

Proposal to make Fort Williams Park Financially Self-sustaining
submitted by the Fort Williams Advisory Commission
December 4, 2009

At its meeting of March 19, 2009 the Fort Williams Advisory Commission (the Commission) was formally asked by the Town Council to develop a proposal to raise enough funds in Fort Williams Park to make the Park financially self-sustaining.

The Fort Williams Park Capital Budget (865) has been traditionally supported by revenues generated from picnic shelter rentals, sales of park benches, coin-operated binoculars, commercial site fees and donations from the Fort Williams Charitable Foundation. The capital fund budget has also been supported by transfers from the Portland Head Light budget (870) for larger projects, such as the southerly extension of the Cliff Walk, improvements to the main gate, new interpretive display panels and landscape improvements at Battery Blair. These projects would not have been possible to fund with the limited revenue raised by traditional methods referenced above.

Revenue generated from the rental units on Officers Row has gone into the General Fund, to offset the Park operating budget (645). The operating budget covers utility expenses, portions of salaries for parks personnel, professional services and maintenance-related expenses. The operating budget for FY 2010 is \$173,187.00.

In 2006 voters overwhelmingly said "No" to a proposed pay and display system of parking fees at the park, which would have generated much needed revenue needed to pay for capital projects and offset operating expenses. However, there has not been a prior proposal to raise a specific amount of money, in this case the amount necessary to make the Park self-sufficient.

After consideration, and some exploratory discussions with consultants, the Commission concluded that the only way to raise this amount of money would be to institute parking fees or entrance fees. The consensus of the Commission was that parking fees would be preferable because they would present fewer implementation problems, and because they would interfere less with the traditional uses of the Park.

To assist the Commission in it's charge, it was felt that updated traffic and length of stay data was needed to make informed projections and recommendations. The last formal analysis was done in 1992 and it was felt that more current information was needed. The Commission was assisted by the Greater Portland Council of Governments (GPCOG) who performed traffic counts and length of stay data in the park this past summer.

GPCOG conducted the traffic studies on dates in late June, July, and August. The Com-

mission was given a draft report on October 13th. Questions about the draft report were raised and the Commission was given a revised report on November 30th. The revised report is attached, but has not been fully reviewed as it was received after the last Commission meeting.

However, the fundamental traffic and use data in the draft report was adequate for the Commission to do some analysis, make some assumptions, and develop some projections. Based on this work the Commission proposes that the Town institute parking fees in Fort Williams Park. A detailed analysis, including basic use data, assumptions, various proposed fees, and revenue projections is attached. This has been updated to reflect the data in the revised traffic report.

We anticipate that Town staff may need to work out some logistical details of pay and display implementation. With that said, the Commission is recommending the following for your consideration:

Hourly parking fees from passenger cars and small vehicles will be collected using the Pay-and-Display technology previously proposed. This technology is gaining more acceptance in the field of parking management and control.

Tour buses visiting the park as part of a cruise ship visit will be charged a fee (\$40.00). The bus tour coordination entity will be billed via a system to be developed by Town staff and the PHL museum coordinator.

Tour buses visiting the park not associated with a cruise ship visit will be charged a fee (\$50.00), utilizing the same billing methodology as listed above.

Trolley and/or shuttle buses that visit the park on a regular, or daily basis will be assessed an annual fee (\$1,000).

Buses associated with a seasonal recreation program will be assessed a per bus fee (\$30.00).

Parking fees will be charged for users of the picnic shelter, and others paying use fees.

Parking fees will be applicable for all activities in the park, including users of the rental facilities, multi-purpose field, the playground and pet recreation areas, unless waived for special circumstances and/or events by the Town Council.

Annual parking passes will be available to residents and non-residents (\$10.00 for residents and \$20.00 for non-residents).

No parking fee will be charged for educational group buses.

Tenants of the rental units on Officers Row will not be charged a parking fee.

Attendees of Town-sponsored events, such as Family Fun Day and the Engine 1 Company Labor Day Art Show will not be charged a parking fee. Parking fees for people-intensive uses of the park, such as the annual Beach to Beacon Road Race or cultural events, may be waived upon approval of the Town Council.

The Commission recommends that the area outside the park referred to as "The Old Main Gate" be reconfigured to eliminate parking and to allow for emergency vehicle and/or special event access only. If a parking fee is approved, this area could become more attractive to park visitors and have a negative impact on parking revenues, cause congestion, and create traffic safety issues. The Commission and Town staff have previously discussed stopping the use of this Parking area for a variety of reasons, and this new change is a significant additional reason to close this area to parking.

