Case Study of Inner Sound High Speed Ferry Service Project

Executive Summary

A very interesting public-private partnership between a private land developer and a regional Tourist Development Office in northeastern North Carolina is currently involved in the planning for a high speed ferry service that would link the inner sounds harbor towns with the high-use tourist areas on the Outer Banks. This partnership was stimulated by the state as a part of a regional economic development initiative.

The success of the partnership to date has been the result of a common vision shared by all the partners, in addition to the local communities. Despite on-going barriers that are in the process of being resolved, the partners and the project have achieved a very favorable public image. In addition, a high degree of confidence is evident in the key motivators of the project.

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Inner Sound High Speed Ferry Service Project, NC

Major Highways

1. Project Information

A. Project Description

In March 1993, the Governor of North Carolina encouraged the participation of 16 counties in northeastern North Carolina to collaborate to develop the economic potential of the region. The General Assembly, in August 1993, established the Northeastern North Carolina Economic Development Commission (NENCEDC) along with the Tourism Development Office (TDO) within it. Ms. Bunny Sanders was appointed director of the TDO.

The TDO immediately recognized the strategic importance of tourism in the region. The strategic vision required that the region's harbor towns be developed as tourist destinations and connected by a high speed water transportation system. A feasibility study of the Inner Sound High-Speed Ferry System (ISHSFS) was completed in May 1994. This study recommended a system of 50-, 150-, and 250-passenger ferries linking twelve inner sound communities, called the SOUNDSystem (see Figure 1). Modern high speed passenger ferries were envisioned as connecting these communities without environmentally-damaging dredging. Since the study was completed, the TDO has been promoting the project among the towns, counties, Chambers of Commerce, and economic development and civic groups in the region.

In developing the ISHSFS, it was recognized that the State ferry system, a tourist attraction in itself, is not configured to promote tourist development of the harbor towns. Likewise, the safety and bridges are a concern, where many two-lane highways are carrying increasing volumes of tourist traffic.

B. Modes Included

☐ High-speed passenger ferries
☐ Highways
☐ Marine terminals
☐ State ferry system (vehicle and passenger)

C. Total Cost of Project/Cost-Sharing Arrangements

The estimated cost of the ISHSFS is as follows:

Seven high-speed ferries	$17 million
Annual operating costs	$15 million
Terminal improvement costs	minimal

At this time, the total cost of the system is projected to be borne by the private sector.

D. Current Status of the Project

Current efforts include the negotiations with a ferry system operator and an architect/builder of the vessels. It is anticipated that this will be drawn to a conclusion within the next six months.

E. Future Plans for the Project

Within the next six months, the developer foresees announcing plans for several tourist-oriented development projects in the region. Ultimate buildout of the system would include up to twenty high-speed ferries in operation. A graphic showing the proposed destinations and existing tourist attractions at the Inner Harbors in Northeast North Carolina is in the Appendix.

II. Partnership Description

A. Steps in Developing the Partnership

The development of this partnership proceeded in a very informal manner. In 1989, local government officials in the region began informal discussions about high-speed ferry service as an option for inclusion in the region's multimodal transportation system. In 1992, the North Carolina Small Business and Technology Development Center (SBTDC) sponsored an economic development seminar at Elizabeth City State University. Three participants, Phil McMullan, Regional Economist for the SBTDC, Bunny Sanders, Director of the SBTDC, and Bill Rich, a regional development company president, developed the concept for the region's tourist development. The water-based transportation system is the key component of this concept, which is recognized by developers and the public alike.

It was recognized that the State ferry system, a tourist attraction in itself, is not configured to promote tourist development of the harbor towns. A similar problem concerns the safety and capacity of the highways and bridges in the region.

B. Partners: Roles and Responsibilities

The following is a list of the roles and responsibilities of the partners:

- ☐ TDO -- Conduit for public funding of the planning and development studies, promotion of the concept and plans to local governments and community groups throughout the region
- ☐ Harbourtown Investment Group -- Land development for lodging, restaurants, and shopping facilities
- ☐ Vessel operator -- Private company to operate the ferry system
- ☐ Vessel architect/builder

C. Person/Organization Most Responsible for Development of the Partnership

The initiation of this project came from the private sector land developer, Bill Rich, and public sector TDO. Bunny Sanders.

D. Person/Organization Most Responsible for Maintenance of the Partnership

Two individuals have been primarily responsible for maintaining the vision and day-to-day working relationships for the project, Bill Rich with the development company and Bunny Sanders with the TDO. Phil McMullan has also been a prime mover for the project.

E. Organizations Indirectly Involved in the Partnership

The following is a listing of the organizations which were indirectly involved in the partnership:

- ☐ Harbor towns throughout the region
- ☐ 16 counties
- ☐ Local Chambers of Commerce and development groups
- ☐ Partners for the Sounds, a nature-based or eco-tourism organization
- ☐ US Coast Guard -- approval of design of the vessels
- ☐ SBTDC -- economic impact analysis and data base management (in the future could provide support for small-business start-ups)

F Organizations That Should Be Officially Involved

The State Ferry Division should be officially involved in the partnership.

III. Partnership Evaluation

A. Motivation Behind Formation of the Partnership

Recognizing the potential commercial value of regional tourism and recreational activity in the region, the TDO and the Rich Company, representing Harbourtown Investment Group, defined the regional economic problems and developed a water-based tourism strategy for the region to solve these problems.

B. Goals of the Partnership

The main objective of the partnership is tourism "development," as opposed to the conventional approach of "promotion." As seen by members of the partnership, successful tourism development cannot be accomplished without an acceptable transportation system to better connect the Outer Banks with the harbor towns (and the harbor towns with each other). The main vision is to remove traffic from the two-lane highways in the region and transfer this traffic to more water transportation.

The partnership also sees the project as a model for environmentally-compatible economic development. Another goal is to bring together the strengths of the region, including the natural environment, historic sites, the visual and performing arts, and the culture of the region. Each county and harbor town is envisioned to have a unique role in the overall tourism development strategy.

C. Success in Achieving Goals

One of the first steps in achieving these goals was the endorsement by the local communities and political leadership within the region. Another example of the initial success of the partnership has been the attraction of the private capital to invest in residential and tourist-based commercial development. A third element indicating early success has been the attraction of potential ferry operators to run the privately-operated high- speed ferry system.

D Legal Issues

None were identified.

E. Technical Issues

The following is a list of the technical issues encountered in the partnership.

☐ Assessment of minimal environmental impacts.

☐ The perception of the high-speed ferry technology had an initially negative public reaction.

☐ The vessel design must be approved by the US Coast Guard.

F Institutional Issues

The following are institutional issues that were encountered in the partnership:

☐ Despite top-level support for the project, some of the regional political base has demonstrated less than enthusiastic support for the project.

☐ The State initially showed support for the project by funding the regional feasibility study; once the concept of high-speed ferry service (supporting tourist-based development) showed promise, the private sector demonstrated willingness to invest in the project.

☐ The partnership envisions a very strong role for the private sector; they do not want government to begin investing in tourist attractions, but do want government support for the transportation infrastructure.

☐ As expressed by participants, it is vital that the harbor towns and counties supporting the partnership and its objectives stay on neutral ground, separate from the developers and environmental groups.

G Barriers to Forming and Maintaining the Partnership That Were Overcome

The following are barriers that were overcome in the partnership:

- ☐ Public opinion and lack of confidence in the region as a tourist destination was a major barrier in developing the partnership; this is being overcome by the aggressive public relations efforts by the TDO, including continuing local workshops.

- ☐ The success that the partnership has had in gaining grassroots support for the project has in fact become a barrier to its continued successful maintenance; in short, the project has become too popular too quickly.

- ☐ Lack of a common goal between the NENCEDC and the partnership the Commission's goal is to bring in manufacturing industry, while the goal of the partnership is to develop the tourism potential for the area.

- ☐ Determining the market and proving to investors that one does exist.

- ☐ The need to define the term "nature-based tourism" to the press and to investors.

H. Barriers That Were Not Overcome

The following is a list of barriers that were not overcome in the partnership:

- ☐ There is a lack of institutional support and involvement from the State Ferry Division because they saw the SOUNDSystem as competition, rather than a compliment to existing service.

- ☐ There is a continuing lack of involvement and support from the NENCEDC.

- ☐ The sixteen counties were originally involved in the partnership, but the level of support now varies due to changes in political power.

- ☐ Regionalism does not exist in the area; the public has a parochial view of their environment.

- ☐ The Outer Banks business community perceives the project as competition to its tourist trade.

I. Favorable Outcomes of the Project,

The following are preliminary outcomes only since the project is still in the development stage:

☐ A very favorable public image of the project and the partnership has evolved.

☐ Confidence in the key motivators of the project has kept the project alive despite opposition.

☐ There is attraction of private sector investors to the area for its unique and potentially profitable characteristics.

J. Unfavorable Outcomes of the Project

It is premature to analyze issues of unfavorable outcomes since the project is still in the development stage.

K. Changes in the Partnership Arrangement That Would Have Increased Favorable Outcomes

The following is a list of changes in the partnership arrangement that would have increased favorable outcomes:

☐ More involvement of officials from the State Ferry Division.

☐ Approaching the concept of the partnership from a political as well as business perspective.

L. Applications of Techniques/Elements of Partnership Arrangement

The accomplishments of this partnership illustrate a very strong lesson for other multimodal transportation partnerships throughout the country; they show that projects, given the right conditions. can be carried out without government support.

M. Keys to the Success of this Partnership

The following are the keys to the success of the partnership:

- ☐ The common vision of each of the major partners has created a unity of purpose; this factor has compelled the partnership to continue development of the project in spite of considerable opposition.
- ☐ The project has been endorsed by local communities.
- ☐ The economic incentive had convinced the Rich Company in the beginning of the potential of the project; Bill Rich is a developer who knows, lives in, and loves the area, and is willing to invest in it.
- ☐ The plan itself is good because it takes into account all the elements necessary to develop tourism in the area.

IV. Follow-up Information

A. Continuing or One-Time Partnership Arrangement

The partnership is in a state of change. and the composition and roles of future partners to develop the high speed ferry system is yet to evolve.

B Documentation

- ☐ Media Packet, Office of Tourism Development, Elizabeth City, NC, March 1995.
- ☐ A Preliminary Analysis of the Feasibility of Operating High-Speed Passenger Ferries on the Rivers and Sounds of Northeastern North Carolina: Executive Summary, Charles D. Miller and Associates, for Office of Tourism Development, May 20, 1994.
- ☐ Harbor Tours by Fast Ferry - A Water-Based Tourism Development Strategy for Eastern North Carolina, Philip McMillan, for the Easter North Carolina Chamber of Commerce.*

* Graphic included in Appendix

NCHRP Project 8-32(4)

Case Study Report

Project: Inner Sound High Speed Ferry Service
Northeast North Carolina

File: 31

Type of Partnership: public-private-community

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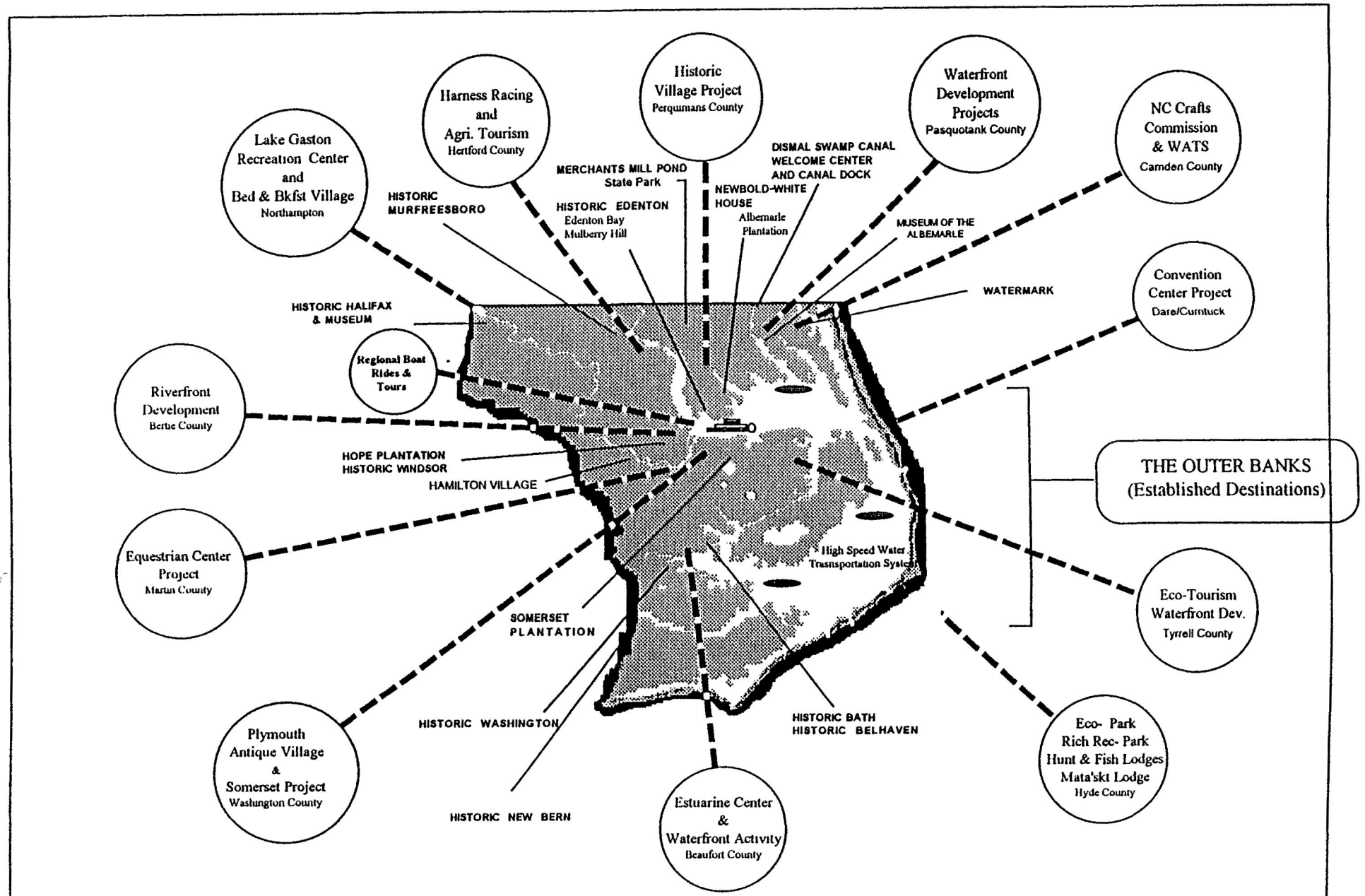
Note: This case study report was prepared based on personal interviews with the persons indicated. Although it is intended to represent their ideas and opinions, responsibility for how those ideas and opinions have been interpreted and recorded remains solely with the authors.



PROPOSED DESTINATIONS AND EXISTING TOURIST ATTRACTIONS AROUND

AMERICA'S SOUNDSystem

Case Study of TransGuide, San Antonio, Texas

Executive Summary

TransGuide is the Texas Department of Transportation, San Antonio District Intelligent Transportation System (ITS) partnership, which has been in the development stage since 1988. A milestone in the program genesis was attained in July 1995 with the opening of Phase I of a state-of-the-art Traffic Management System (TMS) and Traffic Operations Center (TOC) for the San Antonio metropolitan area. The TOC is located within the interchange right-of-way where the 1-4 10 loop intersects I-10 in northwest San Antonio.

Included in the partnership that built the TOC and is in process of developing the San Antonio TMS and its various multimodal components are the following partners:

-- City of San Antonio (Emergency Medical Service, Fire and Police Departments)

-- "VIA," the Metropolitan San Antonio transit system

-- Allied Signal Technical Services Corporation

-- Approximately 70 subcontractors that have been involved in the construction of the first phase of the ATMS and TOC

In the minds of most of those interviewed concerning this project, the partnership for building the TransGuide TOC was only a partnership because the planning, partial design, and construction of the system was facilitated by the active incorporation of a Total Quality Management technique called Partnering. Through this process, the groundwork was laid for a successful partnership and long-term commitment to manage the operations and maintenance (O&M) phase of the program with a more comprehensive view of the mission of the program and individual projects within the program.

