SUSTAINABLE ENERGY & A CLEAN ENVIRONMENT
Clean Transportation
April 13, 2015
Goal 3: 1.1

REDUCE TRANSPORTATION RELATED GREENHOUSE GAS EMISSIONS FROM 43.6 MILLION METRIC TONS PER YEAR TO 37.5 PER YEAR (1990 LEVELS).
1 MILLION METRIC TONS OF CARBON POLLUTION IS EQUIVALENT TO ...

ANNUAL GREENHOUSE GAS EMISSIONS FROM 210,526 passenger vehicles.

112,523,911 gallons of gasoline.
Onroad vehicles are our largest source of greenhouse gas pollution from transportation.
SOURCES OF GREENHOUSE GAS EMISSIONS

- Onroad gasoline and diesel: 30%
- Electricity, Net Consumption-based: 16%
- Residential/Commercial/Industrial (RCI): 22%
- Agriculture: 7%
- Waste Management: 5%
- Industrial Processes: 5%
- Fossil Fuel Industry: 1%
- Natural Gas, LPG: 1%
- Aviation: 8%
- Marine Vessels: 4%
- Rail: 1%

2012 data
HOW WE’RE DOING

Million metric tons of CO2e

- Natural Gas, LPG
- Rail
- Aviation
- Marine
- On Road Total
- 1990 Levels
MULTIPLE STRATEGIES

Cleaner cars

Cleaner fuels

Move people/goods more efficiently
REDUCE THE AVERAGE EMISSIONS OF GREENHOUSE GASES FOR EACH VEHICLE MILE TRAVELED IN WASHINGTON BY 25% BY 2020.
HOW WE’RE DOING

Pounds of greenhouse gas pollution per vehicle mile traveled
STRATEGIES

Incentives to encourage smart growth and development of livable communities.

Improvements in transportation system efficiency.

Promote alternative modes of travel.

Transportation planning and funding.
INCREASE THE AVERAGE MILES TRAVELED PER GALLON OF FUEL FOR WASHINGTON’S OVERALL PASSENGER AND LIGHT DUTY TRUCK FLEET FROM 19.2 MILES PER GALLON IN 2010 TO 23 MILES PER GALLON IN 2020.
HOW WE’RE DOING

Average miles per gallon

- **Actual**
- **Target**
All new cars purchased in Washington since 2009 must meet the standard.
FEDERAL EFFICIENCY STANDARDS

Covers new passenger cars and light duty trucks.
Carmaker fleet average miles per gallon.

[34.1 in 2016]
[54.5 by 2025]
Publicly owned vehicles, vessels and construction equipment are required to be fueled with electricity or biofuel, to the extent practicable.

- State agencies by June 1, 2015
- Local governments by June 1, 2018

Since 2010, all new state vehicles must achieve an average fuel economy of 40 mpg for light duty passenger vehicles, and 27 mpg for light duty vans and SUVs.
INCREASE THE NUMBER OF PLUG-IN ELECTRIC VEHICLES REGISTERED IN WASHINGTON FROM ~8,000 IN 2013 TO 50,000 IN 2020.
12,351 Plug In Electric Vehicles Registered in Washington

As of December 31, 2014

Map includes Electric Vehicles (EVs) produced by major automakers since about 2011. It does not include cars that were converted to EVs by their owners, neighborhood EVs or EV models from the 1990’s that are still registered in Washington, or motorcycles. WSDOT created this map based on data provided by the Washington State Department of Licensing.
GREATEST OPPORTUNITIES TO REDUCE GREENHOUSE GAS EMISSIONS IN WASHINGTON

Plug-in electric

Plug-in electric

Plug-in hybrid electric
ELECTRIC VEHICLES SOLD IN WASHINGTON

- BMW i3
- Ford Focus Electric
- Mitsubishi i-MiEV
- Nissan Leaf
- Smart ForTwo Electric Drive
- Tesla Model S

PHEVs sold in Washington include:
- Cadillac ELR
- Chevrolet Volt
- Ford C-MAX Energi and Ford Fusion Energi
- Toyota Prius Plug-In
WASHINGTON’S EXPANDING FAST-CHARGING STATIONS
WEST COAST ELECTRIC HIGHWAY
LEGISLATIVE & REGIONAL ACTIVITIES

Zero Emission Vehicles
Incentives
Infrastructure
Pacific Coast Collaborative