1993

Reverse Commute Programs that Work and How: an Institutional Model for Comprehensive Commute Planning

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An Institutional Model for Comprehensive Commute Planning

as presented at the

Reverse Commute Workshop
New Orleans, Louisiana
October 7, 1993

submitted by

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REVERSE COMMUTE PROGRAMS THAT WORK AND HOW

An Institutional Model for Comprehensive Commute Planning

Reverse commuting has been traditionally characterized by attempts to provide transportation to inner-city residents to worksites in suburban or outlying areas. In most metropolitan areas, however, the mobility needs of reverse commuters are comparable to those of any of segment of commuters -- there are many origins and many destinations. In order to address these, there is a need for an approach that is not reliant upon one particular mode, such as vans, buses, and so on, but rather several commute alternatives. This report details the evolution of such an approach.

Introduction

The institutional model described below began in 1989 as part of a grant received by he Hillsborough Area Regional Transit Authority (HART) from the Federal Transit Administration through the Suburban Mobility Initiative Program. HART subsequently contracted with he Center for Urban Transportation Research (CUTR) to implement a Suburban Mobility Initiative (SMI) Study to identify and implement solutions to existing and potential mobility problems in the Tampa Bay metropolitan area.

HART serves the cities of Tampa and Temple Terrace and a large amount of unincorporated Hillsborough County. HART is the only designated "regional" transit authority within the state of Florida, thus enabling the system to provide service into contiguous jurisdictions upon approval. HART operates 30 local and 13 express bus routes. The current service encompasses mass transit, paratransit, specialized transportation, and privately-operated services. The system routes are interlined in a network radiating from downtown Tampa and express routes link downtown Tampa with suburban areas. There is one regional route that links Hillsborough County with Clearwater in Pinellas County.

CUTR, located at the University of South Florida, in Tampa, was established in 1988 by an act of the State legislature to provide policy research to state and local governments. Although housed in the College of Engineering, CUTR's research staff is multi-disciplinary and prides itself on the integration of analytical capabilities with "real world" experience gained through work in the public and private sectors. The Center's enabling legislative charge and the

researchers' technical abilities have led to a diverse mixture of transportation projects addressing virtually all modes and such topics as mass transit, high speed rail, transportation finance, safety, intelligent vehicle highway systems (IVHS), public policy, transportation demand management, and transportation for the elderly and disabled. CUTR was named as a National Urban Transit Institute in the Intermodal Surface Transportation Efficiency Act of 1991.

Problem Setting

In the decade of 1980 to 1990, the state of Florida experienced a 35 percent increase in population. This population growth was characterized by increases in the number of people entering the workforce and automobile ownership, shifts of jobs and residences into suburban areas, and a travel demand that outpaced the national experience[1]. During this same period, the Tampa Bay metropolitan area which includes Hillsborough County, was one of the fastest growing areas in the nation.

