

# Predicting and Utilizing the Vehicle's Past and Future Road Grade

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- Complete powertrain strategies
  - Utilize the past vehicle history
  - Predict the future road grade
  - Intelligent component controls
- Simulation Setup
  - Powertrain System Analysis Toolkit (PSAT)
  - Six Test Weights
  - Vehicle: 2010 EPA Compliant Volvo VNL
  - Three Road Profiles: Flat, Rolling Hills, and Hilly
- Showed a reduced fuel consumption (0.1-4.7%) while still maintaining adequate vehicle performance

