</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1978</td>
<td>Commercial vacancy rate in downtown Fargo reaches 40 percent.</td>
</tr>
<tr>
<td>March, 1978</td>
<td>President Carter announces a new urban policy, emphasizing joint public and private sector efforts to revitalize inner-city areas.</td>
</tr>
<tr>
<td>February, 1979</td>
<td>UMTA announces the Urban Initiatives Program.</td>
</tr>
<tr>
<td>July, 1980</td>
<td>Fargo makes its first application to UMTA for project funds</td>
</tr>
<tr>
<td>1981</td>
<td>Fargo makes a second application for funds.</td>
</tr>
<tr>
<td>1981</td>
<td>Fargo obtains funding from UMTA for acquisition, relocation, architectural and engineering services, and construction.</td>
</tr>
<tr>
<td>1982</td>
<td>Fargo purchases two and a half square blocks of property.</td>
</tr>
<tr>
<td>1982</td>
<td>Demolition and site preparation begin.</td>
</tr>
<tr>
<td>1982</td>
<td>Fargo begins negotiations with Greyhound for leasing space.</td>
</tr>
<tr>
<td>1982</td>
<td>A developer proposes office development as part of GTC. Proposal does not come to fruition.</td>
</tr>
<tr>
<td>Late 1983</td>
<td>Construction of GTC begins.</td>
</tr>
<tr>
<td>July, 1984</td>
<td>GTC opens to public.</td>
</tr>
</tbody>
</table>

GTC site. A bank in the district agreed to remain downtown and offered to participate in a special assessment if the GTC project were to become a reality.

In 1980 Fargo applied to UMTA for Urban Initiatives Program funds to help finance the GTC. UMTA reacted unfavorably to the proposal first advanced by the city. The next year the city of Fargo worked with its congressional delegation, which succeeded in obtaining funding from UMTA for acquisition, relocation, architectural and engineering services, and construction of the GTC. These funds were used in 1982 to purchase a two and one-half block area that included
a large (100,000 square foot) auto dealership. A key feature of the project was a relationship with Greyhound Corporation negotiated in 1982. The city had to convince Greyhound to move to the new site, and that involved agreeing to find a lessee for Greyhound's facility a short distance away. Resolving the problems associated with Greyhound's participation took about a year.

To meet the needs of the bank that agreed to remain at its location near the GTC site, a 200-space underground parking facility was built below the GTC. It is significant that following completion of the GTC, the bank has added another 30,000 square feet of office space. As the GTC project was proceeding through the late stages of the design phase, a developer proposed a two- to three-story office tower above the GTC. In the end, the developer was unable to recruit tenants, and the office tower was deleted from the center's plans. The city felt that further delays in proceeding with the project would be unwise.

Costs

The cost of the GTC project was $4.7 million. Of this, UMTA provided a grant of 80 percent ($3.6 million), leaving a local contribution of $1.1 million. The local contribution was funded from three sources: $560,000 was provided by a Community Development Block Grant (CDBG), $310,000 through a local cash contribution from the Fargo Parking Authority, and $250,000 from a loan by the Fargo Parking Authority. The cash contribution of $310,000 was available because the parking authority had sold one of its public parking ramps to a local firm. In effect, no local tax monies were directly used to finance the GTC.

Fargo and Moorhead operate the GTC jointly. A revenue and cost sharing formula of two-thirds (Fargo) to one-third (Moorhead) is based on the respective cities' populations. The gross annual operating costs of the GTC are about $90,000. Both cities operate their buses out of the GTC, although each has its own maintenance facilities in other areas. The facility utilizes a sawtooth parking arrangement, Fargo buses leaving in one direction and Moorhead buses in the opposite. The GTC, which is located within the city of Fargo, is only three blocks from the edge of Moorhead, so it is in an ideal location to facilitate transfers between the two communities.

Lease Revenue

Since transfers between intercity and local buses would be greatly improved if Greyhound buses also used the GTC, the city felt that Greyhound's inclusion in the center would be highly beneficial. In order to attract Greyhound from its current site, the city had to find a new tenant for the remaining 12 years of Greyhound's lease and offer a very attractive rent, since Greyhound's monthly rent was only about $1.00 per square foot. The monthly cost of space in the GTC was estimated to be about $2.50 per square foot.
The Greyhound facility is located next to the GTC and connected to it by a covered pedestrian walkway. Built by the city, the Greyhound terminal is architecturally similar to the GTC, although physically separate. As part of the lease agreement, Greyhound is required to pay property taxes on the site. Since completion of the project, property tax revenues on the site have gone from $12,000 to $28,000 annually. Greyhound’s lease is for about $32,000 per year.

