U.S. Department
of Transportation

Federal Highway Administration

FHWA JOINT DEVELOPMENT STUDY

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Table of Contents

EXECUTIVE SUMMARY

Introduction

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) has brought about sweeping changes in the way transportation improvements of all kinds are funded. These changes have occurred at both the federal and state levels. Coupled with the funding changes wrought by ISTEA, are other factors that have brought renewed interest in identifying new sources of funds and creative financing for transportation improvements. These factors include the development of new transit systems, the need to link highways and transit systems in multi-modal exchange points, and the desire to increase ridership through adjacent development, encourage redevelopment of specific urban areas, maximize the use and value of public property, and capture some of the land value created (or positively influenced) by investments in transportation infrastructure.

The study focuses on the use of creative financing and funding through Joint Development and public/private partnerships. The study features case studies that explore several different facets of joint development. Topical case studies focus on a particular type of situation for joint development activities including:

- telecommunications utility accommodation
- jointly developed highway rest areas, and
- parking underneath highway structures.

More extensive case studies focus on specific [illegible] scale projects, or the extensive use of a variety of joint development techniques within a metro area. These case studies are meant to illustrate some of the most innovate and creative techniques now being employed.

- Boston Central Artery Project
- Allied Junction Multi-Modal Station Development, New Jersey
- Washington State and Seattle Air Rights and Public/Private Financing
- San Diego Light Rail, Air Rights and Privatized Financing
- Pensacola Highway I-110 Project

Issues

The case studies explore a common set of issues related to joint development. These issues were distilled from an extensive literature review. The key issues are discussed in a brief section that serves to frame the specific case study experience in a way that allows comparison between

them. They key issues included:

- Agency Objectives - Project Options
- Public Agency Development Policy and Organizational Capacity
- Acquisition of Property
- Sale or Lease of Property
- Market Demand
- Financing
- Zoning

Findings

Telecommunications Utilides

The first topical case study examined telecommunications utility accommodation within transportation rights-of-way. The research focused on current efforts in Washington State. Also reviewed were national surveys of both fiber optic cable and cell phone tower utility accommodation leases, policies and regulations. We found that while rail corridors have long been used for fiber optic cables, the use of highway corridors for telecommunications utilities is rare. States often have statutes prohibiting the use of highway rights-of-way for utility accommodation, and are often prohibited from charging rent, entering into leases or selling the right-of-way for profit. The rapid growth in the use of high-speed data networks and wireless communications is driving the demand for more extensive and dense telecommunications infrastructure. Our main finding was that the industry is moving very rapidly in response to m&et demand and cannot wait long for state and federal policies to catch up to their needs for infrastructure. Telecommunications utility accommodation is a "rapidly closing window of opportunity" for lease income to be generated by DOT land.

Jointly Developed Highway Rest Areas

This case study focuses on Iowa's efforts and success in pursuing jointly developed highway rest areas. Washington State also had a successful pilot development and is pursing a state-wide policy for other jointly developed projects. Federal regulations generally prohibit commercial activities within the interstate right-of-way, however, innovative partnerships that involve public/private cooperation, and development just out side of the right-of-way is seen as a way to more quickly and economically build needed rest areas, privatize public services, and encourage compact development near highways. The key benefits of pursuing jointly developed highway rest areas are summarizes as follows:

- Cost Savings
- Revenue Generation
- Modernization of Facilities (ahead of ordinarily funded schedule)
- Increased Road Use Satisfaction (and Safety)
- Ability to Promote State Tourism
- Creation of Jobs

Parking Underneath Highway Structures

This case study focused on Philadelphia's Interstate Land Management Corporation (IMLC). The IMLC is responsible for the stewardship, management, and leasing of 50 acres of land and air rights along I-95 in downtown Philadelphia. Parks have been built, eyesores have been cleaned up and in some cases landscaped, and parking and storage leases generate over $100,000 annually. IMLC's success represents a possible institutional model for maximizing an under-utilized resource in a dense urban setting where demand for land is high. Its success is characterized by the following factors:

- Partnership: ILMC is a formal partnership of: the state transportation agency, the local jurisdiction, and affected neighborhoods.
- Combined Functions: ILMC has a clear mandate to manage, maintain, and landscape all of the transportation agency lands within its service area not directly utilized for highway purposes. It functions as a "one stop shop."
- Entrepreneurship: The agency and its director conduct their affairs in the public eye and aggressively pursue their responsibilities.
- Oversight and Performance Review: In order to ensure that the agency is performing its job according to expectations, the partnering governmental bodies are committed to a periodic and public review of performance. This is also a way to ensure that the agency mission can be adjusted as new demands and opportunities arise.

Boston Central Artery Project

The Boston Central Artery travels through the center of the city. Putting the formerly elevated highway underground will eventually free up over 40 acres of land in the city. This massive project represents an unprecedented opportunity for a former highway right-of-way to be redeveloped using joint development. An extensive planning process determined that a sizable portion of the planned will be parks, open space and some other public amenities such as a botanic garden. Joint development was formally initiated as an appendix to the Draft Supplemental Environmental Impact Statement.

Much of the Boston case study illustrates the use of the environmental review process as a planning tool. This is somewhat unusual, as only about fifteen states have environmental policy acts that require the environmental review of public projects. Only a few of these statutes require the review of land use projects. Similar projects in other states would not likely be subject to a similar process. A parcel-by-parcel analysis of joint development potential was conducted by the Massachusetts Department of Public works. This will be used to guide future development within the corridor. It is hoped that joint development revenues will help fund the maintenance of the extensive park system planned in the corridor.

Allied Junction, New Jersey

Allied Junction will involve the creation of 8 new multi-modal transfer station, the consolidation and reconfiguration of commuter transit lines, and will form the base of a planned 5 million square foot mixed-use commercial development. This project is the result of the cooperation of rail lines, private businesses, a public utility and New Jersey Transit. While initial building stages are just beginning, a ten-year planning process has proven that the concept of deliberate, large scale joint development can work when all of the players stand to gain significantly from a successful project. Key factors of that success included:

- Entrepreneurship
- Joint Development as Policy
- Coordinated Effort
- Location/Market Demand
- Land Use Control/Zoning

Washington State Rights and Public/Private Financing

Washington State DOT has aggressively pursued partnerships the have included several aspects of joint development. In downtown Seattle, the leasing of air rights over excess rights-of-way has been highly successful in helping to implement both public and private projects. Co-location and joint development of public facilities for DOT and the Washington State Patrol has saved the state millions of dollars. However, an ambitious program to build large scale transportation infrastructure improvements using private financing has had very limited success. Valuable lessons on the limits of public acceptance of radical public/private partnerships can be learned by the failure of Washington's New Partners Program to fully realize its potential.

San Diego

The San Diego case study examines the use of joint development in three distinct settings, light rail transit station joint development, the leasing of highway airspace, and the development of privately financed transportation improvements. In the construction of the new light rail line fur San Diego, joint development potential at stations was considered from the beginning. The development of the MTS/James R. Mills Building represents joint development as a partnership between public agencies. The building sits at the station where the East and South trolley lines meet, and the major tenant of this 180,000 square foot office building is the County of San Diego. Another successful project is the mixed-use America Plaza development, to which the developer contributed $5 to $7 million in street improvements, and paid a $3.25 million exaction for the inclusion of the San Diego Museum of Contemporary Art in the development. Key lessons from the MTB light rail projects are summarized as follows:

- It is important to have realistic expectations of station site joint development potential.
- The agency must have a strong public policy commitment.
- The agency must demonstrate the benefits of joint development to the private sector.
- Smaller-scale joint development projects have cumulative benefits.

The use of private financing for highways is being explored in several pilot programs in the state of California. The State Route 125 South illustrates the Now Build-Operate-Transfer type of funding which allows public to:

- Take advantage of private sector efficiencies in designing and building transportation projects.
- Allow for the rapid formation of capital necessary for funding transportation projects.
- More quickly bring reductions in congestion in existing transportation corridors.
- Require continued compliance with environmental requirements and applicable state and federal laws that all publicly financed projects must address.
- Offer the traveling public alternate route selections in project areas.

Pensacola Highway I-110 Project

In an innovative approach to joint development along a single corridor, the elevated downtown section of Interstate I-110 has multiple public uses either under or adjacent to the highway. These uses vary from a convention center, police headquarters and vehicle parking, to active recreation amenities such as tennis and basketball courts, to a homeless shelter and soup kitchen. The planning began over thirty years ago and considered multiple use and joint development

from the beginning. Of the total 71 acres acquired for the project, approximately 59 acres have been leases to the city of Pensacola for joint development. While the lease does not generate much income, the mixed use nature of the corridor has spurred significant adjacent private development.

Conclusions

In most of the joint development cases reviewed in this study, revenue does not seem to have been a major consideration or result. Redevelopment, and new development were strong objectives, and to a lesser degree increasing ridership on transit. Joint development as discussed in this study seems to flourish best when policy is fully behind partnership efforts, and joint development opportunities and potential was deliberately considered from the conception of a project. While the private financing of major transportation improvements (on the scale of a new bridge or highway) continues to be a goal of many state DOT's successful examples are extremely limited.

Glossary

In order for the reader to clearly understand the techniques explored and the technical terminology associated with these techniques, a glossary of terms and techniques is presented. The literature of joint development is filled with terms to describe unique situations. Varying terminology describes similar techniques, which are known by more than one name. Here we have aggregated these into larger categories which are defined, followed by definitions of individual techniques mentioned in the literature review.

Joint Development -- a construction project that involves the public sector negotiating with the private sector to share in the cost of building and/or operating a transit station. Different techniques are used in the negotiating process and these are presented below. Joint development can also be thought of as one of many value capture strategies that transit agencies use to earn revenue in addition to fare-paying riders.

Value Capture -- "value" refers to the value of a transit system's real estate holdings and the added value a transit system brings to property surrounding a system. "Capture" refers to transit system efforts to use this value to capture the increase in property values. Value capture techniques are also presented below.

Co-Development -- the coordinated timing, siting, and overall planning of public investments and private real estate ventures, ostensibly to the benefit of both parties. Does not involve a formal legal agreement between a public agency and private developer.

Glossary

Access Agreement -- fee paid by a developer for the right to connect to a transit station, or the actual construction cost of a direct connection paid by a private entity. Used as a joint development technique. Also referred to as an interface agreement.

Advertising Rights -- space available for advertising inside stations, on transit vehicles, on tickets and schedules, or anywhere else that advertisers would be willing to pay. Used as a value capture technique.

Air Rights --See Development Rights.

Benefit Assessment District -- a geographical area in which an assessment is levied on property (usually commercial) and the revenues are earmarked for a specific use. Frequently, the district is drawn around a transit system. The tax is then justified on the grounds that real estate near a transit system will appreciate in value and so the system is entitled to tax this appreciation. Used as a value capture technique. Also called a special assessment district or transportation development district.

Cost Sharing-- A developer or other entity shares in the cost of developing a public facility in exchange for certain benefits. This is used as a joint development technique.

Density Bonus -- the granting of specific zoning enhancements to a development allowing for greater floor to area ratio in return for some benefit to a public agency. Used as a joint development technique. See also incentive zoning.

Developer Exactions -- a negotiated dedication of land or payment of a fee to a public agency from individual developers. Used as a joint development or value capture technique. See also impact fee.

Development Rights -- property rights for the space above, below, or adjacent to transit/highway facilities, which are leased or sold. Property rights for the space above are also known as air rights. Used as a joint development technique.

Impact Fee -- a fee levied on property owners or developers who will benefit from a public improvement, including transit, who are also creating some type of traffic or land use impact. Usually this is a one time fee as opposed to an ongoing tax. Used as a joint development or value capture technique. See also developer exactions and benefit assessment district.

Incentive Zoning -- the awarding of a certain type of zoning to a developer in return for some benefit to a public agency. Used as a joint development technique. See also density bonus.

Land Banking -- the purchase or condemnation of land beyond what is needed for a transit system to be built. This land can then be sold or leased to a developer. Used as a joint development technique. Sometimes referred to as land assembly.

Tax Increment Financing -- the issuance of bonds that are paid off with the higher (an increment in) property taxes that result from the appreciation in value of real estate near the project caused by infrastructure or capital investment the bonds financed. Used as a joint development or value capture technique. Also called a T.I.F. district.

Transfer of Development Rights -- the act of allowing the owner of a piece of property to grant the property's development potential (based on the property's zoning) to another piece of property. Also known by the abbreviation TDR.

Joint Development Literature Review

Introduction

The consultant team used various sources to conduct this literature review. Both ERA and Rivkin Associates used in-house research on joint development that was conducted for previous projects. In addition, transportation research databases such as Northwestern University's NUCATS database, CARL at the University of Maryland, the IDOT transportation library, DIALOG (Canadian Business Database), TRIS (TRB Library), and the Urban Land Institute (ULI) were used to identify relevant studies and articles. The consultants also wish to aknowledge that FHWA staff provided useful unpublished data.

The literature review is presented in three main sections. First there is a review of literature that covers general joint development issues. However, because much of the body of literature that the team uncovered is not abstract or quantitative in nature, but rather is focused on project experience, the next section reviews articles that give project related experience. The third section reviews terminology and definitions, lessons learned, and the relevance of joint development techniques in the literature review to highway issues. It is expected that from these issues of relevance, criteria for selecting the most appropriate case studies will emerge. The literature review was laid out in this manner so that the information presented progresses toward the selection of case studies to be researched and presented as the major component of this report.

I. THE GENERAL JOINT DEVELOPMENT LITERATURE

Basile, Ralph J; Black, J. Thomas; Porter, Douglas R.; Lowy Lyndia. ***Downtown Development Handbook,*** **Urban Land Institute, Washington D.C., 1980**

The *Handbook* is a basic text on how to plan, design, finance, market, and build major downtown projects and has been re-issued since initial publication. It emphasizes public/private partnerships and advocates both air-rights use over public facilities and joint development in transit areas. It summarizes ULI's position on each as follows:

Air Rights Transfer

An air rights transfer is similar to a lease arrangement because it provides usable sites for development while the city retains control and use of the land below the development. It can also be an incentive for development: The city can develop ground space to complement the private use, or it can offer attractive lease payments and property taxes on the space and improvements. Lease payments and property taxes on the air space and improvements can be calculated to provide incentives for the developer at the same time they provide the city government with a share of the profits -- effectively the same as a return on capital invested in the land, (p.156)

Joint Development

Those cities planning or constructing new transit systems or expanding existing systems will have special opportunities to combine private development with public development of the transit stations. The federal government, the primary finder of transit system construction, is pushing the concept of joint development because of the obvious benefits gained from the integration of high-density private uses with the transit system. From the private investor's point of view, the advantages of access and the large volume of traffic generated by transit stations make such joint-development projects very attractive.(p.193)

Public Technology, Inc. *Joint Development: A Handbookfor Local Government Officials,* Urban Mass Transit Administration, Washington, DC, 1983

This *Handbook* is an outgrowth of the Joint Development Marketplace Forums, sponsored by the Urban Mass Transportation Administration in 1978 and 1981. It is based on five case studies that illustrate a range of projects and approaches across the country, extensive interviews, and the experience of the Washington Metropolitan Area Transit Authority (WMATA) on several projects. Written from the standpoint of the public transportation agency it discusses benefits and risks, the stages in the joint development process, the need for agencies to establish expertise in real estate, dealing with developers and lenders, marketing and promotion, and allied matters such as financial assistance available through UMTA.

In general, the *Handbook* is organized according to the following step outline.

Typical Joint Development Steps for A Public Agency

FIRST PHASE - PUBLIC POLICY MAKING AND PLANNING

- ¥ Identifying joint development opportunities
- ¥ Defining joint development goals and policies
- ¥ Coordinating with other public agencies
- ¥ Building public support

SECOND PHASE - DEVELOPING A MARKETABLE PROJECT

- ¥ Preparing a project budget
- ¥ Assembling a project team
- ¥ Preparing a market analysis and concept plan
- ¥ Resolving public issues related to:
  - --Intergovernmental coordination
  - --Special studies
  - --Legal authority
  - --Capital improvement
  - --Regulatory changes
  - --Additional land assembly
  - --Accessibility between the transit facility and the private development
  - --Funding and financing
  - --Public information

THIRD PHASE - DEALING WITH DEVELOPERS

- ¥ Locating interested developers
- ¥ Selecting a developer
- ¥ Negotiating an agreement
- ¥ Specifying the role of a developer
- ¥ Monitoring the developer
- ¥ Renegotiating with the developer
- ¥ Adhering to commitments and schedules

The step-by-step planning, governmental approvals, request for proposal solicitation, and developer selection process (Prudential) for the Van Ness Station on the WMATA Red Line is used for illustration. In the project specific section are summaries of the five project case studies outside of Washington described in its detailed appendix.

Carpenter, Barry. "Newfair TOD: Promoting Green Development" in Urban Land, Urban Land Institute, March 1995 (10-12)

Carpenter writes about a strategic planning process, not a specific project. He is a consultant to the Chesapeake Bay Foundation (CBF) which is attempting to "sell" transit-oriented development (TOD) in the Washington Region. One of the CBF's strategies is to prepare plans for suburban sites

which already evidence development clusters to link these sites with potential multi-modal transfer centers. The prototype CMF is marketing is located in Fairfax County adjacent to Interstate 66 which currently has a major shopping mall on one side of the expressway and the County's Government Center on the other.

The Newfair TOD's primary feature will be a transit center within the I-66 right-of-way. This center will contain a Metrorail station along with feeder bus transfer facilities. It also could accommodate a light-rail station that would complement commuter rail systems. The transit center is planned to provide transit user services, including convenience retail and services and secure bicycle parking. A key element of the plan is a pedestrian spine running from the Fairfax County Government Center (just under one-half mile from the transit stop) to Fair Oaks Mall via a bridge across I-66, above the proposed transit center. In addition to over 1,400 mixed density dwelling units, the plan envisions 725,000 gross square feet of office and institutional uses and 200,000 GSF of community, special, and service retail.

At the article's publication date, CBF was presenting the Newfair plan to a wide range of governmental agencies, citizen groups and private developers.

Brecher, S.; Heder, L.; Howard, J.A.; and Rivkin, G. "Strategies to Implement Benefit-Sharing for Fixed-Transit Facilities"; Transportation Research Board, July 1985

The following is a brief summary of types of benefit-sharing strategies identified:

Transit and Development Planning, Design, and Land Acquisition

- land banking. For example, L.A. is authorized to acquire land for joint development but once the transit agency has the land they must use one of the methods described below to develop it.
- lease or sale of supplemental property or air rights -- that is, development potential that exists either over or under a given facility
- negotiated investments -- the process of bargaining between two or more parties, usually public and private sector interests, to determine which portions of the costs associated with a public facility will be borne by whom. Four *different investments have been identified:

x 1) land contribution for transit, either leased or donated to the transit agency

x 2) shared right-of-way which can include costs of acquisition and maintenance

x 3) system interface, the provision of a direct physical tie-in from adjoining private or public development to a transit system, this is also referred to as "access integration"

x 4) cost-sharing of facilities like shelters, terminal facilities, or park-and-ride lots

- sale of advertising rights inside stations and on vehicles, which more and more includes passes, farecards, schedules, and tickets
- lease of commercial space
- turnkey development where the construction of the transit facility itself becomes the vehicle for private investment. The agency issues an RFP for the transit facility desired, private developers then build the facility usually at a cost savings to the agency
- real estate management which generates revenue by selling or leasing properties available from the agency's portfolio. This is particularly relevant for older transit systems.

Urban Design and Construction Management

- urban design plan formulation develops a strategy to integrate a large transit/transportation project into the. "complex urban fabric" around it and sets up manageable private development parcels around the site
- urban design and construction coordination to integrate a transit project with other public and private projects in the vacinity, which could include a public street road, or parking improvements, new or renovated buildings, etc.

Special Financial Arrangements

- special assessment districts are designated areas in which a special tax or "special benefit assessment" is levied on all properties to pay for the cost of certain improvments within the district
- tax increment financing earmarks the prospective increase in property tax revenues in a designated area to support the cost of public improvements in that area.

Land Use Regulations

- incentive zoning involves the relaxation of development constraints -- that is, development bonuses in exchange for provision of certain public benefits. These density bonuses are given in exchange for the inclusion of specific amenities within a development project

- performance zoning -- as a condition of zoning approval a proposed development must meet certain objectively established criteria with respect to the development's impact on the environment
- transfer of development rights confers the right to develop and improve upon a parcel of land apart from fee ownership of the land itself -- involves determining a maximum development potential of a parcel of land, based on zoning, then assigning the right to transfer unused development rights from one parcel to another
- subdivision/site plan approval process is frequently used in the suburbs, the process allows public agencies to negotiate provision of improvements by developers, often called "exactions".

American Association of State Highway and Transportation Officials. "Final Report of the AASHTO Standing Committee on Highways Task Force on Commercialization of Interstate Highway Rest Areas"; AASHTO 1990

The report makes 14 recommendations including:
1) legal requirements -- modify Title 23 USC, Section III "to permit the state highway agency and the Secretary of Transportation to enter into an agreement to allow or permit rest area services, motorist information services, food services, and fuel services for serving motor vehicle users to be constructed or located on the right-of-way of the Interstate system." In this way a state highway agency could enter into a rest area joint development with private developers to develop and operate a Travel Services Rest Area (TSRA).
2) vending machine program -- provide vending machines along with any commercial development at a rest area
3) rest area maintenance -- TSRA development contracts-should "permit and encourage the lessee to continue the utilization of local-based sheltered workshops and similar organizations for routine maintenance of buildings and grounds".
4) overnight truck parking and truck inspection/weighing -- recommended that TSRAs do not providelong-term parking and inspection and weighing facilities for trucks. If parking or other truck facilities are provided they should be on remote areas of the TSRA site.
5) financial considerations -- states should own and hold rights to the land and then "lease the land and rights to its operation to private developers for established rates of return and fee structures and guarantee a minimum utilization period."

6) access options -- access to TSRA property should not be permitted through or over the access control limits.

The report then explores issues related to the above recommendations:
1) Federal law modifications: Federal regulations will have to modified -- 23 CFR 752-752.5(b) and (g) and the Federal Aid Highway Program Manual 6-2-5-1, Paragraphs 6b and g.
2) the Federal Randolph-Sheppard Act gives priority to blind people to operate vending facilities on Federal land. The interesting question is whether or not this would apply to commercial operations at a TSRA.
3) services offered at a TSRA, should include "commercial services designed to provide the traveler with a safe, convenient and restful stopping opportunity". This does not include services that would encourage the traveler to stay overnight -- the report feels that long-term motorist services should be provided by the local business community.
4) trucking issues. It is noted that many accidents on the interstates are due to trucks, and overnight parking could help this problem. Yet, the report feels the negatives of overnight truck parking (more right-of-way would be needed, higher level of noise and exhaust fumes, and the larger concentration of trucks) might be "intimidating" to the general public causing them to avoid the TSRA. This could outweigh the safety positives. The same held true (negatives outweigh positives) for truck inspection/weighing.
5) successful TSRA developmental plans. These are often predicated on the state owning the land and providing "certain designated utilities, entrances and exit ramps, and standards for the design, operation and compliance for the construction and operation of the physical plant." In addition, the report mentions rent credits as a way of paying for improvements at a TSRA without having to use "out-of-pocket" funds.
6) access across the right-of-way line. Should be denied at the rear of each TSRA (for employees of and delivery trucks servicing the TSRA) for safety reasons.

Cervero, Robert; Hall, Peter; and Landis, John. "Transit Joint Development in The United States: A Review and Evaluation of Recent Experiences and an Assessment of Future Potential"; Institute of Urban and Regional Development, University of California at Berkeley, August 1992

This extensive study covers several aspects of joint development: history, a profile with examples of joint development, joint development as public policy, agency perceptions of the joint

development process, real estate impacts of urban rail transit investments and joint development initiatives, the revenue and ridership impact of joint development, and conclusions as to the institutional and market conditions necessary for successful joint development.

Part of the study process included a survey of transit officials responsible for negotiating joint development agreements, and an extensive roster of joint development projects in the US. (This roster is an excellent database of information for helping identify and select potential case study candidates.)

This study focuses solely on transit, not highway related joint development. Three factors are given as to why joint development efforts began in the US: 1) operating deficits and the need to grow non-farebox revenue, 2) the growth in new systems and the rebuilding of old systems, 3) rebirth of downtown coupled with increased commercial activity and rising real estate values.

Of the more than 100 projects surveyed, joint development is classified into three categories:
1) Cost Sharing (39% of projects)
2) Revenue-Sharing (22% of projects)
3) Combinations of cost sharing and revenue sharing (34% of projects)

Five key obstacles slowing the growth of joint development were identified:
1) Laws and regulations, political opposition, limits on transit agency participation;
2) Lack of transit agency experience and incentive to engage in development;
3) Suburban development that is not accessible to transit connections or projects;
4) Agency perception of high risk and low rewards of development;
5) History of reliable Federal subsidies (through the 1970's).

In the survey of transit officials who had negotiated joint development agreements, goals and motivation for the deals varied by the kinds of techniques used. For those who had done air-rights leases, revenue was the most important factor. However, more cited that revenue was not the most important goal. More frequently, joint development was seen as a catalyst for development or redevelopment, or an opportunity to shape urban growth.

As part of the study, detailed regression analyses were conducted to test the key assumption underlying all joint development: that proximity and access to transit increases land values. The

presence of joint development, measures of transit service quality, ridership levels, etc. were regressed against market indicators such as office rental rates, absorption rates, and vacancy rates. Overall, it was found that system-wide ridership levels correlated positively with office rents near stations. The more riders, the higher the rent. In the Washington DC and Atlanta markets it was found that the presence of a joint-development project at a station correlated with a rent premium of between $3 and $4 per square foot. Given the overall small percentage of revenue generated from joint development to the typical transit agency budget (less than 1%) it was found that the opportunity for revenue generation and value capture were vastly under-exploited,

The study concludes with four conditions found necessary for successful joint development:

1) Healthy real estate market
2) An agency with an entrepreneurial outlook
3) Agency coordination to bring about changes (i.e. zoning)
4) Agency recognition that benefits go beyond revenue generation.

"Utility Accommodation on Right of Way and Resource Sharing", FHWA Memo, 1995.

Historically the accommodation of utilities within rights of ways has been controlled by state laws and statutes, but generally followed AASHTO guidelines that defend the highway ROW against any other uses.

The growth of telecommunications infrastructure needs, and the possibility of income from them, has created interest among states to consider shared ROW's. Safety is a primary concern. A previous study on practices found that the chief barrier were state policies prohibiting utility accommodation. Proposed legislation in the senate provides for the FCC to supersede state authority to place utilities in ROW's.

Some of the states have expressed concerns about the implication of proposed legislation. The main concerns are as follows:

- How do you value the utility accommodation rights?
- Will benefits received offset the costs of allowing others to use the ROW?
- How do you balance public needs versus private commercial interests? If you charge private utilities, do you still give it for free to public utilities?

An informal poll of states and their status with utility accommodation and resource sharing was conducted. Fiber optic cable has been laid in highway ROW in Maryland and Missouri, the highway agencies generally received free telecom or some fibers in the conduit in exchange for access. Tollway authorities routinely negotiate for fiber optic compensation in ROW's. In Rhode Island, telecom accommodation and the sale of easements are the largest property management income producing activity for DOT.

Cervero, Robert. "Rail Transit and Joint Development -- Land Market Impacts in Washington, D.C. and Atlanta" in Journal of the American Planning Association; American Planning Association, Winter 1994.

This article examines how transit investments and joint development in particular affect office market conditions: average rents; vacancy rates, absorption rates, densities, and the proportion of office and commercial construction near the stations. Data is examined for five rail stations in the Washington, D.C. and Atlanta areas over the 1978-89 period.

Joint development was defined as "any formal, legally binding arrangement between a public entity and a private individual or organization that involves either private-sector payments to the public entity or private-sector sharing of capital or operating costs, in mutual recognition of the enhanced real estate development potential or higher land values created by the siting of a public transit facility."

Three trademarks of joint development are defined as: 1) "a legally binding agreement between two or more parties; 2) some form of renumeration by the private to the public sector; 3) and voluntary agreement to all terms and conditions." A overview of the types of joint developments that have been completed up to 1990 was provided, showing the revenue these developments generate for the transit systems, including fare revenue to the extent that a joint development project generates more transit trips.

Five rail stations were profiled including the Ballston, Bethesda, and Silver Spring stations on the Washington Metrorail system and the Arts Center and Lenox stations on the Atlanta MARTA system. The transit agencies provided the data for each station that was used for multiple regression equations. The equations were designed to "isolate the effects of rail transit from other factors that also influence property values and local real estate market conditions, such as the opening of a new freeway nearby or overall regional growth."

The study found that office rents near stations tended to increase as systemwide transit ridership increased and that annual office rents are about three dollars per square foot higher at station areas with joint-development projects. It also found that vacancy rates tend to be lower and that average office building size (which is used as a proxy for density) tended to increase with joint development activity. An interesting conclusion is that the strongest relationship was between office rents and ridership, with rents increasing as ridership grows. In fact, "office rents were more strongly influenced by transit ridership than by nearby freeway traffic volumes."

Gillen, Lori; et. al. "Moving Towards Joint Development: The Economic Development - Transit Partnership"; National Council for Urban Economic Development, August 1989.

This report covers broad trends in transportation usage, commuting, and joint development financing and techniques. Joint development is defined as "any public-private partnership designed to decrease the costs of operating or constructing public transportation systems, stations or

improvements through creative public-private financing arrangements." The report also discusses the elements of a successful partnership by examining three cities in which CUED/UMTA provided technical assistance to encourage the development of joint transportation-economic development projects.

An analysis of "Public-Private Financing Techniques" is contained in Chapter Four of the report. Special districts are examined, including special assessment districts, tax increment finance (TIF) districts, transportation development districts (TDD), and independent districts or utilities. The report defines special financing districts as geographical areas in which "projects are financed through extra fees collected in addition to regular jurisdiction-wide property, sales and income taxes or through an earmarking of taxes to a project fund." A special assessment district generates supplemental fees and a TIF district creates revenues by growing the tax base and related property values. Assessments are set in accordance with a formula which relates them to "(1) the district's annual costs (debt service and/or operating costs) and (2) estimates of the value of the benefits such as the property's proximity to the improvement."

TDDs refer to government authorized and dependent districts which allow for the imposition of fees on private development to help pay for road and mass transit improvements necessitated by the new development. The TDD is very similar to a special financing district except that it is designed solely for use with transportation projects, whereas a TIF or special assessment district might pay for site clearance, utilities, etc. The other form of special district examined is a utility district, which is an independent corporation "established to finance, construct, operate and maintain public works." A transit utility would parallel the structure of traditional utilities such as gas, water, and power. Fort Collins, Colorado is mentioned as an example of a city with a separate public transit utility. The advantages of organizing transit as a public utility are that: "(1) financial support is user based and is related to the actual use or benefits received, and (2) planning and financial management are not subject to the uncertainties of general revenue budgeting, such as local government transit agencies."

The text covers developer contributions, impact fees and exactions. Fees and contributions are similar to special assessments but usually are levied on one or two specific developers as opposed to a whole geographic area. Exactions involve the dedication of land for public use or payment of a fee in lieu of such dedication and usually involve on-site improvements. San Francisco's Transit Impact Development Fee Ordinance is mentioned as a good example of impact fees being used to help fund transit. The report concludes that development fees are often dependent on a "strong local

economy, because the "supply and demand for developable land must be adequate to absorb the added costs of development fees."

Equity investment strategies are discussed and public-private partnerships are defined as "working relationships in which the public and private interests share ownership, or certain features of ownership, in public transit facilities." These partnerships can include everything from turnkey development to solicited donations for transit-related purposes. The report divides private equity into two groups: passive and active. Active participation refers to direct private investment and administration of transit services, like a shuttle bus service. The report mentions an "ambitious example of active equity participation" in Colorado known as the Front Range Transportation Corridor. The Corridor is a private group that wants to build a 210-mile toll road and rail line stretching from Fort Collins to Pueblo. When the report was published (in August 1989) the group was still trying to arrange financing for the project.

Passive investment involves donations to a transit agency. (An example mentioned was a developer of a shopping center who donated land for a bus transfer station in order to attract more customers and reduce parking). Limited ownership in a system occurs through the purchase of equipment trust certificates, much like owning stock in the transit agency.

The use of property and property rights is discussed next. The leasing and selling of development rights is the most common method of the use of property rights and includes rights to space above, below, or adjacent to transit facilities. The report mentions that while some cities have aggressively pursued joint development, others "have been cautious due to legal questions surrounding whether or not public agencies can aquire air and subsurface rights from properties that have been condemned for transit purposes." Other methods mentioned include leasing or selling existing facilities and negotiated land leases in which land is leased to the transit agency in exhange for construction of transit facilities.

Two more techniques discussed are land assembly/land banking and transit-related development initiatives. Land assembly is discussed in the context of how important it can be for developers to have control of an entire site, made easier if a public agency has taken the initiative. Transit related development includes turnkey development (the private developer produces elements of the transit system following the design and specifications of the public authority) and transit access agreements,

where private developers provide entrances and connections to subway stations and make improvements to existing stations that are linked to new adjacent developments.

Walther, Erskine S. "Public-Private Partnerships in Joint Development", in Journal of Transportation Engineering; January 1987.

This article begins by listing three "basic factors which are apparently required for a successful joint activity." The factors are a "willingness on the part of both partners to flexibly seek out joint opportunities; the ability of the public partner to provide a concentration of individuals at a relatively limited number of geographic locations; and the presence of desirable economic and/or developmental opportunities at and around those geographic locations."

A definition of joint development is presented as "the voluntary joining together of governmental entities and private for-profit business firms to undertake mutually beneficial developmental activities in connection with public infrastructure projects, in particular those projects impacting public mobility." Three public policy goals of joint development are presented followed by nine guiding principles for a successful joint development project. The principles include: joint development as an objective (it should be an explicit objective of the project and an underlying theme in all project planning), supportive zoning (e.g. incentive zoning), and a single point of contact and consistency.

The article concludes with some recommendations and considerations for the public partner. One recommendation is to "modify the vision of the transit system from simply a provider of transportation services to one which includes:

- being a catalyst for positive economic development; and
- being an agent for the implementation of public policy with respect to economic development activities."

ERA's Previous Research

The previous research in this field has examined revenue generation experiences of recently built transit systems in North America with an emphasis on "value capture" techniques, especially joint development. The following are definitions of value capture, joint development, and co-development used in this work:

- value capture -- methods used by a transit agency, or another public jurisdiction, to recapture a portion of the value created by the major public infrastructure investment. Value capture revenue is essentially revenue that is generated from sources other than passenger fares, general taxes, and federal, state, or local grants and subsidies. Techniques include joint development, benefit assessment districts, tax increment financing districts, development impact fees, charges for station area parking, and charges for advertising or concession space.
- joint development -- the joint participation in real estate development projects. Joint development typically includes public agency leasing of land or air rights to a private development entity. It is also defined to include the sharing of construction cost for stations and connectors, or the transit agency charging an adjacent property owner for the right to directly connect to the system.
- co-development -- does not involve a legal agreement between the transit agency and a private sector party. ERA quotes a UC Berkeley study that defines co-development as the "coordinated timing, siting, and overall planning of public investments and private real estate ventures, ostensibly to the benefit of both parties."

The research catalogues the value capture techniques of transit agencies and delineates the percentage of operating expenses that come from value capture. Below are summaries of systems that ERA has examined:

SAN FRANCISCO

- just over 1% of total operating expenses come from value capture
- methods include: joint development, station concessions, advertising, and parking fees.
- joint development includes: leasing fiber optics right-of-ways and a special agreement with a downtown shopping mall that was built directly over a station
- various developments have occurred around stations but were not coordinated with the transit agency or built on their land (so there are no leases) -- however, they have been working on a residential/retail project that is pursuing a joint development concept. Another tool includes:

Impact fees: San Francisco is the only city nationwide to have enacted an impact fee which is used specifically for financing transit improvements -- called the Transit Impact Development Fee Ordinance. It requires owners and developers of newly constructed buildings in a ten square mile area of downtown 'San Francisco to pay a fee of up to $5 per square foot on new office or commercial space. The fee is designed to cover the increased transit costs which the City projects

will be generated over the 45-year life of each office building. It is collected as a one-time payment at the time permanent financing is taken out for new construction, and at the time of occupancy where the space was converted from one use to another.

SACRAMENTO

- less than one-half of one percent of operating expenses come from value capture
- the only value capture method used is advertising; however, joint development was used to help pay construction costs of two downtown stations. The transit agency also have attempted to negotiate a connection agreement between a station and office building -- either a one-time fee or ongoing rental payments for the right to connect to the transit station.

LOS ANGELES

- the system has its first four-mile increment in place and the extension of it is under construction. The transit agency has used benefit assessment districts to defray some capital costs and has used joint development at one station, with other joint development agreements in the works
- joint development agreement for a downtown station which involved the owner and developer of an office building above the station provided free easements and an entrance into the station
- future joint development includes plans for leasing the right-of-way for fiber optics. Interestingly, most transit agencies use fiber optics to carry information from each station to a central control unit. The fiber optics will be run along the transit lines during construction and extra lines can be put in place for the purpose of leasing the lines to companies like Sprint.

SAN DIEGO

- value capture amounts to about one-third of one percent of total operating expenses and is composed of advertising and joint development revenue
- the joint development revenue comes largely from a downtown office building that was developed through a partnership with the transit agency and the County of San Diego. Another joint development project involved cost sharing for construction, and still another involved a lease agreement. Due to cost overruns, it will be seven years before the transit agency starts receiving lease payments.

PORTLAND

- value capture is currently only implemented through advertising

- although there are no joint development projects, a great deal of co-development has taken place along the rail line. A small portion of the total cost of rail construction came from a benefit assessment district where the money was used to fund design improvements around the downtown and convention center stations.

ATLANTA

- value capture includes joint development, advertising, pay phone commissions, newspaper vending, and parking; totalling about three percent of operating expenses
- joint development includes the lease of air rights and property rental income, In addition, developers have built direct connections to stations at their own expense
- co-development has been encouraged by the transit agency through cooperative planning and zoning. For example, parcels near stations in the downtown area were up-zoned to encourage high-density, mixed-use development.

MIAMI

- value capture generates over five percent of operating expenses -- high relative to other tranist agencies
- methods include: joint development, advertising, benefit assessment districts, and parking
- joint development revenue comes from the lease of air rights and cost-sharing of facilities like emergency power generators

WASHINGTON. D.C.

- value capture methods include: joint development, advertising, vending, telephones, bike programs, and parking. Revenue from value capture comes to about three percent of operating expenses
- joint development has been very successful and includes land and air rights leases, income from station interface connections, and fiber optics right-of-way leases
- joint development has also included shared construction costs -- usually in the context of an interface agreement. Typically, with an interface agreement the developer will either pay all construction costs but no annual fee due to the high level of ridership expected from the connection, or the transit agency and developer will split construction costs and the developer will pay a percentage of revenues in excess of operating costs.

