Number of vehicles:	19
Reporting period:	August 2012

U.S. DEPARTMENT OF

Date range of data received: Number of vehicle days driven: 268

**All Vehicles** 

40

08/01/2012 to 08/31/2012

Gasoline Fuel Economy By Trip Type

All CD CD/CS

CS

### All Trips Combined

Overall gasoline fuel economy (mpg)	35
Overall AC electrical energy consumption (AC Wh/mi) <sup>1</sup>	45
Overall DC electrical energy consumption (DC Wh/mi) <sup>2</sup>	29
Total number of trips	1,839
Total distance traveled (mi)	21,089

### Trips in Charge Depleting (CD) mode<sup>3</sup>

Gasoline fuel economy (mpg)	39
DC electrical energy consumption (DC Wh/mi) <sup>4</sup>	61
Number of trips	654
Percent of trips city   highway	66%   34%
Distance traveled (mi)	5,717
Percent of total distance traveled	27%

#### Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes<sup>5</sup>

	00
Gasoline fuel economy (mpg)	38
DC electrical energy consumption (DC Wh/mi) <sup>6</sup>	57
Number of trips	117
Percent of trips city   highway	39%   62%
Distance traveled (mi)	3,683
Percent of total distance traveled	17%

### Trips in Charge Sustaining (CS) mode<sup>7</sup>

Gasoline fuel economy (mpg)	33
Number of trips	1,068
Percent of trips city   highway	71%   30%
Distance traveled (mi)	11,689
Percent of total distance traveled	55%

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	41
DC electrical energy consumption (DC Wh/mi)	81	55
Percent of miles with internal combustion engine off	3%	0%
Average trip driving intensity <sup>8</sup>	4	2
Average trip distance (mi)	3.2	19.6
Trips in Charge Depleting and Charge Sustaining (CD/CS) mode		
Gasoline fuel economy (mpg)	41	38
DC electrical energy consumption (DC Wh/mi)	71	53
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity <sup>8</sup>	3	2
Average trip distance (mi)	17.5	40.2
Trips in Charge Sustaining (CS) mode		
Gasoline fuel economy (mpg)	29	35
Percent of miles with internal combustion engine off	1%	0%
Average trip driving intensity <sup>8</sup>	4	2
Average trip distance (mi)	4.1	27.2

Trip Fuel Economy Distribution By Trip Type





Average number of charging events per vehicle per month when driven	13	
Average number of charging events per vehicle per day when driven	0.9	
Average distance driven between charging events (mi)	84.0	
Average number of trips between charging events	7.3	
Average time plugged in per charging event (hr)	16.2	
Average time plugged in and drawing power (hr)	16.2	
Average time charging per charging event (power > 200 w) (hr)	4.8	
Average energy per charging event (AC kWh)	3.8	
Average charging energy per vehicle per month (AC kWh)	49.9	
Total number of charging events	251	
Total charging energy (AC kWh)	948	

Time of Day When Driving



Time of Day When Charging



Time of Day When Plugging In





#### Number of vehicles: 1

U.S. DEPARTMENT OF

Date range of data received:

#### Quantum SCAQMD #QF14

08/01/2012 to 08/31/2012

19

#### Reporting period: August 2012

Number of vehicle days driven:

### All Trips Combined

Overall gasoline fuel economy (mpg)	35
Overall AC electrical energy consumption (AC Wh/mi) <sup>1</sup>	68
Overall DC electrical energy consumption (DC Wh/mi) <sup>2</sup>	49
Total number of trips	112
Total distance traveled (mi)	1,103

#### Trips in Charge Depleting (CD) mode<sup>3</sup>

Gasoline fuel economy (mpg)	37
DC electrical energy consumption (DC Wh/mi) <sup>4</sup>	71
Number of trips	68
Percent of trips city   highway	35%   65%
Distance traveled (mi)	487
Percent of total distance traveled	44%

#### Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes<sup>5</sup>

Gasoline fuel economy (mpg)	38
DC electrical energy consumption (DC Wh/mi) <sup>6</sup>	72
Number of trips	6
Percent of trips city   highway	17%   83%
Distance traveled (mi)	165
Percent of total distance traveled	15%

### Trips in Charge Sustaining (CS) mode<sup>7</sup>

Gasoline fuel economy (mpg)	33
Number of trips	38
Percent of trips city   highway	42%   58%
Distance traveled (mi)	451
Percent of total distance traveled	41%

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



#### **Distance Traveled By Trip Type**





Trips in Charge Depleting (CD) mode	City	Highway
Gasoline fuel economy (mpg)	37	36
DC electrical energy consumption (DC Wh/mi)	87	67
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity <sup>8</sup>	4	3
Average trip distance (mi)	4.3	8.7
Trips in Charge Depleting and Charge Sustaining (CD/CS) mode		
Gasoline fuel economy (mpg)	42	37
DC electrical energy consumption (DC Wh/mi)	71	72
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity <sup>8</sup>	4	2
Average trip distance (mi)	26.6	27.7
Trips in Charge Sustaining (CS) mode		
Gasoline fuel economy (mpg)	30	34
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity <sup>8</sup>	4	3
Average trip distance (mi)	5.4	16.6



Trip Fuel Economy Distribution By Trip Type



Average number of charging events per vehicle per month when driven	35	
Average number of charging events per vehicle per day when driven	1.8	
Average distance driven between charging events (mi)	31.5	
Average number of trips between charging events	3.2	
Average time plugged in per charging event (hr)	3.6	
Average time plugged in and drawing power (hr)	3.6	
Average time charging per charging event (power > 200 w) (hr)	3.5	
Average energy per charging event (AC kWh)	2.1	
Average charging energy per vehicle per month (AC kWh)	75.0	
Total number of charging events	35	
Total charging energy (AC kWh)	75	

I otal charging energy (AC kWh)

**Time of Day When Driving** 



Time of Day When Charging



Time of Day When Plugging In





#### Number of vehicles: 1

U.S. DEPARTMENT OF

Date range of data received:

#### Quantum SCAQMD #24

08/01/2012 to 08/31/2012

#### Reporting period: August 2012

Number of vehicle days driven: 24

### All Trips Combined

Overall gasoline fuel economy (mpg)	39
Overall AC electrical energy consumption (AC Wh/mi) <sup>1</sup>	44
Overall DC electrical energy consumption (DC Wh/mi) <sup>2</sup>	36
Total number of trips	145
Total distance traveled (mi)	1,793

#### Trips in Charge Depleting (CD) mode<sup>3</sup>

Gasoline fuel economy (mpg)	44
DC electrical energy consumption (DC Wh/mi) <sup>4</sup>	74
Number of trips	47
Percent of trips city   highway	49%   51%
Distance traveled (mi)	482
Percent of total distance traveled	27%

#### Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes<sup>5</sup>

Gasoline fuel economy (mpg)	46
DC electrical energy consumption (DC Wh/mi) <sup>6</sup>	70
Number of trips	11
Percent of trips city   highway	46%   55%
Distance traveled (mi)	316
Percent of total distance traveled	18%

### Trips in Charge Sustaining (CS) mode<sup>7</sup>

Gasoline fuel economy (mpg)	36
Gasoline ruel economy (mpg)	50
Number of trips	87
Percent of trips city   highway	61%   39%
Distance traveled (mi)	995
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.



