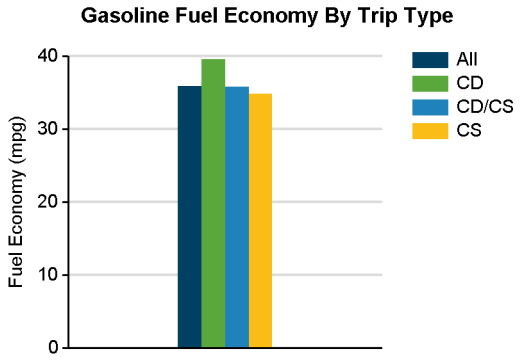
SCAQMD Quantum Escape PHEV Report

All Vehicles

Number of vehicles:	17	Date range of data received:	10/01/2012 to 10/31/2012
Reporting period:	October 2012	Number of vehicle days driven:	128

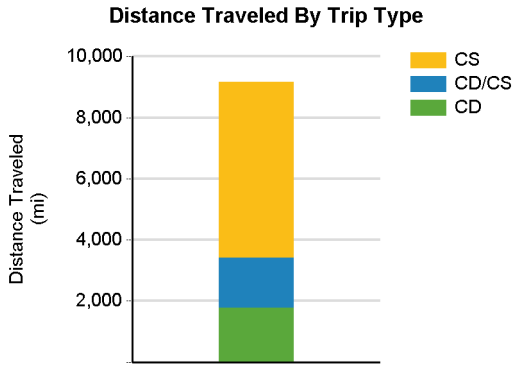
All Trips Combined

Overall gasoline fuel economy (mpg)	36
Overall AC electrical energy consumption (AC Wh/mi)[1]	50
Overall DC electrical energy consumption (DC Wh/mi)[2]	22
Total number of trips	730
Total distance traveled (mi)	9,164



Trips in Charge Depleting (CD) mode[3]

Gasoline fuel economy (mpg)	40
DC electrical energy consumption (DC Wh/mi)[4]	61
Number of trips	225
Percent of trips city | highway	68% | 32%
Distance traveled (mi)	1,768
Percent of total distance traveled	19%



Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes[5]

Gasoline fuel economy (mpg)	36
DC electrical energy consumption (DC Wh/mi)[6]	53
Number of trips	40
Percent of trips city | highway	23% | 78%
Distance traveled (mi)	1,638
Percent of total distance traveled	18%

Trips in Charge Sustaining (CS) mode[7]

Gasoline fuel economy (mpg)	35
Number of trips	465
Percent of trips city | highway	70% | 30%
Distance traveled (mi)	5,758
Percent of total distance traveled	63%

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

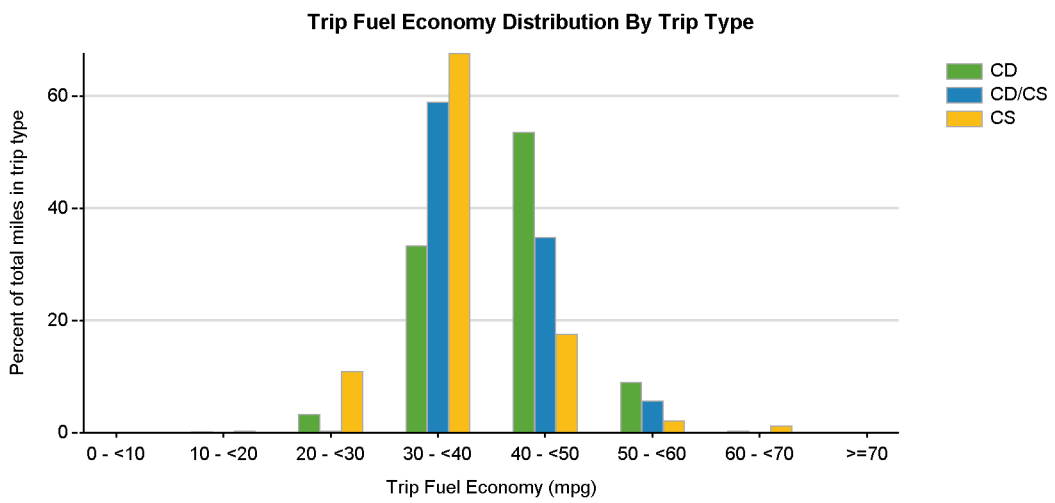
	City	Highway
Gasoline fuel economy (mpg)	37	41
DC electrical energy consumption (DC Wh/mi)	64	58
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity[8]	4	2
Average trip distance (mi)	4.4	15.3

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

Gasoline fuel economy (mpg)	43	35
DC electrical energy consumption (DC Wh/mi)	75	51
Percent of miles with internal combustion engine off	0%	1%
Average trip driving intensity[8]	3	2
Average trip distance (mi)	20.3	47.0

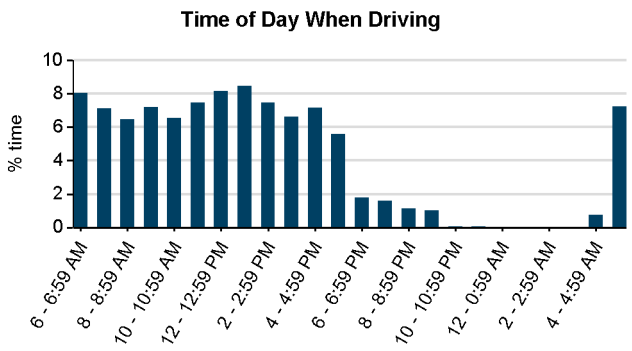
Trips in Charge Sustaining (CS) mode

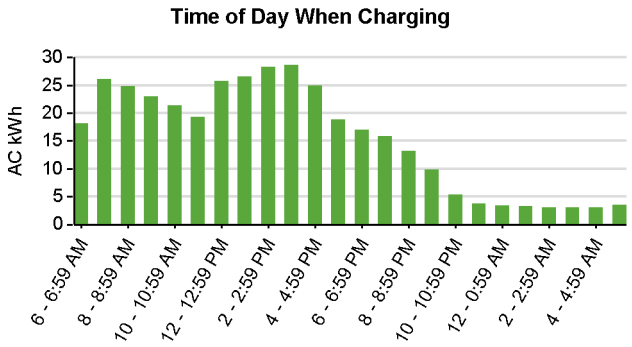
Gasoline fuel economy (mpg)	33	36
Percent of miles with internal combustion engine off	4%	2%
Average trip driving intensity[8]	4	2
Average trip distance (mi)	4.0	31.6

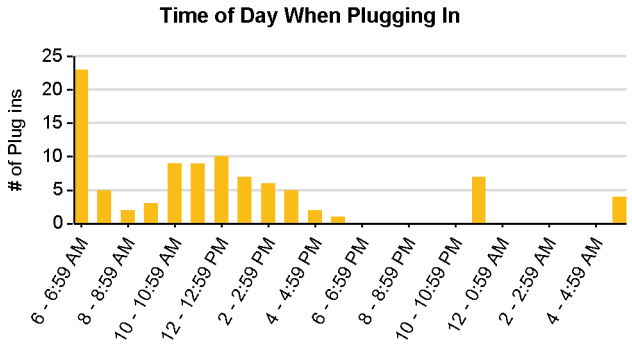


Plug-in charging

Average number of charging events per vehicle per month when driven	5
Average number of charging events per vehicle per day when driven	0.7
Average distance driven between charging events (mi)	98.5
Average number of trips between charging events	7.8
Average time plugged in per charging event (hr)	39.8
Average time plugged in and drawing power (hr)	39.8
Average time charging per charging event (power > 200 w) (hr)	5.3
Average energy per charging event (AC kWh)	5.0
Average charging energy per vehicle per month (AC kWh)	27.1
Total number of charging events	93
Total charging energy (AC kWh)	461







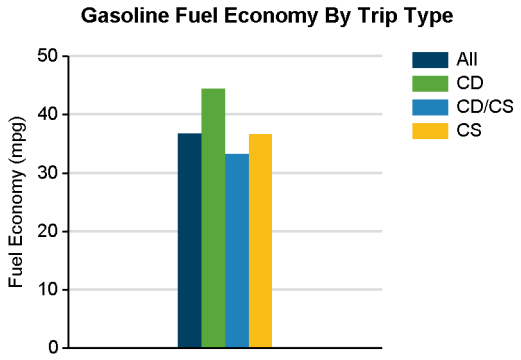
SCAQMD Quantum Escape PHEV Report

Quantum SCAQMD #8

Number of vehicles:	1	Date range of data received:	10/17/2012 to 10/29/2012
Reporting period:	October 2012	Number of vehicle days driven:	9

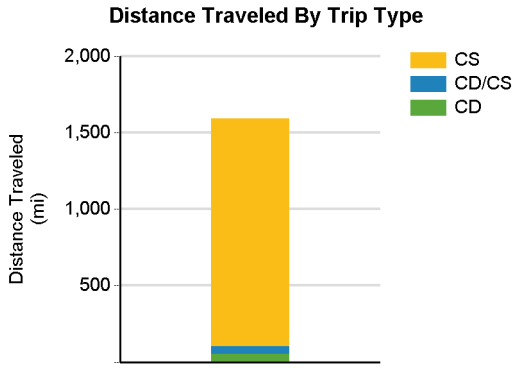
All Trips Combined

Overall gasoline fuel economy (mpg)	37
Overall AC electrical energy consumption (AC Wh/mi)[1]	5
Overall DC electrical energy consumption (DC Wh/mi)[2]	0
Total number of trips	80
Total distance traveled (mi)	1,593



Trips in Charge Depleting (CD) mode[3]

Gasoline fuel economy (mpg)	44
DC electrical energy consumption (DC Wh/mi)[4]	41
Number of trips	5
Percent of trips city | highway	80% | 20%
Distance traveled (mi)	52
Percent of total distance traveled	3%



Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes[5]

Gasoline fuel economy (mpg)	33
DC electrical energy consumption (DC Wh/mi)[6]	52
Number of trips	1
Percent of trips city | highway	0% | 100%
Distance traveled (mi)	51
Percent of total distance traveled	3%

Trips in Charge Sustaining (CS) mode[7]

Gasoline fuel economy (mpg)	37
Number of trips	74
Percent of trips city | highway	66% | 34%
Distance traveled (mi)	1,489
Percent of total distance traveled	94%

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

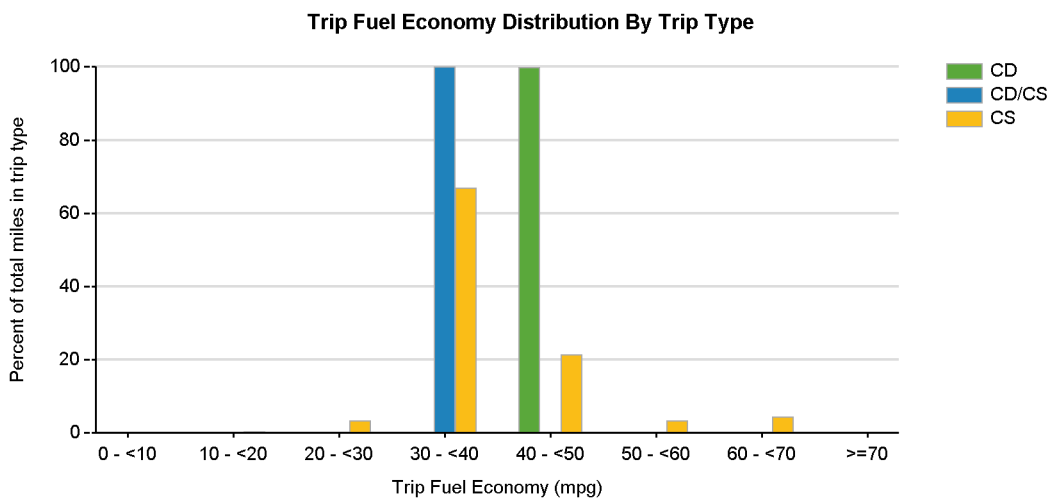
	City	Highway
Gasoline fuel economy (mpg)	1	46
DC electrical energy consumption (DC Wh/mi)	875	41
Percent of miles with internal combustion engine off	0%	1%
Average trip driving intensity[8]	3	2
Average trip distance (mi)	0.0	51.9

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

Gasoline fuel economy (mpg)	0	33
DC electrical energy consumption (DC Wh/mi)	0	52
Percent of miles with internal combustion engine off	0%	4%
Average trip driving intensity[8]		1
Average trip distance (mi)	0.0	51.4

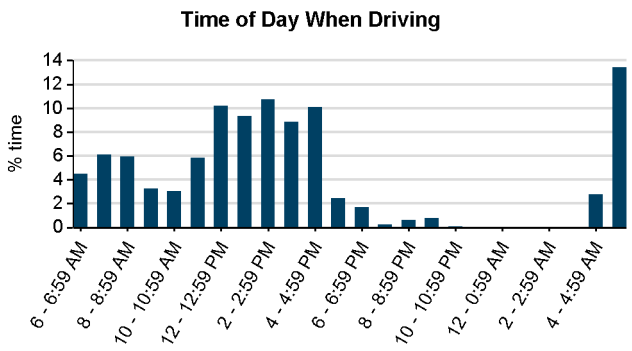
Trips in Charge Sustaining (CS) mode

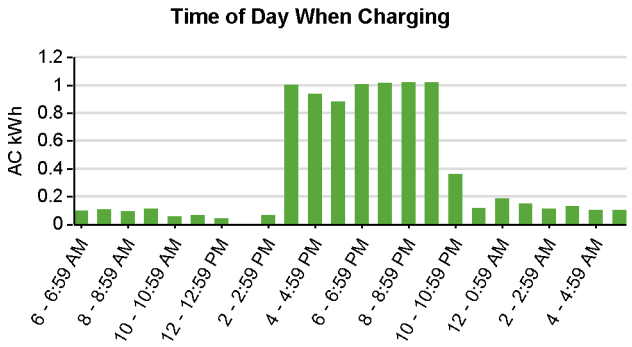
Gasoline fuel economy (mpg)	36	37
Percent of miles with internal combustion engine off	17%	6%
Average trip driving intensity[8]	3	2
Average trip distance (mi)	5.9	48.1

