# Performance Measures Report for South Florida and Bay Area Commuter Services 2001

Prepared for:

Florida Department of Transportation South Florida Commuter Services Bay Area Commuter Services

Prepared by:

Center for Urban Transportation Research University of South Florida Tampa, Florida

## **TABLE OF CONTENTS**

INTRODUCTION	1
NOTE ON CHANGES IN BASELINE RESULTS	2
SECTION A - REQUIRED PERFORMANCE MEASURES Definitions of Required Performance Measures	
SECTION B - DISTRICT OPTIONAL PERFORMANCE MEASURES Definitions of District Optional Performance Measures	
Definitions of District Optional Fertormance Measures	13
SECTION C - OTHER PERFORMANCE MEASURES	17
Goal 1 - Increase public awareness	18
Definitions of Performance Measures for Goal One	20
Goal 2 - Increase productivity of roadway system	21
Definitions of Performance Measures for Goal Two	22
Goal 3 - Decrease Traffic Congestion	23
Definitions of Performance Measures for Goal Three	25
Goal 4 - Improve air quality	
Definitions of Performance Measures for Goal Four	29
Goal 5 - Conserve energy resources	30
Definitions of Performance Measure for Goal Five	31
Goal 6 - Improve mobility - Carpools	32
Definitions of Performance Measures for Goal Six - Carpools	33
Goal 6 - Improve mobility - Vanpools	34
Definitions of Performance Measures for Goal Six - Vanpools	35
Goal 6 - Improve mobility - Non-motorized	
Definitions of Performance Measures for Goal Six - Non-motorized	37
Goal 6 - Improve mobility - Transit	
Definitions of Performance Measures for Goal Six - Transit	
Goal 7 - Reduce Costs of Auto Ownership	40
Definitions of Performance Measures for Goal Seven	41
Goal 8 - Improve Economic Viability	42
Definitions of Performance Measures for Goal Eight	
Goal 9 - Increase Customer Inquiry	
Definitions of Performance Measures of Goal Nine	45

## TABLE OF CONTENTS (Continued)

SECTION C continued	
Goal 10 - Promote Trial Use	46
Definitions of Performance Measures for Goal Ten	
Goal 11 - Facilitate Arrangement of Pools	
Definitions of Performance Measures for Goal Eleven	49
Goal 12 - Reinforce Use of Commute Alternatives	
Definitions of Performance Measures for Goal Twelve	
Goal 13 - Develop CS Constituency	
Definitions of Performance Measures for Goal Thirteen	

## 2001 SOUTH FLORIDA COMMUTER SERVICES & BAY AREA COMMUTER SERVICES EVALUATION PERFORMANCE MEASURES REPORT

## **INTRODUCTION**

The survey results presented in this report give Bay Area Commuter Services (abbreviated as BACS in the tables) and South Florida Commuter Services (abbreviated as CS in the tables) a number of areas on which future performance should be based, including commuter traveling behavior and advertising awareness, Commuter Services Database member evaluations, business awareness, provision of programs, and evaluation of Commuter Services activities. This evaluation has been conducted in accordance with the procedures set forth in the CAP Evaluation Manual published by CUTR under the sponsorship of the Florida Department of Transportation.

Information was collected on the commuting habits of the public and members of the Commuter Services database, as well as awareness of advertising among members of the public. Another possible source of many of the performance measures is a survey of businesses. That survey was not performed in this evaluation.

The purpose of this project was to review CAP performance for 2001, and to assist in the appropriate setting of goals for future evaluation periods. With the information provided in this report BACS and South Florida Commuter Services should be able to set meaningful, measurable goals for performance for 2001 and future years.

The goal setting process should take the following form:

- Review program direction and determine *which* of the goals listed in this report are most relevant to BACS and Commuter Services' current direction.
- Select the *performance measures* within those goals that are most appropriate
- Select *target levels* for those performance measures that reflect a reasonable level of performance improvement. For those performance measures where the data is derived from survey results, target levels should be set in one of two ways:
  - statistically significant increases from baseline levels, or
  - *minimum performance levels* that will have a 95% probability of having been met i.e., there will be a 95% probability that the true measure is at or above the target level.

CUTR will be available to assist BACS, CS and FDOT in the goal selection and target level setting processes.

This report focuses on the performance measures available to Florida Commuter Assistance Program

(CAP) offices to determine program progress and/or effectiveness. The performance measures are divided into three sections:

- required performance measures
- optional performance measures
- other performance measures.

As the name suggests, *required performance measures* are those that the Florida Department of Transportation (FDOT) has mandated that all CAP offices in Florida must track and report on at least an annual basis. These performance measures are specified on pages 8-9 of the Commuter Assistance Program procedures, dated May 5, 1997. District optional performance measures are those that FDOT have determined are appropriate for some of the CAP programs and, at CAP and FDOT District option, can be reported to show progress and/or performance. Other performance measures are those that can help a CAP illustrate the effectiveness of their programs in meeting program or regional objectives.

	BACS	SFCS
Counties Served	Citrus, Hernando, Hillsborough, Pasco, Pinellas	Broward, Miami-Dade, Palm Beach
Area Population (2000 census)	2,395,977	5,007,564
Area Commuters (2000 Florida Statistical Abstracts labor force, corrected for non-commuters.	1,171,995	2,163,679

#### **COMPARISON OF COMMUTER SERVICE AGENCY SERVICE AREAS**

#### NOTE ON DATABASE SIZE ESTIMATES

#### **Bay Area Commuter Services**

At the time of the survey, BACS had 3,283 members in the database. BACS added 1,642 members in 2001 and retained 1,641 members from prior years.

The Rideshare Database survey was performed using sample provided by BACS. The interviewing firm attempted contact with 2,248 households. Of those interviewed, however, 181 indicated that they had neither heard of BACS nor had they ever signed up with a commuter assistance program. An additional forty-eight (48) database members indicated they did not commute to work or school. Each of the respondents was verified as being the person named as the database member in the Commuter Services database list. Another 431 telephone numbers had no person with the name indicated in the database listing living there. Either of these conditions was sufficient to terminate the interviews, as further questions regarding interaction with Commuter Services would have been pointless. These changes result in an effective database size increase for 2001 of 2,493 members (down from the 3,283 listed above).

#### South Florida Commuter Services

At the time of the survey, CS had 11,743 members in the database. CS added 3,760 members in 2001 and retained 7,983 members from prior years. For 2000 year-end, the comparable database consisted of 8,243 members.