The other major component of the GTC is the underground parking facility. Revenues from the parking garage are used to help fund the transit system. Since not all of the parking spaces are needed for GTC purposes, UMTA required that part of the funds used to build the parking garage be repaid. The amount of repayment was based on the amount of parking not required for GTC purposes and entailed a repayment schedule linked to 36 percent of net parking revenues. Given current forecasts of future revenue from the parking facility, UMTA’s loan, at zero interest, will be repaid in about 15 years. At the end of 1988, the remaining balance on this loan was $228,887. The parking garage generates about $72,000 per year in gross revenue. After allowing for operating expenses, UMTA’s 36 percent share of net revenues in 1988 was $13,004. The remaining net revenue is allocated to the transit system.

Evaluation

Fargo’s GTC has clearly improved the quality of service offered to many riders of the two transit systems it serves. Moreover, the project has served as a model of redevelopment in downtown Fargo. But do these gains justify the cost involved in building the GTC? Although no simple evaluation can be made, some sense of how worthwhile the project has been can be gained by looking at both the transit benefits and redevelopment gains in aggregate terms.

Fargo’s and Moorhead’s transit systems carry about 800,000 riders per year, who pay about $415,000 in fares. Annual operating costs for the two systems are about $1.5 million. The operating deficit, some $1.1 million each year, is funded by UMTA (slightly over half) and state and local governments (slightly under half). Thus, in general terms, passengers, the federal government, and local governments each contribute about $500,000 per year to fund the two bus systems’ operating costs.

About $4.7 million was spent on the GTC project. In annual terms, this cost works out to about $550,000, assuming a 20-year life and 10 percent interest rate. The actual value will of course vary with assumed term and interest rate, but $500,000 is a reasonable estimate of the likely annual cost. We can compare this cost to benefits on a per-rider basis or on a system-wide basis. The question is whether the benefits to riders justify this level of cost: could other improvements be more beneficial at the same or lower costs? Assuming all 800,000 riders benefit, each would...
have to benefit by 62 cents each ride to justify $500,000 per year. Given that full fares per rider are around 70 cents at present, the GTC’s benefits would have to be substantial to justify this cost. Put another way, $500,000 per year could have been used (if only in theory) to eliminate fares entirely on both systems. Can the incremental benefits that the GTC offers—improved transfers and a better image for transit—be on a par with the benefits that the whole system offers to passengers?

These comparisons highlight the danger inherent in categorical grant programs. Because recipients cannot trade-off these grants for other uses, the federal government may simply encourage a transit system to overbuild capital facilities. Given the choice, Fargo may have preferred a smaller GTC and more operating assistance. Such trade-offs are impossible to make in capital grant programs. The magnitudes in this case suggest that, given freedom, Fargo and Moorhead may well have chosen differently if given an amount equal to their total annual farebox revenue. Although other difficulties obviously arise if trade-offs were allowed, more benefits to transit riders might be possible with smaller grants if grants were more flexible.

Spurring redevelopment downtown was the other goal of the GTC project. Since the GTC was completed, a number of developments have taken place downtown. City officials report that about $70 million of mostly private investment has been made in downtown Fargo since the GTC was finished. For example, a local bank has built a new facility near the GTC, and a Radisson hotel has located in the same area. The difficulty with determining cause and effect in redevelopment is obvious: did the GTC project really influence private developers or did the intrinsic economic viability of their projects drive their investment decisions? Although it is difficult to believe that a hotel would be viable downtown with the GTC and not without the GTC (few hotel customers arrive by bus), private investors are influenced by the perceived business climate of an area. Because government can influence an area’s business climate by making confidence-building investments there, the GTC project may have had an important psychological effect on business investment downtown.

In summary, Fargo’s GTC probably had some effect on the encouragement of downtown redevelopment. Although it is unlikely that it caused all or even most ensuing developments to take place, it probably did have a positive effect on development prospects. Whether this positive effect was worth $4 million and whether more beneficial public investment projects could have been built instead are open questions.
SECTION 7
DEMOPOLIS, ALABAMA

A case study rather different from the preceding three is Demopolis, Alabama. While the community sought to provide better public transportation through public-private interaction, it did not build a ground transportation center. Rather, the community purchased a vacant automobile dealership and converted it to a facility that could meet the needs of the transit system and provide other revenue-producing services. The Demopolis experience is a variation of the "diversification of facility use" approach discussed in Section 3.

