

SCAQMD Quantum Escape PHEV Report

All Vehicles

Number of vehicles: 18

Date range of data received:

09/01/2012 to 09/30/2012

Reporting period: September 2012

Number of vehicle days driven: 160

All Trips Combined

Overall gasoline fuel economy (mpg)	36
Overall AC electrical energy consumption (AC Wh/mi) ¹	49
Overall DC electrical energy consumption (DC Wh/mi) ²	27
Total number of trips	927
Total distance traveled (mi)	9,301

Trips in Charge Depleting (CD) mode³

Gasoline fuel economy (mpg)	39
DC electrical energy consumption (DC Wh/mi) ⁴	66
Number of trips	313
Percent of trips city highway	68% 32%
Distance traveled (mi)	2,138
Percent of total distance traveled	23%

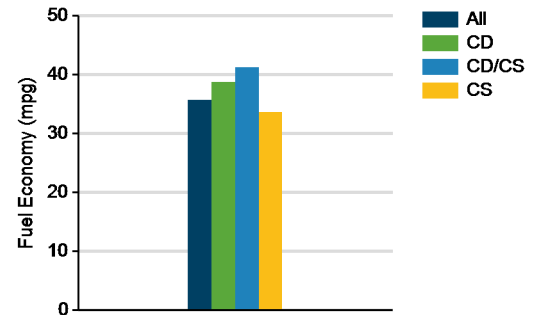
Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes⁵

Gasoline fuel economy (mpg)	41
DC electrical energy consumption (DC Wh/mi) ⁶	63
Number of trips	46
Percent of trips city highway	30% 70%
Distance traveled (mi)	1,462
Percent of total distance traveled	16%

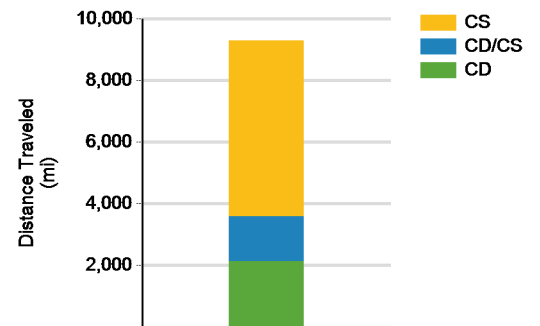
Trips in Charge Sustaining (CS) mode⁷

Gasoline fuel economy (mpg)	34
Number of trips	568
Percent of trips city highway	75% 25%
Distance traveled (mi)	5,701
Percent of total distance traveled	61%

Gasoline Fuel Economy By Trip Type



Distance Traveled By Trip Type



Notes: 1 - 8. Please see <http://avt.inl.gov/pdf/phev/SCAQMDreportnotes.pdf> for an explanation of all PHEV Fleet Testing Report notes.

Trips in Charge Depleting (CD) mode

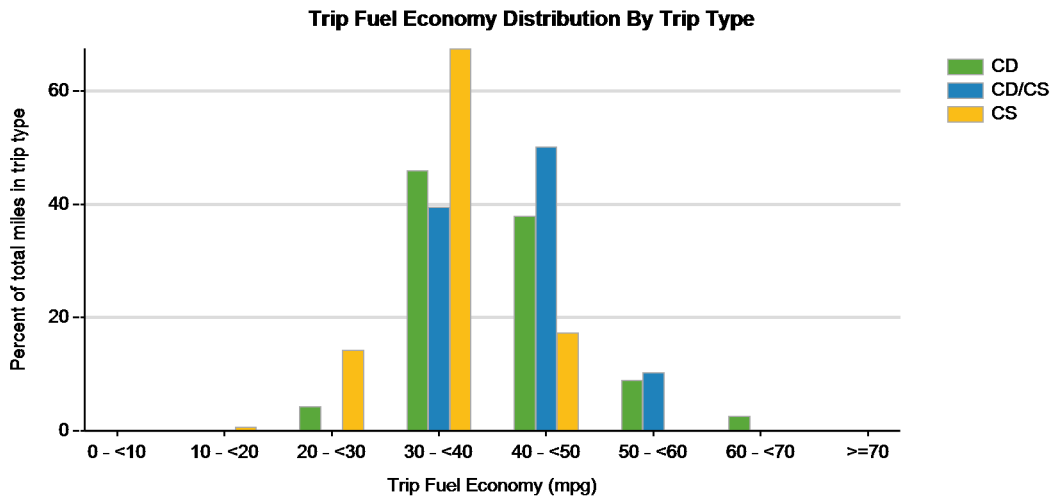
	City	Highway
Gasoline fuel economy (mpg)	37	39
DC electrical energy consumption (DC Wh/mi)	75	63
Percent of miles with internal combustion engine off	4%	1%
Average trip driving intensity ⁸	4	3
Average trip distance (mi)	2.8	15.3

Trips in Charge Depleting and Charge Sustaining (CD/CS) mode

Gasoline fuel economy (mpg)	44	41
DC electrical energy consumption (DC Wh/mi)	73	61
Percent of miles with internal combustion engine off	4%	0%
Average trip driving intensity ⁸	3	2
Average trip distance (mi)	16.6	38.4

Trips in Charge Sustaining (CS) mode

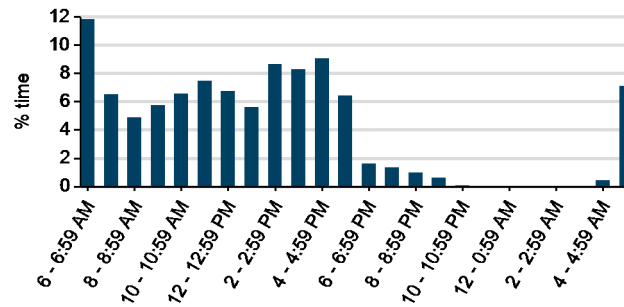
Gasoline fuel economy (mpg)	32	35
Percent of miles with internal combustion engine off	1%	0%
Average trip driving intensity ⁸	4	2
Average trip distance (mi)	4.4	26.8



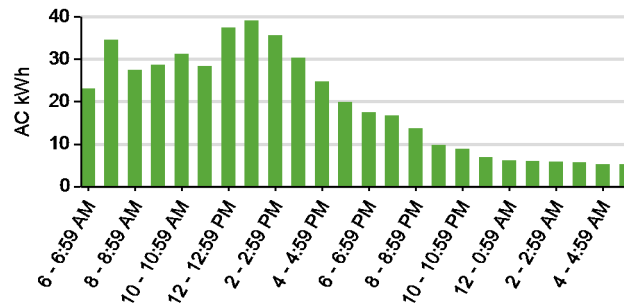
Plug-in charging

Average number of charging events per vehicle per month when driven	6
Average number of charging events per vehicle per day when driven	0.7
Average distance driven between charging events (mi)	86.1
Average number of trips between charging events	8.6
Average time plugged in per charging event (hr)	25.6
Average time plugged in and drawing power (hr)	25.6
Average time charging per charging event (power > 200 w) (hr)	4.2
Average energy per charging event (AC kWh)	4.2
Average charging energy per vehicle per month (AC kWh)	25.2
Total number of charging events	108
Total charging energy (AC kWh)	454

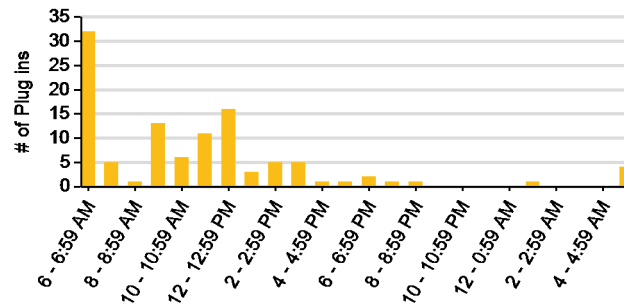
Time of Day When Driving



Time of Day When Charging



Time of Day When Plugging In



SCAQMD Quantum Escape PHEV Report

Quantum SCAQMD #25

Number of vehicles: 1

Date range of data received:

09/07/2012 to 09/18/2012

Reporting period: September 2012

Number of vehicle days driven: 6

All Trips Combined

Overall gasoline fuel economy (mpg)	34
Overall AC electrical energy consumption (AC Wh/mi) ¹	51
Overall DC electrical energy consumption (DC Wh/mi) ²	23
Total number of trips	38
Total distance traveled (mi)	277

Trips in Charge Depleting (CD) mode³

Gasoline fuel economy (mpg)	48
DC electrical energy consumption (DC Wh/mi) ⁴	85
Number of trips	14
Percent of trips city highway	86% 14%
Distance traveled (mi)	51
Percent of total distance traveled	19%

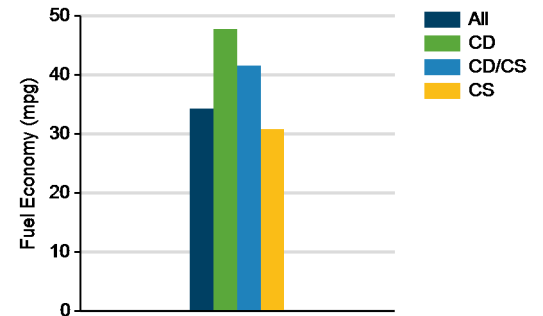
Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes⁵

Gasoline fuel economy (mpg)	42
DC electrical energy consumption (DC Wh/mi) ⁶	46
Number of trips	1
Percent of trips city highway	0% 100%
Distance traveled (mi)	38
Percent of total distance traveled	14%

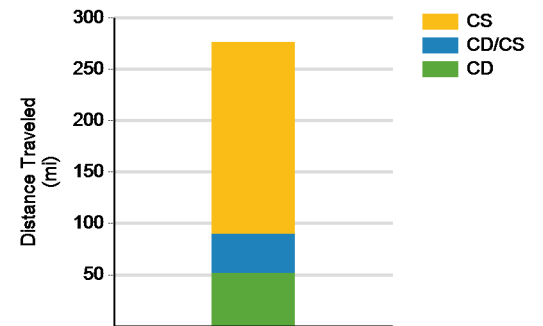
Trips in Charge Sustaining (CS) mode⁷

Gasoline fuel economy (mpg)	31
Number of trips	23
Percent of trips city highway	78% 22%
Distance traveled (mi)	187
Percent of total distance traveled	68%

Gasoline Fuel Economy By Trip Type



Distance Traveled By Trip Type



Notes: 1 - 8. Please see <http://avt.inl.gov/pdf/phev/SCAQMDreportnotes.pdf> for an explanation of all PHEV Fleet Testing Report notes.

Trips in Charge Depleting (CD) mode

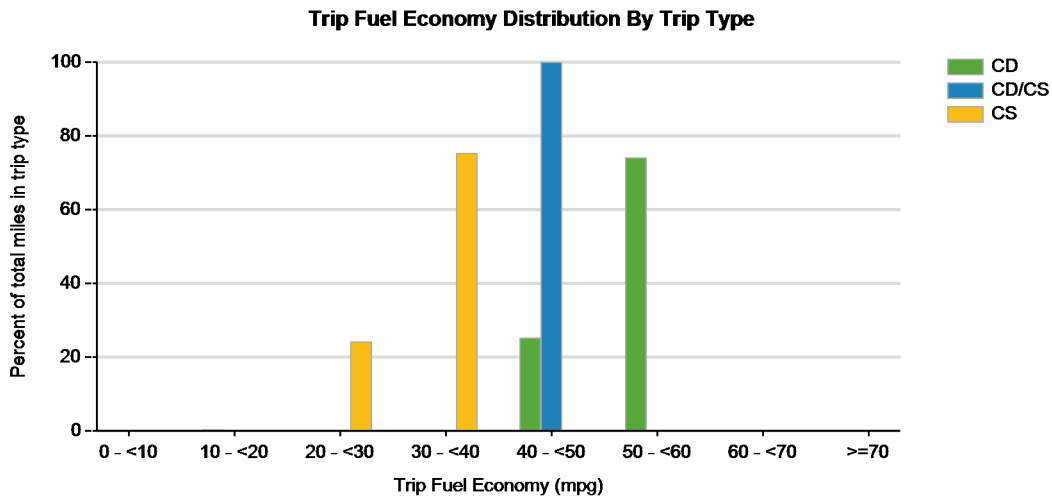
	City	Highway
Gasoline fuel economy (mpg)	39	52
DC electrical energy consumption (DC Wh/mi)	83	85
Percent of miles with internal combustion engine off	22%	12%
Average trip driving intensity ⁸	5	3
Average trip distance (mi)	1.1	19.0

