Metropolitan Planning Organization

Regional Jobs Access Plan

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HILLSBOROUGH COUNTY
METROPOLITAN PLANNING ORGANIZATION

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Adopted October 3, 2000.

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Without whose participation and support this plan would not have been possible.

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  Ms. Donna Morrison

Endorsed September 14, 2000.

HILLSBOROUGH COUNTY
METROPOLITAN PLANNING ORGANIZATION

REGIONAL JOBS ACCESS PLAN

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"The first bus passes my way approximately 5:30 am. I must catch it no later than 6:00 (to take my infant to day care in the opposite direction from my work) to arrive at my work LATE!!! Then I have to figure out how to explain to my boss why I can't attend meetings (that are pertinent to my job). All the while thinking, "Please God, don't let me lose my job." Then there's the return trip home, except today I have to figure out how to get to the grocery store. I can't forget another leg of my journey. Before 6:00 my elementary school-age daughter has to be picked up from after school care. When you are just trying to get through normal everyday living, a vehicle can make all the difference in the world . . . "

- Resident of Tampa, Florida,
quoted by Cars for Success, Inc.

INTRODUCTION:
COMMUNITY PARTNERS

The issue of transportation to jobs for the disadvantaged has been brought to the forefront by several organizations in Hillsborough County. A brief history:

- In late 1998, Hillsborough Area Regional Transit (HART) convened a group of human service providers and transportation providers to develop a collaborative application for a federal Job Access/ Reverse Commute grant. The application's largest component was a package of additional trips on existing HART bus routes, routes that serve target areas. HART later received funding for the first year of the program.
- In May, 1999, the WAGES Coalition of Hillsborough County (the local administrator of TANF funds) organized the "WAGES and Beyond" workshop, which identified transportation as one of the "remaining barriers" in welfare-to-work efforts. The WAGES Coalition convened several task force meetings with local transportation providers and day care providers to address this issue. Out of this effort grew a small program to reimburse child care providers for picking up and dropping off the children of welfare recipients at home.
- In the summer of 1999, the Pinellas County Metropolitan Planning Organization (serving St. Petersburg and Clearwater, Florida) partnered with HART and with the Pinellas Suncoast Transit Association to provide bus service to an industrial park on the border of Pinellas and Hillsborough Counties. A two-year pilot program was funded through a one-time state grant for welfare-to-work transportation. The service was designed with the help of the local WAGES Coalitions and the Oldsmar Chamber of Commerce, each of whom conducted surveys of their patrons.
- Later in 1999, the Greater Tampa Chamber of Commerce conducted a membership survey of business' perceived transportation needs. Issues identified included goods movement, customer access, and employee transportation to work. The Greater Tampa Chamber has also played an important role in bringing employee transportation to the attention of the business community through the Workforce Development Council.
- In the spring of 2000, the City of Plant City applied for a Congestion Mitigation/ Air Quality grant to provide bus service in this previously un-served community. The proposed circulator, which is to provide transit access to a growing business park among other destinations, has been designed in collaboration with HART and Plant City community members.

The Hillsborough County Metropolitan Planning Organization began to play a role in the local jobs access discussion in the summer of 1999. Federal guidance indicated that future Job Access/ Reverse Commute grant applications should be supported by comprehensive regional plans. A variety of local groups had started work on a variety of projects, but all of the projects were limited in geography, in clientele, in transportation mode, and/or in funding

source. The Hillsborough MPO aspired to create a plan that would look at the whole county of over 1,000 square miles, and at the needs of the working poor as well as welfare recipients; a plan that would consider a wide range of transportation techniques and implementers, and provide a basis for pursuing funding without tailoring recommendations to any particular funding source.

To assess community interest in collaborating on such a plan, the MPO convened a workshop in September, 1999. The workshop was well attended by human service and transportation providers (please see Appendix C for a summary), and interest in transportation access to jobs was high. After a special effort to recruit members of the business community, a Jobs Access Plan Steering Committee was formed. The committee adopted the following mission statement in December, 1999:

> *Public and private partners will develop a plan to provide and expand transportation services that increase access to training and employment opportunities for transit dependent individuals.*

The MPO retained a consultant in February, 2000 to undertake a geographic-information-systems (GIS)-based analysis, and to research transportation techniques. The steering committee set priorities for the consultant's scope of work, made corrections to the resulting analysis based on their experience, and provided insights on the feasibility of implementing recommended techniques. They consistently emphasized the importance of talking with end-users. Over the course of the study, many of the members went out of their way to provide data, contacts, and reference material. Committee meetings were often hosted by members at their own locations. After ten months of meetings, the members endorsed the Jobs Access Plan on September 14, 2000. But they agreed to reconvene within three months, to guide the preparation of grant applications and establish priorities among the recommended projects.

The committee members' involvement makes the implementation of the Hillsborough County Jobs Access Plan that much more feasible. The Jobs Access Plan recommendations will inform MPO activities, such as prioritizing available funds and developing the Long Range Transportation Plan. But the role of actually providing transportation services ultimately lies with the committee members and their colleagues in transportation, business and human service. It will be thanks to the Steering Committee members' continuing interest if the projects discussed in the following pages are one day a reality.

I. THE PROBLEM AS IT EXISTS IN HILLSBOROUGH COUNTY

Transportation has become a key barrier to those moving from welfare to work. Nationally, while two-thirds of all new jobs are now in the suburbs, three-quarters of welfare recipients live in rural areas or central cities. Public transit tends to be available in the suburbs only on a limited basis, and even in the center city, may not be available to serve late-evening or early-morning work shifts.

Hillsborough County is no exception. Over the recent decades, the greater Tampa area has experienced rapid growth in both residents and jobs; the county population has grown 9% since 1990. Highways that radiate from the center, such as I-4 and the Selmon Expressway, have made outlying areas more accessible, and jobs and higher-value residences have grown in these areas. Meanwhile, the center city has experienced greater concentrations of low-income households. And rural areas in the southern part of the county continue to offer fewer opportunities for economic advancement than the rapidly growing suburbs of Tampa.

Interestingly, Hillsborough County's urban form varies somewhat from the national norm. Unlike many metro areas across the country, Tampa does not have a circumferential beltway, which in other cities has led to an outer ring of low-density office and industrial parks. Tampa's recent commercial growth has tended to occur in centers, often where major roadways converge, such as Westshore and the Sabal Park area.

But even with some clustering in job growth, the task of providing access to jobs for those who do not or cannot drive presents an enormous challenge. The local bus company, Hillsborough Area Regional Transit (HART), provides service to only 208 square miles in this rapidly-urbanizing county of 1051 square miles. General expansion of bus services is not on the table due to a lack of funding. In fact, declines in federal assistance for transit operations, combined with local unwillingness to raise taxes, have led to four service cut-backs and three fare increases over the past eight years. Extending bus service to new suburban areas, to new employers, or to later hours of service has been impossible.

In an effort to more precisely identify the specific problems created by this state of affairs, a detailed analysis was conducted of jobs, job-seekers, and transportation services in Hillsborough County. Areas of high un- and under-employment, areas of entry-level job growth, job training centers, and child-care facilities were located. Existing transportation services were inventoried and mapped to locate population and employment clusters not currently served by the public transit system. By comparing the areas with transportation needs with available transportation resources, it is possible to make recommendations to improve access to jobs in Hillsborough County.

The Data

To better define the problem of access to jobs in Hillsborough County, the following data was collected and analyzed. Maps of the data described below can be found in Appendix A.

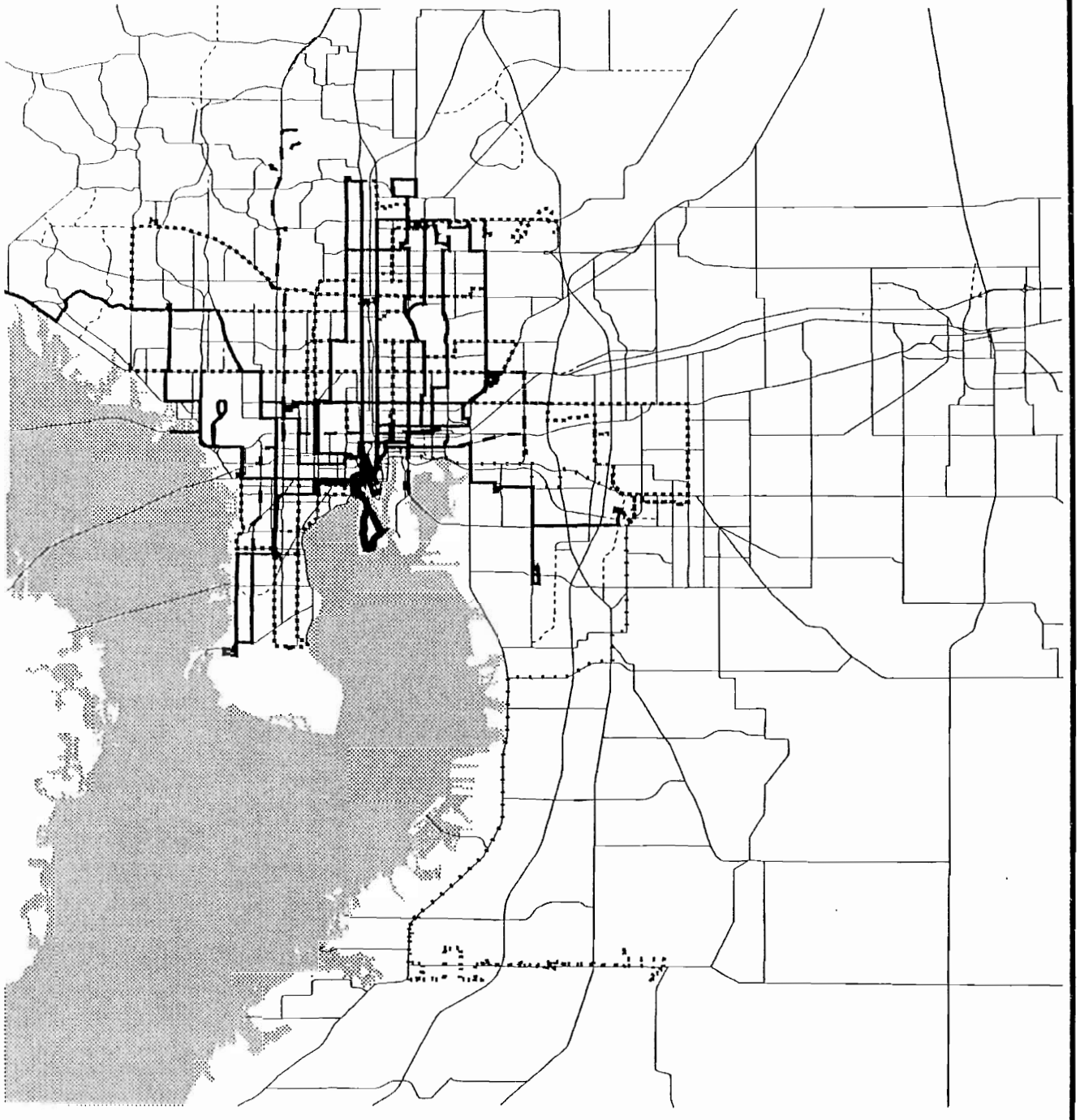
a) **Areas of high un/underemployment.** This refers to the location of the population *to be served* by Jobs Access transportation improvements. Each map in this series drew data from a different source, so that together the maps might create a comprehensive picture of the population. Sources included the local welfare-to-work coalition, the county's Employment and Training Department, the Tampa Community Redevelopment Agency, the service provider for disabled transportation, and the 1990 Census. Please see Appendix A, Maps A1-A6.

b) **Major areas of entry-level employment and job training centers.** A second series of maps was developed to create a comprehensive picture of job locations. Data sources included the Florida Department of Transportation's regional travel forecasting model (which relies on employer locations as a source of trips), Bay Area Commuter Services clients, the county's child care referral center's clients, the employers of welfare recipients, and the county's Employment & Training and Economic Development Departments. Please see Appendix A, Maps B1-B10.

c) **Child-care facilities.** This series of maps depicts child-care facilities licensed by the county, by capacity. Separate maps were prepared for centers open during the day, in the evening, and in the very early morning. Agency staff involved with child-care placement suggested that graveyard-shift workers are likely to place their children with family members or friends, but that as a last resort, overnight care is sometimes arranged with in-home child-care providers. Accordingly, a separate map was created of licensed in-home care locations. Please see Appendix A, Maps C1-C4.

d) **Existing transportation services.** These maps focused primarily on the fixed-route public transit service provided by the Hillsborough Area Regional Transit Authority (HARTline). Time-of-day maps were created, and routes displayed according to the frequency of the bus trips. Two additional transportation services were identified and mapped: a late-night shuttle developed by downtown Tampa hoteliers to take their employees home after the last bus; and pick-up/drop-off services provided by some child-care centers. Please see Appendix A, Maps D1-D11. The Jobs Access Plan steering committee also discussed mapping transportation services provided by human service agencies and non-profit groups, but this data was not readily available.

The map showing the frequency at which HARTline bus routes operate at mid-day is displayed on the following page.



HILLSBOROUGH COUNTY

TRANSPORTATION SERVICES

HARTline Routes by Headway (Mid-day)

Headway Mid-Day
- 0 - 15 Minutes
- 15 - 30 Minutes
- 30 - 45 Minutes
- 45 - 60 Minutes
- 60 + Minutes

Major Roads
- Future
- Existing

Tampa Bay

Source: Hillsborough Area Regional Transit
Effective 4/30/00

20000 0 20000 40000 Feet

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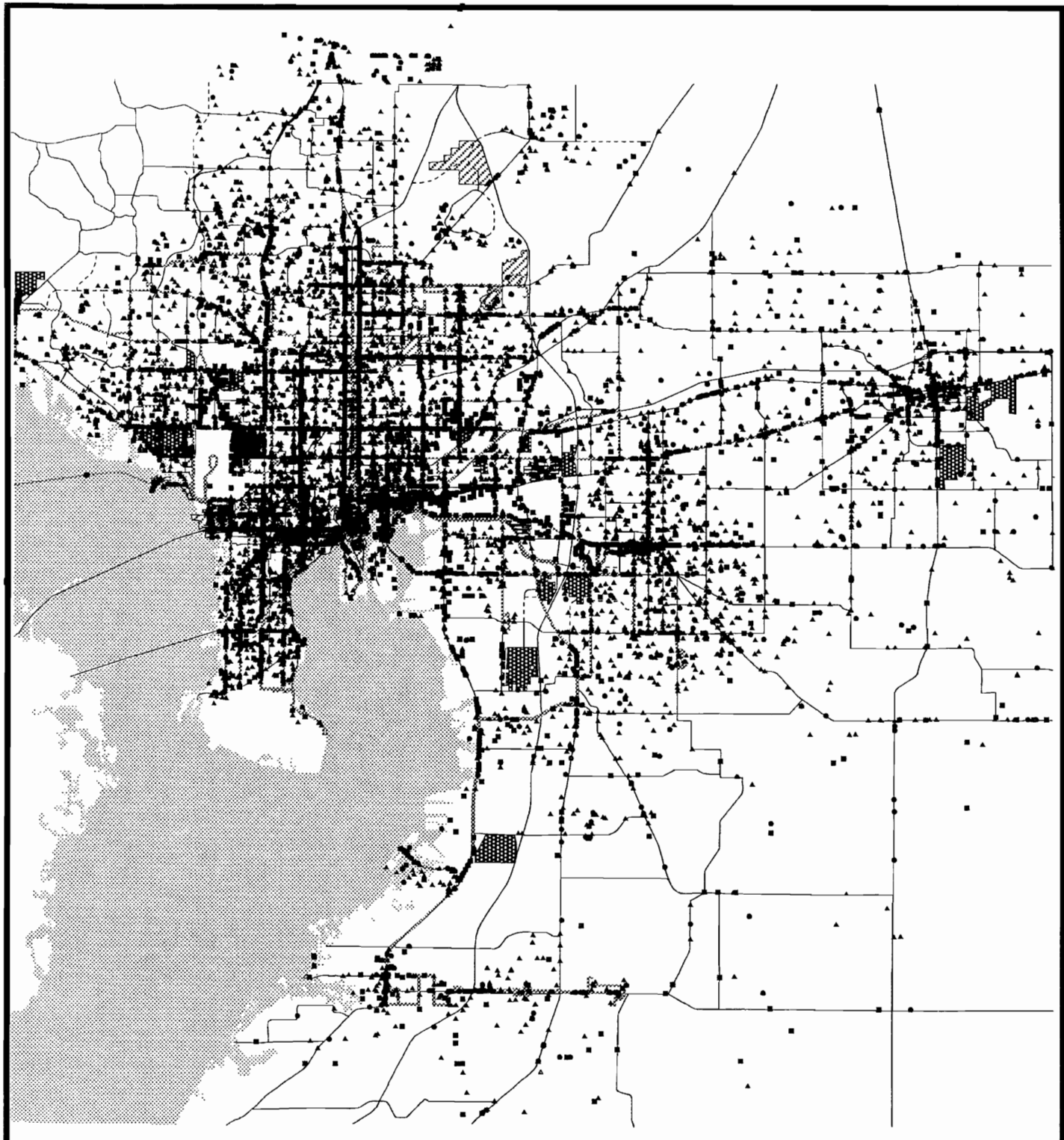
N W E S

Once the data was acquired and converted to a standard format, several "composite" maps were created showing job and job-seeker locations.

Job locations are shown on the ***job composite map,*** shown on the following page. This composite is intended to provide a more detailed analysis of job locations than is currently available from the Florida Department of Labor and Employment Service. The DLES projects extensive employment growth in Hillsborough County in trade and service occupations. Over 82% of new jobs will be in the trade and retail end—jobs that will not be in the city, but in the suburbs.

The job composite map displays businesses with 50 or more employees, in standard industrial classification (SIC) categories likely to employ entry-level workers. On the recommendation of the Steering Committee, business parks with known growth plans were added to the composite. The map is shown on the following page.

The "evening shift" version of this composite narrowed the SIC categories to hospitality and medical employers - business types that are locally characterized by round-the-clock shifts. The evening shift job composite map also included businesses that employ clients of local programs and are known to have evening shifts. A comparable composite was generated for early morning shifts.



