

# Introduction

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Volume 1 of this report documents development and use of the GREET (*Greenhouse Gases, Regulated Emissions, and Energy Use in Transportation*) model. The GREET model was developed to estimate fuel-cycle energy use and emissions of various transportation fuels and advanced vehicle technologies applied to three light-duty vehicle types: passenger cars, light-duty trucks 1 (LDT1), and light-duty trucks 2 (LDT2). On the basis of the default assumptions documented in Volume 1, per-mile energy use and emissions and resultant energy and emissions changes were calculated for each of the three vehicle types. In Volume 1, changes in per-mile energy use and emissions for passenger cars were presented in charts. In Volume 2, changes for LDT1 and LDT2 are presented in charts. In addition, numerical results from GREET calculations are presented for all three vehicle types.