The Rideshare Database survey was performed using sample provided by Commuter Services. The interviewing firm attempted contact with 5,065 households. Of those interviewed, however, 99 indicated that they had neither heard of Commuter Services nor had they ever signed up with a commuter assistance program. An additional thirty-four (34) database members indicated they did not commute to work or school. Each of the respondents was verified as being the person named as the database member in the Commuter Services database list. Another 475 telephone numbers had no person with the name indicated in the database listing living there. Either of these conditions was sufficient to terminate the interviews, as further questions regarding interaction with Commuter Services would have been pointless. These changes result in an effective database size increase for 2001 of 10,297 members (down from the 11,743 listed above). For comparison purposes, the 2000 database size was adjusted downward from 10,160 to 8,243 used in the final estimates of performance.

## **SECTION A - REQUIRED PERFORMANCE MEASURES**

The FDOT required performance measures are:

- 1. Number of commuters requesting assistance
- 2. Number of commuters switching modes
- 3. Number of vans in service (where applicable)
- 4. Number of vehicle trips eliminated
- 5. Vehicle miles eliminated
- 6. Employer contacts
- 7. Parking spots saved/parking needs reduced
- 8. Commuter costs saved
- 9. Major accomplishments

The following tables have been developed in the CAP Evaluation Manual to assist the Commuter Assistance Programs in Florida track their performance relative to FDOT requirements. The tables are constructed with five supporting columns to help the CAP collect, analyze, and disseminate the results of the performance measures. The first column includes the performance measures that are required by FDOT. The second column is used if benchmarks or actual results are available for each performance measure. These benchmarks/results could be taken from survey responses, from past commuter assistance program evaluation reports, or from data available from other similar CAP programs. The third column lists the source for evaluating achievement of the performance measure (i.e. database survey). The fourth column can be used by the commuter assistance program to select targets to achieve for each of the performance measures. The fifth column can be used by CAP staff to explain contributing factors in setting and/or meeting the selected targets.

A separate table describes actions that the CAP agencies take to achieve program goals, or potential activities that could be incorporated to achieve the goal.

Following each of the tables, a brief description of each performance measure is included along with the method to be used to collect the necessary information. Where appropriate, the formula for calculating the performance measure is included.

*Note:* The "effective database size" is calculated by taking the entire number of non-FDOT/Commuter Services database members less the number of disconnected and no-such number call terminations during the database survey projected for the entire database.

Performance Measures	BACS (2001)	SFCS (2001)	Source	Targets*	Cont. Factors
RP1 Number of commuters requesting assistance			Collected by CAP		
RP2 Number of commuters switching modes	24.1% or 269 (db members added: 1,114)	21.9% or 726 (db members added: 3,316)	Database Survey		
RP3 Number of vans in service			Collected by CAP		
RP4 Number of vehicle trips eliminated	392,414	1,352,063	Database Survey		
RP5 Vehicle miles eliminated	6,733,863	30,851,338	Database Survey		
<b>Potential Actions</b> RA1.1 Provide informa	tion to commuter	s about commute	alternatives		
RA1.2 Develop ridema	tching system				
RA1.3 Contract for and	l/or provide vans	for commuting pu	rposes		
RA1.4 Develop market a) Promote carp c) Promote trans	ooling	b) Promote vanpo l) Promote walk/b			

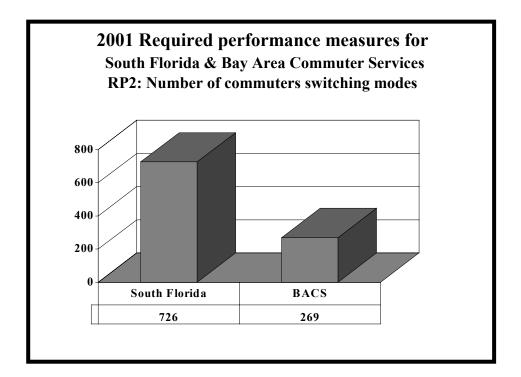
RA1.5 Develop employer outreach program
 \* Where performance measures involve

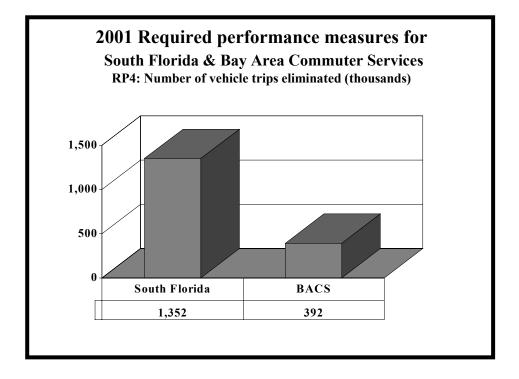
Required Performance Measures (continued)							
Performance Measures	BACS (2001)	SFCS (2001)	Source	Targets*	Cont. Factors		
RP6 Employer contacts			Collected by CAP				
RP7 Parking spots saved/parking needs reduced	801	2,759	Database Survey (based on veh. Trips reduced)				
RP8 Commuter Costs saved	\$0.29/mile \$1,952,820	\$0.29/mile \$8,946,888	Database Survey (based on veh. miles eliminated)				

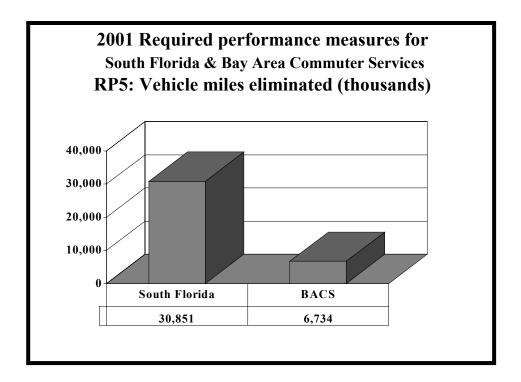
\* Where performance measures involve surveys or other inferential statistics, targets should be set in the form of "statistically significant increase from prior year" or "95% probability that performance measure is at or above" target level

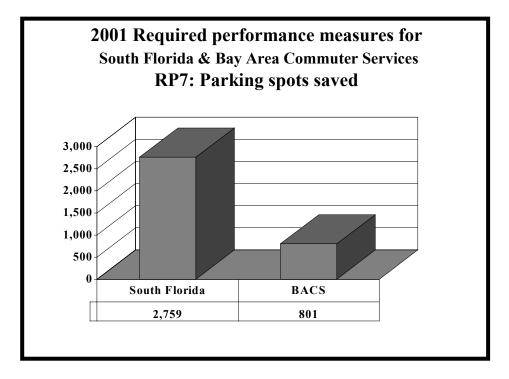
Performance measures in **bold** indicate statistically significant differences from baseline.