HILLSBOROUGH COUNTY

JOBS ACCESS PLAN

DATA

Job Locations

- ▲ HOSPITALITY, MEDICAL, and ASSISTED LIVING EMPLOYERS
- ● RETAIL, MAIL ORDER, and DIRECT MAIL EMPLOYERS
- ■ MANUFACTURING, TRANSPORTATION & STORAGE, and WHOLESALE EMPLOYERS
- VESTED PROJECTS of SIGNIFICANT SIZE UNINCORPORATED COUNTY
- DEVELOPMENT of REGIONAL IMPACT CITY of TAMPA
- DEVELOPMENTof REGIONAL IMPACT UNINCORPORATED COUNTY
- FUTURE ROADWAYS
- EXISTING ROADWAYS
- TAMPA BAY

20000 0 20000 Feet

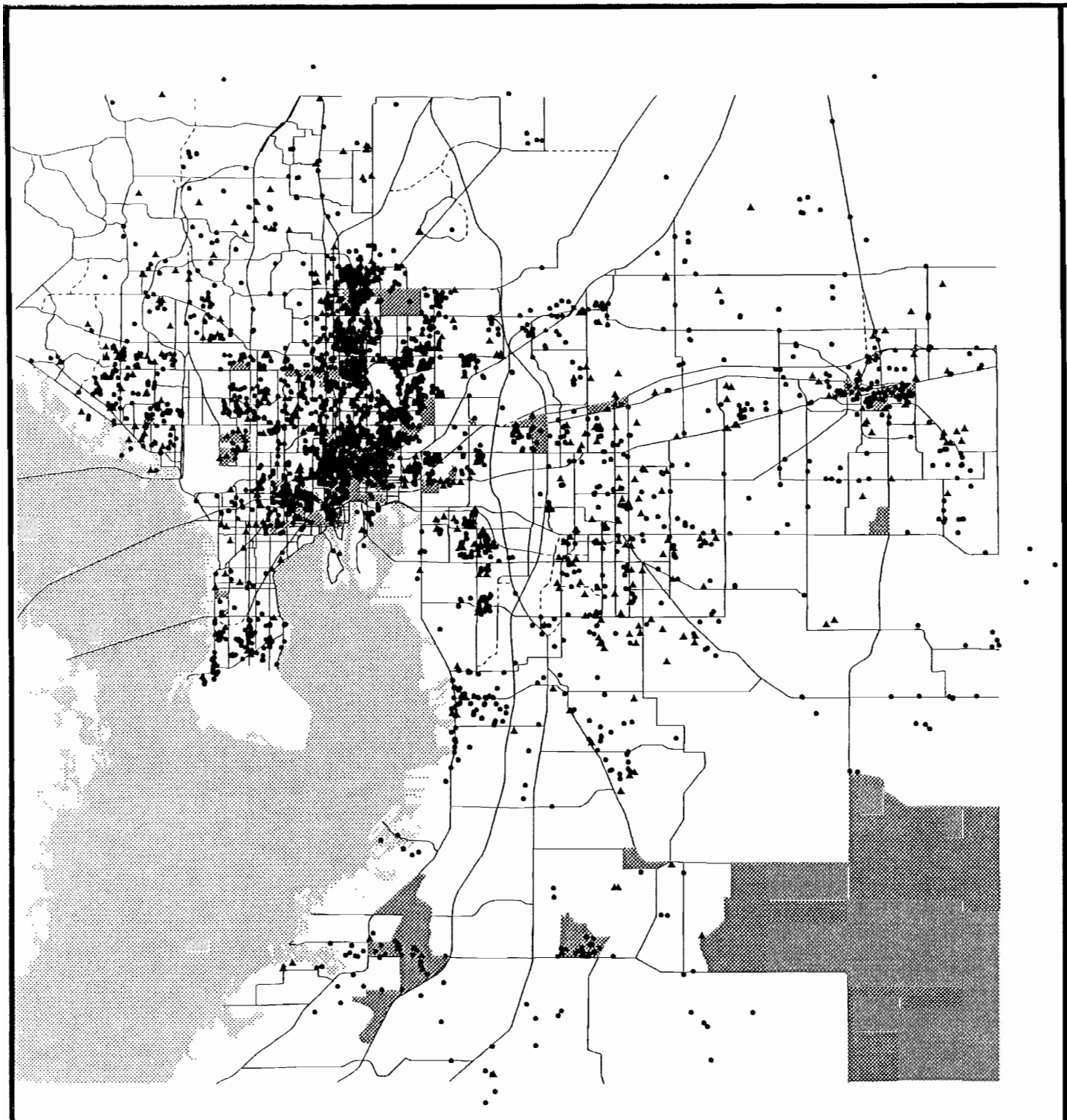
Metropolitan Planning Organization

N W E S

The ***job-seeker composite map*** is intended to create snapshot of the geographic areas containing populations needing assistance. A very broad example of geographic concentration is the percentage of Hillsborough County adult TANF recipients residing in the City of Tampa; that is, 68% live within Tampa city limits. At a finer grain, 1990 census data indicated an unemployment rate in city enterprise zones of 15.2%, versus a 6.7% city-wide rate.

Our analysis was intended to create a more detailed and refined geographic analysis of job-seeker locations in Hillsborough County. Per our Steering Committee's direction, the job-seeker composite map includes both the unemployed and the "underemployed"—that is, people who may be looking for jobs with better wages, hours, benefits, etc. Data shown on the map consists of welfare (Work and Gain Economic Self-Sufficiency, or "WAGES") clients, County Employment & Training clients, and Census block groups with a median income less than $20,000 (the minimum living wage for a single parent with two children in Tampa).

The job-seeker composite map is shown on the following page.



HILLSBOROUGH COUNTY

JOBS ACCESS PLAN

DATA

Job - Seeker Locations

- HILLSBOROUGH COUNTY WORK & GAIN ECONOMIC SELF-SUFFICIENCY (WAGES) CLIENTS
- HILLSBOROUGH COUNTY EMPLOYMENT & TRAINING DEPARTMENT CLIENTS
- CENSUS BLOCK GROUPS with MEDIAN HOUSEHOLD INCOME ≤ $20,000 , 1997
- FUTURE ROADWAYS
- EXISTING ROADWAYS
- TAMPA BAY

20000 0 20000 Feet

Metropolitan Planning Organization

N W E S

The Analysis

The locations of jobs and job-seekers were compared with existing transportation services. Generally, those that were located within a ¼-mile walking radius of transit routes were eliminated. (For major training centers and for job locations with more than 200 employees, a ½-mile walking radius was used, on the assumption that people may be more likely to walk to a larger and perhaps better known establishment.) The eliminated job centers and job-seekers were assumed to be served by the existing transportation system.

Maps were created of the remaining job centers and job-seekers, and geographic clusters were identified. This analysis was repeated several times to identify different types of work-trip transportation problems.

(A) Spatial Mismatch

The *spatial mismatch* problem was considered to occur in target areas where there currently is no public transit (HARTline) service whatsoever. In other words, jobs and job-seekers are in separate areas and are not connected by public transit.

Job clusters with a spatial mismatch problem included:

- Plant City
- the Bruce B. Downs corridor
- the US 301/ Harney corridor
- the Kingsway/ Lithia Pinecrest corridor
- the US 41 corridor south of downtown Tampa.

These are illustrated in Map A-2, Appendix 2.

Job-seeker areas with a spatial mismatch problem included:

- Plant City
- Northdale
- the US 301/ Harney corridor
- the Kingsway/ Lithia Pinecrest corridor
- the CR 672 corridor in south county
- the Fort Lonesome area.

These are illustrated in Map A-1, Appendix 2.

The only major vocational training center not served by transit is located in Plant City.

(B) Temporal Mismatch

The "temporal mismatch" problem refers to transit service not being available at the time of day it is needed for a work trip. The hospitality industry, medical and assisted living facilities, and call centers for mail-order or customer service are among the many business types that have significant staffing needs in the late evening, early morning and weekends. For late evening and early morning shifts, public transit may be available for half of the commute – the half that takes place during regular business hours – but not for the other (very late or very early) half.

Job clusters with late evening, early morning, or weekend gaps in transit service include:

- Hidden River
- Sligh & Anderson
- Waters & Manhattan
- Armenia & Dr. MLK Jr. Blvd
- Western Westshore
- Armenia & Kennedy
- Davis Island/Bayshore North
- MacDill/Dale Mabry corridor south of Gandy
- US 301 & Dr. MLK Jr. Blvd
- US 301 & Palm River
- the US 92 corridor east of US 301
- Parsons & SR 60
- Sun City/Ruskin

These areas are illustrated in Maps B-2 (a) through (c), Appendix 2.

Job-seeker clusters with late evening, early morning, or weekend gaps in transit service include:

- Memorial & Sheldon
- Gunn Highway in the area of Ehrlich Rd
- Florida Ave from Bougainvillea to Bearss
- Livingston just north of Skipper
- Armenia & Waters
- Sligh & 40th St
- MacDill south of Gandy
- US 92 east of US 301
- Palm River & 78th
- Brandon Blvd & Parsons
- Providence & Bloomingdale

- Gibsonton
- Ruskin
- Sun City

These areas are illustrated in Maps B-1 (a) through (c), Appendix 2.

(C) Multiple Trips

The "multiple trip" problem refers to the difficulty of making side trips on the way to and from work - trips to child care centers, most often - using transit. The trip to the child care center may not be on the same bus route as the trip to work, and even if it is, it will require leaving the bus and catching the bus again later. In a metro area with very limited bus frequency (most bus service in Tampa is provided every 30 or 60 minutes) stops and transfers can be extremely time-consuming.

One way to address this problem is by developing child care close to work. Maps C-2 (a) and C-2 (b), in Appendix 2, show job locations that are already close to licensed child care centers. However, conventional wisdom among human service agencies, as well as a local survey (see Chapter 3), both suggest that parents prefer a child-care center located close to home rather than close to work. The reason given is that in case of child sickness or unexpected overtime, another family member or friend will more easily be able to get the child to and from day care.

Another way to get at this problem is by looking at the feasibility of pedestrian trips between child care center and home. In Appendix 2, Maps C-1 (a) and C-1 (b) show the locations of job-seeker households that are not within a 5 minute walk of licensed child care providers. (A 5-minute walk was defined as a ¼-mile radius for the purposes of this analysis.) Job-seeker households with no child care within walking distance are located throughout the county. This situation could be particularly problematic in areas where bus service is minimal or nonexistent, such as the US 301/ Harney corridor, Plant City, Gibsonton, and Ruskin.

Data was also obtained regarding licensed child care centers that provide transportation for children to and from home. In Hillsborough County, these centers typically operate vans that serve a two to three mile radius. Some job-seeker households with limited or no bus service do fall within child care transportation service areas. Examples are the US 301/Harney corridor, the Kingsway/Lithia Pinecrest corridor, the US 92 corridor east of US 301, and an area just south of Sun City. The service areas, and the job-seeker households that fall within those areas, are illustrated in Map C-4, Appendix 2.

Prioritization of Clusters

The purpose of the following analysis is to identify areas with similar characteristics with respect to the types of strategies that may be appropriate. For each job and job-seeker cluster, demographic and economic data were gathered. The data include the number of job-seekers, number of entry-level jobs, population density (1997 persons per square mile), housing density (1997 dwelling units per acre), and the area's proximity to current HARTline transit service. The data are shown in Tables 1-3.

Table 1. Clusters in the "Spatial Mismatch" Category

	WAGES and ETD Clients	1997 Population Density (persons/ sq. mile)	1997 Housing Density (dwellings/ acre)	Jobs at Identified Employers	Proximity to Transit Service
Job-Seeker Clusters					
Northdale Area	22	1,106	0.68	NA	Close
CR 672 Corridor	34	561	0.41	NA	Distant
Fort Lonesome Area	Not Avail.	Not Avail.	Not Avail.	NA	Distant
Job Clusters					
Bruce B. Downs Corridor	NA	NA	NA	2,220	Close
US 41 South Corridor	NA	NA	NA	1,475	Close
Clusters with Jobs and Job-Seekers					
US 301/Harney Corridor	109	477	0.31	2,617	Close
Plant City	150	576	0.36	10,053	New Planned Service
Kingsway/Lithia Pinecrest Corridor	97	1,242	0.72	4,562	Close

NA=Not Applicable

Table 2. Clusters in the "Temporal Mismatch" Category- Job Clusters Only

	Bus Service Currently Available						HMAL* Jobs
	Rte. No.	Start or End Time	Rte. No.	Start or End Time	Rte. No.	Start or End Time	
No Early Morning Service							
Bayshore North/Davis Island	3	5:45 am	46	6:00 am	22x	6:00 am	3,572
Western Westshore	30	5:00 am	--	--	--	--	3,534
Hidden River Area	33	6:30 am	--	--	--	--	3,330
MacDill/Dale Mabry Corridor South	4	5:30 am	17	6:00 am			1,993
Sun City & Ruskin	84	5:00 am	--	--	--	--	1,719
US 301 & Palm River	31	6:00 am	--	--	--	--	1,083
Parsons & SR 60	38	6:00 am	--	--	--	--	1,049
US 301 & MLK	38	6:00 am	--	--	--	--	875
Sligh & Anderson	11	5:10 am	--	--	--	--	643
Armenia & MLK	14	5:24 am	--	--	--	--	475
Armenia & Kennedy	30	5:00 am	--	--	--	--	0
No Late Evening Service							
Western Westshore	30	9:00 pm	--	--	--	--	3,534
Hidden River Area	33	6:18 pm	--	--	--	--	3,330
MacDill/Dale Mabry Corridor South	4	7:22 pm	17	7:54 pm	--	--	1,993
Sun City & Ruskin	84	7:53 pm	--	--	--	--	1,719
US 92	28x	6:03 pm	--	--	--	--	1,186
No or Limited Weekend Service							
Davis Island	3	Sat. & Sun.	--	--	--	--	3,632
Hidden River Area	33	Sun.	--	--	--	--	3,330
Sun City & Ruskin	84	Sun.	--	--	--	--	1,719
US 301 & Palm River	31	Sun.	--	--	--	--	1,285
US 92	28x	Sat. & Sun.	--	--	--	--	1,186
N. Armenia	14	Sat. & Sun.	--	--	--	--	855
Bayshore South	4	Sun.	17	Sun.	--	--	384

*Indicates the number of jobs in industrial classifications very likely to have shifts operating around the clock. HMAL=Hospitality, Medical & Assisted Living Establishments

Table 3. Clusters in the "Temporal Mismatch" Category- Job-Seeker Clusters Only

	Bus Service Currently Available				Number/ Density of Potential Riders		
	Rte. No.	Start or End Time	Rte. No.	Start or End Time	1997 Population Density (persons/sq. mile)	1997 Housing Density (dwellings/acre)	WAGES & ETD Clients
No Early Morning Service							
Sligh & Boulevard	41	5:55 am	7	5:23 am	4,655	3.44	154
North of Skipper	7	5:15 am	--	--	2,811	2.54	99
MacDill/Dale Mabry Corridor South	4	5:30 am	17	6:00 am	2,200	1.57	71
Gunn to Erlich	39	5:55 am	20x	6:10 am	2,085	1.37	66
Providence & Bloomingdale	31	6:00 am	27x	6:33 am	2,037	1.15	46
Brandon Blvd. & Parsons	38	6:00 am	--	--	1,941	1.20	61
Memorial & Countryway	34	4:50 am	21x	6:29 am	1,598	1.12	104
US 92 to Hwy 574	28x	6:29 am	--	--	1,144	0.66	80
Gibsonton	31	6:00 am	54x	6:30 am	565	0.36	85
Ruskin	84	5:00 am	--	--	Not Avail.	Not Avail.	41
Sun City	84	5:00 am	--	--	Not Avail.	Not Avail.	34
No Late Evening Service							
Armenia & Waters	14	7:42 pm	16	7:42 pm	4,699	3.63	36
Memorial & Sheldon	34	7:53 pm	21x	6:10 pm	2,371	1.72	51
MacDill/Dale Mabry Corridor South	4	7:22 pm	17	7:54 pm	2,200	1.57	71
Providence & Bloomingdale	31	7:34 pm	27x	6:18 pm	2,037	1.15	46
US 92	28x	6:03 pm	--	--	779	0.47	50
No or Limited Weekend Service							
Armenia & Waters	14	Sat. & Sun.	16	Sun.	4,699	3.63	36
Memorial & Sheldon	21x	Sat. & Sun.	--	--	2,371	1.72	51
MacDill/Dale Mabry Corridor South	4	Sun.	17	Sun.	2,200	1.57	71
Gunn to Erlich	20x	Sat. & Sun.	--	--	2,085	1.37	66
Providence & Bloomingdale	31	Sun.	27x	Sat. & Sun.	2,037	1.15	46
US 92	28x	Sat. & Sun.	--	--	779	0.47	80
Palm River & 78th	31	Sun.	27x	Sat. & Sun.	655	0.37	103
Gibsonton	31	Sun.	54x	Sat. & Sun.	565	0.36	85
Ruskin	84	Sun.	--	--	Not Avail.	Not Avail.	41
Sun City	84	Sun.	--	--	Not Avail.	Not Avail.	34

(A) Areas and Times of Day Close to Existing Bus Service

The analysis identifies clusters of jobs and job-seekers that are geographically close to existing bus service but not actually within the service area. It also identifies clusters that currently have bus service for most of the day but not for a few critical evening and early morning hours. The highest priority of these areas, based on number and density of jobs and households, are discussed below, in no particular order. They are also shown on the map on the following page.

Western Westshore (Job Cluster, Temporal Mismatch)

The Western Westshore area of Tampa, in the area of Memorial Boulevard just north of Interstate 275, has been identified as a job cluster that does not receive early morning and late evening HART bus service. Over 3,000 jobs at hospitality, medical, and assisted living facilities – employers that typically have entry-level jobs at non-traditional hours – have been identified in this area. This area is served by HART Route 30, which operates every day of the week. However, the first run of this route in the morning arrives after 5:00 am and the last route in the evening leaves before 8:30 pm.