A multimodal approach to urban traffic management has also resulted. with plans for future extensions of the county-wide transit system poised to use advanced technology that will integrate transit operations with the overall TransGuide traffic management system.

The benefits of the partnering process were identified as follows:

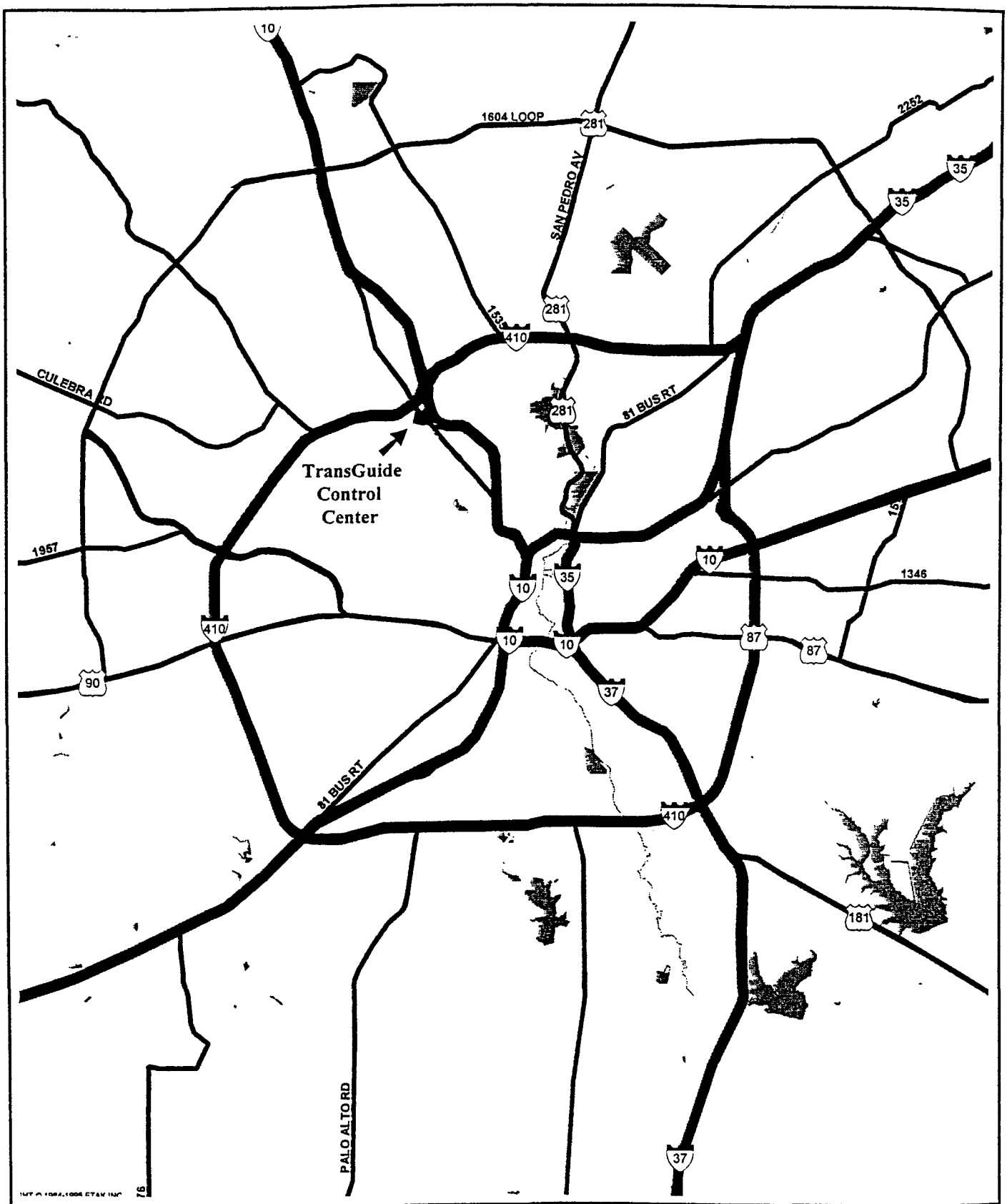
- ☐ More hands-on involvement by TxDOT, the owner and operator or the system.
- ☐ Greater adherence to the construction schedule.
- ☐ Lower transaction costs.
- ☐ Increased sharing of risks.
- ☐ Increased communications, both horizontally and vertically with other agencies and organizations involved in the construction process and with various levels of management within TxDOT.
- ☐ A standard of communications such that daily communications among the members of the partnership is the norm.
- ☐ Value-Added Engineering enhancements.
- ☐ No unresolved issues and no claims to date.
- ☐ Reduced conflicts and misunderstandings by the owner/ operator and the various levels of contractor and sub-contractor management

I. Project Information

A. Project Description

TransGuide is the program name for a comprehensive series of Intelligent Transportation System (ITS) projects in the San Antonio District of the Texas Department of Transportation (TxDOT). Over the course of the past several years seven separate partnerships have been formed, (or are in process of being formed), to develop or implement different projects within the TransGuide Program. The partnerships that are relevant to this case study include:

(I) A public agency partnership to develop and operate a Corridor Management Team in the San Antonio area. This partnership, which had its beginning in the early 1970's, is essentially an Incident Management Program for the metro area. TransGuide, to some extent, grew out of this pre-ITS, pre-ISTEA partnership.



Kimley-Horn and Associates, Inc.

TransGuide ITS Project

San Antonio, TX

(2) A public-private partnership to plan, design and build the Traffic Mamagement System for the TransGuide Program. This partnership dates from its conceptual stage in 1988 until the TOC opened in July 1995. The TOC is designed and will be staffed to manage operations for freeways as well as emergency response and VIA transit buses. The first phase of the TransGuide program included, in addition to the TOC, a 26-mile freeway management system.

(3) A three-party, public-public partnership to establish communications consoles to integrate enforcement and emergency response communications with the real-time traffic data now available through TransGuide.

The first two partnerships are currently in the operations and maintenance stage, since July 1995. Partnership # 3 is an outgrowth of the overall TransGuide ITS program that began mid-way through TOC construction.

B. Partners: Roles and Responsibilities

Partnership #1, Corridor Management Team:

- ☐ TxDOT, San Antonio District - chair and facilitate team meetings
- ☐ VIA Metro Transit - co-chair; coordinate development of the use of buses as communications and probe vehicles
- ☐ San Antonio Traffic Engineering section - coordination of some 1000 signalized intersections in the city with the State systems
- ☐ San Antonio Police Department - enforcement
- ☐ San Antonio Fire Department - manages on-site emergencies, including HazMat response
- ☐ Bexar County Public Works - emergency management county-wide
- ☐ Bexar County Sheriff's Department - enforcement outside the city

Partnership #2, Design and build the Traffic Management System:

- ☐ TxDOT, San Antonio District - overall project management
- ☐ Allied Signal Technical Services Corporation - Prime contractor
- ☐ All subcontractors (as many as 70 subs arranged in up to four tiers) including H.B. Zachry (general contractor for field construction), Browning Construction (TOC general contractor), and AT&T Network Systems (communications equipment supplier)

Partnership # 3. Police and Fire Communications functions. City Traffic Engineering integration:

- ☐ TxDOT - provides space in building
- ☐ City Traffic Engineering - coordinates closed loop, city-controlled signals; as payment to use space in the TransGuide TOC, will pay for utilities, custodial service, and building maintenance
- ☐ Police Department - coordinates police communications in the TransGuide operational area, manages the 911 emergency call network, and dispatches calls to other emergency response unit

C. Modes Included

- ☐ Personal vehicles
- ☐ Metropolitan transit buses
- ☐ Paratransit (demand responsive transit vehicles)
- ☐ Park and Ride lots
- ☐ Taxis, limousines, tour buses
- ☐ Commercial vehicles
- ☐ Emergency response vehicles (police, fire, rescue)

D Total Cost of Project/Cost-Sharing Arrangements

The total TransGuide program is planned to cover surveillance and incident response for a 191-mile freeway management system (FMS). When completed, this system is currently estimated to have a capital cost of $155 million. The Phase I construction including the first 26-miles of the traffic management system (TMS) and the TOC, costs $36 million, including public and private funds. The program was initially recognized in the State Transportation Improvement Program (STIP) in 1992 and is listed in the current 10-year plan. As currently funded, this project is a regular Federal- Aid project with TxDOT and the FHWA participating.

Additional funding has been secured from the city, VIA Transit, SwRI and TTI for the further development of the TOC, with a total of $800,000 committed for the long-term build-out of the facilities and equipment needed to incorporate municipal components of the system. The city and VIA Metro are currently scheduled to be the primary tenants of the third floor of the TOC, which was added into the plans mid-way through construction.

Operational costs of the TOC and the entire ITS program will be paid by each respective department or unit.

E. Current Status of the Partnerships

The first partnership, developed for incident management and response, has been an on-going activity of state and local agencies for about two decades. The TMS, including the TOC, was opened in July 1995, and is being promoted as a model for the design of traffic management systems elsewhere, including the state of Texas. In late 1996, an additional 16 to 30 miles of freeway in San Antonio will come on-line as part of the TMS. There is also an on-going operational test project to develop a design manual of the TOC as built ($1.5 million).

In addition, partnership #3 to expand the services provided through the TransGuide TOC is currently underway. In some ways it is an outgrowth of the partnering process that has been initiated by TxDOT for the design and construction of the FMS. The expanded TOC will integrate city traffic engineering, fire, police, HazMat response, emergency medical service (EMS), and 911 communications with TransGuide data management and information dissemination. A number of these units are currently in process of being brought into the third floor of the TOC:

- ☐ consoles for the Police Communications section
- ☐ consoles for the Fire Department's communications unit
- ☐ Traffic Operations Division from the city
- ☐ VIA/Metro's elderly and handicapped, demand response communications function

This project is expected to be completed by the end of calendar year 1995.

F. Future Plans for Project

As mentioned above, TxDOT's four district engineers, from the San Antonio, Pharr, Laredo, and Corpus Christi districts, have agreed in principle to cooperate on the extension of the TransGuide fiber optic plant in order to serve a complete set of traffic operations and emergency management functions including hurricane evacuation, border crossing. tourist information, and emergency traffic management and re-routing.

Additional participants are also currently being sought from the private sector for the TransGuide traffic information system. It is anticipated that over 100 private firms will ultimately participate.

Currently, eight TV and radio stations in the metropolitan area, plus the local newspaper, are in the process of joining the TransGuide public-private partnership. These stations have contributed half the cost of the $53,000 software development project for the Advanced Traveler Information System (ATIS). Kiosks at major employment centers, tourist attractions, major hotels, etc. are also part of the ATIS concept.

*II. **Partnership Description***

A. Steps in Developing the Partnership

Partnership #1, the **Corridor Management Team,** is responsible for incident management services in San Antonio. This public agency partnership grew out of a long-standing incident management working arrangement between TxDOT's San Antonio District and a number of agencies in San Antonio and Bexar County.

Partnership #2, to develop the **Traffic Operations Center and Phase I of the TMS** as the key infrastructure investment under TransGuide, evolved from 1988 out of a grass-roots marketing/public involvement program developed by the Trans- Guide staff. Presentations were made to groups such as the Chamber of Commerce, various civic groups, major employers, and various government agencies.

This public-private partnership, to build the TOC and the first 26 miles of the FMS, was enhanced by a series of Partnering Workshops, the first in February 1993 and the second several months later. The actual construction of the building and integration of various hardware and software components was completed under a project-long partnering agreement.

Partnership #3, to **integrate communications** of related agencies in San Antonio and Bexar County in the TOC in order to facilitate interaction between departments, was initially considered as an integral part of Project #2 (at least by the SAPD).

For various reasons, including internal rotations of Police Commanders responsible for communications, this function was omitted in the planning and design phase for the TOC. Adequate room was including in the building design for a police communications unit and others being brought into the building, however. Therefore it is currently anticipated that it will be early 1996 when these additional functions will be incorporated into the TOC.

The Fire Department, although being brought into the third floor emergency management communications facility, may take longer since it was not part of the original TransGuide partnership. Other local agencies have been partners with TxDOT since the early 1970's.

B. Persons/Organizations Most Responsible for Development of Partnership

- ☐ San Antonio District, TxDOT - Pat Irwin, Traffic Operations Director, and the two most recent district engineers, Richard Lockhart (1987-1992) and John Kelly (1992 - present).

- ☐ Former TxDOT executive director Raymond Stotzer (1987-1990); prior to 1987 he was the district engineer in San Antonio.

Without this top management support, a project of the scale that was planned and implemented could not have been undertaken, particularly within the time frame identified.

C. Persons/Organizations Most Responsible for Maintenance of Partnership

- ☐ Pat McGowan, Project Manager of TransGuide, TxDOT
- ☐ C.R. (Hap) Carr. Project Manager of Allied Signal's contract with TxDOT

D Organizations Indirectly Involved in Partnership

☐ TransGuide public information staff
☐ Anderson Advertising, a private marketing/PR firm
☐ The general public, through various civic associations, chambers of commerce, etc.

E. Organizations That Should Have Been Officially Involved

Although not identified by any respondent as needing direct involvement, it appears that the City Managers office, including both Manager Alex Bresenio and Assistant Manager J. Relondo Bono, have been and are involved "behind the scenes" to assure local participation. Involving them as "official" partners in the project may have created a greater early interest in TransGuide by local agencies.

VIA Metro, plus the San Antonio police, fire, and traffic engineering agencies, unanimously felt that their agencies had not provided sufficient input in the planning and design of the TOC. Currently involved representatives from these agencies, in retrospect, would have preferred to have been involved in an active role at the beginning of the project. This observation was made not as an assessment of neglect on the part of any of the partners, just that it had happened The Fire Department, for example, is a a major participant in incident management coordination of communications; on-site emergency management, and HazMat response services.

III. Partnership Evaluation

The following evaluation is **primarily** a discussion of Partnerships #2 and #3, the concept development, marketing, design, and building of the TransGuide Advanced Traffic Management System (TMS). The TOC for this system, a three-story. 52,000 sq. ft., $6.5 million facility, is located in the right-of-way of the interchange of 1-10 and the 1-410 Loop in the northwest part of the city.

A. Motivation Behind Formation of Partnership

- ☐ Recognition by all parties that the entire development of the TransGuide ATMS would be preceding on a very tight time schedule and that it would be necessary to have a buy-in to the successful, on-time completion of the project by each of the 60 to 70 subcontractors.

- ☐ For this very complex project, it was determined by TxDOT District Office that a greater degree of knowledge of each of the subcontractor's performance on the construction of the project needed to be understood by departmental personnel.

- ☐ The partners themselves were considered an unconventional set of partners. They had never worked together before. Allied Signal, a giant in the aerospace and defense industry, had built a number of complex control centers (aviation, NASA, tactical and strategic defense, etc.), but had never been involved with a state transportation project or any project of this type.

- ☐ Among ATMS's that had previously been built in this country and abroad, the TxDOT design was unconventional in the degree that it's design was incorporated to "showcase" the FMS to the public and to technical study groups from other metropolitan areas.

- ☐ Finally, there were a number of known and perhaps unknown risks that Allied Signal foresaw in the project, which led to its ready acceptance of the partnering process when TxDOT's central office in Austin requested that the District undertake this as a partnering project management approach.

B. Goals of the Partnership

- ☐ To use the total quality management process of "partnering" in order to:
  - -- lower transaction costs during construction,
  - -- save time and money overall,
  - -- reduce hassles in contract administration,
  - -- increase productivity, and
  - -- improve quality of work by all participants in the project.

- ☐ To build a system that would be an integral part of San Antonio's traffic management system with the overall goal of reducing congestion along 1-10, 1-410, 1-35, 1-87, U.S. 90, U.S. 281, and parallel frontage roads and intersecting streets.

- ☐ To improve overall safety.

C. Success in Achieving Goals

The partnering process was judged by the public sector owner (TxDOT) and the private sector firms involved as being very successful. Allied Signal's Project Manager, Hap Carr, indicated that in his view there would not have been a partnership in the true sense unless the partnering process had been undertaken. For example, only one subcontractor was reportedly not an enthusiastic supporter of the process.