Trips in Charge Depleting and Charge Sustaining (CD/CS) mode

	City	Highway
Gasoline fuel economy (mpg)	0	42
DC electrical energy consumption (DC Wh/mi)	0	46
Percent of miles with internal combustion engine off	0%	1%
Average trip driving intensity ⁸		2
Average trip distance (mi)	0.0	38.1

Trips in Charge Sustaining (CS) mode

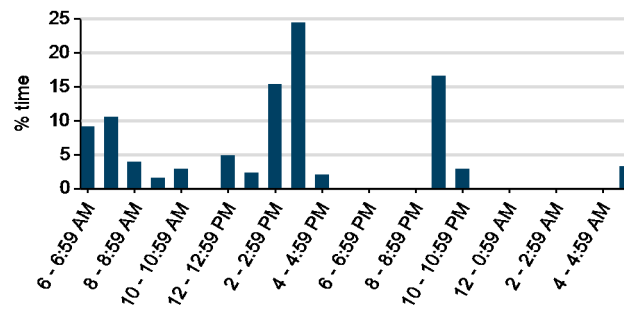
	City	Highway
Gasoline fuel economy (mpg)	26	31
Percent of miles with internal combustion engine off	12%	3%
Average trip driving intensity ⁸	5	2
Average trip distance (mi)	0.7	35.0



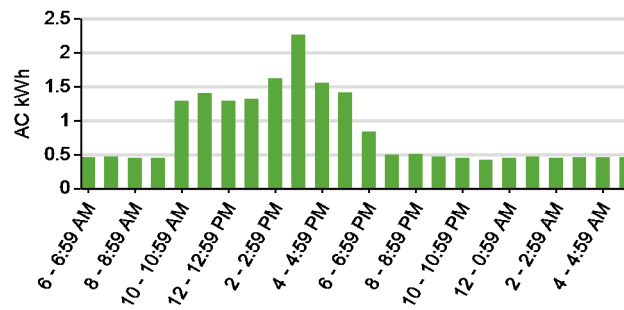
Plug-in charging

Average number of charging events per vehicle per month when driven	3
Average number of charging events per vehicle per day when driven	0.5
Average distance driven between charging events (mi)	92.2
Average number of trips between charging events	12.7
Average time plugged in per charging event (hr)	41.4
Average time plugged in and drawing power (hr)	41.4
Average time charging per charging event (power > 200 w) (hr)	8.1
Average energy per charging event (AC kWh)	4.7
Average charging energy per vehicle per month (AC kWh)	14.1
Total number of charging events	3
Total charging energy (AC kWh)	14

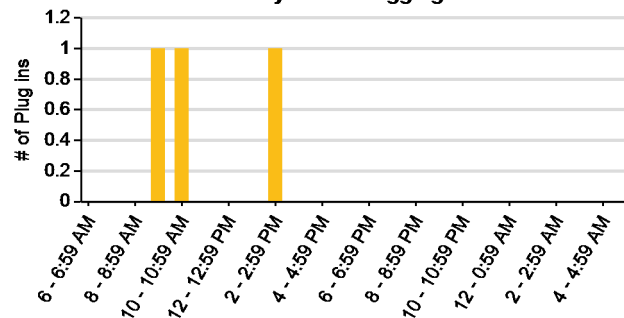
Time of Day When Driving



Time of Day When Charging



Time of Day When Plugging In



SCAQMD Quantum Escape PHEV Report

Quantum SCAQMD #23

Number of vehicles: 1

Date range of data received:

09/01/2012 to 09/28/2012

Reporting period: September 2012

Number of vehicle days driven: 18

All Trips Combined

Overall gasoline fuel economy (mpg)	35
Overall AC electrical energy consumption (AC Wh/mi) ¹	28
Overall DC electrical energy consumption (DC Wh/mi) ²	19
Total number of trips	141
Total distance traveled (mi)	1,911

Trips in Charge Depleting (CD) mode³

Gasoline fuel economy (mpg)	33
DC electrical energy consumption (DC Wh/mi) ⁴	66
Number of trips	21
Percent of trips city highway	43% 57%
Distance traveled (mi)	208
Percent of total distance traveled	11%

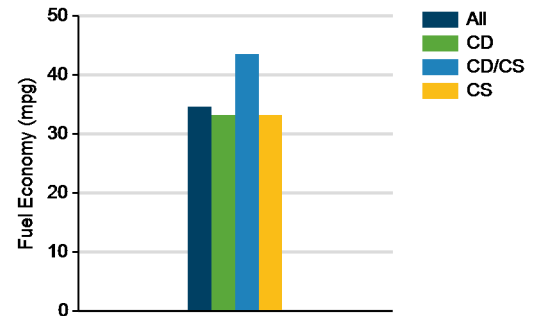
Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes⁵

Gasoline fuel economy (mpg)	44
DC electrical energy consumption (DC Wh/mi) ⁶	59
Number of trips	8
Percent of trips city highway	25% 75%
Distance traveled (mi)	332
Percent of total distance traveled	17%

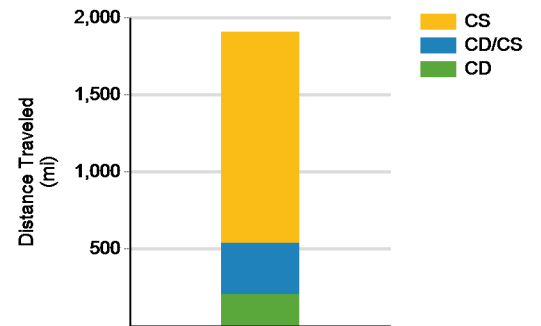
Trips in Charge Sustaining (CS) mode⁷

Gasoline fuel economy (mpg)	33
Number of trips	112
Percent of trips city highway	77% 23%
Distance traveled (mi)	1,370
Percent of total distance traveled	72%

Gasoline Fuel Economy By Trip Type



Distance Traveled By Trip Type



Notes: 1 - 8. Please see <http://avt.inl.gov/pdf/phev/SCAQMDreportnotes.pdf> for an explanation of all PHEV Fleet Testing Report notes.

Trips in Charge Depleting (CD) mode

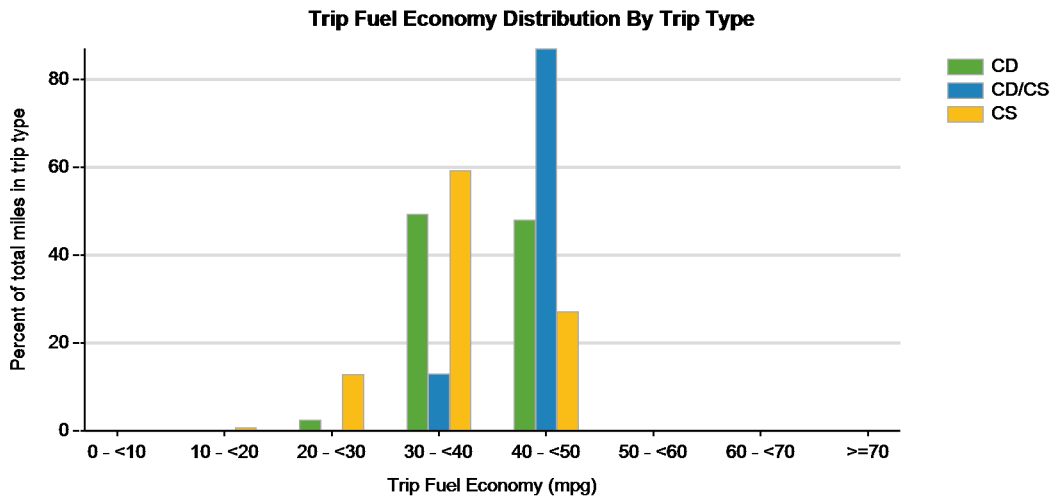
	City	Highway
Gasoline fuel economy (mpg)	37	32
DC electrical energy consumption (DC Wh/mi)	77	62
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity ⁸	3	3
Average trip distance (mi)	5.9	12.9

Trips in Charge Depleting and Charge Sustaining (CD/CS) mode

	City	Highway
Gasoline fuel economy (mpg)	44	43
DC electrical energy consumption (DC Wh/mi)	83	53
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity ⁸	3	2
Average trip distance (mi)	34.2	44.0

Trips in Charge Sustaining (CS) mode

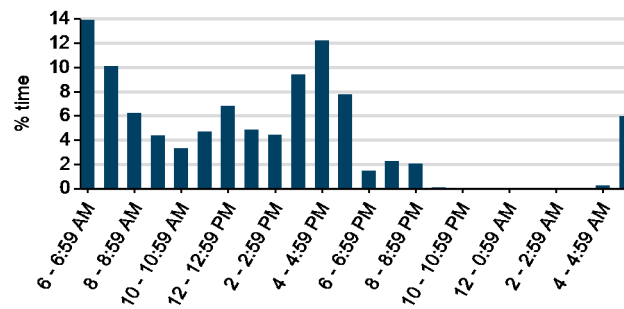
	City	Highway
Gasoline fuel economy (mpg)	29	36
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity ⁸	3	2
Average trip distance (mi)	5.3	35.2



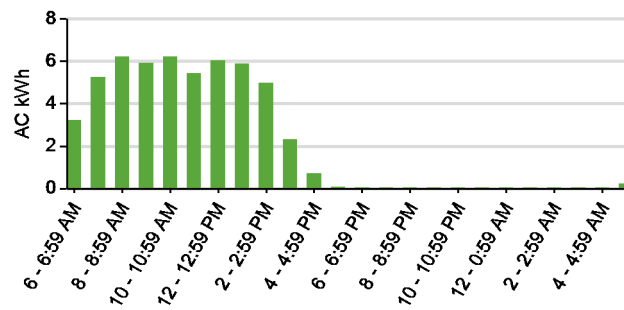
Plug-in charging

Average number of charging events per vehicle per month when driven	12
Average number of charging events per vehicle per day when driven	0.7
Average distance driven between charging events (mi)	159.2
Average number of trips between charging events	11.8
Average time plugged in per charging event (hr)	6.4
Average time plugged in and drawing power (hr)	6.4
Average time charging per charging event (power > 200 w) (hr)	4.9
Average energy per charging event (AC kWh)	4.4
Average charging energy per vehicle per month (AC kWh)	53.0
Total number of charging events	12
Total charging energy (AC kWh)	53

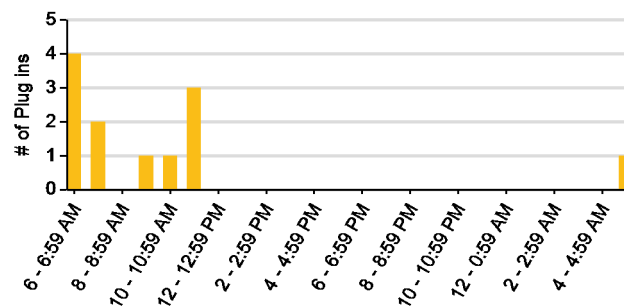
Time of Day When Driving



Time of Day When Charging



Time of Day When Plugging In



SCAQMD Quantum Escape PHEV Report

Quantum SCAQMD #22

Number of vehicles: 1

Date range of data received:

09/13/2012 to 09/18/2012

Reporting period: September 2012

Number of vehicle days driven: 3

All Trips Combined

Overall gasoline fuel economy (mpg)	39
Overall AC electrical energy consumption (AC Wh/mi) ¹	249
Overall DC electrical energy consumption (DC Wh/mi) ²	64
Total number of trips	18
Total distance traveled (mi)	85

Trips in Charge Depleting (CD) mode³

Gasoline fuel economy (mpg)	42
DC electrical energy consumption (DC Wh/mi) ⁴	83
Number of trips	11
Percent of trips city highway	73% 27%
Distance traveled (mi)	45
Percent of total distance traveled	53%

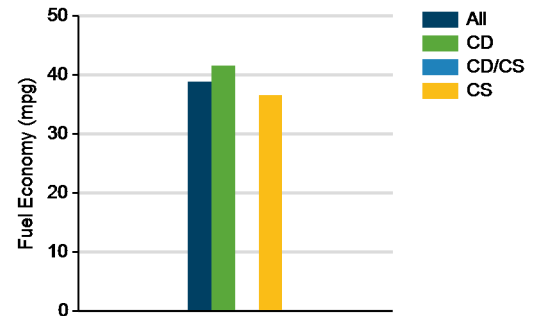
Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes⁵

Gasoline fuel economy (mpg)	0
DC electrical energy consumption (DC Wh/mi) ⁶	0
Number of trips	1
Percent of trips city highway	100% 0%
Distance traveled (mi)	0
Percent of total distance traveled	0%

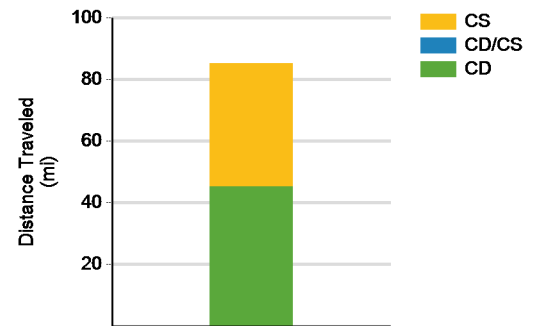
Trips in Charge Sustaining (CS) mode⁷

Gasoline fuel economy (mpg)	37
Number of trips	6
Percent of trips city highway	83% 17%
Distance traveled (mi)	40
Percent of total distance traveled	47%

Gasoline Fuel Economy By Trip Type



Distance Traveled By Trip Type



Notes: 1 - 8. Please see <http://avt.inl.gov/pdf/phev/SCAQMDreportnotes.pdf> for an explanation of all PHEV Fleet Testing Report notes.