VANCOUVER

- minimal amounts of value capture occurs in the form of advertising and concession income
- joint development has been successfully implemented using cost sharing for the construction of stations -- including the financing of an extension that will cost $148 million, of which 14 percent will come from private sources

TORONTO

- value capture revenue is generated from joint development, advertising, subway concessions, pay phones, and parking
- joint development includes air rights and land leases -- although the leases only generated about $1.6 million compared to the over $8 million in advertsing revenue
- substantial co-development where cooperative planning and zoning policies have spurred residential development around transit stations
- joint development has also included connections to subway stations paid for by the developer, although no connecting fees have been implemented yet.

Taiwan Transit Research (ERA)

This information examines seven case studies of transit related joint development. Similarly it defines joint development as: "real estate development projects which are the result of a public/private sector partnership. It is a technique used by transit and other public jurisdictions to recapture a portion of the value created by a major public infrastructure investment. It can include the public agency leasing of land or air rights to a private development entity, the sharing of construction cost for stations and connectors, or the transit agency charging an adjacent property owner for the right to directly connect to the system."

The case studies look at the San Francisco Area Rapid Transit (BART) system -- two joint developments; the Washington Metropolitan Area Transit Authority (WMATA) -- two joint developments; the Toronto Metro system -- one joint development project; Amtrak's northeast corridor -- one project; and finally the Reseau Electric Regional (RER) system in France -- one project.

Each case study first examines joint development policy as it relates to the transit system as a whole. The system's joint development agenda, station area development program, joint development staff and process, etc. are discussed. Then the report takes an in depth look at each selected joint

development project and discusses its history, the planning process, and the project's successes and constraints.

The following is a list of all of the specific case studies: Contra Costa Centre, Pleasant Hill Station and El Cerrito Plaza/Del Norte Stations -- both BART projects; 110 1 Connecticut Avenue, Farragut North Station and Ballston Metro Centre, Ballston Station -- WMATA projects; Sheppard Centre -- a Toronto Metro project; Union Station, Washington, D.C. -- Amtrak; Cergy-Pontoise -- a RER metro system project.

In addition to these case studies, this research outlines a series of recommendations for how joint development should be carried out by Taiwan. These reflect broad joint development policy and goals, and specific powers that would be required for a "highly effective" joint development program: legal authority to acquire land in excess of the lands actually needed for high speed rail operation. In other words, it should have the legal authority to acquire land for future joint development projects. This issue is probably the most important single issue in the entire analysis.

Other powers listed include granting land planning and zoning powers to the transit agency, the right to collect parking fees, and the ability to conduct deals in private. The WMATA is presented as a good model of "an effective transit agency joint development organization". Developer selection criteria were presented, defining the risks associated with joint development. Brief mention is made of timing issues and privitization.

II. PROJECT/SYSTEM SPECIFIC LITERATURE

Gilson, James R. and Francis, F. Michael. "Planning for Joint Development in Los Angeles" in Urban Land, June 1993 (30-33)

The $78 billion, 400 mile, Los Angeles Metro system is one of the new generation of area-wide rail efforts. The Los Angeles Metropolitan Transit Authority is emphasizing joint development throughout the system and investigating opportunities at more than 80 station sites.

> Transit accessibility is expected to generate opportunities for higher-density commercial and residential uses, as well as neighborhood-serving retail development and services.

Opportunities also exist at some station sites for telecommunications or tele-commuting facilities that can capitalize on the MTA's ownership of right-of-ways and its fiber-optic transmission capabilities.

A major point is that MTA's joint development planning considers ideas both from property owners and businesses and residents within the impact areas of the stations.

The tools available to MTA for implementing master-planned joint development include:

- long-term ground leases of the MTA-owned property that is not used for transit facilities;
- air-rights transfers from station sites to surrounding property;
- relocation or addition of station portals to enhance accessibility and accommodate surrounding development;
- loan guarantees and other financial incentives that can be offered to encourage transit-supporting private development; and
- "knock-out panels" designed into stations to provide accessibility to planned future development.

The article proceeds to discuss a specific case of a station now under planning, Sunset-Vermont in Hollywood at the intersection of two major streets in a commercial neighborhood with three large hospitals and other medical services.

The master plan for the area around the station envisions neighborhood-serving retail uses, a new medical office building, child care facilities, an education/conference center, and parking. At its center -- at the main street intersection and above the transit station -- is a public plaza. Proposed underground passageways running between the station and two of the hospitals' main campuses will provide easy pedestrian access.

The hospitals and MTA are working together to obtain approval from the City of Los Angeles for the increased density and air rights transfers needed to implement this plan. The MTA is negotiating an agreement with one of the hospitals to lease MTA-owned land for development of a medical office building. Other agreements will encompass the engineering of the subsurface pedestrian-ways and the cooperative acquisition of additional parcels.

Implementation of the plan through private investment will provide many benefits for the MTA; income from the ground lease, enhanced ridership, and a pleasant station environment. The owners and developers of the private medical facilities will reap benefits from the land assembly for a medical office building, the complementary land uses in the area, the underground street crossings, reduced parking requirements, and access to transit.

Much of MTA's joint development interest is driven by the air quality constraints in the Los Angeles region, and it is working with local jurisdictions to reduce parking requirements in areas served by the stations.

Stern, Julie D. "An Entertainment Complex for the Meadowlands" in Urban Land, Urban Land Institute, August 1994 (11-12)

The Meadowlands sports complex in New Jersey (New York Giants and Jets, New Jersey Nets, New Jersey Devils, Meadowlands Racetrack) is a few miles from the multi-modal Allied Junction project also reviewed in Urban Land. It is in the process of major redevelopment with an extensive array of additional attractions. This, too, is to be a multi-modal joint development project, involving New Jersey Transit, the Turnpike Authority and New Jersey Department of Transportation. Lead developer is the New Jersey Sports and Exposition Authority. The components are cited in the article:

The plan calls for a structure -- centrally located between the Meadowlands' stadium, arena, and raceway -- that will house a retail pavilion featuring flagship sports apparel and equipment outlets and superstores, linked to four pavilions containing a 40,000 square foot, high-tech entertainment center; a food court; a 60,000 square foot conference center; and a 20,000 square-foot television studio and communications center. . .

Central to the plan's success is the development of an elevated passenger rail platform and station at the complex, which will allow the extension of the New Jersey Transit rail lines from the proposed Secaucus Transfer Station and will have the capacity to handle 20,000 passengers per hour. The planned relocation of Route 120 to the site's eastern perimeter would open an additional 55 acres of land for development. And new toll plazas within the complex have been designed to brighten the Meadowland's image. . .

Brennan, Henry W. and Dewes, Peter W. "Allied **Junction/Secaucus Transfer Station, New Jersey" in Urban Land, December 1993 (29-31).**

Allied Junction is probably the most complex multi-modal joint development activity to be undertaken in the United States. Construction began in 1994 after 10 years of planning. The 28-acre site is directly west of Manhattan and traversed by the New Jersey Turnpike and commuter rail line.

Key points of the article.

In early 1992, New Jersey Transit, the state's mass transit agency, concluded an agreement with Allied Junction Corporation to construct and operate a 50,625 square foot rail transit station on a 28-acre site Allied owns in Secaucus. The new transfer station, midway between Newark's Pennsylvania Station and New York City's Pennsylvania Station, will link all rail lines serving northern New Jersey, including New Jersey Transit's Main and Bergen County Lines and Amtrak's Northeast Corridor line. Links to the New Jersey Turnpike and connections to other major regional roads will make the transfer station multi-modal. Allied Junction Corporation plans a mixed-use commercial development above the transfer station, bringing the entire complex to 3.6 million square feet.

The simplicity of the concept belies the complexity of its implementation. As owner of the land, Allied granted an easement to New Jersey Transit for the additional right-of-way area required to expand the Northeast Corridor from two tracks to four. In turn, New Jersey Transit agreed to build the larger foundations for the future commercial development as part of the track work, as it would not be possible to build the foundations later. Allied will pay new Jersey Transit for the over-build as the commercial buildings reach a certain percentage of occupancy.

Four entities are involved as developers. New Jersey Transit, Allied Junction Corporation, Consolidated Rail Corporation (Conrail), and the New Jersey Turnpike Authority. Permitting has required dealing with more than 50 agencies at the local, state, and federal levels. To obtain a Section 404 permit for development on wetlands, the five major development entities have jointed together to go through an "umbrella" public notice procedure.

The decision to develop the commercial part of the AJ/STS project over the rail right-of-way was based in part on environmental considerations. Building atop already filled rights-of-way would minimize the filling of adjacent wetlands and avoid reducing the flood storage capacity of Penhorn Creek which flows through the site.

The plans for Allied Junction include four 20-40 story office towers, a 600-room hotel and conference center, and a 112,000 square foot retail concourse, plus a 4,400 car parking garage to support this complex. Access to the garage for park-and-ride parking will be denied.

When complete, the total construction and soft costs of the complex, including the 3.6 million square-foot, mixed use development, the parking garage, the rail and transit improvements, and the turnpike interchange will exceed $1.3 billion. The private sector development alone will cost in excess of $800 million; the rail and station improvements, approximately $375 million; and the turnpike interchange, approximately $165 million. Allied Junction Corporation was instrumental in petitioning successfully for federal funding on New Jersey Transit's behalf.

Allied Junction sits along a corridor between the Jersey City waterfront, an effective competitor with Wall Street for office tenants, and the Meadowlands Sports Complex. The growth potential for this corridor, with new and improved road and light rail facilities is strong. Allied Junction is well situated to meet commercial development needs in the new century.

Miller, M. Richard. "Joint Development at Ballston Metro Center" in Urban Land, June 1993 (22-24).

This article is a detailed case study of a major joint development on the Washington Metro System. Prior to the Ballston project, all of WMATA's joint development projects had been awarded on the basis of competitive proposals. No bids were received for the 72,118 sq. ft. Ballston site, and the Authority discovered that it was not feasible to develop as a stand-alone facility. It then entered into an exclusive negotiation. with the single landowner who controlled the remainder of the block (3 1,4 14 sq. ft.). Negotiations resulted in a mixed-use plan for the site over a major bus-to-rail transfer facility (1985), both of which were in accordance with Arlington County, VA's Master Plan.

The Metrorail station itself had opened in 1979, and the Ballston area was developing as the new downtown for Arlington County. The 712,000 sq. ft. development has been built and includes a 26 story hotel/residential tower with separate entrance lobbies containing 209 hotel rooms and 277 condominium units, along with a 12-story office building with a health club and retail space and a 760-space underground garage. Total costs were $96.2 million.

A key ingredient of WMATA's strategy was to obtain a participation in the income from condominium sales. The transit agency's preferred method of capitalizing on the real estate value of its joint development project had heretofore been to collect rent payments on land leases. But all the parties in this project recognized that the condominium units would be more marketable if the building were located on fee simple land.

In a precedent-setting arrangement; the agency agreed to a percentage share of gross proceeds from the condominium sales in addition to three lump-sum progress payments. BMLP (the *developer)* accepted this arrangement, even though it meant the transit agency would audit the condominium sales, because WMATA also offered the developer an advantageous land takedown schedule. WMATA sold 15,000 square feet of land to the partnership to accommodate the condominiums as well as a hotel.

Land rents were structured similarly. During the so-called "development period" WMATA received small rent payments. Upon completion, a fixed-sum minimum guaranteed rent, graduated in hundred-thousand-dollar increments for three years, went into effect. WMATA also receives a participatory rent based on 8 percent of gross commercial income above an agreed-upon (confidential) amount.

In setting-up rent schedules, WMATA had always used a renewal formula of 50 years plus 49 years. BMLP's financing structure obliged it to request a longer initial term. The partnership asked for, and obtained, a 65/34 years split. Rent during the 34-year renewal term was stipulated to be at appraised fair market rent for the land "as if vacant and unimproved" after taking into account the cost of demolition and clearance of the then-existing improvements. Appraised fair market value will be established by a panel of experts in the year 2050 or so.

Miller makes the final summary evaluation of the project:

It was a complicated but worthwhile undertaking. Ballston Metro Center's attractive mixture of land uses in an urban focal point makes it an unqualified success from the standpoint of the county's planning goals. The success of its housing component is important news for developers: public transit accessibility is a positive market influence for up-scale housing projects.

Howe, Peter J. "Boston's Big Dig" in Urban Land, October 1993, (33-36, 90)

The article describes the massive redevelopment of transportation systems now underway in Downtown Boston and its adjoining areas: A Turnpike extension under the harbor to Logan Airport and the tearing down of the Central Artery and its replacement by a tunnel. The article focuses on the full range of direct and indirect land use impacts to be anticipated by the projects. Of special attention is the Central Artery and the 22 acres of new Downtown land that will be made available on air/ground rights over the tunnel.

Replacement of the Central Artery (Interstate 93), a six-lane elevated highway rammed through downtown in the 1950s, with an eight-to-ten lane underground expressway. Through innovative construction techniques, the old Central Artery will remain in service for nearly 200,000 vehicles a day while its replacement is constructed underneath.

The question of what to do with the 22 acres of new space it creates in downtown was effectively settled in January 1991, when a Boston Redevelopment Authority (BRA) plan for the corridor produced through years of neighborhood meetings was made binding by the terms of a state environmental approval for the project. . . From north to south it envisions:

- low-rise commercial buildings to fill in the famous Bulfinch Triangle section near North Station, named for Charles Bulfinch, the architect of the Massachusetts State House, who also laid out the triangular district of granite-block commercial buildings.
- parks and space for open-air markets close to Haymarket, where Italian produce, meat, and fish dealers now conduct lively sales on Fridays and Saturdays.
- five-and-six-story apartment buildings next to the North End, the traditionally Italian-American residential neighborhood that lost hundreds of units of affordably priced housing when the artery first came through in the 1950s;

- pedestrian plazas and a reflecting pool or outdoor skating rink near Quincy Market, to provide a safe and enticing passage for the millions of tourists visiting Long Wharf, the New England Aquarium, and the harbor front park;
- vest-pocket parks close to the office towers of the financial district, modeled on the Beacon Companies' stunningly successful Post Office Square park, which replaced a dowdy city garage with a 1,300 space underground parking facility and meticulously landscaped street-level park that is always mobbed at lunchtime;
- a new glassed-in botanical garden complex -- a facility that Boston alone among major U.S. cities lacks -- proposed to be developed by the Massachusetts Horticultural Society one block from South Station; and
- a Chinese-theme park and marketplace alongside Chinatown.

The article proceeds to describe the AIA award won by the plan and the enthusiasm of Boston citizens and the development community. It comments:

> The city/state decision to reserve new downtown land for parks and limited, mostly non-commercial development suggests that the project will help downtown real estate values in two ways. Current downtown property owners and their tenants will enjoy more attractive surroundings. And, as state development official Theodore Chandler -- a former BRA director -- puts it. "By taking 20 additional acres of land out of play in a city as land poor as Boston, you put a floor under rental rates."
>
> Of course, life will not be easy in Boston for the next ten years. Despite extensive plans to improve mass transit, minimize disruptions for motorists, and keep utility lines operating, Bostonians will inevitably face traffic snarls and construction-inflicted inconveniences. State officials are still struggling to determine just how they will cover their $1 billion-or-so share of the cost, despite raising gasoline taxes 91 percent three years ago to help fund the artery/tunnel.
>
> But, says Transportation Secretary Kerasiotes, "People have to take the long view of this thing. This is a project whose benefits are going to be realized by our kids and grandkids. This is a 100-year project.

Witherspoon, Robert. "Denver's 16th Street Mall. Tabor Center Ties Together a Mixed-use District" in Urban Land, May 1985 (7-9)

Denver's transit mall opened in 1982. It provides a continuous flow of specially-designed free Regional Transit District (RTD) buses and is a landscaped pedestrian way. Buses are electric as well as diesel and the passenger entrance is directly at the sidewalk level. The mall is the focus of intense office and commercial development, and a special benefit-assessment district handles operation and maintenance.

Tabor Center is a $300 million complex including hotel, office, retail, and parking space which opened in 1985. Tabor Center and the mall became a joint-development project when Williams Realty Corporation (the mall developer) negotiated air rights agreements above the city street.

> Air rights were negotiated over the highway to enable a sky bridge to connect the upper level of the retail component with a continuous 500-foot frontage along the 16th Street Mall. This bridge became "Bridge Market", a festival market of pushcarts A pedestrian entrance to the hotel also occurs at this level.

Dunphy, Robert T. "Transportation-Oriented Development: Making a Difference" in Urban Land, Urban Land Institute, July 1995 (32-36, 48)

Dunphy reviews the range of issues that are leading jurisdictions, transportation agencies, and developers to plan for high density development nodes at or near transit lines. He describes such activity in two metropolitan areas, San Diego and Portland.

Dunphy utilizes the term Transit-oriented Development (TOD), popularized by California architect Peter Calthorpe as the mode of development being pursued. In San Diego, the city has prepared new planning guidelines that apply.

"The first transit-oriented development (TOD) to fall under the guidelines was Rio Vista West, a 90-acre mixed-use development adjacent to a station on the future Mission Valley trolley line, approved by the city council in December 1993. The plan called for more than 1,000 units of moderate-density housing, 165,000 square feet of office space, and 325,000 square feet of highway-

oriented retail. The developer, Don Cerone, vice president of Cal-Mat, Properties (was) a participant in the development of the city's TOD guidelines."

Although not a "classic" joint development project on transit agency land, the developer has dedicated some right-of-way to the Metropolitan Transit Development Board and is incorporating one of the MTDB's transit stations within the project. Dunphy cites a number of downtown San Diego projects in the article, including:

> The MTS/Mills Building, winner of a 1991 ULI Award for Excellence, is a ten-story, 180,000 square-foot government office building with ground-floor retail, a 1,000 car garage, and a transit terminal. It was developed by Starboard Development and completed in 1989. Shimuzu Development's America Plaza, at 565,000 square feet the largest office project in the San Diego region, incorporates a Helmut Jahn-designed trolley station.

In Portland, Dunphy cites the city's efforts to concentrate growth along the light-rail line, particularly in suburban areas. He highlights the proposed mixed-density residential project at suburban Beaverton Creek, that will incorporate an intermodal transfer area.

> As an innovative project in its market, Beaverton Creek has involved extensive public review, comment, and negotiation among four private landowners, the transit agency, and local planning officials -- the opposite of what would have been required for a proposed conventional development. The proliferation of high-density transit-oriented projects depends not only on their market acceptance but also on their ability to gain strong dependable public and citizen support, financial as well as political. At Beaverton Creek, public funding will enhance station areas, sidewalks, and landscaping.

Dunphy sums up:

> What is transportation-oriented development ? Probably nothing more than good planning linked with wise transportation investments -- easy to say but hard to do. Portland and San Diego seem to embody the essential planning directions.

Urban Land Institute Project Reference File, Relevant Projects

The Urban Land Institute periodically publishes case studies on a wide range of commercial, industrial, residential, and mixed use projects. These present a depiction of the projects and their settings, design, management and financing. Six projects were selected which fit joint development or air-rights definitions, all of which represent private/public undertakings in some fashion.

The projects and their transportation interfaces are:

1. Tabor Center, Denver, Colorado. Multi-modal. This is a mixed-use development at the Denver Transit Mall which uses air rights over a public street as an integral component of the project.

2. River Center, San Antonio, Texas. Multi-modal. This is a mixed-use development in Downtown San Antonio. It utilizes air-rights over both the city's River Walk and the San Antonio River and involves special ramps from a limited-access highway to its parking facility.

3. Washington State Convention and Trade Center, Seattle Washington Highway. This is a Downtown convention facility located on private land and on air-rights over Interstate 5.

4. Fishermen's Terminal, Seattle Washington. Port of Seattle Commercial Moorings. This redevelopment of the Fishermen's Terminal involves significant new investment in commercial office and retail facilities.

5. Underground Atlanta, Atlanta Georgia Multi-modal. This major retail, entertainment, and public open space facility in Downtown Atlanta incorporates city streets and is linked to the MARTA rail system.

6. Tower City Center, Cleveland, Ohio Transit. This major downtown development links historic preservation with new commercial structures and the region's transit hub.

Sears, Gary L. "A Public/Private Partnership Builds a Highway in Silverthorne, Colorado", in Small Town; May-June 1984.

The article is a case study of the town of Silverthorne required upgrading of the final 1.3 miles of roadway through town and the state funds were not immediately available. The highway was needed

to serve a variety of new housing developments, and Silverthorne officials believed "theformation of a special improvement district could be used as a suitable means of building the required acceleration/deceleration lanes in conjunction with the construction of an improved highway."

A detailed history of the creation of this special improvement district is presented focusing on finding an equitable way to tax the housing developers that the new highway would serve. After the district was formed a dispute about how much one of the developers would be assessed was worked out and the "town's bonding counsel and the town's attorney drafted a waiver form that "'locked in" each developer to the district terms."

"Portland Looks to Public-Private Development to 'Break-Even"', in Passenger Transport; January 15, 1990.

The article briefly discusses a public-private venture between the Tri-County Metropolitan Transportation District of Oregon (Tri-Met) and the Winmar Corporation (a private developer) to build a $100 million suburban shopping mall with a rail station built into the mall. Eventually the venture will. include a downtown Portland convention hotel, and the revenue generated from the new ridership and mall/hotel leases will nearly eliminate the rail line's operating deficit.

This development was made possible with the help of federal money and the ability of Tri-Met to aquire in suburban Gresham nearly 80 acres of land through which the light rail system runs. After Tri-Met acquires the land they will lease it back to the developer who will build the mall. The income from the increase in ridership attracted by this anchor (as well as the hotel), along with lease payments, could generate up to $2.75 million, erasing the operating deficit not covered by rail fares. Federal funds that are available to Tri-Met for the purchase of land were not identified, although the article mentions UMTA.

Lessons learned include the importance of keeping the public well informed (given that a public transit agency got involved in shopping mall development), and the importance of keeping pace with the private sector. ("If a system intends to get involved in a joint development project of this type, it has to be prepared to follow the private sector's often accelerated schedule.")

Levenson, Mark S. "Use of Public-Private and Intergovernmental Partnerships To Fund Transportation Improvements", in Transportation Research Record, 1305.

The article examines Minnesota public-private and intergovernmental partnerships which fund improvements for highways, transit, and rail. Interestingly, the article notes that it is "estimated that highways and streets on the federal-aid highway system require more than $20 billion a year for improvements. Many state governments lack sufficient funds to make needed improvements. Thus, the future needs for transportation improvements require consideration of different approaches to funding."

Seventeen examples were presented of highway improvement projects that used some form of partnership. Frequently, the partnership was simply between a city, county, and the Minnesota Department of Transportation. Private sector contributions typically funded consulting studies (engineering, environmental, etc.). In one unusual example, money was raised from the private sector by selling certificates for inches of the highway. T.I.F. financing was used by one city to fund design work.

The article concludes with the observation that partnerships have been successful in Minnesota because the "turnaround time from project inception to completion is faster when the predesign and environmental work is financed by sources other than Mn/DOT. More projects can be completed in a timely manner with economic benefits for everyone, including increased safety and less congestion."

Lall, B. Kent. "Public-Private Relationship in Transportation Development'", in Major Development and Transportation Projects: Public/Private Partnerships: Proceedings of the Specialty Conference; American Society of Civil Engineers, 1990.

This article is a brief review of public-private partnerships for transportation projects in the Portland Metropolitan area. Successful development of partnerships is said to be a function of the "coordination of effort between professionals, politicians, and [the] public." The history of the Joint Policy Advisory Committee (JPACT), a group responsible for planning efforts to meet transportation needs, is presented. JPACT developed a public-private Task Force to explore joint development funding mechanisms,

The Task Force compiled data on the increase in retail sales, premium rents, and induced development (measured in square feet) that result from transit related investment. They then decided the best three mechanisms for joint development would be station area assessment districts, tax

increment financing, and station cost sharing. The Task Force also developed an implementation strategy to get "local, regional and state enitities...to achieve agreements in planning, design, review and zoning."

"Public-Private Partnerships: Improving Urban Life (Partners for Downtown Development: Creating a New Central Business District in Brooklyn)"

The article discusses a large joint development project in downtown Brooklyn known as the "Atlantic Center", the "busiest and most accessible transportation nexus" in Brooklyn. The project involved the construction of a mixed-use development on land owned by New York's transit agency, the City of New York, and the city's Public Development Corporation.

Although the transit agency played a very small role in the planning process there are some general lessons to be learned with regard to public-private partnerships. The key one is that real estate projects usually face "fairly rigid timetables.. .Preliminary negotiations and public-approval requirements can add years to the length of projects, and while the clock ticks toward the official groundbreaking, soft costs measured in lawyers' billable hours and consultants' per diem fees mount up." Joint development implementers must know that the risks and rewards are different for the public and private sector; that the resources government can bring to a deal (everything from subsidies to public-sector anchor tenants) can make a project financially feasible; and that the urban entrepreneur can bridge the cultural and economic gaps in such a way that the economic-development is maximized.

Dougherty, Joe. "Transit's Role in Creating Joint Development Opportunities" in Passenger Transport; June 22, 1992.

This is a report from a Rapid Transit Conference held in Los Angeles. A representative from Oregon talked about Tri-Met's success in working with local government. A joint development specialist with the Southern California Rapid Transit District mentioned the benefit assessment district surrounding the Metro Red Line. This district will capture revenue from two joint development projects along the Red Line, one at Union Station and the other at West Lake/MacArthur Park. A planner with the San Diego Metropolitan Development Board mentioned two joint development projects, the MTS/James R. Mills and the American Plaza Building, that created "distinctive environments where the buildings, publci transit, and public all interact."

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ISSUES IN JOINT DEVELOPMENT AND CO-DEVELOPMENT
TO GUIDE CASE STUDY ANALYSIS

A. Definitions. As used in this study, *joint development* is a joint effort by a public agency and a private developer to carry out a development project at a transportation facility, such as a *transit* station, a highway interchange or a multi-model connection point within a transportation corridor. The project may or may not be carried out under a joint agreement. Joint development carried out cooperatively, but not under a joint agreement, is known as *co-development.*

B. Agency Objectives; Project Options

Joint development begins when a public agency, under the terms of a formal joint development agreement with a private developer, either acquires property for filature use or commences development of property it has already acquired. The agency can either sell the property to a private developer for a one-time gain, or lease the property to the developer over a period of time to create a revenue stream to support operations or apply to debt retirement. The public agency must also determine if it desires to have an equity stake in the project. For the examples explored in the literature review, most transportation agencies retained ownership and entered into a long-term lease with a private developer.

Co-development begins when, without the formal legal relationship of a joint development agreement, the public agency cooperates in the development of land by a private developer adjacent to a public agency facility. The public agency may also cooperate with the local government, which may provide density bonuses and other zoning incentives to make private development more active.

Issues:

I. What are the public agency's objectives (land; resources; financing for one-time capital investment; on-going revenue stream to support operations or debt retirement; other)?

2. What development option (joint development or co-development) did the public agency use?

3. What is the public agency's rationale tor the option it selected?

4. How did the public agency implement the development option which was selected?

C. Public Agency Development Policy and Organizational Capacity

Transportation agencies may or may not have a formal policy for joint development and co-development. If an agency does not have a formal policy, it will carry out joint development projects on an ad hoc basis and may not have the staff needed to manage these projects. An agency policy for joint development should identify the type of projects it intends to carry out and how they will be implemented. The agency should also develop organizational and staff capacity to carry out joint development projects effectively.

Issues:

1. Does the public agency have a policy for joint development and/or co-development?

2. If the agency has a policy' what are the key elements that make up that policy?

3. What are the organizational resources needed to implement the public agency's policy?

4. Which of these organizational resources are the most critical to successful implementation of the policy?

5. Does the public agency's organization currently contain the key elements for successful implementation of the policy?

6. Has the agency also been successful in creating joint development or co-development opportunities?

7. If the agency has been successful in creating opportunities, what are the organizational or other aspects that have been critical to that success?

D. Acquisition of Property

In many cases, the transportation agency will own the property it intends to use for a joint development project. If the property is not owned, the agency must acquire it through purchase or condemnation. {f joint development is contemplated, the agency likely will acquire more land than it needs. There may be legal] restrictions on excess condemnation for transportation facilities, and on how long an agency may keep acquired land idle (known as land banking).

Issues:

1. How has the agency acquired the land to be used for a joint development project?
2. What are the applicable legal limitations on excess acquisition or condemnation?
3. What are the applicable legal limitations on the holding of land through land banking?

E. Sale or Lease of Property

Normal conveyancing and leasing techniques are used for the sale and lease of property for joint development projects, although enabling legislation may be necessary to authorize the sale of air rights over transportation facilities. Model legislation is available that authorizes air rights transfer and some states have adopted it.

The sale or lease of commercial space within a transportation facility is another common joint development project. A developer can also pay a fee for the right to link a commercial project with a owners to capture any increase in property values created by the joint development project. These techniques require enabling legislation if they are to be used effectively in joint development projects.

Issues:

1. Is there enabling legislation for the financing techniques utilized by joint development projects?
2. Which financing technique or combination of techniques was used in the joint development project?
3. Was the financing technique used or structured in any special way to accomplish the objectives of joint development?
4. Were any legal authority or tax issues raised by the way in which the financing technique was used?

H. Zoning

Incentive zoning and other innovative zoning techniques, such as special neighborhood and design districts, have been used in joint development projects around transit stations although there are no examples of the use of these techniques for joint development projects adjacent to highways. The use of zoning techniques also is important in co-development projects because a zoning incentive may be necessary to make the project successful.

Issues:

1. What zoning techniques, if any, were used in the joint development or co-development?

Philadelphia Case Study

Introduction

Philadelphia's Interstate Land Management Corporation (ILMC) is the steward of 50 acres of land and air rights under, over, and adjacent to approximately two miles of Interstate 95 in the Center City.

I LMC has property management functions (maintenance, landscaping) characteristic of many Downtown management districts across the country. Its distinction is that these functions are being applied exclusively to highway right-of-way and that, in addition, the Corporation acts as leasing agent for properties acquired by PennDOT but not currently needed for highway purposes. ILMC was created to meet special community and transportation circumstances attendant to completion of I-95, almost a decade ago. In this sense it was a unique institutional response to a unique set of transportation-related conditions. Nonetheless, ILMC and its activities reflect certain principles of joint development and have considerable relevance to right-of-way management as broadened by ISTEA.

ILMC's leasing activity is the primary focus of this discussion. It executes leases with the private-sector for right-of-way land under or adjacent to the transportation facility on which non-intensive uses (parking, storage) may be placed.

When land acquisition for I-95 was in process, and even as the highway was under construction, PennDOT had no plans to create or encourage joint use of right-of-way. The leasing operation was an *ex post facto* decision made by PennDOT and the City of Philadelphia to supplement and eventually supplant expenditures of government as I LMC's primary revenue source. Actual leases thus far have been confined to accessory uses in support of development plans from owners or occupants of land adjacent to I-95 who need additional space to meet zoning or customer parking requirements.

ILMC's leasing activity illustrates two important principles relevant to transportation agencies considering public/private partnerships on land not directly needed for transportation purposes.

1. Land Scarcity. If land demand is high and suitable sites are scarce in the vicinity of a transportation facility, private sector developers may be induced to enter into lease agreements with the public sector. Since these agreements are invariably more restrictive on tenure and flexibility than purchase or lease of suitably-zoned private land, a strong economic incentive must be present.
2. Entrepreneurship. Factors of strong demand Ð limited supply notwithstanding, it takes an entrepreneurial agency or agency director to work through bureaucratic constraints and broker such deals to the mutual satisfaction of the private sector and public agency.

Private sector leases for parking and storage at I-95 now generate over $100,000 annually to ILMC, to a great degree because of the aggressive efforts of ILMC's board and its director. This success contrasts sharply with the case study of I- 1 10 in Pensacola, Florida where no private sector leases have been executed in more than 15 years since the land became available. PennDOT's financial conditions and tenure restrictions on leases are similar to

those of Florida DOT. In Pensacola, however, even landowners adjacent to the highway have multiple opportunities to obtain unrestricted sites for their needs. Local leasing priorities in Pensacola have, moreover, focused on city and community re-use of acquired lands, with only desultory marketing of sites earmarked in the city's master plan for new or expanded commercial use.

Origins of ILMC

For approximately two miles in Center City Philadelphia, between the Benjamin Franklin and the Walt Whitman bridges, I-95 runs parallel to the waterfront, separating it from residential and commercial sections of Downtown. The highway borders elegant neighborhoods such as Society Hill and Logan Square, as well as Chinatown. Part of its length is elevated, part on grade, and part depressed with streets and pedestrian walkways passing overhead.

In the mid' 1980s, as the expressway was nearing completion, residents were highly concerned about its impacts on their tranquility and property. The structure itself was bald. Spaces that had been landscaped were poorly maintained. Graffiti were proliferating. "Orphan" land below the travelway was accumulating trash and feared to be harboring disease, homeless people, and crime. Land beneath the structure was paved and lit poorly, if at all. While the highway was moving traffic efficiently, it was generally not a good neighbor.

Neighborhood groups saw a pressure point in the yet-to-be approved access ramps between I-95 and Downtown and seized the opportunity to block the flow of highway progress while they sought relief from the State Legislature.

> The concept of creating one agency and centralizing responsibility emerged in 1985 during the Environmental Impact Statement for the I-95 Center City access ramps. The communities near the highway felt that the issue of responsibility for these areas had to be addressed before construction of the ramps. They had experienced frustration because of the confusing city, state and federal roles in past maintenance efforts. [1]

The Legislature responded. In 1988 it established as a condition of approving the ramps that a consolidated management agency charged with the Center City portion of I-95 be created. PennDOT executed a joint-use lease agreement with the City of Philadelphia for about 40 separate parcels of expressway-related land, and ILMC was chartered En 1990 with initial funding from both the Commonwealth and the City.

The Corporation has a broad-based Board of 10 Directors: two each appointed by the City, the Commonwealth, and an umbrella body of civic associations from adjoining neighborhoods. The four other members represent the

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[1]. Interstate Land Management Corporation brochure, 1994, p. 1.

City's Chamber of Commerce, the State Legislature (members appointed are a State Senator and a Representative), and FHWA as a non-voting director. Mr. Barry Promos, the staff Director, reports to the Board.

In addition to funding from the Commonwealth and City, ILMC receives dedicated revenues from a Downtown Parking Authority garage as well as the payments from the land leases. (The city's annual contribution has now ceased as initially intended.) In setting up ILMC, the various governmental bodies concurred that, by the tenth year of operations, lease revenues were to become the sole source of the Corporation's budget. Another unusual aspect of the Corporation's charter is its sunset clause. ILMC's performance is reviewed at the end of each four years, when PennDOT and the City determine whether it should continue.

Results

Results of ILMC's stewardship have been extraordinary. Neglected lands have been cleaned up and eyesores restored as community assets.

> In addition to day-to-day maintenance of the areas, we have completed seven specific rehabilitation projects on ten different parcels.
>
> These efforts have resulted in installation or replacement of 348 bollards, 6 driveway gates, 85 lamps, 162,000 square feet of asphalt paving and 6,700 square feet of concrete. These projects included the painting of 119 highway support piers and 4,400 square feet of wall area with anti-graffiti paint. We have continued to maintain these areas with repainting as needed . . . At the same time, the restoration of lighting to areas that had been neglected in the past was accomplished.
>
> . . . The Pennsylvania Horticultural Society (PHS) is working for ILMC to help manage approximately 16 acres of landscaped areas within the boundaries of the corporation. The frequency of regular landscape maintenance such as mowing, watering, weeding, mulch application, pruning, fertilization, and trash policing has been significantly increased.;[1]

The Corporation's landscaping and maintenance functions extend beyond "left-over pieces" of right-of-way. ILMC is responsible for the Philadelphia's Vietnam Memorial and two handsome parks built over the expressway travel lanes that serve as seamless pedestrian connections between the neighborhoods and the waterfront. These are highly visible and popular recreation spaces.

ILMC's contractors and staff, as in many other urban management districts, play an extra role as "eyes and ears" for the community. Acting essentially as an additional layer of security, they flag problems before there is a chance to get out of hand.

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[1] ibid, p. 9

> Corrective action can then be taken by the corporation in a timely fashion. This has been especially helpful with debris, litter and graffiti removal.[3]

Community Response

ILMC is a neighborhood favorite. Considerable community support accompanied the first four year performance review in 1994. Excerpts from letters indicating that support are indicative of the Corporation's success in its primary missions.

From the neighborhood associations:

> ILMC is, in our view, an undeniably successful experiment in community and governmental cooperation. The Board, which represents the total community, including government, should be highly commended for helping to stimulate development and maintaining the areas around the highway without the huge overhead that usually accompanies this kind of process.[4]

From the Waterfront Business Association:

> Because of the very large amount of frontage along Columbus Boulevard that is PennDOT right-of-way, the image of the Central Waterfront is significantly impacted by the way this property is maintained. As private owners in the area have struggled to upgrade their properties, the untended appearance of this publicly owned land had been a continuing irritant. With the advent of ILMC sponsored landscaping and maintenance, what was once a detriment to the area is now an asset. Your work in particular reflects a caring professionalism, which has been critical to its success.[5]

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[3] . ibid, p. 9. In a telephone interview, Promos made a major distinction between ILMC's section of I-95 and the recent, nationally-reported tire fire that essentially immobilized the expressway north of Downtown, creating traffic jams for several days. There was no special maintenance and surveillance presence where the fire occurred. The abutting used tire storage operation was not monitored and became a perfect set-up for arson. This would be most unlikely near ILMC-managed property.

[4] Letter to Andres Perez, Jr. Chairman, ILMC Board from Jeff Rush, Chairman, Community Council for interstate Land Management, February 17, 1994.

[5] . Letter to Barry Promos from Michael Scholnick, Executive Director, Waterfront Business Association.

The Leasing Function

Completion of I-95 coincided with the City of Philadelphia's efforts to restore the Delaware River waterfront to viable commercial uses, especially linked with tourism. Like many other major cities, Philadelphia had effectively turned its back on the waterfront. Older wharves and warehousing uses had deteriorated and were becoming more isolated from the city core by the multi-lane expressway.

Public and private investment during the late 1980s and early 90s has brought new land uses to the waterfront and begun to reverse the image. Penn's Landing is a major tourist attraction, particularly for performances during the summer. Derelict buildings have been rehabilitated for restaurants. A ferry link has been established between the waterfront and the new State Aquarium at Camden, New Jersey just across the Delaware. Retail stores and a hotel have been developed in the waterfront area as well.

ILMC and its land have played strategic roles in this revitalization. While sites and buildings for new uses have been abundant along the narrow waterfront and at the edge of the core just west of I-95, low-cost land suitable for open-lot parking has been especially difficult to find. ILMC, however, offered open land under and adjacent to the highway, and its Director was charged with brokering lease deals.