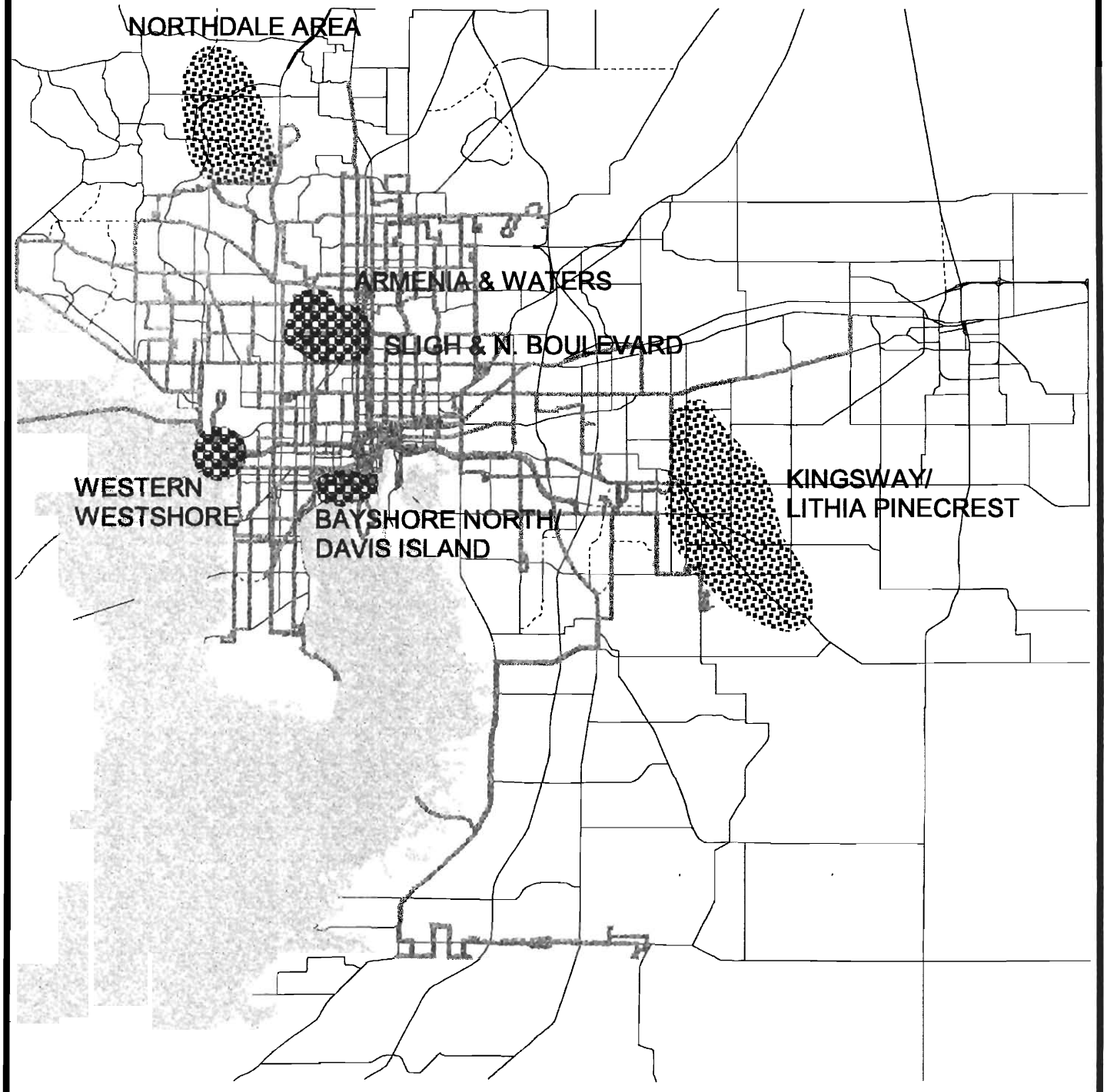
Bayshore North/Davis Island (Job Cluster, Temporal Mismatch)

This area includes Tampa General Hospital, a major employer with shifts operating around the clock. Currently, bus service is not provided to shifts starting in the very early morning. The area is served by HARTline Routes 3 and 46. Route 3, the East Bank-West Bank Connector, provides service from Ybor City to Tampa General Hospital on Davis Island; the first run of this route in the morning arrives at Tampa General Hospital after 6:15 am. Route 46, which connects Davis Island and Bayshore North with the Marion Street Transit Parkway and Palmetto Beach, also does not provide service to Davis Island before 6:00 am.

Sligh Avenue & North Boulevard (Job-Seeker Cluster, Temporal Mismatch)

The area surrounding the intersection of Sligh Avenue and North Boulevard has a relatively high population density (4,655 persons per square mile) and a high concentration of WAGES and ETD clients. Bus routes do not depart this area in the very early morning (defined as 5:00 a.m. or before) in time to allow job-seekers to travel by bus to early-starting shifts.

Currently, two HARTline routes serve this area. Route 7 runs north-south from the University Area and Bearss Avenue to Downtown Tampa. Route 7's first run in the morning leaves this intersection at 6:17 am going northbound and 5:37 am going southbound. Route 41 travels east-west, primarily along Sligh Avenue, from the Net Park Transit Center to Tampa Bay Center. The first run for Route 41 leaves this area at 6:10 am going eastbound and 6:23 am going westbound.



HILLSBOROUGH COUNTY

JOBS ACCESS PLAN

RECOMMENDATIONS

A. Areas and times of day close to existing bus service

SPATIAL MISMATCH CLUSTERS
Bus service not provided to this area

TEMPORAL MISMATCH CLUSTERS
Bus service not provided evenings, early morning, and/ or weekends

HARTLINE BUS ROUTES

TAMPA BAY

FUTURE ROADWAYS

EXISTING ROADWAYS

20000 0 20000 Feet

Metropolitan Planning Organization

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Armenia Avenue & Waters Avenue (Job-Seeker Cluster, Temporal Mismatch)

The area surrounding the intersection of Armenia Avenue and Waters Avenue has a mid-ranking number of WAGES and ETD clients and a high population density. Late evening service and Sunday service are not provided to this area.

Routes 14 and 16 serve the area. Route 14 travels primarily along Armenia Avenue, connecting Downtown Tampa with the WAGES One-Stop Center and park-and-ride at Waters Ave and Florida Ave. Route 14's service ends after 7:10 pm going northbound and 6:50 pm going westbound. No Saturday or Sunday service is provided on Route 14. Route 16 travels east-west along Waters Avenue, connecting the Waters/Hanley Transfer Center with the WAGES One-Stop Center and the University Area Transfer Center. The last evening run on Route 16 serves the intersection of Armenia and Waters at 7:10 pm going eastbound and 7:20 pm going westbound. Route 16 provides Saturday service but no Sunday service.

Kingsway/Lithia Pinecrest Corridor (Job & Job-Seeker Cluster, Spatial Mismatch)

In Brandon, Kingsway Road north of Lithia Pinecrest, and Lithia Pinecrest Road southeast of Kingsway delineate a corridor containing both jobs and job-seekers. The population density is at the low end of the spectrum, but comparable to some other suburban areas of the county where bus service is currently provided (such as the Memorial/Countryway area in Town 'N' Country). There are a relatively high number of WAGES and ETD clients in the area, as well as a passable number of entry-level jobs.

HART routes traveling in the Brandon area (Routes 31, 37, and 38) do not extend far enough east to serve the target population and jobs on and near Kingsway Road and Lithia Pinecrest Road. A couple of express routes terminate near this area; specifically, Route 22x (North Brandon Express) and Route 27x (South Brandon Express). Route 22x is particularly close, terminating at the intersection of Kingsway Road and Sadie, at the Rogers Field Park and Ride Facility. This express route is designed for travel from the North Brandon area to Downtown Tampa in the morning and returning to North Brandon in the late afternoon. It currently does not carry passengers in the reverse commute direction. Route 22x operates Monday through Friday only.

Northdale (Job-Seeker Cluster, Spatial Mismatch)

The Northdale area of North Tampa is defined as the area west of Dale Mabry Highway, north of Ehrlich Road and east of the Veterans Expressway. The area has a population density comparable to the Kingsway/Lithia Pinecrest Corridor, thought it includes a smaller number of WAGES and ETD clients. One HARTline route is near to and follows the perimeter of this area; route 36 travels along Dale Mabry Highway and terminates at the North Lake View Park and Ride Lot (north of Northdale Blvd.)

(B) Areas and Times Not As Close to Existing Bus Service

Expanding the bus system will be more costly in areas that are farther from the existing transit service area or where the bus system operates fewer hours per day. These areas also tend to have lower density development, which increases the difficulty of serving them with traditional fixed-route transit. The highest priority of these areas, based on number and density of jobs and households, are discussed below, in no particular order. They are also shown on the map on the following page.

Plant City (Job & Job-Seeker Cluster, Spatial Mismatch)

Plant City includes a large and growing number of jobs, a high number of WAGES and ETD clients, and three Census block groups with median incomes less than $20,000/year. Currently, no transit service is provided in Plant City at all, as the city has opted out of HARTline transit service. The only major Hillsborough County vocational and technical training center not served by transit is located in Plant City.

Hidden River Area (Job Cluster, Temporal Mismatch)

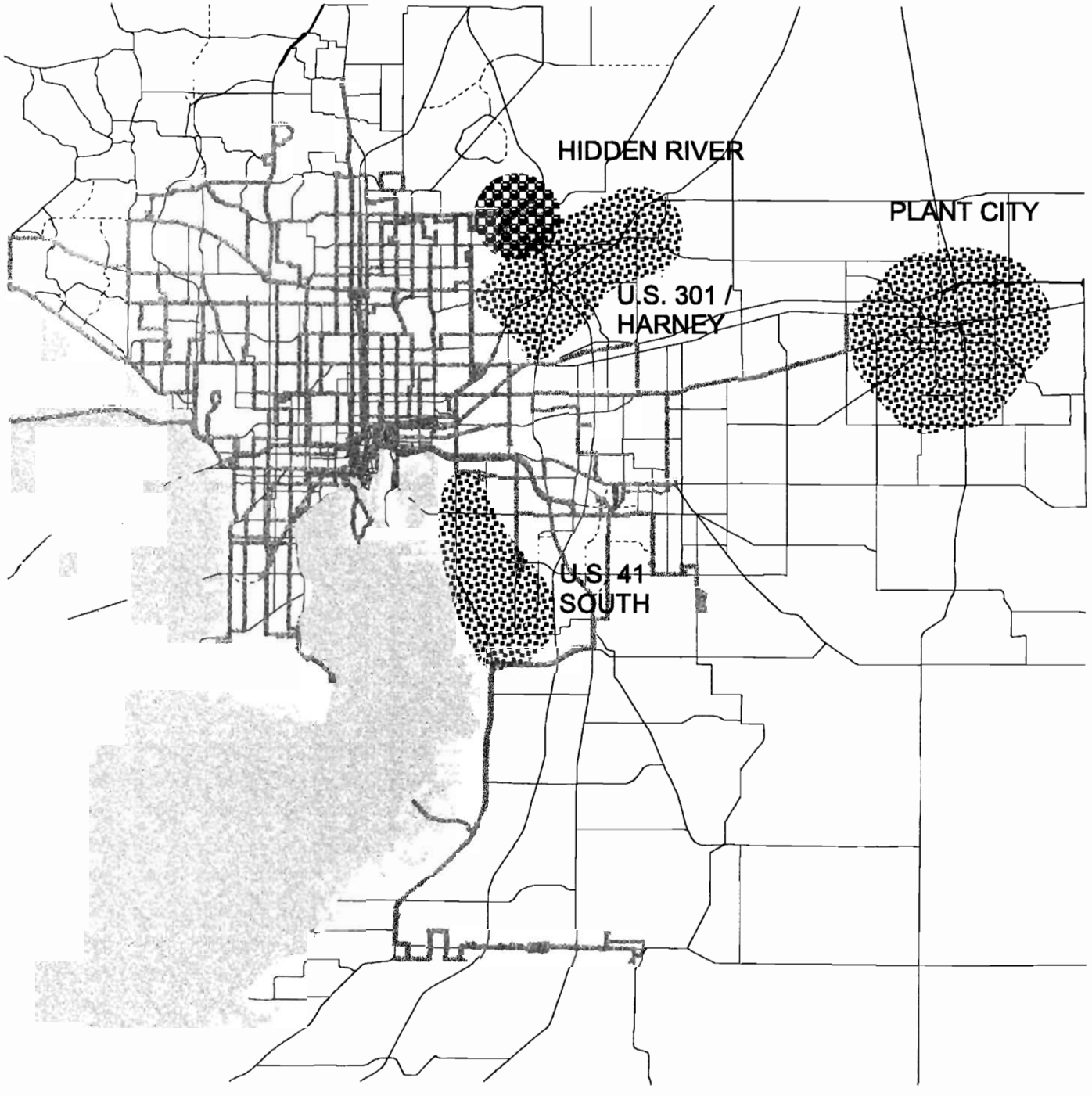
Hidden River is defined as the area just west of Interstate 75 around Fletcher Avenue. The area has a significant number of jobs, is growing, and is not served by transit in the early morning, late evening, or on weekends.

The area is currently served by HARTline Route 33. This route travels primarily along Fletcher Avenue and connects Hidden River with the University Area Transfer Center. The first run in the morning on this route arrives in the Hidden River area at approximately 6:30 am. The last run in the evening leaves Hidden River at approximately 5:30 pm. Route 33 does not operate on Sunday, nor does it run all the way to the Hidden River Area on Saturday. Hidden River is considered an area not close in time to existing bus service due to the limited hours of service on Route 33.

US 301/Harney Corridor (Job & Job-Seeker Cluster, Spatial Mismatch)

Where US 301, Harney Road, Interstate 75, Fowler Avenue, and Hillsborough Avenue come together are jobs and a high number of WAGES/ETD clients. The area is not served by HARTline. The closest bus routes include Route 33, serving Hidden River to the north, and several routes (6, 15, 32, 34, 39, and 41) that serve the Net Park Transit Center at the corner of 56th Street and Hillsborough Ave.

Hospitality-based businesses in Hidden River, immediately to the north, indicated a great appreciation for the recent extension of bus service to their area. (Please see Chapter 3 for interviews conducted for this study.) This could indicate a potential transit market for hospitality-based employers in the US 301/Harney Area.



HILLSBOROUGH COUNTY

JOBS ACCESS PLAN

RECOMMENDATIONS

B. Areas and times not as close to existing bus service

SPATIAL MISMATCH CLUSTERS
Bus service not provided to this area

TEMPORAL MISMATCH CLUSTERS
Bus service not provided evenings, early morning, and/ or weekends

HARTLINE BUS ROUTES

TAMPA BAY

FUTURE ROADWAYS

EXISTING ROADWAYS

20000 0 20000 Feet

Metropolitan Planning Organization

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US 41 Corridor South (Job Cluster, Spatial Mismatch)

The US 41 Corridor South is located between SR 60 on the north and Gibsonton Road on the south. It is not currently served by HARTline, though there is a HART route serving US 41 immediately north and south of this area. The area had a number of jobs, predominately industrial and warehouse employers that are spaced far apart along the corridor.

(C) Low-Density or Outlying Areas

In areas that are far-flung or have a low density of jobs or job-seekers, even creative variations of fixed-route transit are likely to be inefficient. The highest priority of these areas, based on number and density of jobs and households, are discussed below, in no particular order. They are also shown on the map on the following page.

Sun City & Ruskin (Job & Job-Seeker Cluster, Temporal Mismatch)

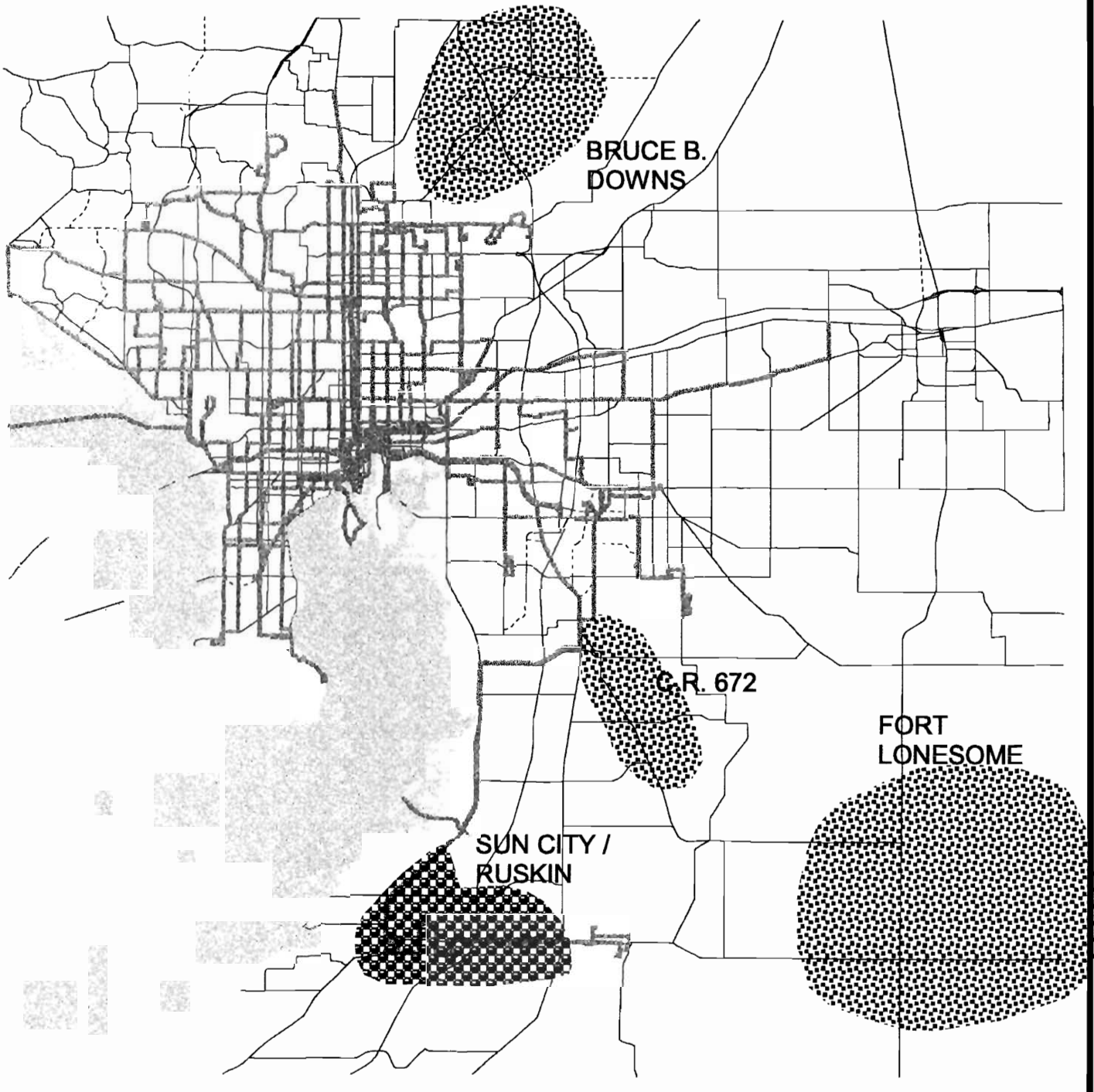
Sun City and Ruskin are two small communities on State Road 674 in rural, southern Hillsborough County. The communities include jobs, WAGES/ ETD clients, and low-income Census block groups. The very limited transit service is not available in the early morning, late evening, or on Sunday. HARTline Route 84 serves both areas, with 90 minute headways. This route is a circulator that begins service at 5:00 am on the east end of the route in Wimauma, travels west, turns around at the Ruskin K-Mart and returns east at 6:37 am. In the evening, the route completes the last run of the day in Wimauma at 7:53 pm. There is no Sunday service on Route 84.