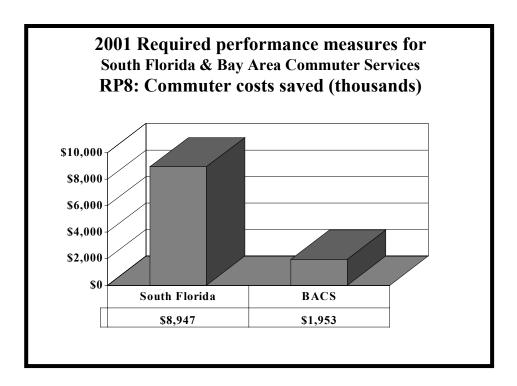
	Required Per	formance Measur	es (continued)	i	
Performance Measures	BACS (2001)	SFCS (2001)	Source	Targets*	Cont. Factors
RP9 Major Accomplishments			Collected by CAP		











## **Definitions of Required Performance Measures**

#### **RP1** Number of commuters requesting assistance

This is the number of people that request assistance of some sort including: Carpool matchlist Vanpool matchlist or formation assistance Transit route and/or schedule information Telecommuting information Bicycle route and/or locker/rack information

The CAP offices would track the number of requests received and may want to track requests by type. The information would be reported as part of quarterly and annual progress reports.

#### **RP2** Number of commuters switching modes

This is the number of people that actually use the information you provide to change from their SOV mode to carpooling, vanpooling, transit use, telecommuting, walking and/or bicycling.

This information can be gathered by doing sample survey of commuters assisted on a monthly basis by either phone or mail. Every month contact a random sample of the commuters assisted the previous month to see how many actually used the information provided. Extrapolate survey results to estimate total. It is recommended that actual data (rather than data modeled based on the number of commuters in the database and applying a fixed percentage) be used where available.

## **RP3** Number of vans in service (where applicable)

This measure represents the actual number of commuter vans on the road and/or the number of vanpoolers. These numbers would be collected and reported by the CAP office.

#### **RP4** Number of vehicle trips eliminated

This performance measure is calculated by using follow-up survey data or actual data. For the database survey, this is done *without* respect to prior mode but includes only those for whom the CAP influenced the mode choice decision

## **RP5** Vehicle miles eliminated

This performance measure is calculated by using follow-up survey data. For the database survey, this is done *without* respect to prior mode but includes only those for whom The CAP influenced the mode choice decision

## **RP6** Employer contacts

Report number of employer contacts by the following categories:

Number contacted by letter/fax

Number contacted by phone

Number contacted in person

Number of follow-up calls or visits

When reporting include the number of employees at each site. These figures will be tracked and collected by the CAP staff.

## **RP7** Parking spots saved/parking needs reduced

This is a performance measure that is calculated by determining the number of people using alternative modes at each employment site. It can also be calculated by taking the number of vehicle trips reduced from a database survey and dividing by 2 trips per day/245 working days per year.

## **RP8** Commuter costs saved

This performance measure is calculated by multiplying vehicle miles eliminated by the average cost per mile (AAA uses \$.448 per mile, the federal government and State of Florida use \$.29 per mile).

## **RP9** Major accomplishments

This performance measure is a listing of all major CAP programs and/or initiatives and the accomplishments of these projects/initiatives. These may include:

New Transit Services Initiated/Improved Educational Program Initiated Transportation Planning Initiatives Emergency Ride Home Projects Initiated Other Implementation Activities

This information would be tracked and collected by CAP staff.

(This page intentionally left blank)

## **SECTION B - DISTRICT OPTIONAL PERFORMANCE MEASURES**

The FDOT defined District optional performance measures are:

- 1. Gasoline saved
- 2. Emissions reduced
- 3. Information materials distributed
- 4. Special events
- 5. Media/community relations

The following tables have been developed to assist the Commuter Assistance Programs in Florida track their performance relative to FDOT District optional performance measures. The tables are constructed with five supporting columns to help the CAP collect, analyze, and disseminate the results of the performance measures. The first column includes the performance measures that are required by FDOT. The second column is used if benchmarks or actual results are available for each performance measure. These benchmarks/results could be taken from survey responses, from past commuter assistance program evaluation reports, or from data available from other similar CAP programs. The third column lists the source for evaluating achievement of the performance measure (i.e. database survey). The fourth column can be used by the commuter assistance program to select targets to achieve for each of the performance measures. The fifth column can be used by CAP staff to explain contributing factors in setting and/or meeting the selected targets.

A separate table describes actions that the CAP agencies take to achieve program goals, or potential activities that could be incorporated to achieve the goal.

Following each of the tables, a brief description of each performance measure is included along with the method to be used to collect the necessary information. Where appropriate, the formula for calculating the performance measure is included.

Performance Measures	BACS (2001)	SFCS (2001)	Source	Targets*	Cont. Factors
OP1 Gasoline Saved	340,783	1,561,303	Database survey data calculation		
OP2 Emissions Reduction	43,555 329,771 21,837	199,546 1,510,852 100,045	Database survey data calculation		
OP3 Special Events			Collected by CAP		
OP4 Media/Community Relations			Collected by CAP		

## **Potential Actions**

OA1.1 Promote/develop alternative transportation programs.

OA1.2 Develop and conduct a community outreach/promotional campaign.

## **Definitions of District Optional Performance Measures**

## **OP1** Gasoline saved

This performance measure is calculated by multiplying vehicle miles eliminated by the average miles per gallon figure from EPA. For April, 1997, average fuel consumption is 0.04 gallons/mile (i.e., 25 MPG).

## **OP2** Emissions reduction

This performance measure is calculated by multiplying vehicle miles eliminated by the emission factors for the CAP service area. Emission factors are available from Department of Environmental Regulation and are available for Hydrocarbons (HC), carbon monoxide (CO), and nitrogen oxide (NO). In April 1997 the average passenger car emissions were estimated at:

- \* 2.9 grams/mile of HC
- \* 23 grams/mile of CO
- \* 1.6 grams/mile of NO

Grams are converted to pounds by multiplying the results of this calculation by .0022.

## **OP3** Special events

This performance measure reports the number and type of special events conducted by the CAP staff to promote and/or encourage commute alternative use. Special events may include but are not limited to:

Commuter Service Days Commuter Fairs Special Promotions

This information would be collected and tracked by CAP staff.

## **OP4** Media/community relations

This performance measure tracks CAP staff efforts in informing the media and general public about CAP activities and programs. Categories may include but are not limited to:

Number of PSAs aired Number of newspaper articles Number of news stories Number of magazine articles

This information would be collected and tracked by CAP staff.

