



Caltrans Division of Research,  
Innovation and System Information

# Research



# Results



Executive

**MAY 2019**

**Project Title:**

OHV Fuel Tax Study

**Task Number:** 2967

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## OHV Fuel Tax Study

Conduct a study on OHV fuel tax revenues as mandated by the California Revenue and Taxation Code, (2014 Amendments; Division 2, Part 2, Motor Vehicle Fuel Tax, Chapter 10, Section 8352.6e)

### WHAT IS THE NEED?

Caltrans is mandated by the California Revenue and Taxation Code, (2014 Amendments; Division 2, Part 2, Motor Vehicle Fuel Tax, Chapter 10, Section 8352.6e) to conduct a study on OHV fuel tax revenues in the 2014-15 fiscal year, in consultation with the Department of Parks and Recreation (DPR) and the Department of Motor Vehicles (DMV), and to provide a copy to the Legislature no later than January 1, 2016.

### WHAT WAS OUR GOAL?

Caltrans addressed questions related to the amount of fuel tax generated by off-highway vehicle users. Every month, a portion of CA fuel tax revenues is transferred from the Motor Vehicle Fuel Account into the Off-Highway Vehicle Trust Fund based upon an estimated amount “attributable to taxes imposed upon...fuel used in the operation of motor vehicles off highway.”

These revenues support the operation of nine state Off-Highway Vehicle (OHV) recreation parks around the state, and other state parks activities. The amount of the transfer is based upon a methodology developed in 1990 and first reviewed in a 2006 study. Caltrans is currently required to review the amount of transfer in an updated study.

### WHAT DID WE DO?

There are four tasks with in this contract with the ultimate result of a report that will provide updated data, findings and analysis on the study. The four tasks are:

1. Review of data and trends on OHV use and fuel purchases
2. Review of 2006 OHV fuel tax transfer study and methodology
3. Writing draft report
4. Revising draft report



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## WHAT WAS THE OUTCOME?

In this study, UCTC reviews the two studies completed in 1990 and 2006, comparing and contrasting the methodology used to estimate the fuel tax transfer. The first component of the report re-evaluates the past two studies for competency in research design, data accuracy and internal validity. We found the 2006 study to have a more rigorous study design, sample and weighting procedures, and correcting for data deficiencies in the 1990 study. The study collected data from a larger number and wider range of California households. It also corrected for several confounding factors in the 1990 study, including significant misclassification of vehicles in the DMV registration database, by independently cross-checking vehicle counts.

We found that the 1990 fuel tax transfer model systematically over-estimates fuel use by OHVs. Two important factors changed between 1990 and 2006 without adjustment to the model. The first factor was enhanced enforcement efforts, which ensured that unregistered OHVs became registered. The second major change factor was the growing popularity of four-wheel drive (4WD) vehicles for everyday use. The 1990 model estimates that 36% of highway-licensed 4WD vehicles are used for off-highway recreation, but the 2006 study found that only 11% were. This means that fuel use by 4 WDs in the fuel tax transfer model is over-estimated by a factor of three.

## WHAT IS THE BENEFIT?

To provide the legislature with expert review and analysis of OHV Fuel Tax and the amount of transfer in an updated stud