The Commission recommends that the Chief of Police and Director of Public Works make recommendations to the Town Council regarding on-street parking in adjacent neighborhoods that may be adversely impacted by a proposed parking fee in the park.

Due to need of the travel industry to include access fees in its basic costs, it is already too late to institute parking fees for buses in the Park in 2010. In fact, the Commission has been told that if notice is not given by the end of this calendar year, it will also be too late to institute parking fees for buses in 2011. Therefore, the Commission requests that the Town Manager contact bus and tour companies as soon as possible with notification that fees will be charged beginning in the year 2011.

The Commission feels strongly that money raised in the Park should be dedicated to supporting the Park. Operating expenses for the Park, currently paid by tax dollars as noted above, will be charged to the Park budget and funds must be available to cover them. New capital expenses will be incurred to install the parking fee system, and new ongoing operating expenses will be arise to implement it. Estimates of these expenses are attached.

In addition, many maintenance, repair, and replacement needs in the Park have accumulated due to lack of available funds in the past, and will require additional expenditures to bring them up to date. These include those for natural features such as trees and other vegetation, the pond, and controlling invasive plant species. They also include those for constructed features such as buildings and other Fort remnants, pathways and stairways, sports fields, fire boxes, picnic tables, the playground, stonewalls, roadways, parking lots, and perimeter fencing.

The Commission envisions the progression of the parking fee implementation roughly as follows:

In calendar 2010, capital will be expended to install the pay-and-display system. Additional operating expenses will be incurred to support pay-and-display. Income from the pay-and-display system will be generated to pay operating expenses, routine capital expenses, and some reimbursement of pay-and-display capital expenses.

In calendar 2011, the bus fee system will be implemented and the fee collection system will now be fully in place. Additional operating expenses will be incurred to support collection of the bus fees. Income from pay-and-display and bus fees will be generated to pay operating expenses, routine capital expenses, and finish reimbursement of pay-and-display capital expenses.

In calendar 2012 and beyond, income will be generated to pay operating expenses, routine capital expenses, and begin to contribute to the Parks' Capital Fund to address backlog of deferred maintenance and repair.

Although the parking fee proposal is estimated to raise adequate funds for the Park to become self-sustaining, the Commission also recommends the pursuit of other possible means to raise revenue. However, these will require further study to determine their feasibility, and the Commission recommends nothing other than further study at this time.

These possibilities include the construction of a second picnic shelter, possibly using a seasonal structure, establishing a reserved picnic area near the beach, opening the Officer's Row buildings to a wider range of tenants, and concessions.

The Commission looks forward to the opportunity to further explore this proposal with the Town Council, and to work towards its implementation if adopted.

Respectfully submitted,
Dan Chase
Chair, Fort Williams Advisory Commission

PAY AND DISPLAY FEE PROJECTIONS

Assumptions

Annual visits

10 wks (4/1-5/15 & 10/1-10/30 at 5000 car visits per week =	50,000 visits
20 wks (5/16-9/30) at 7000 cars per week =	<u>140,000 visits</u>
Total annual visits	190,000 visits

Out of State residents = 28.5% of the total*	54,150
Maine residents = 71.5% of total visits*	135,850
Cape residents = 20% of total visits#	38,000
Non-Cape ME resid. = 51.5% of total	97,850

* From Council of Governments Appendix A, Table 1

Based on C.E. Public Safety Dept. survey

Season Pass purchases

350 Cape residents, one in 10 households, who average 15 trips per year will buy season passes at a cost of \$10.00 per season, reducing hourly paying vehicles by 5,250.

1000 non Cape residents who average 15 trips per year will buy season passes @ a cost of \$20.00 per season, reducing hourly paying vehicles by 15,000.

Proposed ticket prices

Up 1 hour	\$1.00
2-3 hours	\$2.00
3-4 hours	\$3.00
4-5 hours	\$4.00
Over 5 hours	\$5.00

