

## **WA Plug-in Electric Vehicle Update through December 2018**

For the past several years, WSDOT has provided a semi-annual update on the number of plug-in electric vehicles (PEV) registered in the state. Department of Licensing provides raw registration data to WSDOT.

DOL recently undertook significant background research to ensure their dataset captures all the correct vehicles and subsequently rewrote their code based on this research. This effort captured many previously missed vehicles.

This update includes all registration activity through the end of December 2018. Numbers prior to December 2018 may vary slightly as the DOL continues to review their data. These small shifts (a few vehicles each year) do not affect the overall trends and patterns of EV ownership in WA.

This write up includes the following analyses:

- Total registrations of battery electric vehicles (BEV) and plug-in hybrid electric vehicles (PHEV)
- Percentage split between BEV and PHEV registration
- Year-over-year PEV registration growth
- PEV registration counts by county

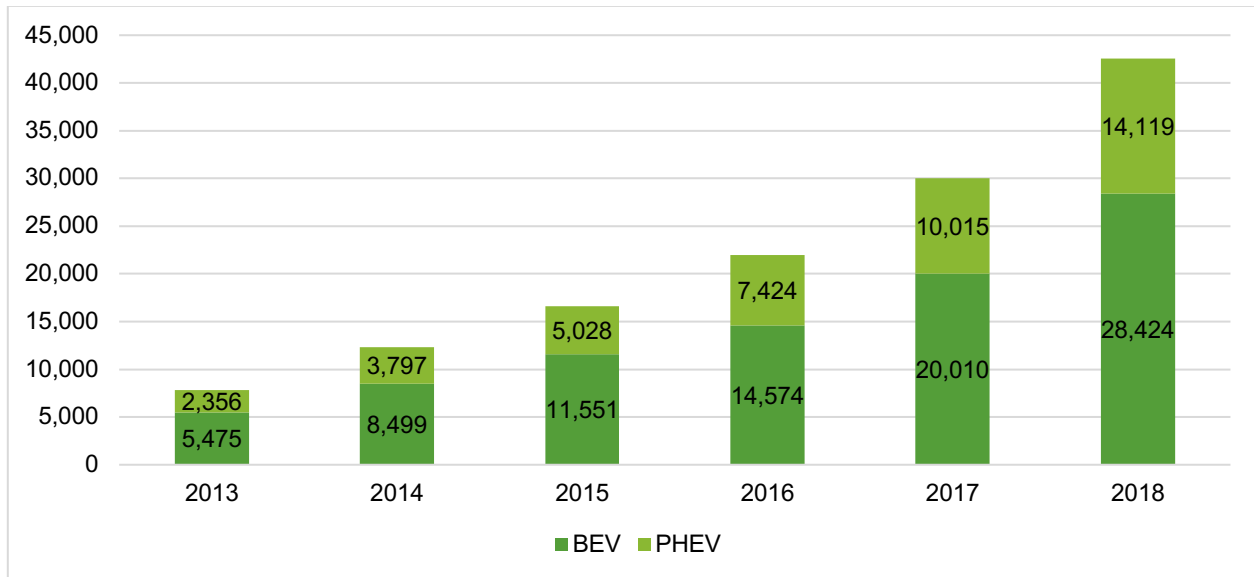
### **Highlights**

- As of December 31, 2018, there were 42,542 plug-in electric vehicles registered in Washington State.
  - Battery electric vehicles (BEV): 28,423
  - Plug-in hybrid electric vehicles (PHEV): 14,119
- Since December 2017, PEV registrations have increased by 42 percent.
- The split between BEVs and PHEVs remains about 2 BEVs for every one PHEV.
- With the delivery of Tesla Model 3 vehicles, Tesla's registrations increased from 5,873 at the end of December 2017 to 12,298 at the end of December 2018 – a 109% increase. Of all the Teslas registered in WA, 5,117 are Model 3s.

