

# Service Authority for Freeways and Expressways Annual Report

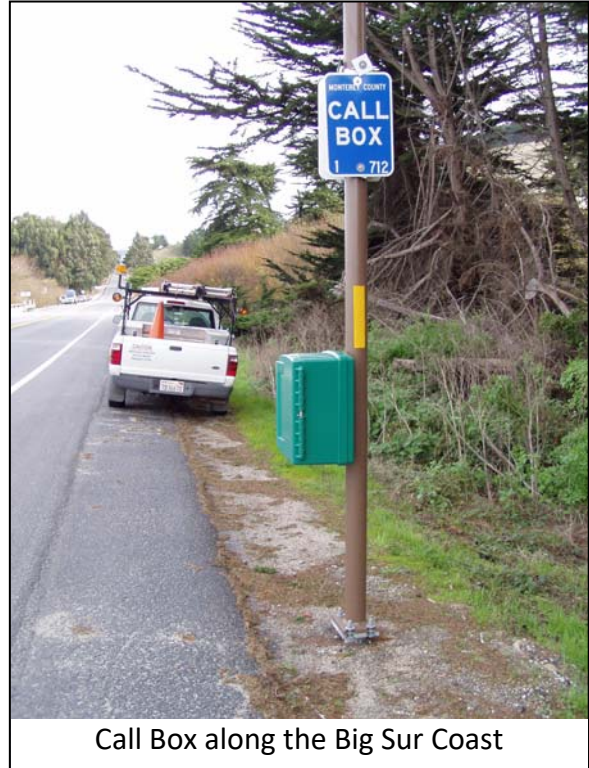
Fiscal Year 2019 - 2020



## **PROGRAM OVERVIEW**

### **About the Program**

The Transportation Agency for Monterey County's Service Authority for Freeways and Expressways (SAFE) program provides free emergency telephone service to stranded motorists through call boxes. The program is a joint effort between the California Department of Transportation (Caltrans), the California Highway Patrol and the Transportation Agency. Agency staff oversee the program contracts and daily operations. The call boxes are linked directly to a call answering center where live operators dispatch the calls to the California Highway Patrol, tow trucks and/or emergency services. Since its inception in 1999, thousands of stranded motorists have received assistance through call boxes in Monterey County.



### **Funding**

Funding for the program is from a \$1 registration fee on each registered vehicle in Monterey County collected by the Department of Motor Vehicles, which generates approximately \$387,000 per year for Monterey County. The annual operating cost for fiscal year 2019 – 2020 was \$119,000. In the past, revenues in excess of annual operating costs were utilized to pay capital costs to acquire and install each new phase of call box equipment. Currently these remaining funds are used for call box maintenance and upgrades as well as the local match for the Freeway Service Patrol program and to support other Agency motorist aid services, including the Go831 Rideshare and Traveler Information program.

### **Service Routes**

Currently, the call box program provides a system of 178 call boxes allowing motorists to request roadside assistance along the following routes: State Route 1, State Route 68, State Route 156, US Highway 101, Jolon Road (G14 and G18) and Carmel Valley Road /Arroyo Seco

Road (G16). The call boxes along Jolon Road and Carmel Valley /Arroyo Seco Roads were added in 2010 at the request of Monterey County Public Works and the South Monterey County Fire Protection District to enhance safety and provide emergency roadside assistance to motorists, given the lack of cellular reception in these areas. These locations include areas that have historically seen accidents and fires, and that have limited or no access to other forms of communication (such as pay phones and residential/commercial districts).

### **Maintenance Activities**

In February 2014, the Agency entered into a three-year maintenance and improvement contract with CASE Systems Inc. to ensure all call boxes are maintained and to evaluate Americans with Disabilities Act (ADA) access requirements to accommodate persons in wheelchairs. The contract was renewed for an additional three years in 2017. After release of an RFP for Call Box Maintenance and Improvements in April 2020, the Agency entered into a three-year contract with CASE Emergency Systems. Under this contract, CASE is responsible for replacing knocked down call boxes as well as performing corrective maintenance on all call boxes. Maintenance work includes making repairs associated with electronics, transceivers, power supply, and the interface with the cellular system, in addition to keeping call boxes clean and operational by conducting preventive maintenance field visits at least two times a year. This contract includes tasks to upgrade the existing call boxes to 4G cellular services as well as site improvements at the call boxes to improve accessibility for disabled motorists. These tasks will begin after completion of a Call Box Modernization Plan and plan approval by Caltrans and the California Highway Patrol.