The Community

Demopolis is a community of about 7,000 people in Marengo county, located in west-central Alabama, and is a center of activity for a low population, multicounty area. The city of Demopolis recently completed a $16 million downtown renovation project that has helped draw retailing activity back to downtown. The city is currently converting an old movie theater into a library to anchor that part of downtown.

The Tennessee-Tombigee waterway, which connects the Tennessee River with the Gulf of Mexico, flows through the Demopolis area, and many people in the community believe that it will help stimulate future economic development. However, while the city shows signs of revival, the broader west Alabama area as a whole faces serious economic problems. Figure 7-1 depicts the West Alabama Public Transportation (WAPT), the transit operator in this case study, that serves the six-county area around Demopolis. This six-county service area is one of the poorest in Alabama and has lost about four percent of its population during the 1980s. Demopolis and its surrounding counties have been targeted for economic development efforts by the state.

The immediate area around Demopolis has lagged behind the region and nation in employment growth over the period from 1978 to 1986. Figure 7-2 shows how employment has changed in the three counties of Greene, Sumter, and Marengo in five sectors. Although total job growth in the 12-state region has outpaced the nation, the Demopolis area has actually lost jobs over these years. Strong gains in the transportation sector have been more than offset by losses in manufacturing, wholesale trade, and slower comparative growth in services.

People in the six-county Demopolis area are much less likely to have cars than those in either the state of Alabama or the nation as a whole. Table 7-1 shows how the six counties compare individually and as a whole to the state and region in terms of auto ownership, commuting
patterns, and income. An average of 22 percent of households in the six counties have no car, roughly twice the national and statewide averages. In Greene county, over a quarter of households had no car in 1980. Few people used public transportation to get to work in these counties in 1980, except in Greene county.

This area is extremely poor. The rate of poverty in owner-occupied households in 1980 was twice that of Alabama, itself twice the national rate. And more than half of all renting households lived in poverty, two and a half times the national rate. Blacks make up almost two-thirds of the six counties' population, over twice the proportion in Alabama as a whole. Thus, Demopolis and its surrounding counties are largely rural, sparsely populated, and poor. A large number of households have no means of private transportation, so the potential for some form of public transportation to help increase people's mobility clearly exists.
Figure 7-2
Employment Changes for Major Sectors, 1978-86, in Greene, Sumter and Marengo Counties, the Region, and the Nation*

* The region includes Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, and West Virginia.
Source: County Business Patterns.

West Alabama Public Transportation

West Alabama Public Transportation (WAPT) is a separately incorporated, private, non-profit organization that operates under the umbrella of West Alabama Health Services (WAHS). WAPT provides transit service in Choctaw, Greene, Lowndes, Marengo, Sumter, and Wilcox counties in Alabama (we will refer to these six counties as the Demopolis area). Unlike the systems in the previous three case studies, WAPT is a primarily rural transit system that utilizes vans.