Fort Lonesome Area (Job-Seeker Cluster, Spatial Mismatch)

Census data identified this area of far southeast Hillsborough County as being an area of low median income. The area is a long distance from any existing HARTline route, and there are no WAGES or ETD clients in the area. Fort Lonesome is rural and sparsely populated .

CR 672/Balm-Riverview Road Corridor (Job-Seeker Cluster, Spatial Mismatch)

This small cluster of WAGES/ETD clients is located in the vicinity of Balm-Riverview Road, from Gibsonton Road to CR 672 in southern Hillsborough County. The area is somewhat remote from existing bus routes (the closest are route 31 and route 54x) and has a relatively low population density.



HILLSBOROUGH COUNTY

JOBS ACCESS PLAN

RECOMMENDATIONS

C. Low density or outlying areas

SPATIAL MISMATCH CLUSTERS
Bus service not provided to this area

TEMPORAL MISMATCH CLUSTERS
Bus service not provided evenings, early morning, and/ or weekends

HARTLINE BUS ROUTES

TAMPA BAY

FUTURE ROADWAYS

EXISTING ROADWAYS

20000 0 20000 Feet

Metropolitan Planning Organization

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Bruce B. Downs Corridor (Job-Seeker Cluster, Spatial Mismatch)

Our analysis identified a number of jobs along Bruce B. Downs Boulevard from Bearss Avenue to the Pasco County Line. Currently, all HART routes terminate south of this area, generally in the vicinity of the University of South Florida. The density of development in this area is relatively low, taking the form of office parks and a commercial strip along the main artery.

As indicated by interviews with clients at the University Community Resource Center (documented in Chapter 3), many potential employees live in the vicinity of the university, but do not have access to jobs in the Bruce B. Downs corridor due to the unavailability of a vehicle.

II. IDENTIFICATION OF SOLUTION ALTERNATIVES

In this section, an array of potential strategies have been identified that could address the jobs access transportation needs in Hillsborough County. These strategies have been separated into five major categories based on the operating environments of the strategies. Following the list, each of the strategies are described in detail with specific information on advantages and disadvantages; estimated general costs; and examples of where they have been used.

Strategies were identified based on information gathered from other communities, input from the Hillsborough County community including the Jobs Access Plan Steering Committee, other studies performed, and individual contact with employers, social service agencies, and job-seekers.

- **Public Transportation Strategies**
  - ✓ Fixed-Route Transit
  - ✓ Deviated Fixed-Route Service
  - ✓ Subscription Bus Service
  - ✓ Paratransit Feeder Services
- **For-Profit Transportation Strategies**
  - ✓ Subsidized Taxi Service
  - ✓ Jitney Service
- **User Initiated/Operated Strategies**
  - ✓ Carpool Matching Service
  - ✓ Vanpools
  - ✓ Donated Cars
- **Coordination Strategies**
  - ✓ Transportation/Job Matching Coordinator
  - ✓ Establishing Job/Job-Seeker Database
  - ✓ Establishing Gathering Points for Transportation Services
  - ✓ Encourage Businesses to Allow Telecommuting
  - ✓ Employer Education
  - ✓ Daycare Provided/Coordinated Transportation

◆ **Land-Use Strategies**

The problem of transportation to jobs would be greatly lessened if jobs and job-seekers existed in close proximity to each other. According to the US Department of Transportation, 2/3 of all new jobs are in the suburbs, while 3/4 of welfare recipients live in rural areas and central cities. Is it realistic to expect that this mismatch can be alleviated with transportation services? The goal of the Hillsborough County Jobs Access Plan is to identify transportation solutions. However, it may be that the long-term problem could be better addressed with land-use strategies such as:

- Encouraging job growth in inner city and rural areas
- Encouraging the development of affordable housing in suburbs (where jobs are)
- Encouraging high-quality day care in inner-city and rural neighborhoods
- Encouraging high-quality day care at job sites

Public Transportation Strategies

The following strategies apply traditional public transportation techniques – and variations on those techniques – to the job access problem.

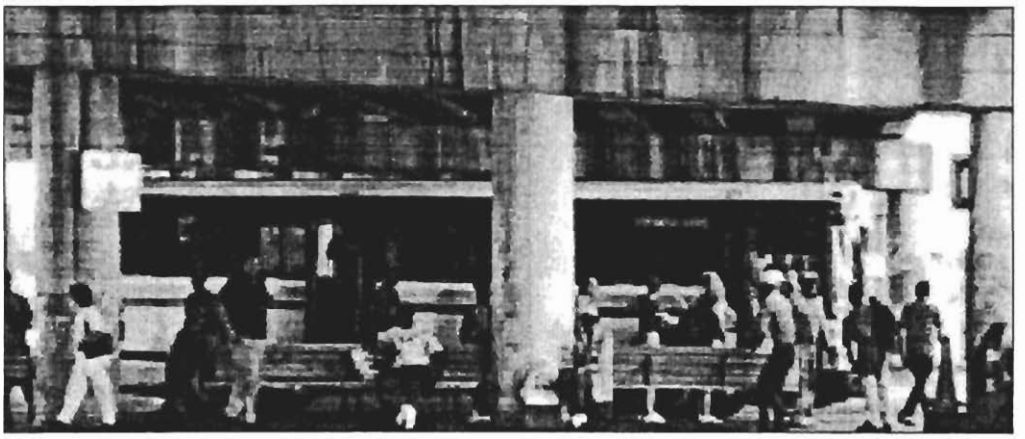
Pros
- Relatively easy to provide the service compared to dispatched demand response service
- No needed commitment from riders
- HARTline structure already in place

Cons
- Long lead time to start services (e.g., time to plan, acquire vehicles)
- No guaranteed riders (No guarantee for efficiency/effectiveness)
- Higher travel time than other alternatives (e.g., vanpools, carpools, driving oneself)
- Up-front cost of vehicle and operator
- Cost per trip could be high if ridership is low

The costs of these strategies depend in part on the size of vehicle that is used. Typical local, fixed-route service generally uses a 40-foot vehicle. Variations such as community circulators and deviated fixed-route service often use smaller vehicles, as small as 20 feet. Demand responsive and paratransit feeder services might use even smaller vehicles. Table 4 lists sample purchase prices of different size transit vehicles.

Table 4. Transit Vehicle Costs

Vehicle Size	Number of Passengers	Price per Vehicle
40-foot Heavy Duty Transit Bus	40-50	$267,000
30-foot Heavy Duty Transit Bus		$247,000
25-foot Cutaway Diesel Bus	25-30	$48,000
Commuter Van	9-12	$25,000

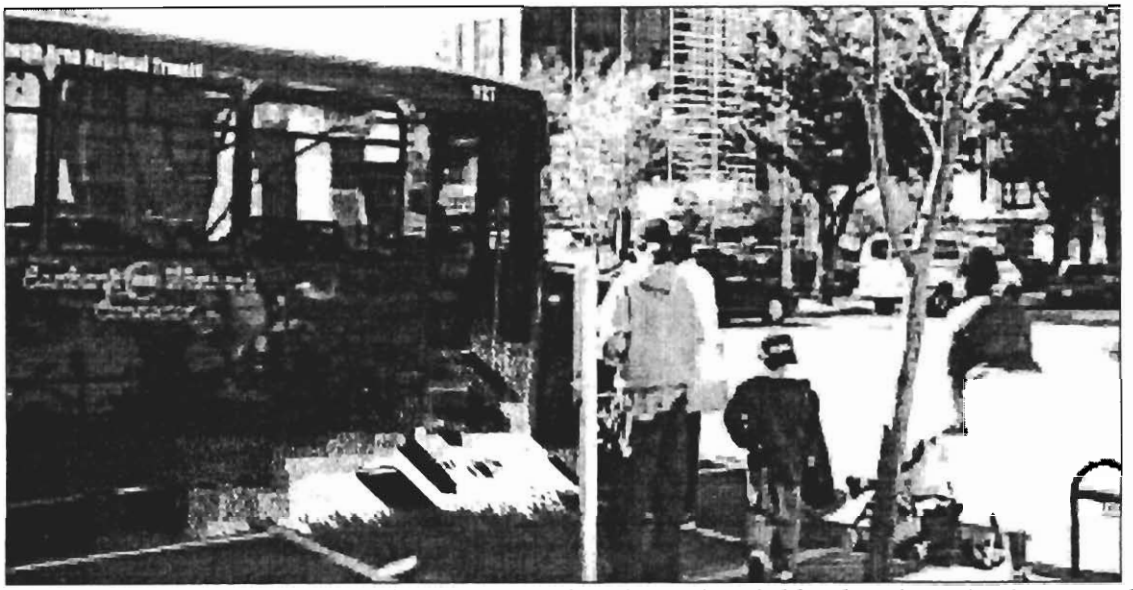


A 40-foot bus pulls into a transfer center.

(A) Fixed-Route Transit

Typical fixed-route bus service operates throughout the day, using city streets, stopping at marked locations every 3 or 4 blocks. Shelters may be provided at more heavily used locations. Routes usually converge at transit centers (often downtown) to facilitate connections. Vehicle sizes typically range from 25 feet to 40 feet or larger, seating 30-50 passengers.

A variation of typical fixed-route service, neighborhood circulator service involves operating smaller vehicles in a more limited geographic area. The smaller turning radius of the vehicle allows travel on minor roads as well as city streets. Circulators typically serve an area where a large number of short trips are made, such as a university campus and environs, or a shopping area and nearby suburban neighborhoods. Circulators often connect with standard local routes to allow longer trips to be made.



Smaller vehicles can provide circulator service through neighborhoods or business parks.

Pros

- A published, regular schedule can be relied upon by occasional as well as daily users.

Cons

- May still have long walking distances from neighborhoods to fixed route.

The operating cost of fixed-route transit service is not dependent on the number of people using the bus. In other words, transit service will cost the same per revenue hour of service whether 1 person is on the bus or 20 people are on the bus. An estimated general cost of expanding transit service can be derived based on HARTline's estimated costs that were submitted to the Federal Transit Administration in the Fiscal Year 1999 National Transit Database Report (NTD). In that year, HARTline reported that transit service cost $57.91 per revenue hour of service. This is the cost of operating one bus for one hour no matter how many people are riding the bus.

Also included in the NTD report was HARTline's average operating cost per passenger trip (total operating cost divided by total passenger trips). On average, 22 people were being carried for every revenue hour of service at an average cost of $2.64 per passenger trip. Any expansion of transit service into low-density areas and/or late or early times of day will most likely attract fewer passengers than the average. For such expansions, the cost per passenger trip will be higher than $2.64.

(B) Fixed-Route Service with Deviation

Like local fixed-route bus service, fixed-route with deviation operates a regularly scheduled route on city streets. But in designated areas, the bus will deviate a few blocks from the route for "on call" drop-offs and pick-ups. An on-board passenger may request a drop-off in a nearby neighborhood. Those needing to board the bus off the regular route call in advance and the bus dispatcher informs the driver of the request After deviating, the vehicle immediately returns to the fixed route at the point at which it departed. This procedure ensures that the vehicle does not skip any portion of the fixed route. In the event that no requests for deviation are received, the vehicle operates identically to a fixed-route vehicle. Typically, route deviation service requires smaller vehicles than traditional fixed-route service due to the need to travel on minor streets.

HARTline's Ruskin Circulator

Pros

- Larger service area.
- Route location somewhat customized to user needs.
- More flexible service particularly for persons with disabilities

Cons

- Almost as expensive as regular fixed-route services (the only difference between deviated fixed-route transit services and regular fixed-route services are the vehicle costs)
- Dependent on times of the existing fixed-route services to accommodate transfers
- Less direct service compared to regular fixed-route service

Example

Broward County Transit (BCT) in Broward County, Florida coordinates with a number of municipalities to provide Community Bus Service in areas that do not have fixed-route bus service. All of the Community Bus Service routes connect with BCT fixed routes. In addition, all of the routes deviate upon request.

Another example of deviated fixed-route transit service is a late-night/early-morning shuttle developed by the Tampa Downtown Partnership for downtown hotel employees. The shuttle is operated by United Cab, at an estimated cost of $6,400 per month or $76,800 annually. This service operates seven days per week, with two runs in the early morning (before the start of regular HARTline service) and two runs in the late night (after the end of regular HARTline service). The length of the route is 18 miles one-way, with 27 stops and some deviation to drop off employees at home.

(C) Subscription Bus Service

Subscription bus service generally takes the form of pre-arranged service that is designed to meet specific group or individual needs. The most significant difference between subscription buses and public buses is in the way the service is paid for; payment is made by arrangement between the parties requesting and providing the service. Subscription bus service is typically not open to the general public.

This type of service works best when there are specific needs for group trips to one or two destinations. Rides may be arranged daily, weekly, or during whatever period is required to serve the target population.

Pros

- Good for specialized transportation needs with many trips going to a common destination (e.g., a major employer)
- Typically more direct service and fewer stops than fixed-route public buses

Cons

- Limited to trips from common origins to common destinations
- Not very flexible
- Limited to the subscribing population only

Example

In Brevard County, Florida, subscription bus service is contracted by social service agencies in order to transport agency clients who are making a common trip on a regular basis. When not being used for fixed-route bus service, Space Coast Area Transit (SCAT) buses provide subscription bus service for persons traveling to training centers, sheltered workshops, congregate meal sites, and similar destinations. Currently, several agencies in Brevard County have a contract with SCAT for the provision of subscription route transportation to a variety of social service programs. Any group sponsored (and paid for) by the County, a municipality, school board, senior citizen group, or social service agency may subscribe for service. The agency-sponsored subscription routes in Brevard County operate between the hours of 6:30 a.m. and 6:00 p.m., Monday through Friday. The typical service day consists of picking up passengers at their homes and transporting them to the agency facilities between 6:30 a.m. and 9:00 a.m. In the afternoon, the bus reverses the route, returning clients to their homes,

generally between 3:00 p.m. and 6:00 p.m. The current average cost for this service is approximately $1.65 per vehicle mile, which is billed to the sponsoring agency. Other residents of the county may use this service on a seat-available basis for $1.00 per one-way trip; seniors and persons with disabilities are charged 50 cents.

(D) Paratransit Feeder Service

Feeder service is transportation service that picks passengers up at their origin point (usually home) and transports them for the first leg of their journey to a fixed-route bus stop. Vans or small buses are typically used for feeder services. Upon arrival at the stop or station, the passenger disembarks and, after a short wait or immediately upon leaving the feeder vehicle, boards the fixed-route vehicle. Providing paratransit service for the first leg of a journey and then transferring to a fixed-route bus is cheaper than providing the trip completely on a door-to-door basis. The longer the trip, the greater the cost-savings. Therefore, suburban-to-urban or rural-to-urban trips are typically better candidates for feeder service than intra-urban trips. This type of service is appropriate for outlying areas.

Pros

- Part of trip is door-to-door. Therefore, can accommodate more people with disabilities.
- Provision of service is based on demand.
-

Cons

- High degree of dispatch coordination is required
- More expensive per trip than fixed-route service

Example

In Chapel Hill, North Carolina a shared-ride "feeder service" transportation is available on weekdays to some areas of the city, that do not have fixed-route bus service because demand is low. Transportation for these areas to and from nearby bus stops is provided by request Monday through Friday.

The Greater Cleveland Regional Transit Authority (GCRTA), also, provides "feeder service" for clients of their Welfare-to-Work Program. If transit service is not available for a client trying to get to work, either because of a spatial mismatch or temporal mismatch problem, GCRTA provides a van to transport the client from home to the nearest bus stop, from a bus stop to the work site, or directly from home to worksite if bus service is not operating at that time of day. The van service is contracted to a private operator, Provide-A-Ride, that uses paid drivers. Each passenger pays $54 per month for the service. This monthly fare is paid for by the Welfare-to-Work Program if the individual is searching for a job, is in job training, or is in the first 60 days of employment.

Eligibility for the service is established carefully. First, it must be determined by the client's "self-sufficiency coach" that transit service will not be available to accommodate the complete work trip. At this point, the client is referred to a mobility specialist who is located in one of the eleven neighborhood centers operated by the Welfare-to-Work program. The mobility specialist determines if there is an existing van that can accommodate the missing link(s) of an individual's work trip, and coordinates transportation on this van. The mobility specialist works with the dispatcher at Provide-A-Ride to arrange the trip on the van.

Estimated General Cost

Because paratransit feeder services is based on demand (a vehicle does not travel to a location without someone asking for a trip) the cost per trip of this form of transportation is more predictable than for fixed-route transit service. The factors that affect the cost per trip for paratransit service are the length of the trip and how many people are on the vehicle at once. For example, if a vehicle travels to one person's house and drops that person off at the closest bus stop, then goes and picks up another person; the cost per trip will be substantially more than if multiple people are picked up and delivered to the same bus stop.

