EV Project Electric Vehicle Charging Infrastructure Summary Report

78%

Region: ALL

80%

Report period: October 2013 through December 2013

Number of EV Project vehicles in region: 5110

Charging Unit Usage	Residential Level 2	Nonresidential Level 2	Accessible Level 2	Accessible DC Fast	Total
Number of charging units ¹	5,106	336	2,521	95	8,058
Number of charging events ²	401,497	15,938	70,278	11,704	499,417
Electricity consumed (AC MWh)	3,088.36	184.80	584.35	108.79	3,966.30
Percent of time with a vehicle connected to charging unit	43%	19%	6%	2%	30%
Percent of time with a vehicle drawing power from charging unit	8%	8%	3%	2%	6%

Drivato

Number of Charge Events

Residential Level 2

Private Nonresidential Level 2

Publicly Accessible Level 2 Publicly Accessible DC Fast

3%

14%



15%

Charging Unit Utilization

Publicly

Publicly



Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³

Residential Level 2

rivate Nonresidential Level 2

Publicly Accessible Level 2

Publicly Accessible DC Fast







Charging Demand: Range of Aggregate Electricity Demand versus Time of Day⁴



¹ Includes charging units that reported at least one use during the reporting period. Some residential charging units are excluded due to incomplete data.

² A charging event is defined as the period when a vehicle is connected to a charging unit, during which period some power is transferred

³ Considers the connection status of all charging units every minute

Based on 15 minute rolling average power output from all charging units

Note: throughout this report, weekdays are defined as the period from Monday 6:00 AM until Saturday 6:00 AM. The weekend is defined as the period from Saturday 6:00 AM until Monday 6:00 AM.



Region: ALL

Report period: October 2013 through December 2013

EVSE Usage	Weekday	Weekend	Overall
Number of charging events	296,379	105,118	401,497
Electricity consumed (AC MWh)	2,368.01	720.36	3,088.36
Percent of time with a vehicle connected to EVSE	42%	47%	43%
Percent of time with a vehicle drawing power from EVSE	8%	7%	8%
Average number of charging events started per EVSE per day	0.88	0.79	0.86

Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³







Region: ALL

Report period: October 2013 through December 2013

Vehicles Charged	Nissan Leaf	Chevrolet Volt	Unknown
Percent of charging events	64%	36%	0%
Percent of electricity consumed	69%	31%	0%
Individual Charging Event Statistics	Weekday (WD)	Weekend (WE)	Overall
Average length of time with vehicle connected per charging event (hr)	12.4	12.3	12.3
Average length of time with vehicle drawing power per charging event (hr)	2.3	2.0	2.2
Average electricity consumed per charging event (AC kWh)	8.0	6.9	7.7





Distribution of Electricity Consumed per Charging Event







Region: ALL

Report period: October 2013 through December 2013

EVSE Usage	Weekday	Weekend	Overall
Number of charging events	13,480	2,458	15,938
Electricity consumed (AC MWh)	151.65	33.14	184.80
Percent of time with a vehicle connected to EVSE	20%	16%	19%
Percent of time with a vehicle drawing power from EVSE	9%	5%	8%
Average number of charging events started per EVSE per day	0.62	0.29	0.53

Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³







Region: ALL

Report period: October 2013 through December 2013

Vehicles Charged	Car sharing fleet 1	Nissan Leaf	Chevrolet Volt	Unknown
Percent of charging events	39%	5%	4%	53%
Percent of electricity consumed	53%	3%	2%	41%
Individual Charging Event Statistics		Weekday (WD)	Weekend (WE)	Overall
Average length of time with vehicle connected per charging event (hr)		8.7	8.1	8.6
Average length of time with vehicle drawing power per charging event (h	ır)	3.4	4.1	3.5
Average electricity consumed per charging event (AC kWh)		11.2	13.6	11.6

Distribution of Length of Time with a Vehicle Connected per Charging Event



Distribution of Length of Time with a Vehicle Drawing Power per Charging Event



Distribution of Electricity Consumed per Charging Event



¹ Car sharing fleets in the Oregon, Philadelphia, San Diego, and San Francisco regions use private nonresidential EV Project charging units to charge their grid-connected electric drive vehicles. The use of these charging units by car sharing fleet vehicles is included in this report.



Region: ALL

Report period: October 2013 through December 2013

EVSE Usage	Weekday	Weekend	Overall
Number of charging events	57,321	12,957	70,278
Electricity consumed (AC MWh)	482.57	101.79	584.35
Percent of time with a vehicle connected to EVSE	6%	4%	6%
Percent of time with a vehicle drawing power from EVSE	3%	2%	3%
Average number of charging events started per EVSE per day	0.35	0.20	0.31

Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³







Region: ALL

Report period: October 2013 through December 2013

Vehicles Charged	Car sharing fleet 1	Nissan Leaf	Chevrolet Volt	Unknown
Percent of charging events	5%	10%	3%	82%
Percent of electricity consumed	8%	9%	2%	81%
Individual Charging Event Statistics		Weekday (WD)	Weekend (WE)	Overall
Average length of time with vehicle connected per charging event (hr)		4.5	3.6	4.4
Average length of time with vehicle drawing power per charging event (h	nr)	2.3	2.1	2.3
Average electricity consumed per charging event (AC kWh)		8.4	7.9	8.3

Distribution of Length of Time with a Vehicle Connected per Charging Event



Distribution of Length of Time with a Vehicle Drawing Power per Charging Event



Distribution of Electricity Consumed per Charging Event



¹ Car sharing fleets in the Oregon, Philadelphia, San Diego, and San Francisco regions use publicly accessible EV Project charging units to charge their grid-connected electric drive vehicles. The use of these charging units by car sharing fleet vehicles is included in this report.



DC Fast Chargers

Region: ALL

Report period: October 2013 through December 2013

EVSE Usage	Weekday	Weekend	Overall
Number of charging events	8,897	2,807	11,704
Electricity consumed (AC MWh)	82.09	26.70	108.79
Percent of time with a vehicle connected to EVSE	2%	2%	2%
Percent of time with a vehicle drawing power from EVSE	2%	2%	2%
Average number of charging events started per EVSE per day	1.42	1.14	1.34

Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³







DC Fast Chargers

Region: ALL

Report period: October 2013 through December 2013

Vehicles Charged	Car sharing fleet 1	Nissan Leaf	Chevrolet Volt	Unknown
Percent of charging events	0%	18%	0%	82%
Percent of electricity consumed	0%	16%	0%	84%
Individual Charging Event Statistics		Weekday (WD)	Weekend (WE)	Overall
Average length of time with vehicle connected per charging event (min)		24.8	24.1	24.6
Average length of time with vehicle drawing power per charging event (min)	24.7	24.1	24.6
Average electricity consumed per charging event (AC kWh)		9.2	9.5	9.3

Average electricity consumed per charging event (AC kivin)





Distribution of Length of Time with a Vehicle Drawing Power per Charging Event



Length of time with vehicle drawing power per charging event (min)

Distribution of Electricity Consumed per Charging Event



¹ Car sharing fleets in the Oregon, Philadelphia, San Diego, and San Francisco regions use publicly accessible EV Project charging units to charge their grid-connected electric drive vehicles. The use of these charging units by car sharing fleet vehicles is included in this report.



Project

EV Project Electric Vehicle Charging Infrastructure Summary Report

Region: Phoenix, AZ Metropolitan Area

Report period: October 2013 through December 2013

Number of EV Project vehicles in region: 255

Charging Unit Usage	Residential Level 2	Nonresidential Level 2	Accessible Level 2	Accessible DC Fast	Total
Number of charging units ¹	255	22	286	16	579
Number of charging events ²	21,412	626	4,326	834	27,198
Electricity consumed (AC MWh)	150.86	4.07	32.52	7.27	194.72
Percent of time with a vehicle connected to charging unit	45%	8%	2%	1%	22%
Percent of time with a vehicle drawing power from charging unit	8%	3%	1%	1%	4%

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Electricity Consumed



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Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³

Publicly Accessible Level 2

Publicly Accessible DC Fast







Charging Demand: Range of Aggregate Electricity Demand versus Time of Day⁴



Includes charging units that reported at least one use during the reporting period. Some residential charging units are excluded due to incomplete data.

A charging event is defined as the period when a vehicle is connected to a charging unit, during which period some power is transferred

Considers the connection status of all charging units every minute

Based on 15 minute rolling average power output from all charging units

Note: throughout this report, weekdays are defined as the period from Monday 6:00 AM until Saturday 6:00 AM. The weekend is defined as the period from Saturday 6:00 AM until Monday 6:00 AM.



Region: Phoenix, AZ Metropolitan Area Report period: October 2013 through December 2013

EVSE Usage	Weekday	Weekend	Overall
Number of charging events	15,590	5,822	21,412
Electricity consumed (AC MWh)	116.67	34.19	150.86
Percent of time with a vehicle connected to EVSE	44%	50%	45%
Percent of time with a vehicle drawing power from EVSE	8%	6%	8%
Average number of charging events started per EVSE per day	0.93	0.88	0.91

Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³







Region: Phoenix, AZ Metropolitan Area Report period: October 2013 through December 2013

Vehicles Charged	Nissan Leaf	Chevrolet Volt	Unknown
Percent of charging events	51%	49%	0%
Percent of electricity consumed	56%	44%	0%
Individual Charging Event Statistics	Weekday (WD)	Weekend (WE)	Overall
Average length of time with vehicle connected per charging event (hr)	12.2	11.7	12.1
Average length of time with vehicle drawing power per charging event (hr)	2.2	1.7	2.1
Average electricity consumed per charging event (AC kWh)	7.5	5.9	7.0





Distribution of Electricity Consumed per Charging Event







Region: Phoenix, AZ Metropolitan Area Report period: October 2013 through December 2013

EVSE Usage	Weekday	Weekend	Overall	
Number of charging events	578	48	626	
Electricity consumed (AC MWh)	3.85	0.22	4.07	
Percent of time with a vehicle connected to EVSE	10%	4%	8%	
Percent of time with a vehicle drawing power from EVSE	3%	0%	3%	
Average number of charging events started per EVSE per day	0.40	0.08	0.31	

Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³







Region: Phoenix, AZ Metropolitan Area Report period: October 2013 through December 2013

Vehicles Charged	Nissan Leaf	Chevrolet Volt	Unknown
Percent of charging events	0%	7%	93%
Percent of electricity consumed	0%	6%	94%
Individual Charging Event Statistics	Weekday (WD)	Weekend (WE)	Overall
Average length of time with vehicle connected per charging event (hr)	6.7	4.8	6.6
Average length of time with vehicle drawing power per charging event (hr)	2.1	1.4	2.0
Average electricity consumed per charging event (AC kWh)	6.7	4.8	6.5

Distribution of Length of Time with a Vehicle Connected per Charging Event



Distribution of Length of Time with a Vehicle Drawing Power per Charging Event



Distribution of Electricity Consumed per Charging Event





Region: Phoenix, AZ Metropolitan Area Report period: October 2013 through December 2013

EVSE Usage	Weekday	Weekend	Overall	
Number of charging events	3,663	663	4,326	
Electricity consumed (AC MWh)	28.15	4.37	32.52	
Percent of time with a vehicle connected to EVSE	3%	1%	2%	
Percent of time with a vehicle drawing power from EVSE	2%	1%	1%	
Average number of charging events started per EVSE per day	0.19	0.09	0.16	

Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³







Region: Phoenix, AZ Metropolitan Area Report period: October 2013 through December 2013

Vehicles Charged	Nissan Leaf	Chevrolet Volt	Unknown
Percent of charging events	12%	8%	80%
Percent of electricity consumed	12%	5%	83%
Individual Charging Event Statistics	Weekday (WD)	Weekend (WE)	Overall
Average length of time with vehicle connected per charging event (hr)	3.6	3.0	3.5
Average length of time with vehicle drawing power per charging event (hr)	2.1	1.8	2.1
Average electricity consumed per charging event (AC kWh)	7.7	6.7	7.5

Distribution of Length of Time with a Vehicle Connected per Charging Event





Distribution of Electricity Consumed per Charging Event





DC Fast Chargers

Region: Phoenix, AZ Metropolitan Area Report period: October 2013 through December 2013

EVSE Usage	Weekday	Weekend	Overall	
Number of charging events	696	138	834	
Electricity consumed (AC MWh)	6.03	1.24	7.27	
Percent of time with a vehicle connected to EVSE	1%	1%	1%	
Percent of time with a vehicle drawing power from EVSE	1%	1%	1%	
Average number of charging events started per EVSE per day	0.66	0.33	0.57	

Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³





Charging Demand: Range of Aggregate Electricity Demand versus Time of Day⁴



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DC Fast Chargers

Region: Phoenix, AZ Metropolitan Area Report period: October 2013 through December 2013

Vehicles Charged	Nissan Leaf	Chevrolet Volt	Unknown
Percent of charging events	21%	0%	79%
Percent of electricity consumed	18%	0%	82%
Individual Charging Event Statistics	Weekday (WD)	Weekend (WE)	Overall
Average length of time with vehicle connected per charging event (min)	21.7	22.9	21.9
Average length of time with vehicle drawing power per charging event (min)	21.7	22.8	21.9
Average electricity consumed per charging event (AC kWh)	8.7	9.0	8.7





Distribution of Length of Time with a Vehicle Drawing Power per Charging Event



Length of time with vehicle drawing power per charging event (min)

Distribution of Electricity Consumed per Charging Event





Project

EV Project Electric Vehicle Charging Infrastructure Summary Report

Region: Tucson, AZ Metropolitan Area

Report period: October 2013 through December 2013

Number of EV Project vehicles in region: 53

Number of EV Project vehicles in region. 55		Private	Publicly	Publicly	
Charging Unit Usage	Residential Level 2	Nonresidential Level 2	Accessible Level 2	Accessible DC Fast	Total
Number of charging units ¹	52	4	41	0	97
Number of charging events ²	4,031	173	373	0	4,577
Electricity consumed (AC MWh)	27.13	0.64	2.99	0.00	30.75
Percent of time with a vehicle connected to charging unit	44%	30%	1%	0%	25%
Percent of time with a vehicle drawing power from charging unit	7%	3%	1%	0%	4%

Number of Charge Events

88%



Charging Unit Utilization



Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³

Electricity Consumed







Charging Demand: Range of Aggregate Electricity Demand versus Time of Day⁴



¹ Includes charging units that reported at least one use during the reporting period. Some residential charging units are excluded due to incomplete data.

² A charging event is defined as the period when a vehicle is connected to a charging unit, during which period some power is transferred

³ Considers the connection status of all charging units every minute

Based on 15 minute rolling average power output from all charging units

Note: throughout this report, weekdays are defined as the period from Monday 6:00 AM until Saturday 6:00 AM. The weekend is defined as the period from Saturday 6:00 AM until Monday 6:00 AM.



Region: Tucson, AZ Metropolitan Area Report period: October 2013 through December 2013

EVSE Usage	Weekday	Weekend	Overall
Number of charging events	2,953	1,078	4,031
Electricity consumed (AC MWh)	20.27	6.86	27.13
Percent of time with a vehicle connected to EVSE	43%	47%	44%
Percent of time with a vehicle drawing power from EVSE	7%	6%	7%
Average number of charging events started per EVSE per day	0.86	0.80	0.84

Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³





Min percentage of charging units connected across all days





Region: Tucson, AZ Metropolitan Area Report period: October 2013 through December 2013

Vehicles Charged	Nissan Leaf	Chevrolet Volt	Unknown
Percent of charging events	81%	19%	0%
Percent of electricity consumed	81%	19%	0%
Individual Charging Event Statistics	Weekday (WD)	Weekend (WE)	Overall
Average length of time with vehicle connected per charging event (hr)	12.8	12.5	12.7
Average length of time with vehicle drawing power per charging event (hr)	2.0	1.8	1.9
Average electricity consumed per charging event (AC kWh)	6.9	6.3	6.7





Distribution of Electricity Consumed per Charging Event







Region: Tucson, AZ Metropolitan Area Report period: October 2013 through December 2013

EVSE Usage	Weekday	Weekend	Overall	
Number of charging events	291	82	373	
Electricity consumed (AC MWh)	2.36	0.63	2.99	
Percent of time with a vehicle connected to EVSE	1%	1%	1%	
Percent of time with a vehicle drawing power from EVSE	1%	1%	1%	
Average number of charging events started per EVSE per day	0.11	0.08	0.10	

Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³







Region: Tucson, AZ Metropolitan Area Report period: October 2013 through December 2013

Vehicles Charged	Nissan Leaf	Chevrolet Volt	Unknown
Percent of charging events	15%	1%	84%
Percent of electricity consumed	12%	0%	87%
Individual Charging Event Statistics	Weekday (WD)	Weekend (WE)	Overall
Average length of time with vehicle connected per charging event (hr)	3.1	2.7	3.0
Average length of time with vehicle drawing power per charging event (hr)	2.3	2.0	2.2
Average electricity consumed per charging event (AC kWh)	8.2	7.4	8.0

Distribution of Length of Time with a Vehicle Connected per Charging Event





Distribution of Electricity Consumed per Charging Event





EV Project Electric Vehicle Charging Infrastructure Summary Report

Region: Los Angeles, CA Metropolitan Area

Report period: October 2013 through December 2013

Number of EV Project vehicles in region: 503

Number of EV Project vehicles in region. 505	Desidential	Private	Publicly	Publicly	
Charging Unit Usage	Level 2	Level 2	Accessible Level 2	Accessible DC Fast	Total
Number of charging units ¹	501	25	298	3	827
Number of charging events ²	37,129	954	13,057	470	51,610
Electricity consumed (AC MWh)	281.83	8.88	109.43	4.92	405.06
Percent of time with a vehicle connected to charging unit	40%	11%	7%	3%	27%
Percent of time with a vehicle drawing power from charging unit	7%	4%	4%	3%	6%



Charging Unit Utilization



Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³







Charging Demand: Range of Aggregate Electricity Demand versus Time of Day⁴



¹ Includes charging units that reported at least one use during the reporting period. Some residential charging units are excluded due to incomplete data.

² A charging event is defined as the period when a vehicle is connected to a charging unit, during which period some power is transferred

³ Considers the connection status of all charging units every minute

Based on 15 minute rolling average power output from all charging units

Note: throughout this report, weekdays are defined as the period from Monday 6:00 AM until Saturday 6:00 AM. The weekend is defined as the period from Saturday 6:00 AM until Monday 6:00 AM.



Region: Los Angeles, CA Metropolitan Area Report period: October 2013 through December 2013

EVSE Usage	Weekday	Weekend	Overall
Number of charging events	26,885	10,244	37,129
Electricity consumed (AC MWh)	212.83	69.01	281.83
Percent of time with a vehicle connected to EVSE	39%	44%	40%
Percent of time with a vehicle drawing power from EVSE	8%	6%	7%
Average number of charging events started per EVSE per day	0.81	0.79	0.81

Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³







Region: Los Angeles, CA Metropolitan Area Report period: October 2013 through December 2013

Vehicles Charged	Nissan Leaf	Chevrolet Volt	Unknown
Percent of charging events	40%	60%	0%
Percent of electricity consumed	44%	56%	0%
Individual Charging Event Statistics	Weekday (WD)	Weekend (WE)	Overall
Average length of time with vehicle connected per charging event (hr)	12.3	11.7	12.1
Average length of time with vehicle drawing power per charging event (hr)	2.3	2.0	2.2
Average electricity consumed per charging event (AC kWh)	7.9	6.7	7.6





Distribution of Electricity Consumed per Charging Event







Region: Los Angeles, CA Metropolitan Area Report period: October 2013 through December 2013

EVSE Usage	Weekday	Weekend	Overall	
Number of charging events	818	136	954	
Electricity consumed (AC MWh)	7.59	1.29	8.88	
Percent of time with a vehicle connected to EVSE	11%	9%	11%	
Percent of time with a vehicle drawing power from EVSE	5%	2%	4%	
Average number of charging events started per EVSE per day	0.50	0.21	0.42	

Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³







Region: Los Angeles, CA Metropolitan Area Report period: October 2013 through December 2013

Vehicles Charged	Nissan Leaf	Chevrolet Volt	Unknown
Percent of charging events	7%	1%	92%
Percent of electricity consumed	6%	0%	94%
Individual Charging Event Statistics	Weekday (WD)	Weekend (WE)	Overall
Average length of time with vehicle connected per charging event (hr)	6.2	6.5	6.2
Average length of time with vehicle drawing power per charging event (hr)	2.4	2.4	2.4
Average electricity consumed per charging event (AC kWh)	9.3	9.5	9.3

Distribution of Length of Time with a Vehicle Connected per Charging Event





Distribution of Electricity Consumed per Charging Event





Region: Los Angeles, CA Metropolitan Area Report period: October 2013 through December 2013

EVSE Usage	Weekday	Weekend	Overall
Number of charging events	10,551	2,506	13,057
Electricity consumed (AC MWh)	89.76	19.67	109.43
Percent of time with a vehicle connected to EVSE	8%	5%	7%
Percent of time with a vehicle drawing power from EVSE	5%	3%	4%
Average number of charging events started per EVSE per day	0.54	0.32	0.48

Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³







Region: Los Angeles, CA Metropolitan Area Report period: October 2013 through December 2013

Vehicles Charged	Nissan Leaf	Chevrolet Volt	Unknown
Percent of charging events	2%	2%	96%
Percent of electricity consumed	2%	2%	97%
Individual Charging Event Statistics	Weekday (WD)	Weekend (WE)	Overall
Average length of time with vehicle connected per charging event (hr)	3.7	3.0	3.6
Average length of time with vehicle drawing power per charging event (hr)	2.2	2.0	2.2
Average electricity consumed per charging event (AC kWh)	8.5	7.8	8.4

Distribution of Length of Time with a Vehicle Connected per Charging Event





Distribution of Electricity Consumed per Charging Event





EV Project Electric Vehicle Charging Infrastructure Summary Report

Region: San Diego, CA Metropolitan Area

Report period: October 2013 through December 2013

Number of EV Project vehicles in region: 616

Number of EV Project vehicles in region: 616		Private	Publicly	Publicly	
Charging Unit Usage	Residential Level 2	Nonresidential Level 2	Accessible Level 2	Accessible DC Fast	Total
Number of charging units ¹	616	84	325	4	1,029
Number of charging events ²	47,658	7,603	16,022	261	71,544
Electricity consumed (AC MWh)	379.50	110.14	150.43	2.31	642.39
Percent of time with a vehicle connected to charging unit	45%	30%	11%	1%	33%
Percent of time with a vehicle drawing power from charging unit	8%	18%	6%	1%	8%



Charging Unit Utilization



Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³







Charging Demand: Range of Aggregate Electricity Demand versus Time of Day⁴



Includes charging units that reported at least one use during the reporting period. Some residential charging units are excluded due to incomplete data.