Trips in Charge Depleting (CD) mode

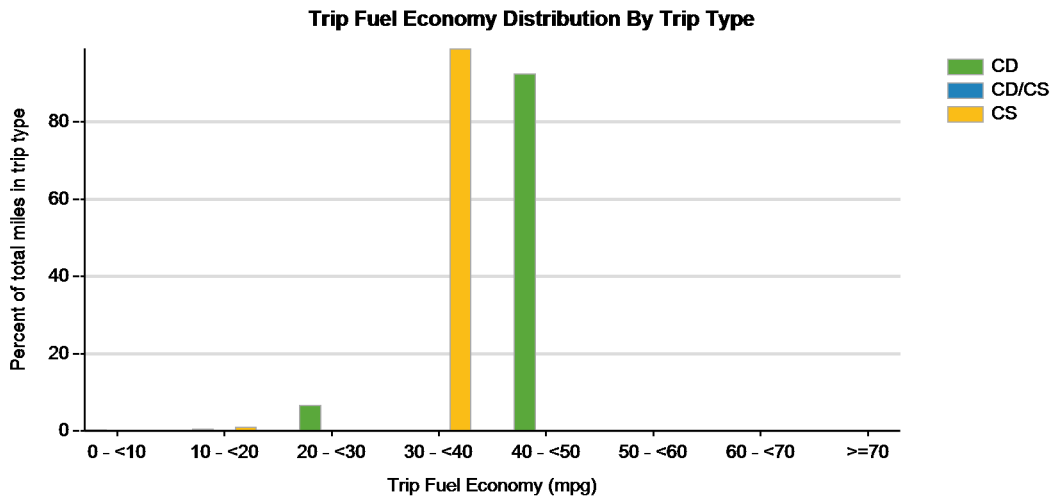
	City	Highway
Gasoline fuel economy (mpg)	22	45
DC electrical energy consumption (DC Wh/mi)	187	74
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity ⁸	5	3
Average trip distance (mi)	0.4	13.9

Trips in Charge Depleting and Charge Sustaining (CD/CS) mode

Gasoline fuel economy (mpg)	0	0
DC electrical energy consumption (DC Wh/mi)	0	0
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity ⁸		
Average trip distance (mi)	0.0	0.0

Trips in Charge Sustaining (CS) mode

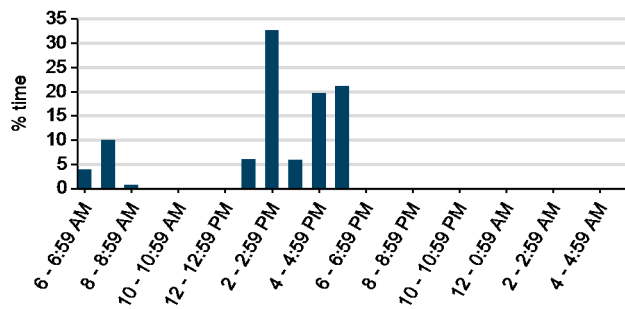
Gasoline fuel economy (mpg)	26	38
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity ⁸	5	2
Average trip distance (mi)	0.7	36.5



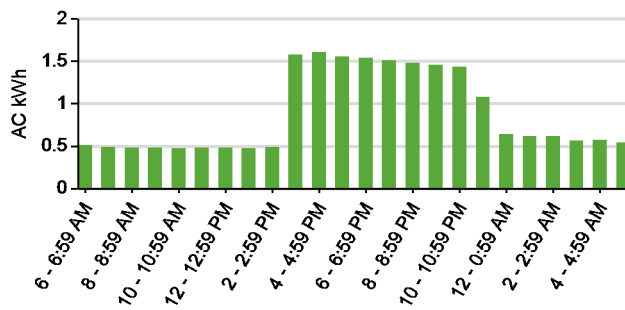
Plug-in charging

Average number of charging events per vehicle per month when driven	3
Average number of charging events per vehicle per day when driven	1.0
Average distance driven between charging events (mi)	28.4
Average number of trips between charging events	6.0
Average time plugged in per charging event (hr)	140.8
Average time plugged in and drawing power (hr)	140.8
Average time charging per charging event (power > 200 w) (hr)	0.0
Average energy per charging event (AC kWh)	7.1
Average charging energy per vehicle per month (AC kWh)	21.2
Total number of charging events	3
Total charging energy (AC kWh)	21

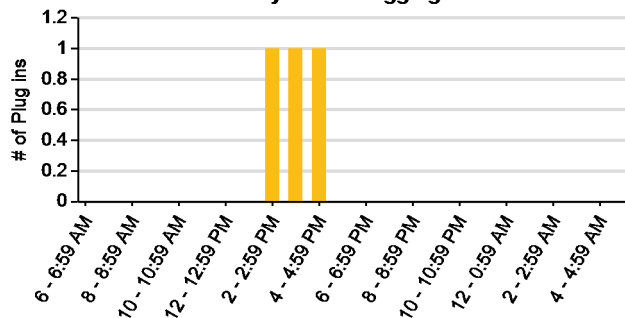
Time of Day When Driving



Time of Day When Charging



Time of Day When Plugging In



SCAQMD Quantum Escape PHEV Report

Quantum SCAQMD #21

Number of vehicles: 1

Date range of data received:

09/04/2012 to 09/28/2012

Reporting period: September 2012

Number of vehicle days driven: 13

All Trips Combined

Overall gasoline fuel economy (mpg)	37
Overall AC electrical energy consumption (AC Wh/mi) ¹	118
Overall DC electrical energy consumption (DC Wh/mi) ²	66
Total number of trips	49
Total distance traveled (mi)	342

Trips in Charge Depleting (CD) mode³

Gasoline fuel economy (mpg)	40
DC electrical energy consumption (DC Wh/mi) ⁴	89
Number of trips	37
Percent of trips city highway	87% 14%
Distance traveled (mi)	159
Percent of total distance traveled	46%

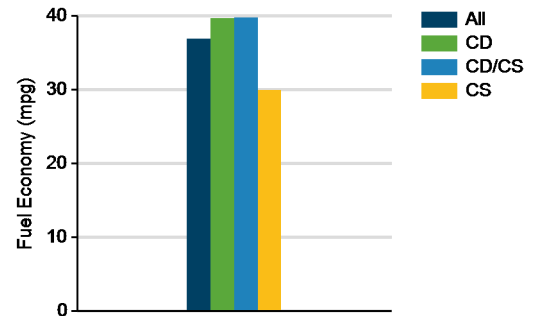
Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes⁵

Gasoline fuel economy (mpg)	40
DC electrical energy consumption (DC Wh/mi) ⁶	79
Number of trips	3
Percent of trips city highway	0% 100%
Distance traveled (mi)	104
Percent of total distance traveled	30%

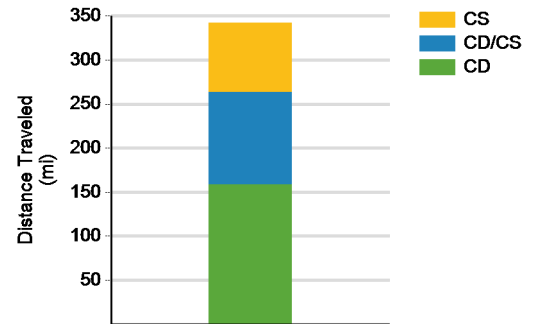
Trips in Charge Sustaining (CS) mode⁷

Gasoline fuel economy (mpg)	30
Number of trips	9
Percent of trips city highway	67% 33%
Distance traveled (mi)	79
Percent of total distance traveled	23%

Gasoline Fuel Economy By Trip Type



Distance Traveled By Trip Type



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Trips in Charge Depleting (CD) mode

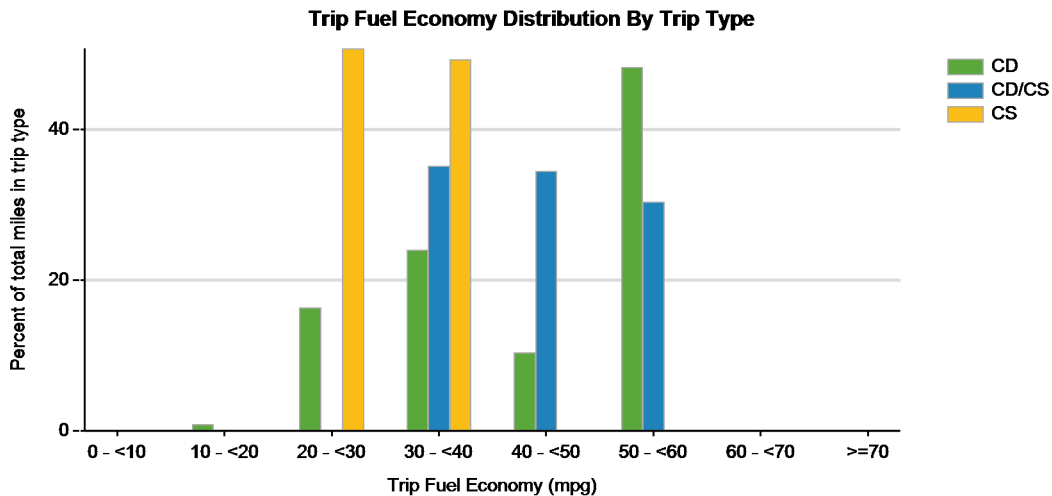
	City	Highway
Gasoline fuel economy (mpg)	28	45
DC electrical energy consumption (DC Wh/mi)	142	74
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity ⁸	5	3
Average trip distance (mi)	1.1	24.9

Trips in Charge Depleting and Charge Sustaining (CD/CS) mode

	City	Highway
Gasoline fuel economy (mpg)	0	40
DC electrical energy consumption (DC Wh/mi)	0	79
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity ⁸		2
Average trip distance (mi)	0.0	34.8

Trips in Charge Sustaining (CS) mode

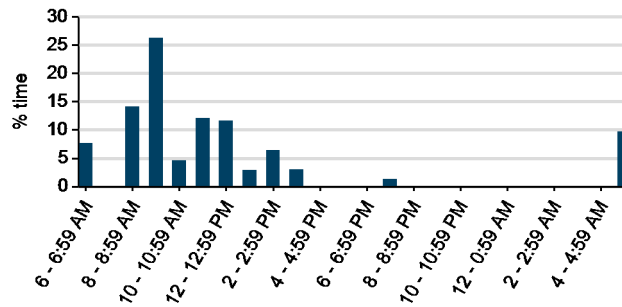
	City	Highway
Gasoline fuel economy (mpg)	29	30
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity ⁸	6	3
Average trip distance (mi)	0.6	25.1



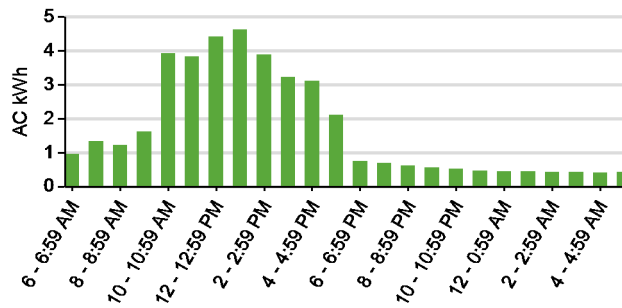
Plug-in charging

Average number of charging events per vehicle per month when driven	6
Average number of charging events per vehicle per day when driven	0.5
Average distance driven between charging events (mi)	57.0
Average number of trips between charging events	8.2
Average time plugged in per charging event (hr)	46.4
Average time plugged in and drawing power (hr)	46.4
Average time charging per charging event (power > 200 w) (hr)	7.7
Average energy per charging event (AC kWh)	6.7
Average charging energy per vehicle per month (AC kWh)	40.5
Total number of charging events	6
Total charging energy (AC kWh)	40