(This page intentionally left blank)

#### SECTION C - OTHER PERFORMANCE MEASURES

The performance measures in this section have been developed to allow a CAP the flexibility to tailor an evaluation program that closely matches program goals and objectives. They have also been developed to measure CAP effects on markets and groups, like employers and the general public, that directly or indirectly are influenced by CAP efforts. The performance measures can be used to develop a more complete profile of direct and indirect effects of CAP program activities on commuter mode choice. For example, the performance measures in this section can be used to determine if advertising campaigns influenced members of the general public to try carpooling without ever contacting the CAP office for assistance. To assist the CAP in selecting appropriate measures from this section, some of the FDOT required and optional performance measures have been repeated under appropriate goals. This provides the CAP with a mechanism to find some performance measures that can help develop a complete picture of CAP efforts.

The following tables have been developed to assist the Commuter Assistance Agencies in Florida track their performance relative to the their own stated goals or to regional transportation goals. The tables are constructed by using a potential generic CAP or regional transportation goal as the major section heading with five supporting columns to help achieve the goal. The first column includes the performance measures. The second column is used if benchmarks or actual results are available for each performance measure. These benchmarks/results could be taken from survey responses, from past commuter assistance program evaluation reports, or from data available from other similar CAP programs. The third column lists the source for evaluating achievement of the performance measure (i.e. database survey). The fourth column can be used by the commuter assistance program to select targets to achieve for each of the performance measures. The fifth column can be used by CAP staff to explain contributing factors in setting and/or meeting the selected targets.

A separate table describes actions that the CAP agencies take to achieve program goals, or potential activities that could be incorporated to achieve the goal.

Following each of the tables, a brief description of each performance measure is included along with the method to be used to collect the necessary information. Where appropriate, the formula for calculating the performance measure is included.

Goal 1 - Increase public awareness							
Performance Measures	BACS (2001)	SFCS (2001)	Source	Targets*	Cont. Factors		
P1.1 % awareness of CS among employers	N/A	N/A	Business survey				
P1.2 # employer meetings			Collected by CAP				
P1.3 % of employers with TDM programs	N/A	N/A	Business survey				
P1.4 % aided awareness of CS or CS number among commuters	32%	41%	General public survey				
P1.5 # of customer inquiries			Collected by CAP				
P1.6 % awareness of CS promotional materials	33%	43%	General public survey				
* 11/1							

## Goal 1 - Increase public awareness

## **Potential Actions**

- A1.1 Develop coordinated, consistent marketing program.
- A1.2 Develop employer outreach materials on TDM strategies.
- A1.3 Plan and conduct kick-off events with employers.
- A1.4 Provide technical assistance in establishing employer programs.
- A1.5 Establish employer outreach campaign to appoint Employee Transportation Coordinators (ETCs) to involve employers in mobility programs.

A1.6 Host ETC training program.

## Definitions of Performance Measures for Goal One

#### P1.1 % awareness among employers

This measure is derived from a survey of businesses. The survey asks if businesses are aware of the commuter assistance program.

#### P1.2 Number of employer meetings

This is a measure that examines how many presentations were made about rideshare services to area employers. This measure represents initial presentations to employers who have shown an interest in commuter assistance program services. This data would be collected through quarterly reports and year-end evaluation reports.

#### P1.3 % employers with TDM programs

This performance measure represents those employers who have designated an employee transportation coordinator or offer one of the following: compressed work weeks, work at home options, preferential parking, parking shuttles, emergency ride home programs, or bus or pool subsidies. Data for this measure would come from a business survey.

# P1.4 % aided awareness of Commuter Assistance or Commuter Assistance Number among commuters

This measure examines commuter awareness of the CAP agency and/or the recognition of the telephone number commuters can call to receive assistance. This measure would be collected from the results of the general public survey.

#### P1.5 Number of customer inquiries

The number of customers who contacted the commuter assistance program during the review period. This measure would be tracked internally by the CAP.

#### P1.6 % awareness of CAP promotional materials

This measure examines the general public's awareness of CAP promotional materials including highway signs, TV and radio ads, etc. This measure is collected through the general public survey.

Goal 2 - Increase productivity of roadway system						
Performance Measures	BACS (2001)	SFCS (2001)	Source	Targets*	Cont. Factors	
P2.1 average vehicle occupancy	DB: 1.82 GP: 1.05	1.72 1.07	Surveys: Database Gen Pub			
<ul><li>P2.2 % reduction in vehicle miles of travel from 100% SOV for:</li><li>1. Database members</li><li>2. General public</li></ul>	45.1% 5.1%	43.6% 5.0%	Surveys: Database Gen Pub			
<ul><li>P2.3 % reduction in vehicle trips from</li><li>100% SOV among:</li><li>1. Database members</li><li>2. General public</li></ul>	45.0% 5.0%	42.0% 6.5%	Surveys: Database Gen Pub			

## **Potential Actions**

A 2.1 Attend and participate in MPO meetings to provide input and guide CAP Services.

A2.2 Develop long range vision, goals and objectives for CAP that are consistent with area-wide transportation network goals and programs.

A2.3 Target MPO selected corridors and roadways for intensive rideshare marketing programs.

## **Definitions of Performance Measures for Goal Two**

#### P2.1 Average vehicle occupancy

This measure examines the vehicle occupancy from one evaluation period to the next. In the table, the baseline figure will be used to help the commuter assistance program calculate the percent change. The measure would be taken from a general public survey and database survey.

#### P2.2 % reduction in vehicle miles of travel

This measures the percent difference between actual VMT and VMT that would occur if all commuters used an SOV for work trips. The calculation would be done once for database members and once for the general public. To calculate:

(total trips in alternative mode per week) x (duration of alternative mode use) x

(passengers-1/passengers) x (49 weeks per year) x (miles per trip) (total trips per week) x (49 weeks per year) x (miles per trip)

#### P2.3 % reduction in vehicle trips

This performance measure would be calculated by taking the total number of trips taken versus the total number of trips that would have been taken assuming all alternative mode users formerly drove alone. The percent reduction figure is derived from a database member survey and the general public survey. To calculate:

(total trips in alternative mode per week) x (duration of alternative mode use) x

(passengers-1/passengers) x (49 weeks per year) (total trips per week) x (49 weeks per year)