A charging event is defined as the period when a vehicle is connected to a charging unit, during which period some power is transferred

Considers the connection status of all charging units every minute

Based on 15 minute rolling average power output from all charging units

Note: throughout this report, weekdays are defined as the period from Monday 6:00 AM until Saturday 6:00 AM. The weekend is defined as the period from Saturday 6:00 AM until Monday 6:00 AM.



Region: San Diego, CA Metropolitan Area Report period: October 2013 through December 2013

EVSE Usage	Weekday	Weekend	Overall
Number of charging events	35,494	12,164	47,658
Electricity consumed (AC MWh)	292.07	87.44	379.50
Percent of time with a vehicle connected to EVSE	44%	48%	45%
Percent of time with a vehicle drawing power from EVSE	8%	6%	8%
Average number of charging events started per EVSE per day	0.87	0.76	0.84

Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³





Inner-quartile range of charging units connected across all days

Median percentage of charging

units connected across all days

Min percentage of charging units connected across all days





Region: San Diego, CA Metropolitan Area Report period: October 2013 through December 2013

Vehicles Charged	Nissan Leaf	Chevrolet Volt	Unknown
Percent of charging events	63%	37%	0%
Percent of electricity consumed	67%	33%	0%
Individual Charging Event Statistics	Weekday (WD)	Weekend (WE)	Overall
Average length of time with vehicle connected per charging event (hr)	13.0	13.3	13.1
Average length of time with vehicle drawing power per charging event (hr)	2.3	2.0	2.3
Average electricity consumed per charging event (AC kWh)	8.2	7.2	8.0





Distribution of Electricity Consumed per Charging Event



Distribution of Length of Time with a Vehicle Drawing Power per Charging Event





Region: San Diego, CA Metropolitan Area Report period: October 2013 through December 2013

EVSE Usage	Weekday	Weekend	Overall
Number of charging events	5,773	1,830	7,603
Electricity consumed (AC MWh)	82.98	27.16	110.14
Percent of time with a vehicle connected to EVSE	31%	28%	30%
Percent of time with a vehicle drawing power from EVSE	19%	16%	18%
Average number of charging events started per EVSE per day	1.04	0.84	0.98

Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³







Region: San Diego, CA Metropolitan Area Report period: October 2013 through December 2013

Vehicles Charged	Car2Go fleet ¹	Nissan Leaf	Chevrolet Volt	Unknown
Percent of charging events	78%	3%	1%	18%
Percent of electricity consumed	86%	2%	1%	11%
Individual Charging Event Statistics		Weekday (WD)	Weekend (WE)	Overall
Average length of time with vehicle connected per charging event (hr)		7.2	8.0	7.4
Average length of time with vehicle drawing power per charging event (h	ır)	4.4	4.6	4.4
Average electricity consumed per charging event (AC kWh)		14.3	14.9	14.5

Distribution of Length of Time with a Vehicle Connected per Charging Event



Distribution of Length of Time with a Vehicle Drawing Power per Charging Event



Distribution of Electricity Consumed per Charging Event



¹ Car2Go operates a car sharing fleet of Smart Fortwo Electric Drive vehicles in this region. Usage of private nonresidential EV Project charging units to charge these vehicles is included in this report.



Region: San Diego, CA Metropolitan Area Report period: October 2013 through December 2013

EVSE Usage	Weekday	Weekend	Overall	
Number of charging events	12,765	3,257	16,022	
Electricity consumed (AC MWh)	118.86	31.57	150.43	
Percent of time with a vehicle connected to EVSE	12%	9%	11%	
Percent of time with a vehicle drawing power from EVSE	6%	4%	6%	
Average number of charging events started per EVSE per day	0.60	0.39	0.54	

Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³






Region: San Diego, CA Metropolitan Area Report period: October 2013 through December 2013

Vehicles Charged	Car2Go fleet 1	Nissan Leaf	Chevrolet Volt	Unknown
Percent of charging events	22%	9%	3%	66%
Percent of electricity consumed	29%	7%	2%	62%
Individual Charging Event Statistics		Weekday (WD)	Weekend (WE)	Overall
Average length of time with vehicle connected per charging event (hr)		5.0	4.5	4.9
Average length of time with vehicle drawing power per charging event (hr)	2.5	2.6	2.5
Average electricity consumed per charging event (AC kWh)		9.3	9.7	9.4

Distribution of Length of Time with a Vehicle Connected per Charging Event



Distribution of Length of Time with a Vehicle Drawing Power per Charging Event



Distribution of Electricity Consumed per Charging Event



¹ Car2Go operates a car sharing fleet of Smart Fortwo Electric Drive vehicles in this region. Usage of publicly accessible EV Project charging units to charge these vehicles is included in this report.



EV Project Electric Vehicle Charging Infrastructure Summary Report

Region: San Francisco, CA Metropolitan Area Report period: October 2013 through December 2013

Number of EV Project vehicles in region: 1129

Number of EV Project vehicles in region. 1129	Posidontial	Private	Publicly	Publicly	
Charging Unit Usage	Level 2	Level 2	Level 2	DC Fast	Total
Number of charging units ¹	1,132	21	146	27	1,326
Number of charging events ²	73,832	507	7,304	4,612	86,255
Electricity consumed (AC MWh)	642.30	5.17	63.02	43.79	754.28
Percent of time with a vehicle connected to charging unit	37%	7%	8%	3%	32%
Percent of time with a vehicle drawing power from charging unit	7%	3%	5%	3%	7%

1%

8%

Number of Charge Events

86%



Charging Unit Utilization



Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³

Electricity Consumed







Charging Demand: Range of Aggregate Electricity Demand versus Time of Day⁴



Includes charging units that reported at least one use during the reporting period. Some residential charging units are excluded due to incomplete data.

A charging event is defined as the period when a vehicle is connected to a charging unit, during which period some power is transferred

Considers the connection status of all charging units every minute

Based on 15 minute rolling average power output from all charging units

Note: throughout this report, weekdays are defined as the period from Monday 6:00 AM until Saturday 6:00 AM. The weekend is defined as the period from Saturday 6:00 AM until Monday 6:00 AM.



Region: San Francisco, CA Metropolitan Area Report period: October 2013 through December 2013

EVSE Usage	Weekday	Weekend	Overall
Number of charging events	54,526	19,306	73,832
Electricity consumed (AC MWh)	497.41	144.90	642.30
Percent of time with a vehicle connected to EVSE	36%	39%	37%
Percent of time with a vehicle drawing power from EVSE	8%	6%	7%
Average number of charging events started per EVSE per day	0.73	0.66	0.71

Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³







Region: San Francisco, CA Metropolitan Area Report period: October 2013 through December 2013

Vehicles Charged	Nissan Leaf	Chevrolet Volt	Unknown
Percent of charging events	100%	0%	0%
Percent of electricity consumed	100%	0%	0%
Individual Charging Event Statistics	Weekday (WD)	Weekend (WE)	Overall
Average length of time with vehicle connected per charging event (hr)	12.8	12.1	12.6
Average length of time with vehicle drawing power per charging event (hr)	2.5	2.1	2.4
Average electricity consumed per charging event (AC kWh)	9.1	7.5	8.7





Distribution of Electricity Consumed per Charging Event







Region: San Francisco, CA Metropolitan Area Report period: October 2013 through December 2013

EVSE Usage	Weekday	Weekend	Overall	
Number of charging events	467	40	507	
Electricity consumed (AC MWh)	4.83	0.34	5.17	
Percent of time with a vehicle connected to EVSE	9%	4%	7%	
Percent of time with a vehicle drawing power from EVSE	4%	1%	3%	
Average number of charging events started per EVSE per day	0.34	0.07	0.26	

Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³







Region: San Francisco, CA Metropolitan Area Report period: October 2013 through December 2013

Vehicles Charged	City CarShare fleet ¹	Nissan Leaf	Chevrolet Volt	Unknown
Percent of charging events	0%	20%	0%	80%
Percent of electricity consumed	0%	13%	0%	87%
Individual Charging Event Statistics		Weekday (WD)	Weekend (WE)	Overall
Average length of time with vehicle connected per charging event (hr)		6.9	5.5	6.8
Average length of time with vehicle drawing power per charging event	(hr)	2.8	2.6	2.8
Average electricity consumed per charging event (AC kWh)		10.2	9.8	10.2

Distribution of Length of Time with a Vehicle Connected per Charging Event



Distribution of Length of Time with a Vehicle Drawing Power per Charging Event



Distribution of Electricity Consumed per Charging Event



¹ City CarShare operates a car sharing fleet of Nissan Leaf, Chevrolet Volt, and Mitsubishi i-Miev vehicles in this region. Usage of private nonresidential EV Project charging units to charge these vehicles is included in this report.



Region: San Francisco, CA Metropolitan Area Report period: October 2013 through December 2013

EVSE Usage	Weekday	Weekend	Overall	
Number of charging events	6,546	758	7,304	
Electricity consumed (AC MWh)	58.00	5.02	63.02	
Percent of time with a vehicle connected to EVSE	10%	3%	8%	
Percent of time with a vehicle drawing power from EVSE	7%	1%	5%	
Average number of charging events started per EVSE per day	0.69	0.20	0.55	

Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³







Region: San Francisco, CA Metropolitan Area Report period: October 2013 through December 2013

Vehicles Charged	City CarShare fleet ¹	Nissan Leaf	Chevrolet Volt	Unknown
Percent of charging events	0%	9%	0%	91%
Percent of electricity consumed	0%	8%	0%	92%
Individual Charging Event Statistics		Weekday (WD)	Weekend (WE)	Overall
Average length of time with vehicle connected per charging event (hr)		3.6	3.1	3.5
Average length of time with vehicle drawing power per charging event	(hr)	2.3	1.7	2.3
Average electricity consumed per charging event (AC kWh)		8.9	6.7	8.6

Distribution of Length of Time with a Vehicle Connected per Charging Event



Distribution of Length of Time with a Vehicle Drawing Power per Charging Event

WE



Distribution of Electricity Consumed per Charging Event



¹ City CarShare operates a car sharing fleet of Nissan Leaf, Chevrolet Volt, and Mitsubishi i-Miev vehicles in this region. Usage of publicly accessible EV Project charging units to charge these vehicles is included in this report.



DC Fast Chargers

Region: San Francisco, CA Metropolitan Area Report period: October 2013 through December 2013

EVSE Usage	Weekday	Weekend	Overall
Number of charging events	3,636	976	4,612
Electricity consumed (AC MWh)	34.37	9.42	43.79
Percent of time with a vehicle connected to EVSE	4%	2%	3%
Percent of time with a vehicle drawing power from EVSE	4%	2%	3%
Average number of charging events started per EVSE per day	2.04	1.39	1.86

Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³







DC Fast Chargers

Region: San Francisco, CA Metropolitan Area Report period: October 2013 through December 2013

Vehicles Charged	City CarShare fleet ¹	Nissan Leaf	Chevrolet Volt	Unknown
Percent of charging events	0%	16%	0%	84%
Percent of electricity consumed	0%	14%	0%	86%
Individual Charging Event Statistics		Weekday (WD)	Weekend (WE)	Overall
Average length of time with vehicle connected per charging event (mir	ר)	25.7	23.3	25.2
Average length of time with vehicle drawing power per charging event	(min)	25.7	23.3	25.2
Average electricity consumed per charging event (AC kWh)		9.4	9.7	9.5

Distribution of Length of Time with a Vehicle Connected per Charging Event



Distribution of Length of Time with a Vehicle Drawing Power per Charging Event



Length of time with vehicle drawing power per charging event (min)

Distribution of Electricity Consumed per Charging Event



¹ City CarShare operates a car sharing fleet of Nissan Leaf, Chevrolet Volt, and Mitsubishi i-Miev vehicles in this region. Usage of publicly accessible EV Project charging units to charge these vehicles is included in this report.



