Monterey County Freeway Service Patrol Annual Report

Fiscal Year 2017 - 2018



Tow Trucks to the Rescue

PROGRAM OVERVIEW

About this Report

This annual report is based on California's Freeway Service Patrol Program Management Information System Annual Report, which is produced by Caltrans and the University of California Berkeley. Typically, Caltrans and UC Berkeley take up to a year to process and analyze the data from each Freeway Service Patrol (FSP) program throughout the state and produce the annual Statewide report. As such, FSP Annual Reports are generally two years behind the current fiscal year, which is why the 2017-18 Annual Report is being published in February 2020.

What is the Freeway Service Patrol Program?

The purpose of the Freeway Service Patrol is to provide for the rapid removal of disabled vehicles and those involved in minor collisions from the freeway. The Freeway Service Patrol program is managed by a partnership of the Transportation Agency for Monterey County, the California Department of Transportation, and the California Highway Patrol.

The Monterey County Freeway Service Patrol operators contracting with the Transportation Agency provide motorists with the following "quick-fix" services free of charge:

- Changing a flat tire
- "Jump starting" your vehicle
- Taping cooling system hoses and refilling your radiator
- Providing you a gallon of gas

If the disabled vehicle cannot be repaired in this manner, it is towed to a California Highway Patrol designated drop location, free of charge. If needed, the Freeway Service Patrol driver will transport motorists to the nearest telephone or call the California Highway Patrol to request additional assistance. The Freeway Service Patrol has provided over 44,000 assists in Monterey County since its beginning in February 2000.

Keeping Monterey County Moving

These roving tow trucks:

- Provide direct assistance to stranded motorists, increasing safety and security for them in a moment of need.
- Reduce the number of traffic jams by quickly clearing collisions and other incidents, the cause of more than 50 percent of traffic congestion.
- Through quick response, lessen the chain of further collisions and bottlenecks caused by drivers passing by the collision scenes.
- Help save fuel and cut air-pollution emissions by reducing stop-and-go traffic.

Service Routes

To ensure maximum coverage over high-traffic areas while remaining within the allocated budget, the Freeway Service Patrol operates in two beats: one along Highway 101 from Airport Boulevard to the Highway 101/156 Interchange (Beat 1) and one along State Route 1 between Carpenter Road in the City of Carmel-by-the-Sea and Reservation Road in the City of Marina (Beat 2).

Freeway Service Patrol drivers patrol these two beats during times of peak traffic congestion from 7:00 - 9:00 a.m. and 3:00 - 7:00 p.m., Monday through Friday. Both Beats may also operate during special event weekends, such as the AT&T Pebble Beach National Pro-Am. A modified Beat 1 operates on Highway 101 from the Highway 101/156 Interchange to the San Benito County Line on Sundays during the summer months to accommodate the increase in traffic due to tourists visiting the Monterey County area, while the regular Beat 2 operates on Saturdays during the summer months to accommodate increased tourist traffic on the peninsula.

Funding

The Freeway Service Patrol program is funded by the California Department of Transportation, with a 25% local match from the Transportation Agency. The state program funding is specifically designated for Freeway Service Patrol operations. The 25% match comes from Service Authority for Freeways and Expressways (SAFE) funds, which originate from a \$1 per registered vehicle fee collected by the Department of Motor Vehicles. The Transportation Agency spent \$283,240 on the program in fiscal year 2017-18.

PERFORMANCE SUMMARY

Benefit/Cost Ratios

The effectiveness of the Freeway Service Patrol (FSP) Program is assessed by calculating the annual benefit/cost ratio of each beat. The annual savings in incident delay, fuel consumption and air pollutant emissions due to FSP service are calculated based on the number of assists, beat geometries and traffic volumes. The savings are then translated into benefits using monetary values for delay (\$21.79/vehicle-hour) and fuel consumption (\$3.27/gallon). The costs include the annual capital, operating and administrative costs for providing FSP service.

Table 1: Benefit Cost Ratio (Fiscal Year 2017-18)

| Beat | Weekday Benefit/Cost Ratio | Weekend Benefit/Cost Ratio | Combined Benefit/Cost Ratio |
|----------------------------------|----------------------------------|----------------------------------|-----------------------------------|
| 1 (Hwy 101) | 10 | 15 | 11 |
| 2 (Hwy 1) | 7 | - | 7 |
| Average Benefit/Cost Ratio | 9 | 15 | 9 |

In fiscal year 2017-18, the overall benefit cost ratio for the Monterey County Freeway Service Patrol Program was 9:1, which indicates that the tow truck program provided an average benefit of nine dollars for every dollar invested in the program. This is an 80% increase from fiscal year 2016-17 when the ratio was 5:1, or five dollars of benefit for every dollar spent. The increase is largely a reflection of a higher number of responses to collisions and debris removal. Although the number of assists varies from year to year, the program continues to provide high value assists to motorists in need.