Cape Elizabeth statistics

Population 9,000 / 2.57 persons per household = 3500 households

Vehicle registrations: '07 = 8,931, '08 = 8764, '09 = 8509

REVENUE PROJECTIONS

Total park visits per year	190,000
Less: Cape resident pass holders (350 x 15 visits)	5,250
Less: Non-resident pass holders (1000 x 15 visits)	<u>15,000</u>
Total potential hourly paying automobile visitors	169,750
Out-of state (28.5% of total visits)	54,150
Cape non-pass holders (38M -5,250)	32,750
ME non-Cape/non pass(97.8M-15M)	82,850
 Less: 33% of potential hourly vehicles drive through without parking	
15% of out of state vehicles	8,123
50% Cape non season pass holders	16,375
38% of ME non-Cape/non-pass	31,520
	 <u>56,018</u>
Potential paying vehicles	113,732
25% of potential vehicles stay < 1 hour	42,438
20% of potential vehicles stay 1-2 hours	33,950
9% of potential vehicles stay 2-3 hours	15,277
8% of potential vehicles stay 3-4 hours	13,580
5% of potential vehicles stay > 4 hours	8,487
 Revenue generation:	
42,438 x \$1.00	\$42,438
33,950 x \$2.00	67,900
15,277 x \$3.00	45,831
13,580 x \$4.00	54,320
8,487 x \$5.00	<u>42,435</u>
Total Pay and Display revenues	\$252,924
Resident pass revenue (350x\$10.00)	3,500
Non-resident passes (1000 x \$20.00)	20,000
125 tour buses @ \$50.00 (year 2)	6,250
450 cruise ship buses @ 40.00 (year 2)	18,000
200 camp and rec. program buses @ \$30.00	6,000
3 trolley buses @ \$1000/ season	<u>3,000</u>
Total projected revenue in year 2	\$309,674

Total projected revenues in year 1 = \$285,424.

Total projected revenues in year 2 = \$309,674.

In an effort to breakdown the cost associated with the implementation of a Pay and Display Parking System at Fort Williams Park, the following summary is provided:

Estimated Start-Up Costs:

Cost of 10 meters based on a “piggy-back” purchase with Portsmouth, N.H.

- Cost includes shipping, installation, training and associated expenses	\$85,000.00
- Cost of concrete pads and installation hardware for machines	500.00
- Signage	2,500.00
- Parking enforcement devices, or “Boots”	2,000.00
- Traffic analyzer device	1,025.00
- Utility vehicle for parking enforcement	13,500.00
- Reconfigure Old Main Entrance to Eliminate Parking adjacent to Shore Road (pavement removal, loam, seed, mulch, etc.)	3,000.00
- Contingency	5000.00
Total	\$112,525.00

Annual Expenses:

- Enforcement: Additional Park Ranger

It is proposed to hire an additional Ranger (in conjunction with adjusting existing schedules) that works primarily on enforcement of the program. An additional 60 hours/week for 26 weeks is proposed.

Since many of visitors will be visiting the PHL, it is proposed to have one half of this requested payroll expense charged off to the PHL Special Funds budget (\$11,280), but we realize this has to be approved by the Town Council. The remaining expense would be charged off to the FWP operating budget, which will eventually be combined with the capital fund budget, assuming self-sustainability at some point in the future.

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|---|----------|
| - Credit/Debit Card purchases (1.5-2% of gross receipts) | ? |
| | |
| - Consumables | |
| This would include seasonal on-line wireless services, receipt paper, signage maintenance, repairs from vandalism, supplies, etc. | 3,500.00 |

FORT WILLIAMS PARK SURVEY

The Town of Cape Elizabeth, asked the Greater Portland Council of Governments to perform a survey of vehicle access to and from Fort Williams Park for the primary purpose of documenting the number and origin of vehicles utilizing the park. The survey was conducted on four separate days during the summer of 2009 as summarized in the below Survey Schedule. In order to minimize costs it was agreed that the survey would be conducted using GPCOG interns with GPCOG staff oversight.

As a working policy guide for the Town the key survey data are considered as follows:

- Total number of vehicles entering and leaving the park.
- Number of out of town vehicles.
- Average length of stay.

In addition to the above, the Survey results as detailed in Appendix A. include the following:

- Direction of automobiles entering and exiting the park on Shore Road
- Number of Passengers in automobiles
- Thirty (30) minute counts of vehicles parked in each parking lot.
- Total number of cars entering each parking lot
- Number of vehicles visiting the playground area,
- Out-of-state or Maine license plate information.

Survey Schedule and Site Conditions

Date	Day	Time	Conditions
6/25	Thursday	9am – 7pm	Cold & windy
6/27	Saturday	9am – 7pm	Warm & Sunny
7/25	Saturday	12pm – 7pm	Warm & Sunny
8/8	Saturday	9am – 2pm	Warm & Sunny

Survey Methodology

Vehicles entering and leaving the park – Two surveyors were stationed at the park entrance equipped with tape recorders to document the turning movements, number of occupants and license plate information of vehicles entering and leaving the park. The time was noted at fifteen minute intervals. One surveyor recorded information on vehicles entering the park while the other recorded those leaving. Comparison of the license plate numbers determined each vehicle's length of stay.