EV Project Electric Vehicle Charging Infrastructure Summary Report

Region: Washington, D.C. Metropolitan Area

Report period: October 2013 through December 2013

Number of EV Project vehicles in region: 255

Charging Unit Usage		Residential Level 2	Nonresidential Level 2	Accessible Level 2	Accessible DC Fast	Total
Number of charging units ¹		255	3	22	0	280
Number of charging events ²		22,883	37	353	0	23,273
Electricity consumed (AC MWh)		154.82	0.46	2.72	0.00	157.99
Percent of time with a vehicle connected to cha	arging unit	51%	4%	2%	0%	47%
Percent of time with a vehicle drawing power f	om charging unit	9%	2%	2%	0%	8%
Number of Charge Events	Electricity	Consumed		Charging L	Init Utilization	





Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³







Charging Demand: Range of Aggregate Electricity Demand versus Time of Day⁴



Includes charging units that reported at least one use during the reporting period. Some residential charging units are excluded due to incomplete data.

A charging event is defined as the period when a vehicle is connected to a charging unit, during which period some power is transferred

Considers the connection status of all charging units every minute

Based on 15 minute rolling average power output from all charging units

Note: throughout this report, weekdays are defined as the period from Monday 6:00 AM until Saturday 6:00 AM. The weekend is defined as the period from Saturday 6:00 AM until Monday 6:00 AM.



Region: Washington, D.C. Metropolitan Area Report period: October 2013 through December 2013

EVSE Usage	Weekday	Weekend	Overall
Number of charging events	16,786	6,097	22,883
Electricity consumed (AC MWh)	119.49	35.33	154.82
Percent of time with a vehicle connected to EVSE	49%	59%	51%
Percent of time with a vehicle drawing power from EVSE	9%	7%	9%
Average number of charging events started per EVSE per day	1.00	0.92	0.98

Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³







Region: Washington, D.C. Metropolitan Area Report period: October 2013 through December 2013

Vehicles Charged	Nissan Leaf	Chevrolet Volt	Unknown
Percent of charging events	11%	89%	0%
Percent of electricity consumed	12%	88%	0%
Individual Charging Event Statistics	Weekday (WD)	Weekend (WE)	Overall
Average length of time with vehicle connected per charging event (hr)	12.7	13.3	12.9
Average length of time with vehicle drawing power per charging event (hr)	2.2	1.8	2.1
Average electricity consumed per charging event (AC kWh)	7.1	5.8	6.8

Distribution of Length of Time with a Vehicle Connected per Charging Event



Distribution of Electricity Consumed per Charging Event







Region: Washington, D.C. Metropolitan Area Report period: October 2013 through December 2013

EVSE Usage	Weekday	Weekend	Overall	
Number of charging events	297	56	353	
Electricity consumed (AC MWh)	2.19	0.52	2.72	
Percent of time with a vehicle connected to EVSE	2%	1%	2%	
Percent of time with a vehicle drawing power from EVSE	2%	1%	2%	
Average number of charging events started per EVSE per day	0.21	0.10	0.18	

Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³







Region: Washington, D.C. Metropolitan Area Report period: October 2013 through December 2013

Vehicles Charged	Nissan Leaf	Chevrolet Volt	Unknown
Percent of charging events	1%	25%	75%
Percent of electricity consumed	1%	11%	89%
Individual Charging Event Statistics	Weekday (WD)	Weekend (WE)	Overall
Average length of time with vehicle connected per charging event (hr)	2.5	2.7	2.5
Average length of time with vehicle drawing power per charging event (hr)	2.0	2.4	2.0
Average electricity consumed per charging event (AC kWh)	7.3	9.7	7.7

Distribution of Length of Time with a Vehicle Connected per Charging Event



Distribution of Length of Time with a Vehicle Drawing Power per Charging Event

WE



Distribution of Electricity Consumed per Charging Event





EV Project Electric Vehicle Charging Infrastructure Summary Report

Region: Oregon

Report period: October 2013 through December 2013

Number of EV Project vehicles in region: 437

Number of EV Project vehicles in region. 437	Posidontial	Private	Publicly	Publicly	
Charging Unit Usage	Level 2	Level 2	Level 2	DC Fast	Total
Number of charging units ¹	440	24	378	17	859
Number of charging events ²	36,731	851	8,295	2,058	47,935
Electricity consumed (AC MWh)	272.41	7.63	55.05	19.69	354.77
Percent of time with a vehicle connected to charging unit	46%	27%	6%	2%	27%
Percent of time with a vehicle drawing power from charging unit	8%	7%	2%	2%	5%



Charging Unit Utilization



Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³







Charging Demand: Range of Aggregate Electricity Demand versus Time of Day⁴



¹ Includes charging units that reported at least one use during the reporting period. Some residential charging units are excluded due to incomplete data.

² A charging event is defined as the period when a vehicle is connected to a charging unit, during which period some power is transferred

³ Considers the connection status of all charging units every minute

Based on 15 minute rolling average power output from all charging units

Note: throughout this report, weekdays are defined as the period from Monday 6:00 AM until Saturday 6:00 AM. The weekend is defined as the period from Saturday 6:00 AM until Monday 6:00 AM.



Region: Oregon

Report period: October 2013 through December 2013

EVSE Usage	Weekday	Weekend	Overall
Number of charging events	27,295	9,436	36,731
Electricity consumed (AC MWh)	208.87	63.54	272.41
Percent of time with a vehicle connected to EVSE	45%	49%	46%
Percent of time with a vehicle drawing power from EVSE	9%	7%	8%
Average number of charging events started per EVSE per day	0.94	0.82	0.91

Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³





Inner-quartile range of charging units connected across all days

Median percentage of charging units connected across all days

Min percentage of charging units connected across all days





Region: Oregon

Report period: October 2013 through December 2013

Vehicles Charged	Nissan Leaf	Chevrolet Volt	Unknown
Percent of charging events	68%	32%	0%
Percent of electricity consumed	73%	27%	0%
Individual Charging Event Statistics	Weekday (WD)	Weekend (WE)	Overall
Average length of time with vehicle connected per charging event (hr)	12.4	12.2	12.4
Average length of time with vehicle drawing power per charging event (hr)	2.2	2.0	2.2
Average electricity consumed per charging event (AC kWh)	7.6	6.7	7.4





Distribution of Electricity Consumed per Charging Event







Region: Oregon

Report period: October 2013 through December 2013

EVSE Usage	Weekday	Weekend	Overall	
Number of charging events	767	84	851	
Electricity consumed (AC MWh)	6.55	1.08	7.63	
Percent of time with a vehicle connected to EVSE	27%	26%	27%	
Percent of time with a vehicle drawing power from EVSE	8%	5%	7%	
Average number of charging events started per EVSE per day	0.50	0.14	0.40	

Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³







Region: Oregon

Report period: October 2013 through December 2013

Vehicles Charged	Car2Go fleet 1	Nissan Leaf	Chevrolet Volt	Unknown
Percent of charging events	27%	2%	0%	71%
Percent of electricity consumed	41%	1%	0%	58%
Individual Charging Event Statistics		Weekday (WD)	Weekend (WE)	Overall
Average length of time with vehicle connected per charging event (hr)		17.4	9.0	16.6
Average length of time with vehicle drawing power per charging event (hr	.)	4.7	3.1	4.5
Average electricity consumed per charging event (AC kWh)		8.7	11.4	9.0





Distribution of Length of Time with a Vehicle Drawing Power per Charging Event



Distribution of Electricity Consumed per Charging Event



¹ Car2Go operates a car sharing fleet of Smart Fortwo Electric Drive vehicles in this region. Usage of private nonresidential EV Project charging units to charge these vehicles is included in this report.



Region: Oregon

Report period: October 2013 through December 2013

EVSE Usage	Weekday	Weekend	Overall	
Number of charging events	6,532	1,763	8,295	
Electricity consumed (AC MWh)	43.23	11.81	55.05	
Percent of time with a vehicle connected to EVSE	6%	5%	6%	
Percent of time with a vehicle drawing power from EVSE	2%	2%	2%	
Average number of charging events started per EVSE per day	0.26	0.18	0.24	

Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³







Region: Oregon

Report period: October 2013 through December 2013

Vehicles Charged	Car2Go fleet ¹	Nissan Leaf	Chevrolet Volt	Unknown
Percent of charging events	3%	17%	2%	78%
Percent of electricity consumed	7%	15%	2%	76%
Individual Charging Event Statistics		Weekday (WD)	Weekend (WE)	Overall
Average length of time with vehicle connected per charging event (hr)		6.4	3.9	5.9
Average length of time with vehicle drawing power per charging event (hr)	2.1	2.2	2.1
Average electricity consumed per charging event (AC kWh)		6.6	6.7	6.6

Distribution of Length of Time with a Vehicle Connected per Charging Event



Distribution of Length of Time with a Vehicle Drawing Power per Charging Event



Distribution of Electricity Consumed per Charging Event



¹ Car2Go operates a car sharing fleet of Smart Fortwo Electric Drive vehicles in this region. Usage of publicly accessible EV Project charging units to charge these vehicles is included in this report.



DC Fast Chargers

Region: Oregon

Report period: October 2013 through December 2013

EVSE Usage	Weekday	Weekend	Overall
Number of charging events	1,512	546	2,058
Electricity consumed (AC MWh)	14.32	5.36	19.69
Percent of time with a vehicle connected to EVSE	2%	2%	2%
Percent of time with a vehicle drawing power from EVSE	2%	2%	2%
Average number of charging events started per EVSE per day	1.35	1.24	1.32

Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³











DC Fast Chargers

Region: Oregon

Report period: October 2013 through December 2013

Vehicles Charged	Car2Go fleet 1	Nissan Leaf	Chevrolet Volt	Unknown
Percent of charging events	0%	21%	0%	79%
Percent of electricity consumed	0%	19%	0%	81%
Individual Charging Event Statistics		Weekday (WD)	Weekend (WE)	Overall
Average length of time with vehicle connected per charging event (min)		25.7	25.9	25.8
Average length of time with vehicle drawing power per charging event (min	n)	25.7	25.9	25.8
Average electricity consumed per charging event (AC kWh)		9.5	9.8	9.6

Distribution of Length of Time with a





Distribution of Length of Time with a Vehicle Drawing Power per Charging Event



Length of time with vehicle drawing power per charging event (min)

Distribution of Electricity Consumed per Charging Event



¹ Car2Go operates a car sharing fleet of Smart Fortwo Electric Drive vehicles in this region. Usage of publicly accessible EV Project charging units to charge these vehicles is included in this report.



