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Michael Sivak and Brandon Schoettle	UMTRI-2011-34

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16. Abstract

This report presents information about the effects of decisions that a driver can make to influence on-road fuel economy of light-duty vehicles. These include strategic decisions (vehicle selection and maintenance), tactical decisions (route selection and vehicle load), and operational decisions (driver behavior).

The results indicate that vehicle selection has by far the most dominant effect: The best vehicle currently available for sale in the U.S. is nine times more fuel efficient than the worst vehicle. Nevertheless, the remaining factors that a driver has control over can contribute, in total, to about a 45% reduction in the on-road fuel economy *per driver*—a magnitude well worth emphasizing. Furthermore, increased efforts should also be directed at increasing vehicle occupancy, which has dropped by 30% from 1960. That drop, by itself, increased the energy intensity of driving *per occupant* by about 30%.

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