

Complex System Method to Assess Commercial Vehicle Fuel Consumption

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- **Objective:** Use a whole-vehicle approach to
 - Gather information on vehicle systems
 - Gather information on current and future powertrain technologies
 - Combine this information to prepare a knowledge management tool that supports high-level decision making



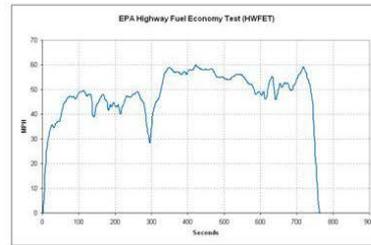
- Apply this Complex System Method to fuel economy, here to medium and heavy duty vehicles
 - Class 8 Truck
 - Light Tactical Vehicle

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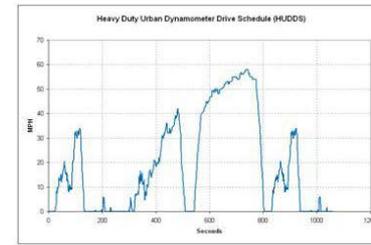
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Complex systems method

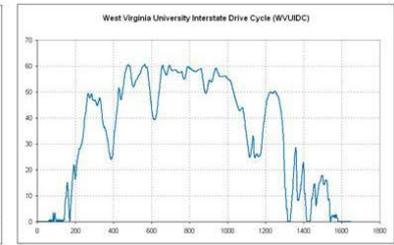
- Defines applications of interest
- Determines appropriate baseline costs and performance metrics
- Gathers expert inputs for future technology packages in timeframe of interest



Highway Fuel Economy Test (HWFET)



Heavy Duty Urban Dynamometer Drive Schedule (HUDDS)



West Virginia Univ. Interstate Drive Cycle (WVUIDC)