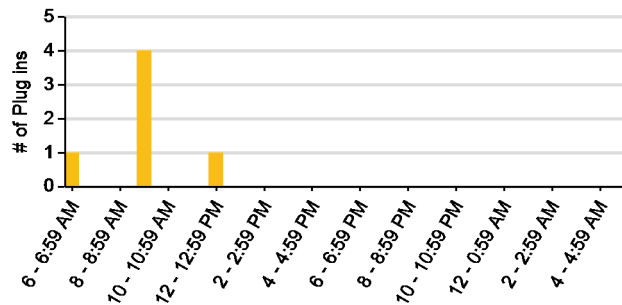
Time of Day When Driving



Time of Day When Charging



Time of Day When Plugging In



SCAQMD Quantum Escape PHEV Report

Quantum SCAQMD #18

Number of vehicles: 1

Date range of data received:

09/01/2012 to 09/21/2012

Reporting period: September 2012

Number of vehicle days driven: 8

All Trips Combined

Overall gasoline fuel economy (mpg)	36
Overall AC electrical energy consumption (AC Wh/mi) ¹	99
Overall DC electrical energy consumption (DC Wh/mi) ²	38
Total number of trips	38
Total distance traveled (mi)	451

Trips in Charge Depleting (CD) mode³

Gasoline fuel economy (mpg)	39
DC electrical energy consumption (DC Wh/mi) ⁴	61
Number of trips	15
Percent of trips city highway	60% 40%
Distance traveled (mi)	205
Percent of total distance traveled	45%

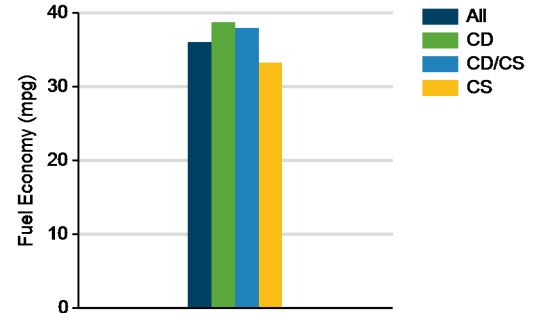
Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes⁵

Gasoline fuel economy (mpg)	38
DC electrical energy consumption (DC Wh/mi) ⁶	70
Number of trips	3
Percent of trips city highway	100% 0%
Distance traveled (mi)	49
Percent of total distance traveled	11%

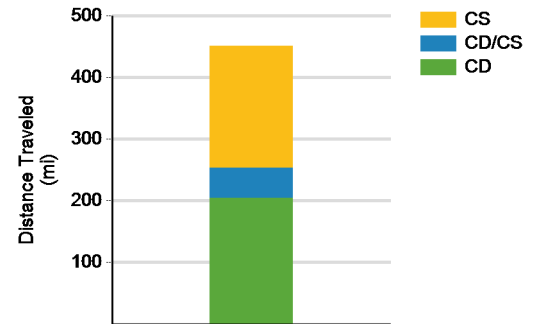
Trips in Charge Sustaining (CS) mode⁷

Gasoline fuel economy (mpg)	33
Number of trips	20
Percent of trips city highway	75% 25%
Distance traveled (mi)	197
Percent of total distance traveled	44%

Gasoline Fuel Economy By Trip Type



Distance Traveled By Trip Type



Notes: 1 - 8. Please see <http://avt.inl.gov/pdf/phev/SCAQMDreportnotes.pdf> for an explanation of all PHEV Fleet Testing Report notes.

Trips in Charge Depleting (CD) mode

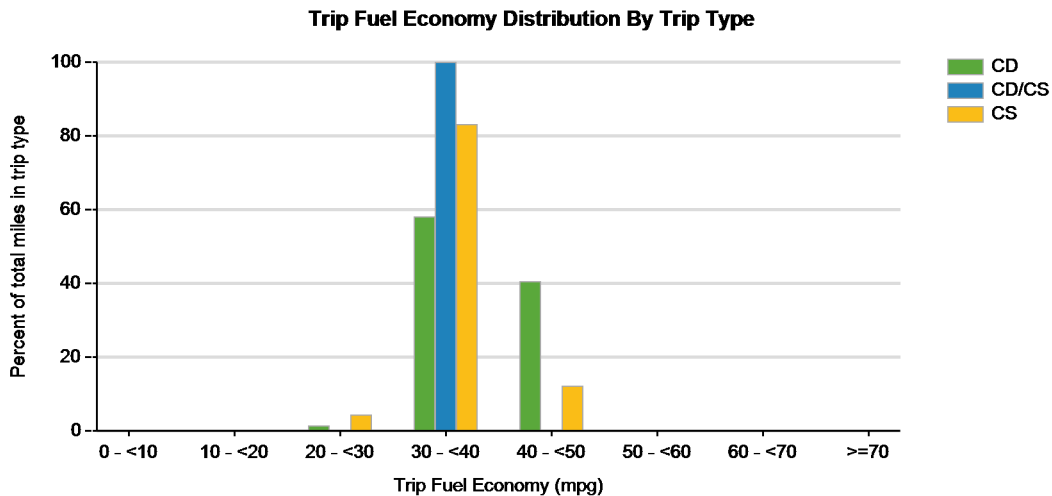
	City	Highway
Gasoline fuel economy (mpg)	40	38
DC electrical energy consumption (DC Wh/mi)	67	60
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity ⁸	4	3
Average trip distance (mi)	4.7	27.1

Trips in Charge Depleting and Charge Sustaining (CD/CS) mode

Gasoline fuel economy (mpg)	38	0
DC electrical energy consumption (DC Wh/mi)	70	0
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity ⁸	4	
Average trip distance (mi)	16.5	0.0

Trips in Charge Sustaining (CS) mode

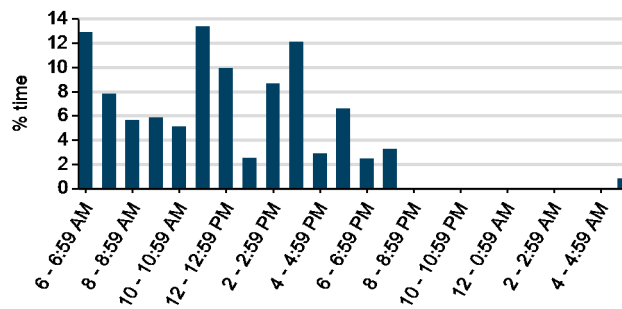
Gasoline fuel economy (mpg)	32	34
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity ⁸	5	3
Average trip distance (mi)	6.7	19.5



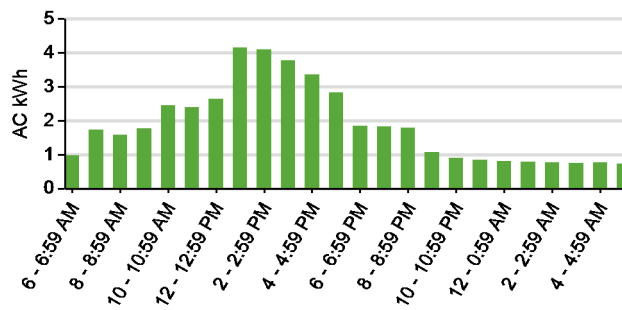
Plug-in charging

Average number of charging events per vehicle per month when driven	5
Average number of charging events per vehicle per day when driven	0.6
Average distance driven between charging events (mi)	90.3
Average number of trips between charging events	7.6
Average time plugged in per charging event (hr)	98.4
Average time plugged in and drawing power (hr)	98.4
Average time charging per charging event (power > 200 w) (hr)	4.9
Average energy per charging event (AC kWh)	8.9
Average charging energy per vehicle per month (AC kWh)	44.7
Total number of charging events	5
Total charging energy (AC kWh)	45

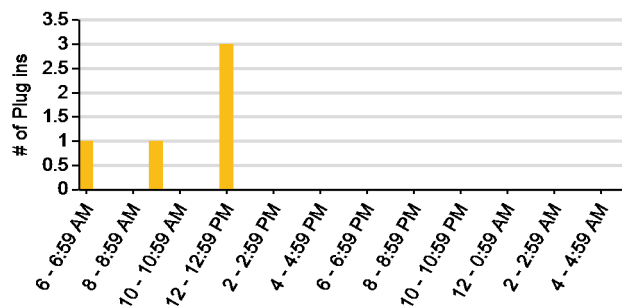
Time of Day When Driving



Time of Day When Charging



Time of Day When Plugging In



SCAQMD Quantum Escape PHEV Report

Quantum SCAQMD #17

Number of vehicles: 1

Date range of data received:

09/02/2012 to 09/30/2012

Reporting period: September 2012

Number of vehicle days driven: 16

All Trips Combined

Overall gasoline fuel economy (mpg)	37
Overall AC electrical energy consumption (AC Wh/mi) ¹	100
Overall DC electrical energy consumption (DC Wh/mi) ²	61
Total number of trips	62
Total distance traveled (mi)	395

Trips in Charge Depleting (CD) mode³

Gasoline fuel economy (mpg)	42
DC electrical energy consumption (DC Wh/mi) ⁴	80
Number of trips	13
Percent of trips city highway	62% 39%
Distance traveled (mi)	147
Percent of total distance traveled	37%

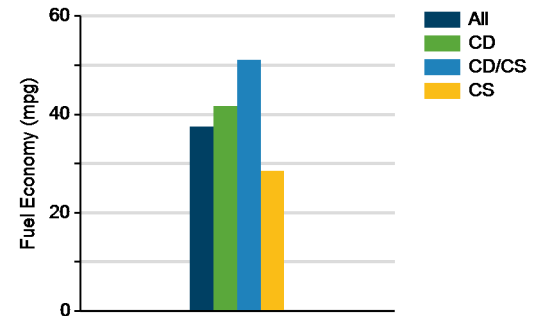
Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes⁵

Gasoline fuel economy (mpg)	51
DC electrical energy consumption (DC Wh/mi) ⁶	77
Number of trips	4
Percent of trips city highway	50% 50%
Distance traveled (mi)	109
Percent of total distance traveled	28%

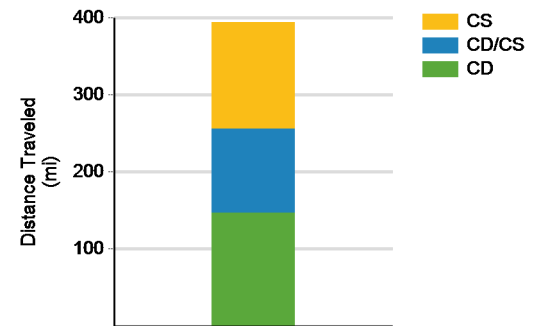
Trips in Charge Sustaining (CS) mode⁷

Gasoline fuel economy (mpg)	28
Number of trips	45
Percent of trips city highway	91% 9%
Distance traveled (mi)	138
Percent of total distance traveled	35%

Gasoline Fuel Economy By Trip Type



Distance Traveled By Trip Type



Notes: 1 - 8. Please see <http://avt.inl.gov/pdf/phev/SCAQMDreportnotes.pdf> for an explanation of all PHEV Fleet Testing Report notes.