EV Project Electric Vehicle Charging Infrastructure Summary Report

Region: Chattanooga, TN Metropolitan Area

Report period: October 2013 through December 2013

Number of EV Project vehicles in region: 43

Number of EV Project vehicles in region. 45		Private	Publicly	Publicly	
Charging Unit Usage	Residential Level 2	Nonresidential Level 2	Accessible Level 2	Accessible DC Fast	Total
Number of charging units ¹	42	0	34	7	83
Number of charging events ²	3,393	0	268	117	3,778
Electricity consumed (AC MWh)	25.48	0.00	1.68	1.17	28.32
Percent of time with a vehicle connected to charging unit	43%	0%	1%	0%	22%
Percent of time with a vehicle drawing power from charging unit	8%	0%	1%	0%	4%



90%



Charging Unit Utilization



Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³

Electricity Consumed







Charging Demand: Range of Aggregate Electricity Demand versus Time of Day⁴



Includes charging units that reported at least one use during the reporting period. Some residential charging units are excluded due to incomplete data.

A charging event is defined as the period when a vehicle is connected to a charging unit, during which period some power is transferred

Considers the connection status of all charging units every minute

Based on 15 minute rolling average power output from all charging units

Note: throughout this report, weekdays are defined as the period from Monday 6:00 AM until Saturday 6:00 AM. The weekend is defined as the period from Saturday 6:00 AM until Monday 6:00 AM.



Region: Chattanooga, TN Metropolitan Area Report period: October 2013 through December 2013

EVSE Usage	Weekday	Weekend	Overall
Number of charging events	2,563	830	3,393
Electricity consumed (AC MWh)	19.98	5.50	25.48
Percent of time with a vehicle connected to EVSE	42%	47%	43%
Percent of time with a vehicle drawing power from EVSE	9%	6%	8%
Average number of charging events started per EVSE per day	0.92	0.76	0.88

Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³



units connected across all days
Inner-quartile range of charging units connected across all days
Median percentage of charging

Min percentage of charging units connected across all days





Region: Chattanooga, TN Metropolitan Area Report period: October 2013 through December 2013

Vehicles Charged	Nissan Leaf	Chevrolet Volt	Unknown
Percent of charging events	76%	24%	0%
Percent of electricity consumed	79%	21%	0%
Individual Charging Event Statistics	Weekday (WD)	Weekend (WE)	Overall
Average length of time with vehicle connected per charging event (hr)	12.2	11.7	12.0
Average length of time with vehicle drawing power per charging event (hr)	2.3	1.9	2.2
Average electricity consumed per charging event (AC kWh)	7.8	6.6	7.5





Distribution of Electricity Consumed per Charging Event







Region: Chattanooga, TN Metropolitan Area Report period: October 2013 through December 2013

EVSE Usage	Weekday	Weekend	Overall	
Number of charging events	209	59	268	
Electricity consumed (AC MWh)	1.30	0.38	1.68	
Percent of time with a vehicle connected to EVSE	1%	1%	1%	
Percent of time with a vehicle drawing power from EVSE	1%	0%	1%	
Average number of charging events started per EVSE per day	0.09	0.07	0.09	

Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³











Region: Chattanooga, TN Metropolitan Area Report period: October 2013 through December 2013

Vehicles Charged	Nissan Leaf	Chevrolet Volt	Unknown
Percent of charging events	28%	4%	68%
Percent of electricity consumed	18%	4%	78%
Individual Charging Event Statistics	Weekday (WD)	Weekend (WE)	Overall
Average length of time with vehicle connected per charging event (hr)	2.9	2.0	2.7
Average length of time with vehicle drawing power per charging event (hr)	2.1	1.6	2.0
Average electricity consumed per charging event (AC kWh)	6.1	6.9	6.3

Distribution of Length of Time with a Vehicle Connected per Charging Event





Distribution of Electricity Consumed per Charging Event





Project

EV Project Electric Vehicle Charging Infrastructure Summary Report

Region: Knoxville, TN Metropolitan Area

Report period: October 2013 through December 2013

Number of EV Project vehicles in region: 91

Number of EV Project vehicles in region. 91	Posidontial	Private	Publicly	Publicly	
Charging Unit Usage	Level 2	Level 2	Level 2	DC Fast	Total
Number of charging units ¹	90	31	89	3	213
Number of charging events ²	7,037	669	1,444	56	9,206
Electricity consumed (AC MWh)	53.88	4.80	11.77	0.56	71.01
Percent of time with a vehicle connected to charging unit	43%	6%	4%	0%	21%
Percent of time with a vehicle drawing power from charging unit	8%	2%	2%	0%	4%





Electricity Consumed





Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³







Charging Demand: Range of Aggregate Electricity Demand versus Time of Day⁴



Includes charging units that reported at least one use during the reporting period. Some residential charging units are excluded due to incomplete data.

A charging event is defined as the period when a vehicle is connected to a charging unit, during which period some power is transferred

Considers the connection status of all charging units every minute

Based on 15 minute rolling average power output from all charging units

Note: throughout this report, weekdays are defined as the period from Monday 6:00 AM until Saturday 6:00 AM. The weekend is defined as the period from Saturday 6:00 AM until Monday 6:00 AM.



Region: Knoxville, TN Metropolitan Area Report period: October 2013 through December 2013

EVSE Usage	Weekday	Weekend	Overall	
Number of charging events	5,259	1,778	7,037	
Electricity consumed (AC MWh)	41.59	12.29	53.88	
Percent of time with a vehicle connected to EVSE	42%	48%	43%	
Percent of time with a vehicle drawing power from EVSE	8%	6%	8%	
Average number of charging events started per EVSE per day	0.89	0.76	0.85	

Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³







Region: Knoxville, TN Metropolitan Area Report period: October 2013 through December 2013

Vehicles Charged	Nissan Leaf	Chevrolet Volt	Unknown
Percent of charging events	66%	34%	0%
Percent of electricity consumed	71%	29%	0%
Individual Charging Event Statistics	Weekday (WD)	Weekend (WE)	Overall
Average length of time with vehicle connected per charging event (hr)	12.6	12.0	12.5
Average length of time with vehicle drawing power per charging event (hr)	2.3	2.0	2.2
Average electricity consumed per charging event (AC kWh)	7.9	6.9	7.7





Distribution of Electricity Consumed per Charging Event







Region: Knoxville, TN Metropolitan Area Report period: October 2013 through December 2013

EVSE Usage	Weekday	Weekend	Overall	
Number of charging events	643	26	669	
Electricity consumed (AC MWh)	4.62	0.19	4.80	
Percent of time with a vehicle connected to EVSE	8%	2%	6%	
Percent of time with a vehicle drawing power from EVSE	3%	0%	2%	
Average number of charging events started per EVSE per day	0.31	0.03	0.23	

Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³







Region: Knoxville, TN Metropolitan Area Report period: October 2013 through December 2013

Vehicles Charged	Nissan Leaf	Chevrolet Volt	Unknown
Percent of charging events	7%	3%	90%
Percent of electricity consumed	5%	3%	92%
Individual Charging Event Statistics	Weekday (WD)	Weekend (WE)	Overall
Average length of time with vehicle connected per charging event (hr)	6.7	3.3	6.5
Average length of time with vehicle drawing power per charging event (hr)	2.3	2.2	2.3
Average electricity consumed per charging event (AC kWh)	7.2	7.2	7.2

Distribution of Length of Time with a Vehicle Connected per Charging Event





Distribution of Electricity Consumed per Charging Event





Region: Knoxville, TN Metropolitan Area Report period: October 2013 through December 2013

EVSE Usage	Weekday	Weekend	Overall	
Number of charging events	1,251	193	1,444	
Electricity consumed (AC MWh)	10.67	1.10	11.77	
Percent of time with a vehicle connected to EVSE	5%	2%	4%	
Percent of time with a vehicle drawing power from EVSE	2%	1%	2%	
Average number of charging events started per EVSE per day	0.21	0.08	0.18	

Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³







Region: Knoxville, TN Metropolitan Area Report period: October 2013 through December 2013

Vehicles Charged	Nissan Leaf	Chevrolet Volt	Unknown
Percent of charging events	20%	1%	79%
Percent of electricity consumed	19%	1%	80%
Individual Charging Event Statistics	Weekday (WD)	Weekend (WE)	Overall
Average length of time with vehicle connected per charging event (hr)	6.1	3.8	5.8
Average length of time with vehicle drawing power per charging event (hr)	2.6	1.7	2.4
Average electricity consumed per charging event (AC kWh)	8.5	5.8	8.2

Distribution of Length of Time with a Vehicle Connected per Charging Event





Distribution of Electricity Consumed per Charging Event




Project

EV Project Electric Vehicle Charging Infrastructure Summary Report

Region: Memphis, TN Metropolitan Area

Report period: October 2013 through December 2013

Number of EV Project vehicles in region: 59

Number of EV Project vehicles in region. 59		Private	Publicly	Publicly	
Charging Unit Usage	Residential Level 2	Nonresidential Level 2	Accessible Level 2	Accessible DC Fast	Total
Number of charging units ¹	57	1	13	0	71
Number of charging events ²	4,545	63	181	0	4,789
Electricity consumed (AC MWh)	30.81	0.65	1.58	0.00	33.04
Percent of time with a vehicle connected to charging unit	42%	33%	4%	0%	35%
Percent of time with a vehicle drawing power from charging unit	7%	8%	2%	0%	6%

Number of Charge Events







Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³

Electricity Consumed





Max percentage of charging units connected across all days
Inner-quartile range of charging units connected across all days
Median percentage of charging units connected across all days
Min percentage of charging units connected across all days

Charging Demand: Range of Aggregate Electricity Demand versus Time of Day⁴



Includes charging units that reported at least one use during the reporting period. Some residential charging units are excluded due to incomplete data.

A charging event is defined as the period when a vehicle is connected to a charging unit, during which period some power is transferred

3 Considers the connection status of all charging units every minute

Based on 15 minute rolling average power output from all charging units

Note: throughout this report, weekdays are defined as the period from Monday 6:00 AM until Saturday 6:00 AM. The weekend is defined as the period from Saturday 6:00 AM until Monday 6:00 AM.