The project was initially estimated at $32 million and was completed for $36 million within schedule, in a two and a half-year period. Additional funds above the original $32 million contract were added in change orders by TxDOT for:

- ☐ adding the third floor to the building;
- ☐ adding VIA work stations and associated equipment;
- ☐ additional fiber conduit and cable to the TxDOT District headquarters (less than five miles away), and to the VIA operations center downtown (about 10 miles); and
- ☐ adding eight additional surveillance cameras at VIA transfer facilities at the Alamo Dome and at the Crossroads park and ride lot.
- ☐ modifying SAPD consoles and purchasing communications equipment
- ☐ modifying the lane control signal brackets

Representative documents from the two partnering workshops on TransGuide are shown in the Appendix: (1) Issues raised at Partnering Workshop, (2) Action plan for resolving issues, (3) ATMS Team Evaluation form, and (4) Issue resolution escalation process.

D. Legal Issues

The current expansion project, to extend TransGuide communications/fiber optic plant to freeways in the four TxDOT districts, is awaiting a policy decision at the State level on how to establish public-private partnerships.

E. Technical Issues

Although Phase I of TransGuide is now operational, the project is continuing to finish some components, particularly incorporating the operations of the third floor tenants.

A number of important design modifications resulted in substantial cost and time savings resulted from the partnering process, such as the innovation of a branch splice off an in-line splice in the fiber cable, instead of routing the mainline cable through each fiber/communications hub.

The use of design-build for the TOC itself, within an overall low bid contract, was a major technical and administrative innovation that perhaps is unique in ITS projects.

Other elements that need consideration include such items as low water crossings, handling icy roads, integrating rail service planning and involving the railroads in the planning. HazMat operations are currently involved.

F. Institutional Issues

- ☐ Lack of active involvement in TMS planning and design by all organizations that were originally involved in the Corridor Management Team (Project #1).

- ☐ Lack of active participation in system design by VIA Metro Transit in the early design stage resulted in adequate consideration of multimodal issues from the beginning, although to the credit of all concerned, it now is strongly moving in that direction.

- ☐ Strong internal politics within each of the major local government. entities appear to be somewhat of a constraint, but is in process of being worked through by the individuals from these agencies involved with the partnership.

G. Barriers to Forming And/Or Maintaining the Partnership That Have Been Overcome

The size of project itself and time needed to market the project and the overall function of freeway management to the general public was the major barrier identified.

H. Barriers That Are Not Overcome to Date

The remaining barrier is the lack of unanimous endorsement by municipal agencies involved with TransGuide. There are a large number of smaller municipalities in Bexar County that have not yet bought into the program.

I. Favorable Outcomes of Project

- ☐ All issues and solutions were under the control of the TxDOT Director for Traffic Operations.
- ☐ All issues were solved at the lowest possible, responsible level of management.
- ☐ As further detail of the above, no issues except perhaps one or two minor items had to be escalated to the District Office; all were handled in the office of the resident engineer. The one subcontractor that needed further encouragement to participate was convinced by other subcontractors, not by the State.
- ☐ Every issue that arose during construction was quickly resolved.

- ☐ All but one of the subcontractors felt a personal stake in the success of the project based on the results of the initial "kick-off" partnering workshop.

- ☐ The final product was judged to be a better quality product, attributable to partnering.

J. Unfavorable Outcomes of Project

Municipal agencies and VIA Metro Transit were continually playing "catch- up" during the design process due to their lack of involvement at the beginning of the project.

K. Changes in Partnership Arrangement That Would Have Increased Favorable Outcomes

City agencies felt that they should have been involved as participants in the planning and design, before the project went to construction; this would have saved time and money during the current operations stage in coming on-line with the TransGuide system. To everyone's credit, the project is currently working very well to insure involvement of all agencies and private sector firms needed to make the project work.

L. Applications of Techniques/Elements of Partnership Arrangement

TxDOT is expanding the system, and there is apparent intent to incorporate the partnering process on other traffic operations improvements statewide.

M. Keys to the Success of this Partnership

- ☐ The use of the partnering process.

- ☐ The on-going philosophy, approach, and manner of doing business in the San Antonio TxDOT district; this informal management style has been conducive to increased flexibility and coordination among partners.

- ☐ Quick, detailed response to inquiries (handled within hours at the most).

- ☐ Detailed plans and specs (opinion that functional specs do not work in this type project due to the large number of unknown factors).

- ☐ Top-down commitment from CAO/CEO/VP level of all agencies and companies.
- ☐ Open and pervasive communications from all subcontractors, the prime contractor, and the owner; (managers representing the partners became personal friends during the process as well as professional colleagues).

- ☐ Dedication to completing the project on time, on budget, with reduced transaction costs.

- ☐ Professional pride and improved workmanship resulting from the TQM/ partnering approach.

- ☐ A common vision that the use of advanced technology for traffic and transit management in general is the "wave of the future," and that highway and transit agencies have to do more to share resources, knowledge, and outcomes.

IV. Follow-up Information

A. Continuing or One-Time Partnership Arrangement

Partnership # I - on-going
Partnership # 2 - one-time, construction partnership
Partnership #3 - on-going

B. Documentation

1. Partnering report on workshop # I for the overall TransGuide ATMS project
2. Partnering report on workshop # 2 for the TOC
3. Corridor Management Team sample evaluation form (from monthly meeting)

4. Interagency Agreement between TxDOT and VIA
5. TxDOT Cooperative Industry- Project Agreement, based on Federal Partnership legislation

C. Key Contact

Patrick L. Irwin, P.E., Director, Transportation Operations, San Antonio District, Texas Department of Transportation, 3500 NW Loop 410, San Antonio 78284; (210) 731-5247, FAX (210) 731-5310

NCHRP Project 8-32(4)

Case Study Report

Project: TransGuide ITS Project
San Antonio, Texas

File: 22

Type of Partnership: Public-Private, Public-Public

Interviewer(s): Dr. Edd Hauser, P.E.

Interviewee(s):

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Note: This case study report was prepared based on personal interviews with the persons indicated. Although it is intended to represent their ideas and opinions, responsibility for how those ideas and opinions have been interpreted and recorded remains solely with the authors.

Issues Raised at Partnering Workshop

	ISSUE	STATUS/RESPONSIBILITY
1	State response time to: submittals waivers invoices materials on hand	
2	Delays caused by State Bureaucracy, FHWA Bureaucracy, Prime Contractor Bureaucracy	
3	Cannot find installed equipment	TxDOT is working to locate
4	Existing equipment inoperative	Procedure in place to replace
5	Schedule visibility: inputs by due date changes to schedule	Schedules will be published
6	Communication breakdown	Weekly meetings established
7	Chargeable days/liquidated damages	Will work with system
8	Hazard liability of boring damages	Documentation coming, liability with contractor
9	Workweek/work hours	5-day work schedule
10	Prenotification of lane closures/Traffic Control	Should be submitted each Friday
11	OSHA guidelines/Keep close to changes	AlliedSignal to distribute
12	Boring Pit details and protection	Resolution coming from TxDOT
13	Advanced technology may not work/meet specifications	TxDOT's responsibility
14	Color-coded conduit	Inspectors will color code
15	Concrete casings melting PVC pipe	May eliminate concrete in casing
16	Coordination between Contractors (schedule, phones, radios)	Communication plan being developed
17	Storage Locations, protecting materials	Contractor responsibility
18	Materials protection	Contractor responsibility
19	Integration testing	Need a plan to complete
20	Signoff items of work	May be done as installed; daily
21	Fiber pulls and splicing	AT&T to provide details to TxDOT

Issues Raised at Partnering Workshop (Continued)

	ISSUE	STATUS/RESPONSIBILITY
22	Software bugs and resolution	There will be none (by definition)
23	Hardware delivery times	Part of scheduling process
24	Subcontractor pay estimates	Flow through Prime
25	Payroll EEO/DBE documentation	Data provided by Subs (timely)
26	Daily quantity verification by state	Size of project necessitates
27	Night work	Must be scheduled
28	Safety	Everyone's responsibility
29	Change order approval process 25% New Items	Use TxDOT Procedures
30	Scenario completion by TxDOT	ATSC to provide data format
31	Training	Need to work details
32	CCC commissioning: turnover Browning to ATSC ATSC to TxDOT BO date	ATSC to work with Browning
33	Coordination with other projects; i.e., sign bridges, etc.	TxDOT - Pat McGowan to coordinate
34	Vandalism and security: manholes cables cameras and signs	Contractors' responsibility
35	Daily Diaries	TxDOT will maintain
36	Weather	It's always a concern
37	Monthly meetings	ATSC to coordinate and schedule
38	Continuity of partnering	Good idea. Each organization needs to develop its own plan
39	Manpower	TxDOT will review department staff
40	Suspension of time	TxDOT will look at
41	Shortage of plans	Hap Carr to supply to Zachry
42	As built drawings	7 copies needed
43	Submittal data from suppliers/ vendors ASAP	All parties will coordinate with AlliedSignal

Action Plans for Resolving Issues

1. State Response Time
   a. Submittals:
      - Shop details submitted through ATSC
      - 6 copies to state, 1 to ATSC, 1 to Zachry
      - State will approve in 7 days (goal).
      - Hap Carr will develop a prioritized list of submittals (partial review) by 3/15/93
   b. Waivers:
      - Pat M. "What waivers???"
   c. Invoices:
      - Addressed earlier; timing and responsibilities
   d. Materials on Hand:
      - Form to be supplied by Pat McGowan
      - No checks supplied
      - Andre needs to supply payment schedules to Pat McGowan.
3. Coordination between Contractors: Radios/Phones/Beepers
   a. Flasher radios will help solve this issue.
   b. Andreas Wolf and Pat McGowan will meet to develop a communication plan by 2/22/93.
4. Safety

   Establish an Interagency Safety Review Team to develop job safety plan and set up review process. Team members include:
   - Andreas Wolf - AlliedSignal
   - Darrel Dalworth - Zachry
   - To be appointed - Browning
   - Pat McGowan - TxDOT
   - To be appointed - Flasher
5. Adequate number of Inspectors

   Pat Irwin assured us that there would be the proper number of inspectors. It is also dependent on the scheduling.
6. Schedule Visibility

   Inputs from the subs (Zachry, Browning, AT&T, etc.) detailing the first 90 days and an estimate of the entire program should be submitted to Andreas Wolf (AlliedSignal) by 2/25/93. Updates are expected monthly. ATSC will provide an update to TxDOT (informal submittal) and all subcontractors.
7. Share Partnership with All Personnel

   Pat Irwin (TXDOT) will share the goals and methods with all new personnel on the job. The rest of the team agreed to do the same. All new key people will be given a copy of the workshop report to read. The participating companies will post the Partnering Charter for all to read (on the job if possible).
8. Change of Personnel

   If a substantial number of the participants in this workshop leave the job, then another partnering session should be scheduled. There may be other reasons to schedule a mid-course partnering session. The team will monitor the evaluation

San Antonio Advanced Traffic Management System Team Evaluation Form

PERFORMANCE FACTORS	RATING				COMMENTS AND RECOMMENDED ACTIONS
	Needs Improvement 1	Satisfactory 2	Excellent 3	Not Evaluated	
Project Safety					
Communication					
Schedule Execution					
Issue/Conflict Resolution					
Quality					
Public Relations					
Team Member Reliability					

Name: _____ Date: _____

Total Score: _____ Avg. Score: _____

San Antonio Advanced Traffic Management System Issue Resolution Escalation Process

Level	Time	Days	TxDOT	Browning	Zachry	AT&T	AlliedSignal
0	1 Hour	1		Foreman Project Engineer		Lead Technicians GBCS, CS/DT, CS + O	
1			Lead Inspectors (6 each)	Superintendent Johnny Lundquist	Pete Hernandez Mike Parton	Job Supervisors (3 each) H. J. Hutchenson	Field Representatives - Building - Roads
2	2 Hours	1	Chief Inspector Jack Meurin	Superintendent Johnny Lundquist	Alvin Zigmond Tony Hildebrand	Job Supervisors (3 each) H. J. Hutchenson	Field Representatives
3	24 Hours	2	Project Engineer Pat McGowan	Asst. Project Mgr. Jeff Haberstroh	Project Controls Mgr. Tom Crea	Functional Mgr. Walt Hammons	Construction Mgr. - A. Wolf Senior Proj. Eng. - B. Keeler Senior Proj. Eng. - A. Schmid
4	24 Hours	3	Area Engineer Pat Irwin	Asst. Project Mgr. Jeff Haberstroh	Project Mgr. Hilton Schweizer	Program/Project Mgr. Bill Bartlett Dennis Simmons	Project Mgr. Hap Carr
5	24 Hours	4	Construction Engineer Craig Clark	Project Mgr./V.P. Lynn Swatzell	Project Mgr. Hilton Schweizer	Director Mark Luilson	Senior Mgr. IVHS Programs Don Calp
6	24 Hours	5	Deputy District Engineer Fred Hilgers	President James Browning	Vice President Travis Cannon	Vice President Thomas L. Childs	Director, IVHS Systems Donald S. Beaulah

Guidelines:

1. Use the process as agreed upon by the team.
2. Resolve all issues at the lowest level of management possible.
3. Resolve all issues internally.
4. When issues cannot be resolved at any level within the specified time limit, the parties will agree to disagree and proceed jointly to the next level of decision-making
5. Escalating resolution of any issue to the next level should not be taken as a sign of failure, but rather as a sign that the system is working.

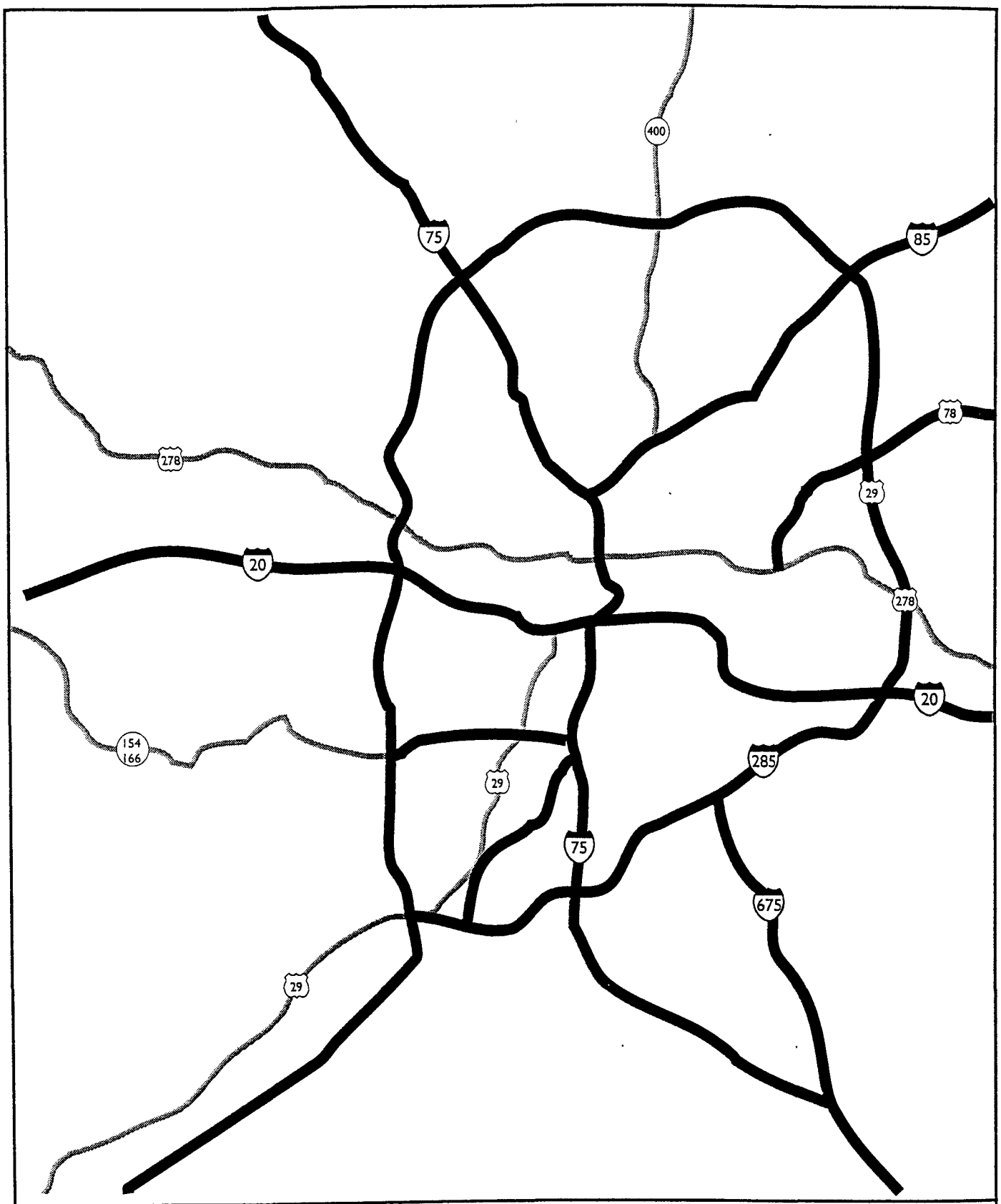
Case Study of Atlanta Committee for the Olympic Games: Olympic Transportation System

Executive Summary

The effort to mount the 1996 Olympic Games in Atlanta, Georgia is massive and complex. For seventeen days - July 19, 1996 to August 4, 1996 - the city will serve as the host to over 10,000 athletes, over 500,000 spectators per day, and a crush of news media representatives from around the world. The problem of transporting Olympic participants, officials, spectators, and media representatives is the principal responsibility of the Atlanta Committee for the Olympic Games (ACOG). This case study is about the efforts of the ACOG to participate in planning, design and implementation of those elements of the Atlanta transportation system that are needed to provide additional system capacity and transportation services during the Olympics.