Trips in Charge Depleting (CD) mode

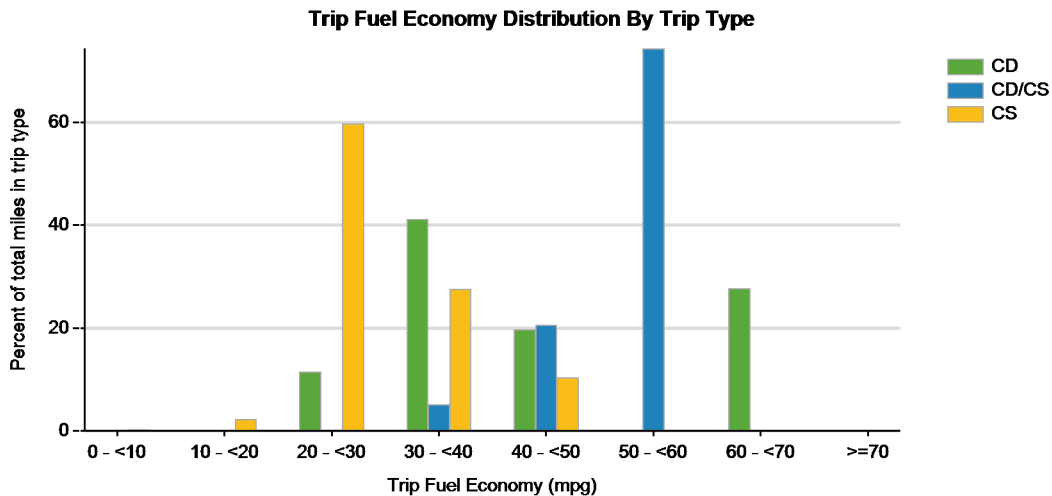
	City	Highway
Gasoline fuel economy (mpg)	34	43
DC electrical energy consumption (DC Wh/mi)	28	89
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity ⁸	5	3
Average trip distance (mi)	2.8	25.1

Trips in Charge Depleting and Charge Sustaining (CD/CS) mode

Gasoline fuel economy (mpg)	51	51
DC electrical energy consumption (DC Wh/mi)	48	98
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity ⁸	3	2
Average trip distance (mi)	23.1	31.5

Trips in Charge Sustaining (CS) mode

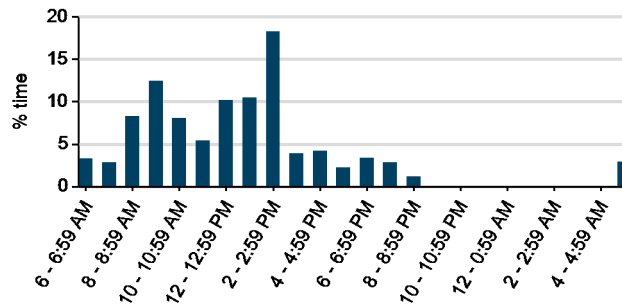
Gasoline fuel economy (mpg)	28	29
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity ⁸	5	3
Average trip distance (mi)	1.6	18.1



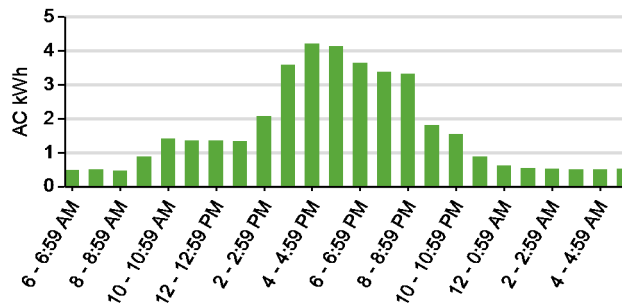
Plug-in charging

Average number of charging events per vehicle per month when driven	5
Average number of charging events per vehicle per day when driven	0.3
Average distance driven between charging events (mi)	79.0
Average number of trips between charging events	12.4
Average time plugged in per charging event (hr)	61.7
Average time plugged in and drawing power (hr)	61.7
Average time charging per charging event (power > 200 w) (hr)	8.7
Average energy per charging event (AC kWh)	7.9
Average charging energy per vehicle per month (AC kWh)	39.5
Total number of charging events	5
Total charging energy (AC kWh)	40

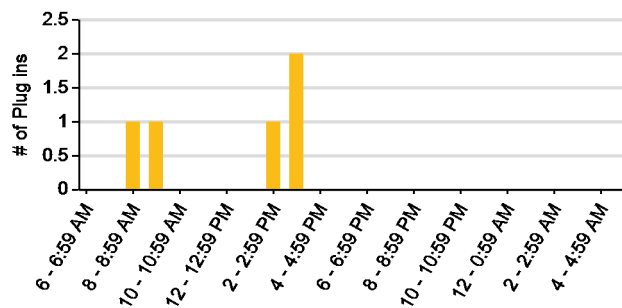
Time of Day When Driving



Time of Day When Charging



Time of Day When Plugging In



SCAQMD Quantum Escape PHEV Report

Quantum SCAQMD #16

Number of vehicles: 1

Date range of data received:

09/04/2012 to 09/07/2012

Reporting period: September 2012

Number of vehicle days driven: 4

All Trips Combined

Overall gasoline fuel economy (mpg)	39
Overall AC electrical energy consumption (AC Wh/mi) ¹	47
Overall DC electrical energy consumption (DC Wh/mi) ²	35
Total number of trips	25
Total distance traveled (mi)	515

Trips in Charge Depleting (CD) mode³

Gasoline fuel economy (mpg)	50
DC electrical energy consumption (DC Wh/mi) ⁴	46
Number of trips	11
Percent of trips city highway	55% 46%
Distance traveled (mi)	88
Percent of total distance traveled	17%

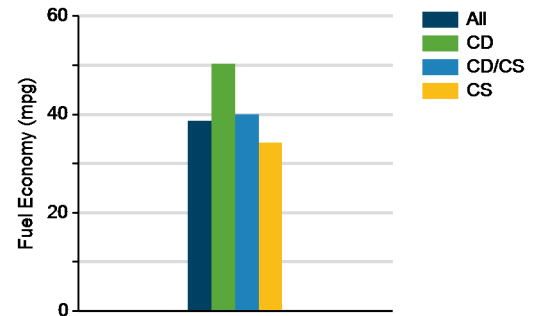
Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes⁵

Gasoline fuel economy (mpg)	40
DC electrical energy consumption (DC Wh/mi) ⁶	57
Number of trips	4
Percent of trips city highway	0% 100%
Distance traveled (mi)	213
Percent of total distance traveled	41%

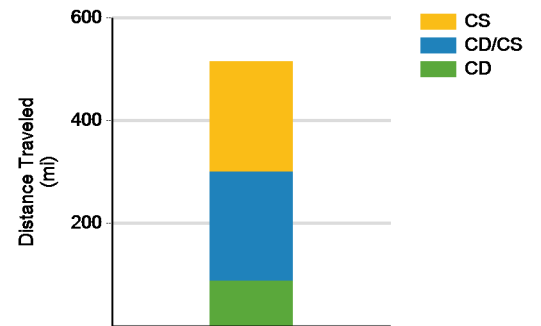
Trips in Charge Sustaining (CS) mode⁷

Gasoline fuel economy (mpg)	34
Number of trips	10
Percent of trips city highway	40% 60%
Distance traveled (mi)	214
Percent of total distance traveled	42%

Gasoline Fuel Economy By Trip Type



Distance Traveled By Trip Type



Notes: 1 - 8. Please see <http://avt.inl.gov/pdf/phev/SCAQMDreportnotes.pdf> for an explanation of all PHEV Fleet Testing Report notes.

Trips in Charge Depleting (CD) mode

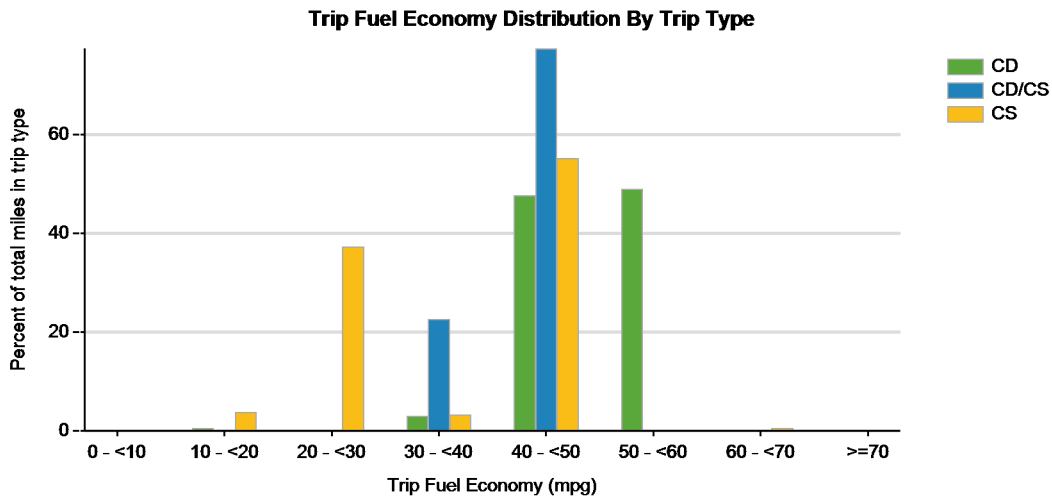
	City	Highway
Gasoline fuel economy (mpg)	40	53
DC electrical energy consumption (DC Wh/mi)	137	28
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity ⁸	4	2
Average trip distance (mi)	2.4	14.7

Trips in Charge Depleting and Charge Sustaining (CD/CS) mode

	City	Highway
Gasoline fuel economy (mpg)	0	40
DC electrical energy consumption (DC Wh/mi)	0	57
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity ⁸		1
Average trip distance (mi)	0.0	53.2

Trips in Charge Sustaining (CS) mode

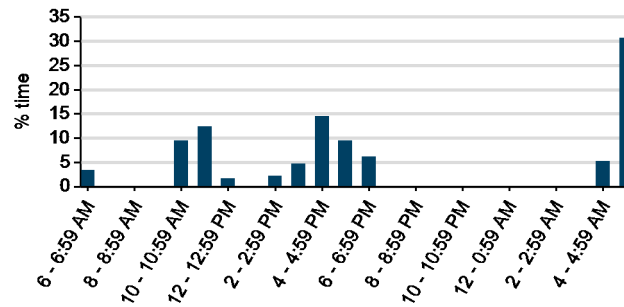
	City	Highway
Gasoline fuel economy (mpg)	21	35
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity ⁸	5	2
Average trip distance (mi)	1.3	34.8



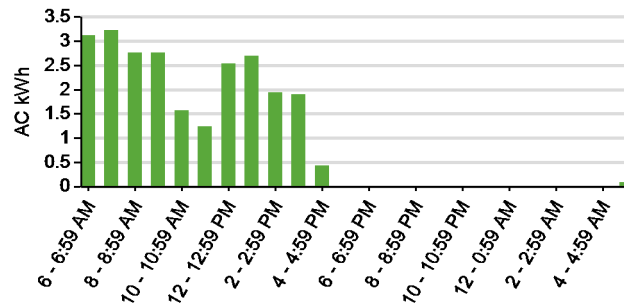
Plug-in charging

Average number of charging events per vehicle per month when driven	6
Average number of charging events per vehicle per day when driven	1.5
Average distance driven between charging events (mi)	85.8
Average number of trips between charging events	4.2
Average time plugged in per charging event (hr)	4.5
Average time plugged in and drawing power (hr)	4.5
Average time charging per charging event (power > 200 w) (hr)	4.5
Average energy per charging event (AC kWh)	4.0
Average charging energy per vehicle per month (AC kWh)	24.3
Total number of charging events	6
Total charging energy (AC kWh)	24

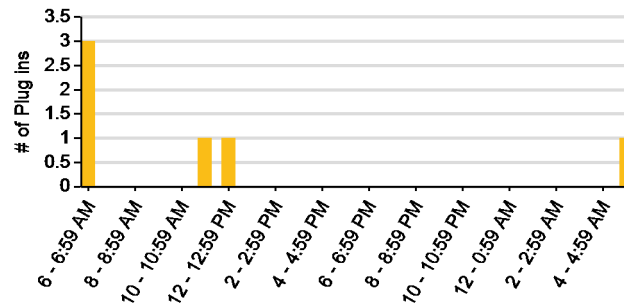
Time of Day When Driving



Time of Day When Charging



Time of Day When Plugging In



SCAQMD Quantum Escape PHEV Report

Quantum SCAQMD #10

Number of vehicles: 1

Date range of data received:

09/03/2012 to 09/27/2012

Reporting period: September 2012

Number of vehicle days driven: 17

All Trips Combined

Overall gasoline fuel economy (mpg)	35
Overall AC electrical energy consumption (AC Wh/mi) ¹	16
Overall DC electrical energy consumption (DC Wh/mi) ²	9
Total number of trips	119
Total distance traveled (mi)	1,155

Trips in Charge Depleting (CD) mode³

Gasoline fuel economy (mpg)	38
DC electrical energy consumption (DC Wh/mi) ⁴	57
Number of trips	12
Percent of trips city highway	58% 42%
Distance traveled (mi)	63
Percent of total distance traveled	5%

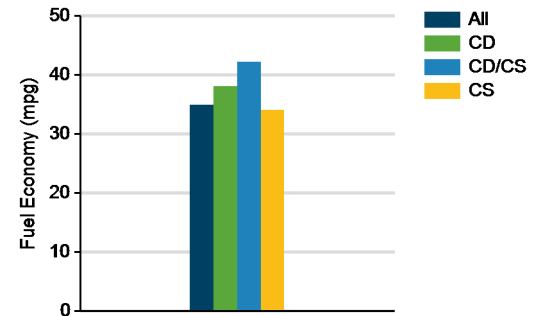
Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes⁵

Gasoline fuel economy (mpg)	42
DC electrical energy consumption (DC Wh/mi) ⁶	60
Number of trips	4
Percent of trips city highway	25% 75%
Distance traveled (mi)	120
Percent of total distance traveled	10%

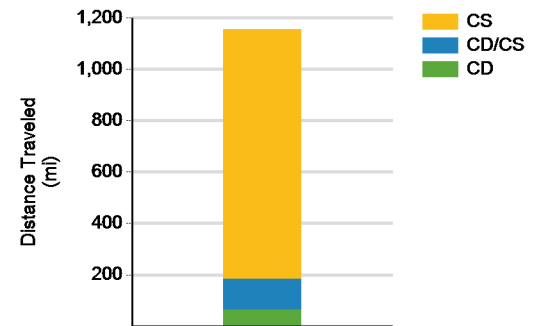
Trips in Charge Sustaining (CS) mode⁷

Gasoline fuel economy (mpg)	34
Number of trips	103
Percent of trips city highway	75% 25%
Distance traveled (mi)	971
Percent of total distance traveled	84%

Gasoline Fuel Economy By Trip Type



Distance Traveled By Trip Type



Notes: 1 - 8. Please see <http://avt.inl.gov/pdf/phev/SCAQMDreportnotes.pdf> for an explanation of all PHEV Fleet Testing Report notes.