HARTline currently provides paratransit services for persons with disabilities, under the Americans with Disabilities Act (ADA) Complementary Paratransit program. In fiscal year 1999, HART provided 23,242 trips at a total cost of $354,372. HARTline estimated that the average cost of their paratransit service is approximately $15.52 per trip, for an average trip length of 11 miles. This may be a high-end estimate. Using it as a guideline, the cost to provide transportation to jobs could cost as much as $7760 per job per year (two trips per day, five days a week).

Existing paratransit van service in Hillsborough Co.

Another way to estimate costs is to look at the total operating cost per driver hour. Based on Hillsborough County's Annual Operating Report for Transportation Disadvantaged Services in Fiscal Year 1999, it cost $18.07 per driver hour to provide paratransit service. This is the cost regardless of how many people are on a vehicle at one time.

GCRTA's feeder service provided job trips to about 200 clients in the month of August, 2000. The gross operating cost was $102,412 for August, with $16,250 going to administration. That equates to a per-client cost of $512/month on average, or $6145/year.

For-Profit Transportation Strategies

The following strategies are grouped together because they are expected to operate at a profit. In general, such strategies tend to accommodate customers at the trade-off of being more expensive.

For example, if an individual took a 10-mile one-way trip by taxi, the total cost for the trip would be $16.25 in Hillsborough County. Comparing this cost to the cost of a transit bus traveling a 10-mile distance, the total bus operating cost would be approximately $40. If the bus carried only four passengers, the cost per person-trip would be $10, already lower than the taxi, but admittedly less convenient for the passenger.

(A) Subsidized Taxi Service

In a subsidized taxi service program, patrons are charged a portion of the fare associated with a demand-response trip, and the remainder of the cost for the trip is subsidized by a third party (for example, an employer or local government). These programs have a high potential for effectiveness in low-density areas or times of day with low demand. Taxi-based user-side subsidy programs are currently operating in many large cities in the United States, such as Houston, Los Angeles, San Francisco, Oklahoma City, and Seattle.

Although each program is designed according to each area's unique mobility needs, some general parameters can be applied to taxi-based user-side subsidy programs. Customers are typically sold taxi vouchers worth a certain dollar amount toward a cab ride (e.g., $10.00) at a reduced cost. The amount of the subsidy passed on to consumers varies from 40 percent to 90 percent. For example, in a program with a 50 percent subsidy, the consumer would be charged $5.00 for a $10.00 taxi voucher. The customer then makes a trip with a designated taxi company and is responsible for any portion of the total fare that exceeds the total value of the voucher.

In Hillsborough County, the typical charge for a taxi trip is $1.25 base plus $1.50/ mile. If a subsidized taxi program were implemented here, the cost to the rider would be dependent on the amount of subsidy that is paid for by a third party.

Pros

- Very flexible service for the user in regards to both time of travel and origins and destinations
- Uses existing transportation resources and dispatching systems (private taxi companies)
- Applicable in areas with low density.

- Public/Private partnership
- Multiple operators/competition
- Taxis already comply with safety regulations

Cons

- High cost per trip
- Need to coordinate distribution/sale of vouchers.
- Payment system/logistics
- Often difficult to get commitment from private providers without financial guarantees
- Subject to abuse by rider/taxi

Example

The user-side subsidy program in Los Angeles, Cityride, is structured to allow for shorter trips made through designated taxi companies, as well as for trips on other modes. In this program, eligible customers purchase booklets of vouchers at a fraction of their cost (between 75 and 90 percent subsidy). Each individual voucher is valued at $1.00. The vouchers may be used toward the purchase of taxi service, paratransit service, or bus passes. Eligibility for the Cityride program is limited to persons over the age of 65 or individuals with a disability that impairs their mobility. When purchasing taxi service or bus passes, each voucher has a value of $1.00. When purchasing taxi service, customers may pay the fare using a combination of vouchers and cash, but cannot use more than eight vouchers (maximum $8.00 voucher value for any one trip.) In FY 1997 the average trip length in this program was just under two miles.

(B) Jitneys

Jitney services are typically composed of privately-operated vans or station wagons that carry up to 15 passengers and operate on semi-fixed routes and a fairly regular basis. Usually jitneys operate on major thoroughfares, picking passengers up anywhere along the routes, or for an extra charge, deviating from the route slightly to deliver passengers to their homes. Jitneys usually do not follow a set schedule, but tend to access stops more frequently and stop less often than vehicles on conventional bus routes.

Jitneys can serve a variety of functions within a community's transportation system. In the best cases, they work in concert with the existing public transportation system and serve as transit feeders. Jitneys may also act as neighborhood circulators that connect residents with popular destinations.

Successful jitney systems are described as having the following characteristics:[1]

- ownership is private;
- vehicles are small;
- operating systems are small;
- *route associations* coordinate the services of the small private units.

Private ownership provides incentives to respond to demand, the smallness of the vehicles enables them to be maintained by their owners, and the smallness of the operating system enables service to be provided with little overhead expense. The route associations – voluntary associations of independent owners – enable the necessary coordination to be carried out.

An important danger of allowing jitney service is that it could debilitate the fixed-route transit system if it is not carefully designed. If jitneys pick up passengers along the routes of scheduled bus service, they could put the established bus operator out of business, without providing the predictability and reliability for which travelers depend on regularly scheduled buses. Independent jitneys are not likely to serve areas and times with low ridership demand, whereas operators of multi-route bus systems can use high-performing routes to offset lower performing routes, where appropriate. (For example, a late evening bus trip, though low-performing in itself, could increase patronage on the earlier buses to the extent that the last route's low performance is more than offset.) Also, the established bus operator incurs overhead costs (route planning, information dissemination, publicity, benches and shelters, signage) to bring patrons to congregate at certain sidewalk areas; if jitneys appropriate the patrons, there is no incentive for the bus operator to make those investments. In summary, in areas with existing fixed-route transit systems, jitney services must be required to provide service that supplements, rather than duplicates, the fixed-route service.

Major obstacles to developing jitney services are transit labor unions and transit regulation. Labor unions will oppose the provision of public transportation by non-unionized workers; Roth claims this to be such a serious obstacle that progress in developing jitneys is likely to be made only in areas that have no unionized transit. The regulatory process typically requires prospective transit providers to announce their proposals at public hearings and fight objections from existing suppliers, a daunting process for small enterprises.

[1] Gabriel Roth, M.I.C.E., M.C.I.T., "Moving from Welfare to Employment: Improving Urban Public Transport" and "Review of Two Books on Paratransit for Transportation Research."

Pros

- Privately provided transportation
- More flexible than fixed-route transit
- Sometimes provides door-to-door service, accommodating people with disabilities

Cons

- Requires a steady, if not high, ridership demand
- No jitney associations in place in Hillsborough County
- A regulatory system must be designed to ensure jitneys support, not detract from, the fixed-route system.
- Conflict with HART labor requirements
- Public Transportation Commission requirements

Example

In Atlantic City, New Jersey a legal system of jitneys is coordinated by the Atlantic City Jitney Association. Each of the jitneys is individually owned and operated. The standard jitney is a 13-seat mini bus with uniform colors of white and blue. The 190 jitneys operate 24 hours per day, 365 days per year. The jitneys operate on four fixed routes and charge $1.50 for a one-way fare. They are funded solely on passenger fares.

User Initiated/Operated Strategies

The following strategies have the common characteristic of being user initiated and/or operated transportation strategies. In other words, the driver typically is not paid for driving, and routes and schedules are determined by the users.

(A) Carpool Matching

Carpooling may be defined as two or more persons sharing rides in a private vehicle. It is not necessary that all members of the carpool own a vehicle. Members may offer cash for operating expenses in lieu of sharing the driving.

The greatest obstacle to carpooling is in bringing together people who can feasibly share trips. The matching processes for carpoolers range from very sophisticated computerized systems to informal arrangements, such as notes on bulletin boards in employee break rooms. More effective matching systems usually include information on specific origins and destinations, schedules, travel routes, and passenger preferences (such as smoking). A sufficiently large pool of potential commuters is important for securing good matches. Targeting commuters at the work site seems to be more effective than those focusing on residential areas; surveys show that people feel more comfortable with the idea of sharing their commute with co-workers.

A "Guaranteed" or "Emergency" Ride Home program can make carpooling more attractive and more reliable. Such a program guarantees a convenient and reliable mode of transportation home from work in the event of a personal emergency, such as personal or family illness, or overtime work being required unexpectedly. The guaranteed ride can be provided by taxi, short-term auto rental, company-owned car, or shuttle service.

One limitation of the carpooling strategy is that at least some of the potential ridesharers must actually own cars. This can be an obstacle with the Jobs Access target population, who by definition are unlikely to be car-owners; if they owned reliable cars, they wouldn't need alternative transportation to get to jobs.

Pros

- Allows for the convenience of the private automobile.
- Lower travel time for rider (compared to fixed-route services)
- More flexible than transit (e.g., hours and areas)
- Works well in dispersed, lower-density areas

Cons

- Someone needs to coordinate the matching of origins and destinations
- Finding participants who own a private automobile
- Not flexible if working overtime or if hours change (since one is coordinating schedules with other people), unless the service is associated with a Guaranteed Ride Home Program.
- Rider is dependent on driver for on-time performance

Example

Bay Area Commuter Services (BACS) currently offers a carpool matching service for residents of the Tampa Bay Area. BACS maintains a database that allows potential carpoolers to find prospective ridesharers. The database contains variables such as work neighborhood, home neighborhood, and work hours.

Another example of carpool matching, taking place in the Washington D.C. area, is more informal in nature. High-occupancy vehicle lanes in Washington require a minimum of three passengers. This has led to drivers picking up fellow commuters at Park and Ride lots, roadside restaurants, and other outlying locations without prearrangement, simply for the sake of using the HOV lane. Commuters seeking a ride wait at these common locations to see if a driver will stop.

A third example of carpool matching is a strategy being used in Connecticut. Published in that area is a free, monthly newsletter, "Commuter Register", that lists available people seeking fellow carpoolers in a classified-ad format.

A fourth is a staged program that relies on carpooling as the second phase in the creation of personalized transportation solutions. In Maricopa County, Arizona, the county receives job-seeker client referrals from human service agencies, and the county transportation broker authorizes a short-term transportation solution (i.e., taxi service). After the client has a full-time job, Valley Metro's transportation specialist works with the employer to find carpool partners - which the program then subsidizes for 3 months - or to help with bus, bike, or vanpool options.

Estimated General Cost

The main cost of this strategy is the administrative cost of facilitating the carpool matching process. The current carpool matching process facilitated by BACS requires the applicant to fill out a lengthy application, and, once matched, the applicant is given a list of potential matches. However, it is up to the individual to contact these potential matches and set up a carpool. BACS does not currently organize the individual carpools.

Because of the difficulty of this process, BACS proposed that a more "hands-on" approach to the carpool matching process would be appropriate for carpooling under jobs access. This would require the hiring of a full time person to help the clients fill out paperwork and to telephone potential matches and make introductions with these matches on behalf of the client. The estimated cost of this additional full-time person is $36,000 per year (including benefits).

(B) Vanpools

Vanpools differ from carpools in that the group of passengers is larger (typically 7-15 people) and the vehicle is provided by a third party. For example, in the Tampa area, Bay Area Commuter Services (BACS) leases vans to groups of commuters at a rate subsidized by a federal grant.

BACS' Bay Area Vanpool Program offers three types of lease agreements:

- Option 1: The van is leased to the volunteer driver of a group of commuters, who split the operating expenses.
- Option 2: The van is leased to an employer or social service agency, which offers it to its employees or clients for use as in Option 1.
- Option 3: The van is leased to any party for any passenger use.

The first two options are subsidized by the federal grant and include maintenance and insurance in the operating expense. The third option does not include the subsidy or maintenance and insurance.

The current cost of operating a vanpool through BACS is $880 per month for an eight-passenger van. This cost does not include gasoline or tolls. The monthly expenses are split

among the riders in each vanpool. In Hillsborough County, the expenses are partially subsidized by HARTline through a federal grant. The WAGES program has also provided a subsidy for vans carrying WAGES clients to work.

In addition to operational costs, there are administrative costs for operating vanpool programs. Based on BACS' experience with the WAGES program, it is estimated that a full-time employee would be needed to provide coordination for "jobs access" vans, and assist the target population in forming pools. BACS estimated that the annual cost of hiring a full-time employee would be $36,000.

BACS Commuter Van

Pros

- Lower travel time for rider than with typical local bus service
- More flexible than fixed-route transit: passengers agree on hours and locations of service.

Cons

- More expensive to rider than typical local bus service, unless subsidized by employer or
- transit system
- Someone needs to coordinate the matching of origins and destinations
- Not flexible if working overtime or if hours change (since one is coordinating schedules with other people), unless the service is associated with a Guaranteed Ride Home Program.

The commuter vanpool concept typically works best for long-distance commuters. Vanpools are particularly appealing to workers traveling to outlying work destinations because the long-distance makes it more worthwhile to seek out trip-sharing strategies. Vanpools also can work well in dispersed, lower-density areas because of the small vehicle size and flexible routing.

(C) Donated Cars

Many organizations across the U.S. have pursued the idea of seeking donated cars, making repairs on those cars, and making those cars available to individuals who need them. Generally, the greatest obstacle to this strategy is the very limited supply of donated cars.

A less frequently discussed drawback is that the responsibility and cost of maintaining and operating a vehicle are placed on the job-seeker household. Donated cars are likely to be older models with correspondingly higher maintenance and repair needs, and fewer years remaining in their operable lives. The American Automobile Association estimates the total cost of owning an average car - including insurance, license, registration, taxes, depreciation, loan finance, gas and oil, tires, and other maintenance - at $6,309 to $8,570 per year; subtracting loan finance still leaves an annual cost of $5,687 to $7,471. In addition, donated car recipients may not have owned a car before and may not be aware of maintenance procedures. Pinellas County Goodwill staff indicated that some cars donated to job-seekers locally were driven without maintenance to the point of car failure.

Pros

- Very convenient for user
- No additional fare for additional riders (e.g., don't have to pay extra bus fares to transport children)

Cons

- Limited supply of vehicles
- Expense of repair
- Vehicles may not be reliable
- Only one client is served with each vehicle
- Expense to maintain, insure and operate vehicle falls on job-seeker
- Recipients may need training in car maintenance

Example

Charity Cars is an example of a donated car program. This non-profit organization was started in Orlando, Florida but is in the process of establishing affiliates all across the country. Affiliates can be any existing organization such as a government agency, private non-profit organization, or private for-profit organization that has a client base in need of donated cars. The affiliates are not responsible for the cost of repairs to the cars or any other expenses related to the car. Affiliates are responsible for local community outreach activities, identifying appropriate clients, and having these clients fill out the application form. The national organization of Charity Cars is responsible for acquiring donated vehicles, letting affiliates know when there are vehicles available in an affiliate's area, paying for the repair of the vehicle, and paying for the vehicle tag and down payment on vehicle insurance. In addition, Charity Cars holds a one-year lien on each car, not the affiliate.

The affiliate system works as follows:

- A car is donated to the Charity Cars: National Car Donation System.
- An affiliate in the geographic area of where the car is donated is notified of the availability of a car.

- If the affiliate is interested in the car, the car is sent to a repair facility (either Sears or a repair shop of the affiliate's choice.)
- After repairs, the car is delivered to the affiliate who delivers the car to the client that they have identified as the recipient of the car.
- There is a one-year lien on the car.
- After one year the car is owned by the client.

Charity Cars estimates the direct costs of supplying each car are as follows:

Repair of vehicle:	$1,000 (on average)
Vehicle Tag:	$180 (based on local tag fees)
Down Payment on Insurance:	$125 (approximately)
Total Approx. Cost:	$1,305

These costs and all administrative costs of Charity Cars are paid for by donations.

Charity Cars does not yet have a demonstrated record of success in central Florida.

Another example of a donated cars program is the Good News Garage located in Burlington, Vermont. Managed by the Lutheran Social Services of New England, this operation refurbishes vehicles donated by individuals and sells them to eligible Vermont residents for the cost of the repairs.

Eligibility is limited to residents whose monthly income does not exceed 150 percent of the federal poverty level. Priority is given to applicants who need transportation to work. Many agencies refer clients to this program, including the Vermont Department of Social Welfare (DSW), which operates the welfare-to-work program in Vermont.

After a car is donated to the Good News Garage, it is repaired at an average cost of $773 per vehicle. Vehicle recipients are expected to pay the cost of repair in addition to costs associated with registration, title, state inspection, sales tax, and insurance. However, DSW can provide up to $400 per client to help offset transportation costs, and this money can be applied toward Good News Garage vehicle repairs.

As of February 2000, 244 individuals had received cars from the Good News Garage, and approximately 300 individuals were on the waiting list.

(D) Car Sharing

A car sharing program operates like a local library; a stock of vehicles is available for members of a community to reserve and to check out. You must be a member of the program to use the cars, and membership typically entails a fee. The vehicle may be used for any reason at any time, but typically must be booked in advance, and returned at the same parking lot. There may be a use charge as well. Existing car-sharing organizations often provide a choice of vehicle type with a corresponding range in use charges.

Over the past decade, car-sharing has become more common in Europe and North America. Approximately 200 car-sharing organizations are active in 450 cities in Switzerland, Germany, Austria, the Netherlands, Denmark, Sweden, Norway, Great Britain, and Italy. In the U.S., programs are planned or underway in Seattle, San Francisco, Chicago, Boston, Portland, OR, Boulder, CO, and Riverside, CA. Some are operated by private companies, others by "cooperatives" or associations of members. Programs come in many flavors: professional services, station cars, short term rentals, and even private agreements among neighbors.

Car sharing programs differ from self-service rent-a-car systems in the requirement to reserve the car in advance and to return it to the lot of origin. Self-service systems also involve a couple of drawbacks; they typically are more difficult to operate, and involve costly technology.