Success has not come easily, for some very important reasons. (1) All the sites under ILMCs control are still classified as highway right-of-way, with some potential for long-term use if I-95 expands or is modified. Thus, the Philadelphia situation differs somewhat from Pensacola's where sections of land acquired by the highway agency were assigned for joint development at the outset of the process. (2) Because the land might one-day be required for transportation purposes, PennDOT's lease restrictions include terms allowing the Commonwealth to give but 30-days notice to a lessee to vacate the premises ĐĐ and without compensation for improvements. In Pensacola, Florida DOT must give 90 days notice. (3) Lease payments can not be negotiated between a potential lessee and ILMC. Once a re-use plan is established, a fair market value appraisal is required, and the price of the lease pegged to that appraisal. That is essentially the same condition as applies for private-sector users in Pensacola. (4) Under ILMC's charter, the Board of Directors must unanimously approve each lease. This means in effect that neighborhood citizen representatives as well as governmental board members have veto power.

Despite these constraints, Promos has negotiated 20-year leases on 11 parcels out of 18 which were available. Currently, the leases generate about $100,000 in revenues for ILMC, and the lessees themselves have to maintain the property in appropriate condition. Examples of the users are United Artists movie theaters, Caldor discount department store, and Comfort Inn. While most of the uses are parking to serve the enterprises, one parcel is leased to a trucking company for truck storage as well as parking. Prior to closure of every lease, ILMC provides the prospective lessee with an environmental report assuring that the site is clean of toxic materials.

According to Promos, availability of the highway land was the "deal-maker" for most of these enterprises. Each had a site adjacent to the expressway adequate for its buildings, but fell short of sufficient gross land area to meet zoning requirements or provide sufficient secured, accessible parking area for their patrons. Indeed, the attraction of these

ILMC parking pads was so great that one developer invested $100,000 in paving and other non-structural improvements such as lighting and bollards, despite the recognized risk involved. Thus far, that developer and the others have considered it unlikely that they would be forced to vacate within the 20-year lease term.

Philadelphia's ILMC area is a case of demand-driven joint use. This basic economic context did not pertain in Pensacola where the private sector has many other alternatives to use of restricted right-of-way below an elevated highway.

In reviewing ILMC's leasing experience, it is well to note that the corporation is ever-mindful of its community obligations. It has worked out no-cost "licensing" arrangements to make some sites available for non-profit activities. Philadelphia has, for example, a tradition of costumed clubs called "mummers" who participate in parades and special events. ILMC has an arrangement with one mummers group permitting vehicle storage and parade practice in return for premises clean-up. Community dance programs are held on another site during good weather.

Some Larger Significance for ILMC

From the standpoint of joint use of transportation right-of-way, ILMC must be considered a successful example (1) because demand for the kinds of non-intensive activities suitable to unused right-of-way was strong and (2) public entrepreneurship aggressively mobilized that demand, despite the restrictions and limitations on tenure that the joint-use leasing entailed.

Although not directly related to joint development, ILMC's effectiveness at performing its management functions demonstrates a broader, ISTEA-related significance.

I LMC charter predates the 1991 Transportation Act with its explicit recognition of "enhancements" as a legitimate focus for highway expenditures. Section 1007 of the Act makes enhancements eligible for federal funding, and amends Section 101 (a) of Title 23 to include the following definition:

> The term 'transportation enhancement activities' means, with respect to any project or the area to be served by the project, provision of facilities for pedestrians and bicycles, acquisition of scenic easements and scenic or historic sites, scenic or historic highway programs, landscaping and other scenic beautification, historic preservation, rehabilitation and operation f historic transportation buildings, structures, or facilities (including historic railroad facilities and canals), preservation of abandoned railway corridors (including the conversion and use thereof for pedestrian and bicycle trails), control and removal of outdoor

advertising, archaeological planning and research, and mitigation of water pollution due to highway runoff.[6]

Since 1991, concern with enhancements, as well as ISTEA's mandate for transportation agencies to consider corridor preservation, has broadened the focus of state transportation agency right-of-way offices. Many are now dealing with proposals for parks, landscaping, and pedestrian precincts similar to what has been accomplished in Center City Philadelphia along I-95.

Once built, however, an "enhanced" transportation facility requires maintenance at a much higher standard than normal right-of-way in order to perform its visual and recreational functions and to continue as an amenity to adjoining neighborhoods. If not handsomely and constantly maintained, it can readily become a wasteland,

Thus. ILMC presents a possible institutional model for ensuring the long-term success of complex, extensive enhancement projects in urbanized areas. The following factors are most relevant.

Partnership status. ILMC is a formal partnership of all the major stakeholders: the state transportation agency, the local jurisdiction, the most affected neighborhoods.

a)

2 Combined functions. ILMC has a clear mandate to manage, maintain, and landscape all of the transportation agency lands within its service area not directly utilized for highway purposes. It is, as termed by its director, a "one stop shop where people know who is responsible."

a)

3. Entrepreneurship. The agency and its director conduct their affairs in the public eye and aggressively pursue their responsibilities.

a)

4. Oversight and performance review In order to ensure that the agency is performing its job according to expectations, the partnering governmental bodies are committed to a periodic and public review of performance. This is also a way to ensure that the agency mission can be adjusted as new demands and opportunities arise.

. *Intermodal Surface Transportation Efficiency Act of 1991*, 105 Stat 193 1

Appendix Materials - Philadelphia Case Study

Iowa Case Study

This case study examines the joint development process currently underway in Iowa to build an Interstate rest area. Iowa was chosen by ERA, in part, because FHWA officials indicated the state is involved in joint development. There were also two different literature review reports that discussed the commercialization of rest areas, including the Feasibility of Safety Rest Area Commercialization in Texas, which was familiar to Iowa transportation officials,

In the course of conducting this case study, the Iowa Department of Transportation (IaDOT) and the Federal Highway Administration (FHWA) in Iowa were contacted and queried by telephone, and in-depth interviews were conducted with selected personnel. A complete list of those interviewed is located in the bibliography. Many respondents provided the consultants with copies of reports, statutes, and other relevant materials. Their cooperation was greatly appreciated.

The case study begins with background information on the impetus in Iowa for pursuing a joint development project. This project, known as the Rest Area Partnership, is then described. Relevant Federal regulations and Iowa's Request for Proposals are examined as they relate to the Partnership. We also examined other states to see what joint development projects or research has been done in conjunction with rest areas. Finally, a conclusion section summarizes the pertinent information and discusses some implications for the wider applicability of this experience.

Background

In early 1995, IaDOT began to develop a ten-year rest area improvement program, as a response to Iowa's aging infrastructure, as well as Federal policy guidelines. Federal guidelines govern the construction and maintenance of "safety rest areas", defined as roadside facilities safely removed from the traveled way with parking and such facilities for the motorist deemed necessary for his rest, relaxation, comfort, and information needs. Federal policy encourages state agencies with authority over highways to maintain a statewide safety rest area system plan. The guidelines also include development priorities to ensure that safety rest areas will be constructed at locations most needed by the motorist (this information is drawn from the Code of Federal Regulations, Title 23, Part 752 -- "Landscape and Roadside Development").

Iowa analyzed their entire system of rest areas, looking for appropriate locations to either build new or simply renovate older facilities. Although many of the rest area buildings had undergone a major

renovation since they were built, most were at least twenty years old and had become outdated. Many buildings were not large enough to accommodate the higher traffic volumes that are currently on the Interstate system. Most of the older structures also do not meet the requirements of the Americans with Disabilities Act.

In addition, parts of the Interstate system were underserved by rest areas. The gateways to the state became a priority. In many cases the first rest area and welcome center in the state was located several miles from the border. State planners felt this was not the optimal location for 'entry' gateway rest areas and welcome centers. IaDOT identified ten locations where new rest areas could be built. These sites are identified on the attached map.

The State decided to seek the private sector's help in implementing their rest area improvement program. IaDOT has solicited and received proposals for a rest area partnership and are currently in the process of evaluating the proposals before implementing any agreements.

Private and Public Benefits

IaDOT already had some limited experience in privatizing services. They previously contracted with private sector janitorial and maintenance services. After an initially disappointing experience with private contractors, the Department modified their requests for proposals (RFPs) for "Interstate Rest Area Janitorial Building Cleaning" and for "Interstate Rest Area Lawn & Ground Maintenance". Details were added to sections of the RFPs outlining specific duties that were to be performed at each rest area.

The janitorial and maintenance request for proposal experience was useful. It gave IaDOT and the Rest Area Administrator a foundation fur conceptualizing the development of the new rest area sites. With appropriate wording and proper attention to detail, IaDOT wrote an effective proposal for the provision of janitorial services; as a result, there is now a solid structure for joint development approaches where the private sector develops and maintains a rest area for IaDOT.

IaDOT officials discussed the idea of partnerships with local development groups, investors, and other state agencies that had shown interest in working with IaDOT to develop rest areas and welcome centers. The private sector's interest was in the potentially underserved captive market on

the highways.[1] IaDOT believed that, with a public/private partnership, costs could be cut while maintaining the same level of service existing prior to the privatization. (This was, in fact, their experience in privatizing janitorial and maintenance services). In addition, the partnership would provide the motorist with useful commercial services (e.g. a restaurant) and generally improve the state's image with the traveling motorist.

With the partnership discussions came many questions. For the public-private partnership to work, it had to be a "win/win" situation for all parties, each participant benefiting in some way. Attached are handouts detailing some of these benefits that were prepared for IaDOT's Board of Commissioners who approve the partnership program. The Board of Commissioners, also known as the Transportation Commission, is the ultimate policy-making body for transportation issues in Iowa and required background information prior to authorizing the program.

The Commission favorably received IaDOT's presentation and encouraged them to proceed.[2] Although ten sites had been identified for new rest areas, to begin the process IaDOT decided to focus on two sites as model or demonstration projects from which they would proceed on a larger scale. Over the long term, IaDOT will probably be receptive to partnerships at any or all of those sites, depending on available funds and agreements that can be worked out.

In detailing the benefits of commercializing rest areas, IaDOT emphasized that the annual maintenance cost of $180,000 for the two rest areas would be substantially reduced and the initial capital expenditure would be more than halved because:

- only one new structure would be needed (as opposed to the two structures used in the past)
- with a partnership agreement the cost of developing the new 'single' rest area would be at least halved (a 50/50 split) and, depending on the proposal savings, could even be greater.

Therefore, from a possible expenditure of approximately $6 million for a pair of rest areas, the savings realized from a partnership that would build one rest area at an interchange would be $4.5 million -- a savings of 75%.[3]

For the IaDOT partner the most likely important benefit is the visibility and ease of bringing motorists to the site. According to the State proposal, the estimated average daily traffic (ADT) at the target site on I-80 will be 17,590 in

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[1] The Texas report regarding the feasibility of commercialized rest areas does a good job of showing what kind of economic returns might be expected based on different levels of traffic. This analysis is discussed further below.

[2] Once IaDOT has selected a partner, they will have to return to the Commission to seek its approval for their selection.

[3] IaDOT estimated figures

1996 and 11,600 for the I-35 site. The financial feasibility of implementing a private project depends on both the revenue generating possibilities and costs associated with the project. To learn more about this subject 'we reviewed a study completed by the Center For Transportation Research -- "Feasibility of Safety Rest Area Commercialization in Texas" -- which analyzes revenue and cost factors.

This report (fully abstracted in the literature review) uses information from toll road service plazas and from other rest area privatization studies to estimate potential revenues and costs for a commercialized rest area, Revenues are generated by the various potential concessions offered by commercial rest area operators including: fuel, food, and other miscellaneous goods. Sales volumes are a function of both people's spending levels and the number of people who come to the commercial facility. The number of customers can be estimated using the ADT for each site and then using a "capture rate" to determine how many motorists will actually stop at the rest area. Capture rate estimates range from 2.3% to 15%, but in general the report notes that a minimum ADT of 2,750 was required for an adequate volume of sales to take place.

Costs are a function of both facility costs (right-of-way acquisition, engineering, construction, etc.) and operating costs (inventory costs, labor, state revenue sharing fees, etc.) Costs for commercial rest areas are significantly higher than those for a typical public facility. However, this is to be expected as the facilities are designed and operated to accommodate consumers -- a clientele different than those using safety rest areas. After a proposal is chosen, IaDOT expects to keep their costs at a level that is equal to or lower than the costs already incurred on public rest areas. Iowa can also arrange for a lease or a revenue sharing fee that, while a cost for the private operator, generates additional fiscal benefits for the State.

Legal and Regulatory Requirements

The RFP IaDOT prepared for this project is attached. The specific proposal requirements include three main points. First, all proposals should "allow the traveling public safe, easy, and immediate access from the interstate to the rest area facility". This requirement is related closely to federal policy governing the development of rest areas. These regulations, already cited above, actually define what a rest area should be: "a roadside facility safely removed from the traveled way with parking and such facilities for the motorist deemed necessary for his rest, relaxation, comfort and information needs." Obviously, this influenced IaDOT's requirement that the rest area partnership also allow safe and easy access to the non-commercial portion of the development.

The second proposal requirement is that the traveling public have "direct access to and from the rest area building without passing through a commercial business or an area where someone is attempting to sell them something". This requirement is found in federal law (Title 23, U.S.C. Section 111.) which is excerpted below:

> All agreements between the Secretary and the State highway department for the construction of projects on the Interstate System shall contain a clause providing that the State will not add any points of access to, or exit from, the project in addition to those approved by the Secretary in the plans for such project, without the prior approval of the Secretary. Such agreements shall also contain a clause providing that the State will not permit automotive service stations or other commercial establishments for serving motor vehicle users to be constructed or located on the rights-of-way of the Interstate System.

Note that these restrictions (on access and commercial activity) only apply to the right-of-way for the Interstate System. That is why Iowa planned for the rest area to be located off of the right-of-way -- otherwise no commercial activity would be allowed. However, the Code of Federal Regulations, Title 23, Section 752, which regulates the use of safety rest areas states that: "no charge to the public may be made for goods and services at safety rest areas except for telephone and articles dispensed by vending machines". Therefore, IaDOT requires that rest areas within the right-of-way remain free of commercial activity, allowing motorists to enter the rest area without going through a commercial area.

The Center For Transportation Research report mentioned above also analyzes these Federal legal and regulatory requirements. The report points out that in the Code of Federal Regulations, the section dealing with right-of-way acquisition states that all uses of the right-of-way are exclusively for public highway purposes. However, the regulations go on to say that temporary or permanent use of ROW for non-highway purposes may be approved by the Federal Highway Administrator if it is determined that such use is in the public interest and will not interfere with the flow of traffic. The report suggests that state transportation agencies can prove that "expanded services at rest areas, provided by the private sector, are in the public's interest and will not interfere with the flow of traffic on the highway."

Other Proposal Requirements

Iowa has required that proposers incorporate a design that meets all Federal Highway Administration and Iowa Department of Transportation access requirements. These requirements vary depending on the location of the rest area. The RFP directs the applicant to contact a Resident Maintenance Engineer for specific site information, largely related to access issues. For example, a developer would not be allowed to build closer than 300 ft. of a entrance/exit ramp off the interstate. For state roads, access is also regulated and typically requires the developer to go through a permitting

process. The Maintenance Engineer might also require the developer to contact the local government that has jurisdiction over the area (e.g. county, city, etc.) if there are local zoning laws or regulations that would put additional requirements or restrictions on the development.

FHWA has been working closely with Iowa since the RFP's inception, concerned with both maintaining the integrity of the right-of-way and ensuring IaDOT follows federal regulations related to safety rest areas. FHWA officials that were interviewed for this case study indicated that the aforementioned regulations can be distilled into a general objective: that the design and final construction are implemented so that the project is perceived by the public as a rest area.

This concern proved relevant to the proposals that the FHWA had already reviewed. One proposal's design and layout was very similar to a truck stop, which is primarily a commercial establishment and is perceived as such by the public. As a result, the FHWA officials told IaDOT that they could not approve of that particular proposal.[4] In addition to meeting access requirements, the facility is required to adhere to all state and local laws, building codes, and the Americans with Disabilities Act.

An environmental assessment of the entire development site is also required by the RFP. The developer submitting the proposal must pay for this assessment and plans for the completion of the assessment must be in place when the proposal is submitted. The RFP lists eight different activities that the assessment must cover including an assessment of any cultural resources (archeological or historical) that might exist on the site. This environmental assessment, which must be complete before any partnership agreement is finalized, will obviously add time and money to the project's ultimate cost.

Rest Area Specifics

IaDOT is naturally concerned that any partnership benefit the agency as much as possible. The RFP language reflects this concern by stating that "the rest area facility shall include the minimum features that are currently available at existing rest areas." The RFP lists these features as including: "drinking fountains, hydrants, mirrors at each sink, diaper changing stations, indoor telephones, vehicle use telephones, motorist safety information, tourist information, benches both indoors and outdoors, picnic area with tables, shelters and grills, pedestrian walkways, designated pet exercise

[4] Compare with the Prosser experience in the State of Washington (mentioned below).

area, trash receptacles, weather radio, adequate building and parking lot lighting and appropriate signing."

The actual rest rooms also have minimum requirements, but interestingly the number of facilities required can be lowered by up to 25% if the commercial development also includes rest rooms (for example, a restaurant with its own rest rooms). Parking spaces also have to be provided for both cars and trucks, again, the number of spaces depends on which highway the rest area is located on. For sites on I-80, a total of 115 car parking spaces and 40 truck parking spaces must be provided. For sites on I-35, a total of 100 car parking spaces and 35 truck parking spaces must be provided. In both cases, there will probably also be more parking to accommodate the commercial portion of the development.

Other States' Experience

Iowa is not alone in exploring rest area commercialization. We have identified a number of other states that have explored, or even implemented a joint development in conjunction with a rest area. (The Prosser area is also discussed in the Washington State Case Study.)

The State of Washington implemented a successful joint development for a commercial rest area that included a truck stop (Horse Heaven Hills Truck Stop) and restaurant (McDonald's) as well as a commercial RV park and dump station, fruit stand, and roadside chapel. The rest area is located near the City of Prosser and it was the City (along with other local agencies and governments) that initially approached the Washington Department of Transportation (WSDOT) to consider the development. The City offered to share the State's financial burden and believed that the project would create jobs and help draw traffic from I-82 into downtown Prosser. The private partner agreed to donate land for construction of the rest area and to pay for maintenance for 13 years.

Like Iowa's planned rest area partnership, the Prosser rest area is located off the Interstate right-of-way, serving both directions of travel. However, the concern in Iowa over whether or not the rest area is perceived as being "too commercial", did not exist in Washington. On the contrary, the rest area's truck stop atmosphere seems to suggest that State officials have some leeway in how they interpret the federal regulations.

The Prosser success prompted WSDOT to draft a policy document governing any future partnerships involving rest areas. The document has not yet been adopted as official policy, but is interesting in

that it considers a variety of issues related to rest area partnerships., Rules include locational and design guidelines intended to integrate the rest area with the State's existing facilities. Other rules are concerned with the ability of a private partner to meet their financial obligations. It is suggested that: "a significant 'up front' contribution" be made by the private partner as opposed to the "unsecured promise of future performance." Ownership policy for the rest area is discussed and contracts, leases, and purchase agreements are all mentioned as possible options for the state's role in the partnership. Finally, liability and the possibility of a partner's default are explored.

Other state experiences with rest area commercialization include California's efforts to prepare feasibility studies for specific sites and to prepare plans to actually develop 5 different rest areas. California emphasizes community relations and the use of the commercial rest areas to attract more tourism and business sales in the region in which the rest area is located. Again, because of the federal restrictions, only sites accessible from interchanges (but off the right-of-way) are being studied. Virginia also prepared a feasibility report on the potential for commercializing rest areas and Michigan hired a consultant to study the feasibility of a joint development on a specific site. Finally, because Illinois had experience with commercialized rest areas on their toll roads, the Department of Transportation (IDOT) initiated a study to explore the feasibility of commercial facilities on their Interstate highways. The study was a comprehensive examination of existing rest area conditions; the motor services market; rest area development concepts, costs, and developer options; economic feasibility; operation of joint public/private facilities; and implementation strategy. The study assumed that for any commercialization efforts to occur, the federal restrictions on commercial interstate activities would be repealed?

Conclusions

IaDOT is currently still reviewing the proposals (as of April 1996). As a result, the negotiations that are expected to take place with the chosen developer cannot yet be analyzed. Problems related to the eventual construction (for example environmental issues or permitting delays) and operation (revenue shortfalls, incompetent management, etc.) of the rest area also remain unanalyzed. However, what the case study shows, much like some of the examples below, is that a rest area partnership seems to be in the state's best interest. By meeting Iowa's rest area needs and by saving the state money (assuming the winning proposal works out), the Rest Area Partnership will likely become a model for continued joint development projects. ERA's conclusion is that commercialized rest areas provide the following possible financial and other benefits to State DOTs:

[5] These experiences are abstracted from the Center For Transportation Research report.

- cost savings
- revenue
- modernization of rest area facilities (ahead of schedule)
- increased road use satisfaction
- ability to promote state tourism.
- create jobs

Telecommunications Utility Accommodation

This case study focuses on the issues that influence how a highway department can take advantage of the demand for highway ROW space for telecommunications utilities, and either profit from its use, get needed (and costly) public telecommunications infrastructure built by the private sector, or both. This evolved as a "supplemental" item to the 'Washington Case Study in part because so much of WSDOT's current "joint development energy" was going into telecommunications utility accommodation issues, in part because the issue is so timely with the passage of the telecommunications act and recent federal bandwidth and air frequency auctions, and because so many other states are now facing similar ROW accommodation issues as well.

The desire and need to accommodate telecommunications utilities within highway rights-of-way, and the joint development potential associated with it is a recently emerging issue. At both the federal and state levels, this issue has come to prominence as several forces converge: the increasing need for highway-related communications equipment and infrastructure, shrinking state and federal transportation budgets, growing competition within the telecommunications industry: the federal changes and deregulation anticipated from the Communications Act of 1995, and the growing demand for telecommunications utility capacity of all kinds.

The Communications Act of 1995 was passed into law in early 1996. This legislation is highly complex and covers many aspects of the entire industry including fundamental aspects related to telephone service (local, long distance, wireless, etc.), broadcast and cable television, and the internet. A minor provision that was reportedly added in the last twenty-four hours preceding passage of the bill, relates directly to the joint development potential of highway ROW's. The right of local jurisdictions to charge telecommunication providers a fee for the use of right-of-ways was ensured: "the authority of a local government to manage the public rights-of-way or to require fair and reasonable compensation from telecommunications providers for use of the rights-of-way on a nondiscriminatory basis if the compensation required is publicly disclosed by such government." In theory, this gives the public sector the right to negotiate for improvements or fees in the same spirit as today's cable franchise arrangements. However, it should be noted that many states have statutes that regulate or prohibit to charging a fee for the private use of a ROW. When more restrictive, they supersede the federal regulations. To a certain extent, this change in federal policy could help states to change their statutes to allow fees.

Other national initiatives also add to the demand for telecom utilities within highway ROW's. A project called Operation Timesaver was announced by Secretary of Transportation Federico Peña in early 1996. This project's goal is to equip seventy-five metro areas with a core Intelligent Transportation Infrastructure. Since a core element of all intelligent highways is information transmission and data sharing, fiber optic cable is likely a fundamental part of this infrastructure. The program involves: "the application of existing technology in communications and management to traffic, transit, and information problems of commuters. A goal is to handle traffic and improve transit performance rather than necessarily increase actual capacity by building more highways and vehicle lanes." [1]

Fiber Optic Cable and Cell Phone Towers

The term "telecommunications" as widely used, tends to lump many things together. For this case study, the relevant items examined from a utility accommodation and joint development perspective, were fiber optic cable and cell phone towers or antennas (also referred to as "mono-poles.") As they relate to highways, cell towers and fiber optic installations have very different real property ramifications.

Although fiber optic cable and cell towers are both typically considered to be "longitudinal installations," cell towers are often argued to not technically be longitudinal. As a technical and legal term, a longitudinal installation involves the transmission from tower to tower, typically through wires strung from one tower (or pole) to another, such as electrical utility lines. Even if those wires are underground, such as fiber optic cables typically are installed, it is still considered a longitudinal installation. Cell towers do not necessarily involve the same kind of serial relationship. Cell phone antennas or dishes can be installed on existing structures, are more locationally footloose, and unlike cable do not have the same kind of need to be laid along a protected and controlled corridor. The distinction is important, because as it is interpreted by many states, federal policy regarding the use of highway ROW's, prohibits longitudinal installations but may allow a single transmission tower, or dish to be installed on existing towers. Additionally, state statues also dictate different legal treatments, regulations, and administrative processes for the two. For example in Washington State, both are handled as franchises and the department can only charge for the cost of handling the permit.[2]

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[1] Information from the Surface Transportation Policy Project, and USDOT.

[2] State of Washington Title 47 RCW: Public Highways and Transportation, Chapter 47.44.010: "The department of transportation may grant franchises to persons, associations, private or municipal corporations, the United States government, or any agency thereof, to use any state highway for the construction and maintenance of...telephone,

Although still rare in highway ROW's, joint use agreements for utility accommodation have long been granted by railroads. One example is METRA in the Chicago metropolitan area, who currently generates $8 million annually from joint use utility licensing fees. Their program includes pipelines, wire lines and fiber optic cables. Since rail corridors are more easily controlled, and undergo changes less frequently than highway corridors, their use for utility accommodation is logical. However, as the desire to create new (and alternate) linkages in regional networks grows, highway corridors are increasingly seen as the next logical "path of least resistance" by the telecommunications industry! States are now experiencing increasing pressure to accommodate telecommunications utilities. Some state DOT officials who have been surveyed about this issue feel a sense of inevitability about the need to accommodate the demand, others see a window of opportunity to get either revenues or "free" cable infrastructure installed by the private sector.

Other States

The WSDOT air rights leasing office recently completed a nation wide survey of FHWA Division ROW officers and shared the results with us. The survey asked if the state allows privately owned fiber optic, cellular transmitter%, or any other telecommunications installations on limited access ROW's. If allowed, the survey then asked if the state has a policy that establishes rental rates, design standards, or limits on the number of installations. The responses to this survey yield a quick overview of the current state of practice regarding telecommunications accommodation as a joint development technique.

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telegraph and electric light and power lines and conduits...which are part of an urban public transportation system owned, or operated by a municipal corporation, agency or department of the state....Chapter 47.44.020: "If the department of transportation deems it to be for the public interest, the franchise may be granted...with or without compensation, but *not in excess of the reasonable cost for investigating, handling, and-granting the franchise."*

[3] A telecommunications firm in Washington characterized the situation as such: "The best possible route for the fiber optic facilities to take is that taken by most of the rest of the traffic serving the communities of the Pacific Northwest; its interstate highway rights-of-way. As with any such high cost communication plant project, initial expenses must be balanced against forecast of future revenues. The cost of construction on the railroad right-of-way is very high because of the extremely limited and unimproved construction corridor already occupied by other utilities, and because of the *high lease cost fir use of the railroad's easement.* The rail system-specific fiber optic improvements needed by the railroad which offset these lease costs have already been made by others. The rights-of-way occupied by interstate gas pipelines are not available to paralleling utilities either by pipeline company policy or because many pipeline easements do not allow assignment by co-occupants. Both gas pipeline and power transmission line easements generally lack river or stream crossing structures that add substantial permitting time and extra-ordinary crossing costs to the project." Michael Baker, Outside Plant Planning Engineer, Electric Lightwave, correspondence dated August 7, 1995 to Harold Peterfeso, Utilities Engineer, WSDOT.

Fiber Optic Cable

As alluded to previously, many state statutes simply do not allow private utilities within an access controlled right of way. However, in several states the legal framework is now being clarified or changed to allow them, and to allow the state to charge for its use.

- Illinois allows longitudinal fiber optic installations, charges "fair market rent based on across the fence values" but has seen very little interest to date.
- Louisiana has recently issued an RFP for fiber optic line along the I-10 corridor from Texas to Mississippi.
- Maine is now negotiating for a fiber optic installation on ROW at the rate of $6,000 per mile.
- Minnesota allowed a fiber optic installation in 1990. It stretches 60 miles from St. Cloud to the Twin Cities. Rather than a lease or rent, MNDOT received the use of three fiber inderducts in the line. Negotiations are now underway to allow extensive fiber installations around the state in exchange for usage by many public agencies.
- Missouri has allowed "one user exclusive rights in exchange for several line free that the State could use."

Cell Phone Towers

Very few of the states allow or have been approached about cell phone towers within highway ROW's.

Wisconsin mentioned being approached by Ameritech,
MNDOT approved one that had yet to achieve local approval,
Ohio has been approached but resisted for liability concerns.

Washington State DOT and Telecommunications Utilities

WSDOT currently has some elements of a state-owned fiber network installed in the Puget Sound Metro region. The network collects data and information for the Traffic Systems Management Center. The extension of this system has been the subject of studies for several years. The studies have examined feasibility from many different perspectives such as technology, the applications of technology into programs, geography, finances, etc. The various projects go by several names, but all refer to the use of information to manage the demand for highways and transit. The backbone infrastructure of all of these

systems[4] are fiber optic networks. To the extent that very long range plans for transportation improvements involve the management of information, fiber optics will be involved. Below is summarized some key information from these plans.

WSDOT Management Information Systems

In 1993, the WSDOT MIS department completed a "Feasibility Study of Using Highway Right-of" Way for Telecommunication Networks." This study was prompted by considerable interest to use ROW's for fiber optic networks. The study lists potential transportation applications such as: "existing and planned surveillance, control and driver information (SC&DI), networks, future Intelligent Vehicle Highway Systems (IVHS), WSDOT and Washington State Patrol (WSP) radio networks, and other current and future WSDOT and WSP voice, data, and video communications networks." Several different alternatives are developed and are evaluated in terms of technical, operational, legal and economic feasibility. For this case study, the focus was on the legal and economic feasibility.

The study dismisses the potential of shared network with non-transportation uses on the basis of technical operational and administrative complexities, but recognizes the advantages of joint uses with-other public users such as government agencies and utilities. The primary dual benefits of lower costs and providing new uses of technology are cited. The study examines potential network applications, funding sources and market potential, WSDOT policy limitations, legal, and regulatory and political issues. The study also features a survey of other state DOT's experience with similar issues, presents several networking alternatives for Washington, and concludes with recommendations. .

As examined in the study, the state could save the $140,000 per mile cost[5] (1992) of installing fiber, by sharing a privately constructed network in the right of way. However, in order to do that, several aspects of the utility accommodation policy would have to be changed, State statute prohibits

[4] Intelligent Transportation Systems (ITS), Intelligent Vehicle Highway Systems (IVHS), Congestion Pricing, "Operation Timesaver.", etc.

[5] The study identifies 'network alternatives and estimates the construction cost of a statewide, multi-agency network to cost from $30 million to $80 million.

charging for the use of ROW beyond the cost to process a utility franchise application. Airspace leasing handles the requests for private use of ROW, however their policy requires that the state charge "fair market" value for private ROW use on federally funded highways.

The study mentions that the state is allowed to rent excess fiber capacity in a public network but would have to retain ownership and control access to the network facilities in the operating ROW. Beyond simply being prohibited by policies and rules, other issues are raised. Such factors as the negative impact to traffic flow and safety by utility maintenance vehicles, the need to minimize obstructions in the right of way, and the need to minimize costs and complexities of modifications to the roadway are mentioned,

The study concludes with a detailed set of recommendations. Most relevant to this study are the recommended changes to the WSDOT Utility Accommodation Policy, Airspace Lease Policy, and state statutes to "allow joint construction ventures and thereby reduce construction costs for WSDOT communications networks." As is discussed further on, WSDOT is now in midst of trying to revise policy and change statutes.

Intelligent Vehicle Highway Systems

"Venture Washington" is a statewide strategic plan to advance Intelligent Vehicle Highway Systems (IVHS). Consultants published the plan in 1993, and it included a detailed examination of funding sources and financing for IVHS improvements.

IVHS seeks to apply integrated, advance technology to the transportation system. The broader goals are to provide safer roads, better information to travelers, improve traffic management, and increase the efficiency of commercial goods movement. More specific goals were identified for Washington State that more closely reflect the needs of the state as well as goals of the national IVHS program. The goals are to: decrease congestion, increase alternative mode share, improve highway safety, facilitate efficient goods movement, support tourism, improve the environment, and enhance existing system operations. The plan has considered all of these goals, and created four key program areas for implementation: traffic management, freight and fleet mobility and management,* public transportation, and traveler information. A program in all four areas is being developed for each of five regions throughout the state.

Most of the IVHS efforts involve fiber optics or a fiber optic network. Existing state-owned fiber optics are used in the management of Seattle's core freeway system. The IVHS program plans to expand the network beyond the Seattle-Everett corridor to the south and east, and implement a fiber-based traffic management system in Tacoma as well. The existing traffic management project in

Seattle is called "FAME" or the Freeway and Arterial Management Effort. The program encompasses management techniques such as High Occupancy Vehicle (HOV) lanes, incident management, data collection, and motorist information. Other elements of traffic management that would use this network, would be the interconnection of traffic signals and ramp meters.

As the plan states, the infrastructure is the crucial first step in providing a foundation from which the IVHS programs can develop. Potential programs and projects were evaluated on many factors. For the purposes of this case study, the most relevant to this case study is cost. How much will it cost to build a fiber optic network for IVHS and other DOT needs, and how can it be financed? Over the next 20 years, the programs as identified in the plan are estimated to cost $1.4 billion to the public sector. This represents capital costs of $70 million a year. Operations and maintenance are not included, but equal approximately ten percent of the capital costs. Costs are estimated by program, and a key element of several of the programs is fiber optics but the cost of fiber alone is not specified.

Funding will play an essential role in the implementation of any of the planned improvements. One stated funding strategy directly addresses private sector participation: "Create strategic alliances with key private sector investment sources. The state should build on current initiatives to provide opportunities for major private sector partners to participate." The plan recognizes the potential of the New Partners Program, but urges additional steps be taken. The most pertinent, yet most difficult is: "establish executive-level interaction with potential IVHS partners and with business leaders in the State."

Private funding is mentioned in association with high tech equipment for individual automobiles and motorists for individual user purchase. Other unique methods are also identified: selling advertising on audio message systems or video text systems, selling shares of major public utilities to small private investors, donations of land and equipment for promotional purposes, user fees and congestion pricing, property management (sale of air rights), and many others. Many of these techniques were researched by the Washington Transportation Policy Institute.

The Current Washington Situation

As mentioned to at the beginning of this case study, much of WSDOT's "joint development energy" is now focused on telecom utility accommodation issues. This effort involves the Washington State

attorney general's office, WSDOT right-of-way, airspace leasing, capital facilities, utilities engineering, property management, and the Advanced Technology Branch of the Washington State Transportation Center (TRAC).

To the extent that WSDOT already has parts of its own communications network in place, the ROW is now being used to accommodate fiber cables. This network is primarily located in the Seattle metro area (also referred to as the Puget Sound Region.) Fiber optic cables carry highway information to WSDOT's Traffic Systems Management Center (TSMC). This systems controls variable-message signs, highway-advisory radio signs, ramp meters, and collect information from closed-circuit television cameras, data accumulators, radio transmitters, and loop detectors (in the pavement).

WSDOT has been asked by private companies for permission to place telecom installations along highway rights-of-way. Although from our survey results it is apparent that telecom utility accommodation is still rare, most states will allow a utility installation in a special circumstance. An example in Washington is in the new I-9 project at Mercer Island. The department signed an agreement with US West to install a fiber optic conduit on the bridge to the island. The conduit as six interducts through which fiber optic cable is pulled. In exchange for the right to install the fiber on the bridge (to provide phone service to the island) DOT receives two interducts in the conduit for their use.

Policy

However, just responding to a request to use ROW is a complex issue, in part because of policies that prohibit longitudinal installations within the ROW. In the course of researching this case study, many people made reference to federal policy that prohibits longitudinal installations within the ROW of an interstate or federally funded highway. WSDOT statutes do allow utility installations within state highway ROW as referenced earlier in footnote number 4. What the statute does not allow is for WSDOT to charge rent for the use of the ROW.

An additional complexity is merely deciding which WSDOT division should handle a telecom utility accommodation request. Should it go to the utilities department, who is the most familiar with utility accommodation but not accustomed to dealing with the private sector, and may not be involved in IVHS long range plans, or know what franchise rates to charge? Should it be handled by the economic development office that handles the New Partners joint development program (some of their proposals have congestion pricing and traffic management elements to them?) Should it go to airspace leasing who

has experience with the private sector, lease agreements and special situations? Should it go to the property management department who is likely to be in the best position to handle the permitting and valuation issues? Should TRAC or the MIS and IVHS departments handle this'? Perhaps a new entity should be created, but does any DOT have the funds for a new program? Can a program that may be a net revenue generator logically fit into the current budgeting and funding landscape of any DOT?

Adding to the degree of ambiguity is a lack of policy that specifically addresses telecommunications utilities, and recognizes the important role they will play in future transportation systems. WSDOT has convened a task force to review existing utility accommodation policies and guidelines, specifically for the possible inclusion of both fiber optic cable and cell phone towers and antennas. Given the research on future technology needs of the department, and shrinking budgets, resource sharing of all kinds now more strongly informs this discussion. The task force aims to create interim guidelines for telecom accommodation, change the state statues, and develop a policy for the department. Ideally the resulting policy would clarify the authority of the state, define clear lines of responsibilities for implementation, provide a flexible set of guidelines for dealing with the private sector, and define the process to be used to set rates for leases or franchises.

Proposed Legal Changes/Revisions

A key element to the policy review and update are efforts to revise the state statutes. Part of the review process will be to define how statutes could be changed to help implement policy. WSDOT and the assistant Attorney General together are trying to broaden the state statute to allow DOT to charge a fair and reasonable rate for the use of ROW's for telecom utility accommodation,, Revised statutes and policy would also direct the process by which DOT could get privately funded fiber installed their own traffic management or communications uses.

The Washington State assistant attorney general is now evaluating the impact that the Communications Act of 1995 will have on their own effort to clarify remaining legal issues. As they interpret the legislation, it allows for a local jurisdiction to charge for the use of ROW, but does not mandate the accommodation of telecoms. Their conclusion was that the legislation did allow some "room to exercise discretion." .

The existing franchise statute mandates that when allowing a private utility to use the ROW, the state follow fair competition bidding process. This has proven to be a far from ideal way of dealing with

telecoms. The process does not allow for close negotiation of terms with providers. The revisions to the statute aim to provide the department with greater flexibility in the granting of franchises.

Joint Development Potential for Fiber Optic Cable

It is not so much the national long distance service providers who will be players in building future fiber networks, but rather it is local firms in specific markets who are emerging as competitors, who will be seeking to establish networks that are alternatives to the major players. (See footnote number 4.) Especially in the Puget Sound Region, with its constrained geography, alternatives the existing networks are desired, but difficult to assemble.