Goal 3 – Decrease Traffic Congestion						
Performance Measures	BACS (2001)	SFCS (2001)	Source	Targets*	Cont. Factors	
<ul><li>P3.1 % of work trips using alternative mode among:</li><li>1. Database members</li><li>2. General public</li></ul>	47% 10%	48% 10%	Surveys: Database Gen Pub			
P3.2 # of peak period vehicles per 100 employees	DB: 55 GP: 95	DB: 58 GP: 93.5	Surveys: Database Gen Pub			
P3.3 VMT reduced: Database members General public	9,167,000 451 m	44,372,000 782 m	Surveys: Database Gen Pub			
P3.4 Vehicle trips reduced: Database members General public	540,000 29 m	2,114,079 71 m	Surveys: Database Gen Pub			
<ul> <li>P3.5 % employers</li> <li>with compressed work</li> <li>week programs</li> <li>among:</li> <li>1. All employers</li> <li>2. Targeted employers</li> </ul>	N/A N/A	N/A N/A	Business Surveys			

Goal 3 - Decrease Traffic Congestion					
Performance Measures	BACS (2001)	SFCS (2001)	Source	Targets*	Cont. Factors
P3.6 % employees working a compressed work week among: 1. All employers	N/A	N/A	Business		
2. Targeted employers	N/A	N/A	Surveys		
P3.7 % employers with flextime programs among:					
1. All employers	N/A	N/A	Business		
2. Targeted employers	N/A	N/A	Surveys		
P3.8 % employees working a flexible work schedule among:					
1. All employers	N/A	N/A	Business		
2. Targeted employers	N/A	N/A	Surveys		

## **Potential Actions**

A3.1 Decrease the number of at activity centers/along corridors

A3.2 Increase the use of alternatives among commuters at activity centers/along target corridors

A3.3 Develop information on compressed work weeks and flexible work hour programs.

A3.4 Conduct workshop on alternative work hour programs for human resource managers.

## **Definitions of Performance Measures for Goal Three**

#### P3.1 % of work trips using alternative mode

This performance measure would be calculated by taking the total number of trips made by alternative modes (carpool, vanpool, transit, walk, and bike) and dividing by the total number of trips. This is equivalent to dividing trips provided without respect to prior mode by total trips. The figure would be calculated for both database members and from surveys of the general public.

#### P3.2 Number of peak period vehicles per 100 employees

This measure can be calculated by CAP agencies by multiplying the inverse of the average vehicle occupancy at a worksite by 100. This measure should be used wherever the commuter assistance program is conducting an employer-based campaign.

Alternatively, this measure can be calculated by multiplying the inverse of the average vehicle ridership taken from the general public survey and/or the database survey by 100.

## P3.3 VMT reduced

This is a performance measure taken from both a general public survey and database member survey. It is calculated by taking the VMT reduced per commuter and multiplying by the number of commuters. For the database survey, this is done *without* respect to prior mode and *without* respect to whether or not the CAP-influenced the decision. The formula for calculating this measure is given under the Definitions of Required Performance Measures section beginning on Page 10.

#### **P3.4** Vehicle trips reduced

This is a performance measure taken from both a rideshare database member survey and a general public survey. It is calculated by taking the vehicle trips reduced per commuter (respondent) and multiplying by the number of commuters. For the database survey, this is done *without* respect to prior mode and *without* respect to whether or not the CAP influenced the decision. The formula for calculating this measure is given under the Definitions of Required Performance Measures section beginning on Page 10.

#### P3.5 % employers with compressed work week programs

The percentage of businesses offering a compressed work week schedule as determined by a business survey. Includes only business with at least one employee participating in compressed work week. Included would be figures for all surveyed employers and those targeted by the CAP. Importance would be determined by CAP focus. In other words, does the CAP provide technical assistance to specific employers, or simply market the concept.

## P3.6 % of employees working a compressed work week schedule

A performance measure taken from a business survey, the figure reported represents the percent of employees actually participating in a compressed work week program, as reported by the employer. Included would be figures for all employees and for those specifically targeted by the CAP.

## P3.7 % employers with flextime programs

The percentage of businesses offering a flextime schedule as reported in a business survey. Included would be figures for all employers and those targeted by the CAP.

## P3.8 % of employees working a flextime schedule

A performance measure from a business survey, the figure reported by employers would represents the percent of employees actually participating in a flextime program. Included would be figures for all employees and for those who work at targeted employers.

(This page intentionally left blank)

Goal 4 – Improve air quality						
Performance Measures	BACS (2001)	SFCS (2001)	Source	Targets*	Cont. Factors	
P4.1 Pounds of carbon monoxide reduced	448,933	2,172,984	Database survey			
P4.2 Pounds of hydrocarbons reduced	59,293	286,998	Database survey			
P4.3 Pounds of nitrogen oxide reduced	29,727	143,889	Database survey			
P4.4 Pollution reductions by mode	Carpool: 195,123	Carpool: 669,676	Database survey			
	Vanpool: 70,991	Vanpool: 230,835	Database survey			
	Transit: 246,013	Transit: 1,594,285	Database survey			
	Non-motorized: 14,150	NM: 109,076	Database survey			
<b>Potential Actions</b> A4.1 Form carpools.	<u>.</u>	•	·	·		
A4.2 Form vanpools.						

A4.3 Encourage transit use.

A4.4 Encourage non-motorized mode usage.

## **Definitions of Performance Measures for Goal Four**

## P4.1 Pounds of carbon monoxide reduced

Using the results of the VMT calculation, CO reduced is derived by: (23 grams per mile) x (miles reduced per commuter) x (# of commuters/454 grams per pound).

## P4.2 Pounds of hydrocarbons reduced

Using the results of the VMT calculation, hydrocarbon reductions are derived by: (2.9 grams per mile) x (miles reduced per commuter) x (# of commuters/454 grams per pound)

#### P4.3 Pounds of nitrogen oxide reduced

Using the results of the VMT calculation, nitrogen oxide reductions are derived by: (1.6 grams per mile) x (miles reduced per commuter) x (# of commuters/454 grams per pound)..

#### P4.4 Pollution reductions by mode

Using the above calculations except that reductions are based on VMT reduced by mode.

Goal 5 – Conserve energy resources					
Performance Measures	BACS (2001)	SFCS (2001)	Source	Targets*	Cont. Factors
P5.1 % employers with telecommuting program	N/A	N/A	Business survey		
P5.2 % targeted employers with telecommuting program	N/A	N/A	Business survey		
P5.3 % employees in a telecommuting arrangement	N/A	N/A	Business survey		
P5.4 % employees at targeted companies in a telecommuting arrangement	N/A	N/A	Business survey		
<ul><li>P5.5 % reduction in vehicle miles of travel among:</li><li>1. Database members</li><li>2. General public</li></ul>	45.1% 5.1%	43.6% 5.0%	Surveys: Database Gen Pub		
<ul><li>P5.6 Gallons of gasoline saved by alternate mode users among:</li><li>1. Database members</li><li>2. General public</li></ul>	463,924 22.8 m	2,245,545 39.6 m	Surveys: Database Gen Pub		

## **Potential Actions**

A5.1 Develop materials on telecommuting.