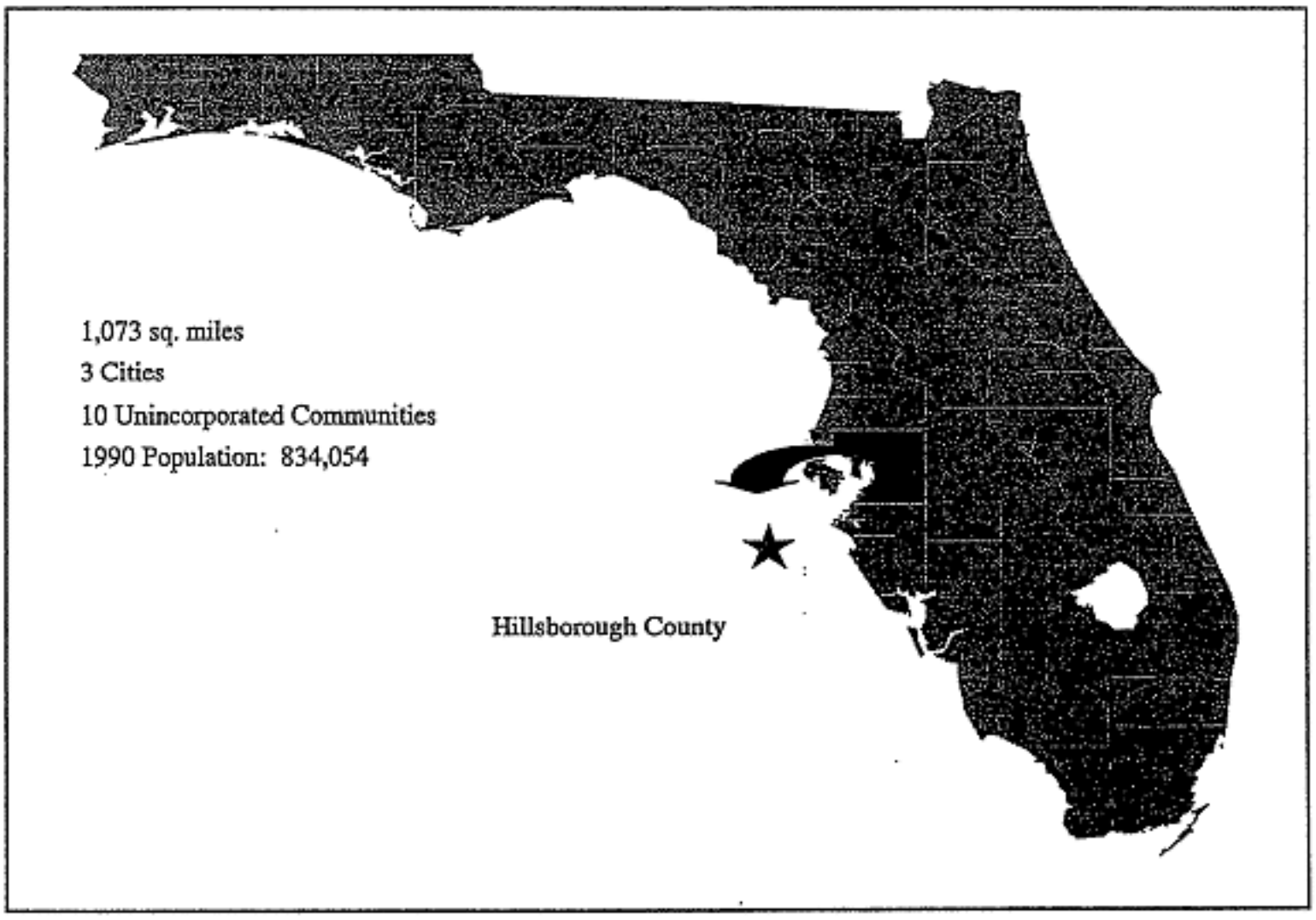

Figure 1 *Hillsborough County Characteristics*

Despite the rapid growth of the Tampa Bay area, Hillsborough County has been a relatively difficult area for traditional mass transit operations to serve. As seen in Figure 1, Hillsborough County contains three incorporated areas and 10 unincorporated communities in which the population is concentrated. The population density of 800 persons per square mile is below the threshold for favorable fixed-route transit service[2].

The mobility needs of Hillsborough County residents have been further impeded by job shifts to suburban areas. During the 14-year period of 1973 to 1987, there was a 25 percent increase in suburban office space in Hillsborough County (see Figure 2). Work trips to and from the CBD comprised less than six percent of the total number of work trips made in Hillsborough County in 1988[3]. As can be expected, there is considerable variation among the suburban areas in terms of their mobility needs.