In addition, baby bells or state-wide phone companies are beginning to replace their old copper-wire systems to high capacity network of fiber optic and coaxial cables into homes and offices.[6] There is general consensus that the most valuable aspect of joint development involving fiber optic utility accommodation is the public use of privately laid fiber, not the potential to generate revenue from a franchise or lease. As one study noted, the cost savings of privately constructed (shared) fiber optic cable is estimated to be $144,000 per mile. If one estimates that 200 miles of fiber are needed, the cost savings totals over $28 million. Contrast this with estimated lease revenue of $5,000 per mile' per year for fifty years, and the yield is $250,000 per mile of fiber, or $50 million over a SO-year lease. If the capital cost savings is given as a credit against that hypothetical rent "payment", one could get the privately funded and built fiber network installed up-front, and then receive lease payments after about 29 years. When quantified in this manner, it becomes apparent that not partnering with telecoms could represent a significant opportunity cost for any DOT.

Joint Development Potential for Cell Phone Towers

For a cell operation, the telecom typically has to assemble many different sites and leases for coverage within an area, Real Estate companies or consultants are often engaged by telecoms to spearhead the

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[6] First Blood in the Telecom Wars, Fortune Magazine, March 4, 1996.

[7] This amount is used for illustrative purposes only, and is similar to what another state from the survey was listed as charging.

identifying the location, selection, acquisition or leasing of sites for tower installations. In the Seattle metro area, it is not really new firms entering the market that is driving demand, but rather the growing client base of existing, and the desire to better servethem. Wireless providers are looking to expand and fill holes in their existing networks. The geography of demand follows the client base. Often it is the growth and construction of highways that dictate or parallel growth or migration of population.

Rather than talking to a different landowner for each site, a DOT could offer consolidated "one-stop-shopping" to do many sites along a corridor or within the ROW in a network of roads for an existing company, or especially to a firm just entering a market. In exchange for an exclusive relationship, a DOT could offer a volume discount, savings, and administrative ease to the company by doing a mass lease for DOT sites. For a telecom who is looking to add several sites, there are tangible benefits in executing several leases with one landlord. It means that zoning issues, fees and logistics only have to be negotiated with one entity rather than having to "reinvent the wheel" each time an additional site is identified.

An industry interview noted that DOT's partnership would have been most valuable a couple of years ago when the company was designing their network. In some areas not yet fully served by wireless providers, or with still rapidly growing markets this may still hold revenue potential. As time goes by, the companies need a DOT less and less because their network is already in place. To the extent that a network is in place future joint development potential lies more in individual sites. WSDOT staff noted that telecoms have indicated that dishes and antennas could be installed right on existing structure such as sign bridges. For this to work from a technical perspective, the signs and structures would have to be constructed of fiberglass instead of aluminum. However, telecoms have indicated that they could pay for the cost of replacement signs. (Probably as a credit against franchise fees or lease payments.) Unlike fiber optic cable, which would likely be underground, aesthetics do play a role in the siting of cell phone towers, especially the mono-poles that can be up to 150 feet tall. This kind of structure would be out of character within most typical ROW's.

There are situations in which WSDOT has already allowed some of these uses. On a highway owned radio site (not within the ROW) they allowed a telecom to build a tower, the telecom built a generator and a radio tower for WSDOT. This is used for radio communications between the trucks of the maintenance force, as well as the Washington State Patrol (WSP). More of these projects could further combine co location of facilities that benefit the telecom, DOT, other state agencies, the community, and also generates rent.

And lastly, from a policy perspective, cell tower accommodation can also be thought of as a highway safety issue. For example, many people have cell phones for use in their cars for safety. It could be argued that accommodating cell towers is just another aspect of making highways safe for users.

Concerns and Constraints

Both the public sector and private sector have considerable concerns about the joint development potential of accommodating telecom utilities within highway ROW's. Some of the concerns are now being addressed. However, other questions will remain until DOT's have gained some practical experience with some significant, relevant programs and projects.

WSDOT is concerned that if they allow telecom utilities into the ROW, then they have to allow others in as well, although statues clearly state the use has to be related to transportation. Not only is the allocation of limited space and the potential difficulty of altering the roadway at issue, but also safety. Obviously, safety is of tantamount importance to all DOT's. From the studies reviewed for this case study, the safety issues related to telecom utilities being located in the ROW appear to be minor. However, remaining safety issues concerning accommodation of any utilities need to be adequately addressed before DOT engineering staff would be comfortable with a revised policy. One respondent to the state survey mentioned that their department was not likely to approve any cell tower that was placed on DOT land, that if it fell over it would hit the roadway.

There is a concern that if the transportation department shares a fiber network with a private company, and only has a limited capacity, how might the state equitably share that space with other state agencies who have a need/demand for the same kind of network, such as the public school or university system. Similarly, could you charge the state school system for that access to the network, could you lease them you excess capacity, or would the state be compelled to provide a network to all public users free of charge?

Some also believe that since the right of way was constructed with the aid of federal funds and state funds, by allowing a private company to use the ROW you are conferring a publicly funded benefit on a private company. Furthermore, if you charge for that access, the state would inappropriately be making a "profit" from a publicly funded improvement. No one interviewed relished the scenario of losing funding (state or federal) by violating either the letter or the spirit of existing law or policy.

The private sector is concerned that the state will simply take too long to decide to do a project, and then take too long in the approval process for it to be worth their while. Others mentioned that the current ambiguous situation (and lack of effective policy) is of real concern. Having a clear set of rules and guidelines, and predictable results are essential to gain the confidence of telecoms and their consultants.

Conclusions

A fundamental reality that was reiterated by many of those interviewed is that the telecommunications industry may simply be moving too rapidly for DOT to fully benefit from the growth and evolution of the industry. It was felt by many that if the state cannot quickly respond to the demand for ROW, that the telecoms will simply go elsewhere to accommodate their needs. Even with a clear policy and enabling statutes, it was felt that the traditional public approval process is too slow, and creates too may delays to be a reliable option for the private sector. The demand for telecom utility accommodation in highway ROW was characterized as "a rapidly closing window of opportunity."

Appendix Materials - Telecommunications Utility Accommodation

Graphic of Washington State IVHS Program Evolution.

Map of Proposed Telecommunication Infrastructure Needed for ITS program.

People Interviewed:

Anderson, Dick. Seattle District WSDOT.
Baker, Michael. Outside Plant Planning Engineer, Electric Lightwave.
Briglia, Peter. P.E. Washington State Transportation Center (TRAC)
Cal, Frances. Seattle District Property Management and Relocation, WSDOT.
DeBolt, H. Fred. Equipment and Facilities Administrator, WSDOT.
Dues, William. Seattle District, WSDOT.
Freedman, John. Columbia Institute for Tele-Information (CITI)
Malsch, Dave. Seattle District, WSDOT.
Meadows, Steve. Private Consultant for One Comm.
Nightingale, Patricia. Assistant Attorney General, State of Washington.
Peters, Robert. Airspace and Rental Manager, WSDOT.

Boston Central Artery Case Study

This case study examines the joint development opportunities that are part of the massive Central Artery/Third Harbor Tunnel (CA/T) Project currently under construction in downtown Boston. This project was chosen by the consultants because it represents one of the largest joint development opportunities ever faced by a public agency. Although its size makes the project somewhat unique, the joint development issues presented in a dense downtown area make the lessons learned relevant to all the major metropolitan cities in the U.S.

In the course of conducting this case study, the Massachusetts Highway Department, the Federal Highway Administration (FHWA) in Cambridge, and private sector consultants were contacted and queried by telephone, and on-site visits and in-depth interviews were conducted with selected personnel. A complete list of those interviewed is located in the bibliography. Many respondents provided the consultants with copies of reports, statutes, and other relevant materials. Their cooperation is greatly appreciated.

The case study begins with an overview of the CA/T Project. The planning process as it relates to joint development is discussed in detail, as are specific approaches to joint development opportunities along the Central Artery corridor. Since this project is just now underway, the emphasis is on process and the potential for joint development, rather than on the actual result of joint development. Unfortunately, many of the joint development issues have yet to be resolved -- especially the structure, management, etc. of the revenue-generating elements of the CA/T Project. As a result, the discussion of what type of revenue stream joint development projects might create and how that revenue will be used, will take place in the future.

Background

The depression of the Central Artery (CA) was first proposed 20 years ago and since then there have been a series of city, state, and private plans to mitigate the impact the artery structure has had on surrounding neighborhoods and the city in general. All of these plans have in some way tried to reunite parts of the city divided by the original elevated artery. The first plan for the depression of the Artery was in 1972 by the Boston Transportation Planning Review (BTPR) -- it was linked to the construction of a third harbor tunnel and. emphasized open vistas and connections to the waterfront. Throughout the 70's other planning efforts and proposals focused on the Central Artery and its eventual depression was taken for granted.

After years of planning, the CA/T Project was finally approved. The Project is a multi-billion dollar infrastructure construction project that will alter the character of downtown Boston for years to come. Over 40 acres of land will be made available once the elevated viaduct (highway) stretching from Causeway Street, past Kneeland Street to the I-90/I-93 interchange, is demolished and an underground tunnel is constructed to replace it (see map on the following page). Most of the construction will be complete in 2004, although portions of the project will be opened to the public when ready. The Ted Williams Tunnel is already open to commercial traffic only.

The land that will form the 'roof of the new Central Artery is approximately 27 acres and has been broken into 26 separate parcels for planning purposes (see map on following page). What actually will be developed on the individual parcels is governed by the plan known as "Boston 2000 -- A Plan for the Central Artery" (herein after referred to as "Boston 2000" or "the Plan"). Much of the development will be a system of parks and public facilities adjacent to the Financial District and Waterfront/Faneuil Hall area in downtown Boston. The Plan includes a botanical garden, a conservatory, and an arboretum.

The parks, gardens, and other public facilities were planned as amenities to balance the City's residential and commercial densities and add to the attractiveness and livability of Boston. While the Plan has provisions for both residential and commercial development, the focus is clearly on open space and public attractions. The Plan explains that the open space is designed to both preserve the value of the existing commercial property downtown as well as enhance the tourist appeal of downtown Boston.

The push for open space is partly a reaction to the perception of an overbuilt office market in downtown Boston. Over the past 15 years, 17 million square feet of "new floor area" have been added to downtown. As a result, the Plan argues that "development of the corridor as a series of buildings rather than parks would detract from the value of existing downtown property, just as the development of the Commonwealth Avenue Mall as a series of buildings would devalue the surrounding Back Bay neighborhood."

The Plan also argues that all of the open space will contribute to the City's tourist base by adding visitor attractions. It is noted that tourism is the second largest component of Boston's economy and the highest concentration of visitors to the city occurs adjacent to the Central Artery at Faneuil Hall. At the time Boston 2000 was published (1990), tourism accounted for $4.3 billion in economic

activity or 14% of the Boston economy. The additional open space is thought to expand the "public realm downtown, including the expansion of the existing pedestrian areas around Faneuil Hall and at the harbor's edge, and the establishment of a conservatory and botanical garden."

As mentioned above, in addition to parks and visitor amenities, there will also be newly available land for potential joint development projects. These parcels and the process that evolved for evaluating and maximizing their potential for joint development is discussed at length in the following section.

The Planning Process

Joint development is typically defined by Central Artery documents as any non-highway use within the highway right-of-way, including open space or building development over, under, or adjacent to highway structures. The potential for joint development was recognized from the conception of the artery depression 20 years ago, and remains a central focus of project planning.

The 1 O-year joint development planning process began formally with the Joint Development Appendix of the "Draft -- Supplemental Environmental Impact Statement/Report and Supplemental Final Section 4(f) Evaluation" (published in May of 1990). The Draft SEIS/R was written after the Final Environmental Impact Statement/Report called for the "'establishment of [a] process to assure an environmentally sensitive future joint development activity with full citizen and agency participation" (FEIS/R, Page xvii).

The Appendix of the Draft SEIS/R outlined a decade-long planning and implementation process to oversee the development of parcels of land to be created over the Central Artery corridor. The process called for a detailed analysis of the joint development potential of each of the parcels within the context of the participatory, regulatory, and physical frameworks. These three frameworks are each defined by a set of variables broken down as follows:

> 1) Physical variables including the "type, quantity, size, location, and attractiveness of space potentially available for development. (This "space" may be air rights over the roadway, land under the viaduct or next to the highway, or a part of the ventilation buildings.)"

2) Participatory variables including the present and future ownership of the space to be developed.

3) Regulatory variables including State and Federal regulations, city land-use policies and zoning controls, etc. governing the acquisition and disposition of the space.

The process then divided the parcels into subareas, defined in terms of recognized communities or commercial areas affected by the project, and in terms of the type of development space that will become available. The Appendix goes on to explain the joint development process as a series of steps leading to a consensus (theoretically) regarding what is required, desired, permitted, and possible. These steps are outlined below:

Analysis of the Physical Framework

1. Existing conditions
2. Future Context
3. Adjacent Historic Resources Guidelines
4. Parcelization
5. Sub-surface Technical Analysis
6. Dimension of Opportunity

The Iterative Public Process

1. Issues, Opportunities, Constraints
2. Land-use Goals & Objectives
3. Examination of First Cut Alternatives
4. Alternative Reduction & Policy Options
5. Preliminary Guidelines
6. Finalization of the Structural Envelope

Policy Options/Decisions

I. Acquisition of R.O.W.
2. Structural Capacity Design Policy

Development of Section Design Consultant Packages

I. Structural Envelope
2. Design Guidelines

Final Design & Construction of Highway

Conceptual Development, Environmental Review, Final Design/Disposition of Parcels

The physical analysis is to examine the existing conditions of land use, open space, ownership, etc. and then formulate ideas about these conditions in their future context. As the Appendix makes clear, realizing "a vision of the future depends on the ability to adapt physical conditions in support of the vision. Specifically, the structural design of the highway must, to the extent feasible, be designed to accommodate future air rights and other joint development, and the vision of future development must be feasible in relation to highway design."

As mentioned above, the Central Artery corridor was divided into parcels (see the map on the following page) and the parcels are divided into four categories: parcels over tunnels (their development potential will be limited by the structural capacity of the tunnel as well as the frameworks mentioned above), parcels under viaducts (mostly suitable for parking or warehouse structures), residual parcels (broken into three types -- stand alone parcels, parcels that must be annexed to adjacent land to be useful, and parcels surrounded by highway), and ventilation building parcels (particularly good for mixed use joint development).

The Appendix also discusses the technical analysis of parcels that will include subsurface mapping, structural analysis of test parcels, a complete parcel-by-parcel structural analysis (see the text below for a description of this document), and policy options for the joint development process -- these policy options will examine acquisition of rights-of-way, modifying structural loading capacity, control and ownership of parcels, and financing of additional structural capacity.

The Appendix also describes in more detail the iterative planning process as involving principally three groups: FHWA and the State's transportation agencies, the City of Boston (and to a lesser extent the City of Cambridge), and the community (represented by neighborhood groups, environmental interest groups, etc.). This process is often referred to as a "tripartite" process. Its goal is the development of details which will result in the definition of the maximum loading capacity or structural envelope for the tunnel box, and thus will determine the range of future joint development opportunities.

The BRA and Boston 2000

The Boston Redevelopment Authority (BRA), as the City of Boston's planning agency; has taken the lead in land use planning for the artery corridor. Under its Interim Planning Overlay District (IPOD) process, the BRA held numerous public meetings in affected neighborhoods. It was this process that helped inform the Draft SEIS/R. To advise it in its planning efforts, the BRA convened an advisory group which includes representatives of affected neighborhoods, business groups, design professionals, and environmental advocates.

The BRA produced a joint development land use plan (see map on the following page) which was included in the "Final Supplemental Environmental Impact Report". Through its IPOD process, the BRA issued "Boston 2000: A Plan for the Central Artery, Progress Report" which was formally adopted by the BRA Board in January 1991. Zoning for this area was approved by the Boston Zoning Commission in May 1991, concluding the establishment of the necessary regulatory framework.

Boston 2000 was designed to guide development along the Central Artery right-of-way once the Artery project was completed -- it calls for "an approach to the re-use of the corridor that balances economic growth in the rest of downtown with a bold new park system along the roadway's former path." The plan is a parcel by parcel analysis of how the area will be rebuilt "in a way that responds to the needs of adjacent neighborhoods, while remaining mindful of the role downtown plays for the city as a whole"

The Plan briefly discusses engineering concerns and suggests that three of the parcels are too small to be developed and another eight cannot support development without strengthening -- these eleven parcels constitute 80% of the total parcel area between the North End and the Financial District. However, there are some parcels shown in the Plan to have development potential. These parcels are listed along with specific development recommendations for each. In fact, there is a section in the report that goes into detail about what should be developed in each area of the CA along with a brief history of the area, including the justification for the recommendations.

After the specific plans are detailed, there are eighteen "urban design guidelines" presented -- these planning guidelines, as they are referred to by the report, were written with the overall idea that "the Artery parcels must be redeveloped in a manner sensitive to the individual neighborhoods while planning for the entire area in a comprehensive and comprehensible manner". The plans and planning guidelines were developed with community involvement and before Boston 2000 was

published, the BRA and their consulting team presented several plans and alternatives to the public for review, comment, and input.

Soon after the publication of Boston 2000, another Joint Development Appendix was published in the "Final Supplemental Environmental Impact Report". This "revised" Appendix again discusses the tripartite planning process which is intended to achieve a balanced mix of uses, including future open space resources, consistent with the downtown transportation corridor and the surrounding environment. It also mentions the BRA's zoning planning process which will create an Interim Planning Overlay District (IPOD) that will govern air rights usage. The zoning code is the legal means by which the BRA will enforce its Boston 2000 plan.

The Appendix also reviews technical studies that examined the physical constraints imposed by the Central Artery. The "Prototype Study" examined six parcels representing the full range of both surface and subsurface conditions for the potential of air rights development over the tunnel. The study found that the "subsurface constraints, including tunnel profile, location of tunnel walls, other encumbrances such as utility corridors, MBTA facilities, tunnel emergency exits, ventilation ducts, etc., varied so significantly from parcel to parcel that only a more detailed parcel-by-parcel analysis would yield meaningful information."

The next study, the "Base Case Structural Capacity", analyzed every parcel along the Central Artery corridor as to the ability of the tunnel structure to support air rights development. It also began to calculate the additional cost of increasing the tunnel's structural capacity to support loads defined by the BRA's land use plan. The third technical study is the "Joint Development Parcel-by-Parcel Analysis" (discussed below in greater detail) which tested actual air rights scenarios generated through the joint development planning process. This study will help determine whether or not (and where) to add structural capacity to the tunnel for future development.

The rest of the Appendix discusses some of the then unresolved issues raised by the planning process including:

- Open space vs. buildings -- the MEPA (Massachusetts Environmental Protection Agency) Certificate on the DSEIS/R suggests that a goal of approximately 75% publicly accessible open space should be established -- the City basically concurs with this document and will allow approximately 75% of the Central Artery corridor to be dedicated to open space in the form of parks, plazas, park buildings, and sidewalks.

x

- Width of surface artery -- the principal north/south arterial streets should be no more than three lanes in each direction (with some exceptions).

x

- Structural capacity -- debate over whether or not maximum flexibility for future uses should be maintained in the structural capacity of the tunnel box. The BRA wants to make future use decisions as soon as possible and have structural capacity accommodate only those uses.

x

- Future environmental review process -- the State Executive Office of Environmental Affairs wants parcels with actual building concepts to be required to file an Environmental Notification Form (ENF). The ENF will determine the appropriate extent of Massachusetts Environmental Protection Agency jurisdiction. Massachusetts Highway Department (MHD) plans to prepare an Environmental Assessment (EA)/ENF addressing the corridor-wide potential for additional future joint development.

x

- Present and future ownership -- the State constructed the original elevated viaduct without federal funding in an existing downtown transportation corridor. The rights and interests in land needed to widen existing city streets were acquired by MHD, known then as the Department of Public Works. Land was acquired from public and private parties by the exercise of the State's power of eminent domain. Once the project was completed, the State conveyed back to the City the surface street system and other rights and interests in land. This land is presently owned and maintained by the City for parking lots and other public uses.

Some of these issues were resolved in the documents discussed below, others continue to be addressed as the joint development planning process moves forward.

Environmental Review

Given that the joint development policy for the CA originated with the environmental review process, mitigation strategies designed to meet the goals of environmental compliance have a strong influence on the available options and opportunities for joint development. For example, soon after the publication of the FSEIR, the "Certificate of the Secretary of Environmental Affairs on the Final Supplemental Environmental Impact Report" was produced. This Certificate essentially verifies that the FSEIR complies with the Massachusetts Environmental Policy Act.

The Certificate raises concerns that any development is coordinated with the Massachusetts Historic Commission, Boston Landmarks Commission, Boston Preservation Alliance, and other historic preservation groups. Also of concern was the requirement that 75% of the land remain as open space. The Certificate exclaims "the 75% open space component of this project is an essential mitigation measure and, by virtue of my Certificates of today and last August, must be considered as an established part of the Central Artery project." Any change in this 75% component would require a Notice of Project Change for the Central Artery project and review and approval by the Secretary of Environmental Affairs.

The Certificate goes on to say that corridor parcels which are designated as open space must not be left as dusty open lots, but must be fully developed as parks and recreational space by the project proponent, including landscaping, plantings, paths; lights, benches, and sidewalks in accordance with BRA design standards. In addition, the Department of Public Works (now the MHD) "must use every effort to secure federal highway funding to finance these activities as well as substantial contributions to the capital costs of the Winter Garden." Whether or not the CA Project will secure this federal funding is currently unclear However, given the enormous cost of the project to begin with, scarce federal highway dollars will first be put to use where they have the most immediate impact -- the construction of the CA/T itself -- not the parks that will be developed once the construction is complete.

Zoning

As the Central Artery project was undergoing its planning process, the City of Boston was also rezoning the downtown. This new zoning was adopted by the Zoning Commission in 1990. The zoning code that affects the joint development options for air rights parcels over the Central Artery is known as "Article 49 -- Central Artery Special District". The zoning code begins with a statement of goals and objectives. This statement echoes the Boston 2000 document and the environmental review process in calling for goals and objectives that:

> direct downtown development in a way that promotes balanced growth for Boston; to improve environmental quality by directing growth to underutilized areas of the City and avoiding an oversupply of commercial space in the downtown; to protect the residential neighborhoods from encroachment by downtown development; to create affordable housing opportunities for the North End; to create public open space and park resources for the -downtown and North End, with links to the

waterfront; to promote residential and mixed-use commercial activities compatible with adjacent areas; to promote uses which integrate uses, activities, and physical connections between North End, downtown, and the waterfront; to provide new and expanded facilities for cultural and community services; to ensure a high quality of design of the open space, cultural, residential, and commercial uses in the Central Artery Special District; to establish design guidelines and standards to be applied by the Boston Redevelopment Authority in reviewing and approving of uses in the Central Artery Special District; to ensure that new development in the Central Artery Special District is compatible with and enhance the unique historic character of each of the surrounding districts and the unique historic sites that contribute to each district; and to create a new surface street and pedestrian network that is compatible with the existing character and conditions within each of the adjacent districts and improves the existing street and pedestrian environment.

Following this statement of purpose, goals, and objectives there is recognition of the "Boston 2000" plan as the general plan that frames the Central Artery Special District. The code establishes applicability and explains that all uses within the Central Artery must meet the zoning requirements of the Special District. It also says that the BRA must approve all Proposed Projects.

In addition, the code contains design guidelines that are applicable generally in the Central Artery Special District before parcels are developed:

- such parcels should be landscaped and maintained to permit safe, convenient public access;
- use of the parcels for parking or storage or uses such as pushcart vending is strongly discouraged;
- during the interim period (before development) parcels should be graded in conformity with adjacent grades and should be engineered and landscaped so as to prevent the accumulation of water, avoid damage to neighboring foundations of buildings and/or the tunnel structure and its appurtenant structures, and protect public safety and welfare.

Finally, there is an area by area breakdown of all zoning regulations (including a Parcel by Parcel analysis). Each Parcel is broken into three sections: use regulations (discusses allowed uses like "office" or "residential"), dimensional regulations (FAR, etc.), and design guidelines (a more specific discussion of what the Boston 2000 proposes for the Parcel). For some Parcels there is also a section called open space designation. Attached is the complete text for a sample Parcel -- see Appendix.

a)

More Environmental Review

Once the zoning code was adopted, the Central Artery Project filed an Environmental Notification Form (ENF). This Form was followed quickly by the "Certificate of the Secretary of Environmental Affairs on the Environmental Notification Form" in which the Secretary says he is very pleased "to see the continued commitment of the City and the MDPW to maintenance of at least 75 percent of the corridor as open space". The Secretary goes on to say that the 75% open space commitment was determined in the January 2, 1991 Certificate to be an "...established part of the Central Artery project." Any proposed decrease in the amount of open space will be subject to the filing of a Notice of Project Change.

The importance of the entire environmental planning process (and the accompanying environmental documents) is that the process was really the origin of the overall joint development planning process. The Environmental Impact Studies/Reports along with the Certificates from the Secretary of Environmental Affairs and the Environmental Notification Form help form the policy and legal frameworks from which joint development along the Central Artery will proceed. Given the complexity and scale of the CA/T Project, it seems appropriate that the environmental review process would have such a strong influence on the disposition of land created by the CA/T Project. Whether or not this influence proves "beneficial''-remains to be seen. Clearly, the options for large-scale joint developments, of the kind that this report is interested in (i.e. developments that are a source of revenue for the transit agency), are very limited by the open space requirement. However, it seems doubtful that other states or cities would produce a joint development policy under similar circumstances, not many highway infrastructure projects will be on the scale of magnitude as the Central Artery.

From Planning to Joint Development

Soon after the land use planning process was complete, the Massachusetts Department of Public Works had a document prepared called "Joint Development Parcel-By-Parcel Analysis". This analysis begins by noting that:

> Joint development of non-highway uses in the Central Artery corridor through downtown Boston is an essential component of the Central Artery/Tunnel Project. Approximately 27 acres of new land will be created above and adjacent to the Central

> Artery tunnels. The MDPA and the BRA currently are conducting a public planning process to guide joint development of the Central Artery corridor. The BRA, as the city's planning agency, has published a specific land use plan (Boston 2000) for each parcel to be created by the artery depression. The city's zoning commission approved zoning for the corridor in May 1991.

The analysis goes on to explain that the "primary purpose of this study was to determine the nature and cost of modifications to the preliminary tunnel design which would be needed to accommodate the City's proposed land use plan for joint development parcels. It is essential that structural support for planned air rights development [must] be included in the final design of the tunnel structures now underway. It will be infeasible in most cases and far more costly to add support after the tunnel structures are completed."

There is a brief discussion of the two technical studies that were previously completed and formed the basis for this analysis (the studies are mentioned above in the section on the FEIS/R). The analysis in this study involved three steps: developing schematic building and/or open space designs for each parcel; then testing the preliminary tunnel design to identify changes needed to support the proposed joint development concept designs; finally, estimating the added tunnel construction costs attributable to these design changes.

The parcel-by-parcel analysis lays the groundwork for most of the joint development activity that will follow upon the completion of the CA/T Project. As an example of what this analysis looks like, an Appendix has been included with the complete text for one of the parcels. Parcel 9, which is planned to have housing with ground floor retail, is an interesting example both because the building will require no structural modifications to the tunnel and because this is one of the few examples of a residential/commercial joint development. The text addresses urban design and historic resource issues, and discusses a proposed building that would have just over 25,000 sq.ft. of retail space. There is no discussion of who would develop the building or how the City or MHD would' structure the sale or lease of the land. These issues have yet to be raised in a systematic fashion.

Implementation

More recently, the Massachusetts Highway Department prepared an "Inventory of CA/T Parcels for Disposition" to describe the issues and conditions for the disposition and development of parcels residual to the construction of the Central Artery/Tunnel Project. The "Inventory" is more comprehensive than the "Joint Development Parcel-By-Parcel Analysis". It includes all the parcels that will be made available as a result of the Central Artery Project -- not just the ones over the tunnel or requiring special tunnel modifications.

This document is the first step in making joint developments a reality. It is an outline of where the opportunities will be to build mixed-use private sector developments, and where environmental mitigation limits the ability of the private sector to build. The "Inventory" is not a plan for disposition or development of the CA/T surplus parcels; rather it is a guidance document to inform the surplus declaration process of the Massachusetts Highway Department and the disposition process of the Division of Capital Planning and Operation (DCPO).

In the State of Massachusetts once the MHD decides that it doesn't need a piece of property for the highway system, it notifies the DCPO which is responsible for all state surplus property. What follows is a two-part process: first, all other state agencies are polled to find out if they have a need for the property in question; then hearings are held regarding the disposition of the surplus property -- these hearings might raise issues that would lead to restrictions on the sale of the property.

The "Inventory", by initiating the surplus process, is able to:

- alert the Commonwealth of the scope and availability of the CA/T parcels for disposition in order to timely plan for the resources needed to implement surplus and disposition processes pursuant to applicable Project environmental commitments, and state and federal laws and regulations;
- prepare comprehensive, although preliminary, background parcel information and data necessary for marketing, issuance and evaluation of proposals, drafting and negotiation of conveyancing documents, and completion of the various other steps associated with the disposition of leaseholds of the parcels;
- inform federal, state and local agencies, abutters, community groups, and other interested parties of the parcel development requirements;
- permit potential developers the opportunity to formulate plans that satisfy Department commitments in the best interest of the Commonwealth;

- allow for sufficient time for state and local fiscal planning, financing and other activities required for the implementation of commitments; and
- ensure that the Project will retain the use of the right-of-way for highway construction, operation and maintenance purposes while others simultaneously undertake the parcel planning and disposition activities.

The *'Inventory" notes that the:

> parcels described in this document are restricted to properties in which the MHD will hold long-term property rights that, upon construction completion and subject to certain terms and conditions, become surplus to highway needs. The parcels will be either owned in fee or leased long-term by the state (MHD)...The parcels will be subject to various property rights, legal agreements and environmental commitments.

At the time of this report, four parcels have already entered the surplus process. To facilitate an 'advance garage opening and to secure an operator, the CA/T Project initiated the surplus process for Parcel 7 this year, coterminous with the commencement of construction preparation on the site. Parcel 7 (see attached map) is a classic joint development -- a vent building (necessary to vent the emissions from the Central Artery tunnel) will serve as a mixed use development and will include a garage and retail space. The garage was planned as one of the various environmental mitigation strategies the Project has adopted along the Central Artery corridor. Like Parcel 9, it remains unclear as to how the MHD will lease the facility and, in this case, who will run the garage.

In fact, there is no general policy on how joint developments will be managed. At this stage in the joint development process, the MHD is still exploring issues such as: which agency will collect the revenue from the sale or lease of land, lease structure, what the revenue will be used for, etc. In addition to Parcel 7, the surplussing of Parcels 19, 21, and 22 is also underway, well in advance of projected construction completion in order to facilitate planning for the intended use as a horticultural facility.

Conclusions

For the CA/T Project, commercial (and residential) joint development is dwarfed by the intense focus and co · rn with open space. A better balance between open space and development would

seem to make more sense -- the development could provide a revenue stream to the City of Boston or MHD, that could pay for the construction (debt) and the maintenance of ail the planned parkland. The cost of this open space is an issue that needs to be addressed in the future.

Revenue seems to be a distant concern for the MHD. There is little mention of the expenditures required to construct and maintain the parkland and nothing about joint development revenue or concern about the cost of all the open space. The tripartite planning process resulted in planning documents that were divorced from the current concern in Washington and many state capitals with containing costs. Eventually, the MHD or the City will be forced to address the cost of building and maintaining the 75% open space.

Other cities and highway agencies can learn from this process, and perhaps inject a dose of fiscal reality into their planning processes at an early stage. As the joint developments in Boston come closer to fruition there will surely be more thought given to whether or not the 75% open space requirement is appropriate and whether or not more development can help the MHD and the City of Boston manage and pay for their new park system.

Appendix Materials - Boston Central Artery Case Study

Allied Junction, New Jersey Case Study

Introduction

Alongside the east spur of the New Jersey Turnpike, just north of Exit 15 E, is a large billboard bearing the logo of New Jersey Transit. It announces the future *Allied Junction. Prime Office Space. 20,000 jobs.*

Secaucus, New Jersey's Allied Junction may be the largest, most complex public/private joint development ever conceived in North America. After almost 10 years of planning, negotiation, and regulatory review, in February 1996, New Jersey Transit let a contract to construct the multi-modal transfer station along with foundations for almost five million square feet of commercial development.

That construction at Allied Junction is actually under way, represents a coming together of (a) government policy favoring joint development of transportation and commercial facilities, (b) the fundamental principle of real estate investment: location, location, and location (c) *extraordinary market demand (d) zoning, and (e) the creativity and persistence of a private entrepreneur with an idea. Despite the inevitable obstacles to coordinating the decision-making processes of Federal, state, and local government, railroads, transit agencies, a turnpike authority, and the private sector, all these processes have meshed with remarkable precision in the case of Allied Junction.

The project involves re-configuration and consolidation of commuter rail transit lines serving New Jersey and suburbs of New York west of the Hudson River. It includes expansion of Amtrak's Northeast Corridor and its direct connection with the rail transit systems. A new interchange for the New Jersey Turnpike is part of the package. Revenues from the 4.7 million sq. ft. of commercial buildings will, along with Federal and other governmental funds, help defray costs of the project, its associated infrastructure and environmental remediation. The project' will also generate earnings for the private developer (Allied Junction/CONRAIL management group) and New Jersey Transit (the principal sponsor) and a significant increase in tax base for local jurisdictions in the Meadowlands. Through an intricate exchange of easements among the parties, the massive construction work will proceed in an integrated, stage by stage fashion on lands owned by Allied, the Consolidated Rail Corporation (CONRAIL), New Jersey Transit and a major public utility, Public Service Electric and Gas Company.

Risks are involved for all parties. However, formal agreements assure public and private funding for the initial stages of the effort. In the event that the full anticipated market for the private office and retail space does not materialize within 10 years after the transfer station is completed, there will be sufficient flexibility to extend the period for build-out.

I. The Setting and Its Steward: the Hackensack Meadowlands Development Commission

To understand Allied Junction, it is necessary to understand its setting within the Hackensack Meadowlands (Figure 1) and how the Meadowlands has been transformed over the past quarter-century.

Three miles across the Hudson River from Manhattan, just west of the Palisades and the Lincoln Tunnel, is a 32-square mile area of wetlands and fill ÐÐ once known for its pig farms ÐÐ that was, until 1969, a solid waste dumping ground for Metropolitan New York. In 1969, some 24 active garbage dumps were leaching contaminates into the surrounding waterways. The Hackensack River, that flows as a spine through the area, was an open sewer. Parts of 14 independent Bergen and Hudson County communities comprised the area; and planning, save for expansion of the garbage dumps, was non-existent.

For the traveler, the Meadows was an area to get through -- and fast. The New Jersey Turnpike ran its length. Here, too, was the main rail line of the Northeast Corridor and the trackage of numerous commuter systems carrying passengers between New Jersey and the New York City.

Recognition that the Meadows was a wasteland spurred the New Jersey legislature to pass, and Governor Brendan Byrne to sign, an act creating the Hackensack Meadowlands Development Commission (HMDC). This was fully a year before Congress enacted the National Environmental Policy Act (NEPA).

> At the time of the creation of the HMDC a drive through the Meadowlands would make eyes bum and many cough from the smoke of a burning dump fire. At that time, no one would have thought to pull off

the road to have lunch by the banks of the Hackensack River or on the side of a landfill overlooking the Kingsland Lagoon.[1]

New Jersey's mandate bestowed three broad powers on the Commission.

Protect the Delicate Balance of Nature
Provide for Orderly Development
Provide Facilities for the Disposal of Solid Waste

The Commission is comprised of seven unpaid members, appointed by the Governor for five-year terms with advice and consent of the State Senate. To ensure local representation, three members must come from Bergen County, and three from Hudson County. They are equally divided among Republicans and Democrats. The seventh is the State Commissioner of Community Affairs. The Commissioners select one of their own as Chair. Under an Executive Director, the Commission has substantial professional staff in engineering, planning and management, and environmental conservation. A Solid Waste Division oversees all garbage operations.[2]

A. Planning and Zoning Powers

To ensure both economic development and environmental conservation, the legislature awarded HMDC a broad array of tools. Planning and zoning would henceforth be exercised by the

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. *Economic Development, the* Hackensack Meadowlands Development Commission, 1992, p 2

. According to the ***Hackensack Meadowlands Development Commission Organizational Summary,*** 1992, p.4:

> As of July 31, 1987 Essex County ceased dumping in the Meadowlands District. December 1, 1987 was the cut-off date for Passaic County using the Meadowlands to dump garbage. On February 29, 1988 Bergen County ceased dumping in the Meadowlands to dispose of its waste. The resource recovery facilities for both Hudson and Bergen Counties are located within the District.
>
> The Division is also responsible for the planning and negotiations of future garbage disposal with the counties. It supervises landfill closure and monitorings as well as maintains the landfills. Inspectors working at these facilities ensure that no illegal dumping takes place. If a hauler is found to be dumping illegal waste, i.e. waste from out of the District, the hauler's company is issued a fine. . .
>
> The HMDC Baler Operations were financed through a $6.9 million grant from the U.S. Department of Commerce and a private loan by the HMDC . . . The HMDC baler is the largest capacity and operating unit in existence. . .

Commission as a regional body and no longer by the local jurisdictions ÐÐ a transfer of power subsequently upheld in court challenges. HMDC produced an area plan by 1972, along with a zoning map. HMDC is the final arbiter of plan and zoning changes and is authorized to establish conditions for development approval which include infrastructure finance and environmental remediation.

B. Revenue-Sharing

One reason for creating a regional oversight body was the land use control imperative. It was clear to the Legislature that only certain, limited areas within the District were environmentally capable of new economic growth. Vast sections would need to be restored as open space or wetlands to achieve the remediation objectives. This meant some jurisdictions might get development windfalls and that others might stagnate or actually lose tax base. To "sweeten the pot", Article 9 of the HMDC Act included a tax-sharing provision, under which revenues from new development would be equitably shared among local governments in the District. This revenue-sharing provision has been such a key factor in enabling subsequent development to occur ÐÐ including Allied Junction ÐÐ that its features are worth depicting at length:

> The principles of the Intermunicipal Tax-Sharing Program were conceived by the municipalities themselves; sitting as the Meadowlands Regional Development Agency. It was recognized that centralized, district-wide authority to prescribe and coordinate land use would have varying effects upon the property tax revenues of the individual municipalities. In simplest terms, it was apparent that sites designated for industrial, shopping center and high density residential uses constitutes a valuable property tax revenue potential for the municipality in which they are located and those selected for parks, highways and schools do not. Additionally, it was foreseen that there would be need to have a fund available to encourage individual municipalities to undertake capital improvements which may be of benefit to the District as a whole.
>
> It was, accordingly, deemed desirable ÐÐ indeed, imperative ÐÐ to include in the Act a program whereby all the affected municipalities would 'equitably share in the new financial benefits and new costs resulting from the development of the Meadowlands District as a whole.' The broad purpose is to insure that each municipality will get a fair share of the Property taxes generated by new development, regardless of where it occurs, thus moderating competitions for ratables. The device decided upon was a 'common pool' called the Inter-municipal Account. In line with the usual features of a pool arrangement, standards are prescribed under which the municipalities will 'put' into or 'take' from the pool, depending, primarily upon annual comparison with 1970 conditions.