Region: Memphis, TN Metropolitan Area Report period: October 2013 through December 2013

EVSE Usage	Weekday	Weekend	Overall	
Number of charging events	3,417	1,128	4,545	
Electricity consumed (AC MWh)	23.96	6.85	30.81	
Percent of time with a vehicle connected to EVSE	41%	45%	42%	
Percent of time with a vehicle drawing power from EVSE	8%	6%	7%	
Average number of charging events started per EVSE per day	0.91	0.76	0.87	

Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³





- units connected across all days
- Median percentage of charging units connected across all days
- Min percentage of charging units connected across all days





Region: Memphis, TN Metropolitan Area Report period: October 2013 through December 2013

Vehicles Charged	Nissan Leaf	Chevrolet Volt	Unknown
Percent of charging events	58%	42%	0%
Percent of electricity consumed	63%	37%	0%
Individual Charging Event Statistics	Weekday (WD)	Weekend (WE)	Overall
Average length of time with vehicle connected per charging event (hr)	12.1	11.6	12.0
Average length of time with vehicle drawing power per charging event (hr)	2.1	1.8	2.0
Average electricity consumed per charging event (AC kWh)	7.0	6.1	6.8

Distribution of Length of Time with a Vehicle Connected per Charging Event



Distribution of Electricity Consumed per Charging Event







Region: Memphis, TN Metropolitan Area Report period: October 2013 through December 2013

EVSE Usage	Weekday	Weekend	Overall	
Number of charging events	164	17	181	
Electricity consumed (AC MWh)	1.44	0.14	1.58	
Percent of time with a vehicle connected to EVSE	4%	2%	4%	
Percent of time with a vehicle drawing power from EVSE	2%	0%	2%	
Average number of charging events started per EVSE per day	0.19	0.05	0.15	

Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³











Region: Memphis, TN Metropolitan Area Report period: October 2013 through December 2013

Vehicles Charged	Nissan Leaf	Chevrolet Volt	Unknown
Percent of charging events	35%	41%	24%
Percent of electricity consumed	40%	36%	25%
Individual Charging Event Statistics	Weekday (WD)	Weekend (WE)	Overall
Average length of time with vehicle connected per charging event (hr)	6.5	2.7	6.1
Average length of time with vehicle drawing power per charging event (hr)	2.4	1.9	2.4
Average electricity consumed per charging event (AC kWh)	8.8	8.4	8.7

Distribution of Length of Time with a Vehicle Connected per Charging Event





Distribution of Electricity Consumed per Charging Event





EV Project Electric Vehicle Charging Infrastructure Summary Report

Region: Nashville, TN Metropolitan Area

Report period: October 2013 through December 2013

Number of EV Project vehicles in region: 379

Charging Unit Usage	Residential Level 2	Nonresidential Level 2	Accessible Level 2	Accessible DC Fast	Total
Number of charging units ¹	376	9	187	6	578
Number of charging events ²	28,804	367	3,770	300	33,241
Electricity consumed (AC MWh)	230.59	3.08	31.39	2.82	267.88
Percent of time with a vehicle connected to charging unit	41%	17%	4%	1%	29%
Percent of time with a vehicle drawing power from charging unit	8%	5%	2%	1%	6%

Drivete

Number of Charge Events



Dublich





Dublich

Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³

Electricity Consumed







Charging Demand: Range of Aggregate Electricity Demand versus Time of Day⁴



¹ Includes charging units that reported at least one use during the reporting period. Some residential charging units are excluded due to incomplete data.

² A charging event is defined as the period when a vehicle is connected to a charging unit, during which period some power is transferred

³ Considers the connection status of all charging units every minute

Based on 15 minute rolling average power output from all charging units

Note: throughout this report, weekdays are defined as the period from Monday 6:00 AM until Saturday 6:00 AM. The weekend is defined as the period from Saturday 6:00 AM until Monday 6:00 AM.



Region: Nashville, TN Metropolitan Area Report period: October 2013 through December 2013

EVSE Usage	Weekday	Weekend	Overall
Number of charging events	21,286	7,518	28,804
Electricity consumed (AC MWh)	176.50	54.09	230.59
Percent of time with a vehicle connected to EVSE	40%	45%	41%
Percent of time with a vehicle drawing power from EVSE	8%	7%	8%
Average number of charging events started per EVSE per day	0.86	0.77	0.83

Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³







Region: Nashville, TN Metropolitan Area Report period: October 2013 through December 2013

Vehicles Charged	Nissan Leaf	Chevrolet Volt	Unknown
Percent of charging events	86%	14%	0%
Percent of electricity consumed	88%	12%	0%
Individual Charging Event Statistics	Weekday (WD)	Weekend (WE)	Overall
Average length of time with vehicle connected per charging event (hr)	12.1	12.1	12.1
Average length of time with vehicle drawing power per charging event (hr)	2.3	2.1	2.3
Average electricity consumed per charging event (AC kWh)	8.3	7.2	8.0





Distribution of Electricity Consumed per Charging Event







Region: Nashville, TN Metropolitan Area Report period: October 2013 through December 2013

EVSE Usage	Weekday	Weekend	Overall	
Number of charging events	3,076	694	3,770	
Electricity consumed (AC MWh)	26.02	5.37	31.39	
Percent of time with a vehicle connected to EVSE	5%	3%	4%	
Percent of time with a vehicle drawing power from EVSE	2%	1%	2%	
Average number of charging events started per EVSE per day	0.25	0.14	0.22	

Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³







Region: Nashville, TN Metropolitan Area Report period: October 2013 through December 2013

Vehicles Charged	Nissan Leaf	Chevrolet Volt	Unknown
Percent of charging events	37%	3%	60%
Percent of electricity consumed	37%	2%	62%
Individual Charging Event Statistics	Weekday (WD)	Weekend (WE)	Overall
Average length of time with vehicle connected per charging event (hr)	5.2	3.7	4.9
Average length of time with vehicle drawing power per charging event (hr)	2.3	2.0	2.2
Average electricity consumed per charging event (AC kWh)	8.4	7.9	8.3

Distribution of Length of Time with a Vehicle Connected per Charging Event



Distribution of Length of Time with a Vehicle Drawing Power per Charging Event

WE



Distribution of Electricity Consumed per Charging Event





EV Project Electric Vehicle Charging Infrastructure Summary Report

Region: Dallas/Ft. Worth, TX Metropolitan Area Report period: October 2013 through December 2013

Number of EV Project vehicles in region: 164

Charging Unit Usage	Residential Level 2	Nonresidential Level 2	Accessible Level 2	Accessible DC Fast	Total
Number of charging units ¹	165	42	173	0	380
Number of charging events ²	15,394	1,026	1,848	0	18,268
Electricity consumed (AC MWh)	97.23	8.48	14.76	0.00	120.47
Percent of time with a vehicle connected to charging unit	49%	13%	3%	0%	24%
Percent of time with a vehicle drawing power from charging unit	8%	3%	1%	0%	4%



Charging Unit Utilization



Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³







Charging Demand: Range of Aggregate Electricity Demand versus Time of Day⁴



¹ Includes charging units that reported at least one use during the reporting period. Some residential charging units are excluded due to incomplete data.

² A charging event is defined as the period when a vehicle is connected to a charging unit, during which period some power is transferred

³ Considers the connection status of all charging units every minute

Based on 15 minute rolling average power output from all charging units

Note: throughout this report, weekdays are defined as the period from Monday 6:00 AM until Saturday 6:00 AM. The weekend is defined as the period from Saturday 6:00 AM until Monday 6:00 AM.



Region: Dallas/Ft. Worth, TX Metropolitan Area Report period: October 2013 through December 2013

EVSE Usage	Weekday	Weekend	Overall
Number of charging events	11,408	3,986	15,394
Electricity consumed (AC MWh)	73.71	23.52	97.23
Percent of time with a vehicle connected to EVSE	46%	55%	49%
Percent of time with a vehicle drawing power from EVSE	9%	7%	8%
Average number of charging events started per EVSE per day	1.05	0.93	1.01

Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³







Region: Dallas/Ft. Worth, TX Metropolitan Area Report period: October 2013 through December 2013

Vehicles Charged	Nissan Leaf	Chevrolet Volt	Unknown
Percent of charging events	6%	94%	0%
Percent of electricity consumed	7%	93%	0%
Individual Charging Event Statistics	Weekday (WD)	Weekend (WE)	Overall
Average length of time with vehicle connected per charging event (hr)	11.6	11.9	11.7
Average length of time with vehicle drawing power per charging event (hr)	2.0	1.8	2.0
Average electricity consumed per charging event (AC kWh)	6.5	5.9	6.3

Distribution of Length of Time with a Vehicle Connected per Charging Event



Distribution of Electricity Consumed per Charging Event







Region: Dallas/Ft. Worth, TX Metropolitan Area Report period: October 2013 through December 2013

EVSE Usage	Weekday	Weekend	Overall	
Number of charging events	997	29	1,026	
Electricity consumed (AC MWh)	8.23	0.25	8.48	
Percent of time with a vehicle connected to EVSE	14%	10%	13%	
Percent of time with a vehicle drawing power from EVSE	4%	0%	3%	
Average number of charging events started per EVSE per day	0.39	0.03	0.29	

Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³







Region: Dallas/Ft. Worth, TX Metropolitan Area Report period: October 2013 through December 2013

Vehicles Charged	Nissan Leaf	Chevrolet Volt	Unknown
Percent of charging events	0%	29%	71%
Percent of electricity consumed	0%	25%	75%
Individual Charging Event Statistics	Weekday (WD)	Weekend (WE)	Overall
Average length of time with vehicle connected per charging event (hr)	10.8	6.8	10.7
Average length of time with vehicle drawing power per charging event (hr)	2.3	3.0	2.3
Average electricity consumed per charging event (AC kWh)	8.2	10.8	8.3

Distribution of Length of Time with a Vehicle Connected per Charging Event





Distribution of Electricity Consumed per Charging Event





Region: Dallas/Ft. Worth, TX Metropolitan Area Report period: October 2013 through December 2013

EVSE Usage	Weekday	Weekend	Overall	
Number of charging events	1,420	428	1,848	
Electricity consumed (AC MWh)	11.17	3.59	14.76	
Percent of time with a vehicle connected to EVSE	3%	3%	3%	
Percent of time with a vehicle drawing power from EVSE	1%	1%	1%	
Average number of charging events started per EVSE per day	0.13	0.10	0.12	

Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³







Region: Dallas/Ft. Worth, TX Metropolitan Area Report period: October 2013 through December 2013

Vehicles Charged	Nissan Leaf	Chevrolet Volt	Unknown
Percent of charging events	3%	7%	90%
Percent of electricity consumed	2%	6%	92%
Individual Charging Event Statistics	Weekday (WD)	Weekend (WE)	Overall
Average length of time with vehicle connected per charging event (hr)	6.2	5.5	6.0
Average length of time with vehicle drawing power per charging event (hr)	2.2	2.2	2.2
Average electricity consumed per charging event (AC kWh)	7.8	8.5	8.0

Distribution of Length of Time with a Vehicle Connected per Charging Event





Distribution of Electricity Consumed per Charging Event





Project

EV Project Electric Vehicle Charging Infrastructure Summary Report

Region: Houston, TX Metropolitan Area

Report period: October 2013 through December 2013

Number of EV Project vehicles in region: 68

Number of EV Project vehicles in region. 66		Private	Publicly	Publicly	
Charging Unit Usage	Residential Level 2	Nonresidential Level 2	Accessible Level 2	Accessible DC Fast	Total
Number of charging units ¹	68	17	79	0	164
Number of charging events ²	6,591	518	405	0	7,514
Electricity consumed (AC MWh)	39.69	3.67	3.09	0.00	46.46
Percent of time with a vehicle connected to charging unit	52%	37%	1%	0%	27%
Percent of time with a vehicle drawing power from charging unit	8%	3%	0%	0%	4%



Charging Unit Utilization



Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³







Charging Demand: Range of Aggregate Electricity Demand versus Time of Day⁴



Includes charging units that reported at least one use during the reporting period. Some residential charging units are excluded due to incomplete data.

A charging event is defined as the period when a vehicle is connected to a charging unit, during which period some power is transferred

Considers the connection status of all charging units every minute

Based on 15 minute rolling average power output from all charging units

Note: throughout this report, weekdays are defined as the period from Monday 6:00 AM until Saturday 6:00 AM. The weekend is defined as the period from Saturday 6:00 AM until Monday 6:00 AM.