Car sharing strategies may not have an immediate application to the jobs access problem, because these programs typically target non-work trips. For example, the Carsharing Network suggests such a program may be a good option for you if "you drive less than 12,000 km (7,500 miles) a year and you don't need a car for work every day." Car sharing among the Jobs Access target population could be problematic if all the members need the vehicles at the same time each day. However, it might be a possibility if late-shift workers are matched with early-shift workers in the same car sharing pool.

Example

A for-profit outfit called Zipcar started a program in Boston in 2000. Annual membership costs $75 and users pay about $5 per hour, plus 40 cents a mile to rent a car. Reservations are made over the Internet or by phone for short trips or all-day excursions. Cars are stored in reserved parking spots near transit stations in downtown Boston, as well as other locales.

In San Francisco, public-private partnership operated a ten-month test program called CarLink. Fifty-four participants shared 12 cars based at a BART station. "Homeside" users drove a CarLink vehicle between their homes and the BART station daily, keeping the car overnight and on weekends for personal use. "Workside" users rode on BART to the station, and then drove CarLink vehicles to and from work at a sponsoring employer. "Homeside" users paid $200 per month; "workside" users paid $60 per month, which could be shared with a co-worker by carpooling. The fees included fuel, insurance, registration, and maintenance costs.

Coordination Strategies

The following strategies are not modes of transportation, but methods to coordinate modes or to provide information about available modes.

(A) Mobility Coordinator

One fact of life in American society is that people, services, and especially information are widely dispersed. Even when transportation resources exist, it is likely that the knowledge of those services and how to access them are unevenly distributed in the community. Infrastructure is needed to connect consumers to providers. In most communities this infrastructure is often insufficiently developed.

These obstacles can be lessened by establishing a countywide mobility coordinator system and transportation resource center. Mobility coordinators act as problem-solvers to help job-seekers - or case workers assisting job-seekers - determine the best, most cost-effective source of transportation. A transportation resource center would provide a one-stop shopping, centralized, coordinated information distribution center wherein all transportation sources are gathered and disseminated.

Clients accessing services through this program could be required to fill out a survey that would detail information on residence location, job skills, child care needs, transportation needs, hours willing to work, etc. This information would help Hillsborough County better determine needs for additional transportation resources.

Transportation providers to which clients could be directed towards would include:

- HARTline - regular routes and paratransit
- BACS - Carpools, Vanpools, and Guaranteed Ride Home Program
- Taxi Services
- Hillsborough County Specialized Transportation
- OASIS (seniors only)
- Medical trip service providers
- Adjacent county and city transportation services
- Child care transportation services

A mobility coordinator service could be structured in one of two ways: as a central information source, or in the form of agents placed throughout the County where they will best aid job placement; for example, agents could be located at welfare "One-Stop Centers." The advantage of decentralized agents is that they can provide more hands-on assistance to targeted groups; the disadvantage is that the information service would not be available to the general public.

Pros

- Individualized solutions
- Maximizes existing transportation resources
- Quick answers

Cons

- Labor intensive

Example

An example of the interest by communities in providing transportation information on a centralized basis is the recent approval by the Federal Communications Commission of local areas using the phone number "511" as a "National Traveler Information Number". After implementation, a traveler in any area of the country will be able to call "511" and receive information about transportation alternatives in that area.

An example of a decentralized mobility coordinator service is in the Cleveland, Ohio area. The Greater Cleveland Regional Transit Authority (GCRTA) has developed a program to address the work transportation needs of the Ohio Works First clients (Ohio's welfare-to-work program). Ohio Works clients are referred to a mobility specialist if their work trip cannot be accommodated by the regular transit routes. The mobility specialist determines the transportation needs and arranges services. The mobility specialists are employees of the transit agency and are located at all eleven of the neighborhood centers operated by Ohio Works First in Cleveland.

(B) Job/Job-Seeker Database

The concept behind this strategy is to help job-seekers locate jobs close to home, and employers to identify qualified candidates who will not have difficulty getting to work. Job-seekers and employers would register with an agency maintaining a geographic database, and provide information on their needs and qualifications. The information on job-seekers would include residence location, job skills, childcare needs, transportation needs, hours willing to work, etc. Information on jobs would include employer location, job skills required, available transportation, etc. Other information that could be included in the database could be available transportation options, childcare facilities, hours of operation (shifts), etc. Once the database is populated, the information could be used for planning by transportation providers and childcare providers as well as employers.

Pros

- Can put it on the Web
- Quick/Instantaneous information
- Data available for planning purposes

Cons

- Data privacy issues
- Establishing and maintaining the database would be labor intensive
- Ensuring accuracy of information over time
- How do you get employers to participate?
- Need to find a party to administer the database

(C) Gathering Points for Transportation Services

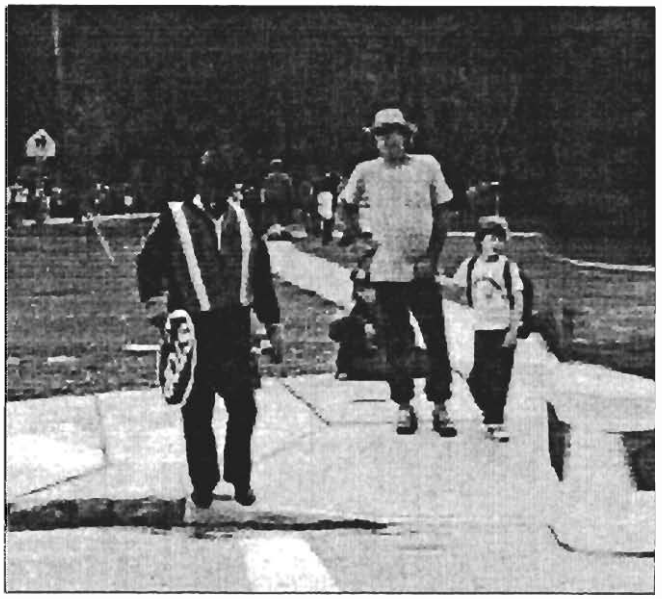
The essence of this strategy is to develop a physical network of gathering points and transfer points between various transportation services, such as buses, carpools, vanpools, employer shuttles, day care shuttles, school buses, jitneys, and subsidized taxis, so that these services better complement each other. The gathering point would be centrally located in a neighborhood or community. Ideally, the gathering points would be maintained by third parties (other than the employer and employee) such as a social service organization, transportation provider, day-care provider or even public school.

Pros

- Coordinates multiple forms of transportation.
- Improves effectiveness of existing transportation services

Cons

- Need to find a third party willing to coordinate
- Liability issues surrounding individuals waiting at the location



Parents and kids gather at public schools.

Example

Some examples of this strategy include:

- Parents and children waiting at the same place for a vanpool, day care van, and a school bus.
- Carpooling to a park and ride location and then using an express bus.
- Employer shuttles to/from bus transfer centers.
- Jitneys serving outlying commercial districts to/from express bus stops.

The main costs of this strategy would be the administrative cost of coordinating the gathering points and transportation options. The administrative costs could be similar to the administrative costs of coordinating child-care transportation. Suncoast Goodwill administers a child-care coordinated transportation program for the Hillsborough County WAGES coalition and is reimbursed $15,000 per year for administrative support to this program. (Although, personnel at Goodwill indicated that the startup cost of the program was substantially more than $15,000.)

(D) Encourage Businesses to Allow Telecommuting

Telecommuting refers to an employee working at home or at an office close to home on a full- or part-time basis. Although computers and other technology facilitate telecommuting, the telephone is still the most basic equipment for working from an alternate location.

The basic equipment for telecommuters is the telephone.

BACS currently operates a program to encourage businesses to explore telecommuting options, although it is quite limited. The cost of this strategy are primarily administrative costs to the agency of providing information to businesses, and assisting them in setting up telecommuting programs. In order for this strategy to be more successful in Hillsborough County, BACS estimated that a full-time individual would need to be hired who is well-trained in human resource issues. The salary costs for this position were estimated at $47,000 per year (including benefits).

Pros

- Can be low cost
- Totally eliminates a work trip
- Can reduce the employer's office space needs

Cons

- Could require equipment at remote locations
- Employer could be held liable for accidents at remote work locations
- Telecommuting is not appropriate for every job or every individual's work habits
- Learning curve for employers

(E) Employer Education

Many employers are not aware of the difficulties that some of their employees have in getting to work, or that their labor pool is smaller because some potential employees can not access particular work locations due to transportation. Therefore, this strategy is aimed at educating employers about transportation problems, potential solutions, and what employers can do to help.

BACS estimated that this program would require one full-time person to meet with employers and spread the word in the community. The estimated salary cost of this full-time person was $42,000 per year (including benefits).

(F) Child Care Provided/Coordinated Transportation

This strategy helps to address the problem of multiple trips for employees trying to get their child to daycare and themselves to work. A number of sub-strategies could take place under this strategy:

- Care providers could pick up/drop off kids at home and school.
- Care providers could pick up parents as well as kids at home and transport to bus stops/transportation hubs.
- Care providers could transport sick children to sick child-care centers on an as-needed basis.

- Day cares could act as gathering places for parents to be transported to work and older kids to be transported to school.
- Care providers could coordinate with other care providers to form a network of shuttle routes.

Because child-care coordinated/provided transportation could be implemented in many different forms, it is difficult to estimate the cost of both providing and/or administering this strategy. General administrative and operating costs can be estimated for day-care provided transportation under the Hillsborough County WAGES program (as described in the example below.) To operate this type of service each day-care provider is paid $15 per week for transporting each child under two years of age and $10 per week for each child older than two. Suncoast Goodwill, which administers the program, is reimbursed $15,000 per year by the Hillsborough County WAGES coalition to provide administrative support for this program. (Although, personnel at Goodwill indicated that the administrative startup cost of the program cost substantially more than $15,000.)

Example

The Hillsborough County WAGES coalition currently subsidizes day-care coordinated transportation on a limited basis. As of June 2000, approximately 25 day-care providers transport children from home or school to their facility and then from the facility to home. For every child that is transported under this program, the day-care provider receives a weekly subsidy from WAGES. They can receive $15 per week for each child under two years of age, and $10 per week for each child over two years of age. The coordinator for these services (Suncoast Goodwill) is holding off on expanding this program to other operators due to the uncertainty of future funding for the transportation services.

Summary

Public transportation services are expensive to operate, but are inexpensive per passenger trip if there is sufficient demand for the service. Therefore, the expansion of transit services into new geographic areas and/or times of day should only be recommended for areas with high population density and/or large concentrations of jobs. In addition, expansion into areas that do not currently have transit service is only appropriate if current transit services terminate near to this geographic area. Expansion of transit services to outlying areas is not generally cost-effective.

On a per hour basis, paratransit feeder services are less expensive to operate than traditional fixed-route bus service. However, fewer people at one time can be accommodated on this mode of travel. Therefore, paratransit feeder services may be most appropriate for geographic areas with relatively low population densities and that are not close to existing bus services.

Similar to paratransit feeder services, subsidized taxi services are provided on a demand-responsive basis, meaning that the service is not operated unless there is a specific demand for a trip. However, only one or two people can be accommodated with each vehicle used for subsidized taxi service. Given these characteristics of service, this mode of transportation may be most appropriate for outlying or rural areas or for times of day when limited demand can be expected.

Strategies such as vanpool coordination, carpool matching, and daycare provided/coordinated transportation are not site specific. These strategies can be applied to all areas of a community regardless of demographics.

Some strategies that appear to be low-cost to the public – such as relying on privately operated jitneys or the donation of cars to needy individuals – have hidden dangers and hidden costs. At the very least, such programs will require significantly more coordination and administrative expense than is widely assumed.

On the following page, Table 5 summarizes the comparative operational costs of several strategies, including the cost per trip of jobs access transit strategies using a range of ridership assumptions.

Table 5. Strategy Cost Comparison

Strategy	Cost/Service Hour	Cost/Service Mile	Cost per 10-Mile Passenger Trip				
			1 person riding	2 people riding	4 people riding	10 people riding	20 people riding
Fixed Route or Fixed Route with Deviation	$57.91[1]	$4.55[1]	$45.50	$22.75	$11.38	$4.55	$2.28
Subscription Bus Service	$57.91[1]	$4.55[1]	$45.50	$22.75	$11.38	$4.55	$2.28
Paratransit Feeder Service	$18.07[2]	$2.85[2]	$28.50	$14.25	$7.13	n/a	n/a
Subsidized Taxi Service		$1.50 (plus $1.25 base)[3]	$16.25	$8.13	n/a	n/a	n/a
Carpool		$0.33[4]	$3.30	$1.65	$0.83	n/a	n/a
Vanpool		$2.20	$22.00[5]	$11.00	$5.50	n/a	n/a

[1] Based on HARTline 1999 National Transit Database. Does not include capital cost of vehicle. Fixed-route with deviation typically uses a smaller vehicle, at a lower capital cost, than standard fixed-route service.

[2] Based on Hillsborough County Annual Operating Report of 1999. Does not include capital cost of vehicle.

[3] Based on actual consumer rates for taxis in Hillsborough County.

[4] Based on estimated cost of owning and operating a personal vehicle.

[5] Based on BACS monthly cost of a vanpool. (Does not include gasoline). Assumes 20 roundtrips per month at 20 miles each. Assumes the use of a volunteer driver. Cost per trip includes capital costs.

n/a=number of people of riding at one time is not applicable to this mode.

III. COMMUNITY INPUT

Previous sections of this plan documented a data-driven analysis of the jobs access problem in Hillsborough County, and summarized solution strategies that have been tried here and elsewhere. Our Jobs Access Plan Steering Committee (see Appendix C) asked for a "reality check" on this process, to answer questions such as:

- Was our analysis of the problem accurate?
- Are the solution strategies reasonable and appropriate?
- What do the end users have to say?

To help answer these questions, this section summarizes the perception of need by employers, social service agency representatives, and potential employees/clients. The information originates from a variety of surveys and interviews of representatives for employers and representatives for potential employees/clients. These interviews and surveys were conducted for other studies as well as directly for this study.

Employers

In general, employers are likely to experience the jobs access problem as a difficulty in recruiting and/or retaining employees. The employer may or may not have investigated the source of the staffing difficulty, or identified transportation as a problem about which something might be done. To investigate the employers' perspectives, results from previous employer surveys and interviews were examined, and new interviews with employers were performed.

Results From Previous Studies

Results from other studies show that employers recognize the issue of transportation for a small percentage of employees but to do not actively participate in providing solutions to those problems. Summaries of two studies are included below.

Greater Tampa Chamber Transportation Survey

The Greater Tampa Chamber recently completed a transportation survey of local area businesses and professional Chamber affiliates. In this survey, respondents were asked

questions related to all transportation issues and how transportation affects their business. A few questions contained in this survey indirectly relate to employee access to jobs.

Employers who reported that the existing transportation infrastructure negatively impacts the functionality of their businesses stated that employee ability to get to work was one of the main reasons for this negative impact. Another, related question asked representatives whether their business provides incentives to employees to use alternate modes of transportation. Over 96 percent of responding companies do not provide incentives. Of those companies that do, incentives consisted of subsidized parking, and bus fare for part-time workers.

Plant City Employer Interviews

Interviews with Plant City employers were conducted to determine business interest in a proposed bus circulator system. Representatives from selected businesses were asked ten questions related to the expected impacts of public transportation on their business. The questions covered the major topic areas of:

- Lack of public transportation effect on business success
- Impact of transit system on community
- Benefits for business
- Hours of operation for greatest benefit
- Positive attributes of transit system
- Negative attributes of transit system
- Suggested changes
- Willingness to provide financial support
- Suggested source of financing cost
- Other concerns and comments

Many comments by businesses were directed at the issue of employees accessing work. Lack of reliable transportation for some employees is currently affecting many employers. Respondents commented on attendance problems related to transportation for current employees and the difficulty of filling positions with qualified employees because transportation options are not available. A large majority of businesses thought that the availability of public transportation in Plant City will help with these two problems.

Interviews Performed for This Study

Interviews were conducted with business representatives from three areas of Hillsborough County: Sabal Park, US 41 South, and Hidden River/Telecom Park. These three areas were targeted for interviews because they were identified as job clusters with either a temporal or spatial mismatch to current transit services.

Sabal Park Employer Interviews

Sabal Park is located near the intersection of Martin Luther King Jr. Blvd. and Interstate 75. The area is currently served by HART fixed-route service. The primary employers in the Sabal Park area operate customer service call centers with many entry-level employees.

Human Resources officers representing four businesses in Sabal Park were interviewed (St Paul Insurance, Intermedia Communications, Citigroup, and Ford Motor Credit). Most of the human resource managers who were interviewed indicated that the majority of entry-level employees drive their own car to work. Other employees either use transit or carpool. However, none of the employers interviewed provide alternative transportation options for their employees, mainly because recruitment of employees has not been an issue.

US 41 South Employer Interviews

This area of Tampa is located along the US 41 corridor, south of the Crosstown Expressway and north of the Alafia River. The majority of the employers in this area are either manufacturers or packers/shippers. There is currently not a HART bus route that travels on US 41 in this area of Hillsborough County; however, one employer remarked that the bus turns South onto US 41 from Gibsonton Road (Route 31) within ½ mile of their worksite.

The results from interviewing human resource representatives from four employers (Cargill Fertilizer Inc., GAF Corp, HGP Affiliates, and Eagle Transport Corp) showed that the majority of businesses interviewed are not currently experiencing recruiting problems, and transportation is not a problem for current employees. Most employees, including entry-level employees, drive their own car and the remaining employees carpool or bicycle to work.

Hidden River/Telecom Park Employer Interviews

This area of Tampa, near the intersection of Fletcher Avenue and Interstate 75, has seen tremendous growth in business in recent years. The predominant type of business established in this area is related to hospitality and customer service. HARTline currently provides service to this area with Route 33, which travels primarily along Fletcher Avenue in this area.

Four human resource managers (Bausch & Lomb, Coca Cola, Marriott Fairfield Inn, and Hilton Garden) representing employers in the Hidden River/Telecom Park area were interviewed (two from the hospitality industry and two from manufacturers with call centers). Most of these businesses are not experiencing tremendous recruiting problems. For the customer-service based businesses, entry level employees working the 2nd (3:00 pm to 11:00 pm) and 3rd (11:00 pm to 7:00 am) shifts have the most problems with transportation, because HART bus service does not operate after 7:00 pm. The human resource managers interviewed were greatly appreciative of the new daytime bus service that HART recently implemented in this area of Tampa.