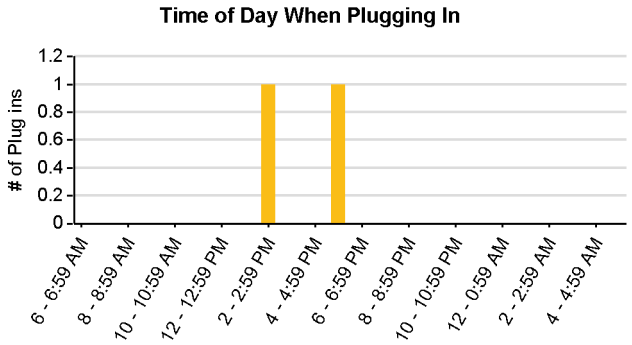


Plug-in charging

Average number of charging events per vehicle per month when driven	2
Average number of charging events per vehicle per day when driven	0.2
Average distance driven between charging events (mi)	796.4
Average number of trips between charging events	40.0
Average time plugged in per charging event (hr)	9.6
Average time plugged in and drawing power (hr)	9.6
Average time charging per charging event (power > 200 w) (hr)	9.6
Average energy per charging event (AC kWh)	4.0
Average charging energy per vehicle per month (AC kWh)	8.0
Total number of charging events	2
Total charging energy (AC kWh)	8







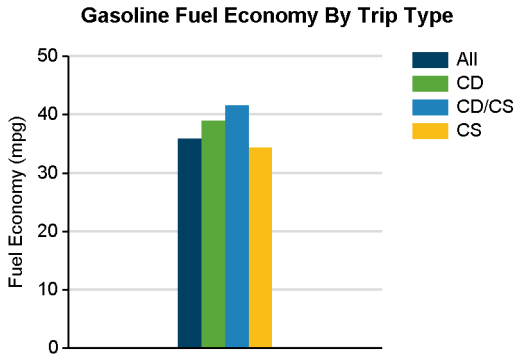
SCAQMD Quantum Escape PHEV Report

Quantum SCAQMD #25

Number of vehicles:	1	Date range of data received:	10/17/2012 to 10/26/2012
Reporting period:	October 2012	Number of vehicle days driven:	5

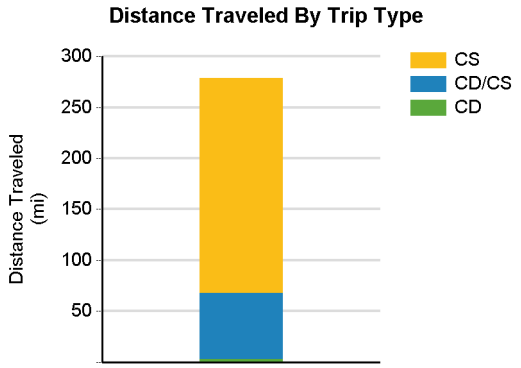
All Trips Combined

Overall gasoline fuel economy (mpg)	36
Overall AC electrical energy consumption (AC Wh/mi)[1]	88
Overall DC electrical energy consumption (DC Wh/mi)[2]	18
Total number of trips	19
Total distance traveled (mi)	279



Trips in Charge Depleting (CD) mode[3]

Gasoline fuel economy (mpg)	39
DC electrical energy consumption (DC Wh/mi)[4]	88
Number of trips	5
Percent of trips city | highway	100% | 0%
Distance traveled (mi)	3
Percent of total distance traveled	1%



Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes[5]

Gasoline fuel economy (mpg)	42
DC electrical energy consumption (DC Wh/mi)[6]	60
Number of trips	1
Percent of trips city | highway	0% | 100%
Distance traveled (mi)	65
Percent of total distance traveled	23%

Trips in Charge Sustaining (CS) mode[7]

Gasoline fuel economy (mpg)	34
Number of trips	13
Percent of trips city | highway	62% | 39%
Distance traveled (mi)	211
Percent of total distance traveled	76%

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

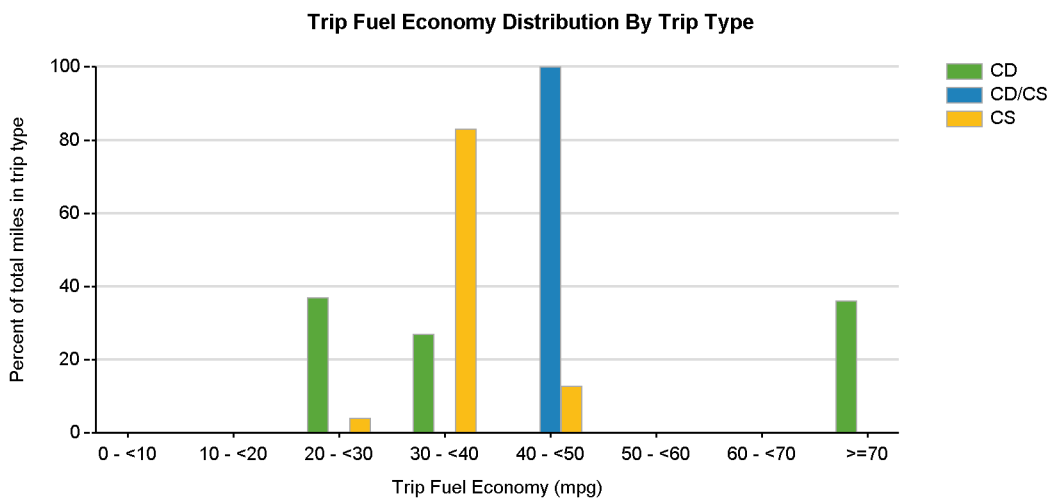
	City	Highway
Gasoline fuel economy (mpg)	39	0
DC electrical energy consumption (DC Wh/mi)	88	0
Percent of miles with internal combustion engine off	25%	0%
Average trip driving intensity[8]	6	
Average trip distance (mi)	0.6	0.0

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

Gasoline fuel economy (mpg)	0	42
DC electrical energy consumption (DC Wh/mi)	0	60
Percent of miles with internal combustion engine off	0%	5%
Average trip driving intensity[8]		3
Average trip distance (mi)	0.0	64.6

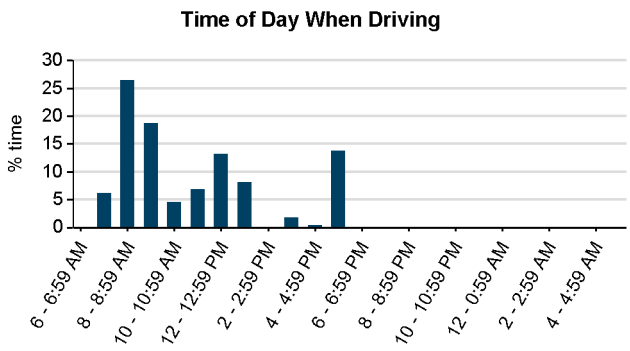
Trips in Charge Sustaining (CS) mode

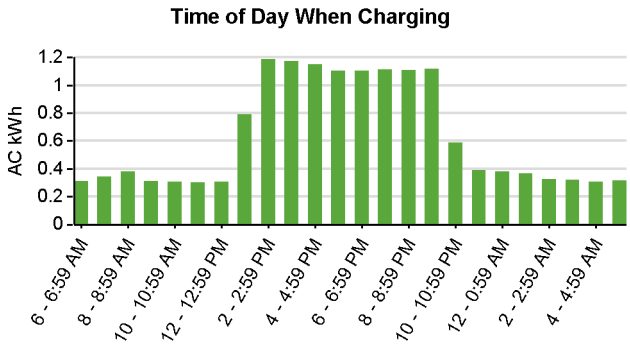
Gasoline fuel economy (mpg)	32	35
Percent of miles with internal combustion engine off	10%	5%
Average trip driving intensity[8]	4	2
Average trip distance (mi)	3.6	36.5

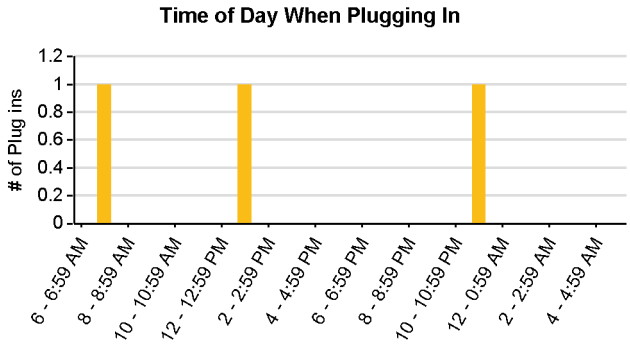


Plug-in charging

Average number of charging events per vehicle per month when driven	3
Average number of charging events per vehicle per day when driven	0.6
Average distance driven between charging events (mi)	93.0
Average number of trips between charging events	6.3
Average time plugged in per charging event (hr)	102.4
Average time plugged in and drawing power (hr)	102.4
Average time charging per charging event (power > 200 w) (hr)	14.0
Average energy per charging event (AC kWh)	8.2
Average charging energy per vehicle per month (AC kWh)	24.6
Total number of charging events	3
Total charging energy (AC kWh)	25







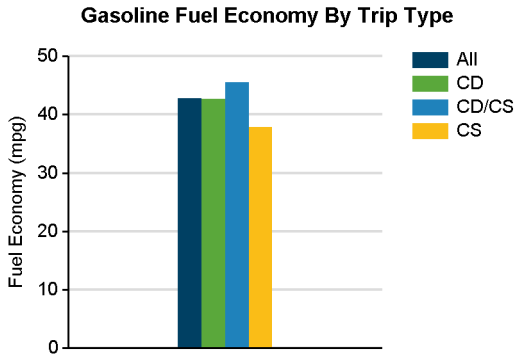
SCAQMD Quantum Escape PHEV Report

Quantum SCAQMD #24

Number of vehicles:	1	Date range of data received:	10/02/2012 to 10/31/2012
Reporting period:	October 2012	Number of vehicle days driven:	12

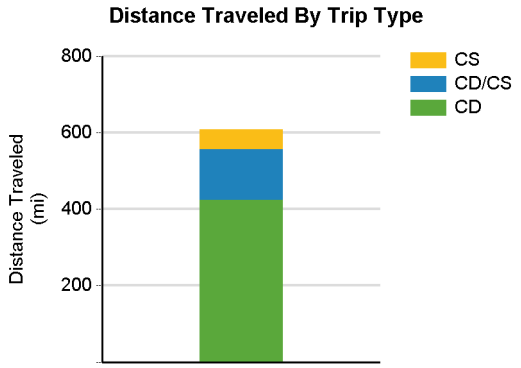
All Trips Combined

Overall gasoline fuel economy (mpg)	43
Overall AC electrical energy consumption (AC Wh/mi)[1]	78
Overall DC electrical energy consumption (DC Wh/mi)[2]	60
Total number of trips	59
Total distance traveled (mi)	608



Trips in Charge Depleting (CD) mode[3]

Gasoline fuel economy (mpg)	43
DC electrical energy consumption (DC Wh/mi)[4]	62
Number of trips	48
Percent of trips city | highway	50% | 50%
Distance traveled (mi)	425
Percent of total distance traveled	70%



Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes[5]

Gasoline fuel economy (mpg)	45
DC electrical energy consumption (DC Wh/mi)[6]	73
Number of trips	4
Percent of trips city | highway	50% | 50%
Distance traveled (mi)	131
Percent of total distance traveled	22%

Trips in Charge Sustaining (CS) mode[7]

Gasoline fuel economy (mpg)	38
Number of trips	7
Percent of trips city | highway	57% | 43%
Distance traveled (mi)	52
Percent of total distance traveled	9%

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

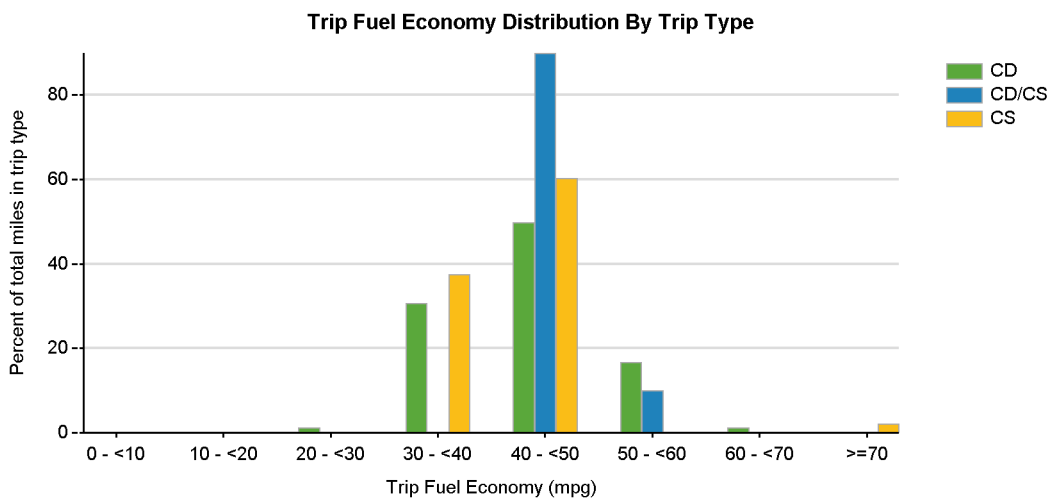
	City	Highway
Gasoline fuel economy (mpg)	38	45
DC electrical energy consumption (DC Wh/mi)	67	60
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity[8]	3	2
Average trip distance (mi)	4.7	13.0

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

Gasoline fuel economy (mpg)	49	43
DC electrical energy consumption (DC Wh/mi)	67	77
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity[8]	3	3
Average trip distance (mi)	29.9	35.9