Region: Houston, TX Metropolitan Area Report period: October 2013 through December 2013

EVSE Usage	Weekday	Weekend	Overall
Number of charging events	4,853	1,738	6,591
Electricity consumed (AC MWh)	30.63	9.07	39.69
Percent of time with a vehicle connected to EVSE	48%	59%	52%
Percent of time with a vehicle drawing power from EVSE	9%	7%	8%
Average number of charging events started per EVSE per day	1.08	0.98	1.05

Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³







Region: Houston, TX Metropolitan Area Report period: October 2013 through December 2013

Vehicles Charged	Nissan Leaf	Chevrolet Volt	Unknown
Percent of charging events	5%	95%	0%
Percent of electricity consumed	6%	94%	0%
Individual Charging Event Statistics	Weekday (WD)	Weekend (WE)	Overall
Average length of time with vehicle connected per charging event (hr)	12.0	11.4	11.9
Average length of time with vehicle drawing power per charging event (hr)	2.0	1.7	1.9
Average electricity consumed per charging event (AC kWh)	6.3	5.2	6.0





Distribution of Electricity Consumed per Charging Event







Region: Houston, TX Metropolitan Area Report period: October 2013 through December 2013

EVSE Usage	Weekday	Weekend	Overall	
Number of charging events	494	24	518	
Electricity consumed (AC MWh)	3.44	0.24	3.67	
Percent of time with a vehicle connected to EVSE	37%	38%	37%	
Percent of time with a vehicle drawing power from EVSE	4%	1%	3%	
Average number of charging events started per EVSE per day	0.45	0.06	0.34	

Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³







Region: Houston, TX Metropolitan Area Report period: October 2013 through December 2013

Vehicles Charged	Nissan Leaf	Chevrolet Volt	Unknown
Percent of charging events	0%	6%	94%
Percent of electricity consumed	0%	4%	96%
Individual Charging Event Statistics	Weekday (WD)	Weekend (WE)	Overall
Average length of time with vehicle connected per charging event (hr)	26.7	44.2	27.5
Average length of time with vehicle drawing power per charging event (hr)	2.0	2.8	2.1
Average electricity consumed per charging event (AC kWh)	7.0	9.7	7.1

Distribution of Length of Time with a Vehicle Connected per Charging Event



Distribution of Length of Time with a Vehicle Drawing Power per Charging Event

WE



Distribution of Electricity Consumed per Charging Event





Region: Houston, TX Metropolitan Area Report period: October 2013 through December 2013

EVSE Usage	Weekday	Weekend	Overall	
Number of charging events	302	103	405	
Electricity consumed (AC MWh)	2.31	0.78	3.09	
Percent of time with a vehicle connected to EVSE	2%	1%	1%	
Percent of time with a vehicle drawing power from EVSE	1%	0%	0%	
Average number of charging events started per EVSE per day	0.06	0.05	0.06	

Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³



Charging Demand: Range of Aggregate Electricity Demand versus Time of Day⁴





Max electricity demand across
all days

Inner-quartile range of electricity demand across all days

Median electricity demand across all days

Min electricity demand across all days



Region: Houston, TX Metropolitan Area Report period: October 2013 through December 2013

Vehicles Charged	Nissan Leaf	Chevrolet Volt	Unknown
Percent of charging events	0%	15%	85%
Percent of electricity consumed	0%	12%	88%
Individual Charging Event Statistics	Weekday (WD)	Weekend (WE)	Overall
Average length of time with vehicle connected per charging event (hr)	5.1	9.1	6.1
Average length of time with vehicle drawing power per charging event (hr)	2.0	1.9	2.0
Average electricity consumed per charging event (AC kWh)	7.7	7.4	7.6

Distribution of Length of Time with a Vehicle Connected per Charging Event



Distribution of Length of Time with a Vehicle Drawing Power per Charging Event

WE



Distribution of Electricity Consumed per Charging Event





EV Project Electric Vehicle Charging Infrastructure Summary Report

Region: Washington State

84%

Report period: October 2013 through December 2013

Number of EV Project vehicles in region: 697

Charging Unit Usage	Residential Level 2	Nonresidential Level 2	Accessible Level 2	Accessible DC Fast	Total
Number of charging units ¹	693	28	296	12	1,029
Number of charging events ²	59,186	772	7,692	2,996	70,646
Electricity consumed (AC MWh)	464.11	6.92	56.51	26.26	553.80
Percent of time with a vehicle connected to charging unit	46%	17%	4%	5%	33%
Percent of time with a vehicle drawing power from charging unit	9%	3%	2%	5%	7%

Drivete



Residential Level 2

Publicly Accessible Level 2 Publicly Accessible DC Fast

1%

11%





Dublich

Dublich



Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³

Electricity Consumed







Charging Demand: Range of Aggregate Electricity Demand versus Time of Day⁴



Includes charging units that reported at least one use during the reporting period. Some residential charging units are excluded due to incomplete data.

A charging event is defined as the period when a vehicle is connected to a charging unit, during which period some power is transferred

Considers the connection status of all charging units every minute

Based on 15 minute rolling average power output from all charging units

Note: throughout this report, weekdays are defined as the period from Monday 6:00 AM until Saturday 6:00 AM. The weekend is defined as the period from Saturday 6:00 AM until Monday 6:00 AM.



Region: Washington State Report period: October 2013 through December 2013

EVSE Usage	Weekday	Weekend	Overall
Number of charging events	43,939	15,247	59,186
Electricity consumed (AC MWh)	353.40	110.71	464.11
Percent of time with a vehicle connected to EVSE	44%	51%	46%
Percent of time with a vehicle drawing power from EVSE	9%	7%	9%
Average number of charging events started per EVSE per day	0.96	0.85	0.93

Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³





units connected across all days Min percentage of charging

units connected across all days





Region: Washington State Report period: October 2013 through December 2013

Vehicles Charged	Nissan Leaf	Chevrolet Volt	Unknown
Percent of charging events	79%	21%	0%
Percent of electricity consumed	82%	18%	0%
Individual Charging Event Statistics	Weekday (WD)	Weekend (WE)	Overall
Average length of time with vehicle connected per charging event (hr)	12.0	12.5	12.1
Average length of time with vehicle drawing power per charging event (hr)	2.3	2.1	2.2
Average electricity consumed per charging event (AC kWh)	8.0	7.3	7.8





Distribution of Electricity Consumed per Charging Event







Region: Washington State

Report period: October 2013 through December 2013

EVSE Usage	Weekday	Weekend	Overall	
Number of charging events	673	99	772	
Electricity consumed (AC MWh)	5.95	0.97	6.92	
Percent of time with a vehicle connected to EVSE	18%	15%	17%	
Percent of time with a vehicle drawing power from EVSE	4%	2%	3%	
Average number of charging events started per EVSE per day	0.36	0.14	0.30	

Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³







Region: Washington State Report period: October 2013 through December 2013

Vehicles Charged	Nissan Leaf	Chevrolet Volt	Unknown
Percent of charging events	6%	0%	94%
Percent of electricity consumed	5%	0%	95%
Individual Charging Event Statistics	Weekday (WD)	Weekend (WE)	Overall
Average length of time with vehicle connected per charging event (hr)	14.4	10.2	13.8
Average length of time with vehicle drawing power per charging event (hr)	2.6	2.7	2.6
Average electricity consumed per charging event (AC kWh)	8.9	9.6	9.0





Distribution of Length of Time with a Vehicle Drawing Power per Charging Event



Distribution of Electricity Consumed per Charging Event





Region: Washington State

Report period: October 2013 through December 2013

EVSE Usage	Weekday	Weekend	Overall	
Number of charging events	6,061	1,631	7,692	
Electricity consumed (AC MWh)	45.96	10.55	56.51	
Percent of time with a vehicle connected to EVSE	5%	3%	4%	
Percent of time with a vehicle drawing power from EVSE	3%	1%	2%	
Average number of charging events started per EVSE per day	0.31	0.21	0.29	

Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³







Region: Washington State Report period: October 2013 through December 2013

Vehicles Charged	Nissan Leaf	Chevrolet Volt	Unknown
Percent of charging events	10%	2%	88%
Percent of electricity consumed	9%	2%	89%
Individual Charging Event Statistics	Weekday (WD)	Weekend (WE)	Overall
Average length of time with vehicle connected per charging event (hr)	4.0	2.4	3.7
Average length of time with vehicle drawing power per charging event (hr)	2.0	1.6	1.9
Average electricity consumed per charging event (AC kWh)	7.6	6.5	7.3

Distribution of Length of Time with a Vehicle Connected per Charging Event



Distribution of Length of Time with a Vehicle Drawing Power per Charging Event

WE



Distribution of Electricity Consumed per Charging Event





DC Fast Chargers

Region: Washington State

Report period: October 2013 through December 2013

EVSE Usage	Weekday	Weekend	Overall
Number of charging events	2,163	833	2,996
Electricity consumed (AC MWh)	18.80	7.46	26.26
Percent of time with a vehicle connected to EVSE	5%	4%	5%
Percent of time with a vehicle drawing power from EVSE	5%	4%	5%
Average number of charging events started per EVSE per day	2.73	2.67	2.71

Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³







Max electricity demand acro	ss
all days	

- Inner-quartile range of electricity demand across all days
- Median electricity demand across all days
- Min electricity demand across all days



DC Fast Chargers

Region: Washington State

Report period: October 2013 through December 2013

Vehicles Charged	Nissan Leaf	Chevrolet Volt	Unknown
Percent of charging events	17%	0%	83%
Percent of electricity consumed	15%	0%	85%
Individual Charging Event Statistics	Weekday (WD)	Weekend (WE)	Overall
Average length of time with vehicle connected per charging event (min)	24.1	24.2	24.1
Average length of time with vehicle drawing power per charging event (min)	24.1	24.2	24.1
Average electricity consumed per charging event (AC kWh)	8.7	9.0	8.8





Distribution of Length of Time with a Vehicle Drawing Power per Charging Event



Length of time with vehicle drawing power per charging event (min)

Distribution of Electricity Consumed per Charging Event





Project

EV Project Electric Vehicle Charging Infrastructure Summary Report

Region: Chicago, IL Metropolitan Area

Report period: October 2013 through December 2013

Number of EV Project vehicles in region: 135

Charging Unit Usage		Residential Level 2	Private Nonresidential Level 2	Publicly Accessible Level 2	Publicly Accessible DC Fast	Total
Number of charging units ¹		136	0	13	0	149
Number of charging events ²		13,129	0	307	0	13,436
Electricity consumed (AC MWh)		89.54	0.00	2.54	0.00	92.08
Percent of time with a vehicle connected to charging unit		50%	0%	5%	0%	46%
Percent of time with a vehicle drawing power from charging unit		9%	0%	2%	0%	9%
Number of Charge Events	Electricity (Electricity Consumed		Charging Unit Utilization		
98%	97% —		6000			



Residential Level 2 Private Nonresidential Level 2 Publicly Accessible Level 2 Publicly Accessible DC Fast



Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³





-	Max percentage of charging units connected across all days
	Inner-quartile range of charging units connected across all days
-	Median percentage of charging units connected across all days
-	Min percentage of charging units connected across all days

Charging Demand: Range of Aggregate Electricity Demand versus Time of Day⁴



¹ Includes charging units that reported at least one use during the reporting period. Some residential charging units are excluded due to incomplete data.