## Plug-in Electric Vehicle Registrations

Exhibit 1 shows the number of battery electric vehicle (BEV) and plug-in hybrid electric vehicle (PHEV) registrations by year. Exhibit 2 shows the total number of PEV registrations and the percent of those that are BEV and PHEV. Exhibit 3 reports the annual percent increase in the number of PEVs registered in the state.

**Exhibit 1 – Total Plug-in Electric Vehicle Registrations**



**Exhibit 2 – Total PEV Registrations and BEV/PHEV Split**

	2013	2014	2015	2016	2017	2018
Total	7,831	12,296	16,579	21,997	30,025	42,542
BEV	70%	69%	70%	66%	67%	67%
PHEV	30%	31%	30%	34%	33%	33%

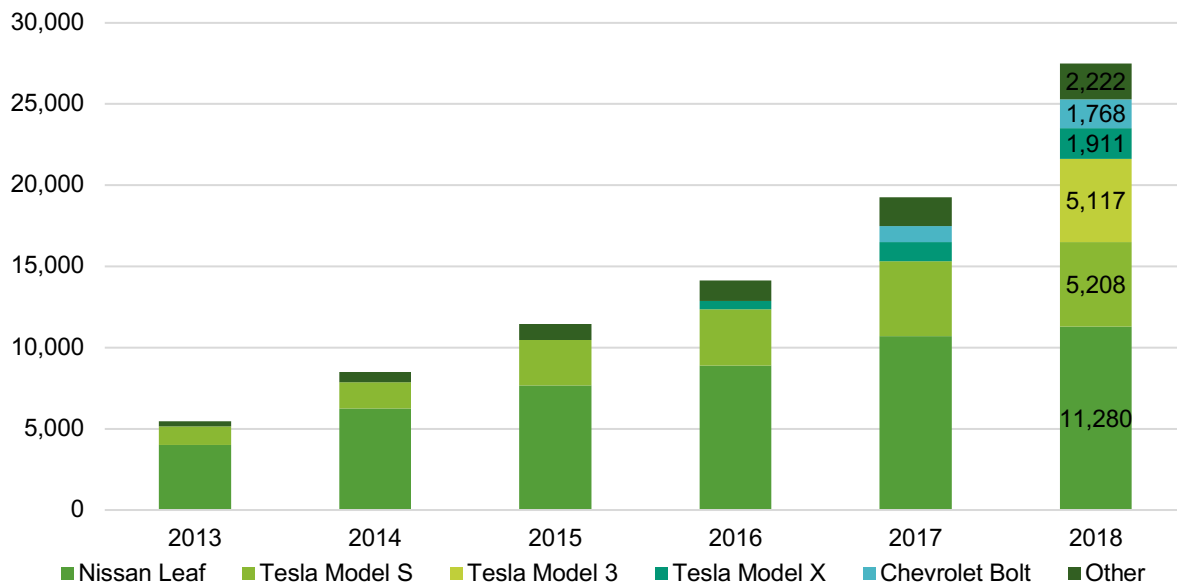
### Exhibit 3 – Annual Increase in PEV Registrations

	2014	2015	2016	2017	2018
All	57%	35%	33%	36%	42%
BEV	55%	36%	26%	37%	42%
PHEV	61%	32%	48%	35%	41%