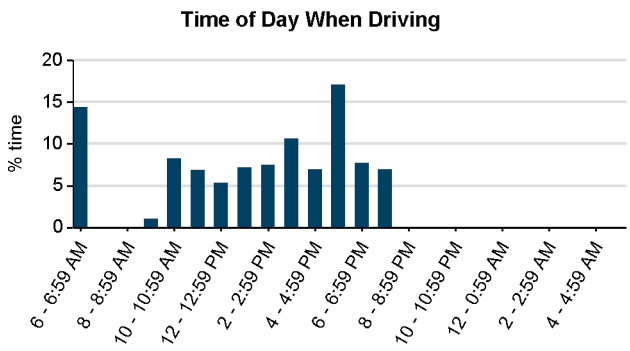
Trips in Charge Sustaining (CS) mode

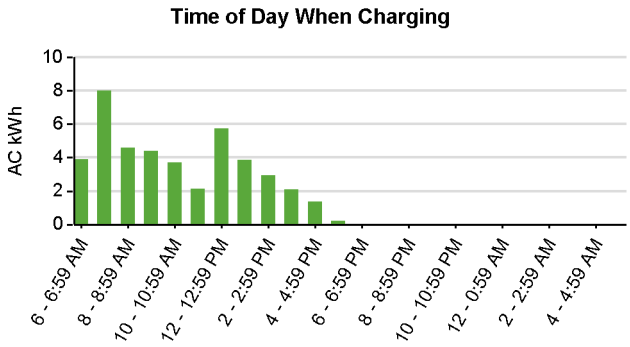
Gasoline fuel economy (mpg)	35	41
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity[8]	4	3
Average trip distance (mi)	6.1	9.2

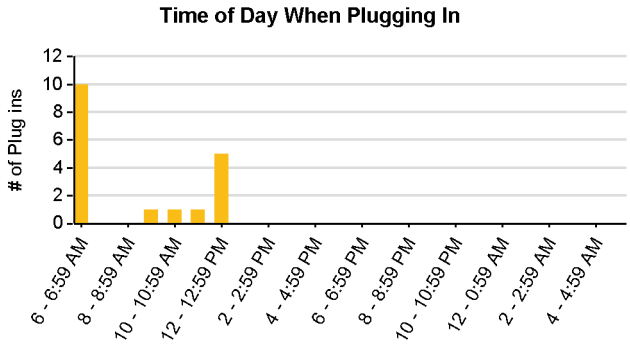


Plug-in charging

Average number of charging events per vehicle per month when driven	18
Average number of charging events per vehicle per day when driven	1.5
Average distance driven between charging events (mi)	33.8
Average number of trips between charging events	3.3
Average time plugged in per charging event (hr)	4.9
Average time plugged in and drawing power (hr)	4.9
Average time charging per charging event (power > 200 w) (hr)	4.3
Average energy per charging event (AC kWh)	2.6
Average charging energy per vehicle per month (AC kWh)	47.3
Total number of charging events	18
Total charging energy (AC kWh)	47







SCAQMD Quantum Escape PHEV Report

Quantum SCAQMD #23

Number of vehicles:	1	Date range of data received:	10/17/2012 to 10/31/2012
Reporting period:	October 2012	Number of vehicle days driven:	9

All Trips Combined

Overall gasoline fuel economy (mpg)	37
Overall AC electrical energy consumption (AC Wh/mi)[1]	41
Overall DC electrical energy consumption (DC Wh/mi)[2]	26
Total number of trips	72
Total distance traveled (mi)	1,136

Trips in Charge Depleting (CD) mode[3]

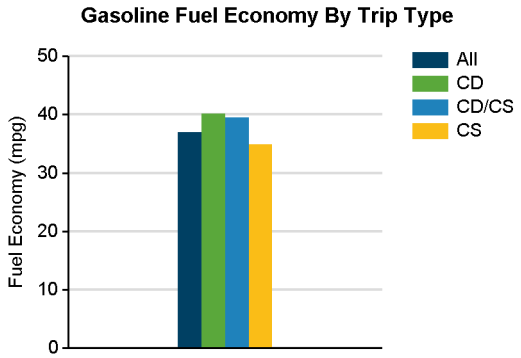
Gasoline fuel economy (mpg)	40
DC electrical energy consumption (DC Wh/mi)[4]	59
Number of trips	20
Percent of trips city | highway	65% | 35%
Distance traveled (mi)	276
Percent of total distance traveled	24%

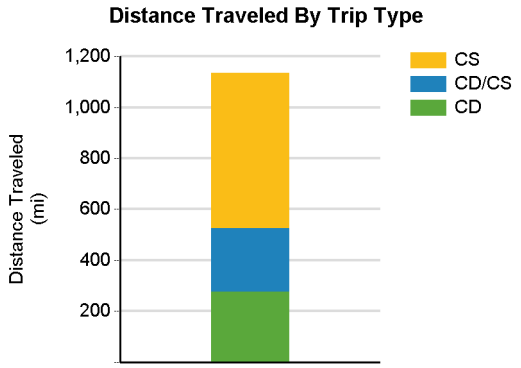
Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes[5]

Gasoline fuel economy (mpg)	39
DC electrical energy consumption (DC Wh/mi)[6]	50
Number of trips	6
Percent of trips city | highway	17% | 83%
Distance traveled (mi)	249
Percent of total distance traveled	22%

Trips in Charge Sustaining (CS) mode[7]

Gasoline fuel economy (mpg)	35
Number of trips	46
Percent of trips city | highway	78% | 22%
Distance traveled (mi)	611
Percent of total distance traveled	54%





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

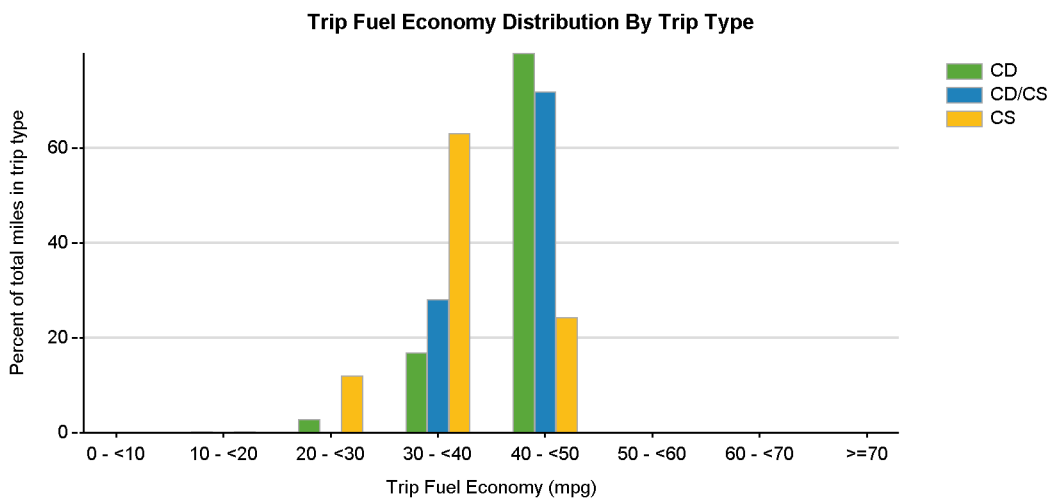
	City	Highway
Gasoline fuel economy (mpg)	40	41
DC electrical energy consumption (DC Wh/mi)	61	56
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity[8]	3	3
Average trip distance (mi)	12.5	16.2

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

Gasoline fuel economy (mpg)	44	38
DC electrical energy consumption (DC Wh/mi)	63	46
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity[8]	3	2
Average trip distance (mi)	53.1	39.1

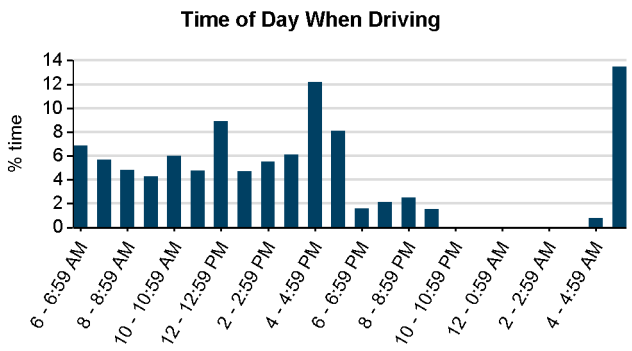
Trips in Charge Sustaining (CS) mode

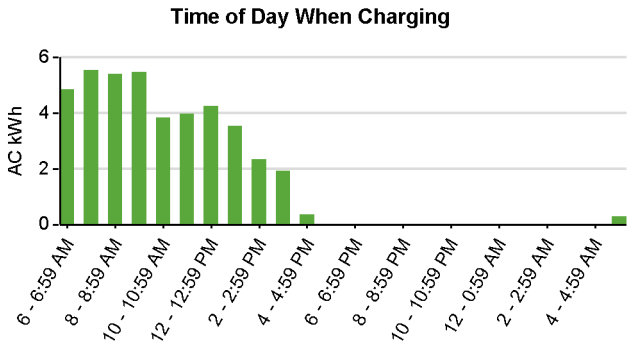
Gasoline fuel economy (mpg)	33	35
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity[8]	3	2
Average trip distance (mi)	3.4	49.0

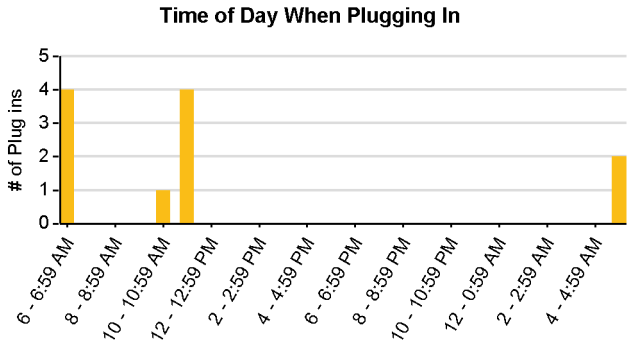


Plug-in charging

Average number of charging events per vehicle per month when driven	11
Average number of charging events per vehicle per day when driven	1.2
Average distance driven between charging events (mi)	103.2
Average number of trips between charging events	6.5
Average time plugged in per charging event (hr)	4.8
Average time plugged in and drawing power (hr)	4.8
Average time charging per charging event (power > 200 w) (hr)	4.8
Average energy per charging event (AC kWh)	4.2
Average charging energy per vehicle per month (AC kWh)	46.2
Total number of charging events	11
Total charging energy (AC kWh)	46







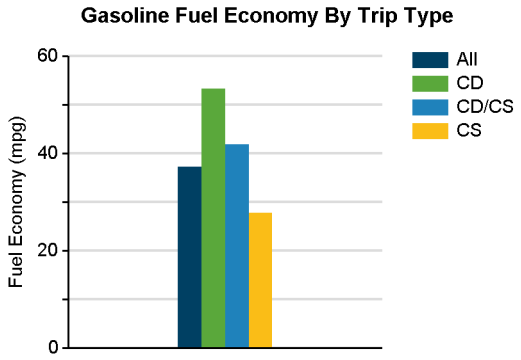
SCAQMD Quantum Escape PHEV Report

Quantum SCAQMD #22

Number of vehicles: 1
Date range of data received: 10/19/2012 to 10/30/2012
Reporting period: October 2012
Number of vehicle days driven: 3

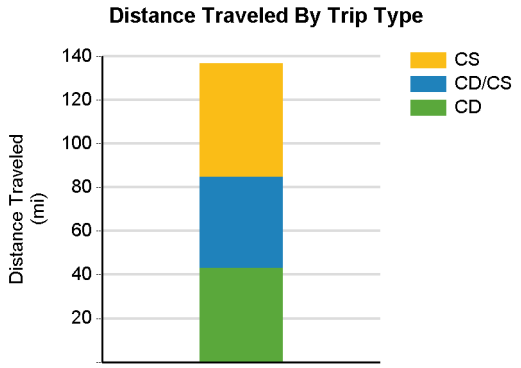
All Trips Combined

Overall gasoline fuel economy (mpg)	37
Overall AC electrical energy consumption (AC Wh/mi)[1]	175
Overall DC electrical energy consumption (DC Wh/mi)[2]	37
Total number of trips	18
Total distance traveled (mi)	137



Trips in Charge Depleting (CD) mode[3]

Gasoline fuel economy (mpg)	53
DC electrical energy consumption (DC Wh/mi)[4]	79
Number of trips	2
Percent of trips city | highway	100% | 0%
Distance traveled (mi)	43
Percent of total distance traveled	31%



Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes[5]

Gasoline fuel economy (mpg)	42
DC electrical energy consumption (DC Wh/mi)[6]	35
Number of trips	1
Percent of trips city | highway	0% | 100%
Distance traveled (mi)	42
Percent of total distance traveled	31%

Trips in Charge Sustaining (CS) mode[7]

Gasoline fuel economy (mpg)	28
Number of trips	15
Percent of trips city | highway	87% | 13%
Distance traveled (mi)	52
Percent of total distance traveled	38%

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

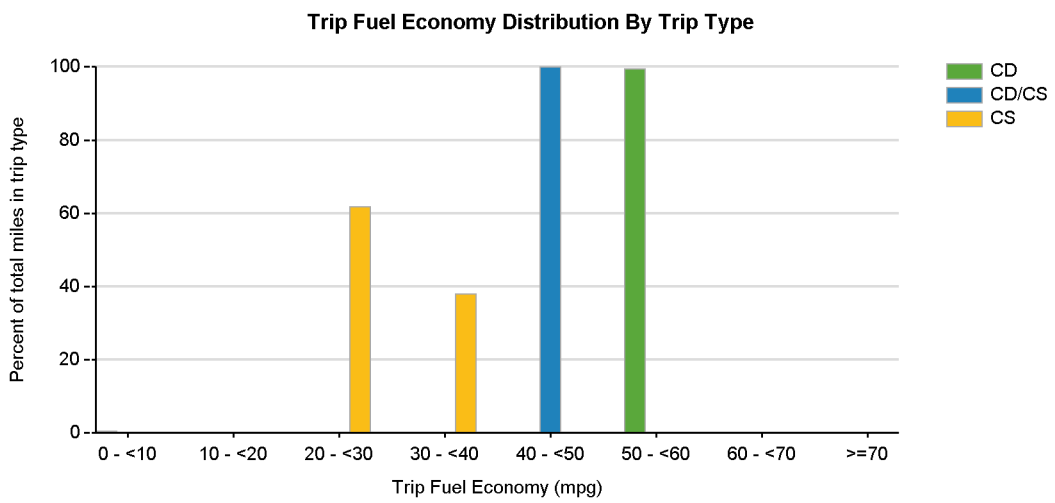
	City	Highway
Gasoline fuel economy (mpg)	53	0
DC electrical energy consumption (DC Wh/mi)	79	0
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity[8]	3	
Average trip distance (mi)	21.5	0.0