#### **Distance Traveled By Trip Type**





	0.1	
Trips in Charge Depleting (CD) mode	City	Highway
Gasoline fuel economy (mpg)	42	44
DC electrical energy consumption (DC Wh/mi)	97	63
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity <sup>8</sup>	3	2
Average trip distance (mi)	6.8	13.5
Trips in Charge Depleting and Charge Sustaining (CD/CS) mode		
Gasoline fuel economy (mpg)	48	46
DC electrical energy consumption (DC Wh/mi)	96	59
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity <sup>8</sup>	3	2
Average trip distance (mi)	19.7	36.2
Trips in Charge Sustaining (CS) mode		
Gasoline fuel economy (mpg)	31	38
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity <sup>8</sup>	3	2
Average trip distance (mi)	5.4	20.8



Trip Fuel Economy Distribution By Trip Type



Average number of charging events per vehicle per month when driven	26	
Average number of charging events per vehicle per day when driven	1.1	
Average distance driven between charging events (mi)	69.0	
Average number of trips between charging events	5.6	
Average time plugged in per charging event (hr)	3.9	
Average time plugged in and drawing power (hr)	3.9	
Average time charging per charging event (power > 200 w) (hr)	3.9	
Average energy per charging event (AC kWh)	3.1	
Average charging energy per vehicle per month (AC kWh)	79.3	
Total number of charging events	26	
Total charging energy (AC kWh)	79	

Time of Day When Driving



Time of Day When Charging



Time of Day When Plugging In





Number of	vehicles:	1

U.S. DEPARTMENT OF

Reporting period: August 2012 Date range of data received: Number of vehicle days driven:

#### Quantum SCAQMD #23

08/01/2012 to 08/31/2012

19

All Trips Combined	
Overall gasoline fuel economy (mpg)	37
Overall AC electrical energy consumption (AC Wh/mi) <sup>1</sup>	30
Overall DC electrical energy consumption (DC Wh/mi) <sup>2</sup>	20
Total number of trips	126
Total distance traveled (mi)	2,085

#### Trips in Charge Depleting (CD) mode<sup>3</sup>

Gasoline fuel economy (mpg)	40
DC electrical energy consumption (DC Wh/mi) <sup>4</sup>	65
Number of trips	22
Percent of trips city   highway	32%   68%
Distance traveled (mi)	334
Percent of total distance traveled	16%

#### Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes<sup>5</sup>

Gasoline fuel economy (mpg)	41
DC electrical energy consumption (DC Wh/mi) <sup>6</sup>	51
Number of trips	10
Percent of trips city   highway	40%   60%
Distance traveled (mi)	450
Percent of total distance traveled	22%

### Trips in Charge Sustaining (CS) mode<sup>7</sup>

Gasoline fuel economy (mpg)	35
Number of trips	94
Percent of trips city   highway	72%   28%
Distance traveled (mi)	1,301
Percent of total distance traveled	62%

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



#### **Distance Traveled By Trip Type**





Trips in Charge Depleting (CD) mode	City	Highway
Gasoline fuel economy (mpg)	37	41
DC electrical energy consumption (DC Wh/mi)	70	64
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity <sup>8</sup>	4	3
Average trip distance (mi)	2.4	21.2
Trips in Charge Depleting and Charge Sustaining (CD/CS) mode		
Gasoline fuel economy (mpg)	42	40
DC electrical energy consumption (DC Wh/mi)	45	55
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity <sup>8</sup>	3	2
Average trip distance (mi)	38.1	49.5
Trips in Charge Sustaining (CS) mode		
Gasoline fuel economy (mpg)	29	40
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity <sup>8</sup>	3	2
Average trip distance (mi)	7.2	31.3

Trip Fuel Economy Distribution By Trip Type





Average number of charging events per vehicle per month when driven	13	
Average number of charging events per vehicle per day when driven	0.7	
Average distance driven between charging events (mi)	160.4	
Average number of trips between charging events	9.7	
Average time plugged in per charging event (hr)	7.3	
Average time plugged in and drawing power (hr)	7.3	
Average time charging per charging event (power > 200 w) (hr)	7.3	
Average energy per charging event (AC kWh)	4.9	
Average charging energy per vehicle per month (AC kWh)	63.4	
Total number of charging events	13	
Total charging energy (AC kWh)	63	

Time of Day When Driving



Time of Day When Charging









## Number of vehicles: 1 Reporting period: August 2012

U.S. DEPARTMENT OF

Date range of data received: Number of vehicle days driven:

#### Quantum SCAQMD #22

08/03/2012 to 08/10/2012

3

#### All Trips Combined

Overall gasoline fuel economy (mpg)	39
Overall AC electrical energy consumption (AC Wh/mi) <sup>1</sup>	153
Overall DC electrical energy consumption (DC Wh/mi) <sup>2</sup>	62
Total number of trips	33
Total distance traveled (mi)	101

#### Trips in Charge Depleting (CD) mode<sup>3</sup>

Gasoline fuel economy (mpg)	42
DC electrical energy consumption (DC Wh/mi) <sup>4</sup>	64
Number of trips	27
Percent of trips city   highway	56%   44%
Distance traveled (mi)	56
Percent of total distance traveled	56%

#### Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes<sup>5</sup>

Gasoline fuel economy (mpg)	40
DC electrical energy consumption (DC Wh/mi) <sup>6</sup>	68
Number of trips	1
Percent of trips city   highway	0%   100%
Distance traveled (mi)	31
Percent of total distance traveled	31%