ACOG proposed a plan to city and state officials called the Olympic Transportation System (OTS) to ensure the efficient movement of people, goods, and services during the 1996 Summer Olympic Games. The plan relies on Transportation Demand Management strategies to lower the background traffic in and around the Olympic Circle and maximum utilization of three modes: metro rail, buses, and pedestrian walkways. The Metropolitan Atlanta Rapid Transit Authority (MARTA)is under contract to operate the OTS.

ACOG alone could not successfully mount such an effort without the support of a well established partnership of public and private agencies and organizations. More than thirty organizations are involved in a partnership to plan and coordinate the OTS. These organizations meet once a month as the Olympic Transportation Support Group (OTSG) and include mostly public entities, but also include private organizations such as Central Atlanta Progress and the Atlanta Chamber of Commerce. Keys to the partnership's success to date include a commitment by the partners to recognize concerns of all affected parties and national/international attention gained by the project.



Kimley-Horn and Associates, Inc.

Atlanta (ACOG)

Major Highways

I. Project Information

A. Project Description

This partnership was formed to develop all public transportation system improvements in Atlanta to provide additional capacity and mobility for the 1996 Summer Olympic Games. The central player in the development is MARTA, the Metro Atlanta Regional Transit Authority. In order to provide substantial service improvements in the public transit system, MARTA solicited the input of some 40 different organizations as members of the Olympic Transportation Support Group (OTSG). The OTSG meets monthly from the time of its formation in 1991 through the July/August 1996 Games.

B Modes Included

☐ pedestrian walkways
☐ metro rail
☐ bus

C. Total Cost of Project/Cost-Sharing Arrangements

The projected cost of the public transportation service improvements is currently listed as $32 million' MARTA received $13 million from the U. S. Department of Transportation for ITS components, and the Federal Transit Administration (FTA) will be used to help MARTA's telephone operators handle more customer requests for route and schedule information. An Automatic Vehicle Locator system will be installed on 250 buses. MARTA is under contract to the Atlanta Committee for the Olympic Games (ACOG) to run the Olympic Transportation System (OTS).

ACOG also received a $15 million grant to help cover the costs of transporting, maintaining, and training drivers to operate the 2,000 buses for the OTS. The City of Atlanta and the Georgia DOT received $4 million in supplemental funding from the Federal Highway Administration (FHWA) to develop and deploy an Advanced Transportation Management System (ATMS) as part of the overall system improvements.

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[1]Officials are sensitive to discussions of cost sharing arrangements. Pubic funds are readily acknowledged but funds from private sources are not readily disclosed.

D. Current Status of the Project

Initial planning for the Olympic Transportation System began as early as 1991. Most of this initial planning was done by the Atlanta Regional Commission (ARC), the local MPO. ACOG presented final plans to the public in late May 1995. As of August, 1995 ACOG has contracts on 1,000 buses.

E. Future Plans for Project

The OTS is mainly a one-time operation planned for the seventeen days of the Summer Olympics of 1996. However, the transit improvements will stay in place. The city should benefit from improved traffic signs, Automatic Vehicle Locator systems, Advanced Traffic Management systems, and increased numbers of buses and trains. Officials expect MARTA ridership to increase after the Olympics are over due to the improved service features.

II. Partnership Description

A. Steps in Developing the Partnership

ACOG was formed to develop Atlanta's bid for the 1996 Olympics. Much of the initial planning was developed by the ARC. In fact, at least seventeen staff members of the ARC are now staff members of ACOG, including the current Director of Transportation for ACOG, Joel Stone. This committee is primarily the brain child of Billy Payne who is now the CEO of ACOG.

While there are a large number of partners involved in the activities of the ACOG, several key organizations form the core of this partnership (see appendix). The ARC, Central Atlanta Progress, MARTA, and the City of Atlanta seem to be the most important organizations in the partnership. These organizations have provided the planning staff responsible for the success of the transportation efforts of ACOG.

Most of the funds used to support the transportation activities of ACOG come from the FTA. However, several corporate sponsors have donated buses including General Motors and BMW. The Georgia DOT has provided funds for improved traffic signs, development of High Occupancy Vehicle (HOV) lanes, and Advanced Traffic Management. TRW is under contract with the Georgia DOT to operate an ATMS.

B. Partners: Roles and Responsibilities

- ☐ ACOG- Primary responsibility of planning and coordinating the Olympic Transportation System.
- ☐ MARTA- Under contract to operate the Olympic Transportation System.
- ☐ Atlanta Regional Commission (ARC) - the MPO for Atlanta, provides planning and support staff for ACOG. Seventeen staff members are on loan to ACOG to help with the planning efforts.
- ☐ Central Atlanta Progress (CAP) - Represents the concerns of corporate Atlanta. CAP was instrumental in formulating the Transportation Information Package that outlined the Transportation Demand Management strategies of the OTS. The OTS encourages private employers to give their workers vacations during the Olympics, use telecommuting and/or use mass transit during the off peak hours.
- ☐ City of Atlanta- The Bureau of Planning works with ACOG staff to make accurate projections and coordinate efforts. The Police Department will play a large role in providing security and traffic management.
- ☐ Georgia DOT- Using funds from ISTEA to deploy a number of ITS (Intelligent Transportation System) improvements; improve overall traffic signs, including installation of Variable Message Signs; build HOV lanes; and improve access to Olympic venues. The DOT has TRW under contract to design, build and operate an Advanced Traffic Management System (ATMS).
- ☐ FTA- Major source of public funds ($28 million). This agency is playing a leading role in getting the agreements with other transit agencies for the use of their buses.

C. Person/Organization Most Responsible for Development of Partnership

☐ Joel Stone, Director of Transportation, ACOG (formerly with ARC)
☐ Susie Dunn, Coordinator of the OTSG, ACOG
☐ Bill Collier, MARTA (office located with ACOG)
☐ Rod Wilburn, Program Manager for Planning and Operations, Consultant with ARC
☐ Paul Kelman, CAP
☐ Byron Marshall, City of Atlanta
☐ Wayne Shackelford, Georgia DOT

D. Person/Organization Most Responsible for Maintenance of Partnership

☐ Susie Dunn, ACOG

E. Organizations Indirectly Involved in Partnership

☐ Corporate Sponsors of ACOG
☐ Delta Airlines
☐ BMW
☐ General Motors

III. Partnership Evaluation

A. Motivation Behind Formation of Partnership

ACOG and OTSG came together as a result of the City of Atlanta's successful pursuit of the 1996 Summer Olympic Games. This historic event will bring millions of visitors, spectators, thousands of Athletes, and media to the city from July 19, 1996 through August 4,1996. Unprecedented numbers of people will be transported to the region and the city and present a unique challenge to the transportation systems of the area. The success of the Olympics may well depend on the successful implementation of the OTS.

B Goals of the Partnership

The main goal of the OTS is twofold: to substantially reduce normal daily commute traffic and to efficiently transport the Olympic family and eighty- five percent of the spectators on MARTA buses and trains. Implied in the above is the goal of finding the resources to implement the OTS.

C. Success in Achieving Goal

According to Joel Stone and Bob McCord (contract manager), the OTS is on schedule. Over 1,000 buses are under contract and a large number of the major employers located in the greater Atlanta region have agreed to cooperate with the Transportation Demand Management Strategies of the OTS. The FTA and the US DOT have been especially supportive of the efforts to meet the transportation challenges of the '96 Olympics. The FTA played a major role in getting the agreements signed to authorize the use of buses from other transit agencies.

D. Legal Issues

The FTA had to waive some of its regulations in order for transit agencies to share their buses with the city of Atlanta. The "umbrella lease agreement" must be constantly modified to account for local particularities. Also, ACOG must ensure that all Olympic venues are accessible to the handicapped in order to comply with the Americans with Disabilities Act (ADA).

E. Technical Issues

The OTS is based on the forecast that 500,000 spectators per day will need to be transported. This model may not account for all relevant variables.

F. Institutional Issues

The historic and unique character of the Olympics has produced and extraordinary degree of cooperation between partners. Historic rivalries between City Hall and the business community, for example, are not in evidence at this time.

G. Barriers to Forming the Partnership That Were Overcome

The uneasy alliance between political leadership and corporate community has transformed into an effective partnership. Both groups seem to be exerting extra effort to make the project a success.

H. Barriers That Were Not Overcome

One of the most important barriers concerns access to resources. Acquiring adequate resources such as funds, expert staff, and volunteers is a constant problem.

I. Favorable Outcomes

The tremendous publicity associated with this event is expected to raise the profile of the city and bring substantial gains to the tourist industry. The city expects billions of dollars to be pumped into the local and regional economy. Officials also expect increased transit ridership and improved transit infrastructure after the event is over. Specific transportation-related improvements include: better traffic signs, Automatic Vehicle Locator Systems installed on 250 buses, HOV lanes, and ATMS.

J. Unfavorable Outcomes of the Project

ACOG has spent a lot of money in the areas and neighborhoods affected by the coming of the Olympics. However, the OTSG does not include representation of the neighborhoods at this time.

K. Changes in Partnership Arrangement That Would Have Increased Favorable Outcomes

It appears that ACOG needs increased citizen input, making sure that all parties are included in the key areas of decision making. For example, the OTSG should include representatives of Community Based Organizations. At the present time, the leaders of ACOG feel that such issues are resolved best by the Community Relations Office.

L. Applications of Techniques/Elements of Partnership Arrangement.

This particular partnership presents a model of cooperation among the key players. It may be the nature of this historic event, but the usual barriers do not seem to present serious problems for the alliance of public and private partners in this instance. The FTA and the FHWA have provided substantial financial support for the goals of this partnership. The FTA has also expedited the resolution of legal issues involved in the sharing of public resources from other transit agencies.

M. Keys to the Success of this Partnership

The following are key attributes to this partnership's success:

☐ Excellent cooperation among key players.

☐ Long-standing professional and personal relationships between leaders of the partnership. The negotiating team of ACOG for example are long term player in the affairs of the region. The various program managers are people with recognized expertise and a long history in the area.

☐ The partnership has been able to acquire the resources that it needs at every critical juncture to meet its short- and long-range goals.

☐ There appears to be a commitment to listen to the concerns of all affected parties and a commitment to solve legitimate problems.

☐ National and international attention and scrutiny may force a level of cooperation that may be unique to this project.

☐ Cooperation between Federal State and local agencies is critical. The FTA, FHWA, Georgia DOT, ARC, local county governments and the City of Atlanta are working are showing an unprecedented level of cooperation.

☐ Technologically advanced information infrastructure.

Appendix

A. Olympic Transportation Support Group Members

- ☐ Athens/Clarke County Public Works Department
- ☐ Atlanta Bureau of Traffic and Transportation
- ☐ Atlanta Chamber of Commerce
- ☐ Atlanta Department of Public Works
- ☐ Atlanta Department of Planning and Development
- ☐ Atlanta Paralympic Organizing Committee
- ☐ Atlanta Police Department
- ☐ Atlanta Police Department, Special Operations Section
- ☐ Atlanta Regional Commission
- ☐ Bureau of Planning, Transportation and Environment
- ☐ Central Atlanta Progress
- ☐ City of Atlanta
- ☐ City of Conyers
- ☐ City of Stone Mountain
- ☐ Clayton County Transportation and Development Department
- ☐ Cobb County Department of Transportation
- ☐ Cobb County DOT
- ☐ Committee on Olympic Development in Atlanta
- ☐ DeKalb County Chamber of Commerce
- ☐ DeKalb County Planning Department
- ☐ Douglas County/ Douglasville DOT
- ☐ Douglas County Department of Transportation
- ☐ Federal Highway Administration
- ☐ Federal Transit Administration
- ☐ Fulton County Department of Public Works
- ☐ Fulton County Office of County Manager
- ☐ Fulton County Sheriffs Department
- ☐ Georgia Department of Transportation
- ☐ Georgia Institute of Technology
- ☐ Georgia Public Service Commission
- ☐ Georgia State Patrol
- ☐ Georgia State Patrol, Department of Public Safety
- ☐ Gwinnett County DOT
- ☐ Hall County Department of Public Works

- ☐ Atlanta Hartsfield International Airport
- ☐ MARTA
- ☐ Rockdale County Department of Public Works
- ☐ State of Georgia, DOT
- ☐ State Olympic Task Force
- ☐ U.S. DOE, Atlanta Support Office

B. Key Contact

Joel F. Stone, Jr., Director of Transportation, Atlanta Committee for the Olympic Games, 270 Peachtree Street, Atlanta, Georgia 30301; (404) 548-2030, FAX (404) 548-2012

NCHRP Project 8-32(4)

Case Study Report

Project: Atlanta Committee for the Olympic Games (ACOG)/Olympic Transportation System (OTS)

File No.: 37

Date: August 8, 1995

Type of Partnership: Public-Private

Interviewer: Dr. Claude Barnes

Interviewees: Joel F. Stone, Jr.
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Note: This case study report was prepared based on personal interviews with the persons indicated. Although it is intended to represent their ideas and opinions, responsibility for how those ideas and opinions have been interpreted and recorded remains solely with the authors.

Case Study of Atlanta Empowerment Zone/Atlanta Community Empowerment Corporation's Multimodal Transportation Planning Efforts

Executive Summary

This case study examines the efforts of the Atlanta Partnership that put together a winning Urban Empowerment Zone application. The empowerment zone application process requires that a strategic plan be developed and implemented by a Community Empowerment Board. This Board directs the activities of a new public-private agency, the Atlanta Community Empowerment Corporation (ACEC). Participation of the local residents in all phases of planning and in all major policy decisions relating to the Strategic Plan is required by law.

The basic goal of the ACEC is to significantly reduce poverty and revitalize the thirty neighborhoods that make up Atlanta's Urban Empowerment Zone. The Strategic Plan plays a key role in improving Atlanta's transportation components, with the recognition of the link between urban inequality and urban mobility. Transportation improvements are essential to the success of the overall plan. A key to the success of this partnership is the willingness of the participants to keep an open mind to new ideas and new ways of solving old problems.