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

Gasoline fuel economy (mpg)	0	42
DC electrical energy consumption (DC Wh/mi)	0	35
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity[8]		2
Average trip distance (mi)	0.0	41.9

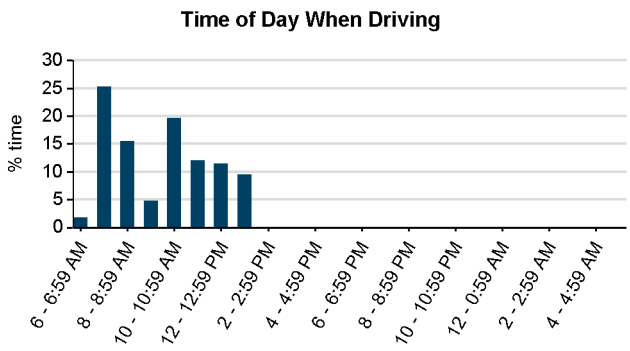
Trips in Charge Sustaining (CS) mode

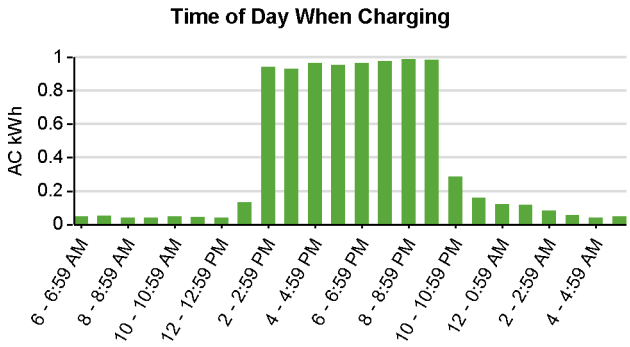
Gasoline fuel economy (mpg)	25	31
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity[8]	7	4
Average trip distance (mi)	1.9	13.8

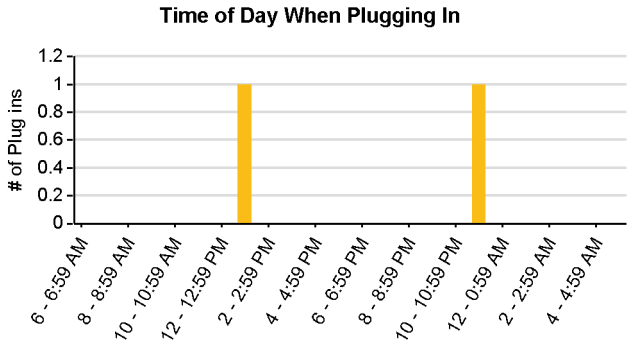


Plug-in charging

Average number of charging events per vehicle per month when driven	2
Average number of charging events per vehicle per day when driven	0.7
Average distance driven between charging events (mi)	68.4
Average number of trips between charging events	9.0
Average time plugged in per charging event (hr)	94.4
Average time plugged in and drawing power (hr)	94.4
Average time charging per charging event (power > 200 w) (hr)	16.6
Average energy per charging event (AC kWh)	12.0
Average charging energy per vehicle per month (AC kWh)	24.0
Total number of charging events	2
Total charging energy (AC kWh)	24







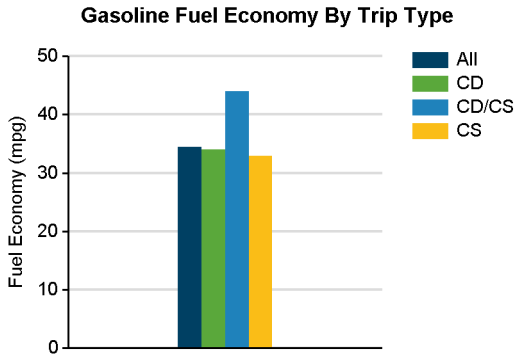
SCAQMD Quantum Escape PHEV Report

Quantum SCAQMD #21

Number of vehicles:	1	Date range of data received:	10/19/2012 to 10/30/2012
Reporting period:	October 2012	Number of vehicle days driven:	5

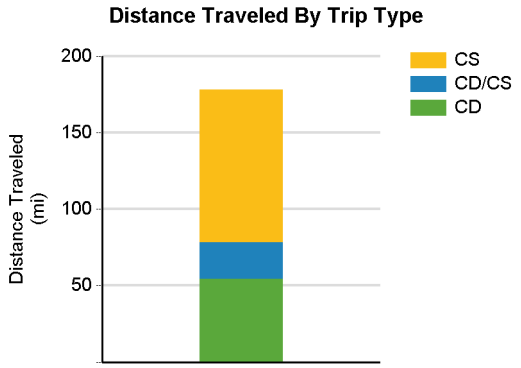
All Trips Combined

Overall gasoline fuel economy (mpg)	34
Overall AC electrical energy consumption (AC Wh/mi)[1]	85
Overall DC electrical energy consumption (DC Wh/mi)[2]	40
Total number of trips	23
Total distance traveled (mi)	178



Trips in Charge Depleting (CD) mode[3]

Gasoline fuel economy (mpg)	34
DC electrical energy consumption (DC Wh/mi)[4]	90
Number of trips	11
Percent of trips city | highway	73% | 27%
Distance traveled (mi)	55
Percent of total distance traveled	31%



Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes[5]

Gasoline fuel economy (mpg)	44
DC electrical energy consumption (DC Wh/mi)[6]	37
Number of trips	1
Percent of trips city | highway	0% | 100%
Distance traveled (mi)	24
Percent of total distance traveled	13%

Trips in Charge Sustaining (CS) mode[7]

Gasoline fuel economy (mpg)	33
Number of trips	11
Percent of trips city | highway	64% | 36%
Distance traveled (mi)	100
Percent of total distance traveled	56%

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

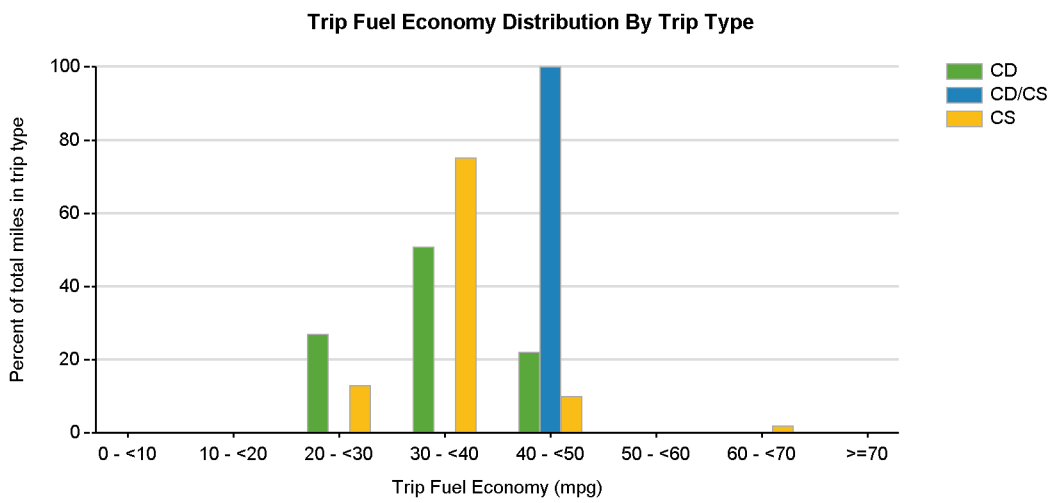
	City	Highway
Gasoline fuel economy (mpg)	38	25
DC electrical energy consumption (DC Wh/mi)	89	92
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity[8]	4	4
Average trip distance (mi)	5.2	4.5

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

Gasoline fuel economy (mpg)	0	44
DC electrical energy consumption (DC Wh/mi)	0	37
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity[8]		3
Average trip distance (mi)	0.0	23.7

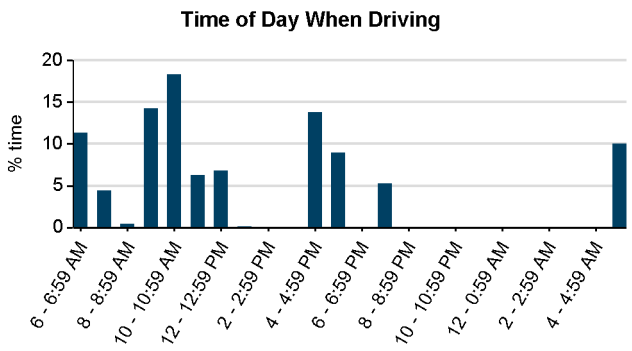
Trips in Charge Sustaining (CS) mode

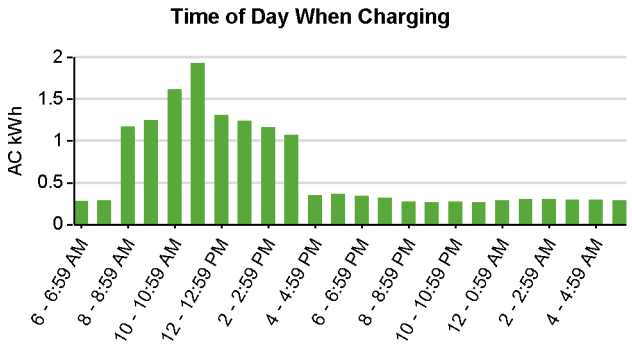
Gasoline fuel economy (mpg)	40	32
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity[8]	5	3
Average trip distance (mi)	2.1	21.4

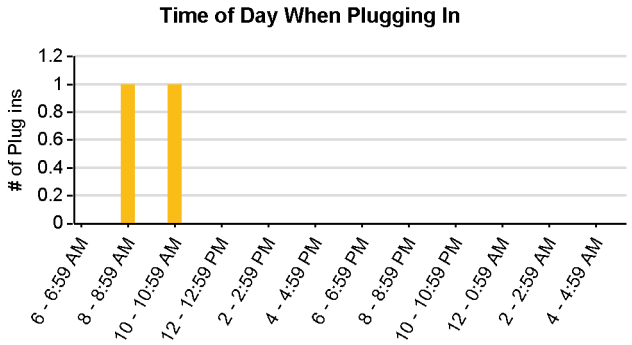


Plug-in charging

Average number of charging events per vehicle per month when driven	2
Average number of charging events per vehicle per day when driven	0.4
Average distance driven between charging events (mi)	89.2
Average number of trips between charging events	11.5
Average time plugged in per charging event (hr)	86.3
Average time plugged in and drawing power (hr)	86.3
Average time charging per charging event (power > 200 w) (hr)	0.0
Average energy per charging event (AC kWh)	7.5
Average charging energy per vehicle per month (AC kWh)	15.1
Total number of charging events	2
Total charging energy (AC kWh)	15







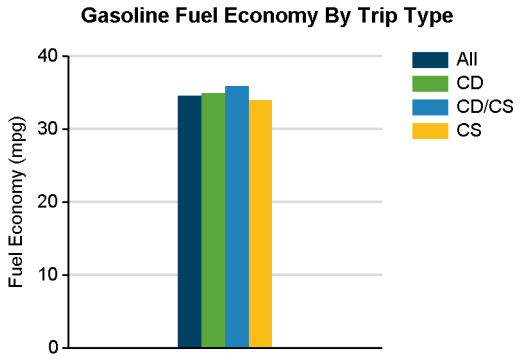
SCAQMD Quantum Escape PHEV Report

Quantum SCAQMD #18

Number of vehicles:	1	Date range of data received:	10/01/2012 to 10/31/2012
Reporting period:	October 2012	Number of vehicle days driven:	6

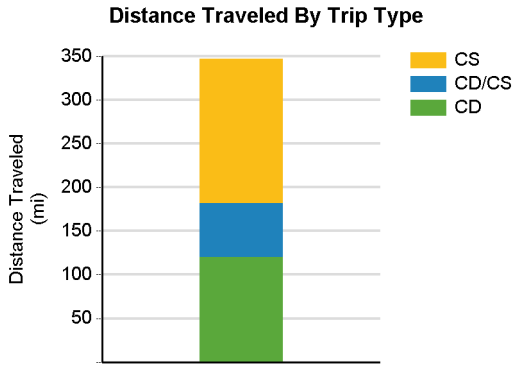
All Trips Combined

Overall gasoline fuel economy (mpg)	35
Overall AC electrical energy consumption (AC Wh/mi)[1]	71
Overall DC electrical energy consumption (DC Wh/mi)[2]	34
Total number of trips	34
Total distance traveled (mi)	347



Trips in Charge Depleting (CD) mode[3]

Gasoline fuel economy (mpg)	35
DC electrical energy consumption (DC Wh/mi)[4]	60
Number of trips	20
Percent of trips city | highway	80% | 20%
Distance traveled (mi)	121
Percent of total distance traveled	35%



Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes[5]

Gasoline fuel economy (mpg)	36
DC electrical energy consumption (DC Wh/mi)[6]	45
Number of trips	2
Percent of trips city | highway	50% | 50%
Distance traveled (mi)	62
Percent of total distance traveled	18%

Trips in Charge Sustaining (CS) mode[7]

Gasoline fuel economy (mpg)	34
Number of trips	12
Percent of trips city | highway	50% | 50%
Distance traveled (mi)	165
Percent of total distance traveled	47%