### Trips in Charge Sustaining (CS) mode<sup>7</sup>

28
5
80%   20%
13
13%

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



#### Distance Traveled By Trip Type





Trips in Charge Depleting (CD) mode	City	Highway
Gasoline fuel economy (mpg)	34	46
DC electrical energy consumption (DC Wh/mi)	63	64
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity <sup>8</sup>	4	2
Average trip distance (mi)	1.1	3.4
Trips in Charge Depleting and Charge Sustaining (CD/CS) mode		
Gasoline fuel economy (mpg)	0	40
DC electrical energy consumption (DC Wh/mi)	0	68
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity <sup>8</sup>		2
Average trip distance (mi)	0.0	31.0
Trips in Charge Sustaining (CS) mode		
Gasoline fuel economy (mpg)	25	30
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity <sup>8</sup>	5	3
Average trip distance (mi)	1.3	8.2

Trip Fuel Economy Distribution By Trip Type





Average number of charging events per vehicle per month when driven	5	
Average number of charging events per vehicle per day when driven	1.7	
Average distance driven between charging events (mi)	20.1	
Average number of trips between charging events	6.6	
Average time plugged in per charging event (hr)	31.6	
Average time plugged in and drawing power (hr)	31.6	
Average time charging per charging event (power > 200 w) (hr)	3.8	
Average energy per charging event (AC kWh)	3.1	
Average charging energy per vehicle per month (AC kWh)	15.4	
Total number of charging events	5	
Total charging energy (AC kWh)	15	

Time of Day When Driving



Time of Day When Charging







Number of vehicles:	1
Reporting period:	August 2012

Date range of data received: Number of vehicle days driven:

#### Quantum SCAQMD #21

08/01/2012 to 08/31/2012

13

### All Trips Combined

Overall gasoline fuel economy (mpg)	31
Overall AC electrical energy consumption (AC Wh/mi) <sup>1</sup>	46
Overall DC electrical energy consumption (DC Wh/mi) <sup>2</sup>	23
Total number of trips	77
Total distance traveled (mi)	1,283

#### Trips in Charge Depleting (CD) mode<sup>3</sup>

Gasoline fuel economy (mpg)	32
DC electrical energy consumption (DC Wh/mi) <sup>4</sup>	48
Number of trips	34
Percent of trips city   highway	79%   21%
Distance traveled (mi)	200
Percent of total distance traveled	16%

#### Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes<sup>5</sup>

Gasoline fuel economy (mpg)	33
DC electrical energy consumption (DC Wh/mi) <sup>6</sup>	52
Number of trips	8
Percent of trips city   highway	38%   63%
Distance traveled (mi)	373
Percent of total distance traveled	29%

### Trips in Charge Sustaining (CS) mode<sup>7</sup>

Gasoline fuel economy (mpg)	30
Number of trips	35
Percent of trips city   highway	69%   31%
Distance traveled (mi)	710
Percent of total distance traveled	55%

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



Distance Traveled By Trip Type





Tring in Charge Depleting (CD) made	City	Highway
	Oity	ingitway
Gasoline fuel economy (mpg)	25	39
DC electrical energy consumption (DC Wh/mi)	17	68
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity <sup>8</sup>	4	3
Average trip distance (mi)	3.0	17.1
Trips in Charge Depleting and Charge Sustaining (CD/CS) mode		
Gasoline fuel economy (mpg)	34	32
DC electrical energy consumption (DC Wh/mi)	79	41
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity <sup>8</sup>	4	3
Average trip distance (mi)	35.8	53.2
Trips in Charge Sustaining (CS) mode		
Gasoline fuel economy (mpg)	29	30
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity <sup>8</sup>	4	2
Average trip distance (mi)	1.8	60.6

Trip Fuel Economy Distribution By Trip Type





Average number of charging events per vehicle per month when driven	13	
Average number of charging events per vehicle per day when driven	1.0	
Average distance driven between charging events (mi)	98.7	
Average number of trips between charging events	5.9	
Average time plugged in per charging event (hr)	37.1	
Average time plugged in and drawing power (hr)	37.1	
Average time charging per charging event (power > 200 w) (hr)	3.8	
Average energy per charging event (AC kWh)	4.5	
Average charging energy per vehicle per month (AC kWh)	58.5	
Total number of charging events	13	
Total charging energy (AC kWh)	59	

Time of Day When Driving



Time of Day When Charging









## Number of vehicles: 1 Reporting period: August 2012

U.S. DEPARTMENT OF

Date range of data received: Number of vehicle days driven:

#### Quantum SCAQMD #20

08/01/2012 to 08/31/2012

21

#### All Trips Combined

Overall gasoline fuel economy (mpg)	30
Overall AC electrical energy consumption (AC Wh/mi) <sup>1</sup>	57
Overall DC electrical energy consumption (DC Wh/mi) <sup>2</sup>	40
Total number of trips	176
Total distance traveled (mi)	1,170

#### Trips in Charge Depleting (CD) mode<sup>3</sup>

Gasoline fuel economy (mpg)	36
DC electrical energy consumption (DC Wh/mi) <sup>4</sup>	120
Number of trips	49
Percent of trips city   highway	84%   16%
Distance traveled (mi)	225
Percent of total distance traveled	19%

#### Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes<sup>5</sup>

Gasoline fuel economy (mpg)	44
DC electrical energy consumption (DC Wh/mi) <sup>6</sup>	77
Number of trips	8
Percent of trips city   highway	50%   50%
Distance traveled (mi)	99
Percent of total distance traveled	8%

#### Trips in Charge Sustaining (CS) mode<sup>7</sup>

Gasoline fuel economy (mpg)	28
Number of trips	119
Percent of trips city   highway	83%   17%
Distance traveled (mi)	846
Percent of total distance traveled	72%

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



#### Distance Traveled By Trip Type





Trips in Charge Depleting (CD) mode	City	Highway
The in charge Depicting (OD) mode		
Gasoline fuel economy (mpg)	34	38
DC electrical energy consumption (DC Wh/mi)	178	75
Percent of miles with internal combustion engine off	15%	3%
Average trip driving intensity <sup>8</sup>	5	3
Average trip distance (mi)	2.4	15.6
Trips in Charge Depleting and Charge Sustaining (CD/CS) mode		
Gasoline fuel economy (mpg)	37	45
DC electrical energy consumption (DC Wh/mi)	113	71
Percent of miles with internal combustion engine off	8%	9%
Average trip driving intensity <sup>8</sup>	5	3
Average trip distance (mi)	3.6	21.1
Trips in Charge Sustaining (CS) mode		
Gasoline fuel economy (mpg)	26	31
Percent of miles with internal combustion engine off	7%	2%
Average trip driving intensity <sup>8</sup>	4	3
Average trip distance (mi)	5.0	17.3