I. Project Information

A. Project description

The Federal Budget Act of 1993 authorized the designation of six urban empowerment zones by the Secretary of Housing and Urban Development. These zones would each receive immediate federal grants of $100 million dollars and could be eligible to receive an additional $150 million in federal tax incentives. The federal dollars are required to be supplemented with at least an additional $250 million dollars from the local private sector to create a potential funding pool of over $400 million dollars to substantially reduce urban poverty. Hundreds of cities submitted applications. Atlanta, Detroit, Chicago, New York, Baltimore, and the joint application of Philadelphia/Camden won the federal designation. This case study examines the efforts of the Atlanta Partnership and examines the transportation component of their plans.

Atlanta's Urban Empowerment Zone (the "zone") includes thirty neighborhoods that form a 9.29 square mile horseshoe around downtown. The area includes twenty-three census tracts with a total population of 49,998, a poverty rate of 54.7%, and unemployment rate of 17.5%.

The empowerment zone process requires that a strategic plan be developed and implemented by a Community Empowerment Board. This Board directs the activities of a new public private-agency, the Atlanta Community Empowerment Corporation (ACEC). Participation of the local residents in all phases of planing and in all major policy decisions related to the implementation of the Strategic Plan is required by law. The Strategic Plan outlines how the federal, state, local, and private funds would be used over the next ten years to meet the goals of the project.

Atlanta Community Empowerment Corporation's Strategic Plan has a key role for transportation in its efforts to combat urban poverty. Plans call for the creation of a Transit Services Corporation to use para-transit to get Zone residents to jobs inside and outside the Zone. A Transit Travelers Center will be built in the Zone to provide residents access to information and to alternative modes of transportation. The ACEC also plans to work with the Metropolitan Atlanta Rapid Transit Authority (MARTA) to implement an Advanced Traveler Information System (ATIS) and improve bus service in the Zone. Finally, plans call for the development of four pedestrian corridors that will emphasize walking and bike lanes as alternative means of transportation.

B. Modes Included

☐ bus
☐ rail
☐ pedestrian corridors
☐ bicycles

C. Total Cost of Project/Cost-Sharing Arrangements

MARTA estimates that it will spend $26.3 million in the zone on Intelligent Transportation Systems (ITS), bus and shelter replacements, new maintenance facilities, and other service improvements.

The Committee for Olympic Development (CODA) estimates that it will spend an additional $30 million on comprehensive improvements to four pedestrian and public transit access corridors which will link Zone neighborhoods to regional services, higher education institutions, employment centers, and recreational/sports venues being prepared for the 1996 Olympics.

The National Association of Neighborhoods will work with MARTA to establish a $2 million dollar Transit Traveler Center. ISTEA provides $16 million administered through the Federal Transportation Administration (FTA) and the Federal Highway Administration (FHWA), for research and planning multimodal solutions to the transportation problems of the Zone.

The City of Atlanta passed a $149 million bond referendum in 1994. Officials estimate that $29 million will be used to improve streets, bridges, walkways in the Zone.

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[1]The total amount of funds available for the development and implementation of Atlanta's Urban Empowerment Zone total more than S500 million. The cost sharing dollars describe here only relate to the transportation component of Zone activities.

D. Current Status of Project

Most of the planning for transportation-related projects is completed. The plans for the capitalization of the Transportation Services Corporation are not complete at this time. About half of the thirty neighborhoods included in the Zone are also within the Olympic circle and will benefit from projects and development associated with that event.

E. Future Plans for Project

According to Nelson Jeter, executive on loan from Georgia Power assisting the acting executive director of the Atlanta Community Empowerment Corporation, the ACEC is in the process of developing a benchmark to measure and evaluate progress.

II. Perspectives on the Process of Developing the Partnership

A. Steps in Developing the Partnership

The Atlanta Urban Empowerment Zone is an ambitious attempt to revitalize the inner city a create an "Urban Village" characterized by dynamic job growth and business activity, safe neighborhoods, and youth development. The plan calls for using a variety of strategies, a substantial infusion of public and private investment ($500 million), and local participation to generate sustained economic development in the Zone. Atlanta's successful Urban Empowerment Zone application would not be possible without "...the city's unique ability to build consensus and commitment among its neighborhoods, corporate citizens, and government leaders..."

City officials, representatives from The Atlanta Project, and the Atlanta Economic Development Corporation, held their first meetings about developing an empowerment zone application in September 1993. This initial group convened an ad-hoc Empowerment Zone Task Force comprised of city, county, state and federal agency representatives, nonprofit organizations, and neighborhood groups to begin the process of defining the boundaries of the Zone. City staff presented its choice of neighborhoods for Zone designation to the Ad-hoc Empowerment Zone Task Force and the Atlanta Planning Advisory Board (APAB).

This initial planning process did not include substantial input from residents of the proposed Zone and was later rejected. Mayor Bill Campbell subsequently appointed a Community Empowerment Board (CEB) in February 1994 to guide the revised application process and the development of the Strategic Plan. The CEB originally consisted of 17 members but has expanded to 69 members in March representing the 30 neighborhoods in the Zone, federal, state and local governments, private business and non-profit organizations. The Mayor co-chairs the Board along with community representative Hakim Yamini.

The CEB selected the area for Urban Empowerment Zone designation and this choice was approved by the Atlanta City Council in April 1994. The CEB also appointed a Strategic Plan Committee and identified four basic themes for the empowerment zone: Economic Development, Public Safety, Human Services and Community Development. Five priorities were established for each theme. The transportation component of the Strategic Plan falls under the themes of economic development (priority #5) and creating safe livable communities (priority #3). Atlanta's Urban Empowerment Zone application and its Strategic Plan were selected by federal officials in late December 1994.

B. Partners: Roles and Responsibilities

- ☐ Department of Housing and Urban Development (HUD) - Provides the initial grant of $100 million and subsequent tax incentives of $150 million. A substantial portion of these funds will be used to plan transportation projects and to capitalize the Transportation Services Corporation.

- ☐ FTA and FHWA will provide funds for multimodal transportation planning and demonstration projects as mandated by ISTEA.

- ☐ MARTA will develop and deploy ITS to serve the residents of the Zone. MARTA will also improve bus service to the Zone.

- ☐ The City of Atlanta will use federal, state, local, and private funds to make infrastructure improvements in the Zone including upgrading of streets, bike lanes and pedestrian corridors. The City of Atlanta provides technical planning staff to aid the implantation of the Strategic Plan.

☐ The Atlanta Regional Commission (ARC) will provide transportation planning funds through ISTEA metropolitan planning allocation.

☐ Corporation for Olympic Development in Atlanta (CODA) will provide substantial investments in fifteen of the thirty neighborhoods in the Zone. Funds will be provided to develop four pedestrian corridors in the Zone.

☐ National Association of Neighborhoods will work with MARTA to establish a Transit Traveler Center in the Zone to assist neighborhood residents, churches, and social and economic development organizations and businesses in developing transit options.

C. Person/Organization Most Responsible for the Development of Partnership

☐ Bill Campbell, Mayor, City of Atlanta
☐ Joe Reid, Acting Executive Director, Atlanta Community Empowerment Corporation
☐ Hakim Yamini, Co-chair of Community Empowerment Board (CEB)
☐ Paul Kelman, Acting President, Central Atlanta Progress
☐ Dan Sweat, The Atlanta Project (TAP)
☐ Linda Taylor, Fulton County
☐ Ricardo C. Byrd, Director, National Association of Neighborhoods

D. Person/Organization Most Responsible for Maintenance of Partnership

Joe Reid, Acting Executive Director, Atlanta Community Empowerment Corporation

E. Organizations Indirectly Involved in Partnership

☐ Nelson Jeter. Executive-on-Loan from Georgia Power
☐ Coca-Cola
☐ Nations Bank
☐ Atlanta Committee for the Olympic Games
☐ Trust Company Bank

III. Evaluating the Process of Developing and Maintaining the Partnership

A. Motivation Behind Formation of Partnership

Atlanta has a long history of private and public partnerships for ambitious civic purposes. The bi-racial public and private coalition of the 1960's rebuilt the skyline of the city. In the 1970's public and private partnerships helped to ease the transition to black urban administration. In the 1980's and 1990's, several public and private partnerships have come together to revitalize development in the city and attract several high profile events to the City such as the National Democratic Convention of 1988, the Super Bowl of 1992, and most recently the Summer Olympics of 1996.

The opportunity to obtain significant federal support to revitalize the area near the Central Business District, however, provides the motivation for this most recent partnership of private, public, non-profit, and neighborhood groups associated with the ACEC.

B. Goals of the Partnership

The overall goal of the ACEC is to revitalize the thirty neighborhoods that constitute Atlanta's Urban Empowerment Zone. This goal entails creating a dynamic economic development process that will produce and sustain thousands of new jobs for Zone residents over the next ten years and significantly reduce the level of urban poverty. Also, the ACEC hopes to build safer and stable neighborhoods that are able to provide real opportunities for the young people.

In order to accomplish these goals, the ACEC developed a Strategic Plan that contains several key elements. One of the key elements recognizes the link between urban inequality and urban mobility. Transportation improvements are essential to the success of the overall efforts of the plan. While MARTA is an excellent transit system, it does not serve the entire ten-county metropolitan region.

The two counties in the metro area with the most rapid employment growth rates and job opportunities are effectively isolated from a significant number of Zone residents who are transit dependent. In order to solve this problem the Strategic Plan calls for the establishment of the Transit Services Corporation to use a variety of means to get residents to areas of job opportunities. The plan also calls for improvements in existing transit

services by providing funds for the implementation of ITS, research on new route configuration, and improved bus service. Pedestrian walkways and bike lanes are also proposed as alternative means of transportation within the zone and to access multimodal transit centers.

C Success in Achieving Goals

By many accounts the greatest achievement of the ACEC is the incorporation of grassroots representation at every level of important planning and decision-making. More than 5,000 people participated in 70 formal meetings over a three-month period to produce drafts of the Strategic Plan. Being designated an Urban Empowerment Zone was a major accomplishment, and greatly enhanced the ability of the ARC to carry out the increased public involvement component stimulated by ISTEA.

D. Legal Issues

One of the most challenging issues concerns how to streamline bureaucratic procedures to fast-track the implementation of various projects envisioned by the Strategic Plan. The City, State, and the Federal government may have to waive some legal requirements associated with the disbursement and expenditure of public funds.

E. Institutional Issues

The ACEC is a complex public-private partnership representing a large array of agencies, non-profits, organizations, businesses, governments, neighborhoods, and private citizens. Constant attention must be given to the problem of boundaries and duplication of effort so that resources will not be wasted.

F. Barriers to Forming and Maintaining the Partnership That Were Overcome

There are several key areas that needed to be overcome to ensure the success of this particular partnership. First, many participants expressed mistrust of city officials. Initially many people were reluctant to participate in the planning process because past efforts seemed to fall short.

City officials had to work hard to overcome this problem by enlisting the support of The Atlanta Project staff, finding innovative ways to inform

participants of meetings, and using the City Hall as a central location for all meetings of the group. Second, the problem of bringing so many different organizations together to hammer out a common agenda requires that officials be open to new ideas and new ways of solving problems. This is a problem that is never fully overcome.

G. Barriers That Were Not Overcome

The complexity of the partnership is a problem that requires constant attention.

H. Favorable Outcomes of Project

As a result of the planning process, a network of skilled and civic minded representatives from different neighborhoods, businesses, agencies, non- profits, and other organizations have come together to create a workable plan to significantly improve a declining area of the city.

I Unfavorable Outcomes of the Project

Despite the initial success and enthusiasm for the project, there are some problems and challenges that need to be addressed. The CEB has yet to name a permanent executive director and the reluctance to name the current acting director may cause some loss of momentum. The project has not met all the deadlines established by requirements of the Federal government and this may lead to some delay and/or loss of funds.

J. Applications of Techniques/Elements of Partnership Arrangement

During the process of developing the Strategic Plan, the Strategic Plan Committee made use of the Carter Collaboration Center. The Center has developed computer programs to facilitate discussion among groups with conflicting interests. These programs may be of some use to other groups seeking to build the consensus necessary for partnerships to work.

K. Keys to the Success of this Partnership

The history of successful partnering in the City of Atlanta and the longstanding professional and personal relationships among key players is the critical factor for the success of this partnership.

A second key to success is the willingness of the participants to keep an open mind to new ideas and new ways of solving old problems.

Another key to the success of this partnership is the attention given to monitoring and evaluation in combination with a willingness to respond to criticism of short-comings without defensiveness. Having access to adequate resources is also essential for the success of this partnership.

IV. Follow-up Information

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NCHRP Project 8-32(4)

Case Study Report

Project: Atlanta Urban Empowerment Zone

File: 38

Date: June 8, 1995

Type of Partnership: Public-Private-Community

Interviewer: Dr. Claude Barnes

Interviewees:

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Note: This case study report was prepared based on personal interviews with the persons indicated. Although it is intended to represent their ideas and opinions, responsibility for how those ideas and opinions have been interpreted and recorded remains solely with the authors.

Pilot Case Study of Virginia Railway Express

Executive Summary

This partnership was created to provide commuter rail service in Northern Virginia. Members of the partnership that created the Virginia Railway Express (VRE) between 1986 and 1989 include the Northern Virginia Transportation Commission(NVTC); Potomac and Rappahannock Transportation Commission (PRTC); the counties of Fairfax, Prince William, Stafford and Arlington; and the independent cities of Manassas and Alexandria.

Since its creation, the cities of Manassas Park and Fredericksburg have joined the partnership. All the cities and counties identified here are in one of the two regions served by the two commissions.

A seven-member Operations Board serves as the policy committee of VRE. There are also currently two "alternate members" appointed by PRTC and one alternate representing NVTC. The Director of the Virginia Department of Rail and Public Transportation is an ex officio member of the Board. The instrument that created the VRE was an inter-governmental Memorandum of Agreement (MOA) that was signed by the two commissions and the original six cities and counties. The two commissions jointly own the assets of the VRE; the railway has no independent legal status apart from NVTC and RPTC.

An "extended partnership," in addition to the three-agency, public sector partnership identified in the previous two paragraphs, includes other stakeholders: CSX Transportation, Inc., Norfolk Southern Corporation, Conrail, and Amtrak.

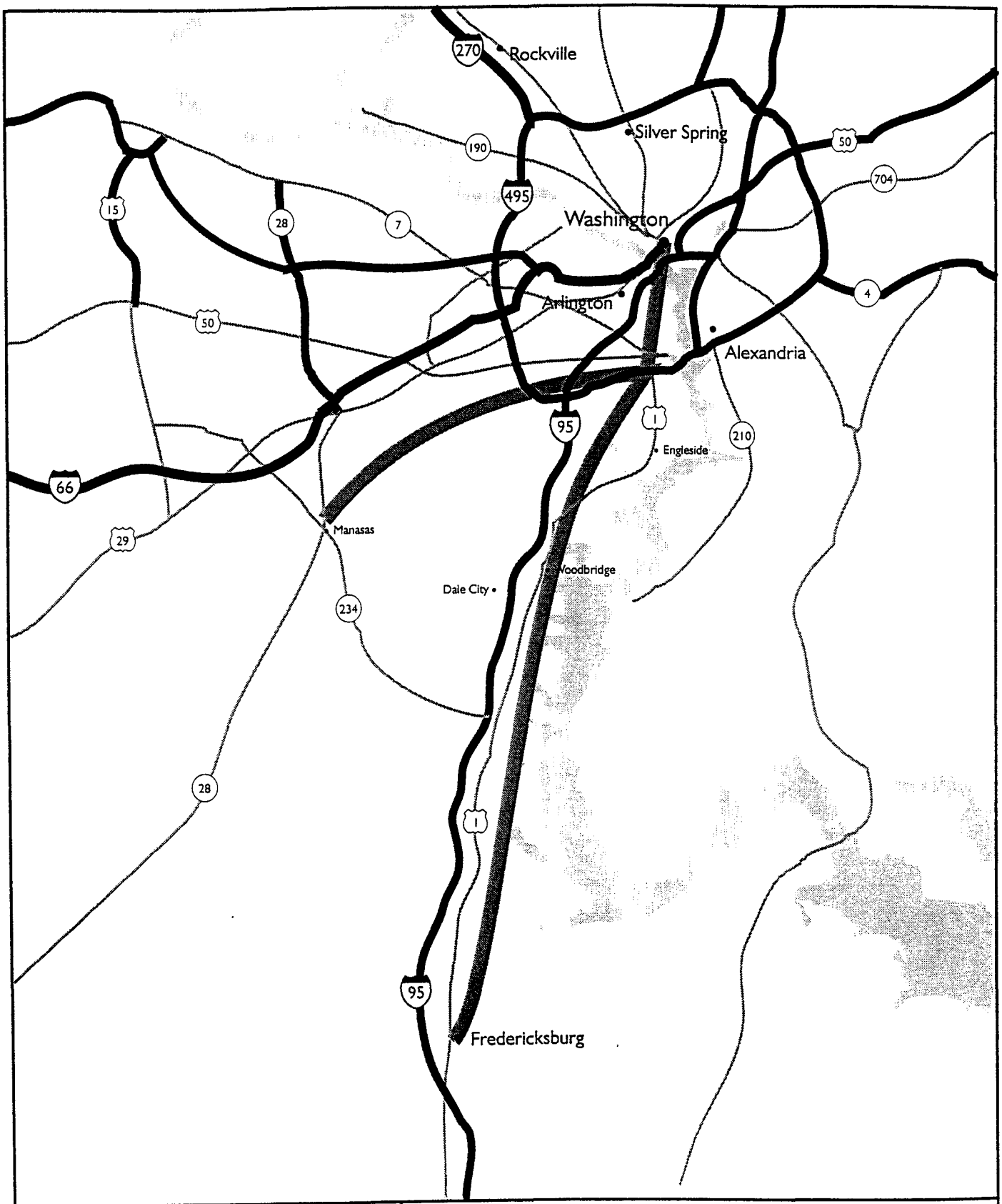
The form of agreement between the two transportation commissions and the three railroads is a formal Operating/Access Agreement. Amtrak has a contract to provide crews and scheduling. While the extended partnership is the most critical to the overall success or failure of VRE, there was insufficient time during this research project to allow a complete study of the railroad's participation. Therefore, primary lessons learned in the case study are applied to the public-public partnership identified above. Lessons

learned from the partnership's association with the railroads are included in this case study to amplify and clarify the findings.