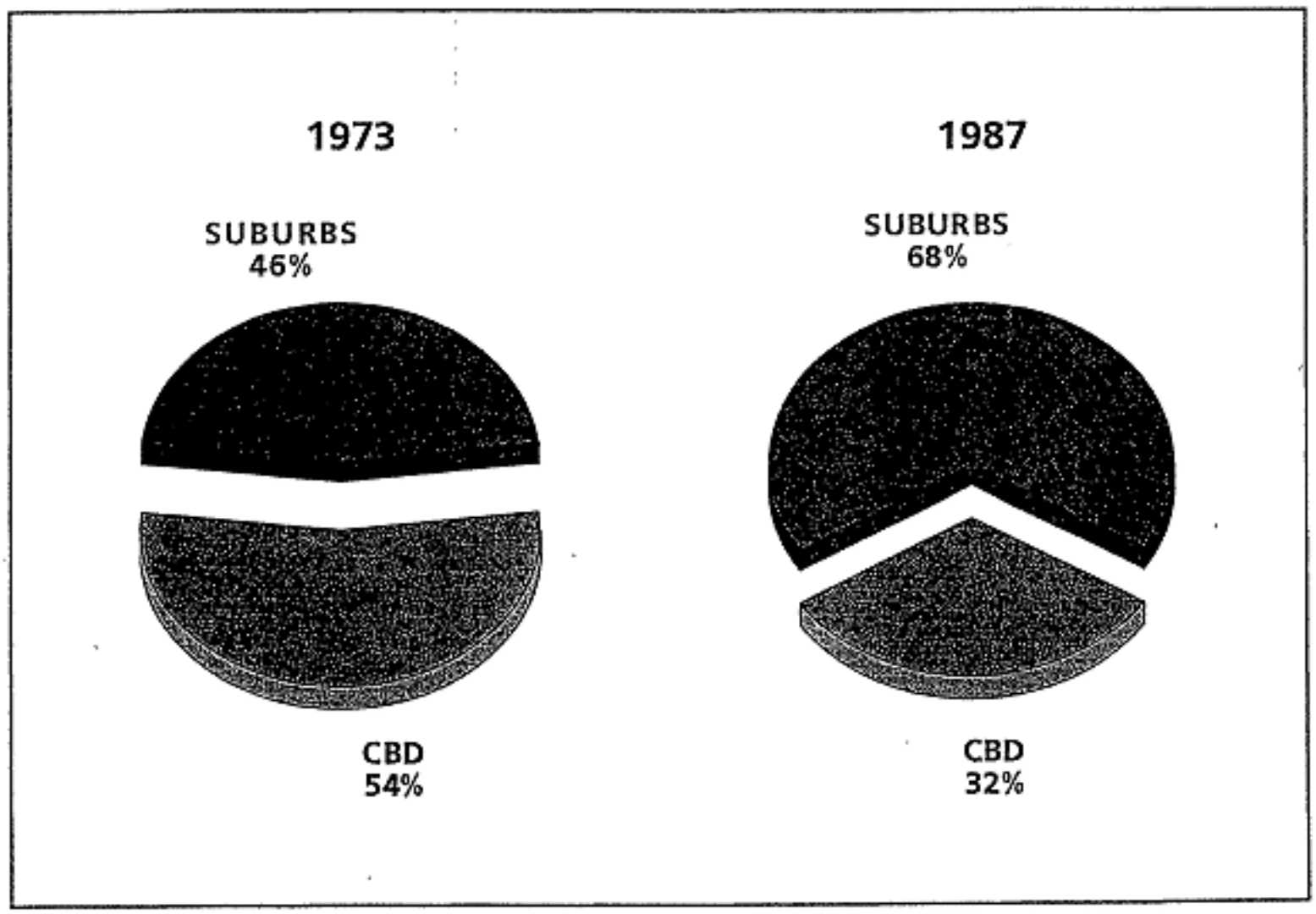

Figure 2 *Distribution of Office Space: Tampa CBD versus Suburban Hillsborough County*

To address the area's mobility needs, in 1989, under the auspices of the Federal Transit Administration, HART contracted with CUTR to implement a Suburban Mobility Initiative (SMI) Study. The objectives of the study included:

- providing a forum for the interchange of ideas;
- educating the private and public sectors about transportation alternatives;
- studying markets and the demand for entrepreneurial services;
- developing model transportation demand management (TDM) plans; and
- providing start-up services and technical assistance.

Methodology

The first task completed under the study was the formation of an advisory team. The SMI Advisory Team was comprised of public and private sector representatives of the inner-city neighborhoods, suburban communities, and the downtown area. CUTR personnel acted as staff to the team by facilitating the identification and discussion of mobility problems and planning and presenting potential solutions.

Tasks included developing strategies and plans for long-range efforts and areawide solutions; consensus building; education and information dissemination; and providing technical assistance to service providers (see Figure 3). It was anticipated that among the solutions would be development of transportation management associations or organizations (TMA/Os) and the emergence of entrepreneurial service providers. Reverse commuting was identified, initially, as a project element with four potential means of supplying the service. The four scenarios considered were a housing community program; private entrepreneur operations; employer-operated or sponsored programs; or a public agency program.