License plate numbers were also intended to be used to determine the town of origin of Maine registered vehicles and give a snapshot of other states represented by visitors.

Total number of cars entering each parking lot – Two additional surveyors were stationed where they could observe and record which parking lot vehicles went to once inside the park. A

fifth, roving surveyor counted the number of vehicles parked in each lot at 30 minute intervals. This person also conducted informal interviews with people at the playground.

Constraining Factors & Limitations

- The survey is a sample only.
 - Each sample day did not span the total hours the park was open.
 - The methodology did not lend itself to capturing all of the information about every vehicle, every time.
 - Most of the entering and exiting vehicles were counted accurately.
 - During periods of high vehicle volumes, and/or when surveyors didn't enunciate well into the voice recorders, license plate numbers were lost.
 - It was also not easy to count the number of passengers in the vehicles during these high activity periods.
 - Analyses based on comparison of the same vehicles entering and exiting the park (sorted by license plate numbers) yielded a smaller sample due to these cumulative errors.
- Privacy protection laws prevented the use of license plate numbers to determine town of origin of all Maine registered vehicles
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Key Summary Findings

- Approximately one quarter of all vehicles counted entered or exited south
- Most vehicles were occupied by two persons (48%) or one person (24%)
- The number of vehicles in the park tended to peak between 1:00 and 2:00
- Approximately 27% of all vehicles, regardless of state of origin, stayed in the park for thirty minutes or less.
- Another 25% of Maine registered vehicles and 36% of all others, stayed for thirty to sixty minutes.

Appendix A

TABLE 1

Total # of Vehicles that Entered Fort Williams Park

This table displays a count of the total number of automobiles that entered the park each day of the survey. Days 6/25 & 6/27 the Cape Elizabeth Police Department placed a marker inside the park the counted entering vehicles. On 6/25 & 6/27 the table includes a total from the Cape Elizabeth Police Department and GPCOG. The remaining days (7/25 & 8/8) were counted only by GPCOG

	6/25/09	6/27/09	7/25/09	8/8/09
GPCOG	1012	1359	1184	1028
Cape Elizabeth Police Department	1137	1330	N/A	N/A

Table 2

Maine & Out-of State Vehicles That Entered the Park

This table shows the total number of Maine vehicles and a separate total of out-of-state vehicles that entered the park on each day surveyed.

	Maine Vehicles	Out-of State Vehicles
6/25/09	748 73.9%	264 26.1%
6/27/09	971 71.4%	388 28.6%
7/25/09	839 70.9%	345 29.1%
8/8/09	666 64.8%	362 35.2%

TABLE 3

Direction of Vehicles

The direction of the automobiles was recorded as they entered and as they exited the park. They were recorded as north, toward South Portland or south, toward Cape Elizabeth. Direction of vehicles was not recorded on 6/25.

The data from table 3 is inconsistent with tables 1 and 2, because though vehicles were counted as they entered and exited the direction was not always included due mainly to the heavy traffic during peak hours