Trip Fuel Economy Distribution By Trip Type



Average number of charging events per vehicle per month when driven	12	
Average number of charging events per vehicle per day when driven	0.6	
Average distance driven between charging events (mi)	97.5	
Average number of trips between charging events	14.7	
Average time plugged in per charging event (hr)	8.5	
Average time plugged in and drawing power (hr)	8.5	
Average time charging per charging event (power > 200 w) (hr)	8.5	
Average energy per charging event (AC kWh)	5.6	
Average charging energy per vehicle per month (AC kWh)	67.1	
Total number of charging events	12	
Total charging energy (AC kWh)	67	

I otal charging energy (AC kWh)

**Time of Day When Driving** 



Time of Day When Charging









## Number of vehicles: 1 Reporting period: August 2012

U.S. DEPARTMENT OF

Date range of data received: Number of vehicle days driven:

#### Quantum SCAQMD #18

08/02/2012 to 08/27/2012

9

#### All Trips Combined

Overall gasoline fuel economy (mpg)	35
Overall AC electrical energy consumption (AC Wh/mi) <sup>1</sup>	72
Overall DC electrical energy consumption (DC Wh/mi) <sup>2</sup>	35
Total number of trips	44
Total distance traveled (mi)	528

### Trips in Charge Depleting (CD) mode<sup>3</sup>

Gasoline fuel economy (mpg)	37
DC electrical energy consumption (DC Wh/mi) <sup>4</sup>	58
Number of trips	20
Percent of trips city   highway	60%   40%
Distance traveled (mi)	250
Percent of total distance traveled	47%

#### Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes<sup>5</sup>

Gasoline fuel economy (mpg)	45
DC electrical energy consumption (DC Wh/mi) <sup>6</sup>	63
Number of trips	1
Percent of trips city   highway	100%   0%
Distance traveled (mi)	28
Percent of total distance traveled	5%

### Trips in Charge Sustaining (CS) mode<sup>7</sup>

Gasoline fuel economy (mpg)	32
Number of trips	23
Percent of trips city   highway	61%   39%
Distance traveled (mi)	250
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.



Distance Traveled By Trip Type





Trips in Charge Depleting (CD) mode	City	Highway
Gasoline fuel economy (mpg)	35	38
DC electrical energy consumption (DC Wh/mi)	52	61
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity <sup>8</sup>	5	3
Average trip distance (mi)	6.5	21.5
Trips in Charge Depleting and Charge Sustaining (CD/CS) mode		
Gasoline fuel economy (mpg)	45	0
DC electrical energy consumption (DC Wh/mi)	63	0
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity <sup>8</sup>	4	
Average trip distance (mi)	28.1	0.0
Trips in Charge Sustaining (CS) mode		
Gasoline fuel economy (mpg)	31	33
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity <sup>8</sup>	5	2
Average trip distance (mi)	4.1	21.4

Trip Fuel Economy Distribution By Trip Type





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)	48.0	
Average number of trips between charging events	4.0	
Average time plugged in per charging event (hr)	27.0	
Average time plugged in and drawing power (hr)	27.0	
Average time charging per charging event (power > 200 w) (hr)	4.5	
Average energy per charging event (AC kWh)	3.4	
Average charging energy per vehicle per month (AC kWh)	37.8	
Total number of charging events	11	
Total charging energy (AC kWh)	38	

Time of Day When Driving



Time of Day When Charging









## Number of vehicles: 1 Reporting period: August 2012

U.S. DEPARTMENT OF

Date range of data received: Number of vehicle days driven:

#### Quantum SCAQMD #17

08/02/2012 to 08/31/2012

21

#### All Trips Combined

Overall gasoline fuel economy (mpg)	34
Overall AC electrical energy consumption (AC Wh/mi) <sup>1</sup>	30
Overall DC electrical energy consumption (DC Wh/mi) <sup>2</sup>	24
Total number of trips	150
Total distance traveled (mi)	1,616

#### Trips in Charge Depleting (CD) mode<sup>3</sup>

Gasoline fuel economy (mpg)	31
DC electrical energy consumption (DC Wh/mi) <sup>4</sup>	61
Number of trips	83
Percent of trips city   highway	90%   10%
Distance traveled (mi)	225
Percent of total distance traveled	14%

#### Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes<sup>5</sup>

Gasoline fuel economy (mpg)	35
DC electrical energy consumption (DC Wh/mi) <sup>6</sup>	50
Number of trips	10
Percent of trips city   highway	40%   60%
Distance traveled (mi)	449
Percent of total distance traveled	28%

### Trips in Charge Sustaining (CS) mode<sup>7</sup>

Gasoline fuel economy (mpg)	34
Number of trips	57
Percent of trips city   highway	72%   28%
Distance traveled (mi)	943
Percent of total distance traveled	58%

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



#### Distance Traveled By Trip Type





Trips in Charge Depleting (CD) mode	City	Highway
Gasoline fuel economy (mpg)	27	41
DC electrical energy consumption (DC Wh/mi)	66	52
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity <sup>8</sup>	5	4
Average trip distance (mi)	1.9	10.5
Trips in Charge Depleting and Charge Sustaining (CD/CS) mode		
Gasoline fuel economy (mpg)	49	33
DC electrical energy consumption (DC Wh/mi)	71	45
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity <sup>8</sup>	2	3
Average trip distance (mi)	20.8	60.9
Trips in Charge Sustaining (CS) mode		
Gasoline fuel economy (mpg)	29	34
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity <sup>8</sup>	4	2
Average trip distance (mi)	3.0	51.2

Trip Fuel Economy Distribution By Trip Type





Average number of charging events per vehicle per month when driven	15	
Average number of charging events per vehicle per day when driven	0.7	
Average distance driven between charging events (mi)	107.7	
Average number of trips between charging events	10.0	
Average time plugged in per charging event (hr)	10.9	
Average time plugged in and drawing power (hr)	10.9	
Average time charging per charging event (power > 200 w) (hr)	6.7	
Average energy per charging event (AC kWh)	3.2	
Average charging energy per vehicle per month (AC kWh)	47.9	
Total number of charging events	15	
Total charging energy (AC kWh)	48	

Time of Day When Driving



Time of Day When Charging



Time of Day When Plugging In





## Number of vehicles: 1 Reporting period: August 2012

U.S. DEPARTMENT OF

Date range of data received: Number of vehicle days driven:

