## Project Description

- ARPA-E sponsored NEXTCAR project with corporate partners
- Development and evaluation of control strategies to realize 20% fuel consumption savings for class 8 trucks
- Focus on leveraging connectivity and greater computational power

## Approach

- Develop simulation framework to model class 8 trucks over representative trucking routes
- Create and test control algorithms using connectivity information (traffic, grade, etc.) in simulation framework
- Verify fuel savings using Cummins X15 engine at Herrick Laboratories and using two Peterbilt 579 trucks

## Discussion

- Simulation framework is developed in MATLAB Simulink
- Truck platooning represents a significant source of fuel savings for this project: 7.25% for a two-truck platoon

## Results

Obtain 20% fuel consumption savings for connected class 8 trucks by end of 3 year project

Connectivity can significantly improve class 8 trucks’ fuel savings.