### **Call Routing**

Call box calls were originally routed to and answered by the California Highway Patrol. In January 2005, the Agency shifted the call answering service to a private call answering center to reduce costs, improve service, and increase reporting. In June 2016, following a competitive procurement process, the Agency approved a new three-year contract with Keolis Transit Services, LLC to provide call box answering services. In May 2018, the Agreement with Keolis was assigned to AAMCOM, LLC. In June 2019, the Agency exercised its option to extend the contract to June 2022.

### Previous Annual Reports

The Agency has baseline data from the program starting in fiscal year 2005 - 2006 and has tracked call box usage in a consistent manner since fiscal year 2013 - 2014 for year-to-year comparisons. Since fiscal year 2014 - 2015, there has been a decline in usage as well as a shift. The majority of calls currently come from call boxes along State Route 1. The number of calls in 2019 - 2020 is down 38.5% from fiscal year 2014 - 2015 volumes.

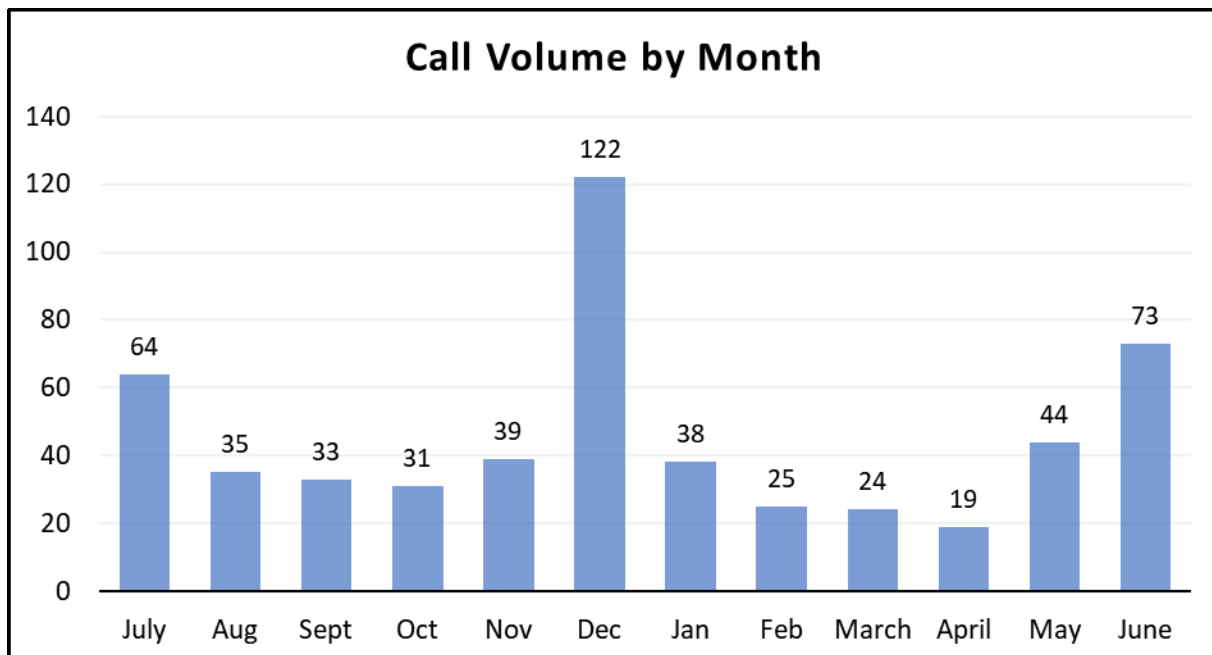
### USAGE EVALUATION

AAMCOM, our call box answering center consultant, provides call box usage data which allows the Agency to evaluate the program.