#### Quantum SCAQMD #16

08/01/2012 to 08/31/2012

23

#### All Trips Combined

Overall gasoline fuel economy (mpg)	37
Overall AC electrical energy consumption (AC Wh/mi) <sup>1</sup>	29
Overall DC electrical energy consumption (DC Wh/mi) <sup>2</sup>	23
Total number of trips	151
Total distance traveled (mi)	2,954

#### Trips in Charge Depleting (CD) mode<sup>3</sup>

Gasoline fuel economy (mpg)	45
DC electrical energy consumption (DC Wh/mi) <sup>4</sup>	44
Number of trips	46
Percent of trips city   highway	54%   46%
Distance traveled (mi)	878
Percent of total distance traveled	30%

#### Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes<sup>5</sup>

Gasoline fuel economy (mpg)	40
DC electrical energy consumption (DC Wh/mi) <sup>6</sup>	50
Number of trips	12
Percent of trips city   highway	25%   75%
Distance traveled (mi)	472
Percent of total distance traveled	16%

#### Trips in Charge Sustaining (CS) mode<sup>7</sup>

Gasoline fuel economy (mpg)	34
Number of trips	93
Percent of trips city   highway	59%   41%
Distance traveled (mi)	1,604
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.



Distance Traveled By Trip Type





Trips in Charge Depleting (CD) mode	City	Highway
Gasoline fuel economy (mpg)	35	45
DC electrical energy consumption (DC Wh/mi)	82	42
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity <sup>8</sup>	4	2
Average trip distance (mi)	2.1	39.3
Trips in Charge Depleting and Charge Sustaining (CD/CS) mode		
Gasoline fuel economy (mpg)	44	39
DC electrical energy consumption (DC Wh/mi)	68	49
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity <sup>8</sup>	4	2
Average trip distance (mi)	10.0	49.1
Trips in Charge Sustaining (CS) mode		
Gasoline fuel economy (mpg)	33	34
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity <sup>8</sup>	4	2
Average trip distance (mi)	3.1	37.7

Trip Fuel Economy Distribution By Trip Type





Average number of charging events per vehicle per month when driven	18	
Average number of charging events per vehicle per day when driven	0.8	
Average distance driven between charging events (mi)	164.1	
Average number of trips between charging events	8.4	
Average time plugged in per charging event (hr)	7.9	
Average time plugged in and drawing power (hr)	7.9	
Average time charging per charging event (power > 200 w) (hr)	7.9	
Average energy per charging event (AC kWh)	4.8	
Average charging energy per vehicle per month (AC kWh)	86.5	
Total number of charging events	18	
Total charging energy (AC kWh)	87	

Total charging energy (AC kWh)

**Time of Day When Driving** 



Time of Day When Charging



Time of Day When Plugging In





## Number of vehicles: 1 Reporting period: August 2012

U.S. DEPARTMENT OF

Date range of data received: Number of vehicle days driven:

#### Quantum SCAQMD #13

08/01/2012 to 08/21/2012

9

#### All Trips Combined

Overall gasoline fuel economy (mpg)	36
Overall AC electrical energy consumption (AC Wh/mi) <sup>1</sup>	58
Overall DC electrical energy consumption (DC Wh/mi) <sup>2</sup>	36
Total number of trips	53
Total distance traveled (mi)	847

#### Trips in Charge Depleting (CD) mode<sup>3</sup>

Gasoline fuel economy (mpg)	37
DC electrical energy consumption (DC Wh/mi) <sup>4</sup>	56
Number of trips	20
Percent of trips city   highway	60%   40%
Distance traveled (mi)	200
Percent of total distance traveled	24%

#### Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes<sup>5</sup>

Gasoline fuel economy (mpg)	39
DC electrical energy consumption (DC Wh/mi) <sup>6</sup>	53
Number of trips	6
Percent of trips city   highway	33%   67%
Distance traveled (mi)	270
Percent of total distance traveled	32%

### Trips in Charge Sustaining (CS) mode<sup>7</sup>

Gasoline fuel economy (mpg)	34
Number of trips	27
Percent of trips city   highway	56%   44%
Distance traveled (mi)	377
Percent of total distance traveled	45%

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



Distance Traveled By Trip Type





Trips in Charge Depleting (CD) mode	City	Highway
Gasoline fuel economy (mpg)	20	40
DC electrical energy consumption (DC Wh/mi)	36	58
Percent of miles with internal combustion engine off	14%	0%
Average trip driving intensity <sup>8</sup>	5	3
Average trip distance (mi)	1.3	23.0
Trips in Charge Depleting and Charge Sustaining (CD/CS) mode		
Gasoline fuel economy (mpg)	41	38
DC electrical energy consumption (DC Wh/mi)	54	52
Percent of miles with internal combustion engine off	0%	1%
Average trip driving intensity <sup>8</sup>	4	3
Average trip distance (mi)	49.4	42.8
Trips in Charge Sustaining (CS) mode		
Gasoline fuel economy (mpg)	31	35
Percent of miles with internal combustion engine off	1%	0%
Average trip driving intensity <sup>8</sup>	5	3
Average trip distance (mi)	3.3	27.3

Trip Fuel Economy Distribution By Trip Type





Average number of charging events per vehicle per month when driven	13	
Average number of charging events per vehicle per day when driven	1.4	
Average distance driven between charging events (mi)	65.1	
Average number of trips between charging events	4.1	
Average time plugged in per charging event (hr)	11.3	
Average time plugged in and drawing power (hr)	11.3	
Average time charging per charging event (power > 200 w) (hr)	3.5	
Average energy per charging event (AC kWh)	3.8	
Average charging energy per vehicle per month (AC kWh)	49.3	
Total number of charging events	13	
Total charging energy (AC kWh)	49	

Time of Day When Driving



Time of Day When Charging









#### Number of vehicles: 1 Reporting period: August 2012

U.S. DEPARTMENT OF

Date range of data received: Number of vehicle days driven:

Quantum SCAQMD #11

20

08/01/2012 to 08/31/2012

### All Trips Combined

Overall gasoline fuel economy (mpg)	35
Overall AC electrical energy consumption (AC Wh/mi) <sup>1</sup>	13
Overall DC electrical energy consumption (DC Wh/mi) <sup>2</sup>	12
Total number of trips	192
Total distance traveled (mi)	1,467

### Trips in Charge Depleting (CD) mode<sup>3</sup>

Gasoline fuel economy (mpg)	38
DC electrical energy consumption (DC Wh/mi) <sup>4</sup>	52
Number of trips	22
Percent of trips city   highway	77%   23%
Distance traveled (mi)	108
Percent of total distance traveled	7%

#### Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes<sup>5</sup>

Gasoline fuel economy (mpg)	43
DC electrical energy consumption (DC Wh/mi) <sup>6</sup>	57
Number of trips	6
Percent of trips city   highway	17%   83%
Distance traveled (mi)	104
Percent of total distance traveled	7%

### Trips in Charge Sustaining (CS) mode<sup>7</sup>

Gasoline fuel economy (mpg)	34
Number of trips	164
Percent of trips city   highway	73%   27%
Distance traveled (mi)	1,255
Percent of total distance traveled	86%

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



#### **Distance Traveled By Trip Type**





Trips in Charge Depleting (CD) mode	City	Highway
Gasoline fuel economy (mpg)	34	44
DC electrical energy consumption (DC Wh/mi)	53	51
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity <sup>8</sup>	5	3
Average trip distance (mi)	3.2	10.9
Trips in Charge Depleting and Charge Sustaining (CD/CS) mode		
Gasoline fuel economy (mpg)	35	43
DC electrical energy consumption (DC Wh/mi)	81	55
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity <sup>8</sup>	4	2
Average trip distance (mi)	7.9	19.2
Trips in Charge Sustaining (CS) mode		
Gasoline fuel economy (mpg)	32	35
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity <sup>8</sup>	4	3
Average trip distance (mi)	3.8	18.2







Average number of charging events per vehicle per month when driven	10	
Average number of charging events per vehicle per day when driven	0.5	
Average distance driven between charging events (mi)	146.7	
Average number of trips between charging events	19.2	
Average time plugged in per charging event (hr)	2.4	
Average time plugged in and drawing power (hr)	2.4	
Average time charging per charging event (power > 200 w) (hr)	2.4	
Average energy per charging event (AC kWh)	2.0	
Average charging energy per vehicle per month (AC kWh)	19.7	
Total number of charging events	10	
Total charging energy (AC kWh)	20	

Total charging energy (AC kWh)

Time of Day When Driving



Time of Day When Charging



Time of Day When Plugging In





#### Number of vehicles: 1

U.S. DEPARTMENT OF

Date range of data received:

#### Quantum SCAQMD #10

08/01/2012 to 08/31/2012

#### Reporting period: August 2012

Number of vehicle days driven: 20

### All Trips Combined

Overall gasoline fuel economy (mpg)	36
Overall AC electrical energy consumption (AC Wh/mi) <sup>1</sup>	22
Overall DC electrical energy consumption (DC Wh/mi) <sup>2</sup>	14
Total number of trips	137
Total distance traveled (mi)	1,798

### Trips in Charge Depleting (CD) mode<sup>3</sup>

Gasoline fuel economy (mpg)	48
DC electrical energy consumption (DC Wh/mi) <sup>4</sup>	40
Number of trips	15
Percent of trips city   highway	60%   40%
Distance traveled (mi)	256
Percent of total distance traveled	14%

#### Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes<sup>5</sup>

Gasoline fuel economy (mpg)	38
DC electrical energy consumption (DC Wh/mi) <sup>6</sup>	72
Number of trips	7
Percent of trips city   highway	43%   57%
Distance traveled (mi)	205
Percent of total distance traveled	11%

### Trips in Charge Sustaining (CS) mode<sup>7</sup>

Gasoline fuel economy (mpg)	34
Number of trips	115
Percent of trips city   highway	68%   32%
Distance traveled (mi)	1,338
Percent of total distance traveled	74%

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



#### **Distance Traveled By Trip Type**





Trips in Charge Depleting (CD) mode	City	Highway
Gasoline fuel economy (mpg)	40	51
DC electrical energy consumption (DC Wh/mi)	74	29
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity <sup>8</sup>	3	2
Average trip distance (mi)	7.3	31.7
Trips in Charge Depleting and Charge Sustaining (CD/CS) mode		
Gasoline fuel economy (mpg)	38	38
DC electrical energy consumption (DC Wh/mi)	102	69
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity <sup>8</sup>	4	2
Average trip distance (mi)	5.3	47.2
Trips in Charge Sustaining (CS) mode		
Gasoline fuel economy (mpg)	31	35
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity <sup>8</sup>	4	2
Average trip distance (mi)	4.9	25.8







Average number of charging events per vehicle per month when driven	9	
Average number of charging events per vehicle per day when driven	0.5	
Average distance driven between charging events (mi)	199.8	
Average number of trips between charging events	15.2	
Average time plugged in per charging event (hr)	10.5	
Average time plugged in and drawing power (hr)	10.5	
Average time charging per charging event (power > 200 w) (hr)	4.7	
Average energy per charging event (AC kWh)	4.3	
Average charging energy per vehicle per month (AC kWh)	39.0	
Total number of charging events	9	
Total charging energy (AC kWh)	39	

Time of Day When Driving



Time of Day When Charging









## Number of vehicles: 1 Reporting period: August 2012

U.S. DEPARTMENT OF

Date range of data received: Number of vehicle days driven:

#### Quantum SCAQMD #9

25

08/01/2012 to 08/31/2012

#### All Trips Combined

Overall gasoline fuel economy (mpg)	37
Overall AC electrical energy consumption (AC Wh/mi) <sup>1</sup>	53
Overall DC electrical energy consumption (DC Wh/mi) <sup>2</sup>	39
Total number of trips	209
Total distance traveled (mi)	2,785

### Trips in Charge Depleting (CD) mode<sup>3</sup>

Gasoline fuel economy (mpg)	39
DC electrical energy consumption (DC Wh/mi) <sup>4</sup>	60
Number of trips	82
Percent of trips city   highway	51%   49%
Distance traveled (mi)	1,268
Percent of total distance traveled	46%

#### Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes<sup>5</sup>

Gasoline fuel economy (mpg)	37
DC electrical energy consumption (DC Wh/mi) <sup>6</sup>	47
Number of trips	22
Percent of trips city   highway	46%   55%
Distance traveled (mi)	561
Percent of total distance traveled	20%

### Trips in Charge Sustaining (CS) mode<sup>7</sup>

Gasoline fuel economy (mpg)	34
Number of trips	105
Percent of trips city   highway	71%   30%
Distance traveled (mi)	956
Percent of total distance traveled	34%