Under the program, each of the municipalities is guaranteed against loss of existing ratables due to centralized coordination of land use. At the same time, 'new' 'revenues derived from increased Meadowlands property values will accrue to and be distributed back to the municipalities. The legislation explicitly prohibits diversion of any of the funds in the Intermunicipal Account to the Hackensack Meadow lands Development Commission. The Commission merely serves as a clearing house for the tax sharing transactions of the constituent municipalities. All tax monies go back to the fourteen constituent members.[3]

C. Environmental Successes

Much of the environmental restoration objective has been achieved over 25 years. In addition to its review and permit-issuing authority and its clean-up of the garbage dumps, HMDC has coordinated the efforts 'of the state's Department of Environmental Protection, the U.S. Army Corps of Engineers and other agencies in wetland restoration. It has required developers to mitigate wetlands removal with remediation of other wetlands on a more than two for one basis, an important factor in approval of Allied Junction and other projects. HMDC has created parks and an Environmental Education Center, with the world's first museum of garbage which teaches about solid waste disposal and recycling. The Center is an important stopping-place for overseas visitors interested in learning how a dying environment can be restored.

Now people can sit in Snipes Park or at the Experimental Park adjacent to the HMDC headquarters and spend a quiet hour or two watching the wildlife or the New York City skyline. They can take a walk out into the impoundment on our Marsh Discovery Trail and sit watching the water. Children use these facilities through our educationa1 programs to learn about the wonders of life in the Meadowlands.

Speaking of life in the Meadowlands, what once was a contaminated river is now home to some 32 species of fin and shell fish. The Hackensack River, because of the cleanup efforts of the HMDC and the DEPE, and because nature has been forgiving somewhat, is returning to its classic role as a spawning grounds for many species including striped bass, alewife herring, and grass shrimp.

The birds have returned too. In the past several years some 265 different species of birds have been seen either nesting or resting in the district. Species on both the state and the Federal endangered list have been seen feeding in the District, including the American Avocet, a young Bald Eagle and Least Bittern as well as the Arctic Tern, which winters in South America and uses the Meadowlands as a stop-over on its trip back to the Arctic to breed.[4]

. ***Intermunicipal Tax Sharing, Theory and Operation;*** Hackensack Meadowlands Development Commission, October 1972, p. 3.

[4]. HMDC, ***Economic Development,*** op. cit., p. 2.

D. Economic Development

Rebirth of the Meadowlands environment has occurred in context of some of the most dramatic area economic development in contemporary America. Or vice-versa, for it may be said that clean-up of the Meadowlands and reversal of its city dump image removed the biggest obstacle to the area's natural advantages for economic growth. Proximity to New York, relatively cheap land (the constraints of wetlands remediation and strong regulatory oversight notwithstanding), and superb transportation access, have made the Meadowlands boom. It has become a warehousing and distribution center for the Northeast. The sports complex in Rutherford houses both New York area football teams, the basketball Nets, the hockey Devils, and a racetrack. It is expanding with new attractions. Major corporations have moved both headquarters and back office activity to the Meadows. The Secaucus outlet center is one of the largest in the country. Here, too, are conference hotels, motels for tourists accessible to New York City in 15 minutes via the Lincoln Tunnel park-and-ride, upscale housing with water views and boat docks, a regional hospital, more than 7,000 acres set aside for wetlands, parks, and waterways. Private developers such as Hartz Mountain Industries have restored wetlands and wildlife, even while building and leasing hundreds of thousands of square feet of productive space. The score card according to HMDC is:

> **Development to date:** Approximately $1.3 billion in private sector investment and $450 million in publicly backed funds for the Sports Complex for a total of slightly more than $1.7 billion in development.
>
> **Jobs Created:** 85,000 permanent jobs and tens of thousands of construction jobs. In the past year, more than 4,600 new jobs have been created.
>
> **Total District Work Force:** Over 115,000, with an annual payroll of more than $2.4 billion.

Valuation: The aggregate true valuation of the District portion of the 14 communi-ties has increased almost four fold. The true valuation of the Meadowlands in 1970 was $509 million. That figure has now increased to $5.8 billion. There has been a similar rise in tax revenues to the communities and the counties.

II. The Site and the Developer

Allied Junction is a 28-acre inverted triangle at the southeast section of the Meadowlands in the Town of Secaucus, with a portion in Jersey City. All three sides of the triangle are rail lines (See Figure 2). The Main Line of New Jersey Transit's commuter rail to New York City converges here with NJT's Bergen County line.[6] The base of the triangle is crossed by Amtrak's Northeast Corridor heavy rail line, which is, in turn, bordered by the east spur of the New Jersey Turnpike.

Until 1982, the property within the triangle was owned by the Erie Lackawanna Railroad. The railroad had filed for bankruptcy, and the court put up the land for sale. Despite the location at the confluence of so many transportation routes, no transportation agency submitted a bid. The ultimate purchaser and only bidder was Allied Outdoor Advertising Corporation, a major sign company in the tri-state area. Allied bid $130,000 ÐÐ roughly 5,000/acre. Allied Outdoor Advertising's Chairman, Dr. George W. Newman, thought it would be an excellent place for the company's displays.

After researching the land's history, however, he discovered that for more than half a century it had been discussed as a potential transportation hub for Northeastern New Jersey and that it was zoned as a transportation center on the HMDC plan. No specific planning had occurred, and no agency was designated to take responsibility. It was not until 1983, after the land sale to Allied, that New Jersey Transit was created to consolidate operations of commuter rail and bus lines within the state. NJT would emerge as a prospective partner for Allied in a new venture, very different from outdoor advertising.

William E. McCann, Ph.D. President of Allied Junction, envisioned a major commercial center linked with a rail transfer complex. As The New *York Times* reported some years later:

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5. Hackensack Meadowlands Development Commission, *Fact* Sheet, 1992

6. Allied Junction was where two New Jersey Transit commuter trains collided in February 1996.

Standing at the window of his fifth-floor office in Rutherford, William E. McCann, Ph.D. looks out over an expanse of rooftops and meadow grass to a spot nearly four miles away in Secaucus. There, amid a jumble of railroad tracks and swaying cattails, he imagines a gleaming oasis of glass and steel rising above the marshlands.

In his mind's eye, Dr. McCann sees five office towers set atop a sprawling train station that would serve 70,000 commuters a day and create thousands of new jobs for New Jersey residents.[7]

III. The Master Plan and HMDC's Joint Development Policy

From the outset, HMDC intended to concentrate development in certain municipalities within the District and to orient that development as much as possible to accessible transportation nodes which could be improved over time. As far back as its original Comprehensive Plan in 1972, HMDC identified three such transportation nodes (at Teterboro Airport, in Kearny where the two legs of the New Jersey Turnpike join, and at the rail site that became Allied Junction). Once the plan was adopted, these sites were zoned as Transportation Centers. At Allied Junction the designation extended to a neighboring six-acre parcel owned by CONRAIL, part of its Croxton Intermodal Freight service yards.

Precisely how the transportation nodes would be improved and by whom was left to future events and market conditions. The TC zoning did, however, limit the scale of development which could occur at a Center to 500,000 sq. ft.[8]

This one provision and its flexibility have been the key to what has subsequently occurred. For HMDC's ultimate willingness to expand the space ceiling in return for many costly conditions or exactions has determined both the space "envelope" and the financial basis for joint development at Allied Junction.

IV. The Project

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[7]. Jay Romano, "Vision of Rail and Office Complex Moves Nearer to Reality", ***The New York Times,*** January 26, 1992, NJ p. 1

[8]. Hackensack Meadowlands Development Commission, ***Zoning Regulations,*** Section 19:4-5.5 (c)3

The central feature of the Allied Junction complex will be a three-level passenger station. Sitting atop and adjacent this transit facility ÐÐ on the same piers that support the station ÐÐ will be private sector commercial buildings and parking facility The station and building construction will be facilitated through a major reconfiguration of Amtrack's Northeast Corridor rail line. The adjoining New Jersey Turnpike interchange will provide access directly into the station complex. Drawings in Figures 3-6 show the station plans, the multi-modal components of the overall project, and a schematic of the building design.

Figure 3 identifies the transportation components of the project. Figure 4 is a photograph of the area, highlighting the piers on which the station and commercial development will be built. Figure 5 shows the station lay-out in relation to the major transportation improvements. Figure 6 is a schematic of the commercial components that will be built above the station.

> One-thousand-foot long platforms for Main Line train passengers on the lower level and 1,200 foot long platforms for the Northeast Corridor train passengers on the second level will be linked by stairs, elevators, and escalators with the station concourse on the third level. The central space features a 135-foot by 135 foot clear span octagonal rotunda with a 75-foot-high ceiling and skylight. A two-story arcade that links with the intersecting concourses in all directions frames the central space . . .
>
> The Allied Junction master plan establishes a flexible planning grid ÐÐ 30 feet by 45 feet ÐÐ that makes the buildings work with track and platform dimensions. With this grid, the foundations constructed during the transportation improvements phase will be designed to handle efficiently the vertical and lateral loads of future development, the location of which remains flexible.[9]

The physical development package as approved by HMDC consists of the following components:

Transfer Station	50,000 sq. ft.
Office Phases 1 & 2	3,157,900
Office Phases 3 & 4	950,000
Hotel (600 rooms)	420,000
Retail	112,000
Total building space	4,689,900 sq. ft
Parking (in structures)	

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[9]. Henry H. Brennan and Peter W. Dewes, "Allied Junction/Secaucus Transfer Station, New Jersey", *Urban* Land, December 1993, p. 3 1

Phases 1 & 2	4,400 spaces
Phases 3 & 4	1,600

Phases 1 & 2 of the commercial development will occur on air rights over land owned by Allied (Northeast Corridor and NJ Transit Main Line); Phases 3 & 4 over land owned by CONRAIL. While Allied is the lead developer, it constituted with CONRAIL a "management group" for joint submissions in the regulatory review procedures.

V. New Jersey Transit: the Partner

New Jersey Transit was, and continues to be, the motivating force behind the transportation components of the joint development. NJT began to operate the former CONRAIL commuter rail system in 1983. That system was the result of mergers of several lines operated by competing railroads which had failed during the 1970s.

> The network inherited by NJ Transit replicates this fragmented system and its historical operational difficulties characterized by the following:
>
> ¥ All NJ Transit 'Hoboken' Division rail lines intersect the "Newark Division's' and the rail system's most heavily traveled line, the Northeast Corridor. However, the absence of track connections physically inhibits the routing of trains from one rail line to another, perpetuating the sense of a disjointed rail system.
>
> ¥ The Main and Bergen County Lines intersect the Northeast Corridor less than 1,000 feet apart. However, due to the lack of a centrally located station that would permit relatively easy transfers from one line to another, commuters have had to travel a circuitious route to access major employment centers within the state and mid-town Manhattan. [10]

Cognizant of the new agency's mission, and system difficulties, Allied's McCann met with NJT officials to build support for a transfer station linked with commercial activity. The Meadowlands Regional Chamber of

[10]. New Jersey Transit, *Program Description,* October I 1993, p 2-1

Commerce became-interested as well as did New Jersey's representatives in Congress. McCann met also with U.S. Transportation Secretary Dole and UMTA Administrator Ralph Stanley to discuss prospects for demonstration grant funding from UMTA. In 1985, NJT made a formal application. UMTA (later renamed the Federal Transit Administration, FTA) then awarded $500,000 for a detailed feasibility study utilizing NJT's trackage, Allied's land, and the adjoining CONRAIL parcel. This was the first of several Federal funding commitments for the reconfigured system. Through fiscal year 1994, FTA has granted over $132 million for the project, towards a total ultimate anticipated allocation of over $448 million[11].

The Secaucus Transfer Station is the major component of NJT's "New Initiatives Program" directed at upgrading rail transit facilities throughout the state.

> The centerpiece of the Secaucus Program is the construction of a major, new rail station which will serve as the interconnecting node for ail commuter rail lines serving Hudson (NJ), Passaic (NJ), Bergen (NJ), Rockland (NY) and Orange (NY) counties. Significant highlights and related benefits include the following,
>
> (1) The station will permit commuters to transfer from the Main, Bergen County, Pascack Valley and Port Jervis Lines to other NJ TRANSIT and AMTRAK training operating on the Northeast Corridor.
>
> (2) Commuters will realize a travel time savings to the mid-town Manhattan employment area of approximately 1 S minutes each way;
>
> (3) New commuters will be attracted to the system, reducing vehicular congestion prevalent at all Hudson River bridge and tunnel crossings while enhancing regional efforts to meet clean air goals and timetables;
>
> (4) Upon completion of the 'Kearny Connection Project' (see New Initiatives Program), all existing NJ Transit commuter rail lines serving northern New Jersey will be accessible from Secaucus;
>
> (5) The alignment for the ' West Shore Line' which will serve the Bergen and Orange County commuting public along the Hudson River, will be routed through Secaucus to connect with the other NEC rail services;
>
> (6) Upon completing the ' New York. Susquehanna & Western Line' project, commuter rail service will reinstituted to the northwestern sections of New Jersey, feeding into Secaucus via the 'Main Line'

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[11] .Other sources have also contributed or promised funding for the rail program. The Port Authority has assisted with design money and Metro North, the New York commuter railroad will pay 17.3% of the construction cost for improvements to the Bergan/Pascack lines. That is equivalent to the proportion of passengers generated from Orange and Rockland Counties.

> The proposed rail connections will elevate 'Secaucus' as the region's future premier mass transport&ion hub, propelling the station as an important spur to economic growth through promoting vastly enhanced personal mobility by rail.[12]

NJT's objectives were straightforward and the calculated public benefits were significant. Nevertheless, the facts remained that (a) these improvements would be largely on land *nut* owned by the transportation agency -- i.e. Allied's -- and (b) administrative, capital investment, and environmental permit approval decisions from a host of other entities were required prior to any construction. Deals had to be made; and normally ponderous bureaucracies moved to act. NJT had to become pro-active if the project were to gel. Thus, for the past 10 years NJT has been an entrepreneurial partner with Allied in this project.

VI. The Land Deals: Easements in Perpetuity

In the late 1980s, New Jersey Transit began negotiating with Allied and CONRAIL, who constituted themselves as a joint management entity for a consolidated site. The landowners were willing participants because direct access to commuter rail was the linchpin for any successful commercial development. Unlike other metropolitan regions without such rail transit dependency, Northern New Jersey already had the precedents of two successful office/retail/hotel projects at rail transfer stations: Metro Park in Iselin, and Gateway in Downtown Newark.

Metro Park had 360,000 sq. ft. of office space by 1988, with plans for an additional 5.5 million.

> What is significant about this increase is that 25 years ago Metro Park did not exist. Only after Amtrak put a station stop, near a major interchange with the Garden State Parkway, for its New York-Philadelphia-Washington trains, and New Jersey Transit stopped its New York-Newark-Trenton trains did office space development start. In addition to becoming a major office center, the Metro Park area has first class retail and hotel development.[13]

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[12]. Ibid, p 2-4

[13]. Real Estate Research Corporation, ***Office Market Potential Allied Junction, Secaucus, NJ, Executive Summary,*** 1989 p 8

Newark had emerged from major recession to have (in 1989) over a million square feet of office space under construction, and relatively little vacancy in the remainder of its downtown.

> All of the existing well-tenanted, high occupancy office space, including the under construction or proposed buildings, have one factor in common -- they are all directly linked or proximate to Newark's Penn Station. This station provides inter-modal transportation connections with Amtrak's mainline Northeast Corridor train service, Port Authority of New York and New Jersey PATH rail service, and New Jersey Transit bus service, as well as direct shuttle bus links to the Newark International Airport.[14]

Allied Junction would be even more dependent on rail access, so the transfer station was vital to any private sector planning. (Note: It was not until 1990, well after preliminary design for the joint use project was under way, that the New Jersey Turnpike Authority made a firm commitment to create a new interchange at Allied Junction. See Section VII below.)

Negotiations and, indeed, the design and coordination of the entire complex project , were advanced when all the parties decided to retain the same engineering consultant (Edwards & Kelcey), and Brennan Beer Gorman as the project architects.

As the design studies and negotiations progressed, it became clear that all the parties needed one another's land to make their own components of the project work. NJT needed the Allied/CONRAIL site for station and trackage. Allied and CONRAIL needed NJT's site for the foundations upon which the commercial development would be built, and they all required an expanded site to locate the facility's parking. garage. Given the complexities, a truly imaginative solution to the land/air-rights problem was essential.

Thus an exchange of *easements in perpetuity,* rather than any lease or sales transfer of property, became the basis for the whole land arrangement. These were tied down by legal agreements in 1993 .

> The simplicity of the concept belies the complexity of its implementation. As owner of the land, Allied granted an easement to New Jersey Transit for the additional right-of-way required to expand the Northeast Corridor from two tracks to four. In turn, New Jersey Transit agreed to build the larger foundations for the

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[14]. Ibid p. 9

> future commercial development as part of the track work, as it would not be possible to build the foundations later. [15]

NJT also granted Allied air rights at no cost under the easement mechanism. Just about every other aspect of the project will require easements as well. A portion of the station will be built on land owned by Amtrak. Most of the land for the New Jersey Turnpike interchange, moreover, is owned by Public Service Electric and Gas which has facilities on it. The Turnpike Authority will need to work out easements and a relocation plan with PSE & G.

VII. New Jersey Turnpike's Participation

The New Jersey Turnpike Authority had been aware of the Allied Junction negotiations, but had no plans for an additional interchange at this site. This was a rail-oriented project, and the Turnpike already had interchanges on the east spur both north and south of the site. In the late 1980's, however, Governor Jim Florio convened a Transportation Executive Council to recommend transportation improvements throughout the state. The Council was chaired by Thomas Downs, Commissioner of New Jersey's Department of Transportation (NJDOT) and included the heads of all the transportation agencies in the state (i.e. NJT, Turnpike, Garden State, etc.).

Once again, formal policy at the highest political levels favoring collaboration in joint development was material in moving the project along. The Council concluded that Allied Junction was critical to the state's economic future and would be enhanced by an opportunity for multi-modal access. In December 1990, it recommended that a Turnpike interchange be part of the Allied Junction package.

> Although the project cannot be fully constructed within the next five years, the TEC believes it is a vital investment that must be made to carry out its policies of improving connnections between systems, re-

[15]. Henry H. Brennan and Peter W. Dewes, op. cit., p 29

> orienting existing transit systems to serve intra-New Jersey travel, improving air quality and making transit competitive with the private automobile . . .
>
> The TEC recognizes that high-density development near the Secaucus transfer cannot be supported without additional highway access. Design, permitting and construction of the interchange will take six or seven years. Therefore, in the next capital program, the Turnpike should carry out the design and permitting of an interchange in this area in anticipation of construction in the mid-90s.[16]

Allied also favored the interchange and promoted it with State and Turnpike officials. The interchange would be both a supplement to rail access and yet an additional marketing feature to reinforce the site's competitive advantages.

Governor Florio and the Turnpike Authority concurred with the TEC recommendation. The Authority appropriated $4 million in planning funds for preliminary engineering and environmental studies. Edwards & Kelcey was retained as the principal consultant for these studies, providing essential continuity with the other components of the project. HMDC, in its final approval of Allied Junction, established completion of the Turnpike interchange as one of the conditions for permitting the private development to begin.

Once again, Allied was able to call on the Meadowlands business community for support to move an element of the project along.

> Some supporters of the Allied Junction project say the Turnpike Authority should be more accommodating to the developer. 'This is as bold a risk as a developer can take' said Richard Fritzky, president of the Meadowlands Regional Chamber of Commerce, alluding to Allied's willingness to start construction on a major development in the midst of a recession. 'The bottom line is that you have a private developer working to make something happen that is in the public interest of the state of New Jersey'
>
> 'We need that transfer station, but the transfer station won't work unless there's a development on top of it,' he said, 'Allied Junction needs the government to cooperate with them big time on this.'[17]

Subsequently, with Edwards & Kelcey preparing the environmental documentation, the Authority joined with NJT, Allied, and CONRAIL in a consolidated submission to the U.S.

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[16]. Transportation Executive ***Council, Recommendations*** *for* ***Northeastern New Jersey,*** December 12, 1990 .

[17]. Jay Romano, op. cit. p. 6

Army Corps of Engineers for a section 404 permit on the project.[18] Once the Corps reaches a final decision (anticipated mid-96), the Authority will determine the funding and staging of the interchange. Completion is targeted for approximately 2002, to coincide with completion of the transfer station.

VIII. Components in the Financial Package

Federal funding for the station and rail improvements and concurrence among the parties on easements were, perhaps, the simplest parts of the financial package. A number of other considerations had to be addressed as well.

1. Foundations for the commercial projects. Design and engineering factors mandated that NJT construct the foundations for any private sector development and associated parking as part of the station and simultaneously with station construction. This would be an "additional cost" to the transit agency, over and above what the station foundations would require. NJT retained an independent engineering consultant, Stone & Webster (engineering corportation) who projected the extra cost at $15.7 million.

2. Air Space Earnings. While the easements to use the air space were conveyed to Allied and CONRAIL for $1.00, office, retail, and other commercial uses would ultimately occupy that air space. NJT, as any other property owner, wanted a fair return from these uses, which it regarded as a revenue-generator for the system.

3. Infrastructure. Other infrastructure components, not covered by Federal funds or the Turnpike Authority interchange, were needed to make the consolidated project work, These included

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[18]. At this writing, the Corps has approved the Allied and NJT components of the submission, permitting construction on these activities to begin. These are the initial phases of the project. The Corps has asked the Turnpike and Conrail for additional information on specific points, and is expected to provide approvals within 1996 for these later phases.

relocation of the Bergen/Pascack rail line and extension of grade-level local access roads to the site. Funding for these improvements would need to be secured.

4. The HMDC Role. The HMDC would be the principal review agency, to provide planning, zoning, and detailed implementation approval for every aspect of the project ĐĐ including any environmental remediation it or the Corps of Engineers required. Based on past experience, HMDC was a tough task-master, especially on matters of environment and infrastructure. It was likely to establish conditions of approval that mandated significant capital outlays.

All these matters were studied, reviewed, and negotiated among the parties for several years. Ultimately, the entire structure of the financial arrangement to provide a return to NJT and to build additional infrastructure rested on two factors: the development envelope HMDC would assign to the site through its planning and rezoning process, and the strength of the Northern New Jersey market to fill that space within a realistic and reasonable period.

IX. Zoning and Parking: The Incentives

Allied Junction's zoning envelope has been, from the outset, the key to how much off-site project costs and partner benefits the private sector could absorb and still make a profit. Initial land costs were minimal. Thus, with the prospects of a long-term bull market for space, the larger the project's scale, the more outside costs it could afford. Yet the HMDC plan, which designated Allied Junction as a Transit Center, permitted only 500,000 sq. ft. of commercial space. The plan had to be changed if all the parties were to come out financial winners. Studies and negotiations in the early 1990s concentrated on that end.

There were confidential discussions. Allied/CONRAIL prepared confidential documents spelling out their financial conditions and outlining their financial assumptions. These were submitted to HMDC. This back and forth process with a liberal sprinkling of attorneys and confidential financial disclosure, is a now-standard practice in any form of public-private partnership where a public agency provides development incentives in return for private sector contributions. Unusual aspects at Allied Junction were:

- the length of time during which the negotiations occurred (over five years),
- the magnitude by which the final envelope exceeded the original zoning, and
- the amount of infrastructure financing involved.

A. Development Envelope Expansion

At Allied Junction the development envelope HMDC approved in 1994 was 4.7 million sq. A., almost 10 times the density level allowed in the original TC zoning. This may be one of the largest density bonuses ever granted by a regulatory body. The infrastructure dollar impacts of this incentive are spelled out in HMDC's final Development Board Decision of October 28,1994.

> The applicant agrees to commit $144,685,000 (1990 dollars) of private monies to infrastructure improvements associated with the development of the TC-3 SPA (Special Planning Area), The basis of the applicant's request for 4.7 million square feet of development at the TC-3 site is to finance the necessary infrastructure improvements. This approval is keyed to an extraordinary infrastructure cost of a minimum of $95,000,000. All financial assumptions made by the applicant, included in a confidential document dated January 15, 1990 and subsequent confidential financial submissions, are considered part of this condition. The cost of development of each phase of TC-3, upon completion, shall be subject to an audit by HMDC or a representative firm hired by HMDC and paid for by the applicant.[19]

HMDC has an experienced economic staff that evaluates the fiscal aspects of applications submitted for approval, One member of that staff commented to this writer: "They made the submission, we examined infrastructure needs and costs, and we figured out together how much floor space would be needed to pay for the infrastructure".

B. Parking Reductions

When HMDC granted the huge rezoning envelope, it also approved Allied/CONRAIL's application for a parking variance. That was a request to slash the parking which a project of 4.7 million square feet would normally require, from 11,400 spaces to 6,000. Although some within the agency were reluctant to approve a cut this deep, HMDC agreed. This approval both saved Allied money up front and fit within HMDC policy to discourage commuting by automobile within the District.

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[19]. HMDC, "Decision on the Development and Implementation Plan Application for the Transportation Center/3/Allied Junction Specially Planned Area in Secaucus and Jersey City NJ, File # 94-384 by the HMDC Development Board, Oct. 28, 1994", p. 113..

On the policy front, HMDC makes a major effort to encourage ride-sharing and transit use, It helps organize transportation management initiatives so area businesses can meet both Federal and State air quality requirements, and HMDC coordinates special commuter bus services for many employers. HMDC had been very explicit that Allied Junction must be a project fed by commuter rail, and insisted that no park and ride opportunities be made available on site. This was to be a "transfer station" between railroads or bus and rail, not a place where commuters could easily park and board a train. (Turnpike access would be a fail-safe supplement.) HMDC believed that parking must be rationed and confined to serving the new development and transit operations. Therefore, it had plenty of rationale to concur with the requested cuts.[20]

Garage parking conservatively costs about $15,000 a space to build. HMDC's decision therefore saved Allied about $81 million in construction costs.

Both the enormous increase in allowable density and the sharp decrease in parking requirements clearly helped in Allied work with infrastructure requirements.

HMDC was supported in its decisions to grant incentive zoning and parking reductions by three factors:

- minimal environment& impacts from the project combined with the applicants' willingness to mitigate those impacts.

x

- market and fiscal impact studies submitted by the developer. These indicated a reasonable probability of absorption of the new space in the middle-range future, plus substantial tax benefits to the local communities.

x

- HMDC's new area-wide management plan. That plan attributed even more importance to Allied Junction as a development node served by transit than the earlier policy document.

C. Environment

HMDC's conclusions on environmental impacts are spelled out in the final decision of its Development Board. Large scale development in this location would have little adverse effects.

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[20] This aspect of HMDC's decision provided yet another competitive advantage to commercial development on the site. As a result of a 1992 State air quality act, all employers of more than 100 people in New' Jersey are required to undertake and maintain trip reduction programs to meet air quality standards. Allied's direct rail access and limited parking establishes a kind of "air quality credit" for large employers that may seek new space, relieving them of certain compliance actions and costs.

> We have concluded that there are certain minimal unavoidable negative impacts to the southeastern portions of the District. However, these negative impacts appear mostly related to the increased train traffic needed to service the STS, rather than from the STS itself. Additionally, other potential negative impacts, such as the filling of wetlands, additional storm water runoff and vehicular traffic have either been addressed by the applicant through mitigation, or by limiting the extent of potential negative impacts. The benefits to the North Jersey Region as a whole far outweigh the localized negative impacts caused by the station and it's associated track work.[21]

Some 11.7 acres of wetlands on site will be disturbed by the railroad and station work that will be undertaken by NJ Transit. NJ Transit has committed to purchase, restore, and maintain at standards acceptable to all federal, and state environmental regulatory agencies, including HMDC, a minimum of 33 acres of wetlands elsewhere within the District (See Section XIIB below). Approximately 10.8 acres will be disturbed by the work proposed by Allied. Similar agreements have also been entered into by Allied to improve an additional 49 acres of existing wetlands.

D. Market and Fiscal Impact Analysis

To prepare for negotiations, in 1990 Allied/CONRAIL commissioned a market study by the Real Estate Research Corporation. Since a specific development program had not yet been identified, the question posed to RERC dealt with a range of options: what is the potential for absorption of between 5-8 million sq. ft. of Class A office space over the 15 year period, 1991-2006?

RERC examined the overall demand for office space in Northern New Jersey, potential demand within the Hackensack Meadowlands, and propects for the Allied site to capture a reasonable share of these markets. The consultants estimated that, given their market projections, a 5 million sq. ft. absorption target would represent 3.7 percent of the area's overall new demand

[21]. ibid, pp 107-8

over 15 years, while 8 million sq. ft. would amount to just under 6 percent. Thus, RERC concluded:

> The project's underlying concept is to offer the region's best transit access outside of New York City . . . . Certainly, the transit center will give the site an exceptional competitive advantage within the region's office market . . . .
>
> Based on the Allied Junction site's attributes, unique concept and location, the project should compete very successfully for a share of the overall Northern New Jersey office market in order to build between five and eight million square feet by the year 2000.[22]

HMDC staff point out that market conditions have changed since RERC conducted the study. Nonetheless they believe Allied Junction's potential continues high, and they have utilized the RERC projections in the new HMDC management plan/EIS cited below.

The developer provided the market study as part of its submission package for HMDC review and approval. Along with that study, Allied/CONRAIL submitted a fiscal impact analysis of the completed project. Based on 1991 tax rates and dollars, that analysis concluded that Allied Junction would generate almost $11.4 million in new tax revenues to local governments and schools. Moreover, almost all of this revenue would be net benefit since the project contained no residential uses requiring school capacity.

E. The Special Area Management Plan

HMDC has had many achievements in its relatively brief tenure as the steward of the Meadowlands. Since 1990, it has, however, together with several other state and Federal agencies, been engaged in one of its most unusual ventures, the Special Area Management Plan (SAMP). SAMP establishes even greater validation for the lo-fold zoning envelope increase granted to Allied Junction.

HMDC initiated SAMP because it was time to update the 1972 plan and because new Federal legislation and administrative regulations during the 1980s significantly raised the priority for wetlands protection. Much of the Meadows is wetlands. Taken literally, the new Federal directives would block virtually all additional economic development. Because this would

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[22] RERC, op. cit. pp 17-18

frustrate its whole growth mission, HMDC decided to enlist. other key agencies in helping to prepare and adopt an overall area plan and EIS which will *both* maintain wetlands values *and* permit. growth to continue in selected areas. This will be one of the first area-wide plans prepared in full compliance with the NEPA/EIS process.

> . . . The HMDC, the New Jersey Department of Environmental Protection (NJDEP), the National Oceanic and Atmospheric Administration (NOAA), the National Marine Fisheries Service (NMFS), the U.S. ACE, and the U.S. EPA executed a Memorandum of understanding under which the parties agreed to prepare a Special Area Management Plan (SAMP) for the Hackensack Meadowlands . . . The unique agreement executed by the SAMP partners followed some nine months of negotiations initiated by the HMDC . . .
>
> The signatories to the agreement have established for themselves an ambitious and challenging task. If the Hackensack Meadowlands SAMP is successful, it could be a model for integrating local and areawide master planning into Federal environmental regulations. A principal objective of the SAMP is to demonstrate that Federal environmental regulations and state legislative mandates can be compatible. Specifically, the Meadowlands SAMP seeks to incorporate the Clean Water Act Section 404 (b) (1) practicable alternatives requirement into areawide master planning.
>
> An important component of the SAMP process is the preparation of an Environmental Impact Statement (EIS) with the USACE and the USEPA acting as the co-lead agencies. The EIS will be programmatic and will test various land use management scenarios through which the mandates of HMDC, as well as those of its Federal and state SAMP partners, can most effectively be fulfilled.[23]

The SAMP plan, in draft form, targets Allied Junction as a growth node for more than one-quarter of new office space projected for the District. The SAMP EIS was circulated for public comment in July 1995, and has drawn considerable controversy. HMDC considers this to be expected given the attempt to "balance" between conservation and growth and the innovative effort to use the NEPA/EIS process as a planning tool. SAMP is nonetheless the operable guidance instrument for HMDC until the NEPA process has run its full course. The Management Plan re-affirms *both* the centrality of intense office complexes such as Allied Junction *and* the value of utilizing exactions from such development to fund environmental benefits.

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[23] HMDC, "The Hackensack Meadowlands Special Area Management Plan: Conceptual Basis, Objectives, and Benefits Anticipated", January 1992, p. 2-3.

The need for additional office development in the District is a function of: (1) the need to provide space to accommodate anticipated employment growth, and (2) the need to fund environmental improvements in the District. Public policy articulated in the State Development and Redevelopment Plan directs growth to areas of the state with existing infrastructure, and recommends growth occur in 'centers' that feature mixed land uses. Center-based development, found to be most efficient form of growth in recent HMDC planning studies for the District, reduces dependence on automobiles, thereby reducing related air emissions, and maximizing use of existing infrastructure capacity in developed areas. . .

If the projected demand for primary and secondary office and warehouse space in the District were met, a total of about 100,000 jobs would be created in the District over the planning period, fulfilling an important social need for employment opportunity . . .

Another significant need for non-residential economic development in the District is the need to provide a funding source and system for environmental remediation and natural resource preservation programs in the District, only a small part of which is fundable under existing government programs.[24]

X. Financial Arrangements between Allied and New Jersey Transit

The grant of increased density and the parking reductions have enabled Allied to fund certain elements of infrastructure (e.g. access roads, relocation of the Bergen line, etc.) before beginning construction on the office complex. These have also provided basis for the financial deal between Allied and New Jersey Transit.

In 1993, Allied entered into a lengthy legal agreement with New Jersey Transit which spells out the terms of the easement exchange, the obligations of all parties during project construction and occupancy, and Allied's financial obligations to NJT.

In December 1994, NJ Transit entered into a full funding grant agreement with the Federal Transit Administration. This agreement secured all the funding necessary to reconfigure the tracks and construct the rail station. Once the station is operable and the infrastructure installed, Allied has 10 years to begin construction of Phase 1 of the commercial uses (3.5 million sq. ft.). If it builds anything, Allied is to pay NJT $62 million prior to taking occupancy. This is

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[24] . ***Executive Summary, Draft Environmental Impact Statement*** *for* ***the Hackensack Meadowlands Special Area Management Plan,*** USEPA, 1995 p. 1-17.

equivalent to nearly 2/3rds of the cost of the transfer station alone,. Allied's applicable share as agreed to in the 1993 agreement with NJ Transit.

After 80 percent of the initial building is leased, Allied is to make benefit payments quarterly to NJT on the basis of $.09/sq. ft. leased. These will be adjusted annually by any increases in the Consumer Price Index. After 10 years, a more complex basis of calculation is applied to the leased space, again with an annual escalation. If all 3.5 million sq. ft. are built and leased in the first 10 years, then NJT will receive an annual benefit of $1.26 million, adjusted thereafter by the CPI. This is $.36/ sq. ft., roughly the equivalent of 1.25 percent of the anticipated rents.[25]

If Allied sells or conveys interest in the project to another party, these terms automatically apply to the new principals.

Should Allied be unable to construct anything within the first 10 years, it must pay NJT the cost of its foundations ($15.7 million) while the build-out period for the commercial space along with the station repayment schedule are extended.

CONRAIL is expected to work out similar terms with NJT when the prospects for its commercial projects are ripe (all in phases 3 and 4, when Allied's buildings are finished.)

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[25]. From the standpoint of return to the transportation agency, this is truly a "second generation" joint development financial agreement. During the 1950s, the pioneering Toronto Transit Commission began to execute contracts with private developers for surplus land and air rights at downtown subway stations. Major office buildings, hotels, and residential towers were to be built on the sites. TTC executed 30-50 year leases with developers at fixed rates without escalation. As the first effort of its kind, this approach produced considerable revenue in the early years, but became an increasingly bad deal for the transportation agency as inflation grew and market conditions changed. New TTC leases do involve escalators.

XI. Staging

In February 1996, New Jersey Transit let a construction contract for the station. This was actually the third contract since January 1995. The first two, now, under way, will provide construction access to the site and will relocate electric transmission cables.

Under the conditions set down by HMDC, the commercial development can begin only after the station is constructed, the New Jersey Turnpike interchange is complete, and the array of infrastructure support requirements that are Allied/CONRAIL obligations have been met. These include providing road access to the site from Secaucus and constructing two additional rail system improvements:

- creation of a new 2-track 4,000-foot connection between the Bergen County Line and the Main Line. All Bergen County and Pascack Valley Line trains would be relocated to the Mail Line, eliminating the existing Bergen Line trackage to the station. The abandoned portion of the Bergen County Line will be used for road access to the facility. (See Figure 7.)

- addition of two new tracks to the Main Line for 9,500 feet to accommodate the Bergen and Pascack Valley trains and allow operational flexibility at the station.

Allied Junction is moving into the design stage for these improvements. The developer is actively marketing space, has letters of interest from potential retail tenants, and is in discussion with office users of more than 2 million sq. ft.. If all goes well, the station and interchange should be completed by 2001-2, with office and retail construction to follow.

XII. Additional Notes

Although not directly related to joint development, two other aspects of Allied Junction merit mention since they afford insight into both the uniqueness and the complexity of this project.

A. Wetlands Banking

All three of the principal parties, Allied, NJT, and the Turnpike Authority are required by HMDC and by the Corps of Engineers under the Section 404 permitting process to mitigate wetlands impacts. This involves obtaining existing wetlands off-site, improving them, and maintaining

them in perpetuity or over an extended period. Each party has been exploring properties in the Meadowlands that meet the requisite criteria, which may be land they currently own or sites available for purchase. In regard to sites for sale, the "demand" for potential remediation land within the Meadows has become so inflated that owners are asking as much as $300,000/per acre ÐÐ for property whose only possible development use is replacement for wetlands disturbed elsewhere. Final decisions on specific properties and their approval by HMDC are still to come.

HMDC has, however, suggested an alternative which only it, as the steward of this area with extraordinary powers and funds, could conceive: wetlands banking. Under HMDC's proposal, the Commission would purchase as many as 200 acres of wetlands within the District through negotiated sale or condemnation. The price would be substantially less, on an acreage basis, than the prices currently being asked of the individual parties. The mechanism would be a wetlands bond to be issued by HMDC, containing sufficient funds for purchase and remediation.

HMDC would ask developers to buy into the system by purchasing wetlands credits from their pool. HMDC would then take on the responsibility for remediation and perpetual maintenance, relieving the developers of that burden. This would substitute for case by case remediation sites.

The concept is a new one, and still under discussion within HMDC and the development community.

B. Local Opposition

Despite the support of relevant public agencies and the Meadowlands Chamber of Commerce, passage of Allied Junction through the regulatory review and approval process has not been without opposition. Indeed, many within the Town of Secaucus, including the Mayor, have fought the project vigorously. Lawsuits were filed against the parties on the grounds that public agencies are inappropriately assisting private development, but the courts have found against the plaintiffs.