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

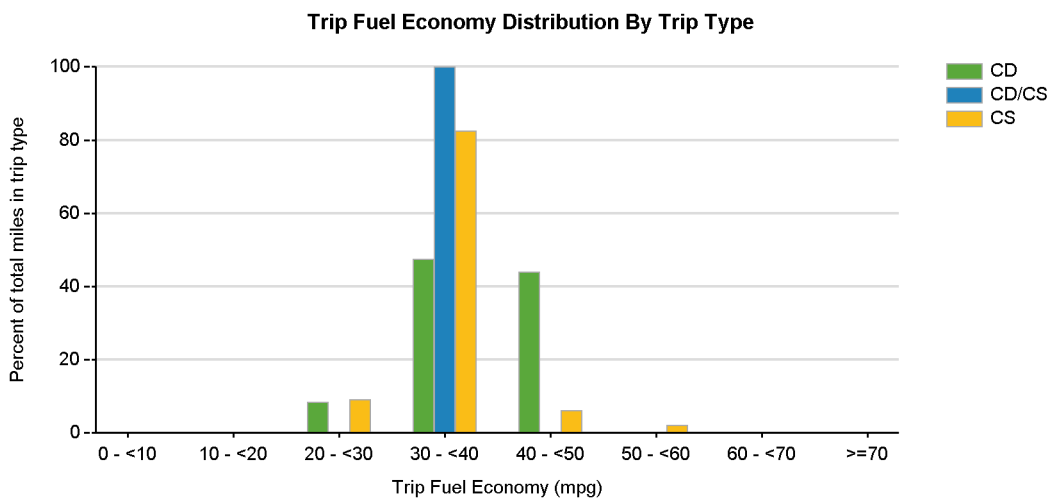
	City	Highway
Gasoline fuel economy (mpg)	33	37
DC electrical energy consumption (DC Wh/mi)	68	51
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity[8]	5	3
Average trip distance (mi)	3.9	14.5

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

Gasoline fuel economy (mpg)	39	34
DC electrical energy consumption (DC Wh/mi)	38	49
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity[8]	4	3
Average trip distance (mi)	22.3	39.5

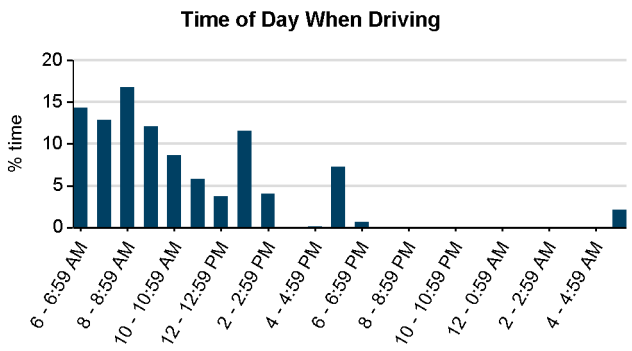
Trips in Charge Sustaining (CS) mode

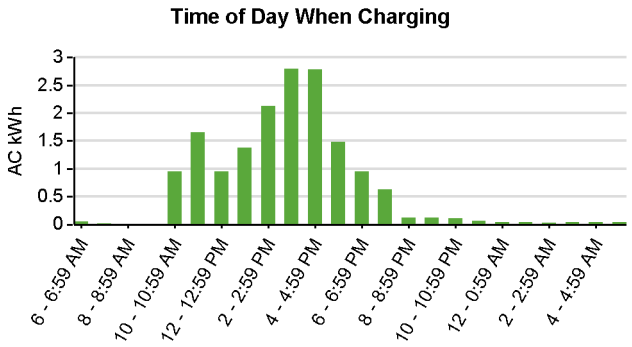
Gasoline fuel economy (mpg)	34	34
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity[8]	4	3
Average trip distance (mi)	7.0	20.5

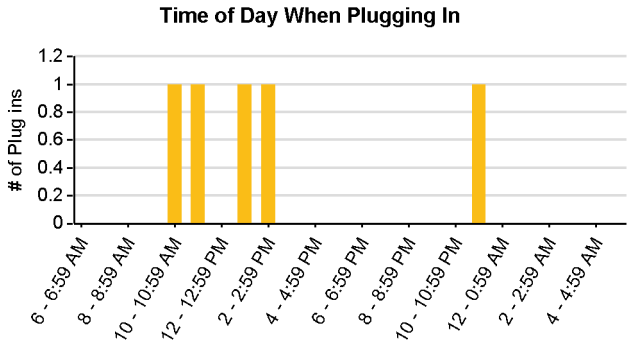


Plug-in charging

Average number of charging events per vehicle per month when driven	5
Average number of charging events per vehicle per day when driven	0.8
Average distance driven between charging events (mi)	69.4
Average number of trips between charging events	6.8
Average time plugged in per charging event (hr)	5.6
Average time plugged in and drawing power (hr)	5.6
Average time charging per charging event (power > 200 w) (hr)	4.0
Average energy per charging event (AC kWh)	4.9
Average charging energy per vehicle per month (AC kWh)	24.7
Total number of charging events	5
Total charging energy (AC kWh)	25







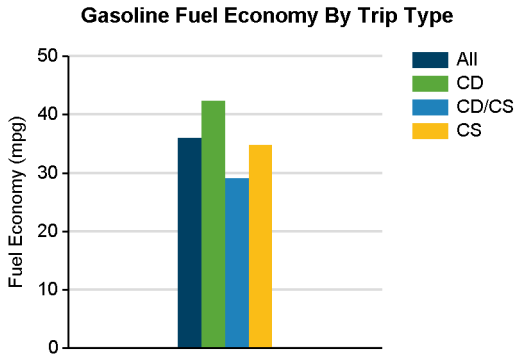
SCAQMD Quantum Escape PHEV Report

Quantum SCAQMD #17

Number of vehicles:	1	Date range of data received:	10/01/2012 to 10/30/2012
Reporting period:	October 2012	Number of vehicle days driven:	7

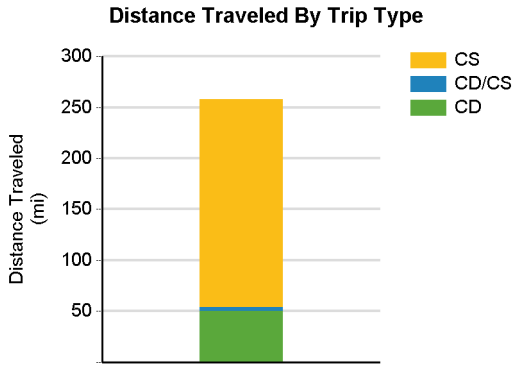
All Trips Combined

Overall gasoline fuel economy (mpg)	36
Overall AC electrical energy consumption (AC Wh/mi)[1]	90
Overall DC electrical energy consumption (DC Wh/mi)[2]	16
Total number of trips	15
Total distance traveled (mi)	258



Trips in Charge Depleting (CD) mode[3]

Gasoline fuel economy (mpg)	42
DC electrical energy consumption (DC Wh/mi)[4]	77
Number of trips	3
Percent of trips city | highway	33% | 67%
Distance traveled (mi)	50
Percent of total distance traveled	19%



Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes[5]

Gasoline fuel economy (mpg)	29
DC electrical energy consumption (DC Wh/mi)[6]	126
Number of trips	2
Percent of trips city | highway	100% | 0%
Distance traveled (mi)	4
Percent of total distance traveled	1%

Trips in Charge Sustaining (CS) mode[7]

Gasoline fuel economy (mpg)	35
Number of trips	10
Percent of trips city | highway	50% | 50%
Distance traveled (mi)	204
Percent of total distance traveled	79%

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

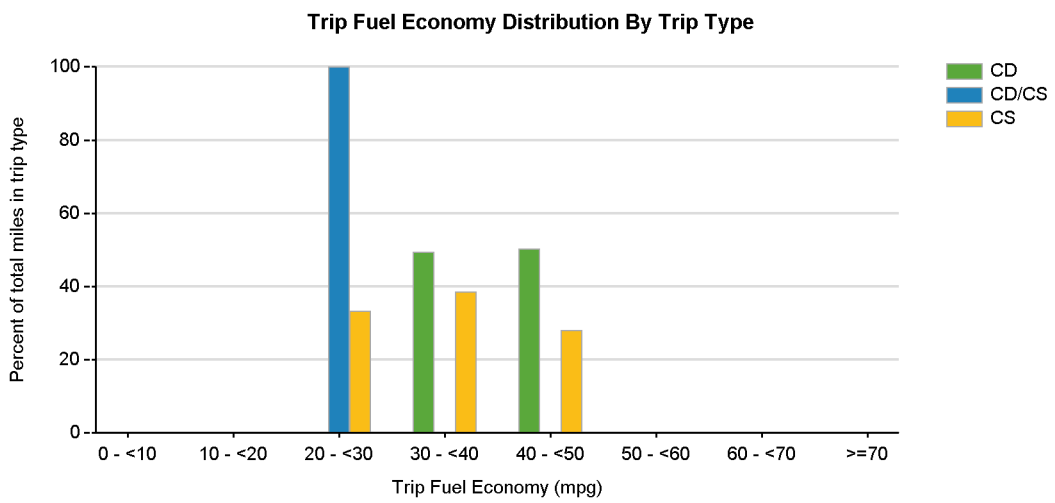
	City	Highway
Gasoline fuel economy (mpg)	4	43
DC electrical energy consumption (DC Wh/mi)	604	76
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity[8]	1	3
Average trip distance (mi)	0.1	25.0

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

Gasoline fuel economy (mpg)	29	0
DC electrical energy consumption (DC Wh/mi)	126	0
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity[8]	5	
Average trip distance (mi)	1.8	0.0

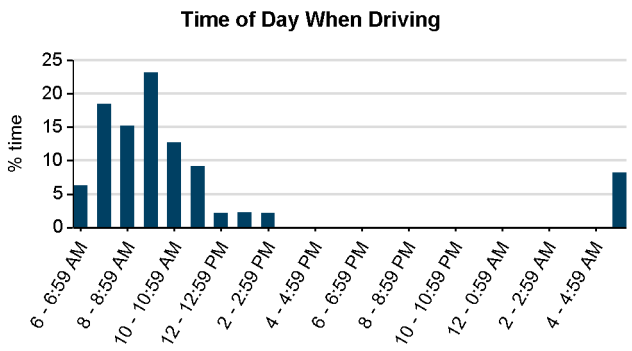
Trips in Charge Sustaining (CS) mode

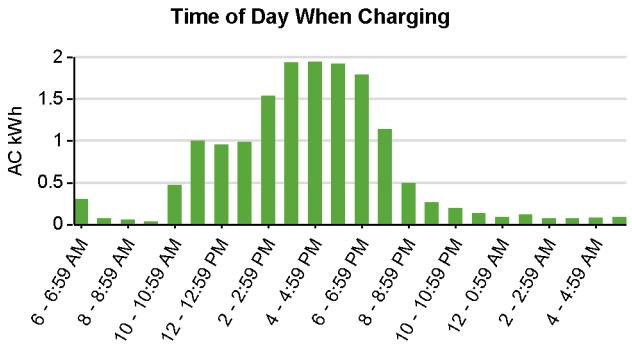
Gasoline fuel economy (mpg)	17	35
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity[8]	4	2
Average trip distance (mi)	0.2	40.6

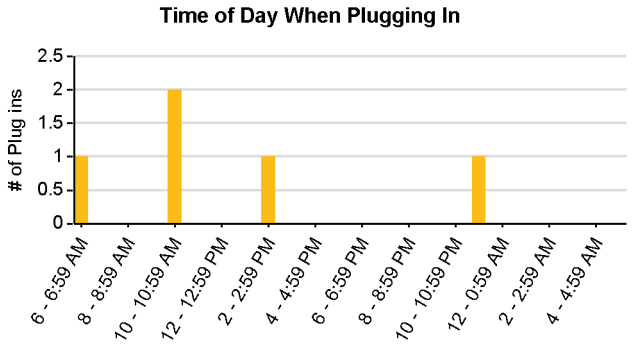


Plug-in charging

Average number of charging events per vehicle per month when driven	5
Average number of charging events per vehicle per day when driven	0.7
Average distance driven between charging events (mi)	51.6
Average number of trips between charging events	3.0
Average time plugged in per charging event (hr)	85.7
Average time plugged in and drawing power (hr)	85.7
Average time charging per charging event (power > 200 w) (hr)	10.9
Average energy per charging event (AC kWh)	4.6
Average charging energy per vehicle per month (AC kWh)	23.1
Total number of charging events	5
Total charging energy (AC kWh)	23







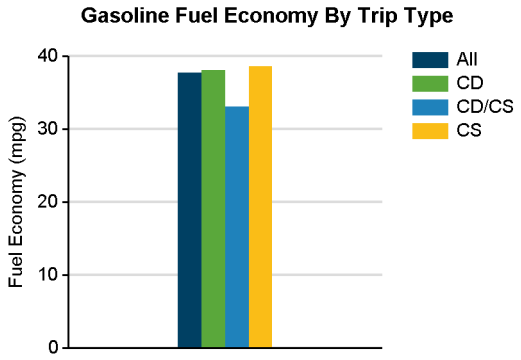
SCAQMD Quantum Escape PHEV Report

Quantum SCAQMD #16

Number of vehicles: 1
Date range of data received: 10/04/2012 to 10/26/2012
Reporting period: October 2012
Number of vehicle days driven: 5

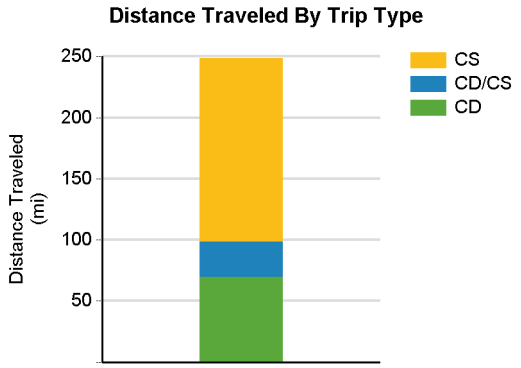
All Trips Combined

Overall gasoline fuel economy (mpg)	38
Overall AC electrical energy consumption (AC Wh/mi)[1]	117
Overall DC electrical energy consumption (DC Wh/mi)[2]	25
Total number of trips	17
Total distance traveled (mi)	249



Trips in Charge Depleting (CD) mode[3]

Gasoline fuel economy (mpg)	38
DC electrical energy consumption (DC Wh/mi)[4]	67
Number of trips	6
Percent of trips city | highway	83% | 17%
Distance traveled (mi)	70
Percent of total distance traveled	28%



Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes[5]

Gasoline fuel economy (mpg)	33
DC electrical energy consumption (DC Wh/mi)[6]	51
Number of trips	1
Percent of trips city | highway	0% | 100%
Distance traveled (mi)	29
Percent of total distance traveled	11%

Trips in Charge Sustaining (CS) mode[7]

Gasoline fuel economy (mpg)	39
Number of trips	10
Percent of trips city | highway	80% | 20%
Distance traveled (mi)	150
Percent of total distance traveled	60%

