Current State of Research of Alternate Fuel Sources for Passenger Vehicles\footnote{Research funded by APS Fellowship in the Forum on Physics and Society.} LEE MASSEY, University of Wisconsin at River Falls — The purpose of this project is to report on the current state of research in the field of alternate fuel sources for passenger vehicles. Because the number of alternate fuel options is very large, this study focuses on selected bio-fuels and briefly describes a couple of the most popular non-bio and non-renewable alternatives. The fuel and energy sources studied are compared using well-to-wheel and well-to-tank net energy balances. Data also includes relative production capabilities by volume in terms of current fossil fuels. Qualitative data includes production methods and transportability.