Factors that have contributed to the success of this public agency partnership to date have included:

- ☐ The persistence, vision, and management style of VRE top management.
- ☐ An orientation and continuing commitment to the customer and marketing the transportation service.
- ☐ Vision of the political leadership in Northern Virginia in setting an agenda to establish a commuter rail service and following up with necessary actions to make it happen.
- ☐ The existence of a ready-made market for the product - a relatively affluent population group in the service area that is willing to pay for alternate transportation to avoid congested highways in their daily commute.

The Commonwealth sees that other potential commuter rail services such as those currently being discussed in the Tidewater area can learn from some of the successes and failures that have been acknowledged in developing the partnership and in planning and operating the VRE.



Kimley-Horn and Associates, Inc.

Virginia Railway Express

Commuter Rail Corridors

1. History and Description of Project

A. Project Description

The Virginia Railway Express (VRE) is essentially a "trademark name" for the commuter rail service operated by a transportation partnership connecting many of the land holdings of the RF&P Corporation. The RF&P Corporation is one of the largest real estate companies in the Mid-Atlantic region. RF&P Corporation is owned by System Holdings, Inc., a wholly- owned subsidiary of the Virginia State Retirement System. RF&P formerly was the real estate arm of the Richmond, Fredericksburg and Potomac Railroad. Because of that, most of its developments and land holdings are concentrated along the 113-mile rail and highway corridor between Richmond and Washington, DC.

For example, RF&P owns the Crystal City development in Arlington, and the 342-acre Potomac Yard in Alexandria. Development of Crystal City is handled largely through limited partnerships with the Charles E. Smith Companies. In total, RF&P owns more than $650 million in assets including 5,100 acres of undeveloped land and over 9.6 million square feet of commercial buildings.

Planning and development of VRE's passenger rail service began in the early 1980's. In 1986, the Virginia Legislature created the Potomac and Rappahannock Transportation Commission (PRTC) as a vehicle to team with the previously-existing Northern Virginia Transportation Commission (NVTC). NVTC had been an operating entity since 1964. The two commissions together were developed as a precursor to VRE.

A formal agreement creating VRE was entered into in October 1989. Negotiations began with the railroads for track access and operating rights. VRE began commuter rail operations in July 1992.

Use of the tracks between Fredericksburg and the District of Columbia, and between Manassas and the District, are guaranteed by Operating/Access Agreements between VRE and the railroads that own the tracks. One of the original Operating/Access agreement that was signed between the two northern Virginia transportation commissions and the railroads that owned the track in the region was with the Richmond, Fredericksburg, and Potomac Railroad. In 1990, the RF&P Corporation divested itself of its railroad holdings by selling its tracks to CSX Transportation, Inc.

The two commuter rail lines' northern-most terminals are at Crystal City on the south side of the Potomac, and two stations in the District of Columbia: L'Enfant Plaza and Union Station. At each of these locations, they connect with Amtrak and Washington METRO, as well as bus, taxi and other modes. The lines' western and southern terminals are at Manassas and at Fredericksburg, respectively. The two lines converge and use the same track across the Potomac and over the two-mile link into Union Station. The track on the Fredericksburg line is owned by CSX; Norfolk Southern Corporation owns the line to Manassas; Conrail owns the line across the Potomac River bridge and into the south tunnel portals of Amtrak's First Street Tunnel..

Ridership has grown on the VRE to a daily maximum level of over 9,000 passenger trips, and an average of over 8,000 trips per day. Some projections of future ridership show that by the end of the century over 30,000 daily riders could be using VRE if the undeveloped 5,100 acres along the track owned by RF&P Corporation is built out.

B. Modes Included

☐ commuter rail
☐ coordination of commuter trains with freight trains that operate on the same track
☐ park and ride facilities
☐ feeder bus service

C Total Cost of Project, Cost-Sharing Arrangements

Capital raised for this project came from local government sources and the Commonwealth of Virginia. The agency that represents the interest of the Commonwealth of Virginia is the Department of Rail and Public Transportation (VDRPT). The initial capital investment in the VRE was approximately $150 million. Annual budgets to operate the railroad are:

☐ capital expenditures averaging $15 million; VDRPT's share is $2.5 million
☐ operating cost $17 million; VDRPT's share is $3.0 million

D. Current Status of Project

VRE has been in operation since July 1992. Contracts are in place with CSX, Norfolk Southern, and Conrail. These particular contracts are in the form of "Operating/ Access Agreements," covering the use of the track, equipment, operations, rush-hour operations, special trains, station leases, maintenance, improvements, liability, labor claims, arbitration, default, payments, etc.

A separate "Northern Virginia Commuter Rail Agreement" is in place between the Potomac and Rappahannock Transportation Commission (for VRE) and the Virginia Department of Transportation (VDOT) to serve as a vehicle to provide continuing financial support to the operation from flexible and federal sources. A similar agreement between VDOT and NVTC Services include project management, technical assistance, and planning assistance. They are primarily for design, maintenance and operation of the park and ride lots and access roads.

Many aspects of planning, managing, and improving service and facilities on the VRE are handled by staff and subject to approval and oversight of the Operations Board. This Board is essentially an operating subcommittee of the membership of the two transportation commissions, NVTC and PRTC. Typical agendas for the Operations Board include such items as:

- ☐ consultant services for operations
- ☐ consultant services for economic analysis
- ☐ software/data base management
- ☐ marketing
- ☐ customer service
- ☐ schedule adjustments
- ☐ fuel procurements
- ☐ budget and CIP guidance and approval
- ☐ design and construction contracting
- ☐ tariff recommendations
- ☐ fleet management
- ☐ approval of procurements greater than $100,000
- ☐ major policy initiatives and legislative advocacy
- ☐ grants management
- ☐ coordination with multimodal corridor planning and improvements

E. Future Plans

Current plans include the following:

- ☐ Expansion of service on existing corridors (additional trains)
- ☐ Extension of the western line beyond Manassas, to Gainesville, Virginia
- ☐ Developing more effective through-travel connections with Amtrac and MARC (Maryland statewide commuter rail)
- ☐ Buying the Norfolk Southern line (or securing alternative access at affordable fees) is a current issue before the VRE Operations Board and the two transportation commissions
- ☐ Safety improvements to gradually improve speed and operational safety on the lines
- ☐ Continuing renegotiating of the Operating/Access agreements with the railroads requires significant investment of time and resources
- ☐ Making track improvements to increase rail capacity on the Fredericksburg line

II. Partnership Description

A. Steps in Developing the Partnership

Initially, a master agreement was developed for signature by the two transportation commissions:

(1) Northern Virginia Transportation Commission (NVTC), whose service area includes Fairfax and Arlington counties and the city of Alexandria; and

(2) Potomac and Rappahanock Transportation Commission (PRTC), which includes (for purposes of VRE service) the cities of Manassas, Manassas Park, and Fredericksburg, and Stafford and Prince William Counties (further south and west of the NVTC area).

Little federal operating funds have been used by VRE from the beginning of the service, although Federal Transit Administration (FTA) funds have subsequently been used to pay for specific capital improvements.

Operating Agreements were initially signed with the three railroads, extending through calendar year 1994. Subsequent Operating Access

Agreements have been negotiated, with the current Agreements with Norfolk Southern and Conrail expiring in mid-1996, and the CSX Agreement expiring in mid-1999.

B. Partners: Roles and Responsibilities

Partnership # 1: Public Agency Partnership

Technically, VRE is a jointly-managed, public agency transportation partnership between NVTC and PRTC; seven persons, including the Director of VDRPT, currently serve on the Operations Board; each commission appoints one or two alternates, and members and alternates typically attend meetings. The "partnership" is therefore an activity of the commonwealth, the two regional transportation commissions and their member local governments.

(NVTC is the inner counties and cities in DC suburbs; PRTC is "outer ring" cities and counties, which includes long distance commuters)

Some of the responsibilities of the members of the partnership are as follows:

- ☐ PRTC and NVTC divide responsibilities based on their traditional strengths and expertise:
  (1) PRTC provides passenger communications, planning for an expanded service area, legal services, Federal grantsmanship; and
  (2) NVTC provides procurement of rolling stock and managing capital projects, state grants and legislative advocacy.

- ☐ VDRPT provides funding and coordination with commonwealth programs and policies.

- ☐ VRE operations group staff is responsible for marketing and managing operations contracts with the four railroads, operating revenue collection, customer service. VRE operations group also shares communications functions with PRTC, and shares treasury management with both commissions. Another important function that VRE handles is the management of brokerage and insurance services with the Commonwealth's Division of Risk Management.

- ☐ Amtrak is under contract with the commissions to provide train crews, mechnical and custodial maintenance of equipment, inventory and materials handling, continuous operations monitoring, and service restoration in the event of emergencies or service interruption.

Partnership # 2: Public-Private Partnership

- ☐ NVTC and PRTC - operates VRE commuter railroad; owns rolling stock
- ☐ Norfolk Southern - owns track from Manassas to Alexandria CSX Corporation - owns track from Fredericksburg to Alexandria
- ☐ Conrail - owns track from Alexandria to Union Station, just north of the Capitol Building
- ☐ Amtrak - owns Union Station
- ☐ local governments - owns some stations and parking lots

C. Person Most Responsible for Formation the Partnership

Many elected officials from Northern Virginia were instrumental in establishing the concept, vision, and ideas that led to the establishment of this partnership and the commuter rail service. Steve Roberts, who prior to becoming operations manager of VRE in 1993, was on the staff at the NVTC, was a key staff person involved from the early days of the planning phase of the project.

D. Persons Most Responsible for Maintaining the Partnership

- ☐ elected officials who chair NVTC, PRTC and VRE boards
- ☐ Steve Roberts, Operations Manager, VRE
- ☐ Rick Taube, Executive Director, NVTC
- ☐ Leo Auger, Executive Director, PRTC
- ☐ Leo Bevon. VDRPT Director

E. Organizations Indirectly Involved in Partnership #1 (see section II. B)

- ☐ FTA: federal Section 15, Section 9, and STP (Surface Transportation Program) funding from both Regional and State funds,
- ☐ VDOT: STP funds matching Federal FHWA,
- ☐ FRA (Federal Rail Admin.): regulatory responsibilities for safety, equipment and operations
- ☐ RF&P: land owner along the railroad right-of-way

III. Partnership Evaluation

A. Motivation Behind Formation of Partnership

The primary reason the partnership was developed was the recognition of leaders in Northern Virginia that the Washington METRO did not provide service to some of the far suburbs and beyond. Additional rail service was seen as essential for the future economic health of the region, and to incrementally provide alternate modes of travel for long-distance commuters into DC.

Another motivation after the region's leadership recognized that commuter rail should be provided was the fact that the two rail lines (RF&P at the time, and Norfolk Southern) had well maintained rail line available that could be used. These tracks were available and had times when passenger rail service could be integrated and coordinated with freight service. The partnership would not have been formed without the infrastructure in place.

B. Goals of the Partnership

- ☐ Develop and run a commuter railroad (i.e., in the early 1980's, the first new commuter rail service that had been planned since the 1950's).

- ☐ Establish an effective policy board to provide guidance to the planning and operations (Operations Board).

- ☐ Establish an effective working group of staff to provide day to day planning, marketing, operations. and maintenance (a Technical Task Force consisting of staff of VRE, NVTC, PRTC, and VDRPT).

- ☐ Negotiate the best possible Operating/Access Agreements with the railroads.

- ☐ Improve communications on transportation issues among the sponsoring local governments.

- ☐ Coordinate the commuter rail service with other modes in the region and thr provision of a total regional transportation service.

C. Success in Achieving Goals

VRE is achieving its goals, but taking a long time to accomplish things. Interviewees report that VRE is not the best model of a transportation partnership but probably the only way VRE could work. Specific successes are:

- ☐ The offering of $ 80 million in tax-free bonds in 1992.
- ☐ A common policy board (the Operations Board) that covers issues for a four-county region.
- ☐ Heavier ridership than projected on some parts of the line.

D. Legal Issues

- ☐ Further work on developing an alternate dispute resolution (ADR) provision in new agreements with the railroads is a continuing issue.

- ☐ Bonding authority - issue was resolved in court, with the solution that the commissions could indeed issue bonds to finance the project using "appropriations-based credit."

- ☐ Liability issue - has been solved by agreeing to a $200 million limit.

- ☐ The act of Congress that changed the liability law was a consequence of the rail accident in Chase, Maryland; Virginia law

also changed to permit higher levels of indemnification and insurance.

- ☐ Four - tiered set of underwriters that provide insurance coverage.
  - -- self ensured (VRE) up to $5 million, managed through the Virginia Department of Risk Management
  - -- three levels of commercial insurers:
  - ♦ Zurich RE - from $5 to $25 million;
  - ♦ X/L - from $25 to $100 million;
  - ♦ STARR Excess, an AIG subsidiary - $100 to $200 million.

E. Technical Issues

- ☐ Communications systems, wireless and wire; more flexibility, realiability and an expanded capacity is needed now.

- ☐ Station operation costs.

- ☐ Single track operations across Quantico Creek on the Fredericksburg line restricts on-time performance.

- ☐ Current issue (mid-1995): VRE is being asked by CSX that VRE build a third track along the right-of-way in order to handle the volume of rail traffic in the corridor if VRE service is to be further expanded.

- ☐ In mid-1995, Norfolk Southern wants VRE to buy the track, asking $100 million for 25 miles of double track; the issue is on the value of the right-of-way and whether less expensive access alternatives are available.

F. Institutional Issues

- ☐ Several layers of decision-makers, with the VRE Operations Board, transportation commissions, and local governments.

- ☐ Two different commissions, NVTC and PRTC.

- ☐ A paradox: decision-making is cumbersome and the budgeting process is slow: but once a decision is made, it stays made; local

governments have an opportunity to thoroughly review budget proposals.

- ☐ Complexity is added when dealing with the large number of governmental jurisdictions involved (five cities, four counties, the state, District of Columbia).

- ☐ Railroad agreements typically do not extend to local governments, with agreements typically made with states and the federal government.

- ☐ VRE is a relatively small issue at the corporate level of CSX and Norfolk Southern, and therefore gets little corporate attention.