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

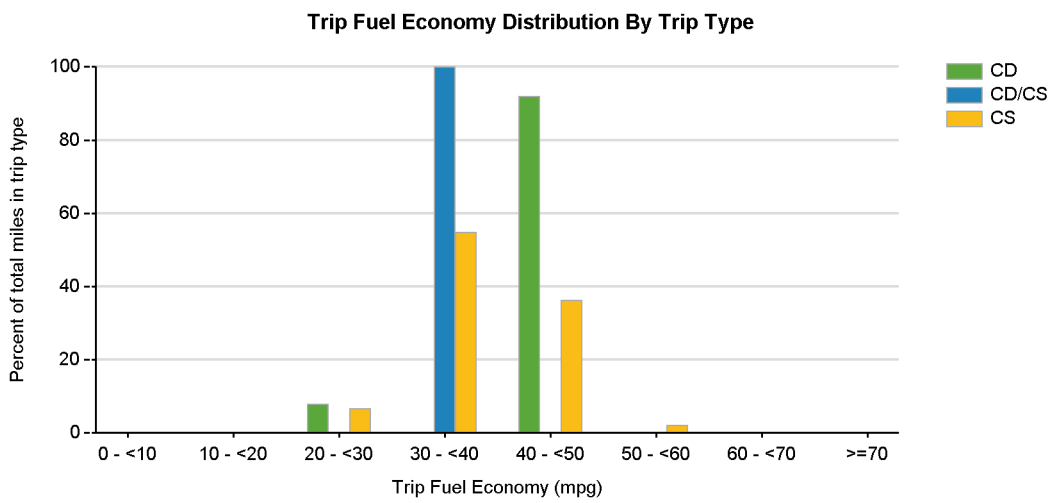
	City	Highway
Gasoline fuel economy (mpg)	24	40
DC electrical energy consumption (DC Wh/mi)	136	61
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity[8]	4	2
Average trip distance (mi)	1.1	64.1

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

Gasoline fuel economy (mpg)	0	33
DC electrical energy consumption (DC Wh/mi)	0	51
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity[8]		3
Average trip distance (mi)	0.0	28.6

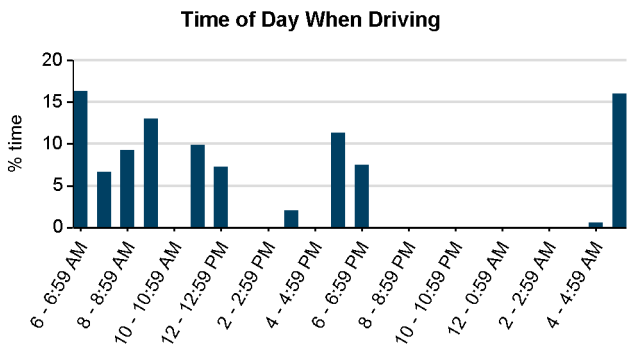
Trips in Charge Sustaining (CS) mode

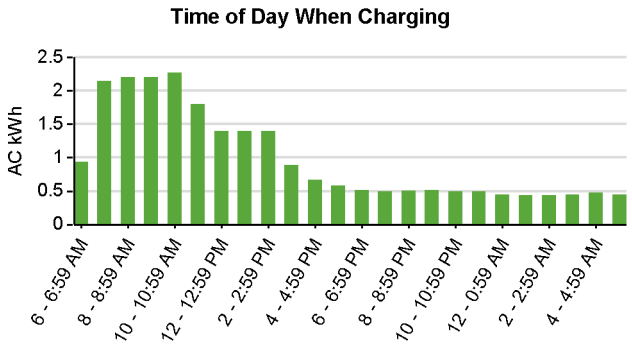
Gasoline fuel economy (mpg)	35	40
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity[8]	3	2
Average trip distance (mi)	5.7	52.5

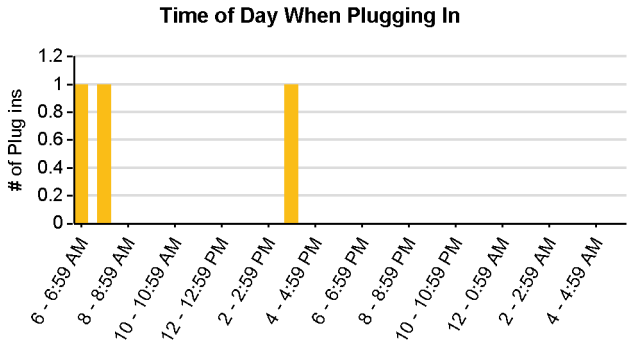


Plug-in charging

Average number of charging events per vehicle per month when driven	3
Average number of charging events per vehicle per day when driven	0.6
Average distance driven between charging events (mi)	82.9
Average number of trips between charging events	5.7
Average time plugged in per charging event (hr)	154.3
Average time plugged in and drawing power (hr)	154.3
Average time charging per charging event (power > 200 w) (hr)	1.7
Average energy per charging event (AC kWh)	9.7
Average charging energy per vehicle per month (AC kWh)	29.1
Total number of charging events	3
Total charging energy (AC kWh)	29







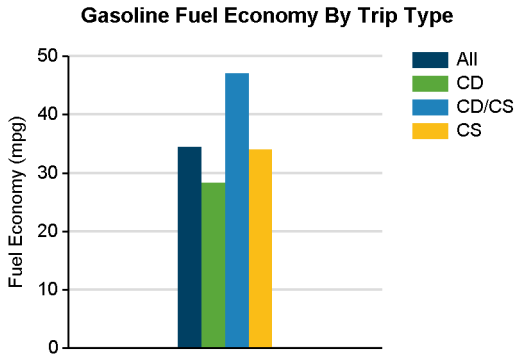
SCAQMD Quantum Escape PHEV Report

Quantum SCAQMD #11

Number of vehicles:	1	Date range of data received:	10/02/2012 to 10/31/2012
Reporting period:	October 2012	Number of vehicle days driven:	10

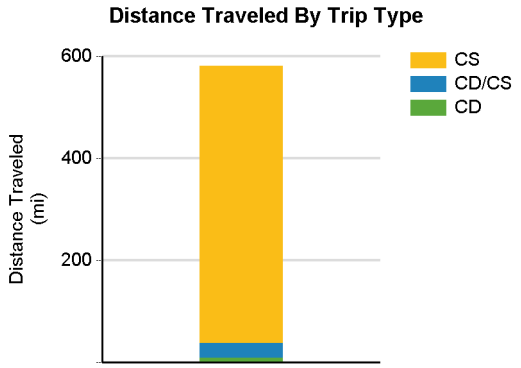
All Trips Combined

Overall gasoline fuel economy (mpg)	34
Overall AC electrical energy consumption (AC Wh/mi)[1]	13
Overall DC electrical energy consumption (DC Wh/mi)[2]	10
Total number of trips	79
Total distance traveled (mi)	581



Trips in Charge Depleting (CD) mode[3]

Gasoline fuel economy (mpg)	28
DC electrical energy consumption (DC Wh/mi)[4]	34
Number of trips	3
Percent of trips city | highway	67% | 33%
Distance traveled (mi)	9
Percent of total distance traveled	1%



Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes[5]

Gasoline fuel economy (mpg)	47
DC electrical energy consumption (DC Wh/mi)[6]	56
Number of trips	1
Percent of trips city | highway	0% | 100%
Distance traveled (mi)	29
Percent of total distance traveled	5%

Trips in Charge Sustaining (CS) mode[7]

Gasoline fuel economy (mpg)	34
Number of trips	75
Percent of trips city | highway	79% | 21%
Distance traveled (mi)	544
Percent of total distance traveled	94%

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

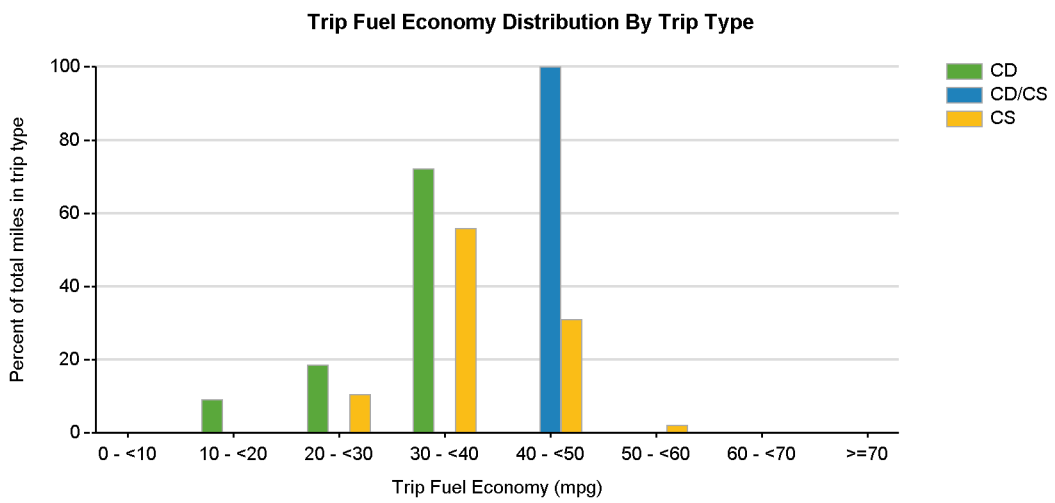
	City	Highway
Gasoline fuel economy (mpg)	24	30
DC electrical energy consumption (DC Wh/mi)	41	31
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity[8]	7	4
Average trip distance (mi)	1.2	6.2

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

Gasoline fuel economy (mpg)	0	47
DC electrical energy consumption (DC Wh/mi)	0	56
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity[8]		2
Average trip distance (mi)	0.0	28.5

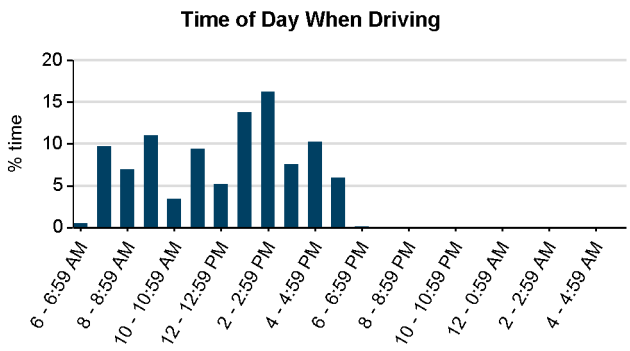
Trips in Charge Sustaining (CS) mode

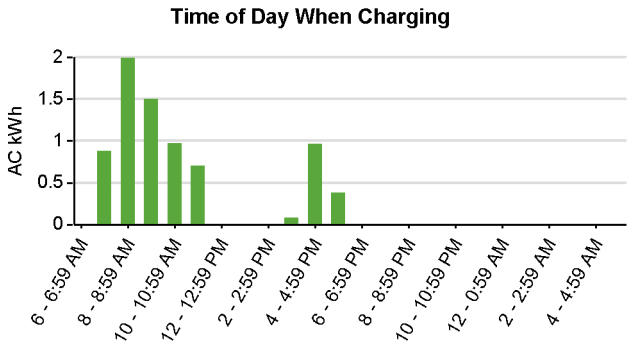
Gasoline fuel economy (mpg)	31	37
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity[8]	4	3
Average trip distance (mi)	4.6	17.2

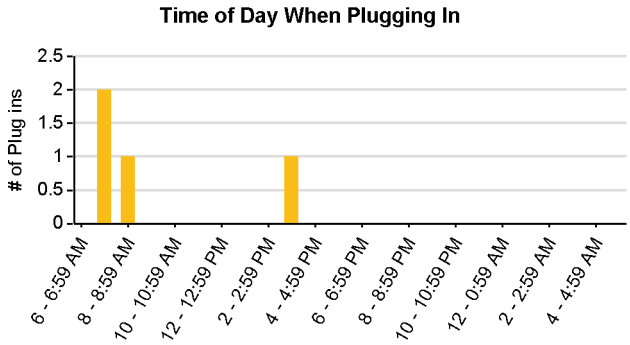


Plug-in charging

Average number of charging events per vehicle per month when driven	4
Average number of charging events per vehicle per day when driven	0.4
Average distance driven between charging events (mi)	145.3
Average number of trips between charging events	19.8
Average time plugged in per charging event (hr)	1.9
Average time plugged in and drawing power (hr)	1.9
Average time charging per charging event (power > 200 w) (hr)	1.9
Average energy per charging event (AC kWh)	1.9
Average charging energy per vehicle per month (AC kWh)	7.5
Total number of charging events	4
Total charging energy (AC kWh)	7







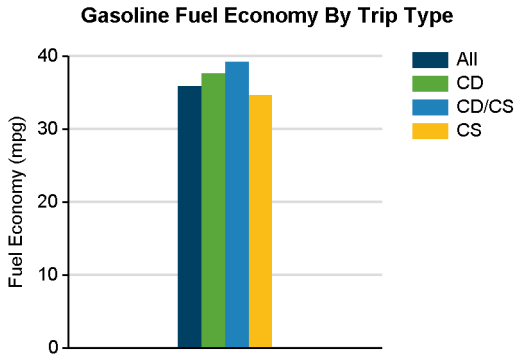
SCAQMD Quantum Escape PHEV Report

Quantum SCAQMD #9

Number of vehicles:	1	Date range of data received:	10/01/2012 to 10/31/2012
Reporting period:	October 2012	Number of vehicle days driven:	12

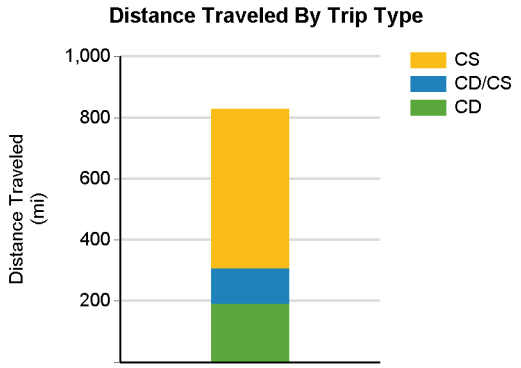
All Trips Combined

Overall gasoline fuel economy (mpg)	36
Overall AC electrical energy consumption (AC Wh/mi)[1]	31
Overall DC electrical energy consumption (DC Wh/mi)[2]	18
Total number of trips	68
Total distance traveled (mi)	829