Major statewide initiatives regarding commuter transportation were occurring almost simultaneous to the SMI Study. First, the Local Government Comprehensive Planning and Land Development Regulation Act (Growth Management Act) was enacted in 1985. Transportation was the most frequently mentioned deficient service of the six public services cited. Second, the State Comprehensive Plan was enacted in 1989 and included among its goals the promotion of ridesharing by public and private sector employees. Also in 1989, the *Report of the Governor's Task Force on Urban Growth Patterns* promoted the inclusion of TDM strategies in the transportation planning process. (TDM refers to activities designed to influence the demand for transportation and improve mobility. This includes encouraging the use of alternatives to single occupant vehicles and making more efficient use of the transportation system.)

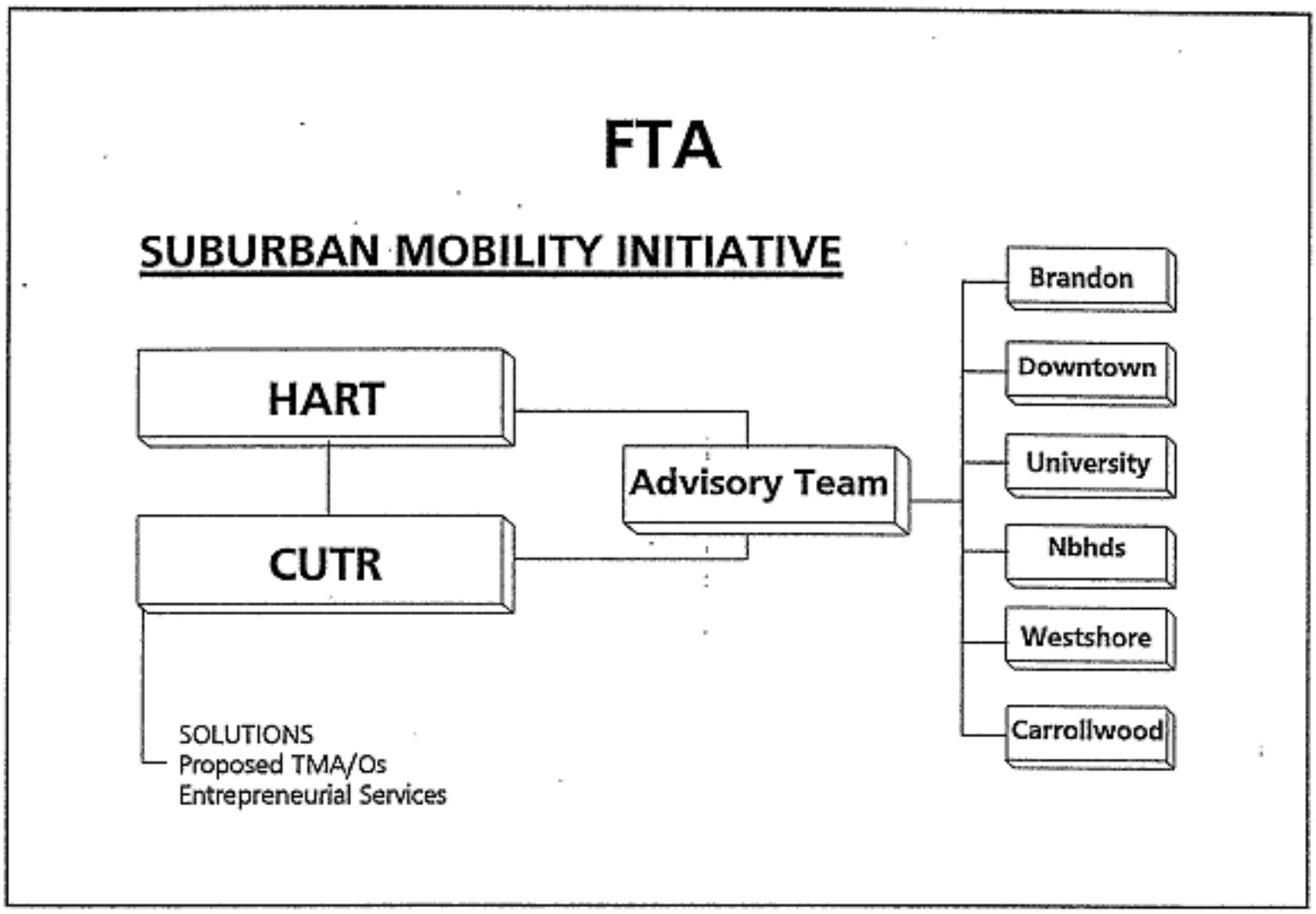

Figure 3 *SMI Study Organization Chart*

Several other issues drove the State's interest in TDM. First, the commitment of the Secretary of the Florida Department of Transportation (FDOT), Ben Watts, was epitomized by his statement that "more of the same [roadbuilding] will no longer work in Florida." Second, in 1990, almost 50 percent of the state's population lived in nonattainment areas (areas that failed to meet the national ambient air quality standards). Energy conservation was also an emerging concern.

Florida Commuter Assistance Program

Florida's state-supported ridesharing programs also evolved during the study period into the Florida Commuter Assistance Program (see Figure 4). FDOT provides funding for TMA/O start-up, regional commuter assistance services, and supporting programs, such as park-and-ride lots and transit corridors.