- ☐ Parking policies - some is provided free, other lots charge a fee, with operating costs paid by the revenues generated from passenger tickets.

- ☐ No subsidy is provided by outlying counties (e.g., Spotsylvania County is not a member of partnership, but residents of Spotsylvania represent 20 percent of the riders on the Fredericksburg line).

- ☐ CSX management turnover, and communication between CSX Corporaton headquarters in Richmond and the CSXT (railroad headquarters) in Jacksonville, Florida.

- ☐ Corporate relationship and communications with all railroads.

- ☐ More effective communications with Metro, MARC and the District of Columbia government.

G. Favorable Outcomes

The fact that over 8,000 trips per day are provided is an initial sign of success; planners indicate that by the end of the century, with 30,000 riders projected, the pressure to add another lane of freeway will be relieved. Other favorable outcomes:

- ☐ Availability of state and regional STP (Surface Transportation Funds) to finance capital improvements.

- ☐ More than 50 percent of operating support comes from customers in the PRTC service area; it is somewhat less in the NVTC service area.
- ☐ Creation of PRTC brought a two percent gas tax to completely fund local cost of the region's share of VRE.

H. Unfavorable Outcomes

- ☐ Slow response to management, organizational and budgeting needs due to multi-layered oversight groups and two transportation commissions.
- ☐ Distorted ridership patterns due to different parking fees; some parking is cheaper and some is provided free.
- ☐ Some park and ride facilities are privately owned.
- ☐ Some promises of service improvements have not been delivered due to railroad opposition.

I. Changes in Partnership Arrangements That Would Have Increased Favorable Outcomes

- ☐ The inclusion of the District of Columbia, Spotsylvania and Fauquier counties from representation inclusion in the partnership; (none of these are represented).
- ☐ Incorporating the real estate interests of the RF&P into the partnership arrangement from the beginning; a stronger financial base for the VRE would have been the result, and more leverage for overall financial management of the system.
- ☐ Setting up the service initially as a corridor rail passenger service provided by Amtrak alone rather than VRE and Amtrak as separate operating entities.
- ☐ Having contracts with the railroads with provisions that would reward all parties for successful, profitable operations.
- ☐ VRE would like to control parking to remove barrier of varying fees affecting ridership.

☐ Establishing a floor level of financial support for VRE from each participating and contributing locality, including local governments not now participating.

There is a popular view that it would be better for VRE to be a state entity (although this does not appear to have a consensus). If this were to occur, there would need to be a greater market orientation by the state.

J. Keys to Success

☐ Ready-made market for passenger rail service
☐ Successful marketing campaigns
☐ Persistence in planning and developing the program despite strong opposition
☐ Management style and vision of top management
☐ Dedicated funding source

IV. Follow-up Information

A. Is Partnership Arrangement Continuing, or Was it a One-Time Event?

Continuing.

B. Are Elements from Partnership Arrangement Being Used for Other Projects?

In the Tidewater area, VDOT and VDRPT are attempting to use the lessons learned in Northern Virginia in planning for a new transportation service. The two transportation commissions often receive requests for information from other cities and MPO's that are considering commuter rail service.

C. Others Knowledgeable about this Project to Obtain First-Hand Information?

- ☐ Washington Post - Don Phillips
- ☐ CSX representative - Robert Shinn, VP, Richmond
- ☐ Norfolk Southern representative - Bill Shafer, Strategic Planning, Norfolk
- ☐ Amtrak - Ed Walker

D. Documentation

- ☐ Master Agreement for Provision of Commuter Rail Services in Northern Virginia - Establishment of VRE
- ☐ 1994 Annual Report, RF&P Corporation
- ☐ Northern Virginia Commuter Rail Agreement
- ☐ Operating/Access Agreement, CSX - NVTC - RPTC
- ☐ Operating/Access Agreement, Norfolk Southern - NVTC - RPTC
- ☐ Investment analysis paper - "Virginia Railway Express versus equivalent highway capacity"
- ☐ VRE Operations Board meeting, Minutes, May 19, 1995

E. Key Contact

Steve Roberts, Operations Manager, Virginia Railway Express, 6800 Versar Center, Suite 247, Springfield, Virginia 22151; (703) 642-3808, FAX (703) 642-3820

NCHRP Project 8-32(4)

Case Study Report

Project: Virginia Railway Express (VRE) - Pilot Project Northern Virginia

File: 52

Date: September 19, 1995

Type of Partnership: Public - Public

Interviewers: Dr. Edd Hauser
Ms. Amy Breese
Mr. Tommy Harrelson

On-site Interviewees:

Secretary Robert E. Martinez
Virginia Department of Transportation (VDOT)
1401 East Broad Street
Richmond, Virginia 23219
Ph. 804/786-2801 FAX 804/786-6673
Date of interview: May 8, 1995 (preliminary, pilot case study)

Mr. Leo Bevon, Director
Virginia Department of Rail and Public Transportation (VDRPT)
1401 East Broad Street
Richmond, Virginia 23219
Ph. 804/786-1051 FAX 804/786-7286
Date of interview: May 8, 1995 (preliminary, pilot case study)

Mr. Alan Tobias
Senior Rail Transportation Engineer
VDRPT
1401 East Broad Street
Richmond, Virginia 23219
Ph. 804-786-1063 FAX 804-786-7286
Date: July 5, 1995 (pilot case study); follow-up telephone interview September 14, 1995

Telephone Interviewees:

Mr. Richard K. Taube, Executive Director
Northern Virginia Transportation Commission
4350 North Fairfax Drive, Suite 720
Arlington, Virginia 22203
Ph. 703/524-3322 FAX 524-1756
Date of Interview: September 18, 1995

Mr. Leo P. Auger, Executive Director
Potomac-Rappahannock Transportation Commission
1549 Old Bridge Road, Suite 209
Woodbridge, Virginia 22192-2737
Ph. 703/490-4811 FAX 703/490-5254
Date: September 19, 1995

Mr. Steve Roberts, Operations Manager
Virginia Railway Express
6800 Versar Center, Suite 247
Springfield, Virginia 22151-4147
Ph. 703/642-3808 FAX 703-642-3820
Dates: September 19, 1995; November 7, 1995

Note: This case study report was prepared based on personal interviews with the persons indicated. Although it is intended to represent their ideas and opinions, responsibility for how those ideas and opinions have been interpreted and recorded remains solely with the authors.

Case Study of the Dulles Greenway/TRIP 11 (Toll Road Investors Partnership II, L.P.)

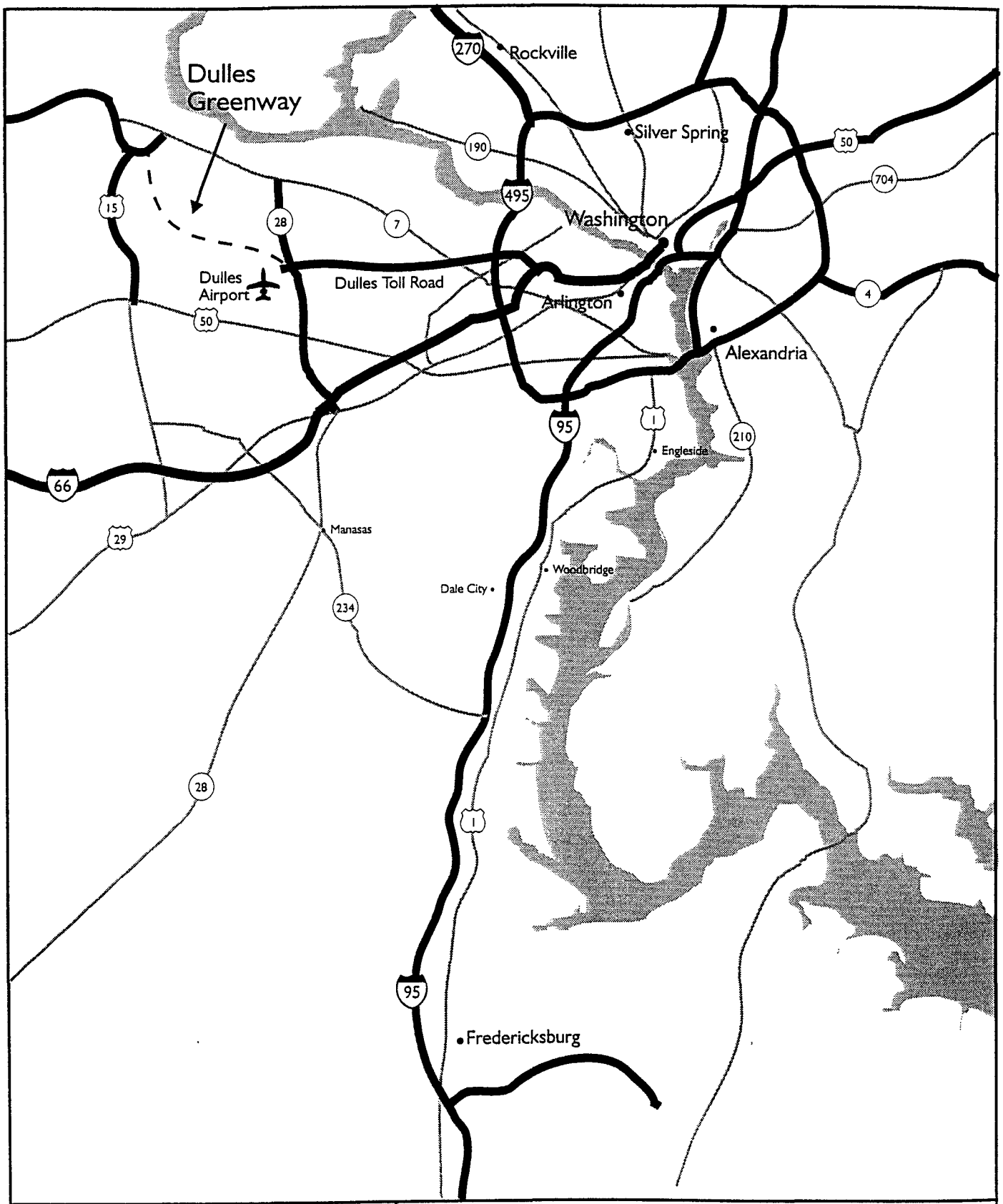
Executive Summary

The Dulles Greenway is a 14-mile toll road that was formalized as a project in 1988 and opened for traffic in 1995. The highway links Dulles International Airport with Leesburg, Virginia. The Greenway is a privately- built four-lane freeway that joins with the publicly-built Dulles Toll Road. The Tollroad connects the Greenway on the north with Interstate 66 corridor on the south. The connected facilities provide the only freeway in the Leesburg -- Tyson's Corner -- Washington, DC corridor. Capacity for future addition of HOV lanes and/or rail in the median are part of the design. The Toll Road Investors Partnership (TRIP II) was formed to plan, design, build, operate and maintain this facility. It is made up of two general partners, the Shenandoah Greenway Corporation and an Italian firm, Autostrade International. Joining these two general partners is the general contractor for the facility, Brown and Root, Inc., a limited partner. The agreement that provided the basic document forming the partnership was signed in late 1988. The toll road opened in September 1995, six months ahead of schedule.

This partnership was formed under the Virginia Highway Corporation Act, (§ 56-535 et. seq., Code of the Commonwealth of Virginia), as amended. The project was approved by the Commonwealth Transportation Board as an extension of the original Dulles Toll Road.

The success of the partnership has been attributed to the following factors: (1) the small, tightly-managed group of partners; (2) the high degree of competence and special talents of the management team; (3) jointly located field offices of the three partners and VDOT inspectors during construction; (4) the financial package offered to the general contractor as a limited partner; and (5) the assumption of the majority of the risk by the general partner, Shenandoah Greenway Corporation.

The success of the partnership is also illustrated by the management team for TRIP II. This group of professional engineers and managers has been hired as staff for a second partnership called Rebuild, Incorporated. This partnership has been formed to provide professional services elsewhere in planning, design and construction of toll roads and other infrastructure, and the operation and maintenance of existing facilities. Nationwide and international interest has been placed on the results of the Greenway.



Kimley-Horn and Associates, Inc.

Dulles Greenway Trip II

Northern Virginia

I. Project Information

A. Project Description

The Dulles Greenway is a four-lane limited access toll road located within a 250-foot right-of-way (R/W). It connects the Washington-Dulles International Airport northwest to Leesburg, Virginia. The Greenway is planned and designed to provide the only limited access route through this rapidly-growing corridor from Dulles to Leesburg (see site location map in the Appendix).

The R/W is located on land that was either purchased or donated to the Toll Road Investors Partnership II (TRIP II), or leased from the Metropolitan Washington Airports Authority. The typical section includes an 88-foot median designed to accommodate future widening to six lanes plus mass transit development. The Greenway features a mainline barrier and nine planned interchanges along the route, seven of which were opened with the 14.1-mile long facility in September 1995.

Environmental features of the Greenway includes the use of recycled materials to the maximum extent feasible during construction. The finished grading includes two miles of berms that provides sight and sound mitigation for adjacent residential development. Other environmental features included the replacement of 64 acres of lost wetlands with approximately 150 acres of forested and emergent wetlands, extensive tree reforestation, recycled arboreal waste (stumps, trees, brush), and landscaping around toll booths as well as on the median and shoulders.

B. Modes included

☐ highway
☐ airport access
☐ future HOV lanes (the 5th and 6th lanes)
☐ future transit

C. Total cost of project and cost-sharing arrangements

☐ Total cost - $326 million
☐ R/W- $181 million
☐ Construction cost - $145 million, fixed price, negotiated contract
☐ Funds for construction provided by 13 lending institutions; no public funds involved
☐ One-way toll: $ 1.75 for private vehicles
☐ Toll road will be privately owned and maintained for 42.5 years; built

and operated to state specifications with provision for state assuming ownership and maintenance after 42.5 years

D Current Status of Project

The toll road was initially planned to be under construction three years before the actual start date. Delays were experienced in securing financial backing. When ground-breaking was accomplished the project was accelerated and the basic roadway was finished six months ahead of schedule. The planned AVI system and debit billing system was delayed, again due to funding and will be installed sometime in early 1996.

The second general partner, Autostrade International, is providing management for the O&M phase of the Greenway. Autostrade operates and maintains over 2,000 miles of private toll roads in Italy, and other facilities elsewhere.

A new company has been formed, with the same construction team that built the Dulles Greenway, to provide professional development and management services as a private transportation infrastructure company. The new company, established in September 1995, is called Rebuild, Incorporated. Rebuild's Chief Operating Officer is General Charles E. Williams, who held the same position with TRIP II.

E. Future Plans for Project

Immediate plans are to install and implement an AVI (automatic vehicle identification) system for automatic payments. Future plans call for capacity enhancements such as HOV lanes or rail lines in the median of the roadway. Additional lanes are planned for completion by the year 2000, and rail service to Dulles Airport within five to ten years. Within a 15 to 20-year period additional rail connections are anticipated.

II. Partnership Development

A. Steps in Developing the Partnership

The history of the Greenway is linked with the original development of the Dulles Airport Access Road and the Dulles Toll Road, as highlighted in the "Dulles Greenway Milestones" shown at the end of this case study report. Specific steps in the development of the partnership to develop the Greenway are as follows:

- ☐ General partners, Shenandoah Greenway and Autostrade, formed agreement in principle to team on the building of a toll road in the Dulles Airport to Leesburg corridor.
- ☐ Invitation to Bid was extended to a number of general contractors, with sequential, detailed discussions carried out with each organization that responded.
- ☐ Limited partnership offered to selected general contractor, Brown and Root.
- ☐ Financial lenders sought to provide funds for R/W, design and construction; 13 lending institutions provided 100 percent private funding for the project.
- ☐ A five-member governing board appointed to provide policy guidance to the partnership.

B. Partners: Roles and Responsibilities

The following three partners formed the Toll Road Investors Partnership (TRIP II):

- ☐ Shenandoah Greenway Corporation - construction management; general partner
- ☐ Autostrade International - tollroad operation and maintenance; general partner
- ☐ Brown and Root, Inc. - construction general contractor; limited partner

The public partner is the Virginia Department of Transportation (VDOT) which provided design standards and construction inspection throughout the project.