A5.2 Hold a workshop with companies on telecommuting.

A5.3 Promote alternative mode use

<sup>\*</sup> Where performance measures involve surveys or other inferential statistics, targets should be set in the form of "statistically significant increase from prior year" or "95% probability that performance measure is at or above" target level.

## **Definitions of Performance Measure for Goal Five**

## P5.1 % employers with a telecommuting program

Taken from a business survey, the percentage of employers who offer a telecommuting option to its employees.

# P5.2 % of targeted employers with a telecommuting program

Taken from a business survey, the percentage of businesses that work directly with the CAP or are located within a CAP-targeted activity center who offer a telecommuting option to some of its employees.

# P5.3 % of employees in a telecommuting arrangement

Taken from a business survey, the % of employees who have taken a telecommuting option, as reported by employers.

# P5.4 % of employees at targeted companies in a telecommuting arrangement

Taken from a business survey, the % of employees who work at targeted companies who have taken a telecommuting option, as reported by employers.

# P5.5 % reduction in vehicle miles of travel

This measures the percent difference between actual VMT and VMT that would occur if all commuters used an SOV for work trips. The calculation is done once for database members and once for the general public.

## P5.6 Gallons of gasoline saved by alternate mode users

Derived by taking the VMT reduction calculation and multiplying by the average miles per gallon figure for passenger vehicles as reported by the Environmental Protection Agency (currently 25 mpg). The figure is derived for database members and for the general public from statistics taken from the database member and general public survey respectively. Gallons of gasoline saved by database members is an Optional Performance Measure as defined by the Florida Department of Transportation in the Commuter Assistance Program Evaluation Manual published by the Center for Urban Transportation Research.

Performance Measures	BACS (2001)	SFCS (2001)	Source	Targets*	Cont. Factors
P6.1 # persons registered			Collected by CAP		
P6.2 # persons placed in carpools	Direct: 61 Total: 69	159 217	Database survey		
P6.3 Duration of existing carpools	2.57 years	2.59 years	Database survey		
P6.4 % of trips done by carpool and vanpool	27.0%	23.0%	Database survey		

A 6.1 Seek to improve carpool matching program operated by CAP

A6.2 Customize brochure on options with survey form.

A6.3 Develop "Guide on How to Form a Carpool."

# **Definitions of Performance Measures for Goal Six - Carpools**

## P6.1 Number of persons registered

The total number of persons who are registered in the commuter assistance program database. This number will be developed by the commuter assistance agencies as part of their performance measures.

## P6.2 Number of persons placed in carpools

The total number of persons placed into carpools. This would be collected and disseminated as part of the quarterly performance report.

An alternative (and less satisfactory) approach is to calculate the figure from the database survey for both direct and total influence by taking the number of people who switched to carpooling (total) and those who switched where CS information had some influence (direct).

## P6.3 Duration of existing carpools

The average length of time that current poolers have been in their pooling arrangement. This figure is taken from a database members survey.

## P6.4 % of trips done by carpool/vanpool

The percentage of all work trips done by carpool and vanpool. This figure is taken from a database member survey and/or a general public survey.

Goal 6 – Improve mobility – Vanpools							
Performance Measures	BACS (2001)	SFCS (2001)	Source	Targets*	Cont. Factors		
P6.5 # vanpools formed			Collected by CAP				
P6.6 # vanpool riders			Collected by CAP				
P6.7 # vanpool meetings			Collected by CAP				
P6.8 # of vans in service			Collected by CAP				

A6.4 Meet with representative of transit agencies to strengthen vanpool programs.

A6.5 Make arrangements to obtain vans through purchase or lease (e.g., VPSI).

A6.6 Develop fare structure, arrange for maintenance, prepare marketing materials, and introduce program.

A6.7 Develop "New Start" assistance program to subsidize the cost of 4 empty seats for four Months.

A6.8 Hold presentations with groups of employees who live over 20 miles away from work.

## **Definitions of Performance Measures for Goal Six - Vanpools**

#### P6.5 Number of vanpools formed

For this performance measure, the CAP agencies would report the total number of vanpools formed during the review period.

#### P6.6 Number of vanpool riders

For this performance measure, the CAP agencies would report the total number of vanpoolers as part of their quarterly performance reports.

#### P6.7 Number of vanpool meetings

For this performance measure, the CAP agencies would report the total number of vanpool meetings held as part of their quarterly performance reports.

#### P6.8 Number of vans in service

This is an FDOT required performance measure. The CAP agencies would report the number of commuter vans on the road as part of their quarterly performance reports.

Goal 6 – Improve mobility – Bicycle/Pedestrian							
Performance Measures	BACS (2001)	SFCS (2001)	Source	Targets*	Cont. Factors		
P6.8 % employers with bike racks/lockers	N/A	N/A	Business survey				
P6.9 % employers w/shower/storage	N/A	N/A	Business survey				
P6.10 % commuters using walk or bike to work	0.4%	0.6%	General public survey				

A6.9 Develop a program to encourage employers to offer incentives and support for bicycle and pedestrian programs.

A6.10 Meet with area bike coordinators and obtain marketing materials for distribution through employers.

A6.11 Meet with employers to discuss plans.

#### **Definitions of Performance Measures for Goal Six - Non-motorized**

## P6.8 % employers with bike racks/lockers

This measure would be taken from a business survey. It represents the percentage of businesses that state that they have bike racks and/or lockers at the worksite.

#### P6.9 % employers with showers/storage facilities

This measure represents the percentage of employers who offer showers and storage facilities to their employees at the worksite. The figures would be taken from a business survey.

#### P6.10 % commuters who walk or bicycle to get to work

This measure would be taken from a general public survey and/or database survey. It is the percentage of commuters who use bicycles or walk to work.

Goal 6 – Improve mobility – Transit							
Performance Measures	BACS (2001)	SFCS (2001)	Source	Targets*	Cont. Factors		
P6.11 % employers with transit subsidy programs	N/A	N/A	Business survey				
P6.12 park n ride lot utilization rates	N/A	N/A	FDOT/CAP collected or estimated via Gen Pub survey				

A6.12 Increase the number of employers offering transit subsidies to employees.

A6.13 Increase the number of employers selling transit passes to employees.