### Call Volume by Month

In fiscal year 2019 - 2020, the total number of calls was 547 with an average of 46 calls per month. This excludes the 19 calls received from call boxes outside the county. Figure 1 shows the monthly call volume for fiscal year 2019 – 2020. December had an unusually high call volume. This was due to two call boxes malfunctioning and registering a high number of open line calls into the answering center. Except for December, this year saw a more even distribution of call volumes during the year with higher volumes during the summer months of June and July.

**Figure 1: Call Volume by Month (Fiscal Year 2019 – 2020)**



The last five years have a total call volume of 3,197 with an average of 639 calls per year. Table 1 shows the monthly call volumes for fiscal years 2015 – 2016 through 2019 – 2020. The months of July and June typically see the highest call volumes while November and February typically see the lowest call volumes. On March 18, 2020, a Shelter in Place Order for Monterey County went into effect followed by a statewide order on March 19, 2020. These Orders were in response to the COVID-19 pandemic. April’s monthly volume saw a fifty-one percent reduction from the previous year. Fiscal Years 2018 – 2019 and 2019 – 2020 continue to show declines in call box usage from previous years. Fiscal year 2016 – 2017 saw a 32% reduction from the previous year. This decline is due in part to a heavier storm season.

**Table 1: Call Volume by Month (Fiscal Years 2015 – 2016 through 2019 – 2020)**

FY	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	April	May	June	Total	Avg
2019-20	64	35	33	31	39	122	38	25	24	19	44	73	547	46
2018-19	53	58	40	44	39	45	36	23	21	39	38	40	476	40
2017-18	123	53	44	57	46	69	82	37	53	57	30	97	748	62
2016-17	76	42	54	59	29	50	57	37	49	30	39	54	576	48
2015-16	119	89	84	85	56	35	46	55	67	61	59	94	850	71

3,197 639

**Call Volume by Route**

Figure 2 shows the percentage of call volume by Route. State Route 1 continues to have the largest percentage of call volumes, 44% this fiscal year. US Highway 101 with 30% had the second largest percentage of call volumes. State Route 68 has an artificially inflated call volume due to calls registered from a malfunctioning call box. Call boxes along the remaining routes make up the balance of total call volumes.