Trips in Charge Depleting (CD) mode

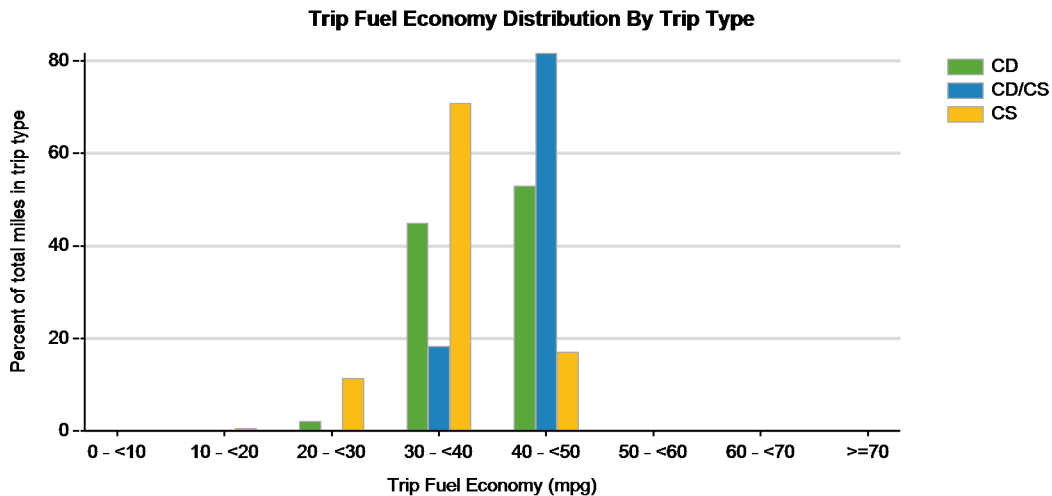
	City	Highway
Gasoline fuel economy (mpg)	40	36
DC electrical energy consumption (DC Wh/mi)	49	64
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity ⁸	4	3
Average trip distance (mi)	4.2	6.8

Trips in Charge Depleting and Charge Sustaining (CD/CS) mode

Gasoline fuel economy (mpg)	44	42
DC electrical energy consumption (DC Wh/mi)	52	61
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity ⁸	5	3
Average trip distance (mi)	14.7	35.2

Trips in Charge Sustaining (CS) mode

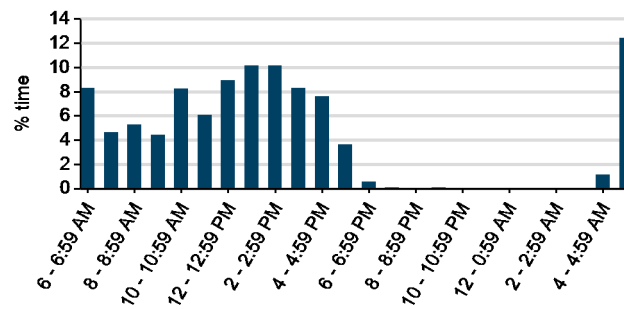
Gasoline fuel economy (mpg)	34	34
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity ⁸	4	3
Average trip distance (mi)	7.0	16.7



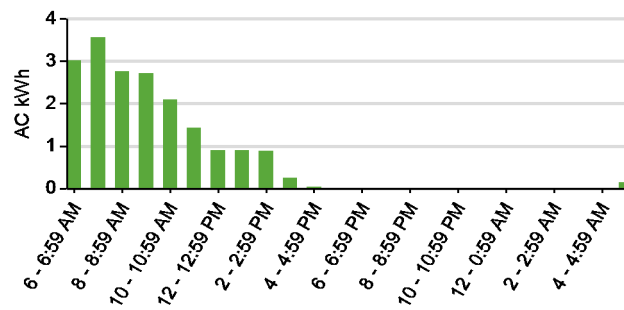
Plug-in charging

Average number of charging events per vehicle per month when driven	5
Average number of charging events per vehicle per day when driven	0.3
Average distance driven between charging events (mi)	231.0
Average number of trips between charging events	23.8
Average time plugged in per charging event (hr)	4.3
Average time plugged in and drawing power (hr)	4.3
Average time charging per charging event (power > 200 w) (hr)	4.3
Average energy per charging event (AC kWh)	3.7
Average charging energy per vehicle per month (AC kWh)	18.7
Total number of charging events	5
Total charging energy (AC kWh)	19

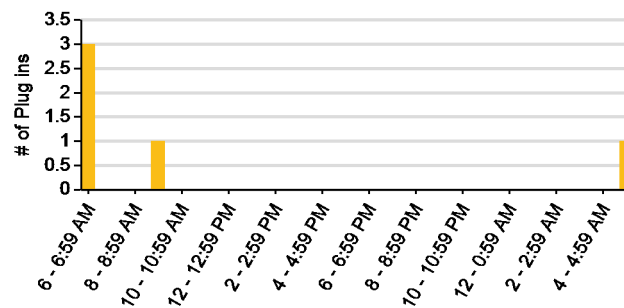
Time of Day When Driving



Time of Day When Charging



Time of Day When Plugging In



SCAQMD Quantum Escape PHEV Report

Quantum SCAQMD #9

Number of vehicles: 1

Date range of data received:

09/01/2012 to 09/28/2012

Reporting period: September 2012

Number of vehicle days driven: 23

All Trips Combined

Overall gasoline fuel economy (mpg)	35
Overall AC electrical energy consumption (AC Wh/mi) ¹	22
Overall DC electrical energy consumption (DC Wh/mi) ²	15
Total number of trips	170
Total distance traveled (mi)	2,024

Trips in Charge Depleting (CD) mode³

Gasoline fuel economy (mpg)	35
DC electrical energy consumption (DC Wh/mi) ⁴	53
Number of trips	30
Percent of trips city highway	57% 43%
Distance traveled (mi)	175
Percent of total distance traveled	9%

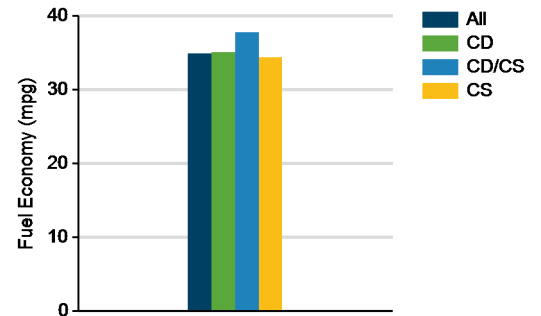
Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes⁵

Gasoline fuel economy (mpg)	38
DC electrical energy consumption (DC Wh/mi) ⁶	57
Number of trips	8
Percent of trips city highway	0% 100%
Distance traveled (mi)	300
Percent of total distance traveled	15%

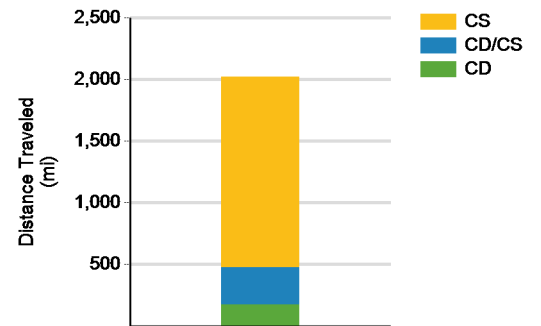
Trips in Charge Sustaining (CS) mode⁷

Gasoline fuel economy (mpg)	34
Number of trips	132
Percent of trips city highway	69% 31%
Distance traveled (mi)	1,549
Percent of total distance traveled	77%

Gasoline Fuel Economy By Trip Type



Distance Traveled By Trip Type



Notes: 1 - 8. Please see <http://avt.inl.gov/pdf/phev/SCAQMDreportnotes.pdf> for an explanation of all PHEV Fleet Testing Report notes.

Trips in Charge Depleting (CD) mode

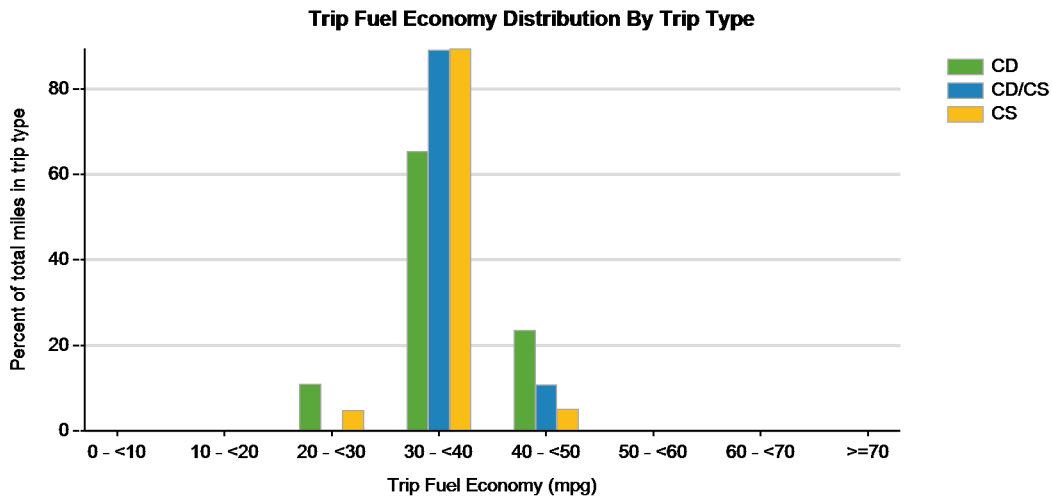
	City	Highway
Gasoline fuel economy (mpg)	31	37
DC electrical energy consumption (DC Wh/mi)	44	55
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity ⁸	5	2
Average trip distance (mi)	2.2	10.5

Trips in Charge Depleting and Charge Sustaining (CD/CS) mode

	City	Highway
Gasoline fuel economy (mpg)	0	38
DC electrical energy consumption (DC Wh/mi)	0	57
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity ⁸		2
Average trip distance (mi)	0.0	37.5

Trips in Charge Sustaining (CS) mode

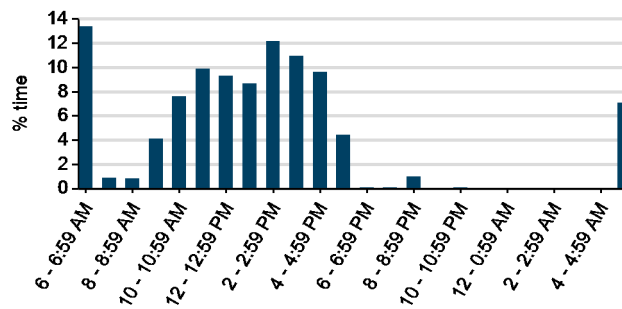
	City	Highway
Gasoline fuel economy (mpg)	32	35
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity ⁸	4	2
Average trip distance (mi)	3.9	29.2



