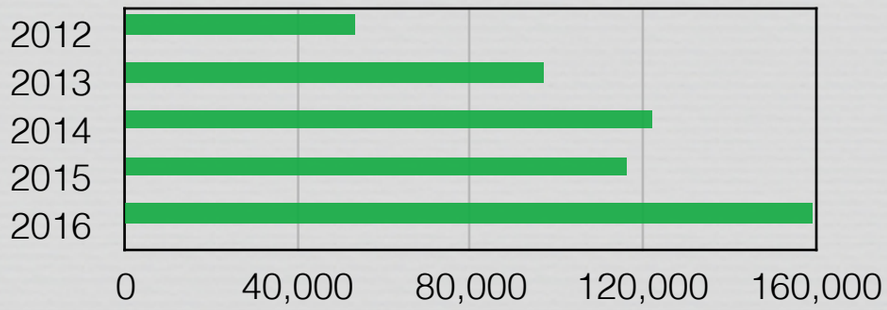
Electric Vehicle Association of Greater Washington, DC

10 COMMON EV MYTHS

1	**My electricity bill will go way up.**	While you'll spend more on electricity, the savings on gas will more than cover it. The comparison below is for 15,000 miles.

		$3.75/gal	$2.25/gal
Gasoline	25.5 MPG (Avg for new cars)	$2206	$1324
Electric	$.12 per kWh (National Avg)	$580	$580
	EV Yearly Fuel Savings	**$1626**	**$744**

2	**Americans won't buy electric cars.**	While still small, EV and Plug-In sales are growing fast. In 2016, U.S. sales were up 37% since 2015 to 159,000 vehicles.



3	**Plug-ins are too expensive.**	New technologies are typically costly. Early cell phones cost thousands. Prices go down, and the key is to compare lifetime costs. The lifetime cost of an EV is already on par with its gas-powered equivalent. EVs have dramatically lower fuel costs and require less maintenance (no oil/filter changes, no tune ups, no smog checks).
4	**EVs don't have enough range.**	On average, Americans drive less than 40 miles per day. There are many affordable EVs with over 100 miles of range. While not suited to every situation, EVs can work for many people, especially two car families.
5	**There isn't enough lithium to make all the new batteries.**	Even in a worst-case scenario (no recycling, aggressive EV sales, and no new sources), existing lithium stores will be sufficient for projected EV production for the next 75 years. Also, lithium comes from many countries, including 24% from the U.S.

6	**EVs just replace the tailpipe with a smokestack.**	Comparisons vary based on where you live. In most areas of the U.S., plug-in cars reduce emissions of greenhouse gases and most other pollutants compared with conventional gas vehicles. As the electric grid uses more natural gas, wind, and solar, electricity generation gets cleaner year by year. As gasoline cars age, they get dirtier and less efficient.
7	**Plug-in cars will lead to more coal and nuclear plants.**	Even if the majority of drivers switched to electric, the existing electric grid's off-peak/nighttime capacity for power generation is sufficient without building a single new power plant. Studies have shown that electric vehicle owners will largely charge their vehicles at night when there is plenty of capacity on the grid.
8	**Electric car batteries pose a recycling problem.**	Internal combustion engine vehicles use lead-acid batteries, and their recycle rate is about 98% in the US. The batteries for electric vehicles include even more valuable and recyclable metals. Before being recycled, many EV batteries will have a second life in stationary uses such as backup for a cell tower or home solar array.
9	**The charging infrastructure must be built first.**	Most charging will be done at home, so a public charging infrastructure isn't a prerequisite. Still, a robust infrastructure does exist and is growing rapidly. Many phone apps and websites exist to help people find charging near them. One of the most widely used is PlugShare (www.plugshare.com).
10	**The technology is too complicated.**	A modern electric car has only about five main moving parts compared with hundreds in an internal combustion engine. There are fewer visits to the dealership for an EV. No oil changes, no filters – even brake pads last two-to-three times longer than in conventional cars because EVs use regenerative braking to recapture energy which results in longer pad life.