Trips in Charge Depleting (CD) mode[3]

Gasoline fuel economy (mpg)	38
DC electrical energy consumption (DC Wh/mi)[4]	52
Number of trips	17
Percent of trips city | highway	41% | 59%
Distance traveled (mi)	189
Percent of total distance traveled	23%



Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes[5]

Gasoline fuel economy (mpg)	39
DC electrical energy consumption (DC Wh/mi)[6]	39
Number of trips	4
Percent of trips city | highway	25% | 75%
Distance traveled (mi)	117
Percent of total distance traveled	14%

Trips in Charge Sustaining (CS) mode[7]

Gasoline fuel economy (mpg)	35
Number of trips	47
Percent of trips city | highway	72% | 28%
Distance traveled (mi)	523
Percent of total distance traveled	63%

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

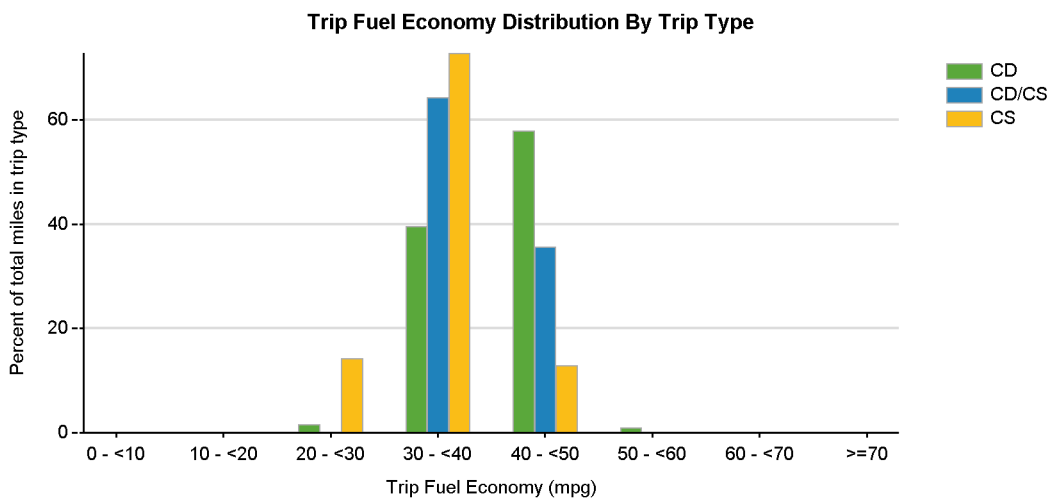
	City	Highway
Gasoline fuel economy (mpg)	31	39
DC electrical energy consumption (DC Wh/mi)	53	52
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity[8]	4	2
Average trip distance (mi)	3.5	16.5

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

Gasoline fuel economy (mpg)	49	37
DC electrical energy consumption (DC Wh/mi)	79	30
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity[8]	3	2
Average trip distance (mi)	22.2	31.5

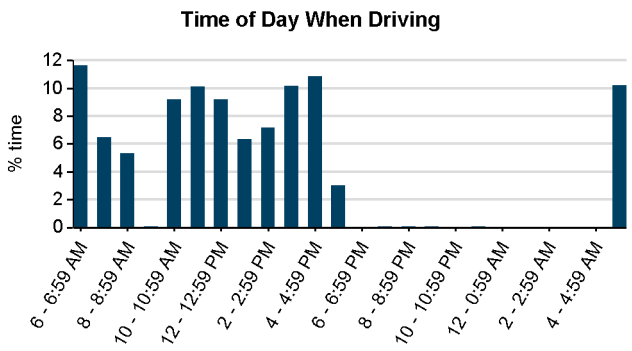
Trips in Charge Sustaining (CS) mode

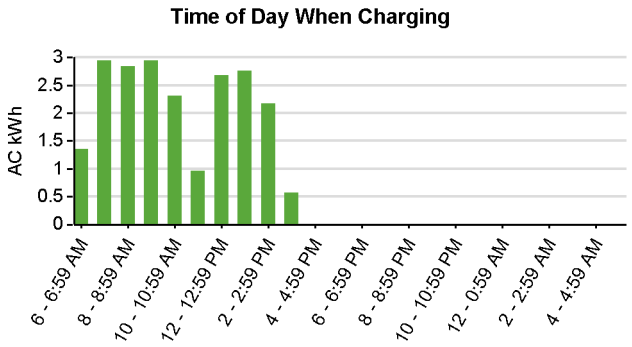
Gasoline fuel economy (mpg)	34	35
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity[8]	4	2
Average trip distance (mi)	1.9	35.2

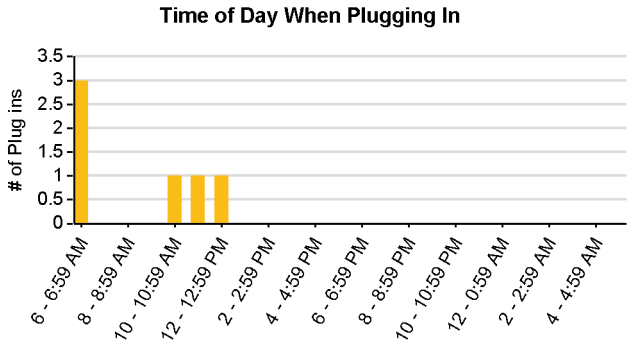


Plug-in charging

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)	138.2
Average number of trips between charging events	11.3
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)	4.3
Average charging energy per vehicle per month (AC kWh)	25.8
Total number of charging events	6
Total charging energy (AC kWh)	26







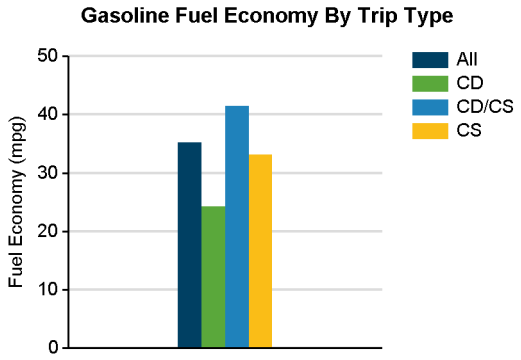
SCAQMD Quantum Escape PHEV Report

Quantum SCAQMD #12

Number of vehicles:	1	Date range of data received:	10/03/2012 to 10/30/2012
Reporting period:	October 2012	Number of vehicle days driven:	12

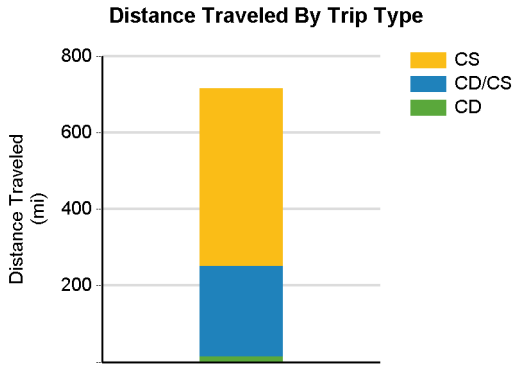
All Trips Combined

Overall gasoline fuel economy (mpg)	35
Overall AC electrical energy consumption (AC Wh/mi)[1]	40
Overall DC electrical energy consumption (DC Wh/mi)[2]	21
Total number of trips	40
Total distance traveled (mi)	717



Trips in Charge Depleting (CD) mode[3]

Gasoline fuel economy (mpg)	24
DC electrical energy consumption (DC Wh/mi)[4]	71
Number of trips	8
Percent of trips city | highway	88% | 13%
Distance traveled (mi)	14
Percent of total distance traveled	2%



Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes[5]

Gasoline fuel economy (mpg)	42
DC electrical energy consumption (DC Wh/mi)[6]	58
Number of trips	4
Percent of trips city | highway	0% | 100%
Distance traveled (mi)	237
Percent of total distance traveled	33%

Trips in Charge Sustaining (CS) mode[7]

Gasoline fuel economy (mpg)	33
Number of trips	28
Percent of trips city | highway	50% | 50%
Distance traveled (mi)	465
Percent of total distance traveled	65%

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

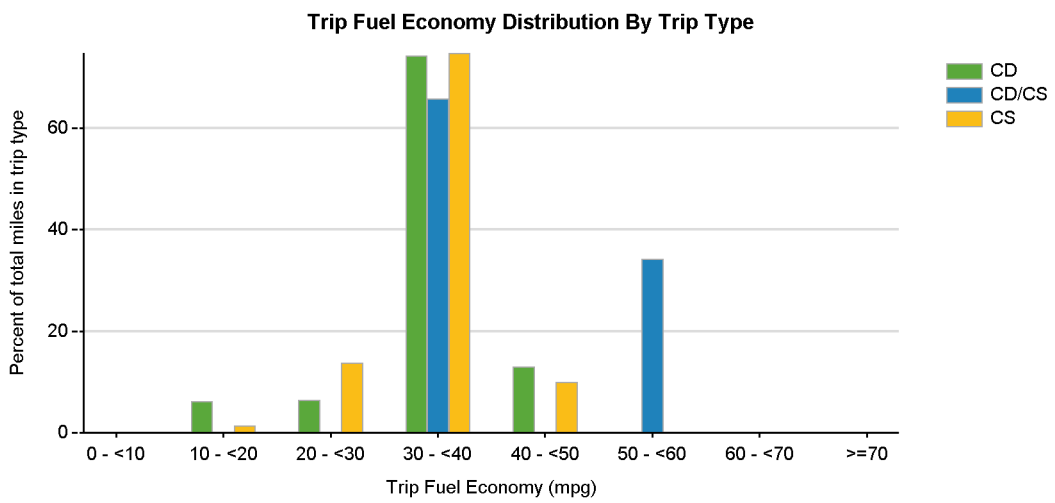
	City	Highway
Gasoline fuel economy (mpg)	32	0
DC electrical energy consumption (DC Wh/mi)	71	0
Percent of miles with internal combustion engine off	12%	0%
Average trip driving intensity[8]	5	
Average trip distance (mi)	2.1	0.0

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

Gasoline fuel economy (mpg)	0	42
DC electrical energy consumption (DC Wh/mi)	0	58
Percent of miles with internal combustion engine off	0%	4%
Average trip driving intensity[8]		2
Average trip distance (mi)	0.0	59.3

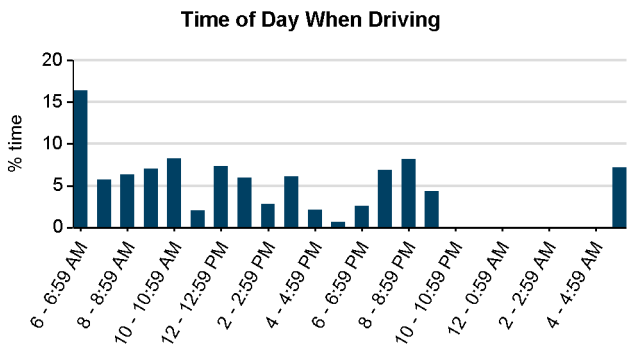
Trips in Charge Sustaining (CS) mode

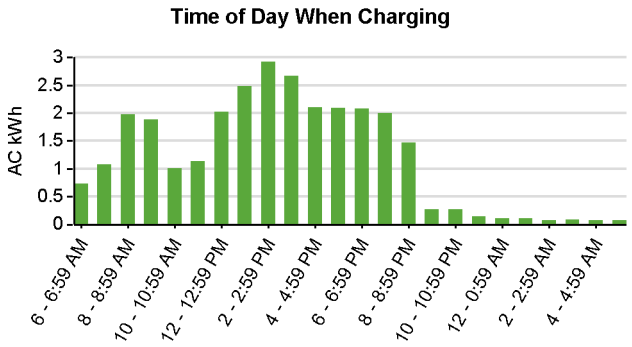
Gasoline fuel economy (mpg)	24	34
Percent of miles with internal combustion engine off	11%	3%
Average trip driving intensity[8]	4	2
Average trip distance (mi)	2.1	31.1

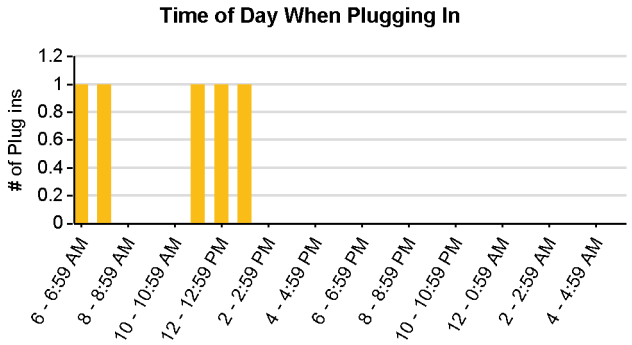


Plug-in charging

Average number of charging events per vehicle per month when driven	5
Average number of charging events per vehicle per day when driven	0.4
Average distance driven between charging events (mi)	143.3
Average number of trips between charging events	8.0
Average time plugged in per charging event (hr)	80.2
Average time plugged in and drawing power (hr)	80.2
Average time charging per charging event (power > 200 w) (hr)	8.0
Average energy per charging event (AC kWh)	5.8
Average charging energy per vehicle per month (AC kWh)	28.9
Total number of charging events	5
Total charging energy (AC kWh)	29







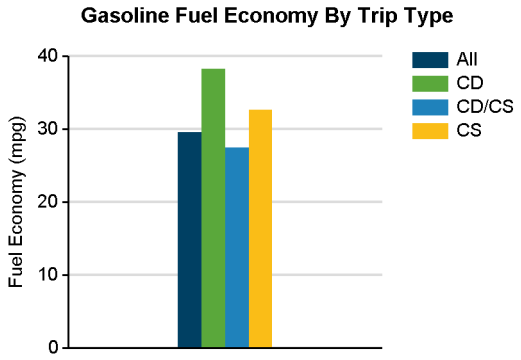
SCAQMD Quantum Escape PHEV Report

Quantum SCAQMD #15

Number of vehicles:	1	Date range of data received:	10/17/2012 to 10/27/2012
Reporting period:	October 2012	Number of vehicle days driven:	6