WAPT was begun in 1977 to transport patients in the Greene county service area of the WAHS. The service began with a single van based in Eutaw, Alabama, where WAHS’s home office is located. As the need for health-service-related transportation increased, WAPT applied for funding from the Alabama Department of Human Resources. Through Title XX of the federal Older Americans Act, funding was given, and WAPT was able to expand its number of vehicles to seven. In the next few years, WAHS expanded its health care provision in three counties: Greene, Marengo, and Sumter. In each county, a separate transportation program was also established.
<table>
<thead>
<tr>
<th></th>
<th>Choctaw Percent</th>
<th>Greene Percent</th>
<th>Lowndes Percent</th>
<th>Marengo Percent</th>
<th>Sumter Percent</th>
<th>Wilcox Percent</th>
<th>Area Percent</th>
<th>State Percent</th>
<th>Nation Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Households with</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 cars</td>
<td>16.4%</td>
<td>26.3%</td>
<td>22.7%</td>
<td>22.0%</td>
<td>21.8%</td>
<td>23.5%</td>
<td>22.1%</td>
<td>11.8%</td>
<td>12.9%</td>
</tr>
<tr>
<td>1 car</td>
<td>25.9%</td>
<td>31.1%</td>
<td>30.4%</td>
<td>27.5%</td>
<td>34.6%</td>
<td>35.4%</td>
<td>30.8%</td>
<td>31.4%</td>
<td>35.5%</td>
</tr>
<tr>
<td>2 cars</td>
<td>32.1%</td>
<td>25.3%</td>
<td>27.4%</td>
<td>30.9%</td>
<td>26.5%</td>
<td>28.1%</td>
<td>28.4%</td>
<td>35.0%</td>
<td>34.0%</td>
</tr>
<tr>
<td>3 plus cars</td>
<td>25.6%</td>
<td>17.3%</td>
<td>19.5%</td>
<td>19.6%</td>
<td>17.1%</td>
<td>13.0%</td>
<td>18.7%</td>
<td>21.8%</td>
<td>17.5%</td>
</tr>
<tr>
<td><strong>Commuters using</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private vehicles</td>
<td>93.1%</td>
<td>91.4%</td>
<td>90.8%</td>
<td>91.6%</td>
<td>89.2%</td>
<td>93.3%</td>
<td>91.6%</td>
<td>93.1%</td>
<td>84.1%</td>
</tr>
<tr>
<td>Public transportation</td>
<td>1.0%</td>
<td>3.3%</td>
<td>0.7%</td>
<td>0.6%</td>
<td>1.2%</td>
<td>0.8%</td>
<td>1.7%</td>
<td>1.4%</td>
<td>6.4%</td>
</tr>
<tr>
<td>Walk</td>
<td>3.1%</td>
<td>3.7%</td>
<td>3.3%</td>
<td>5.0%</td>
<td>6.5%</td>
<td>3.6%</td>
<td>4.2%</td>
<td>3.2%</td>
<td>5.6%</td>
</tr>
<tr>
<td>Other (including at home)</td>
<td>2.8%</td>
<td>1.6%</td>
<td>5.2%</td>
<td>2.8%</td>
<td>3.1%</td>
<td>2.3%</td>
<td>2.5%</td>
<td>2.3%</td>
<td>3.9%</td>
</tr>
<tr>
<td><strong>Travel time to work</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-9 minutes</td>
<td>19.8%</td>
<td>26.2%</td>
<td>15.7%</td>
<td>26.6%</td>
<td>28.9%</td>
<td>25.3%</td>
<td>23.8%</td>
<td>16.5%</td>
<td>17.9%</td>
</tr>
<tr>
<td>10-19 minutes</td>
<td>21.6%</td>
<td>32.3%</td>
<td>18.9%</td>
<td>29.4%</td>
<td>27.8%</td>
<td>20.4%</td>
<td>25.1%</td>
<td>34.5%</td>
<td>33.7%</td>
</tr>
<tr>
<td>20-29 minutes</td>
<td>17.4%</td>
<td>14.1%</td>
<td>11.0%</td>
<td>16.5%</td>
<td>14.2%</td>
<td>16.6%</td>
<td>15.0%</td>
<td>20.3%</td>
<td>19.9%</td>
</tr>
<tr>
<td>30-44 minutes</td>
<td>20.8%</td>
<td>14.5%</td>
<td>28.7%</td>
<td>15.6%</td>
<td>18.9%</td>
<td>21.7%</td>
<td>20.0%</td>
<td>18.2%</td>
<td>16.9%</td>
</tr>
<tr>
<td>45 plus minutes</td>
<td>20.4%</td>
<td>12.9%</td>
<td>25.6%</td>
<td>11.9%</td>
<td>10.2%</td>
<td>16.0%</td>
<td>16.2%</td>
<td>10.5%</td>
<td>11.6%</td>
</tr>
<tr>
<td><strong>Mean travel time</strong></td>
<td>26.5 min.</td>
<td>21.0 min.</td>
<td>28.8 min.</td>
<td>20.2 min.</td>
<td>19.5 min.</td>
<td>23.4 min.</td>
<td>23.2 min.</td>
<td>21.6 min.</td>
<td>21.7 min.</td>
</tr>
<tr>
<td><strong>Households in poverty, 1979</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Owner-occupied</td>
<td>29.8%</td>
<td>33.9%</td>
<td>30.7%</td>
<td>25.7%</td>
<td>23.5%</td>
<td>36.6%</td>
<td>30.0%</td>
<td>14.1%</td>
<td>7.9%</td>
</tr>
<tr>
<td>Renter-occupied</td>
<td>48.1%</td>
<td>59.3%</td>
<td>61.3%</td>
<td>49.3%</td>
<td>50.9%</td>
<td>57.0%</td>
<td>54.3%</td>
<td>33.3%</td>
<td>21.8%</td>
</tr>
<tr>
<td><strong>Population</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Over 65</td>
<td>12.5%</td>
<td>16.2%</td>
<td>11.6%</td>
<td>13.8%</td>
<td>14.4%</td>
<td>14.5%</td>
<td>13.8%</td>
<td>11.3%</td>
<td>11.3%</td>
</tr>
<tr>
<td>Black</td>
<td>43.5%</td>
<td>78.0%</td>
<td>75.0%</td>
<td>53.3%</td>
<td>69.3%</td>
<td>68.8%</td>
<td>64.7%</td>
<td>25.6%</td>
<td>11.7%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>1.0%</td>
<td>1.6%</td>
<td>1.6%</td>
<td>2.2%</td>
<td>1.3%</td>
<td>2.4%</td>
<td>1.7%</td>
<td>0.9%</td>
<td>6.4%</td>
</tr>
</tbody>
</table>