² A charging event is defined as the period when a vehicle is connected to a charging unit, during which period some power is transferred

³ Considers the connection status of all charging units every minute

4 Based on 15 minute rolling average power output from all charging units

Note: throughout this report, weekdays are defined as the period from Monday 6:00 AM until Saturday 6:00 AM. The weekend is defined as the period from Saturday 6:00 AM until Monday 6:00 AM.



Region: Chicago, IL Metropolitan Area Report period: October 2013 through December 2013

EVSE Usage	Weekday	Weekend	Overall
Number of charging events	9,595	3,534	13,129
Electricity consumed (AC MWh)	68.09	21.46	89.54
Percent of time with a vehicle connected to EVSE	47%	57%	50%
Percent of time with a vehicle drawing power from EVSE	10%	8%	9%
Average number of charging events started per EVSE per day	1.07	1.00	1.05

Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³







Region: Chicago, IL Metropolitan Area Report period: October 2013 through December 2013

Vehicles Charged	Nissan Leaf	Chevrolet Volt	Unknown
Percent of charging events	14%	86%	0%
Percent of electricity consumed	19%	81%	0%
Individual Charging Event Statistics	Weekday (WD)	Weekend (WE)	Overall
Average length of time with vehicle connected per charging event (hr)	11.5	12.1	11.7
Average length of time with vehicle drawing power per charging event (hr)	2.2	1.9	2.1
Average electricity consumed per charging event (AC kWh)	7.1	6.1	6.8





Distribution of Electricity Consumed per Charging Event






Region: Chicago, IL Metropolitan Area Report period: October 2013 through December 2013

EVSE Usage	Weekday	Weekend	Overall	
Number of charging events	277	30	307	
Electricity consumed (AC MWh)	2.30	0.23	2.54	
Percent of time with a vehicle connected to EVSE	6%	1%	5%	
Percent of time with a vehicle drawing power from EVSE	3%	1%	2%	
Average number of charging events started per EVSE per day	0.33	0.09	0.26	

Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³







Region: Chicago, IL Metropolitan Area Report period: October 2013 through December 2013

Vehicles Charged	Nissan Leaf	Chevrolet Volt	Unknown
Percent of charging events	1%	27%	72%
Percent of electricity consumed	1%	21%	79%
Individual Charging Event Statistics	Weekday (WD)	Weekend (WE)	Overall
Average length of time with vehicle connected per charging event (hr)	4.7	2.3	4.5
Average length of time with vehicle drawing power per charging event (hr)	2.4	1.9	2.3
Average electricity consumed per charging event (AC kWh)	8.3	7.8	8.3

Distribution of Length of Time with a Vehicle Connected per Charging Event





Distribution of Electricity Consumed per Charging Event





EV Project Electric Vehicle Charging Infrastructure Summary Report

Region: Atlanta, GA Metropolitan Area

Report period: October 2013 through December 2013

Number of EV Project vehicles in region: 170

Charging Unit Usage	Residential Level 2	Nonresidential Level 2	Accessible Level 2	Accessible DC Fast	Total
Number of charging units ¹	170	24	98	0	292
Number of charging events ²	14,040	1,755	3,981	0	19,776
Electricity consumed (AC MWh)	107.71	20.06	37.40	0.00	165.17
Percent of time with a vehicle connected to charging unit	43%	14%	6%	0%	29%
Percent of time with a vehicle drawing power from charging unit	8%	10%	5%	0%	7%



Charging Unit Utilization



Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³







Charging Demand: Range of Aggregate Electricity Demand versus Time of Day⁴



¹ Includes charging units that reported at least one use during the reporting period. Some residential charging units are excluded due to incomplete data.

² A charging event is defined as the period when a vehicle is connected to a charging unit, during which period some power is transferred

³ Considers the connection status of all charging units every minute

Based on 15 minute rolling average power output from all charging units

Note: throughout this report, weekdays are defined as the period from Monday 6:00 AM until Saturday 6:00 AM. The weekend is defined as the period from Saturday 6:00 AM until Monday 6:00 AM.



Region: Atlanta, GA Metropolitan Area Report period: October 2013 through December 2013

EVSE Usage	Weekday	Weekend	Overall
Number of charging events	10,279	3,761	14,040
Electricity consumed (AC MWh)	81.56	26.16	107.71
Percent of time with a vehicle connected to EVSE	41%	47%	43%
Percent of time with a vehicle drawing power from EVSE	9%	7%	8%
Average number of charging events started per EVSE per day	0.92	0.86	0.90

Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³



Charging Demand: Range of Aggregate Electricity Demand versus Time of Day⁴







demand across all days Median electricity demand

across all days

Min electricity demand across all days



Region: Atlanta, GA Metropolitan Area Report period: October 2013 through December 2013

Vehicles Charged	Nissan Leaf	Chevrolet Volt	Unknown
Percent of charging events	64%	36%	0%
Percent of electricity consumed	68%	32%	0%
Individual Charging Event Statistics	Weekday (WD)	Weekend (WE)	Overall
Average length of time with vehicle connected per charging event (hr)	11.6	11.4	11.6
Average length of time with vehicle drawing power per charging event (hr)	2.3	2.0	2.2
Average electricity consumed per charging event (AC kWh)	7.9	7.0	7.7





Distribution of Electricity Consumed per Charging Event







Region: Atlanta, GA Metropolitan Area Report period: October 2013 through December 2013

EVSE Usage	Weekday	Weekend	Overall	
Number of charging events	1,712	43	1,755	
Electricity consumed (AC MWh)	19.50	0.56	20.06	
Percent of time with a vehicle connected to EVSE	19%	2%	14%	
Percent of time with a vehicle drawing power from EVSE	13%	1%	10%	
Average number of charging events started per EVSE per day	1.21	0.08	0.89	

Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³







Region: Atlanta, GA Metropolitan Area Report period: October 2013 through December 2013

Vehicles Charged	Nissan Leaf	Chevrolet Volt	Unknown
Percent of charging events	0%	1%	99%
Percent of electricity consumed	0%	1%	99%
Individual Charging Event Statistics	Weekday (WD)	Weekend (WE)	Overall
Average length of time with vehicle connected per charging event (hr)	3.8	4.6	3.8
Average length of time with vehicle drawing power per charging event (hr)	2.8	4.0	2.8
Average electricity consumed per charging event (AC kWh)	11.4	13.4	11.4

Distribution of Length of Time with a Vehicle Connected per Charging Event





Distribution of Electricity Consumed per Charging Event





Region: Atlanta, GA Metropolitan Area Report period: October 2013 through December 2013

EVSE Usage	Weekday	Weekend	Overall	
Number of charging events	3,369	612	3,981	
Electricity consumed (AC MWh)	32.71	4.68	37.40	
Percent of time with a vehicle connected to EVSE	7%	3%	6%	
Percent of time with a vehicle drawing power from EVSE	6%	2%	5%	
Average number of charging events started per EVSE per day	0.55	0.25	0.47	

Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³







Region: Atlanta, GA Metropolitan Area Report period: October 2013 through December 2013

Vehicles Charged	Nissan Leaf	Chevrolet Volt	Unknown
Percent of charging events	3%	1%	96%
Percent of electricity consumed	3%	1%	97%
Individual Charging Event Statistics	Weekday (WD)	Weekend (WE)	Overall
Average length of time with vehicle connected per charging event (hr)	3.2	2.8	3.1
Average length of time with vehicle drawing power per charging event (hr)	2.5	2.1	2.5
Average electricity consumed per charging event (AC kWh)	9.6	8.3	9.4

Distribution of Length of Time with a Vehicle Connected per Charging Event





Distribution of Electricity Consumed per Charging Event





Project

EV Project Electric Vehicle Charging Infrastructure Summary Report

Region: Philadelphia, PA Metropolitan Area

Report period: October 2013 through December 2013

Number of EV Project vehicles in region: 58

Charging Unit Usage		Residential Level 2	Private Nonresidential Level 2	Accessible Level 2	Accessible DC Fast	Total
Number of charging units ¹		58	1	43	0	102
Number of charging events ²		5,702	17	652	0	6,371
Electricity consumed (AC MWh)		40.46	0.15	7.49	0.00	48.10
Percent of time with a vehicle connected to cha	rging unit	52%	14%	6%	0%	33%
Percent of time with a vehicle drawing power from	om charging unit	9%	2%	2%	0%	6%
Number of Charge Events	Electricity	Consumed		Charging L	Init Utilization	



Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³







Charging Demand: Range of Aggregate Electricity Demand versus Time of Day⁴



¹ Includes charging units that reported at least one use during the reporting period. Some residential charging units are excluded due to incomplete data.

² A charging event is defined as the period when a vehicle is connected to a charging unit, during which period some power is transferred

³ Considers the connection status of all charging units every minute

Based on 15 minute rolling average power output from all charging units

Note: throughout this report, weekdays are defined as the period from Monday 6:00 AM until Saturday 6:00 AM. The weekend is defined as the period from Saturday 6:00 AM until Monday 6:00 AM.



Region: Philadelphia, PA Metropolitan Area Report period: October 2013 through December 2013

EVSE Usage	Weekday	Weekend	Overall
Number of charging events	4,251	1,451	5,702
Electricity consumed (AC MWh)	30.99	9.47	40.46
Percent of time with a vehicle connected to EVSE	50%	59%	52%
Percent of time with a vehicle drawing power from EVSE	10%	8%	9%
Average number of charging events started per EVSE per day	1.11	0.96	1.07

Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³







Region: Philadelphia, PA Metropolitan Area Report period: October 2013 through December 2013

Vehicles Charged	Nissan Leaf	Chevrolet Volt	Unknown
Percent of charging events	26%	74%	0%
Percent of electricity consumed	31%	69%	0%
Individual Charging Event Statistics	Weekday (WD)	Weekend (WE)	Overall
Average length of time with vehicle connected per charging event (hr)	11.5	13.1	11.9
Average length of time with vehicle drawing power per charging event (hr)	2.2	2.0	2.1
Average electricity consumed per charging event (AC kWh)	7.3	6.5	7.1





Distribution of Electricity Consumed per Charging Event







Region: Philadelphia, PA Metropolitan Area Report period: October 2013 through December 2013

EVSE Usage	Weekday	Weekend	Overall	
Number of charging events	547	105	652	
Electricity consumed (AC MWh)	6.14	1.35	7.49	
Percent of time with a vehicle connected to EVSE	6%	4%	6%	
Percent of time with a vehicle drawing power from EVSE	2%	1%	2%	
Average number of charging events started per EVSE per day	0.20	0.10	0.17	

Charging Availability: Range of Percent of Charging Units with a Vehicle Connected versus Time of Day³







Region: Philadelphia, PA Metropolitan Area Report period: October 2013 through December 2013

Vehicles Charged	PhillyCarShare fleet	Nissan Leaf	Chevrolet Volt	Unknown
Percent of charging events	11%	0%	6%	82%
Percent of electricity consumed	9%	0%	3%	88%
Individual Charging Event Statistics		Weekday (WD)	Weekend (WE)	Overall
Average length of time with vehicle connected per charging event (hr)		7.8	10.5	8.2
Average length of time with vehicle drawing power per charging event ([hr)	3.0	2.8	3.0
Average electricity consumed per charging event (AC kWh)		11.5	11.6	11.5





Distribution of Length of Time with a Vehicle Drawing Power per Charging Event



Distribution of Electricity Consumed per Charging Event



¹ PhillyCarShare operates a car sharing fleet of Chevrolet Volts in this region. Usage of publicly accessible EV Project charging units to charge these vehicles is included in this report.