Based on the Freeway Service Patrol statewide model, the Transportation Agency's Freeway Service Patrol program provided an annual savings of 70,268 vehicle hours of delay, 120,790 gallons of fuel savings, and a decrease of 1,062,953 kilograms per year in carbon dioxide.

Assists per Hour

Figure 1 shows the assists per hour from each of the individual FSP programs. In 2017-18, Monterey County had an assist rate of 1.03 assists per hour, ranking slightly above the statewide average assist rate of 0.94 for FSP Programs across the state.

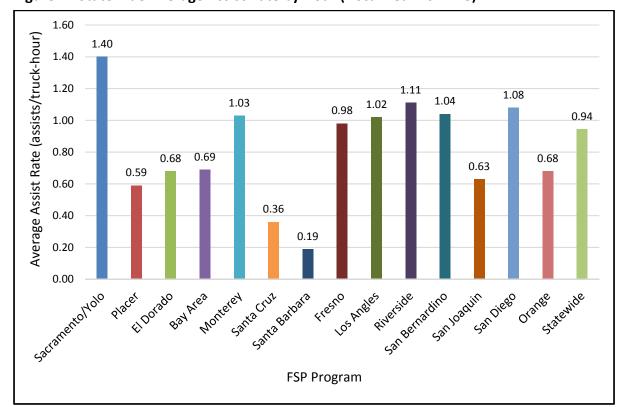


Figure 1: Statewide Average Assist Rate by Hour (Fiscal Year 2017-18)

Total Assists by Fiscal Year

In the last three fiscal years, there were a total of 6,899 assists. Figure 2 shows the annual total assists from fiscal year 2015-16 through fiscal year 2017-18. Fiscal year 2017-18 shows the number of assists for both beats above the historical average. Notably, assists along both beats saw a significant increase in 2017-18, with the amount of debris removed and abandoned vehicle assists increasing, and the collision, mechanical problem and flat tire assists declining considerably. Figures 3A, 3B and 3C show a further breakdown by quarter for fiscal year 2015-16 through fiscal year 2017-18.

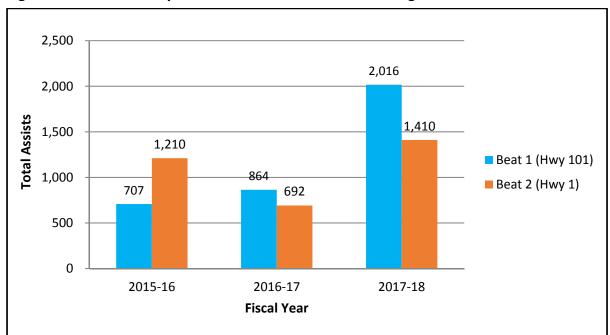
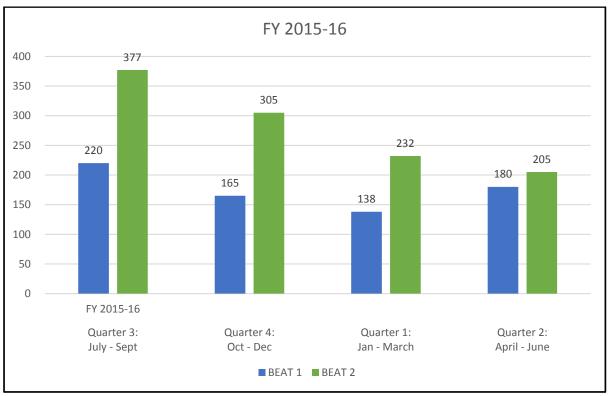


Figure 2: Total Assists by Beat for Fiscal Years 2015-16 through 2017-18





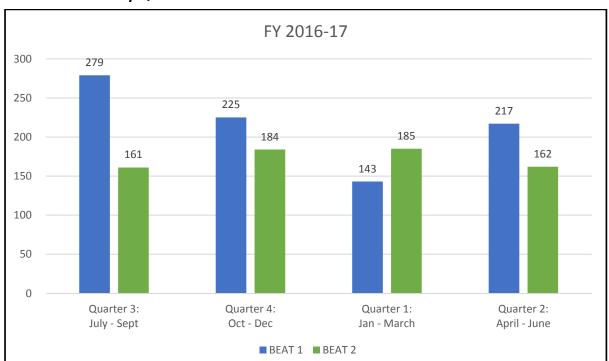
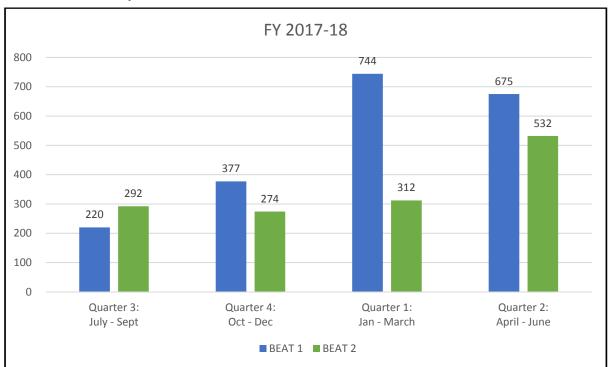