Each transportation program was funded separately through Title XX. In each county, transportation was provided both for WAHS and for a human services agency. Thus the transportation system was not just a transportation service for WAHS but a coordinated service for both health and human services providers. The program was operated in this manner with Title XX funds for five years.

The source of WAPT’s funded changed in the early 1980s, when the amount of funding available under Title XX was falling. WAPT applied for funds under the federal Section 18 program, which was becoming better developed in Alabama. Because applications under Section 18 could include multi-county programs, separate applications were no longer needed for each county. The Section 18 application was approved, and service funded by Section 18 monies was begun in 1982. A multi-county board was established to coordinate for the counties and WAPT.

At present, WAPT operates 75 vehicles and employs 50 paid drivers operating both flexible routes and demand-responsive services. WAPT provides two kinds of transportation services at present: those related to social service and health providers and those more closely resembling conventional public transportation.

- In addition to traditional human service and health service transportation services, WAPT also provides transportation to mental health facilities and to out-of-service area locations, such as Tuscaloosa for kidney dialysis patients. WAPT provides service to and from parenting classes, school for special education students, and elderly nutrition centers. Area churches also use WAPT’s vehicles to transport worshipers on Sunday, providing their own drivers.

- With the advent of Section 18 funding, WAPT also began general public transportation services. Some of these services are provided by WAPT drivers, while others are provided by non-WAPT drivers who are screened by WAPT and placed on its insurance policy but not on its payroll. Home-to-work bus trips are handled in this manner, with a fare collected from the non-driving riders.

Demopolis Maintenance Center Project

Objectives Pursued

In the late 1980s, WAPT began to consider a project to develop, with a number of private partners, a single maintenance facility in Demopolis. Such a facility would achieve two key objectives: to reduce costs by centralizing maintenance facilities and to provide the system with a
source of income. As WAPT's service area and size grew, Eutaw became less attractive as a location for its headquarters. Eutaw, about 25 miles north of Demopolis in Greene county, was not centrally located within the enlarged service area and was not a major destination for passengers. In contrast, Demopolis had both of these characteristics. Moreover, WAPT's maintenance was being performed by a variety of vendors in a number of different locations. If WAPT were to centralize its operations in Demopolis and provide its own maintenance, operating costs and vehicle downtime could be reduced.

WAPT also needed to secure new sources of revenue. The number and size of Section 18 programs in Alabama has grown quite dramatically since 1982, and available Section 18 funds were being supplemented by Section 9 transfers. However, the size of the Section 9 systems has also grown, thus limiting the amount of Section 9 funds available for transfer. For fiscal year 1990, these factors produced the first actual cuts in Section 18 funds at the system level. Therefore, WAPT required a source of local income in order to survive in the long run. A joint development project in Demopolis that generated additional income for WAPT would mitigate against any future reductions in assistance from the state and federal governments.

A joint development project involving the private sector was attractive for reasons other than generating additional income. At the time the project was first conceived, UMTA was promoting its private sector initiative, and the Alabama Highway Department had adopted a policy that favored projects involving the private sector. A joint development in Demopolis would thus be attractive to the agencies from which WAPT wished to obtain financial assistance for the project.

Chronology

In November, 1988, WAPT located a potential site for a facility in Demopolis. The site, on the north edge of downtown Demopolis, was vacant, having formerly been an automobile dealership. The parcel of land was slightly more than three-quarters of a city block and contained the former dealership building (one-third of the parcel), an undeveloped grassy area (another one-third of the parcel), a concrete slab (20 feet square), a gravel lot formerly used to display used cars, and a small building that had served as an office for the used car operation.