Traffic generation- is the principal concern stated. Secaucus residents have expressed fear that, despite the project's rail dependency, traffic it generates will inundate local streets. HMDC has attempted to address these substantive objections through placing conditions for access control on the developer.

Some officials with whom we discussed the project suggest, however, that another issue may underly the opposition. That involves not only Secaucus but other Meadowlands jurisdictions as well and is the loss of local control over planning and zoning to HMDC. New Jersey is a state where local communities prize their ability to control land use. In the Meadowlands, that power has been transferred to a regional agency, not entirely responsive to local elected officials despite local representation on its board. Although significant tax, environmental, and other benefits have accrued to Secaucus and other jurisdictions because of HMDC, the diminution of power still rankles and may have come to the fore at Allied Junction.

XIII. Lessons of Allied Junction

Allied Junction affords lessons that highlight basic principles of successful joint development.

A. Entrepreneurship

An accident of history set in motion the vision, planning, and execution of Allied Junction. Had it not occurred, a transfer station at Secaucus might still be no more than a mere *concept,* and the idea of a revenue-generating private development, far from any official's mind. Allied was the only bidder at the bankruptcy sale. Allied's leadership saw an opportunity, seized it, and had the skill, persistence, and resources to mobilize complex bureaucracies towards a common end.

Had a transportation agency purchased the property, it would have become part of a land inventory. Thoughts of conversion to a transfer station might have percolated through an agency planning and review process likely to extend over many years. However, unless the transportation agency had a risk-taker at the helm, it is unlikely the agency would have sought a private-sector joint development partner to spur early construction. The land deal, not to mention the financing package, would probably have been too daunting to emanate from a bureaucratic setting.

At Allied Junction, a private entrepreneur has pushed the project from the outset at agency *and* political levels. That said, recognition is due the skills, energies, and imagination displayed by project partners and review bodies who must answer to many other masters and missions than this project. Although responsive more than initiating, NJT, the Turnpike Authority, HMDC have managed to make the project work ÐÐ thus far at least ÐÐ while ensuring that project details conform with their own mandates and objectives.

B. Joint Development as Policy

Allied Junction has evolved within governmental and independent agency policy frameworks that foster joint development. Without those policies, it would have been much harder to obtain support for the project and its mix of components. HMDC's land use and zoning plan which established the site as a transportation center with some commercial development was key. This was reinforced by UMTA/FTA's long-standing commitments to joint development and Governor Florio's Transportation Executive Council who formally reaffirmed desirability of joint development in this location.

C. Coordinated Effort

Successful coordinated effort is a hallmark of this project. Allied Junction was conceived as a joint development more than 10 years ago. Had the development partners not shared sufficient common interests to continue negotiating and to press forward through a maze of funding and regulatory procedures, the project could have been derailed at any point. An aspect of the coordinated effort worth noting is that the major actors engaged the same engineering and design team. This assured essential continuity in the physical aspects of the complex undertaking.

D. Location

It is hard to imagine a site more suitable for joint development: a pivotal transit node in one of the world's most active markets, where initial land costs were minimal. Demand within a reasonable marketing period appears high. This is helped by HMDC land use control, which

rations development sites within the market area and enhances Allied Junction's competitiveness. Other than Allied Junction, there are few, if any, opportunities to locate major offices in the area directly linked by rail to Manhattan and virtually all of New Jersey. Verification of these market expectations must await actual production and leasing of the new space. Yet prospects look quite promising.

E. Land Use Control/Zoning

The zoning envelope and HMDC's skill at fashioning it has created value at Allied Junction. That envelope establishes the scale of buildings that can be built and the ability of this project to fund infrastructure and return benefits to the NJT partner as well as profits to Allied/CONRAIL. By raising the development ceiling from 500,000 sq. ft. to almost 10 times 'as much, the regulatory body created substantial value. That has made the time and complexities of the project worthwhile to the private entrepreneur, and, will enable the transportation agency to derive a monetary return from its investment.

Although not related to joint development, this project's role in the ongoing nation-wide controversy over economic growth and environmental preservation must also be noted. HMDC and a bevy of Federal and state agencies are attempting to accomplish something rarely achieved elsewhere, creation of an area-wide management plan through the NEPA/EIS process which will permit economic growth to occur even while protecting and restoring significant environmental values. Allied Junction is a prncipal component of this planning effort, and SAMP's effectiveness will be closely watched by regulators, environmentalists, and environmental groups across the country.

Persons Interviewed

New Jersey Transit

T. Roberson Edwards, P.E. Program Manager, Engineering and Construction

New Jersey Turnpike Authority

Rober J. Grimm, P.E., Senior Project Engineer

Allied Junction

William E. McCann PhD., President and CEO

Hackensack Meadowlands Development Commission

Deborah Lawlor, Assistant Director of Planning
William Nierstedt, Senior Planner
Irfan Bora, Financial Officer

Pensacola Case Study

Introduction

For 1.5 miles, the north and southbound lanes of Interstate I-l 10, elevated on piers and separated by as much as 200 feet, soar over Pensacola, Florida. Where the highway touches down, its ramps bracket a 10,000 seat Civic Center, the most dominant building in Downtown, and frame the forecourt of the adjacent 200-room Grand Hotel.[1]

Unlike many urban freeways that slice through communities creating barriers between areas, I-l 10 has continuous space and light flowing around and under the structures. Tennis courts, basketball hoops, jogging and bicycle paths, and grassy areas accessible to the public are within the right-of-way, as well as a handsome municipal bath house and pool. These are brilliantly lit at night by the same 100-foot light standards that illuminate the highway. Also on the land between the two highway legs is a soup kitchen/homeless shelter/ interfaith ministry, one of the busiest community service centers in the city, even now undergoing expansion.

Police headquarters on excess highway land borders the northbound leg, with police parking and a vehicle impoundment beneath the roadway. For much of the year, an outdoor farmers' market occupies a section of the right-of-way.

This Downtown extension of I-l 10 had been envisioned from its inception in the 1960s as a multiple-use joint development project Plans were complete by 1974, and land was acquired during the 1970s. The road opened in 1981. Most non-highway re-uses of available land were established during the 1980s. Some sites are still available, and in early 1996 one lease is currently under negotiation with Florida DOT. Florida DOT assembled the right-of-way plus some parcels not directly required for the highway which it bought as agent for the City of Pensacola with city' funds.

The multiple use plan, adopted both by the City and FDOT, designated public, community service,. and revenue-generating private sector uses on land assembled for the transportation project. Implementation of public and community service activities has been eminently successful. From that standpoint the highway and its associated lands were in exactly the right place at the right time and the right price.
Commercial uses have not materialized, however. (The Grand Hotel is on private property adjacent to the right-of- way .) ' Reasons- are complex and classic examples of the risks involved in joint development. Pensacola is a small city that has grown only modestly in the past two decades. Developers have many options for sites

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These lanes are an extension of the I-l 10 spur which connects the center city with I-10 on the periphery (See area map attached). Until their completion in 1981, the spur terminated at Max-well Street, considerably north of the Downtown.

accessible to, but not at, the highway. City government and business leaders have, moreover, focused promotion and redevelopment efforts in areas other than the highway corridor where more attractive sites for retail, office, and industrial activity are available for sale or lease. None of the impediments to striking a deal and obtaining secure tenure that encumber highway-associated land applies in these locations.

Nevertheless, one can hardly say that FDOT, the City, or business leaders are disappointed by the outcome:

> "If the premise for multiple-use joint development is to make money", says Rick Dye, the city's I-l 10 Project Coordinator of the 1970s and now Vice-President of AMSouth Bank, "then it's the wrong premise. You do it to improve the setting and make the community better."

By Mr. Dye's criterion, the I-l 10 corridor must be considered a major achievement. As a physical structure, the roadway is a good neighbor to adjoining inner city areas. They have drawn both public and private reinvestment over the past decade. Lands assembled in the course of highway construction are, furthermore, furnishing vital services to these neighborhoods and their residents and, in the cases of the Civic Center and Police Headquarters, providing sites for institutions of regional importance. Further, one major private investment just outside the highway precinct, the Grand Hotel, is a significant addition to the city's economy because of its link to the Civic Center joint use which generates much of its market.

Demographic Background

Pensacola is a small city in a growing, moderate-size metropolitan area which includes Escambia and part of Santa Rosa Counties. Metropolitan area population in 1970, as the planning for the I-110 spur was getting under way, was 244,700. In the next 20 years, metropolitan population increased by 41 percent, to 345,200.

Service employment is growing in the Pensacola area while manufacturing jobs are declining. The principal generator for the region's economy continues to be the Federal Government, primarily the Department of Defense. Pensacola Naval Air Station, home of the Blue Angels and the National Naval Aviation Museum, along with a number of other military facilities are located there. Of the 129,700 non farm employees in the metropolitan area (1990), the largest single sector was government (25,200). Some 71 percent of these (17,864) were military and civilian Federal personnel.

Population of the City itself has hovered from a little below to a little over 58,000 between 1970 and 1990. New growth has occurred largely in the suburbs north and west of the city, and in the beaches across Escambia Bay to the south, which are becoming increasingly popular for resorts, recreation, and year-round suburban living.[2]

With growth in tourism, the City and local business have put increasing efforts into rehabilitating historic areas adjoining the Downtown, along with the Downtown business district itself.

> While the malls and suburbs offer great convenience and opportunities, Pensacola looks to its historic downtown for much of its unique identity. Downtown Pensacola is in the midst of an aggressive renovation campaign that has lured offices, banks, galleries, restaurants, nightclubs and residences. The Downtown Improvement Board oversees a special property tax to finance improvements in the 44 block area.[3]

I- 110 links I-10 directly to Downtown Pensacola and its historic attractions, as well as turn of the century neighborhoods undergoing extensive rehabilitation for offices, shops, services, residences, and restaurants, all of which are but a short distance from the Civic Center, but not on joint development land.

History of the I-l 10 Projects

Planning and implementation of the 1.5 miles of I-l 10 extension and the highway's joint uses has evolved over almost 30 years-

FHWA granted location approval for the extension in 1968. This was a time when Florida DOT was becoming interested in multiple use for highway rights-of-way. FDOT's Environmental Administrator, Grover Rivers, contacted Pensacola's Planning Director, Peter DeVries. A technical committee involving the state and city agencies was established to examine possibilities in Pensacola and supervise design studies for the road.

In 1972, the consultants, Bieswinger, Hoch and Associates, issued their report, *Corridor Location, Design and Multiple Use Report, Interstate 110.* Known also as the Multiple Use Reconnaissance Report (MURS) it was adopted by City Council after public hearing, approved by Florida DOT and FHWA. MURS has served as the blueprint for what subsequently occurred.

. The Beaches and, indeed, the city itself were badly damaged during the hurricanes of 1995, and a substantial reconstruction effort is under way.

. Pensacola Area Chamber of Commerce, ***Pensacola Florida's Best for Business,*** 1996, p. 12.

*The **Area** Traversed and the Role of the Road*

Between its then-current terminus at Maxwell Street and the edge of Downtown, the I-l 10 spur **was** to pass through a deteriorating residential neighborhood with a largely minority population. It would also have to cross railroad tracks and major arterial streets. Building the road on a berm, the least-cost solution, would have created a "Chinese Wall" and isolated the neighborhood. Instead, design decisions sought to make the highway both an area asset and a development tool.

> . . . the MURS plan made slight shifts in the originally designated alignment to minimize impact on the primarily low-income black community. The selected alignment paralleled and adjoined a rail line to the maximum degree possible, removing the most deteriorated housing from the edge of the neighborhood. Thus, the spur was designed to become the neighborhood boundary -- instead of penetrating its core. Land to be made available underneath the elevated section and through expanded acquisition along-side could be encouraged for development in commercial and industrial uses comparable with those already served by the rail line; and for park and community uses both to serve the residential neighborhood and to act as additional buffers. It was hoped that the neighborhood itself could then be rehabilitated; and indeed, a considerable amount of rehabilitation has already taken place under city auspices using Community Development block grant funds. The highway was designed no longer to be a threat to the area, but more directly a tool for its stability and upgrading.[4]

The affected neighborhood supported the highway project and the multiple use plan. Indeed, the City submitted to FDOT a petition signed by a substantial number of area residents endorsing the alignment and the joint use ideas.

Multiple- Use Proposals

. Rivkin Associates Inc., ***Acquisition** of **Land** for **Joint Highway and Community Development, Case Studies,*** Federal Highway Administration, Washington , D.C.1976, p.10-11. This case study discusses the plan and early approaches to joint development in considerable detail. It was written at the time of property acquisition before actual construction of the highway or any re-use decisions for the acquired lands.

The following excerpts from the MURS report describe the joint development proposals which were approved by city, state, and FHWA and utilized as the basis for right-of-way and associated land acquisition. This material is helpful in comparing what actually occurred in the intervening years with original expectations.

1. Public and Community Uses

Use of the right-of-way has been designed in a manner that will permit active use of as much of the area as possible. Much of the land is recommended for public recreation uses which are related to both the immediate neighborhoods and to the City at large . . .

The proposed recreation facilities have been designed to provide a system of activity areas oriented to the needs of the community . . .

Although recreation use and open space areas will utilize most of the highway right-of-way, other uses are suggested as a means of getting the maximum use of the land. Proposals. include several public service sites.

A school bus maintenance center . . . a public utility and city government storage area. . . use by the Pensacola Police and Fire Departments. A three block long site can be allocated as a storage and training area.

2. Commerce and Industry

In addition to public and service uses there is sufficient land within the corridor to permit private business activity. An automotive center has been suggested as a use in the Maxwell Street vicinity . . .

Light industrial uses in the Tarragona Street vicinity can utilize corridor land for buildings, parking, and on-site storage . . .

As requested by the Pensacola Department of Transportation, a city transportation center is proposed within the ramp area south of Wright Street. This center will include a terminal, terminal parking, bus storage and related facilities . . . In addition to the City, local travel agencies have shown great interest in this proposal which will combine the local Trailways and Greyhound Bus Line facilities. These operations are now on separate, un-related sites.

A rather large land parcel within the ramp area east of Alcaniz Street has been proposed for a motor lodge complex. This will provide an excellent site for access by travelers. It

will consist of a motel, restaurant and related elements and be situated adjacent to the proposed visitors center and downtown attractions such as the Historic District. This site will offer the unique advantages of having view exposure to attract tourists plus ideal access in direct proximity to the I-l 10 ramp system.[5]

[5]. Bieswinger, Hoch and Associates, ***Corridor Location, Design and Multiple Use Report, Interstate I IO,*** 1972, unpaged

The final section of the MURS report offered some prophetic comments:

> The development of the multiple use concepts as a means of integrating Interstate Route 110 into the structure of a portion of Pensacola can result in many far reaching benefits. Aside from the immediate social and economic improvements, this project can be used as a tool to expedite many long range programs for local and regional improvement. The I-110 facility can directly enhance proposals for Central Business District growth and related projects such as port improvement, establishment of the government center, the Quayside Project and activities related to the Historic District.[6]

Moving Toward Implementation: the- I-I 10 Coordinator and City Action

Once all the relevant agencies adopted the MURS plan by the early 1970s, focus shifted from the technical committee directly to the Planning Department. DeVries, the Director, was the principal champion of joint development. His Department prepared a detailed land use plan for the area and design guidelines, all of which were adopted by City Council.

Coordinating the program became so time-consuming, however, and demanding of planning staff that, at FDOT's suggestion, the City appointed an I-l 10 Multiple Use Coordinator to work with the planners and handle day by day operations. Albert "Rick" Dye, Director of the area Chamber of Commerce's Economic Development Division, assumed the part-time post in 1974. FDOT contributed $25,000 to the effort, which lasted more than five years until the highway spur was close to completion.

City Council allocated $1 million from Federal revenue-sharing funds to land purchase (especially property not explicitly needed for the structure and operations). DeVries and Dye negotiated an arrangement with FDOT whereby the transportation agency would handle all acquisition, acting as the City's agent for land that might be paid for in whole or in part by Pensacola.

> This agreement was vital to the successful implementation of Pensacola's joint development plan. A number of projects in the plan require use of land outside the actual right-of-way of the road, primarily land comprised of either economic remainder parcels

or whole takes by the city. As a relatively small city, Pensacola did not have either the staff, the budget to add staff, or the administrative mechanisms established to undertake all aspects of these acquisition activities for the city (including appraisals, negotiation, title clearance, and condemnation where necessary) on all properties, including land the city was acquiring as whole takes. The city was able to obtain properties for joint development which it otherwise would have been unable to acquire. In addition, this arrangement effectively saved the city money as well, since all of the funds the city spent for land acquisition went for actual acquisition -- not for title searches, condemnation suits, etc.[7]

The arrangement was an integral part of the Interlocal Agreement cited below.

The Interlocal Agreement

Key to implementation of joint development once the highway was completed was the Interlocal Agreement between Florida DOT and the City. In addition to acquisition procedures, this spelled out the basis for future disposition of the lands not needed for actual transportation use.

1. The City would lease from Florida DOT all land acquired for right-of-way but not required for highway operations.

2. Lease terms were 99 years for a total of $100, renewable at the discretion of FDOT with concurrence from FHWA.

3. The City could utilize the leased lands for its own operations and facilities and could sub-lease it to other governmental agencies, community groups, or the private sector.

4. If FDOT ever needed all, or portions of, the leased property for highway use, the state could cancel the leases or sub-leases upon 90 days notice. FDOT would have no liability to compensate for any improvements on the leased lands.

. Rivkin Associates, op. cit p. 18-19.

5. All uses on the leased and sub-leased properties have to conform with the MURS plan.

6. Detailed plans for all uses, public, community, or private have to be approved by Florida DOT and the FHWA District office.

7. Subleases to governmental agencies may be for nominal consideration.

8. Subleases to community groups and the private sector must pay economic rent based on an appraised value for the lease.

Any revenues for the sub-leases over and above administrative costs were to be utilized for construction, maintenance, or operations of the city's transportation system.

It is important to note that, in this specific Interlocal Agreement, neither the State of Florida nor the Federal Government was seeking revenue from the land identified for joint development. The City, however, had hopes for job generating private investment and additional tax base as well as sites for public and community facilities.

Other Preparatory Actions

Meshing the activities of property acquisition, utilities relocation, and road construction required close coordination. Dye and DeVries set up a Coordinating Committee of state and local officials and the utilities which met, often monthly, to review progress.

Parallel with the overall planning effort, the team drafted an amendment to the City's zoning ordinance which established a special Interstate Corridor Land Use District for the area eligible for joint development:

> The purpose of this district is to provide for non-highway land uses both below and adjoining the Interstate 110 corridor on land owned by the Florida Department of Transportation and leased by the city of Pensacola as shown in the Site Development

Plan in the DOT *Corridor Location, Design and Multiple. Use Report; Interstate 110, Pensacola, Escambia County, Florida, 1972.*[8]

While the amendment permitted a wide range of uses (e.g. recreation, city government buildings, to tourist facilities, community commercial, et al), it offered no incentives such as increased density or relaxed standards. Rather, it required submission of development plans for all proposed uses, adherence to design guidelines, and a detailed review and approval process.

Meanwhile, Dye met frequently with city agencies (e.g. recreation department, school board, police) to encourage planning for public uses within the acquired lands. He also promoted the plan with area real estate brokers to stimulate interest in private sector sub-leases on sites identified for commercial development.

Tieing down re-uses proved a formidable task, partly because of the extensive lead time before any sites would be ready for occupancy and partly because of the tenure restrictions (for the private sector) within the Interlocal Agreement. The earlier Rivkin case study flagged these issues:

> . . . The lengthiness of the process creates problems for the agencies and individuals attempting to coordinate their decision-making and development plans with the highway project through the joint development program. Although the joint development approach can make land available for public agencies at significant cost savings, unless such agencies can anticipate and program their needs (in the case of Pensacola, twelve to fourteen years in advance) they will be hampered in their participation in the benefits of the joint development approach. Private interests are even more limited in the extent to which they can plan for such long term needs.[9]
>
> Private investors, as well as some of the public agencies, are wary of leasing property on which to construct improvements when their tenure on the land may be terminated at any time with only 90 days notice . . . Provisions assuring continued access by the State to the portions of the leased property within the right-of-way, particularly underneath the highway viaduct, also present problems for both potential

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[8]. City of Pensacola Zoning Ordinance, (August 10, 1995 edition) p.12-2.60.

[9]. Rivkin Associates, op. cit., p. 15.

private and public users. The full effect of these regulations in limiting private users will not be able to be determined until the project area is actually ready to be actively marketed. [10]

The Score Card Twenty Years Later

According to Florida DOT, the total amount of land it acquired for highway operations and multiple use was approximately 71 acres.

Only about 12 acres, however, are actually used by the highway itself, access ramps, and operations.

Approximately 59 acres have been leased to the city of Pensacola for 99 years for joint development at the sum of $100.

Of this amount, city facilities and services occupy about 15 acres, 10 for recreation and five for police headquarters and associated parking.

The City has executed two sub-leases, approved by Florida DOT and FHWA; totalling 18.7 acres. One, 17.24 acres, is with Escambia County for the Civic Center. The second, 1.45 acres, is with a community service agency called Loaves and Fishes.
This leaves approximately 25 acres leased by the City and available for future community/city re-use or sub-leases to other tenants. While some of this acreage is hard-surfaced under the highway piers, much has been planted in grass, includes the bike and jogging paths, and effectively functions as park/recreation land[11].

Once the highway was completed in 1981, supervision and review of proposals for re-use continued to be the Planning Department's responsibility. The office of the City Manager and, within the Community Renewal Area south of Cervantes Street, the city's Community Renewal Agency (CRA) handled actual disposition arrangements.

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[10]. Ibid, p. 33.

[11]. Note: We were unable to obtain a full tally of all the land that had been acquired, including the amount purchased for City ownership. The total acreage, therefore, may be somewhat higher than the 71 figure cited above. FDOT indicated that it had transferred under an acre of a non-economic remnant to the City beyond the figures cited. While City property was shown on atlases in the Planning Office, the precise ownership amounts were not available during our visit. Records were compiled many years ago and were stored elsewhere.

The following sections discuss the nature and process of the re-use activity. In the Appendix several pages of photographs illustrate the facilities and are presented in the same sequence as items A-E below.

A. Recreation

Since recreation opportunities were among the main objectives of the program, the city moved rapidly to create facilities. By 1984, a municipal swimming pool and bath house was built north of Blount Street. Several tennis and basketball courts followed, and the adjoining grassy areas are used informally as play fields. These facilities lie between the two sections of expressway and east of the northbound leg. One of the more interesting aspects of the physical layout is that the tall highway light standards placed between the road legs provide night lighting for the recreational facilities as well as the expressway itself.

Prior to installation of these facilities, the adjoining neighborhoods were seriously deficient in recreational space. That is no longer the case. These neighborhoods are part of the City's Recreation Service Area (RSA) 1 which includes the Downtown, where efforts to create parks have also proceeded simultaneously with the I-l 10 projects. According to the background document to the recently revised Comprehensive Plan for Pensacola.

> RSA 1 has . . . a good mix of activity and resource based sites, and most of the sites are either in good or excellent condition. No deficiencies exist at the present time or will exist by the year 2000.[12]

While many of these facilities are used primarily by neighborhood residents, the bike and jogging paths draw a wider clientele from the Downtown and elsewhere. The City's Department of Leisure Services constructs the improvements and maintains the land. It also organizes a Farmer's Market on sections of the joint use right-of-way during spring-summer and provides some of the paved area for group activities ÐÐ such as a model electric car club.

B. The Civic Center: A Target of Opportunity

. Pensacola Planning Department, "Data and Analysis" document for the Comprehensive Plan, 1995 p 9-17

At end of the 1970s, an unexpected opportunity materialized to create the largest and most growth-inducing component of the joint development area. The voters of Escambia County passed a Tourist Development Tax (or "bed" tax) on hotel and motel rooms. Originally based on 2 percent of room rates, it is now 3 percent. These revenues may be used by the County to pay off bonds for auditoriums and entertainment centers.

According to the MURS plan for I-l 10, the largest re-use area was to be between the ramps at the Downtown highway terminus. As indicated above, this site was designated for a private-sector motor lodge complex. No investors came forward, however, and, once the bed tax was approved, both the City and the County sensed an excellent new prospect for the land.

The City essentially gave the land to the County on a no-cost sub-lease as the site for a Civic Center and associated parking. It was built by 1984.

> This multipurpose facility seats 10,300 people. It features 12 meeting rooms, 23,000 square feet of exhibit space, complete kitchen facilities and easily accessible parking for 2,000.
>
> The Civic Center features performances by Reba McIntire, Pearl Jam, Walt Disney's World on Ice, and Ringling Bros. and Barnum Bailey Circus.[13]

The multi-story center is professionally managed by an independent contractor and intensely used. It is under consideration as the nucleus of a possible convention complex. It dominates the low-to-mid rise edge of Downtown and can be clearly seen on approach from the beaches to the south and the I-l 10 entrance to the center city. The Civic Center has clearly played a role in Pensacola's growing attractions for conventions and vacationers. According to the Convention and Visitor Information Center, the number of conventions rose from 312 in 1990 to 972 in 1994, and the number of attendees grew from 76,700 to 134,000.

c. Police Headquarters

The MURS plan envisioned a substantial joint development site east of the highway as a storage and training area for police and fire services.

. ***Pensacola Florida's Best*** *for* ***Business,*** op. cit. p 18

But, as in the Civic Center, availability of joint development land at negligible cost appeared to be an opportunity too good to ignore in the mid-1980s, when the Police Department wished to relocate its headquarters in a larger facility. The plan, and the City, were flexible enough to accommodate change.

The Police Department had outgrown its centrally-located Alcaniz Street headquarters a few blocks south of the Civic Center. The joint development land between Gadsden and Cervantes Streets was equally well situated, and there was plenty of room beneath the north leg of the expressway for parking police vehicles and an impoundment lot.

The move to Cervantes Street brought a double benefit to the City. The old headquarters building, a handsome Spanish-style structure, has now been remodeled and rented on a long-term lease to an insurance company.

At this writing, none of the other strictly public uses envisioned in the MURS plan has come to pass ÐÐ transportation center, school bus maintenance yard, etc. About 25 acres are still available and are a "land bank" for the city, should unanticipated public needs arise.

D. Loaves and Fishes

The one strictly "non-public" use on I-l 10 joint development land is the community service agency, Loaves and Fishes. Its story illustrates both the opportunities and the difficulties in mobilizing a joint development site.

Loaves and Fishes started in 1983 as a soup kitchen serving inner city homeless and poor residents. As operations grew and drew substantial support from area churches and other institutions, the founder, Rick Humphreys, wanted to stay in the central city.

He initiated discussions with officials concerning several parcels of city-owned property, but concluded that the best located to serve his clients was empty land south of Lee Street between the elevated highway sections.

This site had other advantages, too ÐÐ excellent access, room to expand, and physical separation from residential neighborhoods, which would avoid any issues with neighbors. **Indeed, the** facility on the Lee Street site also includes a small shelter for homeless families, offices for Humphrey's operations as well as the Interfaith Ministry, and a parent/child center which teaches family values and parenting skills to residents in the larger community. There is plenty of parking for staff and volunteers as well as protected outdoor play space and storage area.

Because Loaves and Fishes is not a public agency, making the lease deal and obtaining approval for the facility construction was not easy.

Originally, the City offered to lease Loaves and Fishes the site at $1 for 99 years. Within City Council, however; questions arose about the religious character of Humphrey's mission along with concerns that such a favorable lease would be an unconstitutional blending of church and state. Pensacola's Interlocal Agreement with FDOT provided an option, however.

The City could execute a sub-lease to a non-profit institution if an appraisal were made and an "economic" value established as the basis for the payment. Such an appraisal was made, and the price of $15,000 for a 20-year renewable sub-lease established and approved ÐÐ still extremely inexpensive for such an attractive core city location.

Humphreys had some difficulty gaining development approvals. In respect to facility design, it was necessary to ensure the City and FDOT that neither the building nor the parking area impinged on expressway operations or FDOT clearance needs. But once his plans had been processed by the Planning Board, approved by City Council, and reviewed by Florida DOT, they had to be revised because a drainage pipe was discovered with which the construction would interfere. The facilities had to be re-sited a few feet from the original location. But the whole design and approval cycle had to be repeated and took several months. This problem and delay notwithstanding, Humphreys considered the effort worthwhile because his facility has a superior site at relatively little cost. He is apparently not bothered by the sub-lease condition that FDOT could require vacation of the property, without compensation, upon 90 day notice. Loaves and Fishes is currently expanding on its site. To be on the safe side for future expansions, however, Humphreys has purchased three lots just outside the right-of-way as his own "land bank".

E. Neighborhood Impacts

Without knowledge of neighborhood conditions prior to the expressway, it is hard to gauge the impact of the road and its joint uses. Some points can be made, however. Certainly the immediate access to new recreational facilities must be considered beneficial to the neighborhood, along with the light, air, and pedestrian connections under the elegantly-designed expressway itself.

Several industrial and commercial buildings just west of the roadway appear to be newly built or significantly expanded and renovated. There are numerous well-maintained churches on both sides of the highway. Also, on both sides of the highway, the city's Housing Authority has built a number of attractive low-rise garden apartments which fit nicely between the adjoining single family houses and the highway corridor. Although a number of dwellings in the area to the east are deteriorated, the neighborhood generally appears quite well maintained, and a substantial amount of renovation has occurred.

I-l 10 bisects Census Tract #6. According to Department of Community Design & Planning records, between 1980-89, some 162 residential rehabilitation permits were issued here, the third highest number of all tracts within the city.

The Private Sector

Pensacola's I-l 10 corridor was intended for private as well as public re-use. This section addresses some of opportunities access to the road has provided as well as the factors that have deterred private sector interest in leasing joint development land.

The Grand Hotel

We begin with discussion of the one major private sector use built adjacent to the expressway -- but not on government-acquired land.

At the southern end of I-l 10, less than 100 yards from the site that became the Civic Center, the Louisville and Nashville Railroad owned a passenger terminal and rail line long since out of

service. The MURS plan did not target the station for purchase. , It suggested the terminal be converted to a visitor center with parking to connect with land inside the ramps designated for a motor lodge complex.

Instead, during the late 1970s when I- I 10 construction had begun, L & N sold the station building and its adjacent land to an entrepreneur. This was a time when the Carter administration had established economic revitalization of central cities as a priority and had created the Urban Development Action Grant (UDAG) program to encourage such investment. The City applied for a $745,000 UDAG grant to assist the developer who undertook a handsome restoration of the station as a lobby and restaurant area for a new $14 million hotel, completed in 1984.
The hotel was perfectly positioned to capitalize on the new Civic Center for its market and is a second landmark building at the entrance to Downtown[14]. Although not a joint development property, it fits neatly with the highway and the Civic Center, and is generating tax revenue for the city;

Midtown Athletic Club

In more than 15 years since completion of I-l 10, only one serious attempt was made to convert joint development land to revenue-generating, tax paying private property. On July 12, 1981, the *Pensacola News-Journal* announced that the city had executed a lease with the owner of Midtown Athletic Club for space underneath the spur.

> As long as 14 years ago, city fathers and business interests began talking about putting tennis courts and commercial concerns under the interstate spur that would connect Interstate 10 with downtown Pensacola.
>
> The effort finally reached the fruition stage a week ago when the city approved the first lease for operations of a business concern under the I-110 skyway.
>
> Ironically, the first enterprise will provide both tennis courts and a commercial operation.

[14]. The hotel was originally a Hilton. After a short time, however, the development group went into bankruptcy. The facility was sold, re-financed, and reopened as the Grand Hotel.

> Midtown Athletic Club has leased 4.13 acres from the City of Pensacola for athletic facilities and parking space under I-l 10, to be used in conjunction with the Midtown clubhouse which will be located in a renovated warehouse on adjacent Tarragona Street.
>
> City officials hope other leases will follow in the 23 acre, 21 block stretch long ago dubbed the I-110 Commercial Park. Jobs and revenues were partly what the city had in mind more than a decade ago when the push began to make I-l 10 an elevated roadway, thus preserving the land beneath for urban development.
>
> Midtown, which is investing $1.6 million in a clubhouse and sports facilities, will pay approximately 10 percent of its gross profits to the city treasury, said Midtown project owner Dr. Keith Shearlock. Midtown will begin construction in September and hopes to begin operations in November. It plans to hire about 30 employees.
>
> Income to the city will come directly from lease fees paid by the business operations and from taxes paid on property-improvements. [15]

Shortly thereafter, Dr. Shearlock elected not to pursue the deal, and terminated negotiations with the City. During this case study investigation, Dr. Shearlock explained that he did not follow through because of a straightforward business decision. Renovation of the warehouse, which was not on government land and had been offered for purchase, proved economically unfeasible. He had found another building; elsewhere in the city, and moved the project. Lease negotiations with the city for open space under the freeway near the warehouse were arduous, but had not been an issue.

Other private projects in the succeeding 15 years have not moved even this far, except for a small site adjustment with an adjacent property owner noted in IV D below. We asked our contacts in the City, the Chamber of Commerce, and Florida DOT for their views as to why. Based on their comments and our examination of the city's development priorities and experience during the past decade, we suggest four contributing factors.

Insecurity of Tenure

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[15]. Charlotte Wittwer, "I-l 10 Park Lease Caps 14-year Effort", ***Pensacola News Journal,*** July 12, 1981, p 13C.

A main feature of the Interlocal Agreement and the lease terms between the City and FDOT was the 90 day notice clause. If, at any time the Department of Transportation determines it needs site area for any legitimate transportation use (access, parking, storage, etc.) it can evict the City or sub-lessee with 90 days notice. FDOT, moreover, is not responsible for any compensation for improvements, moving expenses, etc.

Apparently this requirement has not deterred the City or Loaves and Fishes from establishing facilities on multiple-use land. Their projects have been designed to meet FDOT specifications, including contingencies. They have considered the risk of eviction minimal, especially in light of the negligible land cost.

The situation would be quite different for a private entrepreneur, except perhaps with a non-intensive use such as parking and storage. Secure tenure is absolutely essential, especially if any structures or other improvements will require financing. Financial institutions will not lend capital on that basis.

Interestingly enough, the sole private sector use currently under negotiation with the City and FDOT, after many years of inactivity, is for a small section of land near the Civic Center (less than an acre) to be used as expanded parking for adjacent offices and a possible health club.

The Approval Process

Compared with conventional purchase of commercial land zoned for the anticipated re-use, securing approval for joint-use sites is both complex and time consuming.

First, a potential lessee must submit a detailed plan to the City for review by the Planning Commission and action by City Council. Until the plan and a definitive design are approved, it is not possible to know the cost of the lease because an appraisal must be made, and an "economic" rent negotiated based on the re-use .

The City then forwards the plan to Florida DOT's regional office in Chipley. That office submits the drawings for review to relevant sections of the agency (i.e. right-of-way, engineering, utilities, etc.) to determine whether the project presents any conflict with highway operations.[16] Once these offices sign off, the plan goes to Florida's Secretary of Transportation for approval. After his signature, it is transmitted to the District headquarters of FHWA for review and approval. Only then, can a lease be executed.

FDOT's Chipley Office estimates a review process of 6-8 weeks after all Pensacola City approvals and its receipt of a complete documentation package. In actual practice, as the Loaves and Fishes experience demonstrated, this process can take many months.

Ample Options Elsewhere

As indicated earlier, Pensacola is a small city and not growing rapidly. I-l 10 has provided superb access to the Downtown, and many sites are available for new construction or renovation near, but not directly at the expressway. The Grand Hotel is an example of a private

[16]. That is the main issue now facing the proposed lease of land to Fabre Engineering for parking under the expressway near the Civic Center. FDOT has determined that the proposed parking site is not "joint development" land, but ground integral to highway operations. This conflicts with the City's view. Discussions will continue, but FDOT may ultimately deny the request.

development with all the advantages of access to the facility but none of the uncertainties or the baggage of development oversight attendant to the public land. Private joint development works most effectively when other suitable sites are scarce and when market demand is high. Neither of these factors prevails in the I- 1 IO corridor.

Desultory Marketing

Some interviewees for this case knew of firms that had expressed interest in land along the expressway ÐÐ for equipment storage, automobile service, or for other non-intensive uses ÐÐ but found no sources of information or interest within the city. Therefore, they dropped inquiries at an early stage.

Certainly the situation today is quite different from the 1970s. There is no I-l 10 Coordinator and no push on behalf of the City or FDOT to attract private tenants. Indeed, much of the land has already been absorbed. Especially in light of the other site options available, the City is clearly not aggressively marketing the remaining land. It is a land bank, perhaps one day to be mobilized for new public uses that may arise.

S hifting Priorities

It is also fair to say that *the City has changed* since the late 1970s. The I-1 10 projects have achieved much of their goal, and priorities have changed. In the 1970s, the highway and channeling its potential impacts were among the "hottest" discussion items in town. Now, different areas and other projects have priority.

The accompanying map of the '"special" districts in Downtown Pensacola indicates their integral relationship with I-l 10.

From the mid-1980s on, primary attention shifted to rehabilitation of the retail core and support of Palafox Street, west of the expressway, as the City's main retail and entertainment thoroughfare. A Downtown Improvement Board was created and vested with special taxing authority. Subsequently, $40 million of public funds for infrastructure have generated $104 million of private investment, according to the Community Redevelopment Director, and the retail core appears thriving.

Simultaneously, efforts were made to restore the historic Seville District, due south of the I-I 10 terminus. It has become a cultural and entertainment center, and many of the old houses (including some quite modest structures) have been restored to create a new intown living area.

> The Seville district was established in 1752 by Spanish Colonists and today offers a unique museum complex that recaptures the heritage of early Gulf Coast life.
>
> The Village includes the Museum of Industry, the Museum of Commerce, and the T.T. Wentworth Jr. Florida State Museum.. . . Beautiful homes are open for a peek into an era of elegance of the late 19th century. . . Lovely Seville Square is the center of the district and you can relax on benches or the lawns as you enjoy our beautiful weather under the large oaks. Many of the Southeast's top 20 festivals and events occur in the park . . .[17]

Yet another Downtown area where the City and private business are investing funds and promotional effort is the Gateway Redevelopment District. Gateway links the beaches and Escambia Bay bridge with Downtown by way of the Civic Center. City officials and business groups have been attempting, with some success, to create a restaurant area here. Through the upcoming demolition of a deteriorated housing project (whose residents have been relocated elsewhere) the City will provide new sites for privately-developed single family detached housing directly south of the Civic Center. Apparently demand for intown living is now so substantial that this site will extend the residential precinct of the historic district with a section for contemporary homes.

The point is that I-l10 and its associated projects have done much of their job, and the City has moved on to other things.

The expressway, itself, has provided direct access to the city's core. It has done so in a fashion that establishes a landmark and activity-generator on joint development property (the Civic Center), a breathing space for in-town neighborhoods rather than a barrier , and many facilities that provide support for the community's recreational, social, and public service needs.