Summary of Interviews

Overall, the interviews with selected human resources managers from these three areas of Hillsborough County revealed that they do not perceive transportation as a problem for the majority of their employees. Three theories can be put forth as to the reason they don't perceive it as a problem:

- The problem is invisible because employees coordinate their own transportation;
- Existing employees don't have transportation problems because they wouldn't apply for jobs in these locations if they had a problem; or
- The wages at these selected employers are high enough that employees can afford transportation.

Employees and Job-Seekers

The transit dependent and transportation disadvantaged find ways to sustain themselves with the limited resources available to them. For example, one might accept a lower-paying job because it is located comparatively close by. Or one might endure two-hour bus rides to get to a job site, a commute that can be further lengthened and complicated with side trips to day care and school. They may or may not identify their difficulties as transportation problems.

Results From Previous Studies

The following are summaries of interviews and surveys of employees, potential employees, and WAGES coordinators that were completed for other studies. Results from other studies show that there is a need for alternative transportation services for work trips.

BACS Interviews with WAGES Coordinators

In 2000, Bay Area Commuter Services (BACS) conducted interviews with all seven of Hillsborough County's "One-Stop" Center managers. "One-Stop" Centers provide WAGES clients with a variety of services related to getting and keeping a job. Each manager at the "One-Stop" Centers was asked the following questions:

- Approximately how many WAGES participants does your office provide service for?
- Please indicate to what extent lack of reliable transportation is a barrier [to employment] for WAGES participants?
- How many WAGES participants have no need for alternative transportation, because they use reliable auto/carpool/busline options?
- How many WAGES participants might utilize either door-to-door [transportation] service or multi-passenger van?

Based on these interviews, BACS concluded that there is a strong need for additional transportation services, including door-to-door service. The Brandon, Apollo Beach, Downtown Tampa, and Plant City "One-Stop" Centers defined their transportation needs as critical; the Hargret, Pan Am (West Tampa), and Florida/Busch One-Stop Centers reported their needs as minimal or not critical since they are well served by HART. However, the centers that reported less need also reported that transportation services are needed for employees who either work night shifts or live outside of HART's service area.

Tri-County Initiative Survey

The primary objective of the Tri-County Initiative was to link WAGES clients in three counties with employment opportunities in Oldsmar, using express and local bus service. Members of the Initiative Committee included HART, Pinellas Suncoast Transit Authority, Pasco County Public Transit, WAGES Coalition, the Oldsmar Chamber of Commerce, the Tri-County Business Park, the three MPOs, and other local agencies.

As part of this initiative, a survey was sent to 1,500 WAGES clients in the tri-county region. The survey asked questions about transportation and childcare needs. The results of questions from the survey that are relevant to this study are included in Figures 1 through 8, and in Table 6, below.

Table 6. Oldsmar Survey:
Would you be willing to travel to the Oldsmar area for a job, if...?

Willing to travel to Oldsmar for a job, if...	Percent
If you could receive a higher wage	61.1%
If you would have a better opportunity for advancement	51.3%
If you could ride an express bus to Oldsmar from your neighborhood	37.2%
If you could carpool with other workers	27.8%
If you could vanpool with other workers	26.5%
Only if an express bus or car/vanpool were low cost or free	33.3%
If you could receive information and assistance with getting childcare	26.1%
Only if transportation for childcare were provided, at low cost or free	19.7%
Other	6.0%
I would not be interested in working in Oldsmar, Florida	23.1%

Plant City Household Survey

A household survey was also used in Plant City, to evaluate public interest in the proposed circulator. The survey was distributed to local households through a monthly water bill, which means that all rental households may not have received it. (Water to rental dwelling dwellings is sometimes included in the rental cost.)

Figure 1 (Oldsmar Survey)
What form of transportation do you use now?
(Please check all that apply)

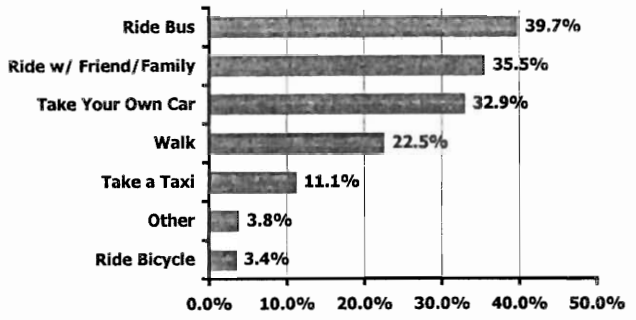


Figure 2 (Oldsmar Suvey)
What form of transportation would you use to get to work?
(Please check all that apply)

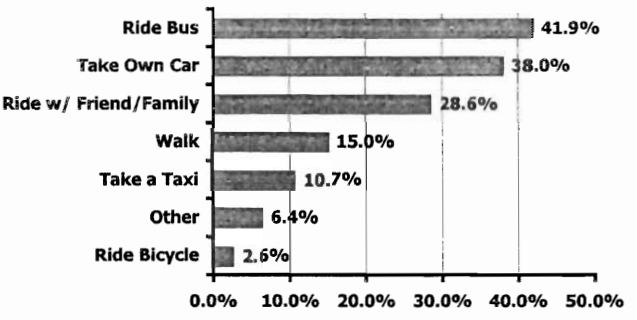


Figure 3 (Oldsmar Survey)
Do you have a valid driver's license?

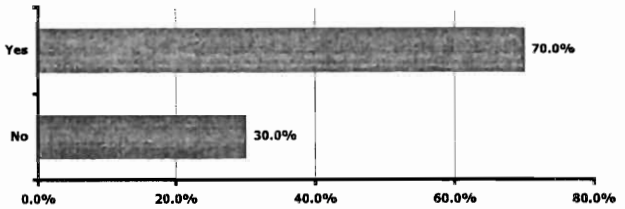


Figure 4 (Oldsmar Survey)
Do you have access to a working car?

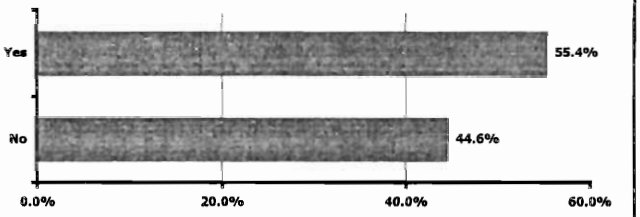


Figure 5 (Oldsmar Survey)
Will you need help with transportation to and from childcare?

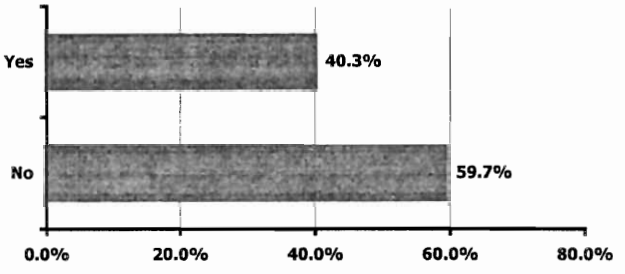


Figure 6 (Oldsmar Survey)
How long are you willing to travel from home to work?

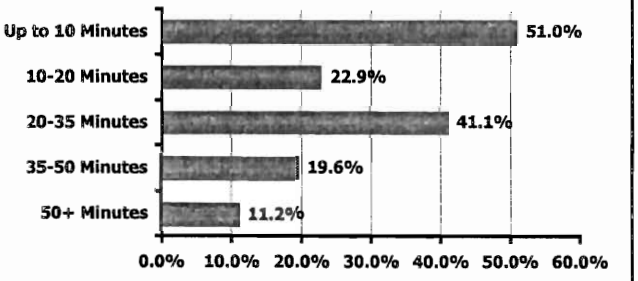


Figure 7 (Oldsmar Survey)
If an express bus was available from your neighborhood to your job area, how far would you be willing to travel?

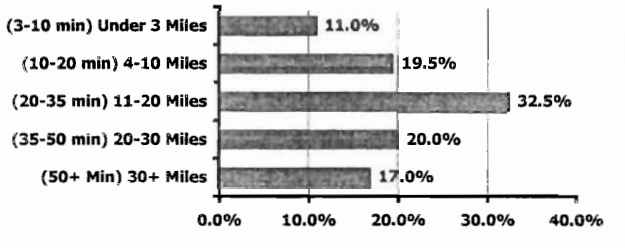
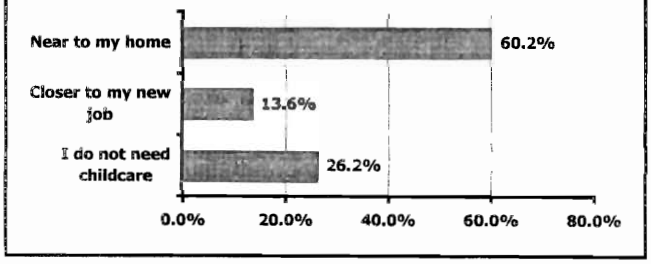


Figure 8 (Oldmar Survey)
If you were to work in the Oldsmar area, would you want childcare near your home or close to your job?



The results of the survey are contained in Table 7. The results show that the majority of respondents would consider riding a new public transportation service in Plant City; the top four reasons for using transit would be to go to the doctor, shopping, to the bank, and to work; and most would not be willing to pay over $1.00 for their trip.

Table 7. Plant City Household Transportation Survey Results

Will ride Public Transit System?	
Yes	58.6%
No	41.4%
Types of trips taken on Transit system:	
Doctor	65.9%
Shopping	65.5%
Bank	49.2%
Work	33.5%
Movie	33.2%
Recreation	28.7%
School	15.1%
Maximum Amount Willing to Pay:	
$0.25	21.2%
$0.50	27.4%
$0.75	13.7%
$1.00	24.7%
$1.25	2.9%
$1.50	4.1%
$2.00	6.1%

Interviews Performed for This Study

Interviews were conducted with clients visiting two social service agencies, the Hillsborough County Childcare Referral Services Center located at the Hillsborough "One-Stop" Center at Florida Avenue and Busch Boulevard, and the University Community Resource Center located on 23rd Street between Fletcher Avenue and Bearss Avenue.

Hillsborough County Childcare Referral Services Client Interviews

At the Hillsborough County "One-Stop" Center, individuals in need of childcare information wait in an area designated for the childcare program. CUTR interviewed twenty clients waiting in this area. The clients were first asked whether they work outside of the home, and if so, how do they get themselves to work and their child/children to daycare. Clients were then asked whether they have problems with their transportation arrangements. Approximately 60 percent of the interviewees indicated that they own their own car and use it to both transport their children to daycare and themselves to work. Those interviewees who do not own a car use the bus as their primary mode of transportation. Most interviewees use daycare close to

home. Many of the interviewees who use the bus as their primary mode of transportation have to take multiple buses to take their child to daycare and then get themselves to work. This was further complicated for some interviewees when they had children of varying ages who had be transported to alternate locations (e.g., daycare and school).

University Community Resource Center Client Interviews

Interviews were also conducted with clients at the Hillsborough County, University Community Resource Center. Neighborhood residents in need of general support services visit this local center. Twenty-two interviews were conducted with residents while they were waiting to see a representative of the resource center. Residents were first asked whether they work outside of the home. If they answered "yes" to this question, they were further asked how they get to work and how long it takes them to get to work. Approximately half of the interviewees have their own car and use it to get to work. The other half of the interviewees combined walking and riding the bus as their modes of transportation to work. One interviewee gets a ride from friends because a similar ride on the bus would take one hour longer each way (15 minute trip versus a 1 hour and 15 minute trip). Many of the respondents who use bus service were not satisfied with the amount of time it takes to make the trip and the number of transfers that are required.

Summary of Interviews

At least 50 percent of the interviewees at the two locations have their own car and use it to get to work. Those interviewees who do not have cars depend on the bus, primarily, to get to work. However, where the bus is available it is often not perceived as an attractive and convenient mode due to the length of travel and the need to make transfers to multiple buses.

IV. RECOMMENDATIONS

Based on the identification of solution strategies, public input, and an analysis of the spatial mismatch and temporal mismatch clusters, recommended strategies have been developed to help address the problem of accessing jobs in Hillsborough County. These recommended strategies have been separated into four categories that are listed below. The geographic areas for which these strategy categories are recommended are shown on the maps in Chapter 1.

- **Category A. Strategies for Areas and Times Close to Existing Bus Service**
  - ✓ Expand Area/Time of HARTline Transit Service (Fixed route or fixed with deviation)
- **Category B. Strategies for Areas and Times Not As Close to Existing Bus Service**
  - ✓ Fixed-Route with Deviation
  - ✓ Paratransit Feeder Service
  - ✓ Expand Area/Time of HARTline Transit Service
- **Category C. Strategies for Low-Density or Outlying Areas**
  - ✓ Paratransit Feeder Service
  - ✓ Subsidized Taxi Service
  - ✓ Establish Gathering Points for Transportation Service
- **Category D. Global Strategies**
  - ✓ Mobility Coordinator
  - ✓ Carpool Matching
  - ✓ Vanpooling
  - ✓ Coordinated/Subsidized Child-care Transportation

Category (A) Strategies for Areas and Times Close to Existing Bus Service

Because traditional public transportation strategies tend to have the lowest cost per passenger trip, these strategies are recommended wherever feasible.

The preceding analysis identified clusters of jobs and job-seekers that are geographically close to existing bus service but not actually within the service area. It also identified clusters that currently have bus service for most of the day but not for a few critical evening and early morning hours. The highest priority of these areas, based on number and density of jobs and households, are summarized below.

"Temporal Mismatch" Problem Areas: Bus service provided at limited times.

- Western Westshore – Job Cluster
  No early morning bus to job site, no late evening bus from job site.
- Bayshore North/Davis Island – Job Cluster
  No early morning bus to job site.
- Sligh Avenue & North Boulevard – Population Cluster
  No early morning bus from home.
- Armenia Avenue & Waters Avenue – Population Cluster
  No evening bus to home & No Sunday Service.

"Spatial Mismatch" Problem Areas: Bus service not currently provided to this area.

- Kingsway/Lithia Pinecrest Corridor – Job & Population Cluster
- Northdale – Population Cluster

Recommended Strategies

1. Expand Area/Time of HARTline Transit System

Trips could be added to existing transit routes, and route areas could be expanded to serve the above clusters. Both fixed-route and route deviation strategies may be appropriate.

Suggested Implementing Agency: As the current operator, it is recommended that HARTline implement any additions to fixed-route transit services in Hillsborough County.

Estimated Cost: The cost of expanding HARTline transit service into the geographic areas identified as Category Two areas can be estimated using historical cost data from HARTline's current transit service. Using HARTline's current operating cost per revenue hour of service ($57.91), as reported in HARTline's Fiscal Year 1999 National Transit Database Report to the Federal Transit Administration, an annual operating cost to expand transit services in the areas described as Category Two can be estimated as follows.

- *Western Westshore*: To expand the hours of service in the early morning and the late evening in the Western Westshore area would require the addition of 1 trip in the morning and evening on weekdays and 2 trips in the morning and evening on the weekend to existing HARTline Route 30. The estimated annual operating cost of these additional services is $52,698.

- *Bayshore North/Davis Island*: To expand the hours of service in the early morning in the Bayshore North/Davis Island area would require the addition of 2 trips every day on Route 46. The estimated annual operating cost of this additional service is $41,116.

- *Sligh Avenue & North Boulevard*: To expand the hours of service in the early morning in the Sligh Avenue & North Boulevard area would require the addition of 1 trip on weekdays and 2 trips on the weekend to Route 7. The estimated annual operating cost of this additional service is $79,047.

- *Armenia Avenue & Waters Avenue*: To expand service in the early morning and provide new service on Sunday near the intersection of Armenia Avenue and Waters would require the addition of two trips in the evening Monday through Saturday and the addition of Sunday service to Route 16. The estimated annual operating cost of these additional services is $148,684.

- *Kingsway/Lithia Pinecrest*: The Kingsway/Lithia Pinecrest area of Hillsborough County is currently outside of HARTline's transit service area. To implement new transit service to this area using the assumptions of one new bus route operating an hourly service, 13 hours per day, Monday through Saturday was estimated to cost $229,613 per year for operating. It was also assumed that this new service would require the acquisition of one new vehicle at a cost of $267,000.

- *Northdale*: The Northdale area of Hillsborough County is currently outside of HARTline's transit service area. To implement new transit service to this area using the assumptions of one new bus route operating an hourly service, 13 hours per day, Monday through Saturday was estimated to cost $229,613 per year for operating. It was also assumed that this new service would require the acquisition of one new vehicle at a cost of $267,000.

Category (B) Strategies for Areas and Times Not As Close to Bus Service

Based on the preceding analysis, the highest priority clusters of jobs and job-seekers falling into this category are summarized below:

"Temporal Mismatch" Problem Areas: Bus service provided at limited times.

- Hidden River Area – Job Cluster
  No early morning bus service to job site, No late evening bus service from job site, and No Sunday service to/from job site.

"Spatial Mismatch" Problem Areas: Bus service not currently provided to this area.

- US 301/Harney Corridor – Job & Population Cluster
- Plant City – Job & Population Cluster
- US 41 Corridor South – Job Cluster

Recommended Strategies

Any of the following strategies could be used in the above areas. Preliminary cost estimates for each strategy are presented. Determining a course of action for each area will require working with potential patrons and employers to more closely identify needs, resources, opportunities, and concerns. HARTline has established a community-oriented "service development" process, a model that could be followed by others if strategies are not implemented by HART.

1. Fixed-route with Deviation

Suggested Implementing Agency: New routes could be developed by HARTline or by other entities, such as employers, business associations, human service agencies, taxicab companies, or even jitney associations (though none today exist). However, HARTline must be kept abreast of the service development process, and any new service should supplement or connect with existing HART service.

Estimated Cost: The cost of implementing deviated fixed-route transit is similar to the implementation of regular fixed-route services, and is dependent on vehicle size. Small vehicles can be leased at approximately $20,000/year including administrative costs.

- *Hidden River:* A late evening/early morning route might have an operating cost similar to the shuttle developed for downtown Tampa hotel employees. As discussed previously, service with two trips in the evening and two trips in the early morning was estimated at $76,800 annually, net of (estimated) fares. This cost estimate included vehicles.

