

## AFLEET Tool - Version History

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**2013** - Released October 28, 2013

**2016** - Released May 5, 2016

- Updated results to match GREET 1 2015 - <https://greet.es.anl.gov/files/summary-updates-2015>
  - Incorporated GREET 1 2015 heavy-duty module fuel economy and emissions data
  - Added gaseous hydrogen fuel cell vehicles
  - Added renewable natural gas – wastewater treatment and hydrogen SMR, H2 electrolysis pathways
  - Also incorporated changes from GREET 1 2013 to GREET 1 2014 - <https://greet.es.anl.gov/files/greet1-2014-memo>
- Added private station pricing from 2015 Clean Cities Alternative Fuel Price Report - <http://www.afdc.energy.gov/fuels/prices.html>
  - Updated public and private station pricing to be state-based rather than national average
  - Added feature to investigate a range of fuel prices for simple payback
- Added refueling station and EVSE infrastructure construction, operation, and maintenance costs using various literature sources including:
  - Gasoline and ethanol - [http://www.afdc.energy.gov/uploads/publication/increasing\\_biofuel\\_deployment.pdf](http://www.afdc.energy.gov/uploads/publication/increasing_biofuel_deployment.pdf)
  - Gaseous hydrogen - [https://www.hydrogen.energy.gov/h2a\\_delivery.html](https://www.hydrogen.energy.gov/h2a_delivery.html)
  - Propane - [http://www.afdc.energy.gov/uploads/publication/propane\\_costs.pdf](http://www.afdc.energy.gov/uploads/publication/propane_costs.pdf)
  - Compressed natural gas - [http://www.afdc.energy.gov/uploads/publication/cng\\_infrastructure\\_costs.pdf](http://www.afdc.energy.gov/uploads/publication/cng_infrastructure_costs.pdf)
  - Added option to investigate other infrastructure-related costs such as public station out-of-route mileage and fueling labor costs
- Updated vehicle air pollutant emission factors from EPA's MOVES 2014a - <https://www3.epa.gov/otaq/models/moves/index.htm>
- Updated light-duty vehicle costs - <https://www.truecar.com>
- Added national petroleum use and GHG emissions externality costs and county-specific air pollutant emission externality costs
  - Petroleum - <http://www.pnas.org/content/108/40/16554>

- GHGs - <https://www.whitehouse.gov/sites/default/files/omb/inforeg/scc-tsd-final-july-2015.pdf>
- Air pollutants - <https://sites.google.com/site/nickmullershomepage/home/ap2-apeek-model-2>
- Added new “Output” charts incorporating externality costs

**2016 rev 1- Released May 12, 2016**

- Fixed light-duty vehicle EV fuel economy formulas in TCO Sheet – Row 556, which were linked to Inputs page cell Inputs\$E\$14 (FCV), changed to the correct one Inputs\$E\$13 (EV).