Lessons of Pensacola's I-110 Corridor

Pensacola's I-110 corridor affords lessons that highlight both basic principles of successful joint development and pitfalls that deter private sector participation.

Joint Development as Policy

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17. ***Pensacola Travel Host,*** Jan.-Feb. 1996, unpaged

The I-1 10 experience could occur only because Florida's Department of Transportation, supported by a comparable interest from the Federal Highway Administration, believed in joint development/multiple use and was seeking pilot projects to demonstrate what could be accomplished. Pensacola was a willing candidate. Elected officials and heads of city agencies supported the basic concept of combining highway development with non-highway facilities. Policy sanction at the highest levels of FDOT and from FHWA clearly was a factor in legitimizing the transportation agency's acquisition of substantially more territory than would normally be required for right-of-way, and in establishing complex, long-term agreements with the City of Pensacola for disposition of the land.

The Plan as a Flexible Guidance Instrument.

Formulating, adopting, and implementing the MURS plan proved particularly important. It has served as guidance instrument for both FDOT and the City for more than 25 years during which acquisition, road construction, and disposition has occurred. The plan has been flexible enough to absorb changes while keeping to basic objectives. Without the plan, its incorporation in the Pensacola zoning ordinance, and its continued support by City Council, re-use of the acquired lands would have been subject to ad hoc decision-making over this very extended period where institutional memory might have faded. Accomplishments within the I-l 10 corridor have met the objectives and many of the details in the MURS Plan.

Leadership and Continuity

Formal policy and an adopted plan were essential underpinnings. However, leadership and continuity by a few dedicated individuals within the governmental agencies were also critical in carrying this long process from plans to performance. Grover Rivers, FDOT's environmental chief introduced the idea to the city and maintained continuity through the planning process. Rick Dye acted as a bridge between the private sector and government during the crucial acquisition/construction process and helped pull the agencies and agreements together. Peter DeVries, as the City's Planning Director to 1992 supervised both planning and implementation

over the extended period and maintained liaison with the Planning Commission' and City Council. Betty Wilson, in FDOT's Office of Right of Way, has been responsible for disposition reviews since the lease to the City began. Other staff and elected officials also played important roles, but these few were the project principals over many years.

Lund Banking for the Community

Pensacola's I-110 may be the most extensive example of land banking for public and community facilities in association with highway development. Although not initially intended as such (the MURS planners thought the public and private re-uses would materialize in the short-term future), that is one item of achievement. The long-term, low cost lease arrangements between Pensacola and FDOT give the City two or three generations in which to determine end uses ÐÐ and land not yet earmarked for specific facilities and services will be there, in a strategic downtown location, for conversion when needs arise.

Role of the Federal Government

The Federal Government, from both policy and a financial standpoints played highly important roles in the I-l IO Corridor. Indeed, Federal support was so crucial to what has been achieved, that it is highly unlikely ÐÐ given the present political climate favoring Federal disinvestment ÐÐ that many aspects of the Pensacola experience could now be replicated elsewhere. Here is the scorecard on Federal support.

- Highway design and financing: The Federal Government, utilizing its 90/10 formula provided most of the funds for the land acquisition and road construction. The elevated system, components of which were separated by considerable space was an expensive solution for the road itself. Dollar figures were not available, but background information indicates that construction closer to grade would have been considerably less costly. Nonetheless, FHWA concurred in the approach which the MURS plan recommended.

- City acquisition funds. The $1 million which the City of Pensacola elected to add to FDOT's funds, so that expanded acquisition of potential joint development land could occur, came directly from revenue-sharing funds provided by the U.S. Department of Housing and Urban Development. Other Federal funds were used in the rehabilitation and new housing activity within the neighborhoods most directly affected.

x

- Urban Development Action Grant: The UDAG program, now terminated, made the one major private sector project in the corridor happen. This was the hotel which complements and reinforces the attractions of the Civic Center, created on joint development land,

Disincentives to Private Investment

Although the MURS Plan called for private sector participation, methods chosen for implementation killed any serious entrepreneurial interest. Insecure tenure essentially eliminated prospects for financing improvements, and review procedures were both cumbersome and lengthy. Yet it is important to note that the market for private re-use of joint development sites has just not been there. Pensacola ÐÐ like other cities with modest growth prospects ÐÐ offers multiple opportunities for properly zoned and competitively priced development sites with the advantage of expressway access -- and far less government control than on joint development land.

Persons Interviewed

City of Pensacola

Leo Doidge, Director of Planning
Peter DeVries, Former Director of Planning
Jenifer Fleming, Director, Community Renewal Agency
William Vickery, Director of Parks and Recreation

Florida Department of Transportation

Betty Wilson, Office of Right-of-Way, Chipley Region

AMSouth Bank

A. Rick Dye, Vice President, former City I-110 Coordinator

Pensacola Area Chamber of Commerce

Frank M. Tambarino, Senior Vice-President for Economic Development

Loaves and Fishes

Rick Humphreys, Executive Director

West Florida Regional Council

Nick Nichols, Chief of Graphics

Pensacola Grand Hotel

Nancy Halford, Manager

Local Business Executives

Dr. Keith Shearlock, Midtown Athletic Club
Frank Fabre, Fabre Engineering

Appendix Materials -- Pensacola Case Study

Washington State Case Study

Introduction

The consultants wish to thank staff of Washington DOT and the Seattle District, the State Attorney General's office, the Washington State Transportation Center, and several private consultants for their time, cooperation, for providing studies and materials, and the many contacts with people who contributed to this case study.

Washington State, and Seattle in particular, was originally chosen as a case study subject because of their national reputation as an innovator in the use of air space leasing, particularly in downtown Seattle. The focus of this case study is not one large project, but a review of several different programs with joint development elements. The joint development programs include the New Partners: Public Private Initiative, the air rights leasing program, the joint development of rest areas, and the transportation facilities public/public efforts. The case study concludes with a discussion of an emerging area for joint development: the accommodation of telecommunications utilities in highway rights of way, or on highway property for a fee.

Joint Development Experience

Public Private Initiatives - New Partners Program

The New Partners Program is one of several joint development initiatives that Washington State DOT has undertaken. Of the different initiatives discussed in this case study, it is the most visible as an "official" and deliberate joint development policy and program, and likely the only one of which the public is aware. By several counts, it has also had the most mixed degree of success. The program has faced considerable political and public controversy and opposition. The program as it began was rather remarkable for its departure from convention as well as its ambitious scope. It ultimately remains remarkable in the political and public response that essentially prevented it from realizing those initial ambitions.

The New Partners program is run through the WSDOT department of Economic Development. The program's origins date back to 1991, when the Washington State Transportation Policy Plan Subcommittee on Public Private Partnerships was formed to study the state's role in public private ventures to finance transportation improvements. The larger context of this initiative has been cited as the combination of funding shortfalls and growing transportation needs in the state.

The stated goal of the program was to "have the private sector fund otherwise unfunded state transportation projects, to be repaid with user fees or tolls." The subcommittee performed a background policy study 1991 that defined the range of methods that have been used in the US and Washington State to fund capital improvement projects. The study also identified associated implementation issues, and examined present options and opportunities to increase the use of privatization. The full range of potential approaches is illustrated on the following pages in Figure 1 and Figure 3 from the policy study. Three main techniques were identified:

- value capture
- public/private agreements, and
- service contracts

The role of the state was identified as potentially ranging from: passive, regulatory, incentive provider, broker, facilitator, or developer. Policy recommendations that focused on how the state could "formalize and expand its leadership role in promoting public and private partnerships" included the following:

> Minimize legal and regulatory barriers to private participation in owning, planning, financing, building, maintaining, and managing transportation facilities and services;
>
> Encourage state and local government to remove barriers to private investment in transportation;
>
> Continue efforts to increase private sector involvement in transportation where practical and in the public interest; and
>
> Encourage joint public/private initiatives for financing transportation facilities and operations.

By 1992 and through 1993 a second subcommittee was preparing a report that developed a legal, regulatory, and administrative framework for public/private partnerships. This study developed key policy recommendations as follows:

> The legislature should authorize a program to allow WSDOT to pursue and implement public/private initiatives for transportation capital improvements
>
> A revolving loan fund within the Motor Vehicle Fund should be established to take advantage of transportation partnership provisions and funding opportunities identified in ISTEA.
>
> The use of community redevelopment financing should be encouraged as a means of increasing private sector investment in the state's transportation system.

This work culminated in the drafting and passage of just such legislation. Substitute House Bill 1006, "An Act Relating to Public Initiatives in Transportation" was passed unanimously in May of 1993. The

law established six primary legislative goals:

1. Provide benefits to both the public and private sectors.
2. Provide a sound economic investment opportunity for the private sector.
3. Provide the state with increased access to project development and financing opportunities.
4. Supplement the state's transportation revenues, allowing the state to use its limited resources for other needed projects.
5. Encourage and promote business and employment opportunities for Washington State Citizens.
6. Implement the program in cooperation and consultation with local jurisdictions of the state.

The legislation authorized DOT to solicit proposals and develop up to six demonstration projects. In mid 1993 the New Partners Advisory Committee was convened to develop the solicitation procedures, evaluation criteria for programs and proposals, and establish procedures for program development and evaluation. A formal Request for Proposals (RFP) was developed. In 1994 a companion legislation 'piece was drafted and passed. HB2909 established financing mechanisms for the potential New Partners Program projects. This law recognizes potential state financial participation in the form of loans, loan guarantees, user charge guarantees, etc. The law also authorized $25 million in long-terms bonds, and the creation of a transportation revolving loan account within the transportation fund.

The partnership legislation stipulates that facilities that would be developed would be owned by the private sector during construction, and then turned over to the state, and leased back to the private sector for operation, for up to a period of fifty years. Although a maximum rate of return would be established for each project, the law allows user fees or tolls to be charged after that rate is reached, to be used for maintenance, operations, and to be shared with affected local jurisdictions. Separately, it also states that excess funds may provide financial benefits to affected jurisdictions+ The law states that through the projects the state will be reimbursed for services such as planning, environmental studies undertaken for the project, project review, design, engineering, construction management, maintenance and law enforcement. WSDOT authority that can be used in a project includes: rights of way, airspace, real property, exercise of eminent domain, development rights, permits, protection from competition, default remedies, etc.

The RFP was unique in that it did not identify specific projects to be developed by partnerships, rather, the RFP outlined the program and its goals and allowed teams to research solutions and proposed projects that they conceptualized. The RFP states: "The law gives private entities latitude to propose any transportation related capital improvement, including but not limited to the design, financing, construction, and operation of highways, roads, bridges, vehicles and equipment, marine-system

facilities and vessels, park-and-ride lots, transit stations, and equipment and transportation management systems." The program staff noted that they wanted the private sector to bring unique and innovative solutions to long-standing transportation problems in the state. It was felt that by going outside of the internalized DOT planning process, the private sector could better choose what projects would be suited to the level of capital and risk that they would bring to the partnership, and better structure the financing approaches that would still confer both public and private benefits.

In response to the RFP, companies formed teams (or consortiums) that spent a great deal of time researching the state's transportation plans and needs, and then conceived projects with profit potential for the team. Although the RFP generated international interest, and several hundred were sent out, the scope of research needed for a response, and a $35,000 submission fee, ensured that only serious contenders submitted proposals. Fourteen conceptual project proposals were submitted (by eleven teams) to WSDOT in May of 1994. Proposals ranged from improvements to existing facilities, additions to facilities such as bridge expansion, parking and an interchange, entirely new facilities such as a new bridge, ferry service, or personal rapid transit. They were categorized as follows by the evaluation committee: Transit related, Transit System, Highway Related, Transportation Demand Management, and Bridge Related.

The projects were evaluated and ranked on four major criteria: qualifications of the proposer, project characteristics, community acceptability, (all equally weighted at 30% each), and on state benefits (weighted at 10%). The state selected the top six projects and proceeded with negotiating developer agreements with the teams. One of the projects was dropped in this initial negotiation phase.

At this point, (1995) public opposition to the use of tolls and user fees in general and the selected projects in particular was expressed in growing strength. At the same time the state legislature changed to a Republican majority after a decade of Democratic majority. In the 1995 session, the legislature changed the public/private partnership legislation to accommodate public input prior to the negotiation stage of development. The change sought to allow communities affected by new project to vote on whether the project should go forward. For projects that has already come through the process, citizens who opposed a project have to submit 5,000 names on a petition in order to initiate the process to conduct an advisory vote on the project. Before the vote, DOT has to do traffic and economic studies to determine the impact of the user fees or tolls: who will be affected, and who can vote on the project. Other new projects would be subject to an expanded public involvement and approval process before entering the planning stage.

Of the original group of six that were chosen and the five that went forward into negotiation, two projects are *now* moving ahead and are still in agreement negotiations.

SR16 and Tacoma Narrows Bridge Improvements. This project includes several potential options (either alone or together) to increase and improve capacity on SR16 and the bridge: a new bridge with tolls parallel to the existing bridge, an additional level added to the existing bridge, transportation demand management techniques (including tolls or congestion pricing) on the existing bridge, completion of High Occupancy Vehicle (HOV) lanes to SR16 from Interstate 5 to Gig Harbor. At this point a complete environmental review that would fully explore all development options is now being conducted.

King County Park and Ride lots. This is a county wide program at twenty-three sites to increase parking capacity and provide commuter amenities for the Metro transit system (bus). Most sites will add a second level of parking, and commercial or retail shops. In most cases no new land will be acquired, but rather existing space will be maximized. Currently the sites offer free parking, but user fees will likely be added in the new facilities, unless retail leases alone can produce sufficient revenues.

WSDOT staff outside of the Economic Development Department have been quite critical of the New Partners Program and its apparent failure. To some it is seen as a good idea gone wrong, either by the selection of projects, or the handling of early public involvement. While some feel that the public is being foolish and short sighted, others are more critical of what has been characterized as policy leaders who were out of touch with the public's apparent unwillingness to pay tolls for benefits that have always perceived to have been free.

. Air Rights Leasing

The use of air rights leasing as a joint development mechanism by WSDOT predates the New Partners Program by at least a decade. The use or air rights became common during Seattle's big building boom of the late 1970's and early 1980's. During the 1980's the market became overbuilt, so air rights development in downtown has slowed considerably. Lately WSDOT has focused its energy on telecommunications utility accommodation issues, which is discussed elsewhere in this study as a separate topic.

Rather than a formal program or policy, the use of air rights leasing is characterized as a tool to

maximize resources, and respond to unique and challenging development situations. Air rights is seen as the tool to use in situations where there are existing facilities, joint development is used before facilities are built or as they are (co) developed. The department has now formalized the use of air space leasing and has developed a policy for its application. This is embodied by the Airspace Agreement Manual. The manual is a "who should do what" guide, and states the following as goals of airspace leasing:

- *integrate* highways into communities - consistent manner with local objectives
- reduce highway impact on adjacent properties
- enhance and protect transportation corridor and environment
- increase local tax base -- return leased row to tax rolls
- increase return on public investment -- generate rent, reduce maintenance costs, conserve land.

x

x The successful application of airspace leasing is best illustrated by a series of projects that have occurred in downtown Seattle, in the dense I-5 corridor from James Street to Olive Way. The air rights program has garnered attention from around the country to the extent that the department developed a video in 1993 that illustrated many of these projects in downtown Seattle,

x

x Development Over Air Rights

x

x Convention Center - four acres between University and Pike. Rights were valued by an appraiser. It was deemed that since the site actually had a low net value, that rent would be offset by value of improvements, and the lease actually does not produce any income for DOT. (Because decking over highways is always expensive, this seems like a potentially common pitfall of air rights deals.) The convention center has been a tremendous success and there is now talk of expansion. The expansion will not involve any DOT ROW's but this may provide an opportunity to renegotiate the lease, from which they still do not get any income.

x

x Federal Courthouse Annex - The **GSA was** considering a site that would use air rights over the freeway adjacent to the existing federal courthouse, between Madison and Spring Street. It was subsequently deemed an unsuitable site for a number of reasons. Among the concerns is security and proximity to highways or parking garages, in light of the Oklahoma City incident. It was noted that another potential pitfall in this particular use of air rights is the federal regulation regarding fee title requirements for the siting of federal facilities.

x

x *Transfer **of** Development Rights (TDR)*

x

x Metropolitan Park II - This project involved the transfer of buildable floor area (FAR) from a DOT-owned vest pocket park to an adjacent parcel. The transfer yielded a FAR bonus of 75,000 square feet for the office tower that was developed on the adjacent site, and rent of about $40,000 a year on the lease.

x

x ***Ground*** *Lease* ***of*** *Excess Land*

x

x Gateway Towers - DOT had owned about 3/4 ths of a block, and the remaining portion was privately owned. They ended up leasing their portion to a developer to build a large office tower. This building is now owned by the city. City of Seattle has simply assumed the lease and pays rent to DOT. However, they made an initial concession on rent that was related to market' at the time. Because the market was soft and the building did not get the occupancy they thought they would, DOT ended up recognizing some of the tunnel construction as a rent credit.

x

x This kind of concession had to be very strongly justified before even broached with either the tenant or land holder. It was feared that subsequent audits of the lease arrangement and concession would have second guessed the value of the concession. It was actually highly unusual that they would OK this kind of arrangement with an auditor beforehand, but in this case, those who were negotiating the lease wanted to be careful because this was one of the first of its kind for DOT. They felt that if the deal were later called into question it would send a bad precedent and send a bad message for future deals and potential funders and partners. The concession was in part a response to the overbuilt market, they wanted to show good faith and a willingness to work with developers to make a project work, even though market conditions could be less than ideal. The bottom line is that the market turned weak, and capital improvements were seen as a credit towards rent for a certain period of time to help make the deal work. The rent concession eventually ran out and now the new owner, the city pays the full ground lease rent to DOT.

x

x *Excess Right* ***of Way*** *Lease*

x

x Metro Bus Tunnel staging area is on leased I-5 row. This is a rent-free lease since the department decided that the project increased the efficiency of the highway. In the lease agreement, the department retained the air rights, reserving them for potential future development. Since it is just a staging area,

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' A background note on the real estate market: In 1989 the city passed an ordinance limiting the height of office towers, as well as the overall amount of office space that can be built in a given year. (The ordinance is referred to as "CAP" the Citizen's Alternative Plan). This had the effect of rushing to construction every tower that had already gotten approval. Otherwise the towers would not likely have all been built at the same time. The' result was a glut of office space and an over built market for a number of years. The value of office tower dropped, eventually to the point where the city purchased Gateway Tower for a fraction of its value when built.

and no real structures have been built on the land, DOT feels that the future potential for further air rights development has been essentially retained with this lease.

x

x *Parking Under Highway Structures*

x

x James Street Bridge - at the time the Seattle Air Space Video was made it was thought that a second level (by constructing a deck) of parking under a highway bridge could be build. The demand did not materialize, but with future construction of a second domed stadium in downtown, there may be intensive parking demand in the future. It was noted that parking is a favored use of excess ROW (or air) space since it is easily interruptable or adaptable in case DOT needs change. It was noted that construction staging areas are becoming increasingly scarce downtown. This could represent yet another source of (reversible) demand for excess ROW and space under highways.

x

x *Jointly Developed Amenities*

x

x Freeway Park - 3½ acres (mostly on a bridge over freeway between Seneca and Union Streets) This was originally conceived as a pedestrian bridge to a parking garage, ended up landscaping the roof of the garage as well. (This is regarded as a federal demonstration project, not characteristic of federally eligible projects.)

x

x Pigott Corridor - This is a barrier free pedestrian connection across a freeway, between uphill residential areas, downtown and the convention center. (This is not in the right-of-way, but is seen as an impact mitigator, and is part of the Convention Center Lease.)

Joint Development of Highway Rest Areas

There is an expanded discussion of the joint development of highway rest areas in the Iowa Case Study found elsewhere in this report This case study briefly covers Washington State's jointly developed rest area in Prosser, Washington.

The Prosser Rest Area

This is the first partnership rest area to be developed in Washington State. The project was recognized by the FHWA with an award for innovative financing. The development plan began in 1988 -- opened in 1990. The public rest area lies outside the I-82 right of way, serves both directions of traffic, and did

not use any federal dollars.

There were three main partners, the City of Prosser, Washington, WSDOT, and the Prosser Land Development Corporation. The Prosser Land Development Company donated 3.2 acres of land for the rest stop, and offered to operate the rest area under lease, and provide maintenance for 13 years without cost if the state could advance its construction schedule. The City of Prosser paid for the frontage road to the rest stop, and provided sewage and water service to the site at no cost. WSDOT spent $600,000 to advance their construction schedule, otherwise the rest area would not have been built for another 20 years. They saved an equivalent amount on the maintenance agreement for the life of the lease. It was paid for through cost savings.

This project was successful in part because all of the players were highly motivated. The rest area and its commercial portion have produced and estimated 60 jobs, and more facilities have been added to the commercial side. Based on the successful joint development of the Prosser rest area, the department has developed a larger draft policy for the joint development of rest areas statewide.

The developments are seen as those which are supported in some manner by one or more private or public partners as cooperative partners rather than legal partnerships. The goal of the program is to get needed facilities on line at reduced costs. The DOT districts were asked to help develop a "Statewide Rest Area Priority List." District Administrators are charged with preparing rest area needs lists for their districts. All of the needs are prioritized on several criteria Districts can then appoint people to explore deals, and involve HQ in potential partnership opportunities. The state would prefer that the statewide review be complete prior to responding to outside proposals or those who approach the department about deals (for sites not on the list.)

Detailed rules were developed to guide the process as follows:

Commercial partnership rest areas have to be outside limited access lines

Non-commercial areas (with prior FHWA approval) may be located within limited access.

Rest areas (both on the interstate or not on the interstate) should be at least an hours drive from another rest area.

Some of the stated "rules" are essentially planning guidelines:

Consider impact on existing facilities, give existing facilities an opportunity to submit bids or become tenants in rest area

Coordinate with local planning bodies -- identify issues, in line with their plan and goals, public

participation, etc.
Consider compatibility with public funding.

Some of the rules are methods of evaluating the partnership:
Coordinate with District Real Estate Services Supervisor and Assistant Attorney General.
Evaluate terms of the agreement: i.e. upfront contributions versus future contributions
Feasibility of continuing service provider
Incentive for private sector to continue service
Secure the maintenance commitment
Strengthening partnership with more partners (public and private)
Appraise partner's contribution

As the policy is still in draft form, and the statewide plan is in development, some significant issues remain. Ownership issues still need to be resolved. Will rest areas be publicly owned and leased to the private partner, will private ownership be allowed with the department paying for public accommodation/access, or would there be a lease/purchase plan either to transfer privately developed facilities to the public sector, or publicly developed improvements to private ownership? Other issues such as how to best structure maintenance agreements, the ability to dissolve a partnership in the case of private sector default on maintenance, and how liability is to be shared among partners, still remain.

Staff noted that the statewide plan and policy development still faces opposition from DOT districts. From central DOT's perspective, the adoption of an over-arching policy is seen as a way to ensure that the state gets the best possible deal. However, DOT districts are not happy with the degree of control the "headquarters" will have over their "deals". Ultimately, this "power struggle" may prevent the policy on jointly developing rest areas from being adopted in the state. Without a statewide plan and policy in place it is feared that DOT and the districts will always be in a reactive role to private sector proposals. WSDOT would prefer to play a more proactive role in the process.

Public/Public Partnerships

Although they rarely involve the private sector, public/public partnerships can employ the same techniques as "externally directed" joint development projects. It can be argued that DOT's who systematically pursue internal public/public joint development would in theory be more adept at public/private joint development. Additionally, there are significant savings to be realized within both capital and operating budgets-

WSDOT Capital Facilities

The Capital Facilities department of WSDOT[2] has begun to implement principles of joint development such as co-location and the development of shared facilities. For Capital Facilities, the drive behind joint development arose from the desire to maximize resources. Since most of their systems and processes involve highways and the use of real estate, joint development plays a role. Capital Facilities has an estimated 600 buildings on 400 sites, and has equipment in 38 of the 39 counties in the State of Washington.

Potential public partners were identified through knowing how various state agencies are funded and what they do, fostering an open communication process with agency staff, and informal networking with known players in local areas. Ultimately, the departments that were found to be the most appropriate and effective partners, were those who use similar types of facilities, have similar geographic reach, and are funded in the same way as WSDOT. A primary partner is the Washington State Patrol (WSP). Both are funded not by appropriations, but by the Motor Vehicle Fund, a revolving fund from gas taxes and vehicle licensing.

Other savings opportunities have grown out of joint development efforts. At times the desire to maximize the use of resources has resulted in no less than a "process re-engineering." An example is how DOT now replaces tires on its vehicles. Previously, WSDOT maintenance shops around the state kept approximately one million dollars worth of tires on hand for this task. When examining the collective demand for real estate needed to store the tires, it was evident that by contracting out tire replacement with an external vendor, capital facilities could fee up significant space. in addition, fewer maintenance staff are needed, and equipment funds no longer need to be tied up in "inventory." The desire to maximize real estate facilities resulting in a complete restructuring of tire-related purchasing and servicing.

WSDOT, WSP, and the Department of Licensing (DOL) are now partnering on vehicle inspection, maintenance and

[2] Capital facilities includes all support buildings for DOT (office, shops, materials), all of the equipment, and the radio system for communication between functions and activities. For example, DOT has over 120 gas pumps to fuel its vehicles.

washing, fuel systems, and radio facilities around the state. Where appropriate, local public uses for counties are also being considered on jointly developed sites. The shared radio transmitters are also well suited for accommodating cell phone dishes and transmitter for telecommunications companies. In some instances (Walla Walla) there are several separate facilities on a shared site, at others (Bellingham) the WSP and WSDOT share offices in the same building. At some sites the full range of co-location amounts to the reservation of parcels for future users whose timing for capital planning may not match DOT's. On one project the local community college will eventually co-location a vocational technology training center with WSDOT's vehicle facilities.

in Thurston County a co-location project involves thirteen sites on five acres of land. The users include WSDOT, the Department of Natural Resources (DNR), Washington State Patrol (WSP), the General Administration (GA), and local emergency management functions. When there are this many partners the planning is complex. Each department will lay out each department function on a matrix to determine where needs overlap. For a project of this magnitude to work well for the partners, the timing must be right. The systematic assessment of capital needs and planning is a pre-requisite. Many departments are now replacing old and functionally obsolete facilities. Some have found the need to consolidate to be acute, since land has become much more valuable since their last capital project. The Thurston County project will save an estimated $60 million in infrastructure and operating costs. Co-location has now been formally adopted as part of the capital budget process. Several pages in the appendix show an inventory of facility co-locations and participating agencies.

Conclusions

As is evident by the number of different approaches to joint development now active in Washington State, staff noted that the concept of "partnerships" is a priority throughout the department and in the districts. In some ways it is felt that this enthusiasm can leads to the desire to enter into partnerships just for the sake of forming partnerships. WSDOT is concerned that too strong a desire to partner does not necessarily lead to the best of possible deals for the state. As mentioned in reference to the joint development of rest areas, there an ideological split between the desire to maintain control in the central headquarters, versus having control over deals be in the districts. Currently, it is felt that this is enough of a split that it may actually be the key obstacle in adopting a full set of policies and procedures for joint development partnerships, especially as they related to emerging areas such as utility accommodation and rest areas.

On a more positive note, it is clear that throughout the various sections and departments of WSDOT it is recognized that joint development in all of its different incarnations is hallmark of good management and good business. There is a real recognition of the value of partnerships and the desire to do them well is genuine. As is perhaps true in of DOT's, and at the federal level as well, the statutes and policies that guide agency process and practice severely lag changing realities and funding situations. To the extent that states can overcome this lag by effectively updating statutes and policies, they can effectively implement new approaches and maximize opportunities in the changing market place. To the extent that individual departments or functions, such as airspace leasing in WSDOT, are given the flexibility to be innovative and flexible, implementation can work.

However, at the opposite end of the spectrum is the New Partners Program. Ultimately its failure is seen as a good program gone wrong. Perhaps there was too much flexibility given to the private sector in conceiving projects, or in

the ultimate choice of projects. Public and political opposition crystallized when it was thought that the department had gone too far in allowing the private sector to provide public improvements.

Appendix Materials - Washington State and Seattle Case **Study-**

New Partners Program Summaries
WSDOT Co-Location Project Inventories

People Interviewed:

Anderson, Dick. Seattle District WSDOT.
Brooks, Rhonda. Manager Public Private Initiatives Program, WSDOT.
Cal, Frances. Seattle District Property Management and Relocation, WSDOT.
DeBolt, H. Fred. Equipment and Facilities Administrator, WSDOT.
Dues, William. Seattle District, WSDOT.
Malsch, Dave. Seattle District, WSDOT.
Nightingale, Patricia. Assistant Attorney General, State of Washington.
Peters, Robert. Airspace and Rental Manager, WSDOT.

SAN DIEGO CASE STUDY ON JOINT DEVELOPMENT

Joint Development Through Transit Station Area Development, Highway Airspace Leasing Program and Privatized Transportation Facilities

INTRODUCTION

The San Diego case study evolved through the series of interviews and document reviews into an investigation of three categories of joint development occurring in the San Diego area. These are: (1) light rail transit station area development; (2) California Department of Transportation (Caltrans) highway airspace leasing program; and (3) privatized transportation facilities. Developer exactions through special assessment and other techniques are often required to accomplish to accomplish joint development. However, developer exactions, per se, do not constitute joint development as defined in this study, and are discussed here only as they are relevant to the specific case study projects described. Successful projects under the first two categories of joint development have been occurring since the 1980's but have slowed since 1990 with the recession and have proceeded at a slow pace. Other factors, such as the 1993 earthquake in southern California, have affected Caltrans' airspace leasing program, which is discussed below. The third category, privatized transportation facility projects, is a more recent, and currently proceeding in southern California as a demonstration project pursuant to state legislation.

LIGHT RAIL TRANSIT JOINT DEVELOPMENT

The prime mover behind joint development in light rail transit ("LRT") is the San Diego Metropolitan Transit Development Board (MTDB). The MTDB was created by the California State Legislature in 1975 and given the power to plan, construct and operate mass transit guideways and to perform near-term planning. During the MTDB's first ten years, the agency was known primarily as a guideway development organization. It planned, designed and constructed the 16-mile LRT line between Centre City, San Diego and the International Border (Tijuana) in San Ysidro, and later the 4.5 mile leg of the eastern extension, which runs from Centre City to Euclid Avenue. The agency has now evolved into an umbrella organization that has broad transit development, planning, programming and financing powers. The MTDB controls various operational units which operate the transit services. The system has been officially named the Metropolitan Transit System (MTS). The MTS consists of six fixed-route bus carriers, one light rail transit (LRT) operator, and four general purpose dial-a-rides. Revenue service on the south line was initiated by the LRT system in 1981 and on the East Line in March, 1986. Another 11.5 miles of LRT service was added to the East Line in 1989.

With the development of the light rail system, consideration was given to the potential for joint development at station sites. In 1983, when the possibility of joint development at station sites was considered, this was a new concept for southern California. Developers traditionally had viewed San Diego public transit as either a neutral or detrimental factor in their project siting. In particular, they were reluctant to engage in partnerships with the public sector because of their perception of the uncertainties and delays in getting projects implemented through the city.

The MTDB proceeded slowly with joint development and, after retaining the necessary expertise, was successful in concluding two joint development projects which are briefly described below.

MTS/James R. Mills Building[1]

This building is located at the southeastern edge of San Diego at the juncture of the South and East trolley lines. The ten-story 180,000 square foot building contains the administrative offices of MTDB and San Diego Trolley, Inc., a wholly-owned subsidiary of MTDB. The major tenant is the County of San Diego, which occupies 130,000 square feet. The building sits on a 2.65 acre site which was acquired by MTDB in 1983. MTDB's goal was to have an administrative office building of approximately 40,000 square feet, and, at the same time to construct additional office space for private occupancy, along with ground floor retail uses to serve the office building and transit patrons. In 1985, MTDB issued a Request for Qualifications (RFQ) to identify qualified developers. MTDB's broader goals were to create a distinctive structure at a major transit transfer point which would enhance the economic development potential of the surrounding area and, most importantly, promote transit ridership at the station transfer site. The RFQ project description proposed a long-term land lease to the developer, with the developer being responsible for the design, financing, construction and operation of the facility. MTDB would enter into a long-term lease with the option to purchase. The project ultimately doubled in size, with the office tower fixed at 180,000 square feet and ten stories. The building was situated over the light rail trolley transfer station with three tracks running through the building. The ground floor was dedicated to retail uses, serving both transit patrons and building occupants with a restaurant, convenience store and financial institution.

Financing Mechanism.

The mechanism chosen to implement the financing for the project was a Joint Exercise of Powers Agreement between the MTDB and the County, creating the San Diego Regional Building Authority. California law allows such a joint powers agency to issue lease revenue bonds which are tax exempt. The bonds were secured by a lease of the facility from the Authority to the County of San Diego. The County, in turn, subleased the top two floors of the building to the MTDB for office space and ground floor for retail. The MTDB leased its underlying land to the Building Authority. Revenue from the ground lease and the retail ground floor lease went to the MTDB to offset its sublease (debt retirement) costs. The Building Authority issued $43.6 million in short-term variable-rate bonds, with the flexibility to convert the bonds to fixed-rate bonds during the life of the project.

Ultimate *Disposition* of *Tile to Structures.*

The project was structured so that after 30 years, title to the office building reverts to the MTDB. The County remains as a tenant for up to a 99-year lease based solely upon payment of its portion of the ground rent to MTDB. The parking structure and the underlying land will revert to both the County and MTDB on the basis of their proportionate shares of payment for that facility (approximately 80/20 percent). (see ***Diagram*** of ***Project on Following Page.)***

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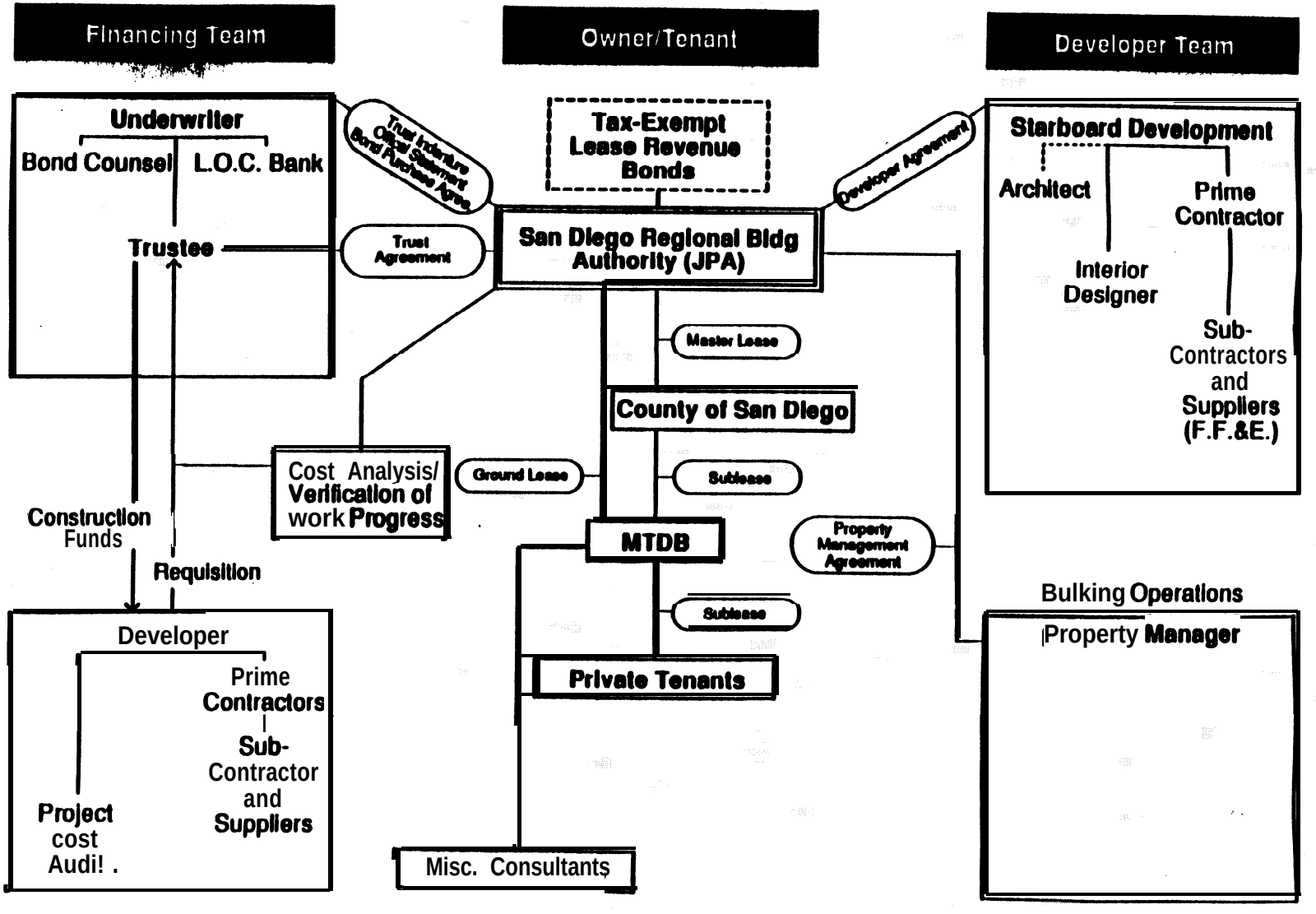
[1] Summary based upon interview conducted on April 3, 1996, with Jack Limber, General Counsel, San Diego Metropolitan Transit Development Board; paper by Jack Limber, "Public/Private Joint Development Partnership San Diego MTS/James R. Mills Building Project: Success Through Self-Fulfilling Prophecy." (Undated).

MTS TOWER PROJECT



Lessons*Learned.*

According to the general counsel for the MTDB, the following are some of the lessons that were learned from the joint development process.

1. Choosing a qualified developer is more important than a detailed financial analysis of any preliminary proposal, unless the scope of the project is fully defined before starting the RFP process,

2. Establish realistic project budget and schedule, recognizing the need for changes and build in adequate contingencies for those changes.

America Plaza Building[2]

This 34-story building is downtown San Diego's tallest office building, located a few blocks from the waterfront and adjacent to the Santa Fe depot, train terminal serving Amtrac and future commuter rail service. The America Plaza Transfer Station runs through the building. The building has ground floor retail shops which open onto the station platform and the Museum of Contemporary Art/San Diego occupies the 10,000 square foot building on the western side of the trolley station. This was the MTDB's second joint development project.

In 1989, the Redevelopment Agency of the City of San Diego, Starboard Station, Inc. and Broadway-Kettner Associates entered into a Disposition and Development Agreement for the construction of the two-block mixed-use project. Starboard Development Corporation, based in San Diego, specialized and pioneered in the development of projects for the public sector. Broadway-Kettner Associates, Inc. is a subsidiary of Great American Development Co., specializing in commercial, industrial and residential real estate. Under the agreement, the developers agreed to construct the trolley station in accordance with plans and specifications approved by MTDB, and to undertake certain off-site track improvements.