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



Distance Traveled By Trip Type





Trips in Charge Depleting (CD) mode	City	Highway
Gasoline fuel economy (mpg)	34	40
DC electrical energy consumption (DC Wh/mi)	70	59
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity <sup>8</sup>	5	2
Average trip distance (mi)	2.6	28.9
Trips in Charge Depleting and Charge Sustaining (CD/CS) mode		
Gasoline fuel economy (mpg)	39	37
DC electrical energy consumption (DC Wh/mi)	59	45
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity <sup>8</sup>	3	2
Average trip distance (mi)	10.9	37.7
Trips in Charge Sustaining (CS) mode		
Gasoline fuel economy (mpg)	32	35
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity <sup>8</sup>	4	2
Average trip distance (mi)	3.2	23.2

Trip Fuel Economy Distribution By Trip Type





Average number of charging events per vehicle per month when driven	30	
Average number of charging events per vehicle per day when driven	1.2	
Average distance driven between charging events (mi)	92.8	
Average number of trips between charging events	7.0	
Average time plugged in per charging event (hr)	7.0	
Average time plugged in and drawing power (hr)	7.0	
Average time charging per charging event (power > 200 w) (hr)	7.0	
Average energy per charging event (AC kWh)	4.9	
Average charging energy per vehicle per month (AC kWh)	147.6	
Total number of charging events	30	
Total charging energy (AC kWh)	148	

Total charging energy (AC kWh)

Time of Day When Driving



Time of Day When Charging



Time of Day When Plugging In





Number of vehicles:	1
Reporting period:	August 2012

U.S. DEPARTMENT OF

Date range of data received: Number of vehicle days driven:

#### Quantum SCAQMD #12

08/15/2012 to 08/22/2012

3

#### All Trips Combined

Overall gasoline fuel economy (mpg)	36
Overall AC electrical energy consumption (AC Wh/mi) <sup>1</sup>	215
Overall DC electrical energy consumption (DC Wh/mi) <sup>2</sup>	40
Total number of trips	12
Total distance traveled (mi)	131

#### Trips in Charge Depleting (CD) mode<sup>3</sup>

38
63
1
0%   100%
38
29%

#### Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes<sup>5</sup>

Gasoline fuel economy (mpg)	40
DC electrical energy consumption (DC Wh/mi) <sup>6</sup>	68
Number of trips	1
Percent of trips city   highway	0%   100%
Distance traveled (mi)	37
Percent of total distance traveled	29%

### Trips in Charge Sustaining (CS) mode<sup>7</sup>

Gasoline fuel economy (mpg)	34
Number of trips	10
Percent of trips city   highway	80%   20%
Distance traveled (mi)	55
Percent of total distance traveled	42%

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



#### Distance Traveled By Trip Type





Trips in Charge Depleting (CD) mode	City	Highway
Gasoline fuel economy (mpg)	0	38
DC electrical energy consumption (DC Wh/mi)	0	63
Percent of miles with internal combustion engine off	0%	1%
Average trip driving intensity <sup>8</sup>		2
Average trip distance (mi)	0.0	38.3
Trips in Charge Depleting and Charge Sustaining (CD/CS) mode		
Gasoline fuel economy (mpg)	0	40
DC electrical energy consumption (DC Wh/mi)	0	68
Percent of miles with internal combustion engine off	0%	2%
Average trip driving intensity <sup>8</sup>		1
Average trip distance (mi)	0.0	37.3
Trips in Charge Sustaining (CS) mode		
Gasoline fuel economy (mpg)	32	34
Percent of miles with internal combustion engine off	17%	6%
Average trip driving intensity <sup>8</sup>	5	2
Average trip distance (mi)	1.3	22.2

Trip Fuel Economy Distribution By Trip Type





Average number of charging events per vehicle per menth when driven	1	
Average number of charging events per vehicle per month when unveh	4	
Average number of charging events per vehicle per day when driven	1.3	
Average distance driven between charging events (mi)	32.7	
Average number of trips between charging events	3.0	
Average time plugged in per charging event (hr)	106.4	
Average time plugged in and drawing power (hr)	106.4	
Average time charging per charging event (power > 200 w) (hr)	2.1	
Average energy per charging event (AC kWh)	7.0	
Average charging energy per vehicle per month (AC kWh)	28.1	
Total number of charging events	4	
Total charging energy (AC kWh)	28	

Time of Day When Driving



Time of Day When Charging







## Number of vehicles: 1 Reporting period: A

U.S. DEPARTMENT OF

d: August 2012

Date range of data received: Number of vehicle days driven:

#### Quantum SCAQMD #15

08/15/2012 to 08/23/2012

5

#### All Trips Combined

Overall gasoline fuel economy (mpg)	35
Overall AC electrical energy consumption (AC Wh/mi) <sup>1</sup>	
Overall DC electrical energy consumption (DC Wh/mi) <sup>2</sup>	26
Total number of trips	17
Total distance traveled (mi)	211

### Trips in Charge Depleting (CD) mode<sup>3</sup>

Gasoline fuel economy (mpg)	40
DC electrical energy consumption (DC Wh/mi) <sup>4</sup>	22
Number of trips	4
Percent of trips city   highway	50%   50%
Distance traveled (mi)	94
Percent of total distance traveled	45%

#### Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes<sup>5</sup>

Gasoline fuel economy (mpg)	41
DC electrical energy consumption (DC Wh/mi) <sup>6</sup>	67
Number of trips	2
Percent of trips city   highway	0%   100%
Distance traveled (mi)	57
Percent of total distance traveled	27%

### Trips in Charge Sustaining (CS) mode<sup>7</sup>

Gasoline fuel economy (mpg)	27
Number of trips	11
Percent of trips city   highway	82%   18%
Distance traveled (mi)	61
Percent of total distance traveled	29%

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



#### Distance Traveled By Trip Type





Trips in Charge Depleting (CD) mode	City	Highway
Gasoline fuel economy (mpg)	45	36
DC electrical energy consumption (DC Wh/mi)	73	23
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity <sup>8</sup>	3	2
Average trip distance (mi)	22.2	24.8
Trips in Charge Depleting and Charge Sustaining (CD/CS) mode		
Gasoline fuel economy (mpg)	0	41
DC electrical energy consumption (DC Wh/mi)	0	67
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity <sup>8</sup>		2
Average trip distance (mi)	0.0	28.4
Trips in Charge Sustaining (CS) mode		
Gasoline fuel economy (mpg)	19	28
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity <sup>8</sup>	5	2
Average trip distance (mi)	0.7	26.9