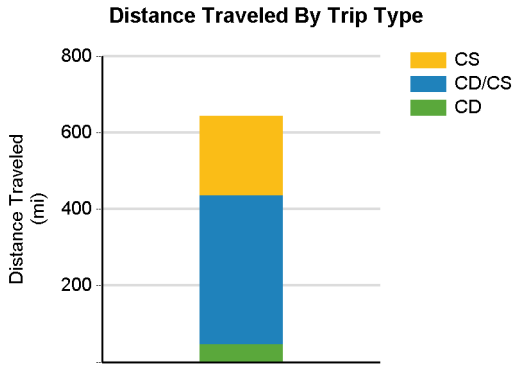
All Trips Combined

Overall gasoline fuel economy (mpg)	30
Overall AC electrical energy consumption (AC Wh/mi)[1]	81
Overall DC electrical energy consumption (DC Wh/mi)[2]	30
Total number of trips	31
Total distance traveled (mi)	645



Trips in Charge Depleting (CD) mode[3]

Gasoline fuel economy (mpg)	38
DC electrical energy consumption (DC Wh/mi)[4]	69
Number of trips	12
Percent of trips city | highway	83% | 17%
Distance traveled (mi)	46
Percent of total distance traveled	7%



Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes[5]

Gasoline fuel economy (mpg)	27
DC electrical energy consumption (DC Wh/mi)[6]	40
Number of trips	6
Percent of trips city | highway	0% | 100%
Distance traveled (mi)	390
Percent of total distance traveled	61%

Trips in Charge Sustaining (CS) mode[7]

Gasoline fuel economy (mpg)	33
Number of trips	13
Percent of trips city | highway	69% | 31%
Distance traveled (mi)	209
Percent of total distance traveled	32%

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

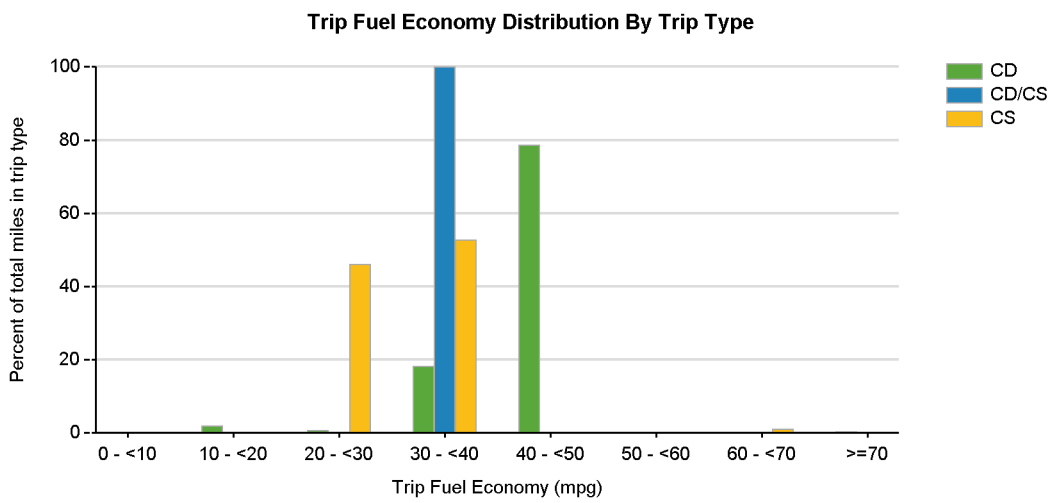
	City	Highway
Gasoline fuel economy (mpg)	23	39
DC electrical energy consumption (DC Wh/mi)	141	67
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity[8]	6	2
Average trip distance (mi)	0.2	22.0

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

Gasoline fuel economy (mpg)	0	27
DC electrical energy consumption (DC Wh/mi)	0	40
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity[8]		1
Average trip distance (mi)	0.0	65.0

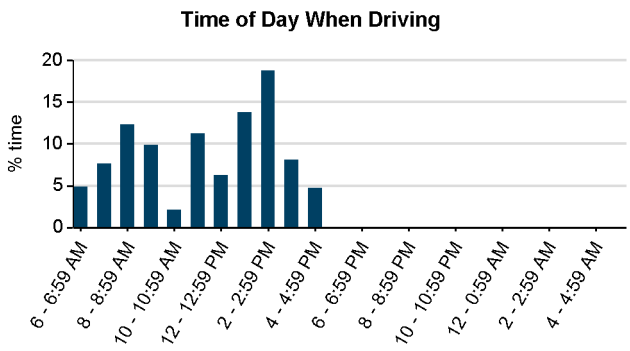
Trips in Charge Sustaining (CS) mode

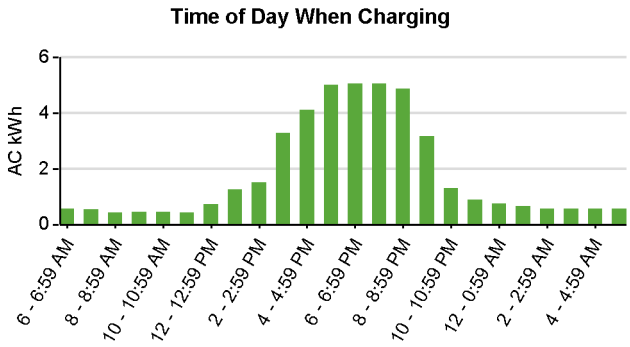
Gasoline fuel economy (mpg)	34	33
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity[8]	5	2
Average trip distance (mi)	1.6	48.6

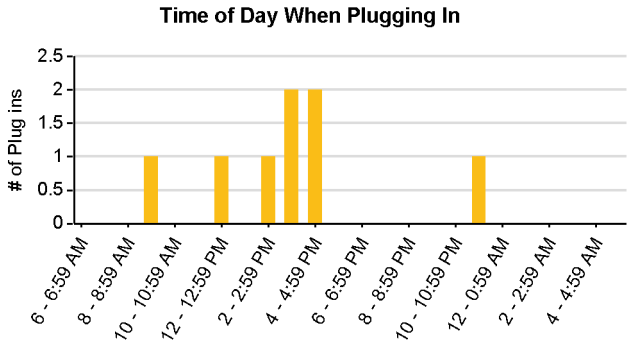


Plug-in charging

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)	80.6
Average number of trips between charging events	3.9
Average time plugged in per charging event (hr)	40.9
Average time plugged in and drawing power (hr)	40.9
Average time charging per charging event (power > 200 w) (hr)	6.3
Average energy per charging event (AC kWh)	6.5
Average charging energy per vehicle per month (AC kWh)	52.3
Total number of charging events	8
Total charging energy (AC kWh)	52







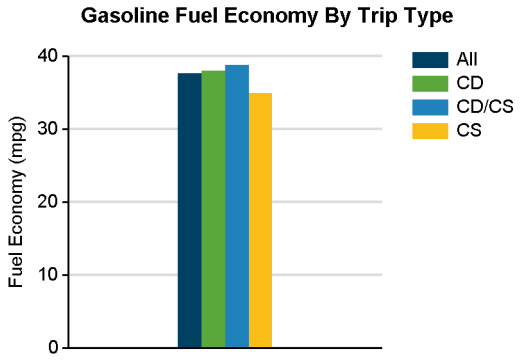
SCAQMD Quantum Escape PHEV Report

Quantum SCAQMD #19

Number of vehicles:	1	Date range of data received:	10/02/2012 to 10/31/2012
Reporting period:	October 2012	Number of vehicle days driven:	11

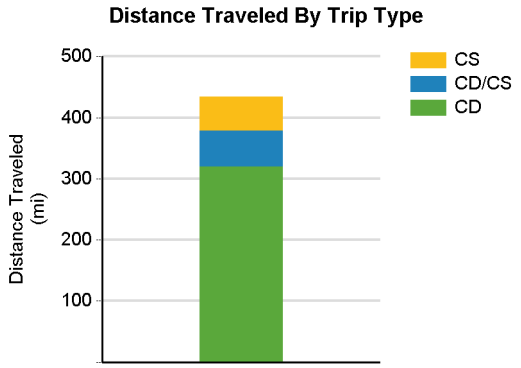
All Trips Combined

Overall gasoline fuel economy (mpg)	38
Overall AC electrical energy consumption (AC Wh/mi)[1]	78
Overall DC electrical energy consumption (DC Wh/mi)[2]	57
Total number of trips	70
Total distance traveled (mi)	435



Trips in Charge Depleting (CD) mode[3]

Gasoline fuel economy (mpg)	38
DC electrical energy consumption (DC Wh/mi)[4]	54
Number of trips	58
Percent of trips city | highway	81% | 19%
Distance traveled (mi)	319
Percent of total distance traveled	73%



Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes[5]

Gasoline fuel economy (mpg)	39
DC electrical energy consumption (DC Wh/mi)[6]	94
Number of trips	3
Percent of trips city | highway	67% | 33%
Distance traveled (mi)	59
Percent of total distance traveled	14%

Trips in Charge Sustaining (CS) mode[7]

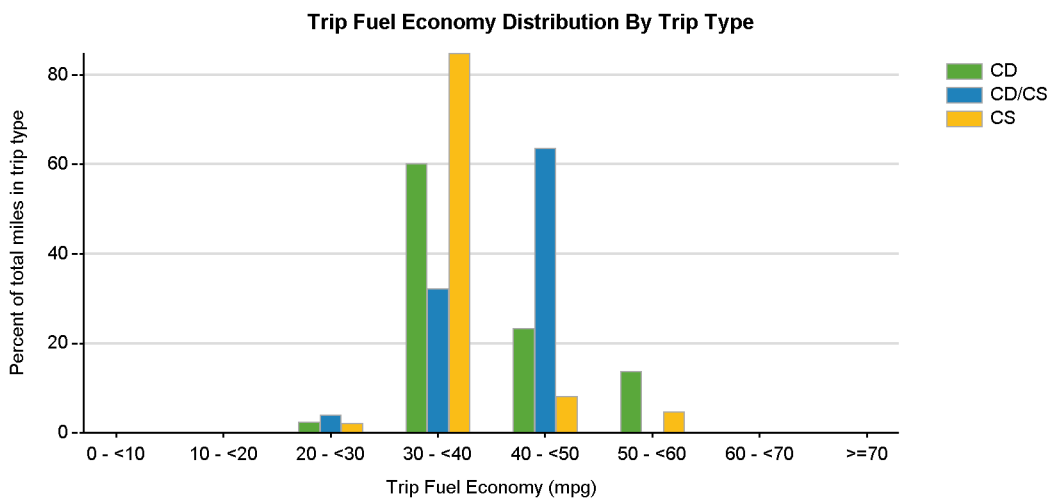
Gasoline fuel economy (mpg)	35
Number of trips	9
Percent of trips city | highway	89% | 11%
Distance traveled (mi)	56
Percent of total distance traveled	13%

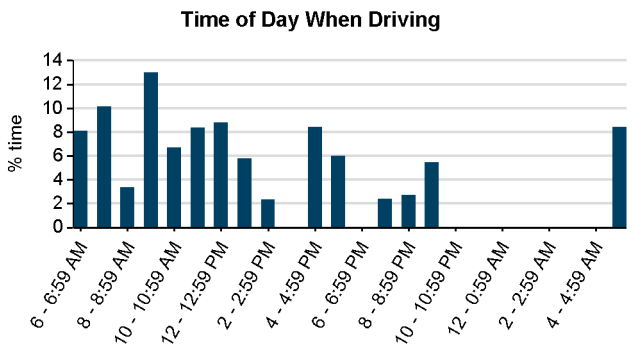
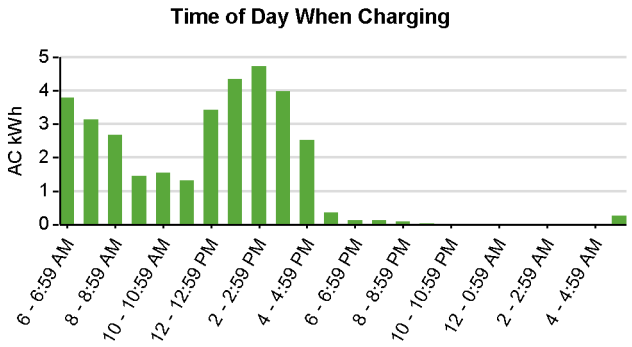
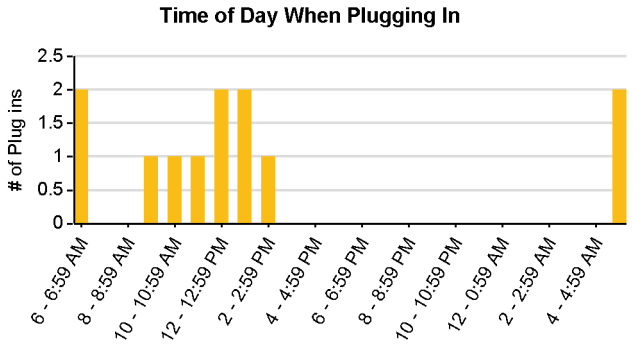
Notes: 1 - 8. Please see http://avt.inl.gov/pdf/phev/SCAQMDreportnotes.pdf for an explanation of all PHEV Fleet Testing Report notes.

Trips in Charge Depleting (CD) mode	City	Highway
Gasoline fuel economy (mpg)	36	41
DC electrical energy consumption (DC Wh/mi)	53	56
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity[8]	4	3
Average trip distance (mi)	4.3	10.7

Trips in Charge Depleting and Charge Sustaining (CD/CS) mode		
Gasoline fuel economy (mpg)	34	42
DC electrical energy consumption (DC Wh/mi)	153	61
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity[8]	3	2
Average trip distance (mi)	10.7	37.5

Trips in Charge Sustaining (CS) mode		
Gasoline fuel economy (mpg)	35	0
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity[8]	4	
Average trip distance (mi)	7.0	0.0



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	1.1
Average distance driven between charging events (mi)	36.2
Average number of trips between charging events	5.8
Average time plugged in per charging event (hr)	33.0
Average time plugged in and drawing power (hr)	33.0
Average time charging per charging event (power > 200 w) (hr)	3.6
Average energy per charging event (AC kWh)	2.8
Average charging energy per vehicle per month (AC kWh)	33.9
Total number of charging events	12
Total charging energy (AC kWh)	34