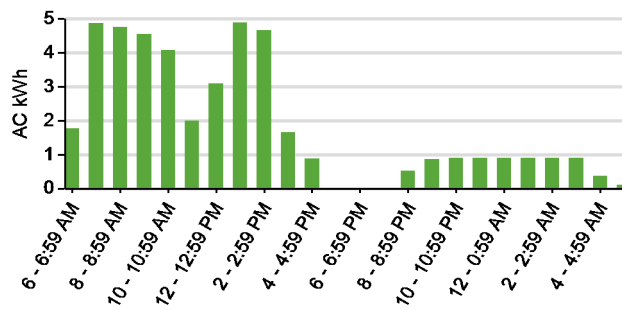
Plug-in charging

Average number of charging events per vehicle per month when driven	14
Average number of charging events per vehicle per day when driven	0.6
Average distance driven between charging events (mi)	144.6
Average number of trips between charging events	12.1
Average time plugged in per charging event (hr)	4.0
Average time plugged in and drawing power (hr)	4.0
Average time charging per charging event (power > 200 w) (hr)	4.0
Average energy per charging event (AC kWh)	3.2
Average charging energy per vehicle per month (AC kWh)	44.5
Total number of charging events	14
Total charging energy (AC kWh)	45

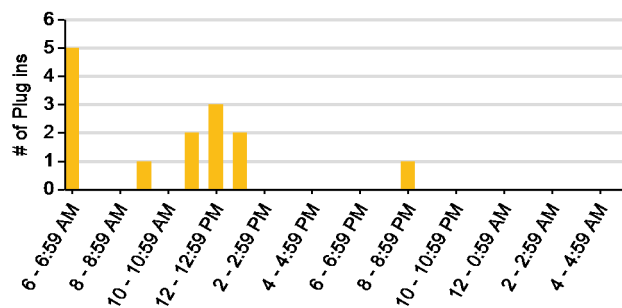
Time of Day When Driving



Time of Day When Charging



Time of Day When Plugging In



SCAQMD Quantum Escape PHEV Report

Quantum SCAQMD #12

Number of vehicles: 1

Date range of data received:

09/11/2012 to 09/18/2012

Reporting period: September 2012

Number of vehicle days driven: 6

All Trips Combined

Overall gasoline fuel economy (mpg)	37
Overall AC electrical energy consumption (AC Wh/mi) ¹	33
Overall DC electrical energy consumption (DC Wh/mi) ²	53
Total number of trips	24
Total distance traveled (mi)	298

Trips in Charge Depleting (CD) mode³

Gasoline fuel economy (mpg)	38
DC electrical energy consumption (DC Wh/mi) ⁴	75
Number of trips	15
Percent of trips city highway	73% 27%
Distance traveled (mi)	145
Percent of total distance traveled	49%

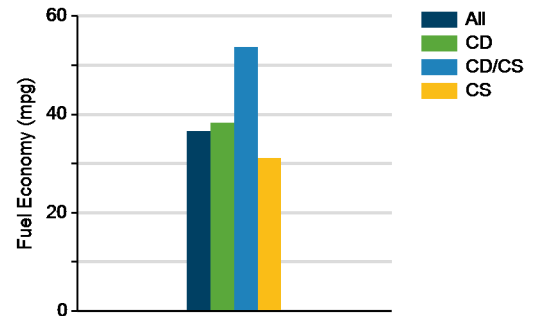
Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes⁵

Gasoline fuel economy (mpg)	54
DC electrical energy consumption (DC Wh/mi) ⁶	95
Number of trips	2
Percent of trips city highway	100% 0%
Distance traveled (mi)	41
Percent of total distance traveled	14%

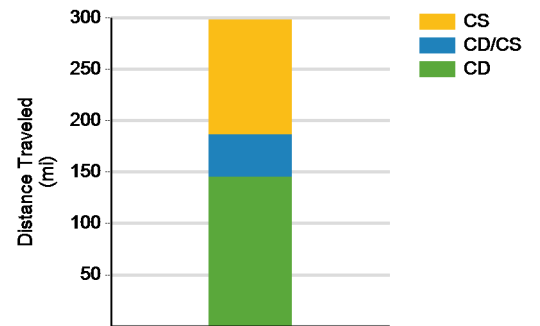
Trips in Charge Sustaining (CS) mode⁷

Gasoline fuel economy (mpg)	31
Number of trips	7
Percent of trips city highway	57% 43%
Distance traveled (mi)	112
Percent of total distance traveled	38%

Gasoline Fuel Economy By Trip Type



Distance Traveled By Trip Type



Notes: 1 - 8. Please see <http://avt.inl.gov/pdf/phev/SCAQMDreportnotes.pdf> for an explanation of all PHEV Fleet Testing Report notes.

Trips in Charge Depleting (CD) mode

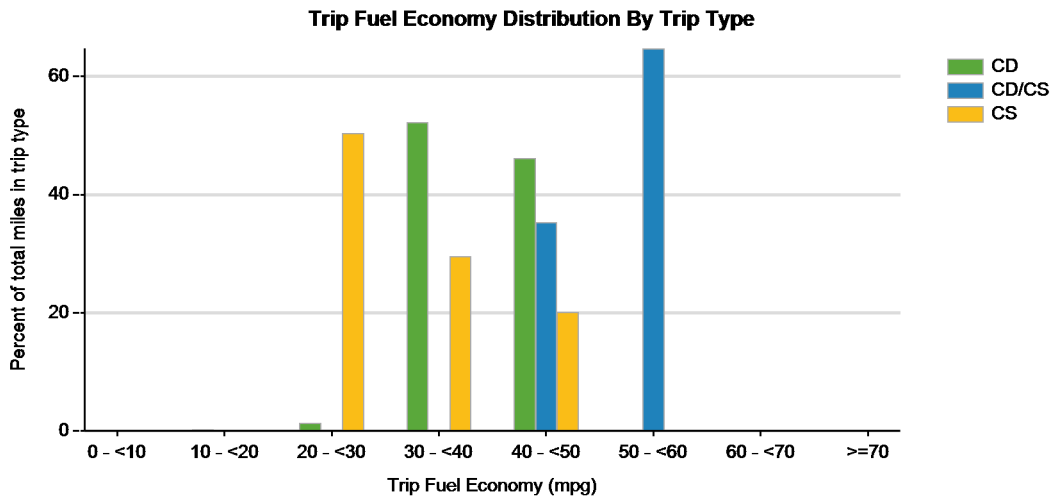
	City	Highway
Gasoline fuel economy (mpg)	33	39
DC electrical energy consumption (DC Wh/mi)	115	69
Percent of miles with internal combustion engine off	27%	4%
Average trip driving intensity ⁸	6	2
Average trip distance (mi)	1.7	31.6

Trips in Charge Depleting and Charge Sustaining (CD/CS) mode

Gasoline fuel economy (mpg)	54	0
DC electrical energy consumption (DC Wh/mi)	95	0
Percent of miles with internal combustion engine off	21%	0%
Average trip driving intensity ⁸	3	
Average trip distance (mi)	20.5	0.0

Trips in Charge Sustaining (CS) mode

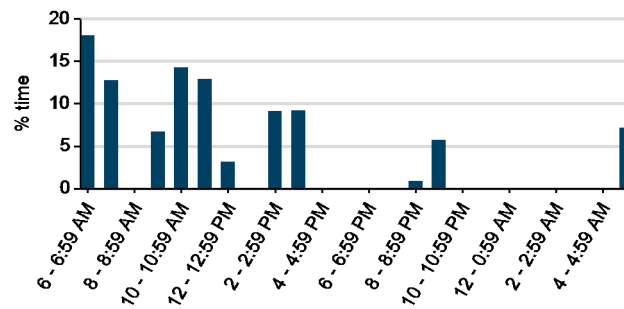
Gasoline fuel economy (mpg)	31	31
Percent of miles with internal combustion engine off	17%	3%
Average trip driving intensity ⁸	4	3
Average trip distance (mi)	15.2	17.0



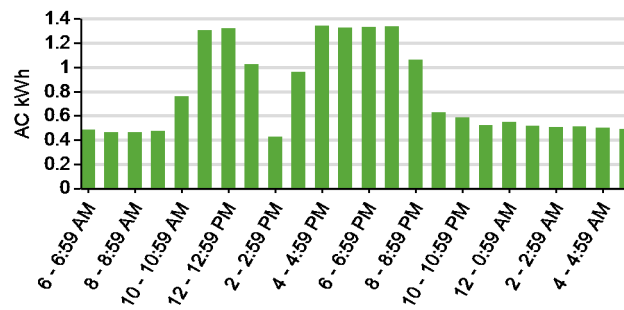
Plug-in charging

Average number of charging events per vehicle per month when driven	4
Average number of charging events per vehicle per day when driven	0.7
Average distance driven between charging events (mi)	74.6
Average number of trips between charging events	6.0
Average time plugged in per charging event (hr)	15.2
Average time plugged in and drawing power (hr)	15.2
Average time charging per charging event (power > 200 w) (hr)	0.8
Average energy per charging event (AC kWh)	2.5
Average charging energy per vehicle per month (AC kWh)	9.9
Total number of charging events	4
Total charging energy (AC kWh)	10

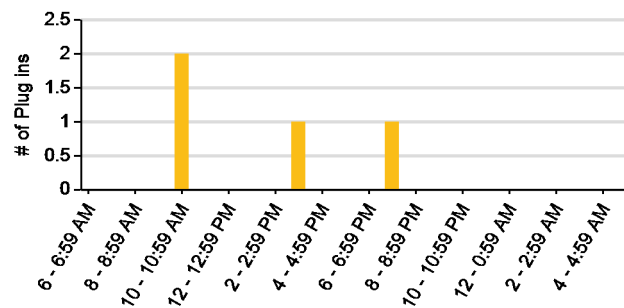
Time of Day When Driving



Time of Day When Charging



Time of Day When Plugging In



SCAQMD Quantum Escape PHEV Report

Quantum SCAQMD #15

Number of vehicles: 1

Date range of data received:

09/05/2012 to 09/25/2012

Reporting period: September 2012

Number of vehicle days driven: 7

All Trips Combined

Overall gasoline fuel economy (mpg)	35
Overall AC electrical energy consumption (AC Wh/mi) ¹	41
Overall DC electrical energy consumption (DC Wh/mi) ²	6
Total number of trips	30
Total distance traveled (mi)	351

Trips in Charge Depleting (CD) mode³

Gasoline fuel economy (mpg)	40
DC electrical energy consumption (DC Wh/mi) ⁴	77
Number of trips	1
Percent of trips city highway	0% 100%
Distance traveled (mi)	26
Percent of total distance traveled	8%

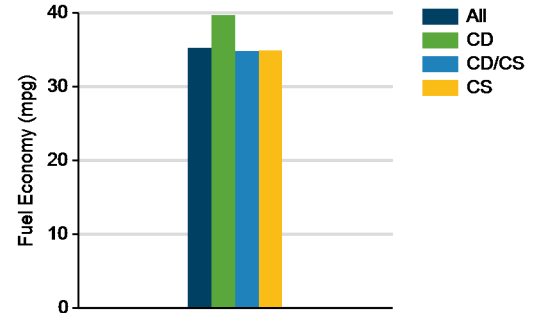
Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes⁵

Gasoline fuel economy (mpg)	35
DC electrical energy consumption (DC Wh/mi) ⁶	68
Number of trips	1
Percent of trips city highway	0% 100%
Distance traveled (mi)	27
Percent of total distance traveled	8%

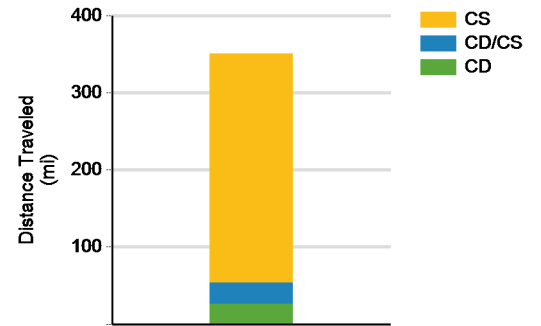
Trips in Charge Sustaining (CS) mode⁷

Gasoline fuel economy (mpg)	35
Number of trips	28
Percent of trips city highway	79% 21%
Distance traveled (mi)	297
Percent of total distance traveled	85%

Gasoline Fuel Economy By Trip Type



Distance Traveled By Trip Type



Notes: 1 - 8. Please see <http://avt.inl.gov/pdf/phev/SCAQMDreportnotes.pdf> for an explanation of all PHEV Fleet Testing Report notes.