**Figure 2: Call Volume Percentage by Route (Fiscal Year 2019 – 2020)**

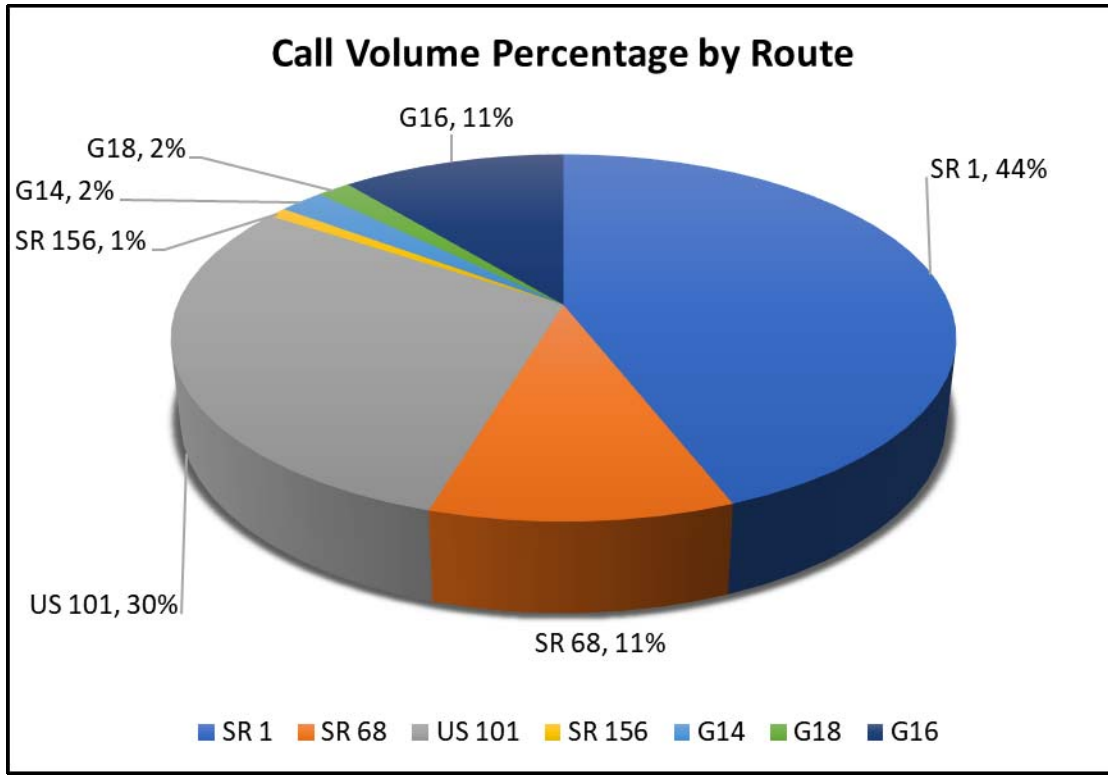


Table 2 shows the yearly percentage of call volume by route for fiscal years 2015 – 2016 through 2019 – 2020. State Route 1 continues to have the highest percentage of call volumes while State Route 156 continues to have the lowest percentage of call volumes. As noted earlier, State Route 68 is artificially inflated due to a malfunctioning call box.

**Table 2: Call Volume Percentage by Route (Fiscal Years 2015 – 2016 through 2019 – 2020)**

FY	SR 1	SR 68	US 101	SR 156	G14	G18	G16
2019-20	44%	11%	30%	1%	2%	2%	11%
2018-19	51%	2%	36%	1%	2%	1%	7%
2017-18	41%	3%	48%	1%	1%	1%	6%
2016-17	46%	2%	40%	1%	1%	1%	10%
2015-16	57%	2%	30%	1%	1%	1%	8%

**Table 3: Call Volume by Route (Fiscal Years 2015 – 2016 through 2019 – 2020)**

FY	SR 1	SR 68	US 101	SR 156	G14	G18	G16	Total
2019-20	241	58	162	5	12	9	60	547
2018-19	244	11	171	5	9	4	32	476
2017-18	306	23	360	5	5	6	43	748
2016-17	266	10	228	5	5	3	58	575
2015-16	487	15	255	8	9	10	66	850

While Table 2 shows the percentage of call volumes by route, Table 3 shows the volume of calls by route. Table 3 more clearly shows the impact of the 2016 – 2017 winter season on State Route 1. This decline in usage corresponded to the record storm season for the Big Sur Coast, where there were frequent road closures during the winter, culminating in a complete closure of State Route 1 from Pfeiffer Canyon Bridge in Big Sur to the San Luis Obispo County Line. The decline in usage for State Route 1 continued into the fiscal year 2017 - 2018 as State Route 1 was not completely reopened until July of 2018. Fiscal years 2018 – 2019 and 2019 – 2020 both saw declines in the number of calls which corresponds to the increased use of cell phones. Fiscal year 2019 – 2020 also recorded 276 calls from outside the area. Most of these were open lines that did not display a call box identification or result in any operator talk time and are not included in the number of calls received.

**Top Call Box Usage**

Table 4 lists the five most used call boxes in Monterey County. During the fiscal year 2019 - 2020, the top five call boxes logged 26 or more calls each, making them the most-used call boxes in the system. While call box MY-068-0033 on State Route 68 registered 47 calls, it was omitted from the top five most frequently used since all of these calls were from a malfunctioning call box over a two-day period. This fiscal year saw the same three call boxes in the top three. All of last year’s most frequently used boxes were on State Route 1 south of Carmel but this fiscal year and fiscal year 2017 – 2018 both included one call box from US Highway 101 in the top five.