The location had four advantages. First, it was relatively inexpensive; the price of the parcel and buildings was $190,000, a figure lower than the appraised values. Second, the site offered sufficient space for WAPT's operations, vehicle storage needs, administration, and an in-house maintenance facility. The site was flanked on two sides by automotive establishments (an auto parts store and an oil change business), and a maintenance facility would fit well with these neighboring businesses. Third, there was adequate space within the site to lease to other users,
including private sector businesses. Finally, the location was vacant, and so a new development on it would help extend downtown redevelopment, which was of great interest to the city.

The main building provided 21,500 square feet of space. As Table 7-2 shows, about half of this space was devoted to a maintenance facility to be used for both WAPT and other vehicles. WAPT originally intended to lease the maintenance space to a company that would provide maintenance for WAPT under a contract arrangement. About half of the maintenance shop's business was to be devoted to local government fleets and vehicles owned by the general public. A number of potential customers for contract maintenance expressed support for, and interest in, such a service.

WAPT originally anticipated that 80 percent of the cost of the project would be funded by an UMTA grant. UMTA did award a grant to cover this portion of the project’s cost, but WAPT encountered two problems with the award. First, a legal issue arose as to who would hold the deed to the property. WAPT wanted to hold the deed to use as local match when applying for additional assistance. However, UMTA required that it would hold the deed because its funds were used to buy the building. Second, UMTA required that any profits earned by WAPT from leasing space in the facility be returned to the federal government, given that it had financed the purchase of this space. Because one of WAPT’s major objectives for the project had been the generation of additional revenue from leasing space in the building, UMTA’s grant of $151,000 was returned and WAPT’s own funds were used to replace it.

WAPT purchased the building in late 1988 and moved its offices into the facility. As of mid-1989, a number of organizations had leased space in the facility. A Social Security office, the first in Demopolis, was open one day a week. A nutrition center for a group congregate meals provider operated five days a week in the building. The Red Cross had leased but not yet occupied space in the facility. Additionally, WAHS itself leased space for administrative functions of its Health Maintenance Organization (HMO) program.

Eight vocational students in the local Job Training Partnership Act (JTPA) program have renovated parts of the facility. In particular, the old parts department has been renovated to house the nutrition center, with new carpeting being laid, kitchen and rest room facilities constructed, air conditioning and dividing walls installed, and the rooms insulated. The renovation project enabled students to receive training and instruction, while the transit system acquired a multi-purpose room for the cost of materials.
Table 7-2
Space Assignments in WAPT Facility

<table>
<thead>
<tr>
<th>Function</th>
<th>Square Footage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Garage, Parts department, maintenance and repair shop</td>
<td>10,750</td>
</tr>
<tr>
<td>WAPT Administrative offices</td>
<td>2,900</td>
</tr>
<tr>
<td>Offices for other public sector uses</td>
<td>2,175</td>
</tr>
<tr>
<td>Available for lease by private sector at $5 per sq. ft. per year</td>
<td>2,175</td>
</tr>
<tr>
<td>Storage space for WAPT</td>
<td>3,500</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>21,500</strong></td>
</tr>
</tbody>
</table>

WAPT has used the maintenance area to maintain its own vehicles. No private sector maintenance firm has been found to take over this facility. Future plans for the facility include a private sector component complementing the automotive nature of the area. At present, the city of Demopolis has no full-service body shop; while there are several people who do painting and other cosmetic work, no one in the area has a frame straightening machine. Additionally, many of the existing paint shops do not appear to meet Occupational Health and Safety Administration (OHSA) standards. The body shop would occupy part of the old maintenance area, with the WAPT maintenance area occupying the remainder. An enclosed paint shop will be constructed on the existing concrete slab adjacent to the facility. At present, WAPT is considering charging a fixed-lease amount for the space within the maintenance facility and a percentage of the business generated by the paint booth. In addition to the revenue generated, having a body shop on the facility would benefit WAPT by permitting it to have its vehicles repaired on-site, thereby reducing costs and vehicle downtime.

WAPT also believes that Greyhound may relocate to the facility some time in the future. At present WAPT is a ticket agent and provides transport to and from county Greyhound terminals as part of the Rural Connections Program (RCP). More space may also be made available for leasing if the Job Training Partnership Act (JTPA) students can renovate the former auto showroom. A national insurance company has expressed initial interest in opening a claims office in the facility, as there are no insurance claims offices at present in Demopolis. The grassy area of the parcel may also be used regularly for a farmers’ market. Depending on public response to the market, WAPT plans to have a market on a weekly basis, using the undeveloped parcel. While this activity would not produce revenue—no fees would be charged—it is viewed as a valuable community service.
and would help make people more familiar with the transit system, thereby helping to garner public support.