- A6.14 Encourage/promote the use of Park n Ride lots as a pick-up/drop-off point for pools and/or accessing transit.
- \* Where performance measures involve surveys or other inferential statistics, targets should be set in the form of "statistically significant increase from prior year" or "95% probability that performance measure is at or above" target level.

# **Definitions of Performance Measures for Goal Six - Transit**

#### P6.11 % of employers with transit subsidy programs

This is a performance measure taken from a survey of businesses. It would represent the percentage of local employers who indicated that they provided financial subsidies to employees traveling on transit vehicles.

#### P6.12 Park n ride lot utilization rates

This information is currently not tracked by CAP agencies. A survey could be conducted to get the information from the general public and/or database members. The result represents either the percentage of parking spaces being used at local park n ride facilities or the percentage of members using the facilities.

Goal 7 - Reduce Costs of Auto Ownership							
Performance Measures	BACS (2001)	SFCS (2001)	Source	Targets*	Cont. Factors		
P7.1 Gasoline costs savings Database General Public	\$651,000 \$32 m	\$3,152,000 \$56 m	Surveys: Database Gen. Pub.				
P7.2 Auto maintenance savings (\$0.04/mile) Database General Public	\$367,000 \$18 m	\$1,775,000 \$31 m	Surveys: Database Gen. Pub.				
P7.3 Commuter costs saved Database General Public	\$2,658,000 \$131 m	\$12,868,000 \$227 m	Surveys: Database Gen. Pub				

A7.1 Develop CS marketing campaign based on reduced costs

A7.2 Implement marketing campaign

## **Definitions of Performance Measures for Goal Seven**

#### P7.1 Gasoline costs savings

This performance measure estimates cost savings accrued from not having to purchase gasoline. It is calculated by taking the VMT reduction figure and multiplying by gallons used per mile by the average automobile and the cost per gallon of gasoline. (VMT x gallons/mile x cost/gallon). Average MPG for 1997 was 25.0, and cost per gallon figures are available from local AAA offices. \$1.60/gallon assumed for this report.

It should be noted that these figures were not adjusted for any inflation between 1997 and 1998. Everything is reported in 1997 dollars for the sake of continuity.

#### P7.2 Auto maintenance savings

For this performance measure, the savings are calculated by taking the VMT reduction figure and multiplying by the maintenance costs of an automobile/mile. (VMT x maintenance cost/mile). Maintenance costs are included in the AAA cost per mile figure and generally are about 4-5 cents per mile.

#### P7.3 Commuter costs saved

This performance measure is calculated by multiplying vehicle miles eliminated by the average cost per mile to operate an automobile (AAA uses \$.448 per mile, the federal government and State of Florida use \$.29 per mile).

Performance Measures	BACS (2001)	SFCS (2001)	Source	Targets*	Cont. Factors
P8.1 Number of parking spaces saved per day	1,103	4,314	Database survey		
P8.2 Cost per trip provided direct influence and total influence	Trips provided: Direct: 484,000 Total: 666,000	Direct: 1,573,000 Total: 2,430,000	Database survey		

A 8.2 Provide cost-effective services

# **Definitions of Performance Measures for Goal Eight**

## P8.1 Number of parking spaces saved

This is an adjusted FDOT required performance measure. It is calculated by taking the vehicle trips reduced figure from the database survey divided by 2 trips per day/245 working days, but does not take into account influence of the CAP in getting commuters to switch modes.

# **P8.2** Cost per trip provided (direct and total)

This is a performance measure that is calculated by using the results of the database member survey. The information needed to calculate the cost per trip provided (direct) is:

- 1. Total carpool and vanpool trips provided per commuter- same measure as trips reduced EXCEPT that the size of the pool is not taken into account.
- 2. Database size.
- 3. Influence rate per trip for carpool and vanpool- the number of poolers that say their mode choice was influenced by the CAP, weighted by the number of trips taken.
- 4. Annual budget- the budget of the commuter assistance program.

To calculate:

annual budget

(total carpool and vanpool trips provided per commuter) x (database size) x (influence rate)

Calculating the cost per trip provided (total) assumes that all database members that are in a pooling arrangement were, in some way, influenced by the commuter assistance program. The information needed to calculate the cost per trip provided (total) is:

- 1. Total carpool and vanpool trips provided per commuter- same measurer as trips reduced EXCEPT that the size of the pool is not taken into account.
- 2. Database size.
- 3. Annual budget- the budget of the Commuter Assistance Program.

To calculate:

annual budget

(total carpool and vanpool trips provided per commuter) x (database size)

Performance Measures	BACS (2001)	SFCS (2001)	Source	Targets*	Cont. Factors
P9.1 number of calls received			Collected by CAP		
P9.2 number of applications processed			Collected by CAP		
P9.3 % of employers wanting assistance from CS	N/A	N/A	Business survey		

A9.1 Develop marketing campaign aimed at reducing costs/congestion
 \* Where performance measures involve surveys or other inferential statistics, targets should be set in the form of "statistically significant increase from prior year" or "95% probability that performance measure is at or above" target level.

# **Definitions of Performance Measures of Goal Nine**

#### **P9.1** Number of calls received

The number of customers who contacted the commuter assistance program during the review period. This measure will be tracked internally by the CAP.

#### **P9.2** Number of applications processed

This is a performance measure, that represents the total number of applications received and processed by the CAP during the review period.

#### P9.3 % of employers wanting assistance from the Commuter Assistance Program

This is a performance measure taken from a business survey. It represents the percent of businesses responding that stated they would like to be contacted by a CAP about establishing an employer TDM program.

Goal 10 - Promote Trial Use							
Performance Measures	BACS (2001)	SFCS (2001)	Source	Targets*	Cont. Factors		
P10.1 % ever tried alternate	Database:		Surveys:				
mode (includes	71%	72%	Database				
telecommuting for general	Gen. Pub.						
public)	26%	31%	Gen Pub				
P10.2 % of general public trying alternate mode based on advertising	2.7%	2.0%	General public survey				
P10.3 % of database trying alternative mode based on CS info	48.0%	40.4%	Database survey				
			General				
P10.4 % of general public	0.0%	0.0%	public				
attempting to contact CS			survey				

A10.1 Develop marketing campaign to encourage use of alternative modes

A10.2 Provide rideshare information on request to local residents

## **Definitions of Performance Measures for Goal Ten**

#### P10.1 % ever tried alternate mode

This performance measure would be taken from both a general public survey and a database member survey. It represents the percentage of respondents that said they tried using a commute alternative at some point in time to commute to and from work.

## P10.2 % of general public trying alternate mode based on advertising

This performance measure is taken from the general public survey. It represents the percent of respondents who said that they tried a commute alternative after hearing/seeing commuter assistance program advertisements.