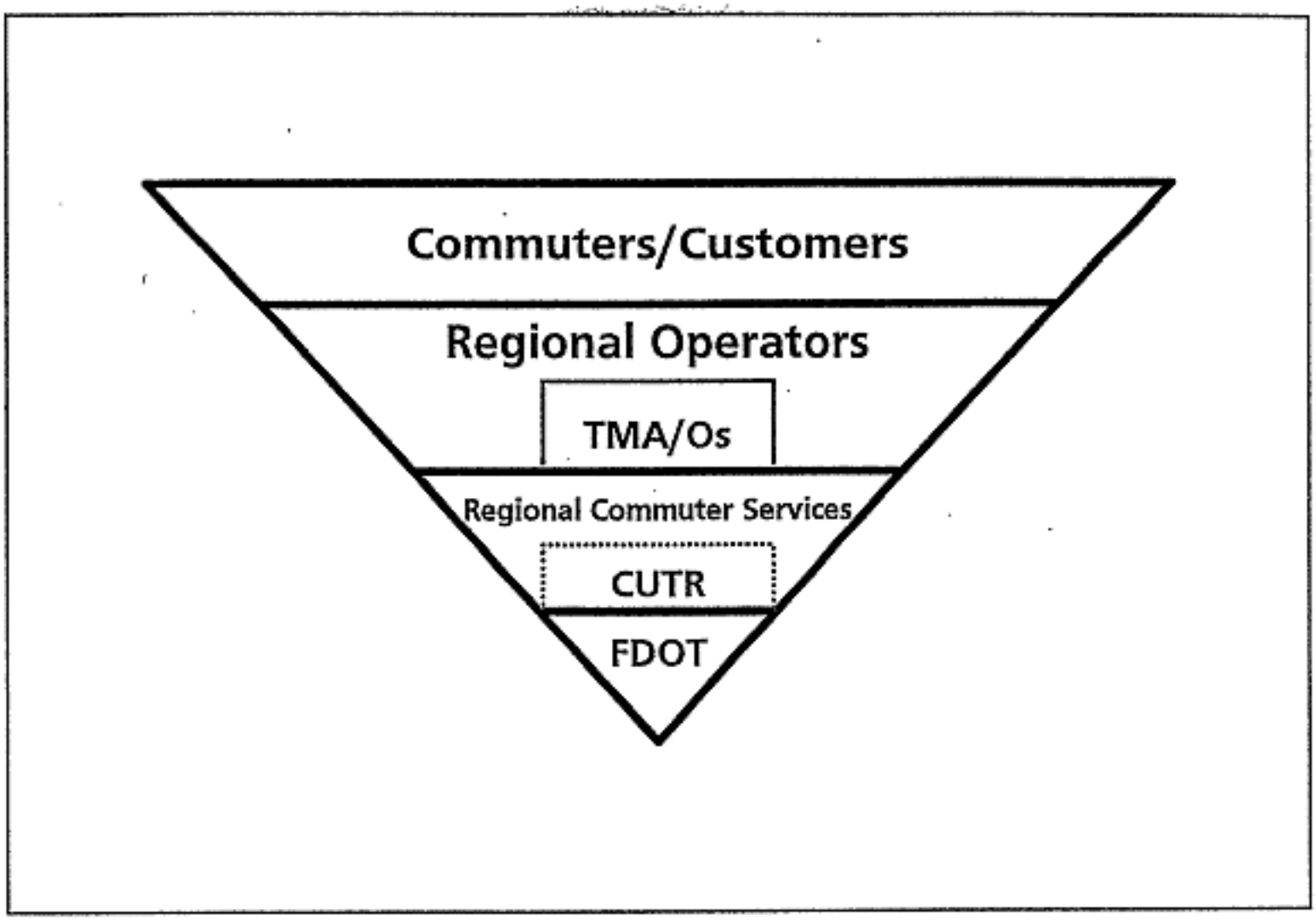

Figure 4 *Florida's Commuter Assistance Program*

CUTR activities in the statewide program are supported by special projects. These have included the provision of TDM training to public and private sector employees through such programs as the Integration of Commute Alternatives into the Growth Management and Land Development Process (the C*A*S*H project) and the TDM Certification and Training project. Under the TMA Clearinghouse project, CUTR provides technical assistance to TDM program implementors and evaluation of state-funded programs.

Regional commuter services are provided by corporations operated by the private sector under contract to FDOT. Two demonstration projects, Bay Area Commuter Services (BACS) and Gold Coast Commuter Services (GCCS), are currently operating in the state. Additional regional commuter activities are provided by public agencies in seven other areas of the state.

State-funded TMA/Os are operated as public-private partnerships, in cooperation with local governments, local comprehensive plans, and regional commuter services program goals. TMA/Os provide added value within the statewide program by working with employers or communities within relatively small geographic areas.

Regional operators include public and private service providers, such as HART, the local MPO and so on, who furnish or support use of more efficient modes of transportation. These activities may be funded directly by FTA, such as the SMI Study, Section 9 funds, or Congestion Mitigation and Air Quality (CMAQ) funds, or by State funds, such as the park and ride lot and transit corridor programs mentioned earlier.

Finally, the customers' or commuters' needs and expectations are an integral part of the statewide program. These are assessed by a number of tools that include informal and formal surveys, focus groups, and employee and employer surveys.

Commuting in Hillsborough County

The promotion and implementation of ridesharing programs, which include reverse commuting, within Hillsborough County currently has two main players, employers and public agencies. The employer-operated or sponsored programs are driven by the statewide commuter assistance program. These activities are guided by a two-tier approach. BACS provides computerized ridematching, technical support for local transportation organizations, regional marketing of transportation alternatives and dissemination of regional transit information. TMA/Os have been formed or are forming in high-activity areas to provide the second level customer service. These include Westshore, downtown, and the University of South Florida area.