**Table 4: Most Frequently Used Call Boxes (Fiscal Year 2019 - 2020)**

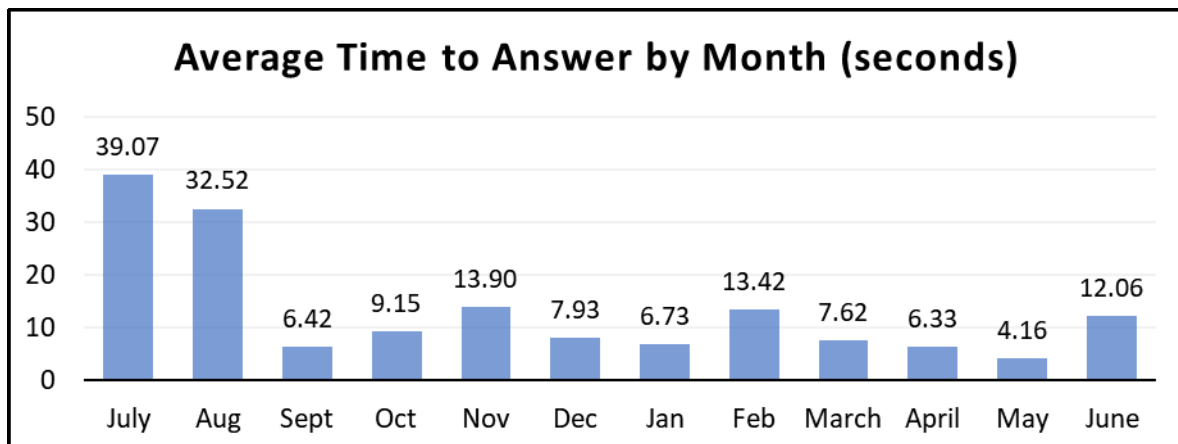
Rank	Number of Calls	Highway	Location	Sign No.
1	55	SR 1	Garrapata Beach	MY-001-0632
2	49	SR 1	Sobreanes Point	MY-001-0658
3	37	SR 1	Salmon Creek	MY-001-0025
4	34	US 101	0.3 mi North of Airport Blvd	MY-101-0858
5	26	SR 1	0.4 mi South of Nashua Road	MY-001-0899

The remaining call boxes registering calls had 20 calls or less each with the majority of these call boxes with only one or two calls each for the year.

**Time to Answer**

The time to answer a call fluctuates based on factors such as call volumes, time period (peak vs. off-peak) and staffing. The average time to answer a call during fiscal year 2019 - 2020 was approximately 14 seconds. On a monthly basis, the longest monthly average time to answer a call was 39 seconds in July. The shortest average monthly time to answer a call was approximately 4 seconds in May. As shown by Figure 3, the monthly average time to answer a call has improved greatly, beginning with September. This fiscal year’s monthly average time to answer a call of 14 seconds is substantially improved from last years average of 55 seconds.