Evaluation

West Alabama Health Services (WAHS), the umbrella organization under which WAPT operates, has set in place an innovative arrangement. Not only are WAPT's facility needs met, but the potential also exists to generate a positive revenue flow. The six-county area served by WAPT is very poor, with almost twice the percentage of autoless households as the state of Alabama or the nation. Funds available to WAPT are limited, and the area economy is not able to support private sector investment in a capital-intensive joint development project.

Purchasing an auto dealership with more space than is required for its own operations has provided WAPT an opportunity to engage in revenue-producing activities that are compatible with providing transit service. Subleasing part of the space and contracting with other agencies and businesses to perform vehicle maintenance are good examples of the diversification approach we discussed in Section 3. Office space has been leased to an HMO representative, the Social Security Administration, and several businesses. Further space may be leased to the Demopolis school system and to Greyhound.

The Demopolis project has yet to reach fruition. Arrangements are being negotiated with municipal and county government agencies and private businesses such as a mortuary. Contracting with outside agencies and businesses is appropriate in Demopolis because no competing private vehicle repair establishments exist in this small community. The success of diversification efforts depends on identifying revenue-producing activities for which there is unmet demand and to which objections by private businesses are unlikely. Detailed data were not available on how WAHS obtained financing to purchase the building when federal funds were not accepted. No local funds were used.

The ability to purchase an oversized facility and engage in revenue-producing activities depends on several factors, all present in this project:

- the availability of a facility,
- a lack of private sector competition for the services to be provided,
- sufficient funds to purchase and renovate the facility, and
- appropriate management skills.
SECTION 8
CONCLUSIONS AND POLICY IMPLICATIONS

Our central objective in this research was to evaluate the potential for transit-related joint development in smaller communities. Nationally, interest in public-private joint ventures has grown dramatically over the past decade, and examples of successful transit related projects in larger urban areas are not difficult to find. But very different circumstances exist in smaller cities: transit typically plays a less central role in personal transportation and proportionally less investment capital exists.

We began Part I by examining transit-related joint development as a generalized concept and then explored the various forms it could take in smaller cities. Recognizing the comparative dearth of investment capital in these communities, we suggested that nontraditional approaches to joint development might be appropriate. We focused on several different approaches:

- public agency joint development whereby the transit system works with other public agencies,
- transportation transfer facilities in which several types of transportation services mutually benefit by access to each other's passengers, and
- diversification of facility use to enable revenue-producing activities to be undertaken by the transit system at its facility.

In Part II we presented four case studies: Cedar Rapids, Iowa; Davenport, Iowa; Fargo, North Dakota; and Demopolis, Alabama. These communities, along with those briefly discussed in Section 2, are representative examples of transit-related joint development in smaller cities. Our analysis leads to seven key conclusions:

- Joint development projects are unlikely to substantially improve transit ridership.
- Attracting major private sector investments to transit-related projects is difficult.
- Most joint development projects involving substantial capital investment have relied heavily on federal dollars, and this may be unwise.
- The net economic impacts (benefits, taking into account costs) of these projects generally have not been impressive.
Quite often, rather attractive packages (e.g., low rent leases) must be offered to businesses to influence them to participate.

Joint development with other public agencies can be a mutually beneficial approach if sufficient funds can be amassed.

Acquiring an existing facility that is oversized can be financially rewarding, if revenue-producing activities compatible with transit service are feasible.

Our overarching conclusion is that transit systems in smaller cities can and should entertain the possibility of engaging in a joint development project. It is a mistake to pattern projects too closely after commuter rail facilities in large urban areas, but the fundamental concept has merit if applied in an appropriate manner. The key is to experience some sort of economic gain, while strengthening the ability to carry out the basic mission of providing public transportation.

Three policy implications emerge from this analysis:

- The federal government should be very cautious in awarding sizable capital grants for the construction of joint development facilities in smaller cities because such grants generally have been inefficient.

- Governments at all levels should perform standard investment analysis before embarking on these projects, using realistic estimates of benefits and costs.

- While some image building gains are possible, projects should be pursued to provide cost effective facilities, not as means of dramatically increasing transit ridership.

The conclusions we have reached and their policy implications have a cautious tone about them. We were unable to find a single case nationally where a transit-related joint development project had yet resulted in a significant turn-around for a transit system in a smaller city. Nor were we able to find a case where the public investment, from any level of government, could be shown to bring about a net economic gain to society.