## P10.3 % of database trying alternative mode based on Commuter Assistance info

This performance measure is taken from a database member survey. It represents the percentage of respondents who stated that they tried a commute alternative after obtaining information from the Commuter Assistance Program.

#### P10.4 % of general public attempting to contact Commuter Assistance

This performance measure would be taken from a general public survey. It represents the percent of respondents who stated that they had tried to contact the CAPs for information.

Goal 11 - Facilitate Arrangement of Pools							
Performance Measures	BACS (2001)	SFCS (2001)	Source	Targets*	Cont. Factors		
P11.1 % database receiving pooling tips	N/A	N/A	Database survey				
P11.2 % database receiving ERH info	72%	84%	Database survey				
P11.3 % database receiving matching info	52%	68%	Database survey				
P11.4 % database using matchlist to try and form a pool	35% (of those who received list)	18%	Database survey				
P11.5 Satisfaction with CS among database members	18% (of all) 7.1	7.4	Database survey				
P11.6 % database who would definitely recommend CAP	49%	52%	Database survey				
Potential Actions	1	1	1				

A11.1 Hold zip code meetings at employment sites.

A11.2 Make introductory calls to potential matched poolers.

#### **Definitions of Performance Measures for Goal Eleven**

#### P11.1 % database members receiving pooling tips

This measure would be taken from a database member survey. It represents the percent of respondents who stated they had received pooling tips from the commuter assistance program.

#### P11.2 % database members receiving ERH info

This measure would be taken from a database member survey. It represents the percent of respondents who stated they received emergency ride home program information from the CAP.

#### P11.3 % database members receiving matching info

This measure would be taken from a database member survey. It represents the percent of respondents who stated they had received matching information from the CAP.

#### P11.4 % of database using the matchlist to try and form a pool

This measure would be taken from a database member survey. It represents the percent of respondents who reported trying to make contacts with others on their matchlist to try and form a pool.

#### P11.5 Satisfaction with Commuter Assistance among database members

This is a performance measure representing the satisfaction database members have with services provided by the CAP agencies. Respondents rate agencies on a 1 to 10 scale.

# P11.6 % of database members who would definitely recommend Commuter Assistance Program to others

This is a performance measure that would be taken from the database member survey. It represents the percentage of database members who would definitely recommend commuter assistance to others.

	Goal 12 - Reinfo	rce Use of Com	mute Alteri	natives	
Performance Measures	BACS (2001)	SFCS (2001)	Source	Targets*	Cont. Factors
P12.1 # of ERH rides provided			Collected by CAP		
P12.2 # of registered users in ERH			Collected by CAP		
P12.3 % of database provided with ERH info	72%	84%	Database survey		
P12.4 % of database members receiving follow-up contacts	48%	54%	Database survey		
P12.5 % of employers providing incentives	N/A	N/A	Business survey		
P12.6 % employers providing ERH	N/A	N/A	Business survey		
P12.7 % of employers w/ETCs	N/A	N/A	Business survey		
P12.8 % 12 mo.+ database members using commute alternative	47% (47% of 12 mo./less)	52% (46% of 12 mo./less)	Database survey		

A12.1 Provide ERH program.

A12.2 Develop follow-up system.

## **Definitions of Performance Measures for Goal Twelve**

#### P12.1 Number of ERH rides provided

This is a performance measure that would be tracked by the CAP agencies. It represents the total number of emergency ride home rides provided during the review period.

#### P12.2 Number registered for ERH

This is a performance measure that would be collected and tracked by the CAP agencies. It represents the total number of persons that have registered for the emergency ride home program.

#### P12.3 % of database provided with ERH info

This measure would be taken from a database survey. It represents the percent of respondents from the entire database that stated they had received emergency ride home program information.

#### P12.4 % of database members receiving follow-up contacts

This measure would be taken from a database member survey. It represents the percent of respondents who reported that they had been contacted by the commuter assistance program as a follow-up to materials that had been sent by commuter assistance

#### P12.5 % of employers providing incentives

This performance measure would be taken from a business survey. It represents the percent of employers responding that they offered financial subsidies to employees who regularly used the transit system to commute to work.

## P12.6 % of employers providing ERH

This is a performance measure taken from a business survey. It represents the percent of employers who reported offering their own emergency ride home program to their employees.

#### P12.7 % of employers w/ETCs

This is a performance measure taken from a business survey. It represents the percent of employers who reported designating their own employee transportation coordinator to assist their employees in finding commute alternatives.

#### P12.8 % 12 mo.+ database members using commute alternative

This is a performance measure taken from a database member survey. The measure represents the percent of database members whose entry date in the database is greater than 12 months and who report that they are still using a commute alternative.

Goal 13 - Develop CS Constituency							
Performance Measures	BACS (2001)	SFCS (2001)	Source	Targets*	Cont. Factors		
P13.1 # of complaints			Collected by CAP				
P13.2 Complaints resolved			Collected by CAP				
P13.3 # of testimonials received			Collected by CAP				
P13.4 Employer effectiveness rating of CS	N/A	N/A	Business survey				
P13.5 CS database satisfaction rating	7.1	7.4	Database survey				
P13.6 % of database members who would definitely recommend CAP to others	49%	52%	Database survey				

A13.1 Develop system to track and resolve complaints.

A13.2 Develop system to obtain CAP service users testimonials.

#### **Definitions of Performance Measure for Goal Thirteen**

#### P13.1 Number of complaints

This is a potential performance measure for the CAP. The CAP would collect the number of complaints they received in regards to their services.

#### P13.2 Complaints resolved

This is a potential performance measure that would be collected and tracked by the CAP. The measure would count the number of complaints resolved by the commuter assistance program to the customer's satisfaction.

#### P13.3 Number of testimonials received

This is a potential performance measure. The measure would be collected by the CAP and would represent the number of testimonials and written recommendations made on behalf of the commuter assistance program.

#### P13.4 Employer effectiveness rating of commuter assistance

This is a performance measure taken from a business survey. It represents the rating given by employers on the effectiveness of services provided by the CAP agencies. The rating scale is from 1 to 10 with 1 = low and 10 = high.

#### P13.5 Satisfaction with the commuter assistance program among database members

This is a performance measure taken from a database member survey. It represents the satisfaction rating given by respondents on the services provided by the CAP agencies. Respondents would be asked to rate the agencies on a scale of 1 to 10 with 1 = 1 ow and 10 = high.

# P13.6 % of database members who would definitely recommend the commuter assistance program to others

This is a performance measure taken from a database member survey. It represents the percentage of database members who would definitely recommend the commuter assistance program services to others.