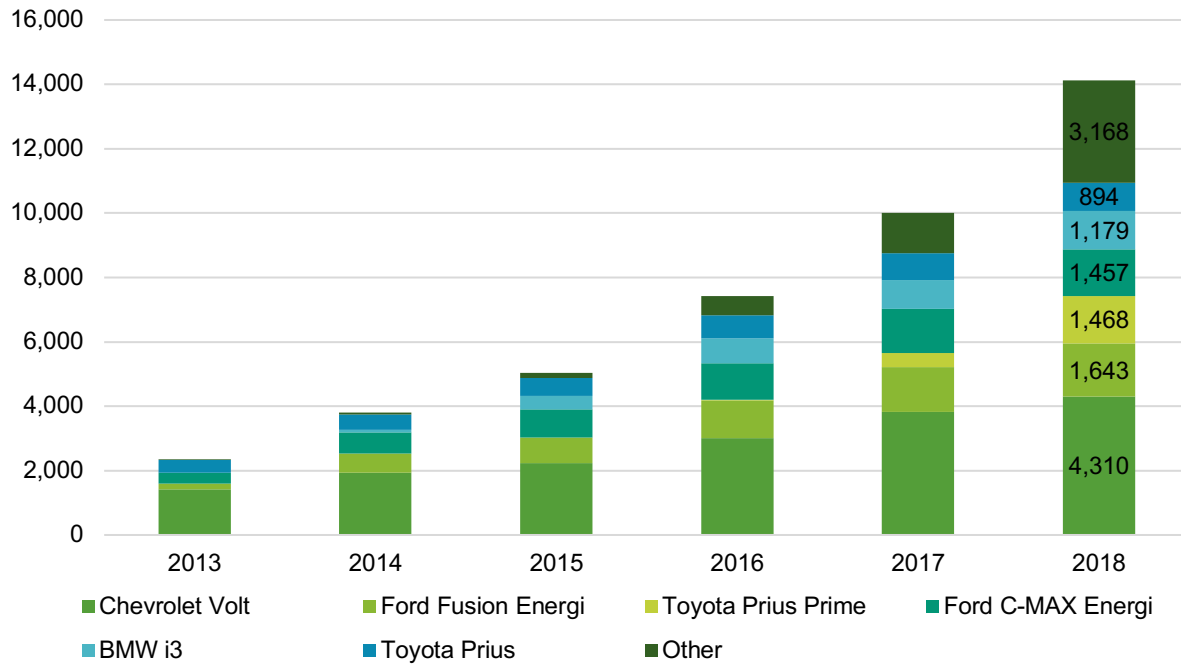
### Vehicle Registrations by Make and Model

Exhibits 4 and 5 show the number of vehicle registrations each by model for both BEVs and PHEVs, respectively.

### Exhibit 4 – Battery Electric Vehicle Registrations by Model



### Exhibit 5 – Plug-in Hybrid Electric Vehicle Registrations by Model



### Electric Vehicle Registrations by County

Exhibits 6 and 7 show the number of PEVs registered in each county.



**Exhibit 6 – WA Battery Electric Vehicle (BEV) Registration by County**

<b>County</b>	<b>Tesla</b>	<b>Nissan</b>	<b>Chevrolet</b>	<b>Kia</b>	<b>Fiat</b>	<b>BMW</b>	<b>Other</b>	<b>Total</b>
Adams	0	2	1	0	0	0	1	4
Asotin	3	9	0	0	0	0	1	13
Benton	85	113	20	3	1	1	12	235
Chelan	54	67	11	2	3	1	3	141
Clallam	40	71	29	2	0	1	12	155
Clark	522	529	83	27	31	17	50	1,259
Columbia	0	0	2	0	0	0	0	2
Cowlitz	33	33	8	4	2	1	1	82
Douglas	27	23	3	0	0	0	1	54
Ferry	2	1	0	0	0	0	0	3
Franklin	15	25	7	0	0	1	2	50
Garfield	0	0	0	0	1	0	0	1
Grant	14	13	3	1	0	0	5	36
Grays Harbor	16	20	5	5	8	0	5	59
Island	129	87	34	8	6	3	11	278
Jefferson	39	86	27	3	3	0	8	166
King	8,271	6,100	980	546	313	386	498	17,094
Kitsap	301	481	83	40	14	11	33	963
Kittitas	33	15	4	2	0	0	1	55
Klickitat	16	5	6	0	0	0	2	29
Lewis	35	38	9	3	1	0	3	89
Lincoln	0	1	0	0	0	0	1	2
Mason	44	49	9	6	1	1	7	117
Okanogan	9	7	2	0	0	0	0	18
Pacific	9	4	4	0	0	0	1	18
Pend Oreille	1	3	0	0	0	0	0	4
Pierce	569	670	129	51	38	17	76	1,550
San Juan	46	96	20	0	5	1	14	182
Skagit	103	113	33	6	5	0	8	268
Skamania	9	4	2	0	0	1	0	16
Snohomish	1,065	1,462	190	129	35	40	105	3,026
Spokane	177	191	39	6	19	3	20	455
Stevens	10	5	1	0	1	0	1	18
Thurston	249	354	101	39	24	7	36	810
Wahkiakum	1	0	0	0	0	0	0	1
Walla Walla	19	17	3	0	0	0	3	42
Whatcom	217	450	47	24	18	3	33	792
Whitman	12	7	2	1	0	0	0	22
Yakima	40	25	5	1	4	0	8	83
Unknown or Out of State	83	104	22	8	7	1	7	232
<b>Total</b>	<b>12,298</b>	<b>11,280</b>	<b>1,924</b>	<b>917</b>	<b>540</b>	<b>496</b>	<b>968</b>	<b>28,423</b>