**Figure 3: Average Time to Answer by Month (Fiscal Year 2018 - 2019)**

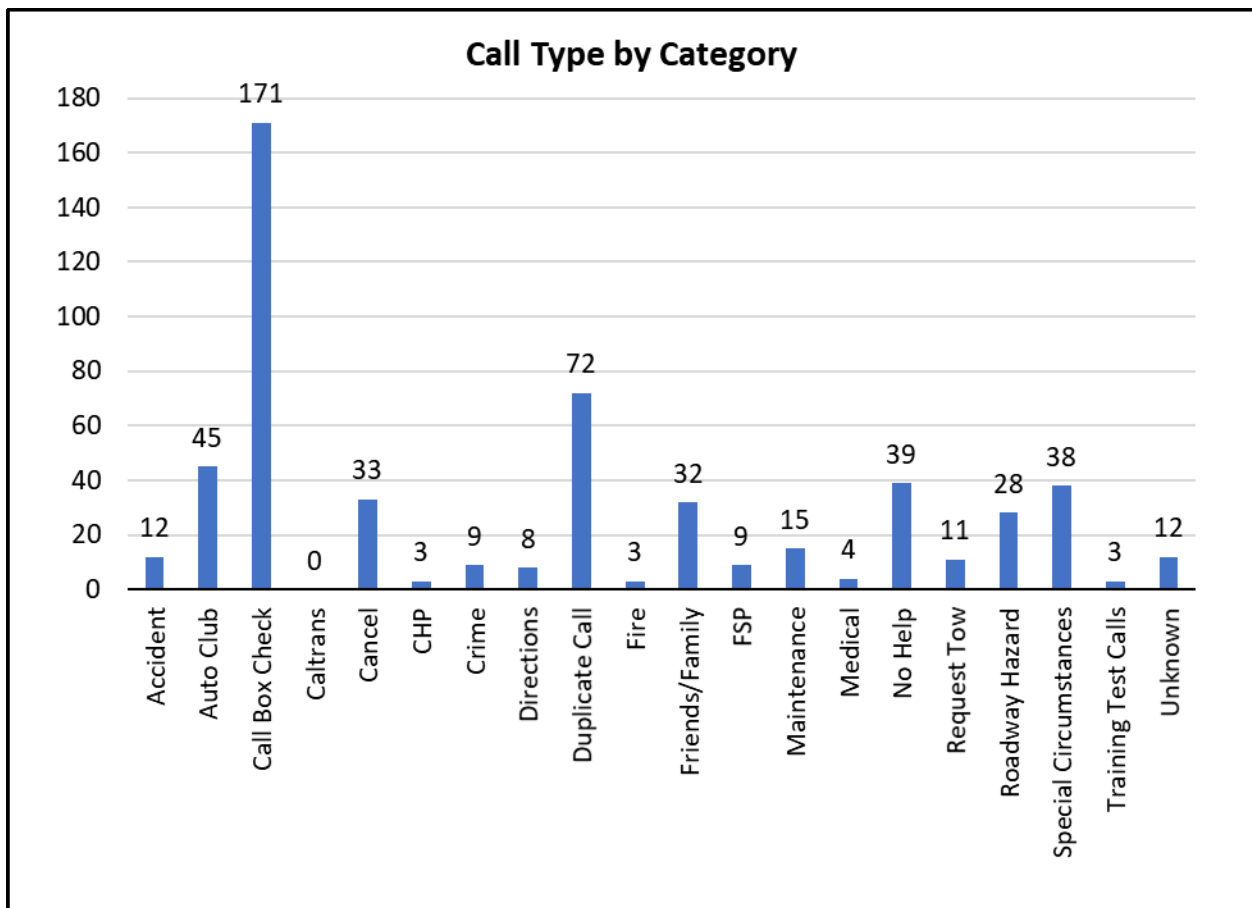




### Call Type by Category

The type of call received falls into one of 20 categories as defined by the call answering center. Figure 4 lists the number of calls under each category. If you remove the Call Box Check category and Duplicate Call category (due to a malfunctioning call box), the five most common types of calls are Auto Club, Cancel, Friends/Family, No Help and Special Circumstances. These are essentially the same top five categories as last year. Special Circumstance calls include, but are not limited to, calls where the operator feels an officer should be sent to the scene, there is a dead animal on the side of the road or a broken freeway sign.

**Figure 4: Call Type by Category (Fiscal Year 2019 - 2020)**



### CONCLUSIONS AND NEXT STEPS

The Agency will continue to track call box usage for year-to-year comparisons as well as continue to work on other motorist-aid programs, such as implementing the Go831 Ridesharing and Traveler Information System.

In 2017, the Agency conducted a multi-year usage analysis to determine if reducing the size of the call box system was warranted. The analysis showed a considerable decline in usage along State Route 1 north of Carmel, State Route 68, US Highway 101 and State Route 156. The decline corresponds to an increase in cell phone reception along these routes, as well as the continued proliferation of cell phone ownership. The analysis has been updated to include the 2017-2018 data, further confirming the identified usage trends.

Corridors under consideration for call box removal include State Route 1 between Carmel and the Santa Cruz County Line, State Route 68, US Highway 101 and State Route 156. Call boxes under consideration to remain active include those along State Route 1 south of Carmel, Jolon Road, Carmel Valley Road, Arroyo Seco Road and additional locations throughout the county with poor cellular coverage. The recommended removal strategy maintains call boxes along corridors with a high number of incidents over the last five years and in poor cell phone service areas.

Based on this analysis, the Agency is working with Caltrans and the California Highway Patrol to finalize a Call Box Modernization Plan for Monterey County, as required by the statewide call box program guidelines. The Agency expects approval of the plan in the next fiscal year and once approved, will begin implementing.