Trips in Charge Depleting (CD) mode

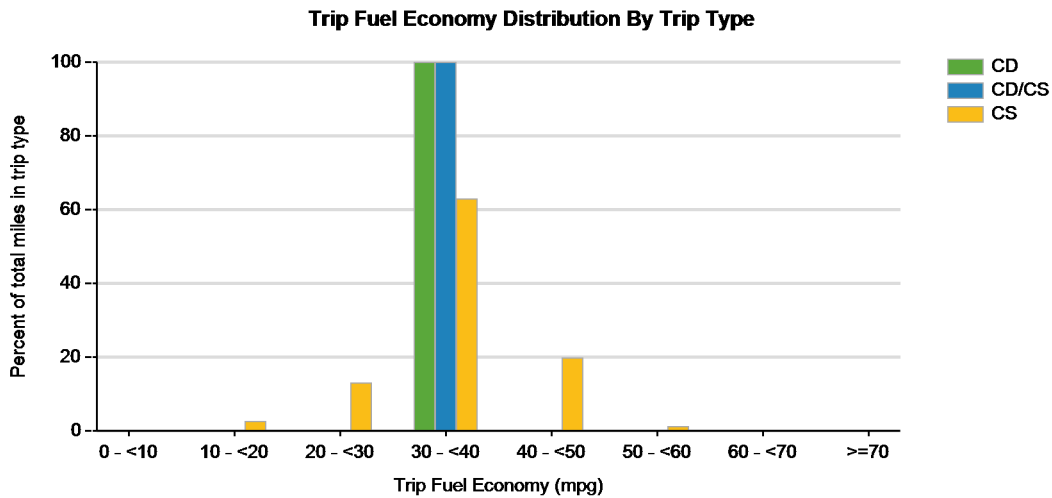
	City	Highway
Gasoline fuel economy (mpg)	0	40
DC electrical energy consumption (DC Wh/mi)	0	77
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity ⁸		3
Average trip distance (mi)	0.0	26.5

Trips in Charge Depleting and Charge Sustaining (CD/CS) mode

	City	Highway
Gasoline fuel economy (mpg)	0	35
DC electrical energy consumption (DC Wh/mi)	0	68
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity ⁸		2
Average trip distance (mi)	0.0	27.1

Trips in Charge Sustaining (CS) mode

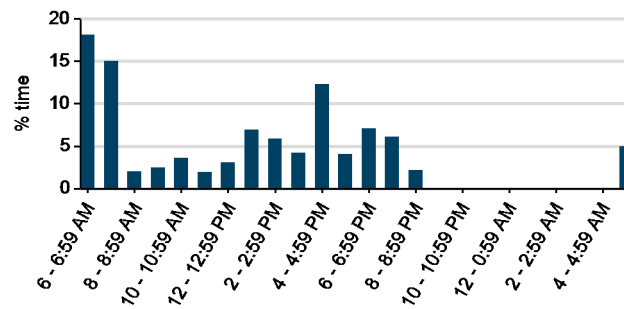
	City	Highway
Gasoline fuel economy (mpg)	35	35
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity ⁸	4	2
Average trip distance (mi)	4.5	33.2



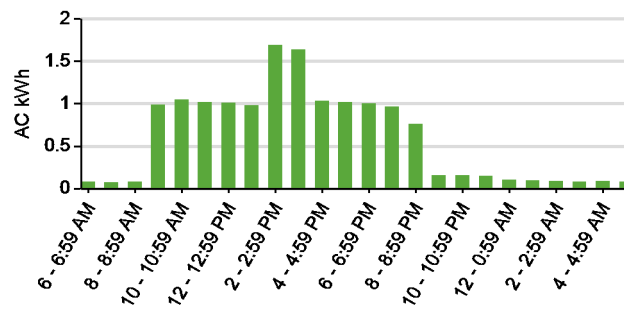
Plug-in charging

Average number of charging events per vehicle per month when driven	2
Average number of charging events per vehicle per day when driven	0.3
Average distance driven between charging events (mi)	175.5
Average number of trips between charging events	15.0
Average time plugged in per charging event (hr)	29.7
Average time plugged in and drawing power (hr)	29.7
Average time charging per charging event (power > 200 w) (hr)	3.3
Average energy per charging event (AC kWh)	7.2
Average charging energy per vehicle per month (AC kWh)	14.4
Total number of charging events	2
Total charging energy (AC kWh)	14

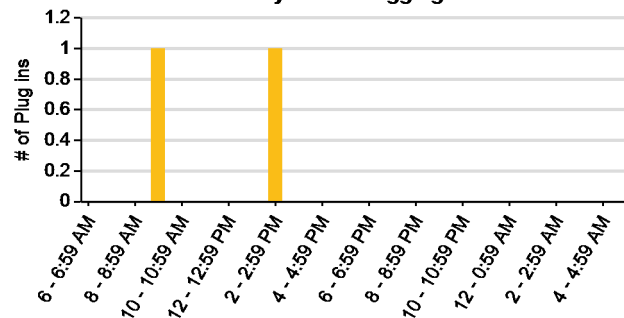
Time of Day When Driving



Time of Day When Charging



Time of Day When Plugging In



SCAQMD Quantum Escape PHEV Report

Quantum SCAQMD #7

Number of vehicles: 1

Date range of data received:

09/11/2012 to 09/27/2012

Reporting period: September 2012

Number of vehicle days driven: 6

All Trips Combined

Overall gasoline fuel economy (mpg)	39
Overall AC electrical energy consumption (AC Wh/mi) ¹	93
Overall DC electrical energy consumption (DC Wh/mi) ²	61
Total number of trips	39
Total distance traveled (mi)	288

Trips in Charge Depleting (CD) mode³

Gasoline fuel economy (mpg)	39
DC electrical energy consumption (DC Wh/mi) ⁴	61
Number of trips	35
Percent of trips city highway	77% 23%
Distance traveled (mi)	219
Percent of total distance traveled	76%

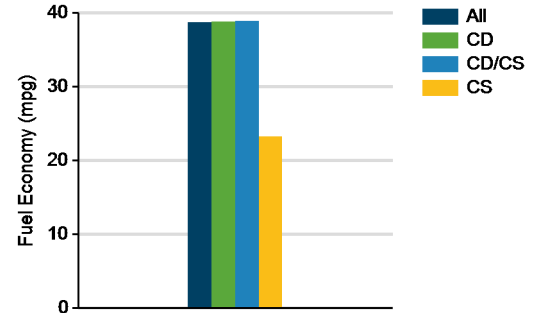
Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes⁵

Gasoline fuel economy (mpg)	39
DC electrical energy consumption (DC Wh/mi) ⁶	63
Number of trips	2
Percent of trips city highway	0% 100%
Distance traveled (mi)	68
Percent of total distance traveled	24%

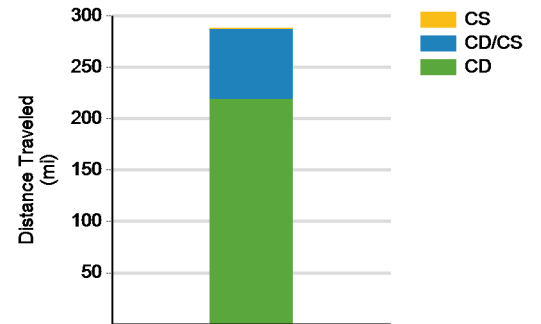
Trips in Charge Sustaining (CS) mode⁷

Gasoline fuel economy (mpg)	23
Number of trips	2
Percent of trips city highway	100% 0%
Distance traveled (mi)	1
Percent of total distance traveled	0%

Gasoline Fuel Economy By Trip Type



Distance Traveled By Trip Type



Notes: 1 - 8. Please see <http://avt.inl.gov/pdf/phev/SCAQMDreportnotes.pdf> for an explanation of all PHEV Fleet Testing Report notes.

Trips in Charge Depleting (CD) mode

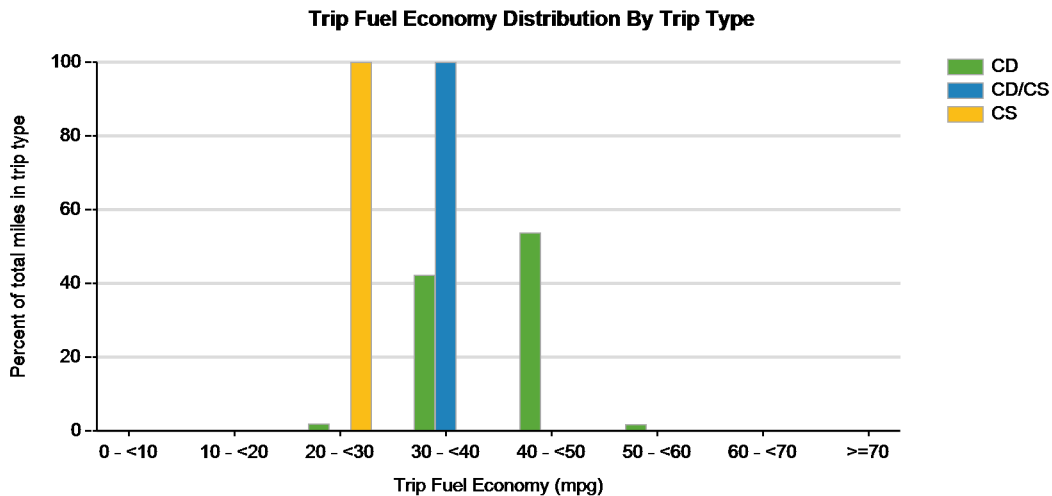
	City	Highway
Gasoline fuel economy (mpg)	35	39
DC electrical energy consumption (DC Wh/mi)	57	62
Percent of miles with internal combustion engine off	18%	5%
Average trip driving intensity ⁸	4	3
Average trip distance (mi)	1.0	23.9

Trips in Charge Depleting and Charge Sustaining (CD/CS) mode

	City	Highway
Gasoline fuel economy (mpg)	0	39
DC electrical energy consumption (DC Wh/mi)	0	63
Percent of miles with internal combustion engine off	0%	4%
Average trip driving intensity ⁸		3
Average trip distance (mi)	0.0	34.2

Trips in Charge Sustaining (CS) mode

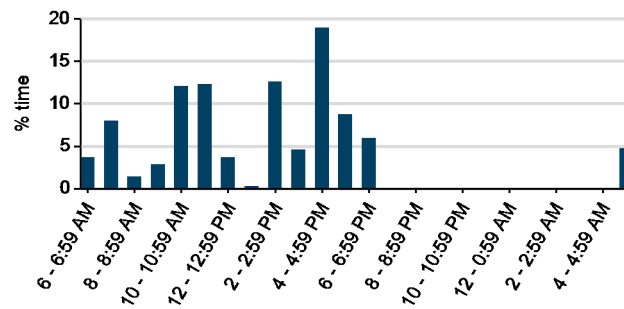
	City	Highway
Gasoline fuel economy (mpg)	23	0
Percent of miles with internal combustion engine off	17%	0%
Average trip driving intensity ⁸	5	
Average trip distance (mi)	0.4	0.0



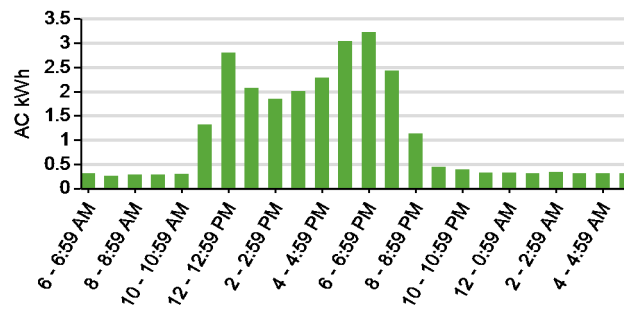
Plug-in charging

Average number of charging events per vehicle per month when driven	8
Average number of charging events per vehicle per day when driven	1.3
Average distance driven between charging events (mi)	36.0
Average number of trips between charging events	4.9
Average time plugged in per charging event (hr)	26.9
Average time plugged in and drawing power (hr)	26.9
Average time charging per charging event (power > 200 w) (hr)	5.4
Average energy per charging event (AC kWh)	3.3
Average charging energy per vehicle per month (AC kWh)	26.7
Total number of charging events	8
Total charging energy (AC kWh)	27

Time of Day When Driving



Time of Day When Charging



Time of Day When Plugging In