Table 3B: Assists by Quarter and Beat for Fiscal Year 2016-17





Total Assists by Quarter

Figure 4 displays the percentage of assists provided on a quarterly basis for fiscal year 2017-18. Unlike in years past, the peak summer travel season did not experience a significantly higher percentage of assists than the rest of the year. Instead, the distribution has one-third of the assists between July 2017 and December 2017 and two-thirds between January 2018 and June 2018.

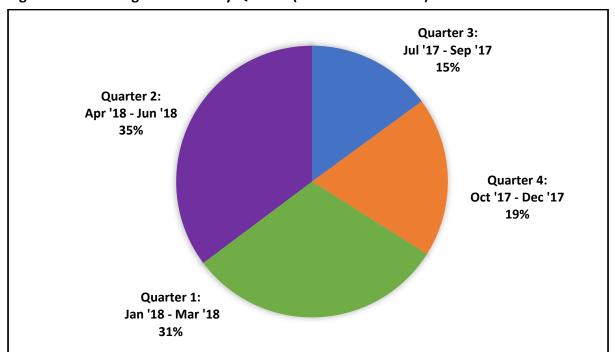


Figure 4: Percentage of Assists by Quarter (Fiscal Year 2017-18)

Total Assists by Problem Type

The three most common problem types are debris removal, collisions and "other". The "other" category refers to motorists that are idling to make adjustments to their vehicles, making personal phone calls, getting directions, driving away after the tow operators stop to assist, and/or incidents with too little information. Figures 5A, 5B and 5C show how the percentages of problem types in the last three fiscal years vary. This year saw reductions in the number of collisions, flat tires, mechanical problems, out of gas and overheating, and increases in abandoned vehicles, debris removal and "other".

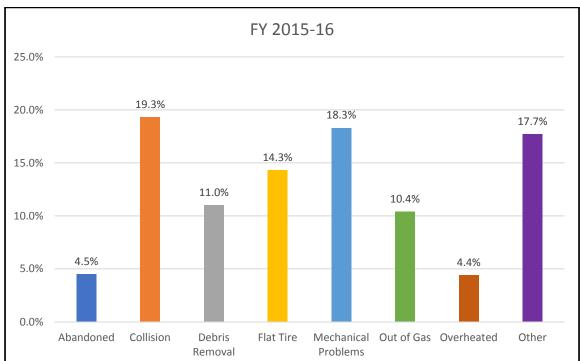
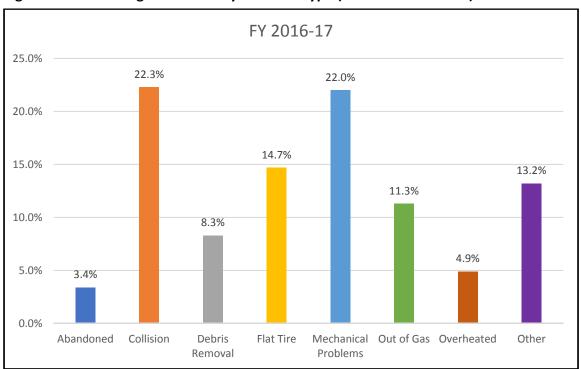


Figure 5A: Percentage of Assists by Problem Type (Fiscal Year 2015-16)





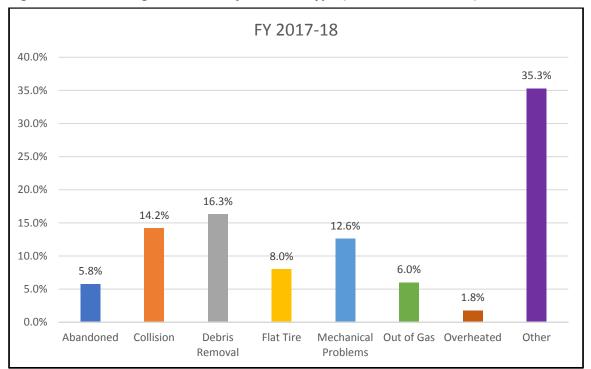


Figure 5C: Percentage of Assists by Problem Type (Fiscal Year 2017-18)

Although a majority of the causes for vehicle breakdown are common and easily fixable, many motorists lack the proper tools or ability to repair their vehicles themselves on the state highway. Therefore, assistance from the Freeway Service Patrol operators plays an important role in getting drivers back on the road safely and quickly. By clearing the problematic vehicles off the roads and removing debris, the program delivers great results in congestion relief and safety enhancement.

