

## **CAFÉ STANDARDS IMPACT ON STATE HIGHWAY TRUST FUND**

*Jason Anderson, Air Force Institute of Technology, 2950 Hobson Way, Wright Patterson Air Force Base, OH, 45433, [Jason.anderson@afit.edu](mailto:Jason.anderson@afit.edu)*

*William Cunningham, Air Force Institute of Technology, 2950 Hobson Way, Wright Patterson Air Force Base, OH, 45433, [william.cunningham@afit.edu](mailto:william.cunningham@afit.edu)*

*Seong-Jong Joo, Air Force Institute of Technology, 2950 Hobson Way, Wright Patterson Air Force Base, OH, 45433, [seong-jong.joo@afit.edu](mailto:seong-jong.joo@afit.edu)*

### **ABSTRACT**

The US government has instituted increased CAFE standards in order to reduce CO<sub>2</sub> emissions. US and foreign automobile manufacturers must produce more efficient vehicles or face large fines. This policy has resulted in an increase in miles per gallon of gasoline and by 2025 almost all cars will be approximately twice as fuel efficient as they were in 2016. This will most likely reduce CO<sub>2</sub> emissions but it will also reduce the revenue going into the national highway trust fund as well as to states. Already, the US government has seen dramatic decreases in revenue and increases in costs related to maintenance and the construction of roads. This gap between revenue and costs is known as a budgetary shortfall, and based upon many estimates is expected to be over 1 trillion dollars by 2050. In order to curtail this widening gap, state and federal gas tax revenue must increase. There have already been numerous gas state tax increases within the last year, which has not been seen for decades within certain states. The rate and method for increases will have to be carefully implemented due to consumer outrage that may be challenging for politicians. This research details different methods that gas taxes can be increased in order to make up the difference in tax revenues due to increased fuel efficiency brought about by the increased CAFÉ standards. In every scenario presented, the change in tax rates or mileage rates will be calculated on an every year as well as multiple year basis. This analysis only considers the reduction in gas tax revenue due to increasing efficiency, and does not consider the impact of the move to alternative fueled vehicles, i.e. hydrogen, biofuel, or hybrid or full electric automobiles.

**Keywords:** CAFÉ, Highway Trust Fund, State Gas-Tax Revenue