C. Person/Organization Most Responsible for Development of Partnership

Concept and motivation for the facility grew out of the Shenandoah Greenway Corporation formed by Ms. Magalen O. "Maggie" Bryant and her son, Michael R. Crane. Shenandoah is a wholly-owned subsidiary of Lochnau, Inc. Mr. Crane is Chief Executive Officer of Shenandoah. Chief Operations Officer of the TRIP II partnership, Major General Charles E.

Williams (U.S. Army, Retired), was brought in to develop the professional staff and manage the construction of the facility.

D. Person/organization most responsible for maintenance of partnership

The same management team that provided the expertise to bring in the completed TRIP II project six months ahead of schedule has been hired as staff for Rebuild, Inc.

E. Organizations Indirectly Involved in Partnership

☐ Dewberry and Davis - design engineers, quality assurance, certification

☐ Town of Leesburg

☐ Loudoun County

☐ Approximately 30 subcontractors for design and construction; 25 for Operations and Maintenance

☐ 13 financial lenders, banks and insurance companies (see following "Financial Facts about the Dulles Greenway")

☐ Greiner - lenders' engineer

☐ Metropolitan Washington Airports Authority - access to Dulles

☐ Kornreich Insurance - owners controlled insurance policy

III. Partnership Evaluation

A. Motivation Behind Formation of Partnership

The primary purpose was to design and build an environmentally sensitive road that would provide additional capacity to the transportation system and a higher level of mobility to the residents of northern Virginia, as well as make a profit for the partners. One key to the success of the financing plan was the willingness of the partners to wait for seven to 10 years to realize a profit from their investment.

B. Goals of the Partnership

☐ Plan, finance, design, build, operate and maintain a toll road that would provide major mobility improvements through the corridor northwest of Dulles Airport to Leesburg.

☐ Future expansion of the facility.

☐ Attract private lending institutions in order to finance the project entirely with private funding.

☐ Work together as a partnership to complete the project on-time and on-budget.

C. Success in Achieving Goals

Thirteen lenders were attracted to the project to finance the planning, design and construction. To date, no change orders or claims have been awarded to the general contractor. The toll road was completed six months ahead of schedule.

D Barriers to Forming the Partnership That Were Overcome

Initially it was difficult to find lenders since no completely privately- financed highway had been built in this century in the U.S. Five or six major financial institutions rejected the project before the first lender was found that agreed to finance the Greenway.

E. Barriers That Were Not Overcome

☐ In spite of partnership arrangement, and the equity arrangement between the limited partner and the two general partners, management relationships between the general partners and the limited partner seems to have maintained the traditional client/owner orientation.

☐ Sufficient financing for the AVI system was not received until after the toll road was opened. The Syntonic AVI system and SPS toll payment system, featuring a debit payment process, will be installed in 1996.

F. Changes in Partnership Arrangement That Would Have Increased Favorable Outcomes

The General Partner would prefer to bring in a design firm as a limited partner on future projects.

G. Applications of Techniques/Elements of Partnership Arrangement

The Rebuild, Inc. project management team will be involved in other projects, applying lessons learned from development and construction of the Dulles Greenway.

H. Keys to the success of this partnership

☐ The number of partners was limited to a small, tightly-managed group.

☐ Professional staff of the partnership were hired with a high degree of experience and competence.

☐ The general contractor (GC) was offered a limited partnership in the corporation as an incentive.

☐ The construction contract was developed as a fixed price arrangement.

☐ Except for the uncertainties of site work on the project, which was the responsibility of the GC, all the risk in developing and constructing the project was assumed by the Shenandoah Greenway Corporation. Examples of these risks include utility relocations, environmental mitigation, regulatory compliance, etc.

☐ Every partner plus others involved (VDOT, etc.) were co-located in field offices on the project site, resulting in increased coordination among partners.

☐ Daily and weekly project management meetings were held among the partners, state, local and federal agency representatives, and other stakeholders.

☐ Monthly, in-depth project review meetings were held giving an increased sense of trust, cutting through "red tape," plus quick and effective problem-solving

I. Evaluation Criteria

☐ Securing 100 percent private funding for toll road construction.

☐ Successful completion of an environmentally-sensitive, aesthetical pleasing facility.

☐ Reduction or elimination of claims on the project.

IV. Follow-up Information

A. Continuing or One-Time Partnership Arrangement

TRIP II is continuing to operate and maintain the Dulles Greenway. A second partnership with the same construction management team has been formed under the name Rebuild, Inc., to develop new facilities and maintain existing toll roads and other infrastructure facilities. Rebuild has the same parent company, the Shenandoah Greenway Corporation - Lochnau, Inc.

B. Documentation

☐ Comprehensive Agreement between the Virginia DOT and the Toll Road Investors Partnership II, L.P., an agreement for guiding the design-engineering, construction, operations, maintenance and expansion for the first privately financed toll road facility based upon the Virginia Highway Corporation Act of 1988, as amended.

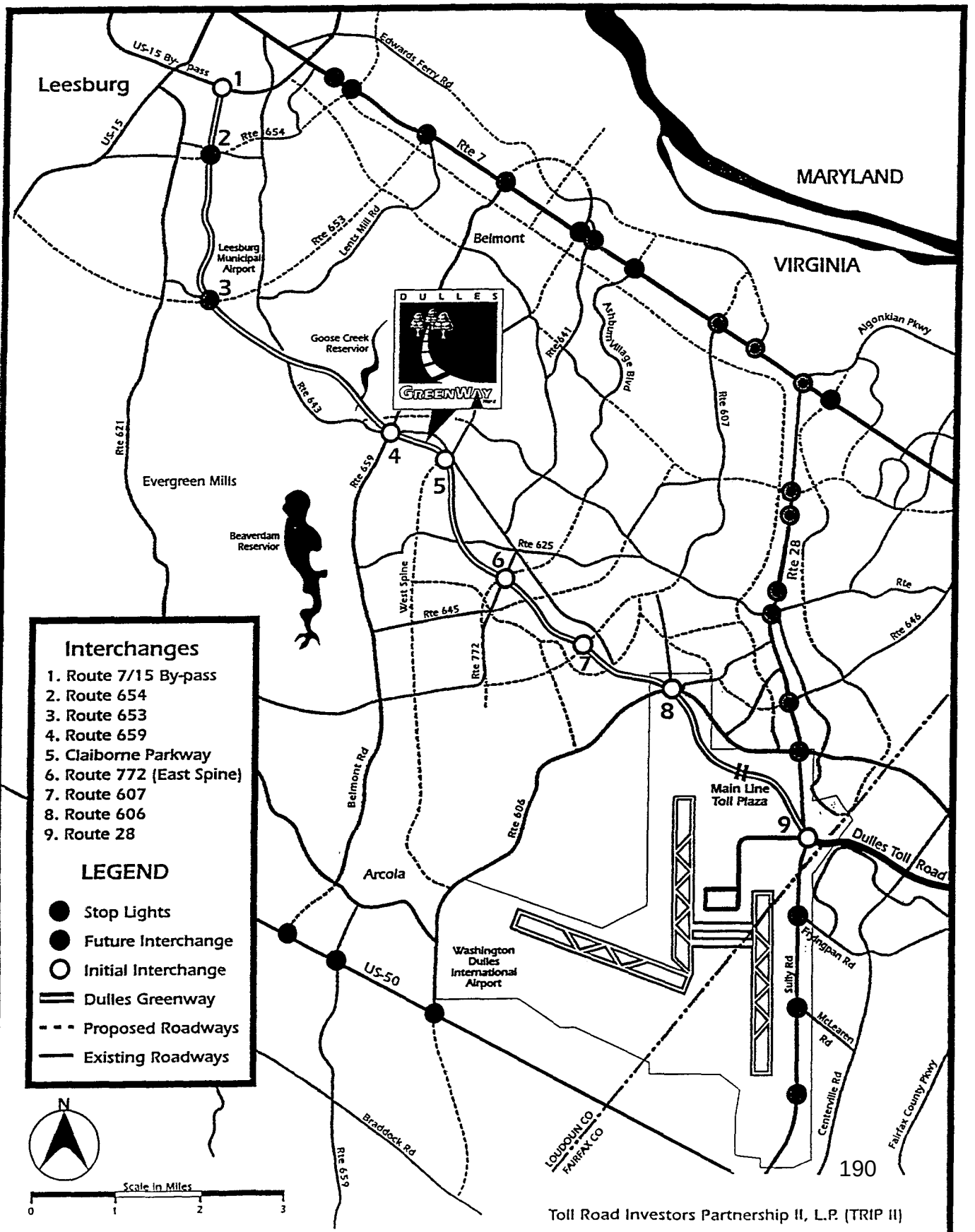
☐ Media package, including the Program from the Grand Opening Ceremonies, September 29, 1995, newspaper inserts, Financial Facts, and Milestones.*

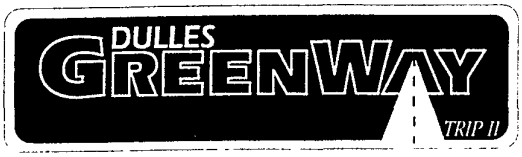
☐ Clinger, Jennifer, "Potential for Private Financed Toll Roads in the U.S.: a Case Study of the Dulles Greenway," a thesis written in partial fulfillment of a master's degree in regional planning, UNC-Chapel Hill, May 1995.

C. Key Contact

Charles E. Williams, Maj. Gen., U.S. Army (Ret.), Executive Vice President and Managing Director, Rebuild, Inc., 107 Carpenter Drive, Suite 120, Sterling, Virginia 20164; (703) 478-2240, FAX (703) 478-2244

* Excerpts included in the Appendix.


DULLES GREENWAY TRIP II
Leesburg
US-15 By-pass
US-15
Edwards Ferry Rd
Rte 654
Rte 7
MARYLAND
VIRGINIA
Rte 653
Lenis Mill Rd
Leesburg Municipal Airport
Belmont
Goose Creek Reservior
Rte 643
Rte 621
Rte 659
Evergreen Mills
Beaverdam Reservior
Rte 641
Ashburn Village Blvd
Rte 607
Algonkian Pkwy
Rte 625
West Spine
Rte 645
Rte 772
Rte 28
Rte 646
Belmont Rd
Rte 606
Main Line Toll Plaza
Dulles Toll Road
Arcola
Washington Dulles International Airport
US-50
Braddock Rd
Rte 659
Frying Pan Rd
Sully Rd
McLearen Rd
Centerville Rd
Fairfax County Pkwy
LOUDOUN CO
FAIRFAX CO
Interchanges
1. Route 7/15 By-pass
2. Route 654
3. Route 653
4. Route 659
5. Claiborne Parkway
6. Route 772 (East Spine)
7. Route 607
8. Route 606
9. Route 28
LEGEND
Stop Lights
Future Interchange
Initial Interchange
Dulles Greenway
Proposed Roadways
Existing Roadways
N
Scale in Miles
0 1 2 3



FINANCIAL FACTS ABOUT THE DULLES GREENWAY

- Financing was arranged by C.C. Pace Resources, an adviser to project developers in the areas of power, transportation, electrical generation, natural gas acquisition, fuel acquisition and project finance.

- A consortium of institutional investors has committed to provide $258 million of long-term fixed rate notes, due 2022 and 2026, to finance a portion of the cost of construction and operation of the DULLES GREENWAY. The group of ten institutional lenders was lead by three major project investors: CIGNA Investments Incorporated, Prudential Power Funding Associates, a unit of The Prudential Insurance Company of America and John Hancock Mutual Life Insurance Company.

- A bank group consisting of Barclay's Bank, Nation's Bank, and Deutsche Bank has agreed to provide a portion of the construction financing, and a $40 million revolving credit facility.

- The total cost of the project is $326 million.

- The DULLES GREENWAY is the first privately financed new road development project in the United States, and the first to receive a long term commitment from institutional investors. The 30-year-average maturity of the notes make the DULLES GREENWAY project unique in terms of long-term commitment.

- Revenues will be derived from tolls and are dependent on traffic volumes, which are projected to grow at an average annual rate of approximately 8 percent over the life of the notes.

- The financing is secured by a first mortgage and security interest in substantially all the developer's right, title and interest in the DULLES GREENWAY.

- The financing has been rated BBB by Fitch Investors Service.

DULLES GREENWAY MILESTONES

November 1962: The Dulles Airport Access Road, developed by the Federal Aviation Administration in conjunction with Dulles International Airport, opens to traffic. The four lanes are built and dedicated exclusively for traffic to and from the airport. The Access Road is designed with sufficient right-of-way to accommodate future service roadways alongside the airport lanes.

1980: The Virginia Department of Highways and Transportation requests that the Federal Aviation Administration allow construction of a toll road in the location reserved for future service roads. The Dulles Toll Road will provide access for non- airport traffic to and from Washington, D.C. and within Fairfax County.

December 1982: Following a $57 million bond sale, construction begins on the Dulles Toll Road from Route 28 in Loudoun County to west of 1495 in Fairfax County. Two lanes will be built on either side of the Access Road.

October 1, 1984: The 12-mile, four-lane Dulles Toll Road opens to traffic. The road is designed to carry 47,300 vehicles daily.

Late 1985: Toll revenues and traffic counts show that the Dulles Toll Road is nearly at capacity. The Virginia Department of Transportation (VDOT) recommends widening the road from four to six lanes.

Early 1987: VDOT begins studies to establish an alignment and prepare supporting environ- mental documents for constructing a four-lane, limited access roadway from Route 28 to Route 7/15 in Leesburg.

July, December 1987: VDOT holds citizen information meetings to discuss five possible alignments for the Toll Road Extension.

1988: The General Assembly approves the "Virginia Highway Corporation Act of 1988" enabling a private corporation to build, own, and operate a toll road for profit. The Act provides that the State Corporation Commission determine that approval of the application is in the public interest, and that the Commonwealth Transportation Board approve the project's location, design, and construction costs.

August 30, 1988: VDOT holds a public hearing to consider the proposed location for a four-lane, limited access road extending from Route 28 northward to Route 7/15 in Leesburg.

November 19, 1988: The Commonwealth Transportation Board approves the location of the Dulles Toll Road Extension from Route 28 to Leesburg.

May 31 - June 1, 1989: VDOT holds citizen information meetings in Fairfax and Loudoun Counties to discuss the construction of the extension of the Dulles Toll Road by a private operator.

June 6-7, 1989: VDOT holds public hearings in Fairfax and Loudoun Counties to receive input from the public as to the construction of an extension of the Dulles Toll Road by the Toll Road Corporation of Virginia.

July 20, 1989: The Commonwealth Transportation Board approves TRCV's application to construct and operate the Dulles Toll Road Extension from Route 28 to Leesburg.

October 1989: VDOT begins widening the Dulles Toll Road from four to six lanes between Route 28 and Route 7.

July 6, 1990: The State Corporation Commission issues a Certificate of Authority to TRCV to build and operate the Dulles Toll Road Extension.

June 20, 1991: The Commonwealth Transportation Board adopts a resolution to facilitate TRCV's request of the State Corporation Commission to transfer its Certificate of Authority to Toll Road Investors Partnership II.

July, 1992: The Dulles Toll Road widening to six lanes from Route 28 to Route 7 is completed and opens to traffic.

September 16, 1993: The Commonwealth Transportation Board approves a resolution for construction of the Dulles Toll Road Extension to begin no later than September 30,1993 and to open to traffic no later than March 31, 1996 at a construction cost of $293.8 million.

September 29, 1993: Groundbreaking ceremony for the Dulles Greenway. The 14-mile roadway will be one of the first privately funded, publicly supported roads to be built in the U.S. in over 100 years.

Virginia Department of Transportation

NCHRP Project 8-32(4)

Case Study Report

Project: Dulles Greenway TRIP 11 (Toll Road Investors Partnership II, L.P.)

File: 45

Type of Partnership: Public-Private

Interviewer(s): Dr. Edd Hauser
Ms. Kathy Falk

Interviewee(s):

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Executive Vice President and Managing Director
Rebuild, Inc.

Colonel Matt Miller, USA, Ret.
Senior Project Manager
Rebuild, Inc.

R. John Martin, P.E.
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