Despite the general lack of highly successful projects, we remain convinced that the underlying concept is good. Like any business arrangement, joint development projects require careful evaluations of current and possible future circumstances, the ability of the project to achieve its objectives, and the economics of go or no go decisions. As the U.S. public transit industry learns more about privatization and innovative arrangements, its ability to recognize good joint
SECTION 8
CONCLUSIONS AND POLICY IMPLICATIONS

Our central objective in this research was to evaluate the potential for transit-related joint development in smaller communities. Nationally, interest in public-private joint ventures has grown dramatically over the past decade, and examples of successful transit related projects in larger urban areas are not difficult to find. But very different circumstances exist in smaller cities: transit typically plays a less central role in personal transportation and proportionally less investment capital exists.

We began Part I by examining transit-related joint development as a generalized concept and then explored the various forms it could take in smaller cities. Recognizing the comparative dearth of investment capital in these communities, we suggested that nontraditional approaches to joint development might be appropriate. We focused on several different approaches:

• public agency joint development whereby the transit system works with other public agencies,

• transportation transfer facilities in which several types of transportation services mutually benefit by access to each other’s passengers, and

• diversification of facility use to enable revenue-producing activities to be undertaken by the transit system at its facility.

In Part II we presented four case studies: Cedar Rapids, Iowa; Davenport, Iowa; Fargo, North Dakota; and Demopolis, Alabama. These communities, along with those briefly discussed in Section 2, are representative examples of transit-related joint development in smaller cities. Our analysis leads to seven key conclusions:

• Joint development projects are unlikely to substantially improve transit ridership.

• Attracting major private sector investments to transit-related projects is difficult.

• Most joint development projects involving substantial capital investment have relied heavily on federal dollars, and this may be unwise.

• The net economic impacts (benefits, taking into account costs) of these projects generally have not been impressive.
• Quite often, rather attractive packages (e.g., low rent leases) must be offered to businesses to influence them to participate.

• Joint development with other public agencies can be a mutually beneficial approach if sufficient funds can be amassed.

• Acquiring an existing facility that is oversized can be financially rewarding, if revenue-producing activities compatible with transit service are feasible.

Our overarching conclusion is that transit systems in smaller cities can and should entertain the possibility of engaging in a joint development project. It is a mistake to pattern projects too closely after commuter rail facilities in large urban areas, but the fundamental concept has merit if applied in an appropriate manner. The key is to experience some sort of economic gain, while strengthening the ability to carry out the basic mission of providing public transportation.

Three policy implications emerge from this analysis:

• The federal government should be very cautious in awarding sizable capital grants for the construction of joint development facilities in smaller cities because such grants generally have been inefficient.

• Governments at all levels should perform standard investment analysis before embarking on these projects, using realistic estimates of benefits and costs.

• While some image building gains are possible, projects should be pursued to provide cost effective facilities, not as means of dramatically increasing transit ridership.

The conclusions we have reached and their policy implications have a cautious tone about them. We were unable to find a single case nationally where a transit-related joint development project had yet resulted in a significant turn-around for a transit system in a smaller city. Nor were we able to find a case where the public investment, from any level of government, could be shown to bring about a net economic gain to society.

Despite the general lack of highly successful projects, we remain convinced that the underlying concept is good. Like any business arrangement, joint development projects require careful evaluations of current and possible future circumstances, the ability of the project to achieve its objectives, and the economics of go or no go decisions. As the U.S. public transit industry learns more about privatization and innovative arrangements, its ability to recognize good joint
development projects from those that are not so good will grow. The case study projects we have examined are contributions to this growing knowledge base.
REFERENCES


REFERENCES FOR CASE STUDIES


INTERVIEWS

Bill Lukerson
Alabama State Highway Department

Byron Baxter
Transit Director, City of Davenport

Charles Heston
Director of Planning, City of Davenport

Craig Cole
Transit Director, City of Fargo

Dale Bruggeman
Greyhound Representative, Fargo

Dan Krom
Transit Director, City of Moorhead

Jon Lindgren
Mayor, City of Fargo

Keith Burkholder
Planning Director, City of Fargo

Mark Thielen
Finance Manager, City of Fargo

Mike Wilson
Former Economic Development Coordinator, City of Davenport

Pat Zavoral
Planner, City of Fargo

Robert Armstedt
West Alabama Health Services Program Coordinator

Scott Hutchens
Director of Community Development, City of Moorhead

Thomas Aller
Former City of Cedar Rapids official

Warner Litten
Local businessman, former North Dakota State Senator

William Hoekstra
Transit Director, City of Cedar Rapids