The mixed-use components of the project are (1) a 34-story office building; (2) the San Diego Museum of Contemporary Art (10,000 sq. ft.); (3) specialty retail and restaurant space (17,000 sq. ft.), all opening onto the trolley station. (see ***Project Site Plan*** *on* ***following*** *page.)*

Financing Mechanism.

The MTDB contributed $1.2 million towards the construction of the trolley station, the typical cost of a downtown station. The developer contributed street improvements totaling $5 to $7 million. After Great American Savings Bank experienced financial difficulties in the early 1990s, the project was taken over by Shimizu Land Corporation, and was renamed America Plaza. The architectural design is by Helmut Jahn. There was an exaction required of the developer, namely, an extra $3.5

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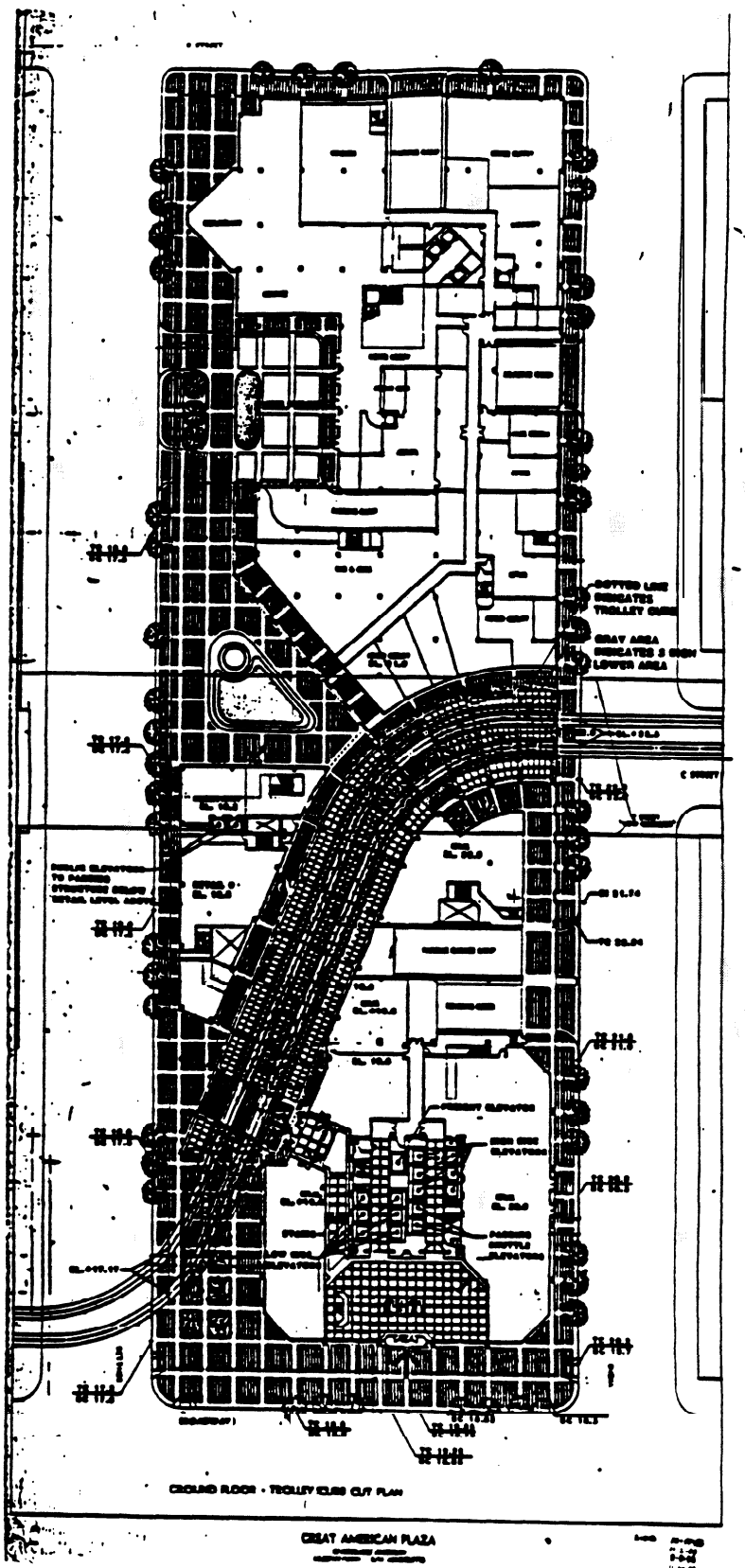
[2] Summary based upon interview conducted on April 3, 1996 with Jack Limber, General Counsel, San Diego Metropolitan Transit Development Board; paper by Robenhymer, "Innovative Design Strategies," (APTA 1992 Rapid Transit Conference: Designing Joint Development Opportunities Workshop: June 1992).

Site Plan



million to enhance the station and provide for an art museum. The exaction was negotiated, but the developer did not object.

Ownership Structure.

The MTDB retained ownership of the parcel upon which the trolley station sits. However, MTDB does not own the station walls and the ceiling. MTDB has maintenance responsibility only for the trolley parcel.

47th Street Trolley Station Child-Care Facility[3]

This station-area joint development project was made possible by the availability of excess land following MTDB's development of the trolley station. MTDB offered the property for a long-term lease. Independent of the MTDB's station development, the developer had acquired property adjacent to the trolley station with the intent of developing a 100-unit multi-family project. The developer made a joint-development proposal to the MTDB in which he proposed to construct 44 units and a child-care center on MTDB property. The MTDB agreed to the proposal and entered into a long-term lease with the developer.

Lease Arrangement.

Under the terms of the lease, the MTDB receives a percentage of the revenues from the 44 units on its property. The lease terms reflect market value for the property. The child-care facility is identified in the lease but is not subject to any increase in lease rates. MTDB receives no income from the operation of the child-care facility on its property.

Lessons Learned.

MTDB cites the following lessons learned from this project.

1. The private developer, to MTDB's surprise, considered the child-care facility an amenity that increased the value of the project.

2. The child-care facility was not included in the original 100-unit project, and was included only after the project was expanded to encompass the joint development of transit property. In other words, the child-care facility did not make economic sense without the joint development arrangement following the transit property. The joint development agreement allowed the developer to increase the number of units in the project which, in turn, made the child-care facility financially feasible,

[3] Summary based upon paper by Jim Bryant, "Child Care Facilities at MTDB Light Rail Stations," (APA National Conference: March 27, 1991).

MTDB Joint Development Policies and Organizational Capacity .

MTDB did not have a set of policies or objectives when it first started doing joint development in the early 1980s. It did, in 1984, issue a Policy and Procedures document -which states that joint use and development on MTDB rights-of-way should be carried out within the following criteria:

1. Projects shall be considered which do not negatively impact present or future public transportation facilities.

2. Projects shall be consistent with regional and local community policies and plans.

3. Projects must demonstrate a fiscal benefit to MTDB.

4. Selection between projects will be based on those which can demonstrate:

   a. The greatest economic development potential to MTDB and the community.

   b. Increased accessibility to public transportation.

   c. Responsiveness to community needs for housing, employment, services, or recreational facilities.

Notwithstanding this statement of policy from the MTDB, it is clear from interviews, that the agency has remained "opportunistic." Except for the first few projects, the MTDB does not issue RFPs, but gives developers a map and a brochure and tells them to put together a proposal. There is no standard agreement with developers. The agreements contain what is needed for each project. Developer incentives include expedited review, density bonuses, reduced parking requirements and early approvals.

The MTDB staff for joint development is small, consisting of the general counsel for the agency and one part-time planner.

Inter Agency Cooperation

Critical to the MTDB success is the role played by the Centre City Development Corporation (CCDC) which has the authority and financial resources to assemble land. For example in the case of the America Plaza Project, the CCDC assembled a block with the trolley as a key requirement. This gave the MTDB air rights for the station and trackage. The CCDC required the developer to build a station and canopy and keep them in repair and also include museum space in the lease with the museum.

The CCDC, in effect, functions as the planning department for the downtown and can provide one-stop permitting except for the building permit. The CCDC acts consistent with the zoning ordinance requirements. By having the authority to provide one-stop permitting, the CCDC can coordinate with the MTDB to structure a joint development project that is attractive to developer.

Also, as evidenced in the MTS/James R. Mills Building Project, because the MTDB has limited authority to issue bonds, it must set up a new "paper agency" through a statutorily authorized joint powers agreement. This paper agency can then issue the bonds needed for tax exempt financing.

MTDB Joint Development Procedures

The diagram on the following page summarizes the joint development proposal evaluation and implementation process established by the MTDB. In addition, the MTDB has the following checklist for evaluating joint development projects:

Joint Development Evaluation Checklist

1. Trolley Compatibility and Enhancement

   - Will the project increase transit ridership? .
   - Will the project enhance Trolley or freight operation, including rider access?

2. Jurisdictional (City/County) Acceptance and Support

   - Is the project consistent with approved City/County policies and plans?

3. Parking and Traffic Circulation

   - Will the project include adequate parking for project patrons based on local parking requirements for the proposed uses?
   - Will the project provide adequate parking for its patrons as well as Trolley users?
   - Will the traffic impacts caused by the project be mitigated by the proposer?

4. Environmental Impact

   - Will the proposer mitigate any and all significant adverse air, noise or other environmental impacts?

5. Aesthetic Compatibility

   - Will the project have a positive aesthetic impact on the Trolley station and on the surrounding neighborhood?
   - Will the project enhance existing landscaping or street furniture'?

6. Community Acceptance and Support

   - Is the project likely to be supported by the community?

- Will the project meet community needs by providing needed housing, jobs, s&vices, facilities, etc.?

7. Financial Viability

- Does a preliminary financial analysis show that project implementation can be successfully financed?
- Does the project include a budget and program for project and Trolley promotion?
- Does the proposer have a commitment from one or more financial institutions to back the project?
- Will the project financially benefit MTDB?
- Will the project financially benefit the community (e.g., jobs, redevelopment, taxes)?
- Can the facility be easily kept productive if the original proposer goes bankrupt or otherwise quits the project?

8. Construction Coordination and Timing

- Is project construction coordinated with construction and operation of Trolley facilities?

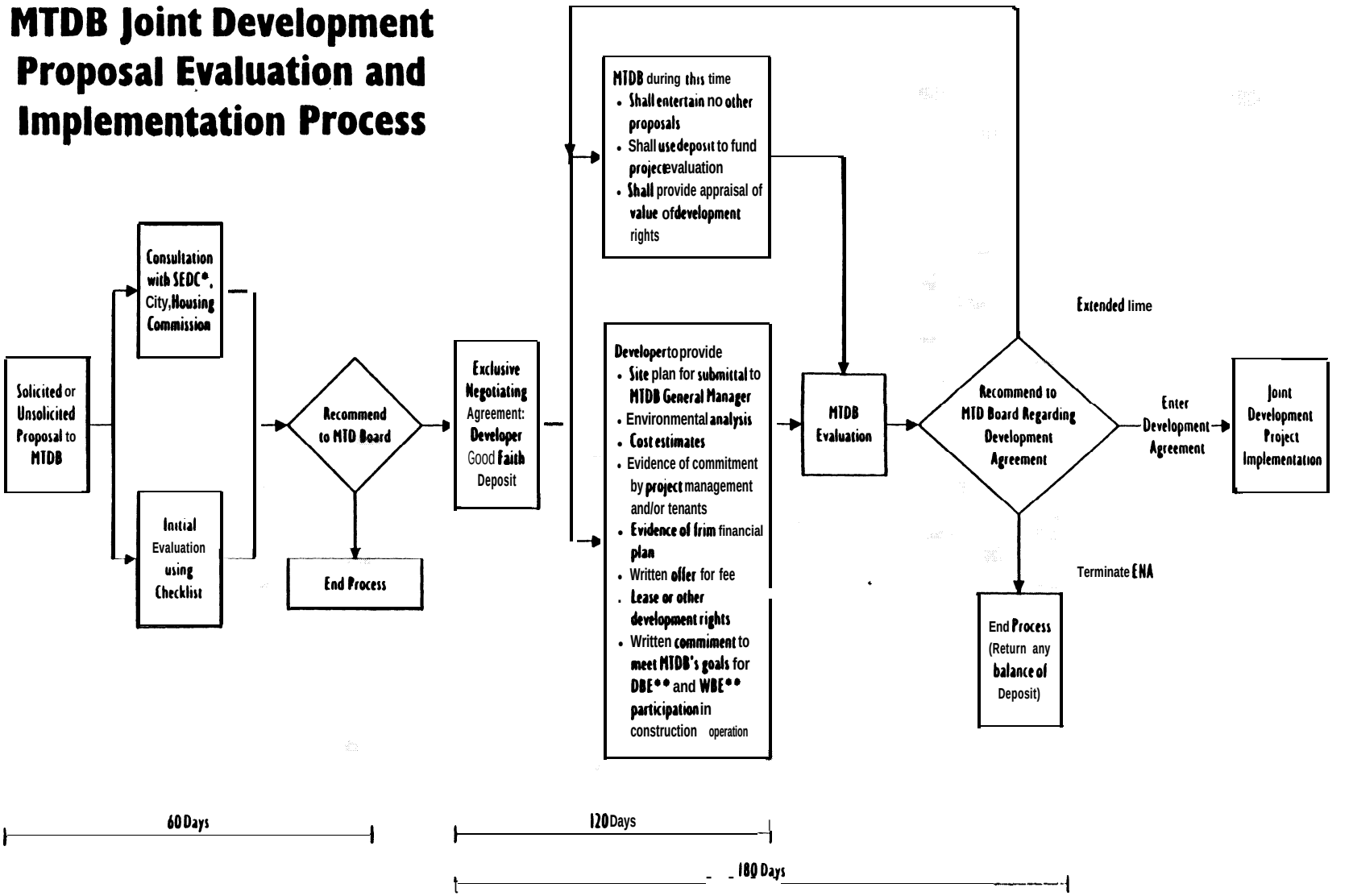
9. Security

- Does the project proposal include a plan for providing adequate security for project and Trolley patrons and facilities?

10 Applicant Qualifications

- Does the proposer exhibit the skill and capability required to successfully carry out the proposed project?
- Is the proposer a Minority Business Enterprise (MBE), a Disadvantaged Business. Enterprise (DBE) or a Women Business Enterprise (WBE)?

MTDB Joint Development Proposal Evaluation and Implementation Process



- SEDC: Southeast Economic Development Corporation
- DBE: Disadvantaged Business Enterprise
- WBE: Women's Business Enterprise

General Lessons Learned from MTDB Joint Development Experience

According to MTDB, there are four key lessons that have been learned from their joint development projects. These may be summarized as follows:

1. It is important to have realistic expectations of station site joint development potential.
2. The agency must have a strong public policy commitment.
3. The agency must demonstrate the benefits of joint development to the private sector.
4. Smaller-scale joint development projects have cumulative benefits.

Realistic Expectations of Station Site Joint Development Potential.

There are many determinants of station site joint development potential, For example, the station environs can help or hinder joint development potential. The station environs must be taken into account. Also, the physical constraints of the potential development site can affect development potential. Lastly, it is important to consider the potential for a combined development with land adjacent to station sites and owned by others. This is particularly important in San Diego where the amount of excess developable station site land is often small.

Strong Public Policy Commitment to Joint Development.

The public policy makers must aggressively seek opportunities for station site joint development if it is going to happen. Initiatives must occur early and often. An example of this approach is the publication by the MTDB of joint development project sites that are available for developers who may be interested. (see *document on following page.)* According to the general counsel for the MTDB, the agency tries to find a developer with a good idea and then get a project as big as possible.

Demonstration of Benefits of Joint Development to the Private Sector,

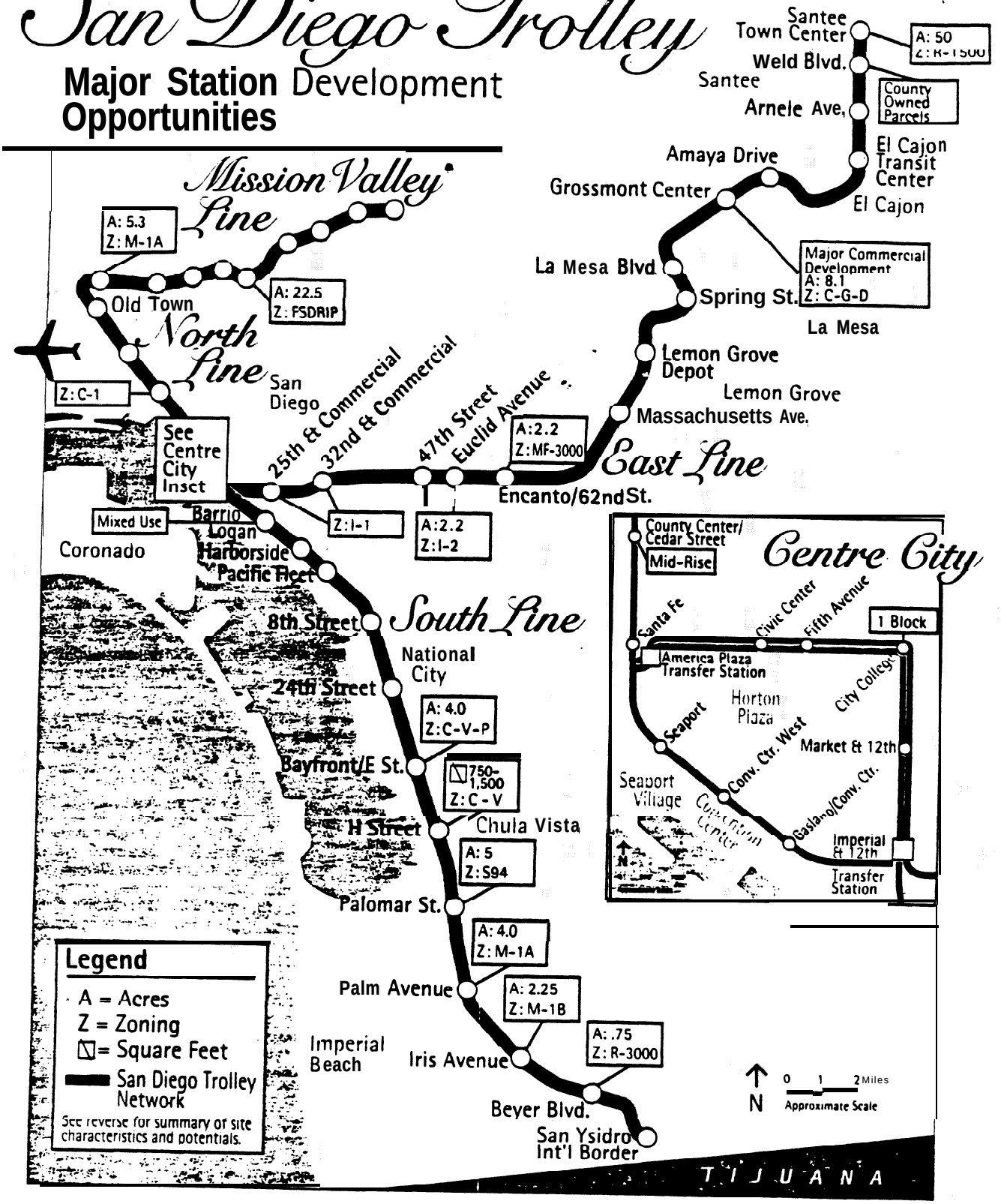
Whether it is demonstrating that construction of LRT will remove severe traffic congestion as a development constraint, or whether additional density is possible if development occurs on an MTDB site, the agency must clearly demonstrate the benefits of joint development to the private sector. By working with private sector developers to define and establish the specific benefits to them of participating in LRT implementation, the likelihood of more joint development projects is greatly enhanced.

Benefits of Smaller-Scale Joint Developments.

Smaller-scale joint developments can have accumulative non-quantifiable set of benefits, including increased visibility of the LRT to the potential rider community, increase in station amenities, and the opportunity to gain additional joint development experience that will be beneficial to subsequent, larger scale efforts.

San Diego Trolley

Major Station Development Opportunities



MTDB Joint Development Project Sites

Centre City

Centre City, with 75,000+ workers and 15,000+ residents is located on San Diego Bay, just 4 miles from the International Airport More than 60,000 people travel to Centre City a day via the San Diego Trolley's South and East Lines, 31 MTS Bus Routes; Coaster trains and Amtrak High intensity employment residential entertainment restaurant retail, hotel, and other uses are encouraged by the Centre City Development Corporation (CCDC). New sports arena/entertainment center planned for Centre City East neighborhood near Trolley's Imperial & 12th and imperial & Market Stations. For more information call CCDC at 235-2200.

South Line

Barrio Logan

Located within San Diego's Barrio Logan Redevelopment Project Area has 1,100+ daily ons/offs. Station one block S from "Mercado District," a planned mixed-use transit village, with commercial, recreational, and new 144-unit "Mercado Apartments." Contact the City of San Diego Redevelopment Agency at 236-6039 for more i "formation.

E Street

4-acre site in Chula Vista on S side of E St at I-5. 162 parking spaces; 4,000+ daily ons/offs on trolley and 4 bus routes.

H Street

S-acre site in Chula Vista, on N side of H St. at I-S. 329 parking spaces and 5,000+ daily ons/offs on trolley and 4 bus routes. Near ChulaVista Shopping Center and planned 1 55-acre, mixed-use "Bayfront" project Zoned C-V 'Visitor-Commercial.'

Palomar Street

5-acre site in Chula Vista. on SE corner of Palomar St. and Industrial Blvd. adjacent to "Palomar Trolley Center" with major supermarket chain and planned day care facility. Existing and planned residences nearby. 363 parking spaces; 3,700+ daily ons/offs on trolley and 4 bus routes. Zoned S94, "Transportation and Utility Corridor", some civic and commercial uses with special permits.

Palm Avenue

4-acre site in San Diego's Otay Mesa-Nestor community on NE corner of Palm Ave. and Hollister St 543 parking spaces; 3,300+ daily ons/offs on trolley and 3 bus routes. Zoned M-1A for light manufacturing and commercial use. Community plan update underway: recommends transit-oriented neighborhood commercial and residential uses on parcels adjacent to the station.

Iris Avenue

2.25 acres in San Diego's Otay Mesa-Nestor community on Iris Ave., one block N of I-905. 318 parking spaces: 3,600+ daily ons/offs on trolley and 6 bus routes. Zoned M-1B for manufacturing. Plan update underway; recommends neighborhood commercial uses on parcel E of station

Beyer Station

3/4-acre site in San Diego's San Ysidro community (1/2 mile from Int'l Border Crossing) at Beyer Blvd. & Cottonwood Rd. 168 parking spaces: 3,200* daily ons/offs on trolley and 1 bus route. R-3000 zoning permits low/moderate, multi-family dwellings

East Line

25th Et Commercial, and 32nd Et Commercial

Two stations on Commercial St. (in San Diego's Logan Heights and Memorial communities, E of Centre City) generate 4,000+ daily ons and offs on trolley. tight. industrial zoning (I-1) along both sides of Commercial St. supports small and incubator businesses. Multiple use development including residential is permitted along Imperial Ave. N of stations. Contact Southeastern Economic Development Corporation (SEDC) at 236-7345 for molt information.

Euclid Ave. Station

2.2-acre site in San Diego's Chollas View community on SW comer of major intersection of Euclid & Market St. Adjacent uses include new Malcolm X Library & Performing Arts Center (opening 1995) on NE corner; the planned Euclid Community Cultural Center on SE corner; and existing fast-food restaurant on NW corner. 164 parking spaces: 6,000+ daily ons/offs on trolley and 9 bus routes. I-2 zoning permits industrial and/or manufacturing and some office use.

62nd Street Station

2.25-acre site in San Diego's Encanto community, between 62nd and 63rd Streets, N of Akins & Imperial Ave. 450 parking spaces: 1,300+ daily ons/offs on trolley and 1 bus route MF-3000 zoning permits market rate apartments or condos with up to 14.5 dwelling units per acre.

Grossmont Ctr. Station

8.1-acre site (divided into 2 parcels) in La Mesa, below Grossmont Regional Shopping Center, off of Fletcher Pkwy 600 parking spaces: 1,200+ daily ons/offs on trolley and 4 bus routes. Potential for mixed-use commercial office, high-density residential, and retail.

Weld Ave.

Station located on undeveloped County-owned land, east of Cuyamaca St., adjacent to Gillespie Field in El Cajon. Zoned "M" for industrial. Adjacent undeveloped acreage in the Gillespie Field Industrial Park that would permit manufacturing as well as specialty office and hotel uses. 200 parking spaces and an estimated 500 daily ons/offs on trolley.

Santee Town Center

SO-acre site in Santee on NE corner of Mission Gorge Rd. & Cuyamaca St: close to extension of SR 52. Site in heart of (CBD) and redevelopment project area: adjacent uses Include Santee Promenade, Santee Plaza with Wal-Mart, Price Costco, and Home Depot anchor tenants Santee Community Development Commission plan calls for station to bisect Santee Town Center with civic, office, and commercial land use components. 200 parking spaces and an estimated 1,000 ons/offs on trolley and 4 bus routes

North Line

County Center/Cedar Street

Site in San Diego Harbor View Little Italy community, between Pacific Highway and Kettner Blvd. Potential for mid-rise residential development, neighborhood commercial uses, and live/work quarters. 800 daily ons/offs on trolley and 10 bus routes.

Airport/Palm

site between pacific Highway and Kettner Blvd. Parcels around station zoned C- 1, CPIOZ B, for wide range of transportation-related commercial uses to take advantage of proximity to airport. Emphasis on pedestrian-oriented design at Trolley Station.

Mission Valley West

Morena

5.3-acre site in San Diego's Linda Vista community, N of junction of I-8 and I-5 on Napa at Friars. Zoned M-1A industrial: community plan update underway to examine mixed-use, commercial/residential. When open in 1998, it will have 100 parking spaces and an estimated 2,000 daily ons/offs on trolley and 4 bus routes.

Mission Valley'

22.5-acres in San Diego's Mission Valley community, E of Mission Ctr. Rd., N of Camino de la Reina. In the First San Diego River Improvement Project Specific Plan (FSDRIP), site to support retail and restaurant uses When station opens in 1998, it will have an estimated 500 daily ons/offs on trolley and 2 bus routes.

CALTRANS AIR SPACE LEASING

The air space program was originally created in 1966 by the Highway Commission (now the California Transportation Commission) ("CTC"). In 1969, a special advisory committee of private real estate experts known as the Air Space Advisory Committee (AAC) was created. The committee currently has eight members and advises the CTC on air space development matters. The committee reviews and comments on air space lease transactions and other public/private real estate proposals.

During the 1970s, the air space program grew slowly. This circumstance was attributable to the slow development market and the fact that other properties were available without restrictions, and there was uncertainty about how the air space leasing program could work with freeways. In particular, lenders did not like subordinate ground leases and were unwilling to support developers. Consequently, developers ended up financing their projects in the entirety. According to Caltrans, it was too considerate of the developers' financing dilemma and too eager to get the new program up and running and, therefore, over compensated developers in their lease agreements.

During the 1980s, the air space leasing program experienced rapid growth. Property without restrictions were less available, lenders were more cooperative and the Department became more sophisticated in negotiating terms. For example, the Department started with a short document with a flat monthly rate and eventually added ground escalation clauses, percentage lease provisions and provisions for reevaluation of leases.

The 1990s have once again witnessed a slow period in the air space leasing program. This is due in part to the poor economy but also to the recent earthquake damage. For example, the Department has leased the air space underneath bridges for self-storage units. Consequently there has been a need to retrofit bridge structures to avoid future damage to these and other leasee structures which are typically located under the highway bridges. This seismic retrofitting interferes with leasees' ground-operations and is also costly to the Department. Most of the income under this leasing program is from parking leases.

Authorization for The Air Space Program

Section 104.12 of the Streets and Highways Code authorizes Caltrans to lease the use of air space above and below state highways to private entities in accordance with the procedures prescribed by CTC. The leases may be made to private entities only after competitive bidding unless the CTC finds by unanimous vote that in certain cases competitive bidding would not be in the best interests of the state. The CTC uses the AAC to make the decision to the committee's review of the request for direct negotiations. The Department can enter into long-term, three year leases, as well as short-term six-month leases, with one extension.

Purposes of the Airspace Program

The purposes of the Air Space Program are to maximize the use of property acquired for transportation purposes in order to increase the local tax base, replace certain commercial services removed by highway construction and to promote area employment. The resulting benefits to the department are that it provides the department with an asset in the form of park and ride lots, internal

uses, avoids maintenance expenses for vacated sites and provides an income stream in excess of expenses to operate the program.

Definition of Air space

The department defines air space as any property that is in the right of way of an operating highway that is capable of other uses without interfering with the operations or future expansions of the transportation facility. Air space may consist of (1) surface under a viaduct structure; (2) space over highway lanes; (3) space inside and interchange loop; (4) space between the main lanes and on/off ramps; and (5) area within cut/fill slopes.

Types of Air Space Leases

There are two types of leases -- long term and short terms. The purpose of the long-term lease is to encourage construction of building improvements on selected prime sites. The recent earthquake damage and the need to retrofit bridges has made long-term leases for actual building improvements less viable. The purpose of the short-term lease is primarily to allow motor vehicle parking and for recreational vehicles and boat storage.

PRIVATIZED TRANSPORTATION PROJECTS - JOINT DEVELOPMENT OPPORTUNITIES

The standard definition of *joint development* presumes that a transportation facility is both constructed and owned by the transportation agency. However, because of the need to develop alternative funding sources in the face of dwindling public revenues for transportation projects, the California legislature, in 1990, enacted legislation that alters the typical role of the transportation agency and the construction of transportation projects, and the context for achieving joint development. Assembly Bill (AB) 680, adopted as Chapter 107, Statutes of 1989, added a new Section 143 to the California Streets and Highways Code. The bill was approved by the Governor in July, 1989. Section 143 was amended by AB No. 3396 as Chapter 1115, Statutes of 1990 and approved by the Governor in September, 1990.

The Legislation authorizes Caltrans to enter into agreements with private entities for the construction by and leasing to private entities of four transportation demonstration projects, including at least one in Southern California. The legislation also authorizes Caltrans to lease rights-of-way in an airspace over or under state highways, to grant necessary easements, and issue permits for other authorizations to enable private entities to construct transportation facilities supplemental to existing state-owned transportation facilities, and to lease those facilities to the private entities for up to 35 years. Although these privately constructed facilities remain at all times owned by the State, the legislation authorizes the private entity to charge tolls for the use of the privately constructed facilities in order that the private entity can retire its private investment and earn a reasonable return on investment.

This type of privately funded project is termed Now Build-Operate-Transfer (BOT) which enables the private entity to obtain exclusive development agreements to build, with private funds, all or a portion of the public transportation project. As stated in AB 680, these privately financed projects allow for joint ventures of private and public entities that do the following:

1. Take advantage of private sector efficiencies in designing and building transportation projects.

2. Allow for the rapid formation of capital necessary for funding and transportation projects. transportation projects.

3. More quickly bring reductions in congestion in existing transportation corridors.

4. Require continued compliance with environmental requirements and applicable state and federal laws that all publicly financed projects must address.

5. offer the traveling public alternate route selections in project areas.[4]

State Route 125 South Project[5]

The demonstration project in southern California selected under the new legislation is a portion of state route 125 *(See diagram of SR 125 on following page.)* As indicated in the diagram, a segment (in bold line) has been funded and constructed under the auspicious of the San Diego Association of Governments (SANDAG), which is the designated MPO under federal law and also serves as the Regional Transportation Planning Agency ("RTPA"), and the Regional Transportation Commission ("RTC"). The bold line segment on the diagram was financed under the one-half percent (1/2%) local sales tax program approved by the voters in 1987 for transportation improvements. The 20-year program known as TransNet is required to divide its funds equally between highways, transit and local streets. Before the privatized portion of SR 125 (dotted line) can be commenced, a small portion known as the San Miguel connector must first be completed?

Legal Structure for Projects

The developer group which successfully bid on this project is actually a consortium known as California Transportation Ventures, Inc. ("CTV"). In December, 1990, CTV entered into a Development Franchise Agreement for a Privatized Transportation Project with Caltrans.

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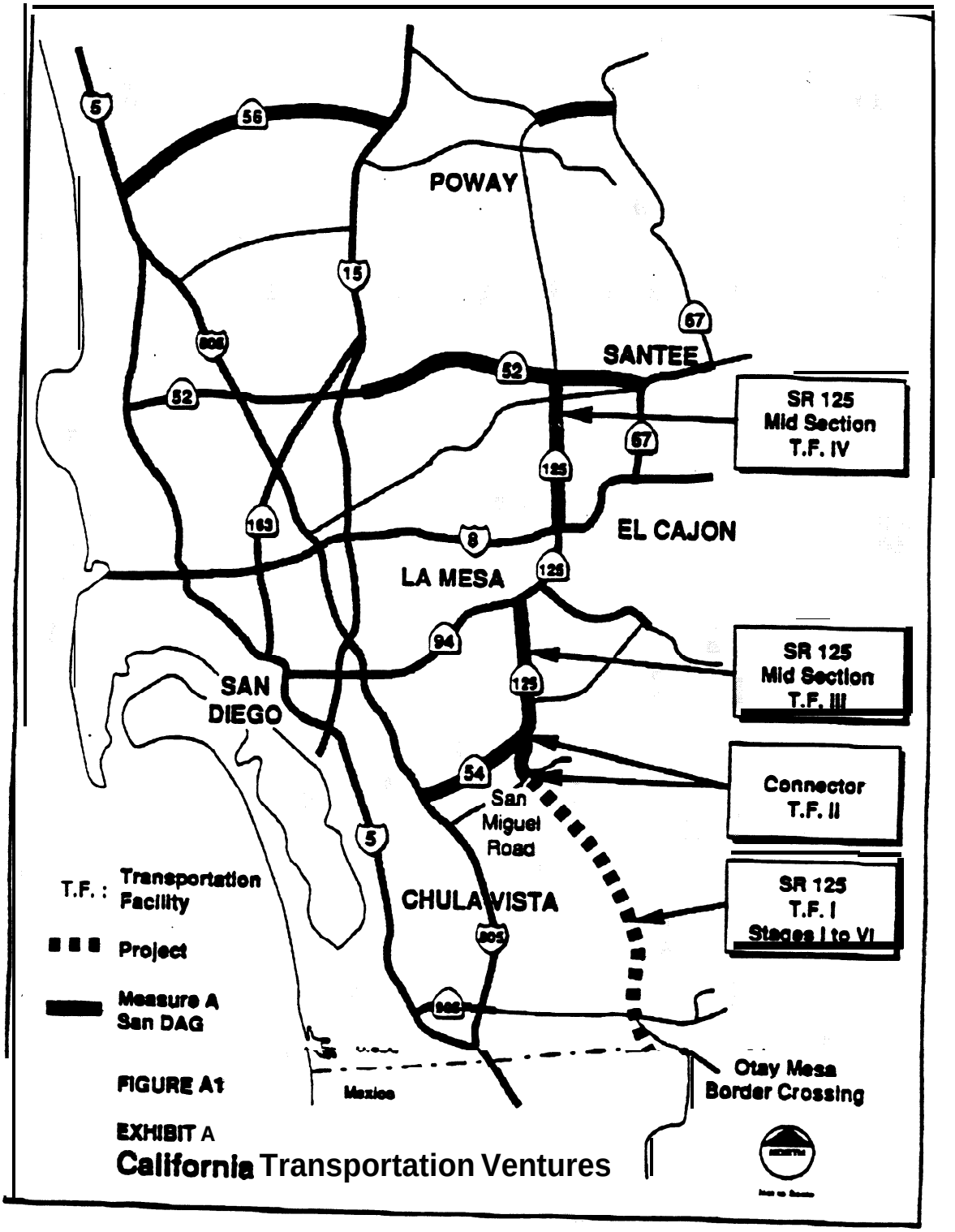
[4] California Assembly Bill No. 680, Sec. l(e).

[5] Summary based upon interviews conducted on March 19, 1996 with Craig Scott, Manager of Transportation Finance, Sandbag and Charles "Muggs" Stoll, Caltrans Project Manager for State Route 125 project and related documents including the Development Franchise Agreement for a privatized transportation project between California Transportation Ventures, Inc. and the State of California, Department of Transportation (January 6, 1991).

[6] The consortium described which has entered into a franchise agreement with Caltrans wants SANDAG to construct this small connector piece. In the alternative, the consortium has proposed to construct the connector if it can be reimbursed through SANDAG. This issue has not yet been resolved.


POWAY
SANTEE
EL CAJON
LA MESA
SAN DIEGO
CHULA VISTA
San Miguel Road
Mexico
Otay Mesa Border Crossing
SR 125 Mid Section T.F. IV
SR 125 Mid Section T.F. III
Connector T.F. II
SR 125 T.F. I Stages I to VI
T.F. : Transportation Facility
Project
Measure A San DAG
FIGURE A1
EXHIBIT A
California Transportation Ventures

Financing Mechanisms

The project will use taxable bonds plus equity by the partners in the consortium. The consortium may bring in at least one additional partner, a design/build contractor who may receive an equity position. Because gas tax funding is not sufficient for the construction portion of the project, it will be used for maintenance purposes only.

Toll Collection

Under the Franchise Agreement, the developer (the consortium) is responsible for a toll collection and related operations. One of the lessons learned from Virginia, which has instituted a similar privatization program, is not to try to set the toll rate in advance but rather to let the market indicate what the rate should be. If revenues collected from tolls exceed a specified "cap" under the Development Franchise Agreement, the excess goes to the state highway account.

Joint Development Opportunities Under Franchise Agreement

Airspace.

Section 4.3 of the Development Franchise Agreement provides that the developer and Caltrans, upon the transfer date of the transportation facility or stage of the facility, must execute an Airspace Option to Lease Agreement. According to the Agreement, the developer anticipates entering into multi-year leases for the development and operation of lodgings, gift shops, restaurants, truck and automobile service stations, financial services, insurance, park-and-ride and other commercial facilities. These discussions were not finalized as of the date of the Development Franchise Agreement. Prior to the development of the later stages of the project, airspace uses may include farming, ranching and other agricultural uses.

Rest Areas.

The Caltrans project supervisor indicated that there is interest by Caltrans under the Franchise Agreement to define ways to jointly develop rest areas. Rest areas traditionally have posed a maintenance problem. If such rest areas could be developed in conjunction with either an existing restaurant, or a new restaurant or facility, that would operate in conjunction with the rest area, Caltrans believes that this may be a way to address maintenance problems that have occurred in the past. For example, in the case of an existing restaurant, the landowner would need to dedicate the rest area to Caltrans which, in turn, would lease it back to the landowner for a dollar; with the landowner having maintenance responsibilities to insure the upkeep of the rest area.

Project Time Frames

Although the Franchise Agreement was executed in January, 1991, litigation delayed the project almost two years. Studies were commenced in January of 1993 and in early 1994 the consortium started work on alternatives for the environmental analysis. The environmental document is expected to be completed by the end of this year.