Average Assist Duration by Problem Type and Beat

In general, repair times for Freeway Service Patrol drivers to address common vehicle breakdowns range from 4 to 27 minutes. The average duration that Monterey County patrol drivers spent on an assist in fiscal year 2017-18 was 11.5 minutes. This is down from 16 minutes in fiscal year 2016-17.

Figure 6 shows the average assist duration by type of problem. The three most frequent types of assists for Monterey County, collisions, debris removal and mechanical problems, took an average of 26.7 minutes, 4.4 minutes and 19.4 minutes, respectively. Compared to the fiscal year 2017-18 statewide averages, Monterey County tow operators were more efficient in abandoned vehicles, debris removals, overheated and "other" and took longer for collisions, flat tires, and mechanical problems, and were consistent with the state average for out of gas assist time.

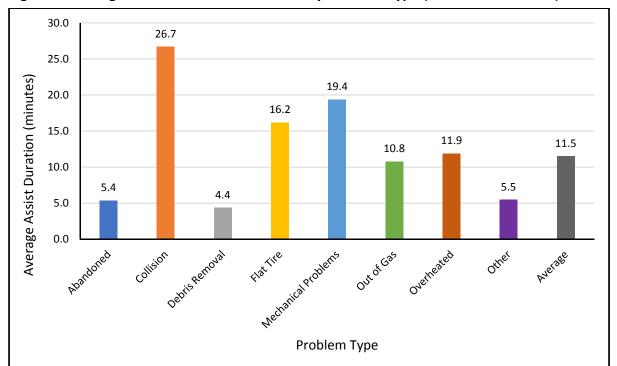


Figure 6: Average Assist Duration in Minutes by Problem Type (Fiscal Year 2017-18)

Total Assists by Vehicle Location

The primary location for assists statewide is the right shoulder where a little over half of the assists provided by Monterey County tow operators were located. However, a significant percentage of assists occur in the travel lane (19%) or on a ramp or connector (15%). The remaining assists predominately occur on the left (inside) shoulder. The "Other" category represents assists that occurred off the standard Beats when dispatched by CHP. The "Unable to locate" categories represents tow providers unable to locate a vehicle after they have been dispatched by the CHP. These percentages illustrate some of the primary program benefits:

preventing collisions by safely clearing the highways and reducing delay for other motorists by maintaining the capacity of the highway system.

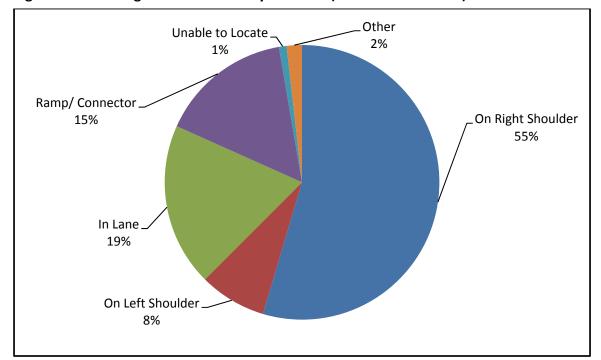


Figure 7: Percentage of Total Assist by Location (Fiscal Year 2017-18)

PUBLIC OPINION SURVEYS

Survey Responses

The Freeway Service Patrol drivers are required to provide opinion surveys to motorists with every assist. Opinions and comments received from the surveys are used to improve the service and motorists' experience. The survey seeks feedback from motorists on the length of their waiting time, the overall service rating, the way they heard about the service, and suggestions for program improvement.

What motorists say

Comments received on survey cards include some of the following:

- "Thank you for great service!
- "The driver came right away, didn't know that we had this service and he saved my day!"
- "It was wonderful to get me safely off the freeway!"
- "As a single female I really appreciate this service. Driver was wonderful."
- "The dude was awesome!"
- "EXCELLENT!!! Thank You =)"

Moving forward

In the next fiscal year, the Freeway Service Patrol will keep patrolling Monterey County's busiest commute corridors, clearing the roads and helping drivers in need. Looking ahead, major goals for the Freeway Service Patrol include increasing the rate of survey responses, maintaining a high benefit to cost ratio, and continuing to reduce vehicle hours of delay, gallons of fuel used, and total emissions of carbon dioxide in Monterey County. Keeping Monterey County's freeways clear benefits everyone.

The Monterey County Freeway Service Patrol Is Here to Help You!