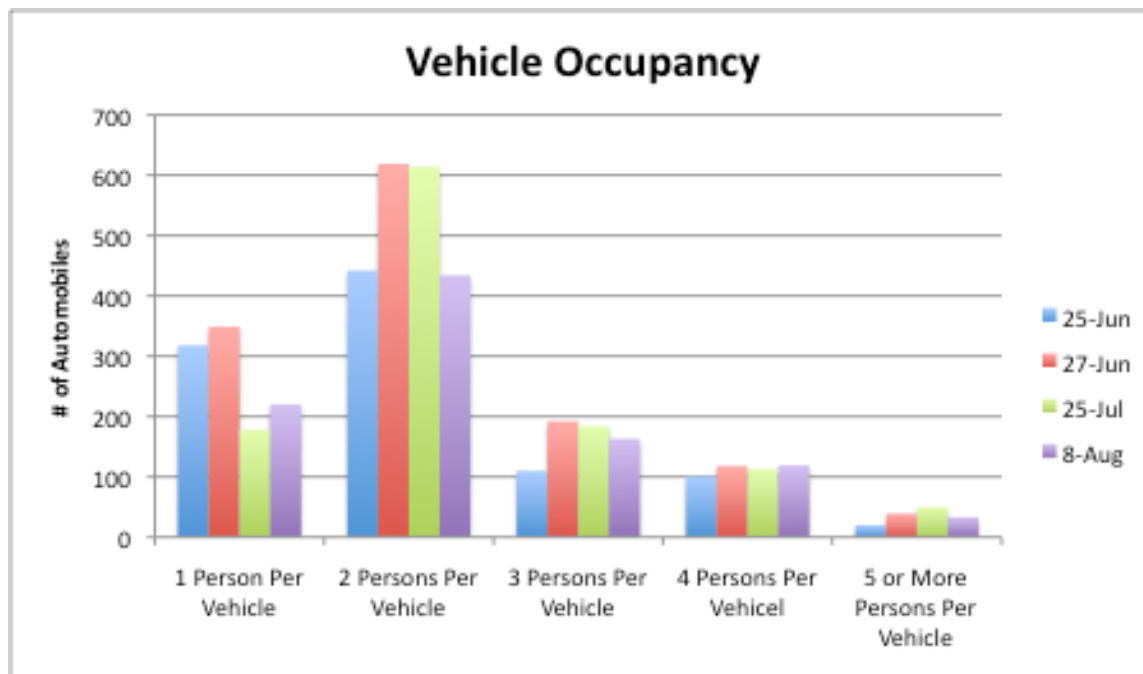
	ENTER		Total	EXIT		Total
	North	South		North	South	
6/27/09	847 65.9%	438 34.1%	1285	932 73.1%	343 26.9%	1275
7/25/09	846 73.9%	299 26.1%	1145	1051 76.8%	318 23.2%	1369
8/8/09	653 68.7%	297 31.3%	950	399 67.4%	193 32.6%	592
TOTAL	2346 74.8%	1034 25.2%	3380	2382 73.7%	854 26.3%	3236

Table 4
Number of Passengers

This table shows the number of individuals that occupied each automobile that entered the park. As in table 3, not every vehicle's occupants were counted due to how busy it was at times.

	1 Person Per Vehicle	2 Persons Per Vehicle	3 Persons Per Vehicle	4 Persons Per Vehicle	5 or More Persons Per Vehicle	Total
6/25/09	318 32.1%	442 44.6%	110 11.1%	101 10.2%	20 2.0%	991
6/27/09	349 26.5%	619 47.0%	192 14.6%	118 9.0%	39 3.0%	1317
7/25/09	178 15.6%	614 53.9%	184 16.2%	113 9.9%	50 4.4%	1139
8/8/09	220 22.7%	434 44.8%	163 16.8%	119 12.3%	33 3.4%	969
Total	1065 24.1%	2109 47.8%	649 14.7%	451 10.2%	142 3.2%	4416

The following tables and accompanying graphs illustrate the total number of cars parked in each



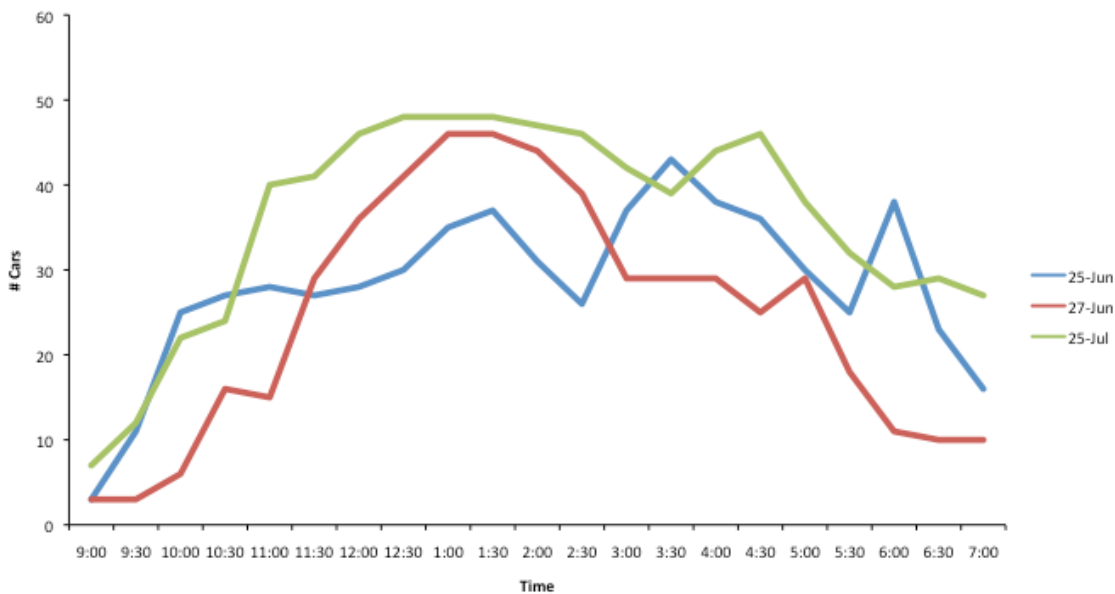
parking lot (Beach, Parade, Shelter, Central & Portland Head Light, PHL) at 30 minute intervals.

