

**Santa Cruz County Regional Transportation Commission
Service Authority for Freeway and Emergencies**

2005 Operational and Financial Report



Santa Cruz County FSP program

As the Service Authority for Freeway Emergencies (SAFE), SCCRTC operates the Freeway Service Patrol (FSP) program in Santa Cruz County. The FSP program began in April 1994 with service on Highway 17. Service on Highway 1 began in 2000. Today this program consists of two tow trucks patrolling Highway 1 from Highway 9 to State Park Drive (Beat 24) and Highway 17 from Granite Creek Road to the Santa Clara County Line (Beat 17). Both highway segments are patrolled during weekday commute periods (6:00 am to 9:00 am and 3:30 pm to 6:30 pm). The Highway 17 segment is also patrolled on Sundays from 1:00 pm to 7:00 pm all year round and Saturdays from 1:00 pm to 7:00 pm during the spring and summer tourist periods.

Disabled vehicles and other incidents increase non recurrent congestion on urban freeways and increase auto emissions related to congestion during peak commute periods. The FSP program is designed to reduce congestion, improve safety, and reduce fuel consumption and auto emissions by minimizing the congestion associated with collisions and other incidents. FSP tow truck drivers are trained and supervised by the California Highway Patrol (CHP) and assist stranded motorists, clear collisions and remove debris from the roadway to keep traffic moving.

SCCRTC staff, in coordination with Caltrans and CHP, monitors the FSP implementation plan to ensure that FSP service addresses the highest congestion periods and segments on Highway 17 and Highway 1.

FSP Operational Report

Several variables are used to evaluate the level, quality and benefit of FSP service. The total annual number of FSP assists is one of the primary service indicators. Other indicators include average weight time for FSP service, hours of congestion saved, average assists per truck hour, a cost-benefit ratio and customer service ratings.

- FSP assists since 2000 have been as follows:

Annual Santa Cruz County FSP Assists

| Year | Highway 1 | Highway 17 |
|------|-----------|------------|
| 2000 | 1486 | 1296 |
| 2001 | 1312 | 1162 |
| 2002 | 1110 | 687 |
| 2003 | 1073 | 696 |
| 2004 | 991 | 1195 |
| 2005 | 1041 | 1442 |

During 2004 and 2005, the number of Highway 17 assists per FSP beat increased back to previous assist levels. The lower number of assists experienced in 2002 and 2003 may be attributed to an economic down turn which decreased Highway 17 traffic. In addition, the tow contractor during these years exhibited less reliable performance. This tow contractor is no longer engaged to provide service on Highway 17 or at any other location in the Bay Area.

- The average weight time for FSP service in 2005 reflected a decrease from previous years from over ten minutes to less than nine minutes.
- In FY02/03 the FSP service saved a total of 142,830 hours of congestion in Santa Cruz County.
- In 2005, approximately 87% of motorists assisted by the FSP who filled out a survey gave the program an excellent service rating.
- The average number of assists per truck hour has increased to .75 in 2005 from .6 assists per truck hour in 2004 and .55 assists per truck hour in 2003.
- The cost-benefit ratio considers response time, incident delays and delay savings which reflect the level of congestion relief provided by the FSP service. Investment in the FSP program is essential for providing congestion relief during a time of reduced transportation budgets and few capital projects. The Cost/Benefit Ratio for Santa Cruz County Beats for FY02/03 are as follows:

| FSP Beat | Benefit Cost Ratio |
|---|---------------------------|
| Highway 1 | 20.1:1 |
| Highway 17 | 1.5:1 |
| Santa Cruz County Average | 10.8:1 |
| San Francisco Bay Area Average (31 Beats) | 4.1:1 |

The Cost/Benefit Ratio is calculated using a model developed by Caltrans in conjunction with UC Berkeley. The model was developed using studies on multi-lane urban freeways in the San Francisco bay Area and the Los Angeles Area. Many of the parameters

assumed by the Cost/Benefit software program do not apply to Highway 17 characteristics, thus reflecting a low Cost/Benefit Ratio for Highway 17.

Caltrans, local SAFEs and UC Berkeley are working together to improve the Cost/Benefit Ratio Model to better reflect unique highway geometries and the most accurate highway count data. Highway geometry directly affects the Volume/Capacity Ratio assumptions used by the model. For example, the existence of auxiliary lanes, High Occupancy Vehicles Lanes and shoulder width are not always accounted for in the existing model; however, all affect actual capacity levels. In addition, highway counts data reflected in the model are collected by counters strategically placed on highways. In many cases counter data is not updated on a regular basis and may reflect counts from one or two locations of an entire highway segment. The next model update is expected to be released in Summer 2006.

Funding

The services provided by the FSP drivers are free to the motorists. In FY04/05, the funding for the Santa Cruz County FSP program was a combination of State FSP funds and SAFE Program reserves due to the delay in programmed STIP funds for that year. SAFE reserves are not currently available to cover FSP program shortfalls due to the cost of call box upgrades and improvements. In FY05/06 the funding for the FSP program is a combination of State FSP funds and State Transportation Improvement Program (STIP) funds. The annual expenditure for the FSP Program in FY04/05 was \$251,000. The FY05/06 estimated annual expenditure is \$283,000. The cost increase can be attributed to an increase in contractor hourly rates, the increase in the cost of fuel and to the limited FSP two truck contractor competition in Santa Cruz County.

The State FSP funds allocated to each FSP program are determined annually using a formula which includes population, freeway lane miles and hours of congestion. Because of the manner in which the data is collected, the congestion hours figure can fluctuate from year to year. In FY05/06, State FSP funds were increased by \$2 million dollars to accommodate three new FSP Programs. The Santa Cruz County shares remained on par with previous years. In FY05/06 Santa Cruz County received \$153,000 in State FSP funds.

FSP programs across the state are experiencing significant cost increases primarily due to increased fuel prices. At the same time, the Statewide FSP funding has remained constant for a number of years with the exception of additional funding for new FSP programs. FSP programs throughout the state are communicating the need for increased State FSP funding levels consistent with cost of living increases and increased fuel costs. The Statewide FSP group continues to show decision makers that FSP programs are very effective congestion relief programs.