HART is the key public agency providing services within the county. Through the Florida Transit Corridor Program, HART has established 15-minute peak-hour headways along several routes that serve identified transit corridors. Potential areas for community circulators or feeder services have been identified. A portion of the CMAQ funds allocated to HART have been set aside to develop a vanpool service. HART also works with BACS and area TMA/Os to market transit and other forms of ridesharing.

The mobility approaches that have developed in Hillsborough County are a result of careful planning. HART conducted a comprehensive operational analysis which was used to determine route networks and schedules to match service levels with demand. The local MPO conducted a potential transit market analysis to evaluate market areas and existing services. BACS and the TMA/Os conduct employer and employee services to measure, in part, transit use, customer awareness, and satisfaction among their markets. The combination of the three players provides an approach which is comprehensive in scope and services. HART's transit services are

supplemented by carpools, vanpools, and other modes which provide a multi-modal solution to the problem.

Summary

HART's mission is to provide a safe, convenient, and effective mass transit system that is a viable alternative for the county's residents, including the transit dependent and transportation disadvantaged. HART describes its system as a "conduit of resources." Through coordination and comprehensive planning, efforts have been made to be responsive to regional transportation needs. The operative phase is "comprehensive planning." The needs and expectations of reverse commuters are recognized as part of the overall attempt to serve the public. Mobility within the region and the state is a goal to be met by providing numerous transportation alternatives. CUTR continues to work with HART on the SMI Study and is also conducting an evaluation of the State-funded commuter assistance and park and ride lot programs.