- *US 301/Harney Corridor and US 41 Corridor South:* New routes in these areas might have costs somewhat greater than HARTline's Sun City-Wimauma Circulator, which in fiscal 1999 operated only four trips per day, four days a week; it cost approximately $87,000, net of fares. Five-day-per-week service might cost an additional 20%, or $104,400. This cost included operating expenses only; a vehicle would be an additional $20,000/year.

  The US 301/Harney Corridor is probably a better candidate for a circulator route than the US 41 Corridor, since the former contains both origins (job-seeker households) and destinations (jobs), while the latter is identified only as a job area. Compared to the cost of providing paratransit feeder service to the jobs and households in US 301/Harney (see below), fixed-route with deviation service may be the appropriate choice.

- *Plant City:* Plant City estimated the costs of operating two circulator routes within Plant City. The annual operating cost of this service was estimated at $507,250. The City has received a Congestion Mitigation and Air Quality Grant in the amount of $1,000,000. This grant will be used to offset operating costs over a three year time period. It is estimated that the remaining operating expenses will be funded through a Jobs Access Grant, rider fees, and general revenue.

2. Paratransit Feeder Service

Suggested Implementing Agency: HARTline currently provides paratransit for its disabled customers, under the Americans with Disabilities Act (ADA) Complementary Paratransit program. This program is already designed to connect with and complement HART's fixed-routes. An ideal solution would be to expand that program to include service for the job-seeking population.

Another possibility might be to expand the program of Hillsborough County's Community Transportation Coordinator (CTC), which coordinates eligible trips for segments of the transportation disadvantaged population, such as trips to medical appointments. However, the on-time performance of the CTC program would have to be significantly improved, if it were to provide trips to work.

Estimated Cost: HARTline currently provides paratransit for the disabled at an average cost of $15.52 per trip for an average trip length of 11 miles. To provide comparable service to jobs could cost as much as $7760 per job per year (two trips per day, five days a week). Compared to fixed-route service (in the neighborhood of $2-$4 per trip on many of HART's local fixed routes), paratransit is an expensive way to get people to jobs – though it may be the only way in areas where transit routes are not viable because of low density or poor street connectivity.

To serve as many job-seekers as possible, paratransit could be provided on a limited-time basis — for example, for a 3-month or 6-month period when a new job is started. Below are cost estimates for serving high-priority clusters of jobs and job-seekers. These estimates could be divided in half if the program had a 6-month time limit, or else, twice as many clients could be served in each area during the course of a year.

- *US 301/Harney Corridor:* As of this study, there are approximately 100 clients of the WAGES and Hillsborough County Employment & Training programs in the US 301/Harney corridor. Providing paratransit to the US 301/Harney households might cost $77,600 per year if one-tenth of them (i.e., 10 clients) found jobs requiring a commute by paratransit, five days a week. If the paratransit were provided on a 6-month time-limited basis, it might serve 20 clients over the course of a year, or 10 clients for $38,800.

  Paratransit could also be provided to the approximately 2,600 jobs in the US 301/Harney corridor, as a link between these jobs and existing HART routes. If ¼ of those jobs were

available to welfare-to-work applicants, and 1/10 of the applicants required paratransit for their commute, five days a week, the program would provide access to 65 jobs at an estimated $504,400 annually (or $252,200 for a 6-month time-limited program).

- *Plant City:* Because the final route of the proposed Plant City Circulator has not yet been unveiled, it is unclear how many of the households in Plant City would be accommodated (or not accommodated) by that means.

- *US 41 South Corridor:* Paratransit could be provided to the approximately 1,400 jobs in the US 41 South corridor, as a link between these jobs and existing HART routes. If ¼ of those jobs were available to welfare-to-work applicants, and 1/10 of the applicants required paratransit for their commute, five days a week, the program would provide access to 35 jobs at an estimated $271,600 annually (or $135,800 for a 6-month time-limited program).

- *Hidden River:* There are approximately 3300 jobs in the Hidden River area. Some fraction of those jobs are not accessible by transit because the shift starts in the early morning, ends in the late evening, or occurs on a weekend. Paratransit could be provided between those jobs and any HARTline routes in operation at that time. For example, routes 2,5,6,7,9,12,16, and 18 provide service to or through the University Area Transit Center; all operate later in the evening than route 33, and some run on weekends, though none provide service earlier in the morning. If ¼ of the 3300 jobs in Hidden River are evening/early morning/weekend shifts, and if ½ of those shift jobs are available to the welfare-to-work population, and if 1/10 of the applicants require paratransit for their commute, five days a week, the program would provide service to 41 jobs at an estimated $320,100 annually (or $160,050 for a 6-month time-limited program).

3. Expand Area/Time of Existing Transit System

Expanding HARTline's existing bus service is one possibility, and has the potential to accommodate trip growth with very marginal operating cost increases. However, as long as the number of riders is low – such as in areas farther away from current bus routes, or in areas with lower population densities – bus service tends to be more costly per trip, particularly in comparison to HARTline's core service area. Therefore, this option should be carefully examined and designed before being implemented.

Suggested Implementing Agency: As the current provider, it is recommended that HARTline implement any expansions to existing routes.

Estimated Cost: The cost of expanding HARTline transit service can be estimated using HARTline's current operating cost per revenue hour of service ($57.91), as reported in HARTline's Fiscal Year 1999 National Transit Database Report to the Federal Transit Administration.

- *Hidden River*: To expand the hours of service in the early morning and the late evening in the Hidden River area would require the addition of 1 trip in the morning and the extension of the last 2 existing trips (these trips do not currently terminate in Hidden River) and the addition of 2 trips on Route 33. Route 33, also, does not provide weekend service to the Hidden River area. To extend Saturday service on Route 33 to Hidden River would require the extension of the existing trips to Hidden River and the addition of 2 trips in the morning and evening. There is currently no Sunday service on Route 33. To implement this service on Sunday for similar hours of service as the other days of the week, would require service from 5:00 am to 9:30 pm. The estimated annual operating cost of all of these additional services is $242,353.

- *US 301/Harney Corridor*: The US 301/Harney Corridor of Hillsborough County is currently outside of HARTline's transit service area. To implement new transit service to this area using the assumptions of one new bus route operating an hourly service, 13 hours per day, Monday through Saturday was estimated to cost $229,613 per year for operating. It was also assumed that this new service would require the acquisition of one new vehicle at a cost of $267,000.

- *Plant City*: HARTline estimated the operating cost of extending HART Route 28x into Plant City, to a planned park-and-ride facility. The extension of this route will connect with the two new circulator routes planned for Plant City. The extension of 28x is estimated to cost $465,000 annually. In May 2000 HARTline applied for Jobs Access Funds from Federal Transit Administration. In their application HART requested $115,000 for this service.

- *US 41 South Corridor*: The US 41 South Corridor of Hillsborough County is currently outside of HARTline's transit service area. To implement new transit service to this area using the assumptions of one new bus route operating an hourly service, 13 hours per day, Monday through Saturday was estimated to cost $229,613 per year for operating. It was also assumed that this new service would require the acquisition of one new vehicle at a cost of $267,000.

Category (C) Strategies for Low Density or Outlying Areas

In areas that are far-flung or have a low density of jobs or job-seekers, even variations of fixed-route transit are likely to be inefficient. Job and job-seeker clusters in low-density and outlying areas include:

<u>"Temporal Mismatch" Problem Areas: Bus service provided at limited times.</u>

- Sun City & Ruskin – Job & Job-Seeker Cluster
  No bus service in the early morning, late evening, or on Sunday.

"Spatial Mismatch" Problem Areas: Bus service not currently provided to this area.

- Fort Lonesome Area – Job-Seeker Cluster
- CR 672/Balm-Riverview Road Corridor – Job-Seeker Cluster
- Bruce B. Downs Corridor – Job Cluster

Recommended Strategies

As in Category (B), any of the following strategies could be used in the above areas, and preliminary cost estimates for each strategy are presented. Determining a course of action for each area will require working with potential patrons and employers to more closely identify needs, resources, opportunities, and concerns, as HARTline currently does with its community-oriented "service development" process.

1. Paratransit Feeder Service

Suggested Implementing Agency: As discussed for Category (B) strategies, probably the most appropriate way to implement paratransit for job-seekers would be through expansion of HARTline's paratransit service for the disabled.

Estimated Cost: As discussed for Category (B) strategies, the high cost per trip of paratransit service suggests that it be provided to each job-seeker for a limited time only – for example, the first 3 or 6 months at the start of a new job.

- *Sun City, Ruskin, and CR 672/Balm Riverview Road Corridor:* As of this study, there are approximately 200 clients of the WAGES and Hillsborough County Employment & Training programs in these areas of southern Hillsborough County. If one-tenth of the clients found jobs requiring a commute by paratransit (i.e., 20 clients), five days a week, the estimated annual cost would be $155,200 (or 77,600 for a 6-month time-limited program).

- *Bruce B. Downs Corridor:* Paratransit could also be provided to the approximately 2,220 jobs in the Bruce B. Downs corridor, as a link between these jobs and existing HART routes. If ¼ of those jobs were available to welfare-to-work applicants, and 1/10 of the applicants required paratransit for their commute, five days a week, the program would provide service to 55 jobs at an estimated $430,680 annually (or $215,340 for a six-month time-limited program).

- *Fort Lonesome:* Data is not available on the precise number of households in the Fort Lonesome area that fall into our job-seeker category. No clients of the WAGES and Hillsborough County Employment & Training programs reside there. However, this Census tract was one of the few in Hillsborough County that had a median income of less than $20,000 in 1990. Because of the area's extreme remoteness, paratransit service is likely to cost more than the average $15.52 per trip. Determining the potential number of patrons will require working with the community.

2. Subsidized Taxi Service

Suggested Implementing Agency: It is recommended that whichever agency provides the Mobility Coordinator Service (recommended as a "Global Strategy") should administer this program as well. An individual in need of subsidized taxi service would need to seek this service through a county-wide mobility coordinator. Of the taxi operators in Hillsborough County, United Cab has to date had the most experience in contracting with employers and human service agencies to provide access to jobs.

Estimated Costs: Other metro areas have set aside limited budgets to fund subsidized taxi service. For example, if $150,000 were annually allocated to the provision of subsidized taxi service in Hillsborough County, and each trip were subsidized 90 percent by the implementing agency, then approximately 10,253 one-way 10-mile trips could be provided in one year. This is an average of 28 one-way trips provided per day each year, or "back and forth" service to 14 jobs.

In other words, the cost of providing subsidized taxi trips to jobs could be even higher than providing paratransit feeder trips ($10,714 per job per year, using the above assumptions, vs. paratransit's $7760 per job per year). The high cost could be ameliorated in two ways: 1) by lowering the percent subsidy—which could make the price to patrons a barrier to using the service; 2) by setting a time limit on using the program—for example, providing the service for the first 3 or 6 months of a client's new job. If a 90% subsidized taxi service were provided on a 6-month time-limited basis, $150,000 per year would provide service to 28 jobs.

3. Establish Gathering Points for Transportation Services

Suggested Implementing Agency: Since gathering points would of necessity be remote from both home and work, ideally they would be maintained by third parties (other than the employer and employee), such as a human service organization, transportation provider, day-care provider, or even a public school. The initial establishment of these points would have to be concentrated effort, coordinated by a party in contact with all county transportation providers as well as the transportation clientele. A county-wide Mobility Coordinator, as discussed under "Global Strategies," would be an obvious choice.

Estimated Costs: The main cost of this strategy would be the administrative cost of developing the gathering points and coordinating the provision of transportation to these spots. Coordination and outreach positions were quoted by BACS at $36,000-$42,000/ year, including benefits. Because of the high level of initiative and authority that would be required for this task, the salary required would probably fall at the upper end of this range.

Category (D) Global Strategies

In this section, strategies are recommended that could be applied county-wide; they are applicable to all geographic areas of the county and times of the day. They are not presented in any particular order. All four strategies discussed would be very valuable to Hillsborough County in addressing the jobs access problem. The decision of which strategy to pursue when will depend on implementers, funding and other opportunities, and patrons' and employers' needs and participation in crafting solutions.

Recommended Strategies

1. Mobility Coordinator

Suggested Implementing Agency: In Chapter 2, two types of mobility coordinator services are discussed: a central agency, and resource-persons placed at local offices. Both types would be of benefit to Hillsborough County.

Trip planners, kept up to date on the transportation services available in this county, could be provided at the county's seven "One-Stop" centers where federal, state, and local assistance is administered. Several human service agencies currently provide staff at each One Stop; additional staff could be placed with one of these agencies. WAGES and the Hillsborough County Workforce Board have been most active in studying the jobs access problem and are the most likely to participate in a solution.

The central information source would also best be placed with an existing agency. Out of the three local candidates – HARTline, BACS, and the CTC – none currently provide trip-planning service on-demand for any and all comers. HARTline and BACS have phone numbers which they advertise widely, but what trip-planning assistance they provide is very limited. The CTC does provide trip-planning for eligible clients, but has a very limited pool of programs out of which it can provide transportation. Because the CTC's activities are the closest match, it is the most likely agency to implement this program. However, the issue of publicizing a single number must be discussed among the three agencies, and new staff will be required to administer the program wherever it is located.

Estimated Cost: The costs associated with this program include the personnel costs of hiring mobility coordinators, and possibly the cost of new or upgraded trip-planning software. The number of staff and type of software needed will depend on the scope of services to be provided to the public, and must be discussed further among the potential implementers and other stakeholders.

2. Carpool Matching

Suggested Implementing Agency: Bay Area Commuter Services (BACS) currently administers and markets carpool matching in Tampa Bay. This service could be specifically targeted for people who have difficulty in accessing jobs.

Estimated Cost: As discussed previously, the cost of administering carpool matching for the welfare-to-work population is likely to be higher than for the general population. BACS has proposed that a more "hands-on" approach would require the hiring of a full time person at approximately $36,000 per year (including benefits).

3. Vanpooling

Suggested Implementing Agency: Bay Area Commuter Services (BACS) currently administers and markets the vanpool program in Tampa Bay. This service could be specifically targeted for people who have difficulty in accessing jobs.

Estimated Cost: Based on BACS' experience with the WAGES program, it is estimated that a full-time employee would be needed to meet the administrative needs of forming vanpools for the target population. BACS estimated that the annual cost of hiring a full-time employee would be $36,000 (including benefits). In addition, the monthly cost of operating a vanpool through BACS is $880 for an eight-passenger van, plus gas and tolls (if any). The existing vanpool program relies on passenger charges, but in the case of the welfare-to-work population, an additional subsidy may be needed to help cover this monthly cost.

4. Coordinated/Subsidized Child Care Transportation

Suggested Implementing Agency: This year, on behalf of Hillsborough County WAGES, Suncoast Goodwill began administering a subsidy for child-care providers to transport children to and from home. Goodwill would be the obvious choice to administer a continuation of the program or an expansion (for example, to transport parents as well as children).

Estimated Cost: As of June 2000, Goodwill was subsidizing the transport of about 120 children, at a rate of $15/week for children younger than two years, and $10/week for older children. If about ¼ of the children were younger than two, a program that size would cost $70,200 per year. In addition, Goodwill received $15,000/year from the WAGES coalition to cover administration (though staff indicated their actual costs to start up the program were much greater).

Ideally, the program would be expanded to recruit more child-care providers, to provide service to more children, and to carry the children's parents to destinations located within the service areas (such as HARTline bus stops or vanpool gathering points). All of these would require additional expense, for example:

- adding another $15,000/year for administration to recruit child-care centers;
- providing subsidy to transport up to 500 children could cost $292,500/year;
- providing subsidy to transport 100 parents, at $10/adult/week, would cost $50,000;
- assisting child-care providers in obtaining more or larger vehicles, ideally by obtaining vehicles through BACS' comparatively low-cost van use program; this might cost as little

as $15,000/year in administrative staff time, or considerably more if a subsidy is needed to make van leases affordable;

- coordinating child care transportation services with each other and with buses, carpools, vanpools, paratransit feeder vehicles, etc. to maximize connections and prevent unnecessary duplication of services — perhaps another $15,000/year in administration;
- publicizing these resources to job-seekers and providing assistance as needed, perhaps another $15,000/year in administrative costs.

Summary of Recommendations

Many creative strategies have been discussed in the development of this plan, and would no doubt be valuable to Hillsborough County job-seekers. The following list includes only a few of the most obvious and readily implementable solutions. It is not intended to be all-encompassing or to discourage the development of other helpful transportation programs.

1. Add limited trips to four HART routes serving Western Westshore, Bayshore North/Davis Island, Sligh Avenue & North Boulevard, Armenia Avenue & Waters Avenue. Estimated cost: $321,545 per year.

2. Add two new routes (either fixed-route or fixed with deviation) in Kingsway/Lithia Pinecrest and Northdale. Estimated cost for bare-bones (limited hours, low frequency) service: $459,226 per year for operating expenses, plus two new vehicles.

3. Provide circulators with deviation service in Plant City, in the US 301/Harney Corridor, and during evenings and weekends to jobs in Hidden River from the university area. Estimated cost for two moderately-frequent routes in Plant City: $507,250 per year. Estimated cost for one low-frequency route each in Hidden River (evenings, weekends only) and in US 301/Harney (5 days/week): $201,200.

4. Provide six-month "transition-to-work" paratransit feeder service, to and from the nearest transit route, for jobs and job-seekers in the following areas: the Bruce B. Downs Corridor, the US 41 Corridor South, Sun City, Ruskin, and the CR 672 Corridor. Estimated cost: $428,740 per year.

5. Expand and customize BACS' carpool matching and vanpool programs to better reach and assist the job-seeking population in obtaining living-wage jobs. Estimated cost: $36,000 per year.

6. Expand Goodwill's child care transportation program. Estimated cost for program development: $60,000 per year, plus incentives to child care providers to participate: up to $350,000 per year.

7. Establish a "one-stop-shop" mobility coordinator service with trip-planning capability and access to all available transportation programs. Develop and market a single phone number and unified presence for the various Hillsborough County transportation services. Develop a network of rider gathering points for all transportation services. Estimated cost: $36,000 to $200,000 per year depending on staffing and scope of work.