Trip Fuel Economy Distribution By Trip Type





Average number of charging events per vehicle per month when driven	0	
Average number of charging events per vehicle per day when driven	0.0	
Average distance driven between charging events (mi)	0.0	
Average number of trips between charging events	0.0	
Average time plugged in per charging event (hr)	0.0	
Average time plugged in and drawing power (hr)	0.0	
Average time charging per charging event (power > 200 w) (hr)	0.0	
Average energy per charging event (AC kWh)	0.0	
Average charging energy per vehicle per month (AC kWh)	0.0	
Total number of charging events	0	
Total charging energy (AC kWh)	0	

Time of Day When Driving



Time of Day When Charging







Number of vehicles:	1
Reporting period:	А

U.S. DEPARTMENT OF

iod: August 2012

Date range of data received: Number of vehicle days driven:

#### Quantum SCAQMD #19

08/14/2012 to 08/31/2012

13

#### All Trips Combined

Overall gasoline fuel economy (mpg)	32
Overall AC electrical energy consumption (AC Wh/mi) <sup>1</sup>	86
Overall DC electrical energy consumption (DC Wh/mi) <sup>2</sup>	61
Total number of trips	107
Total distance traveled (mi)	539

### Trips in Charge Depleting (CD) mode<sup>3</sup>

Gasoline fuel economy (mpg)	36
DC electrical energy consumption (DC Wh/mi) <sup>4</sup>	79
Number of trips	51
Percent of trips city   highway	88%   12%
Distance traveled (mi)	305
Percent of total distance traveled	57%

#### Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes<sup>5</sup>

Gasoline fuel economy (mpg)	28
DC electrical energy consumption (DC Wh/mi) <sup>6</sup>	278
Number of trips	4
Percent of trips city   highway	100%   0%
Distance traveled (mi)	15
Percent of total distance traveled	3%

### Trips in Charge Sustaining (CS) mode<sup>7</sup>

Gasoline fuel economy (mpg)	28
Number of trips	52
Percent of trips city   highway	90%   10%
Distance traveled (mi)	219
Percent of total distance traveled	41%

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	36
DC electrical energy consumption (DC Wh/mi)	81	68
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity <sup>8</sup>	4	3
Average trip distance (mi)	5.6	8.7
Trips in Charge Depleting and Charge Sustaining (CD/CS) mode		
Gasoline fuel economy (mpg)	28	0
DC electrical energy consumption (DC Wh/mi)	278	0
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity <sup>8</sup>	5	
Average trip distance (mi)	3.6	0.0
Trips in Charge Sustaining (CS) mode		
Gasoline fuel economy (mpg)	27	31
Percent of miles with internal combustion engine off	0%	0%
Average trip driving intensity <sup>8</sup>	4	3
Average trip distance (mi)	3.6	10.2

Trip Fuel Economy Distribution By Trip Type





Average number of charging events per vehicle per month when driven	19	
Average number of charging events per vehicle per day when driven	1.5	
Average distance driven between charging events (mi)	28.4	
Average number of trips between charging events	5.6	
Average time plugged in per charging event (hr)	3.8	
Average time plugged in and drawing power (hr)	3.8	
Average time charging per charging event (power > 200 w) (hr)	3.5	
Average energy per charging event (AC kWh)	2.4	
Average charging energy per vehicle per month (AC kWh)	46.4	
Total number of charging events	19	
Total charging energy (AC kWh)	46	

I otal charging energy (AC kWh)

**Time of Day When Driving** 



Time of Day When Charging



Time of Day When Plugging In





# Number of vehicles: 1

U.S. DEPARTMENT OF

Reporting period: August 2012

Date range of data received: Number of vehicle days driven:

#### Quantum SCAQMD #7

11

08/08/2012 to 08/31/2012

#### All Trips Combined

•	
Overall gasoline fuel economy (mpg)	36
Overall AC electrical energy consumption (AC Wh/mi) <sup>1</sup>	69
Overall DC electrical energy consumption (DC Wh/mi) <sup>2</sup>	36
Total number of trips	59
Total distance traveled (mi)	641

#### Trips in Charge Depleting (CD) mode<sup>3</sup>

Gasoline fuel economy (mpg)	41
DC electrical energy consumption (DC Wh/mi) <sup>4</sup>	63
Number of trips	24
Percent of trips city   highway	71%   29%
Distance traveled (mi)	273
Percent of total distance traveled	43%

#### Trips in both Charge Depleting & Charge Sustaining (CD/CS) modes<sup>5</sup>

Gasoline fuel economy (mpg)	36
DC electrical energy consumption (DC Wh/mi) <sup>6</sup>	49
Number of trips	2
Percent of trips city   highway	0%   100%
Distance traveled (mi)	53
Percent of total distance traveled	8%

### Trips in Charge Sustaining (CS) mode<sup>7</sup>

Gasoline fuel economy (mpg)	33
Number of trips	33
Percent of trips city   highway	85%   15%
Distance traveled (mi)	315
Percent of total distance traveled	49%

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



Distance Traveled By Trip Type





Trips in Charge Depleting (CD) mode	City	Highway
Gasoline fuel economy (mpg)	42	41
DC electrical energy consumption (DC Wh/mi)	94	56
Percent of miles with internal combustion engine off	30%	4%
Average trip driving intensity <sup>8</sup>	5	2
Average trip distance (mi)	3.0	31.7
Trips in Charge Depleting and Charge Sustaining (CD/CS) mode		
Gasoline fuel economy (mpg)	0	36
DC electrical energy consumption (DC Wh/mi)	0	49
Percent of miles with internal combustion engine off	0%	4%
Average trip driving intensity <sup>8</sup>		3
Average trip distance (mi)	0.0	26.5
Trips in Charge Sustaining (CS) mode		
Gasoline fuel economy (mpg)	29	34
Percent of miles with internal combustion engine off	13%	2%
Average trip driving intensity <sup>8</sup>	5	2
Average trip distance (mi)	1.8	53.1

Trip Fuel Economy Distribution By Trip Type





Average number of charging events per vehicle per month when driven	13	
Average number of charging events per vehicle per day when driven	1.2	
Average distance driven between charging events (mi)	49.3	
Average number of trips between charging events	4.5	
Average time plugged in per charging event (hr)	32.5	
Average time plugged in and drawing power (hr)	32.5	
Average time charging per charging event (power > 200 w) (hr)	2.8	
Average energy per charging event (AC kWh)	3.4	
Average charging energy per vehicle per month (AC kWh)	44.4	
Total number of charging events	13	
Total charging energy (AC kWh)	44	

Time of Day When Driving



Time of Day When Charging