**Exhibit 7 – WA Plug-in Hybrid Vehicle (PHEV) Registration by County**

<b>County</b>	<b>Chevrolet</b>	<b>Ford</b>	<b>Toyota</b>	<b>BMW</b>	<b>Other</b>	<b>Total</b>	<b>BEV Total</b>	<b>Grand Total</b>
Adams	1	2	1	1	1	6	4	10
Asotin	2	1	4	0	2	9	13	22
Benton	71	67	39	17	37	231	235	466
Chelan	32	2	12	4	10	60	141	201
Clallam	42	22	36	2	19	121	155	276
Clark	256	199	135	82	144	816	1,259	2,075
Columbia	0	0	2	0	0	2	2	4
Cowlitz	35	30	17	4	8	94	82	176
Douglas	15	10	8	0	4	37	54	91
Ferry	1	0	0	1	0	2	3	5
Franklin	25	20	9	2	6	62	50	112
Garfield	0	0	0	0	0	0	1	1
Grant	11	18	8	3	10	50	36	86
Grays Harbor	15	26	14	3	7	65	59	124
Island	86	67	45	11	24	233	278	511
Jefferson	36	29	27	4	17	113	166	279
King	1,744	1,195	1,019	992	1,618	6,568	17,094	23,662
Kitsap	200	126	87	40	116	569	963	1,532
Kittitas	15	2	7	1	5	30	55	85
Klickitat	9	7	7	1	4	28	29	57
Lewis	33	13	17	2	10	75	89	164
Lincoln	2	2	0	2	0	6	2	8
Mason	44	18	19	8	14	103	117	220
Okanogan	4	10	5	0	4	23	18	41
Pacific	5	2	8	1	2	18	18	36
Pend Oreille	0	2	1	0	1	4	4	8
Pierce	464	374	225	110	196	1,369	1,550	2,919
San Juan	20	11	14	6	13	64	182	246
Skagit	54	49	38	20	27	188	268	456
Skamania	4	3	7	0	1	15	16	31
Snohomish	473	392	227	122	246	1,460	3,026	4,486
Spokane	144	93	42	27	51	357	455	812
Stevens	14	4	2	2	0	22	18	40
Thurston	225	135	121	27	84	592	810	1,402
Wahkiakum	0	2	0	0	0	2	1	3
Walla Walla	22	9	8	3	8	50	42	92
Whatcom	108	83	99	17	66	373	792	1,165
Whitman	15	4	9	3	3	34	22	56
Yakima	33	22	16	6	11	88	83	171
Unknown or Out of State	50	49	27	19	35	180	232	412
<b>Total</b>	<b>4,310</b>	<b>3,100</b>	<b>2,362</b>	<b>1,543</b>	<b>2,804</b>	<b>14,119</b>	<b>28,424</b>	<b>42,542</b>