TABLE 5a
30 Minute Count of Cars Parked in Beach Lot

BEACH	6/25/2009 Thurs	6/27/2009 Sat	7/25/2009 Sat	TOTAL
9:00	3	3	7	13
9:30	11	3	12	26
10:00	25	6	22	53

10:30	27	16	24	67
11:00	28	15	40	83
11:30	27	29	41	97
12:00	28	36	46	110
12:30	30	41	48	119
1:00	35	46	48	129
1:30	37	46	48	131
2:00	31	44	47	122
2:30	26	39	46	111
3:00	37	29	42	108
3:30	43	29	39	111
4:00	38	29	44	111
4:30	36	25	46	107
5:00	30	29	38	97
5:30	25	18	32	75
6:00	38	11	28	77
6:30	23	10	29	62
7:00	16	10	27	53

**Number of Cars Per Half Hour
Beach Lot**

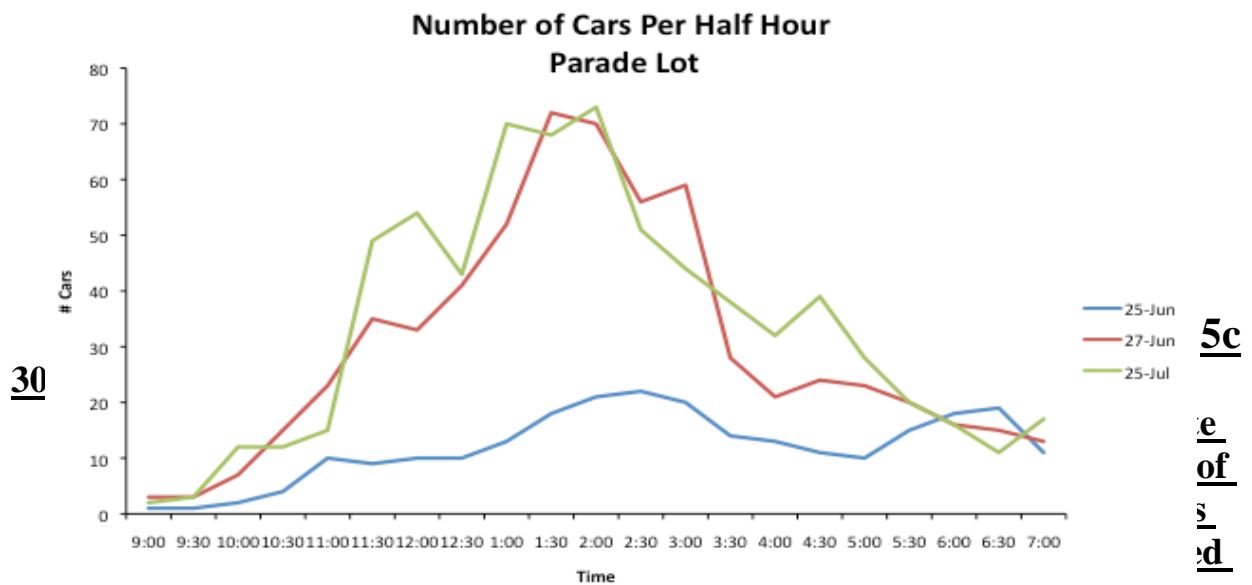


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PARADE	6/25/2009 Thurs	6/27/2009 Sat	7/25/2009 Sat	TOTAL
9:00	1	3	2	6
9:30	1	3	3	7
10:00	2	7	12	21
10:30	4	15	12	31
11:00	10	23	15	48
11:30	9	35	49	93
12:00	10	33	54	97
12:30	10	41	43	94
1:00	13	52	70	135

1:30	18	72	68	158
2:00	21	70	73	164
2:30	22	56	51	129
3:00	20	59	44	123
3:30	14	28	38	80
4:00	13	21	32	66
4:30	11	24	39	74
5:00	10	23	28	61
5:30	15	20	20	55
6:00	18	16	16	50
6:30	19	15	11	45
7:00	11	13	17	41

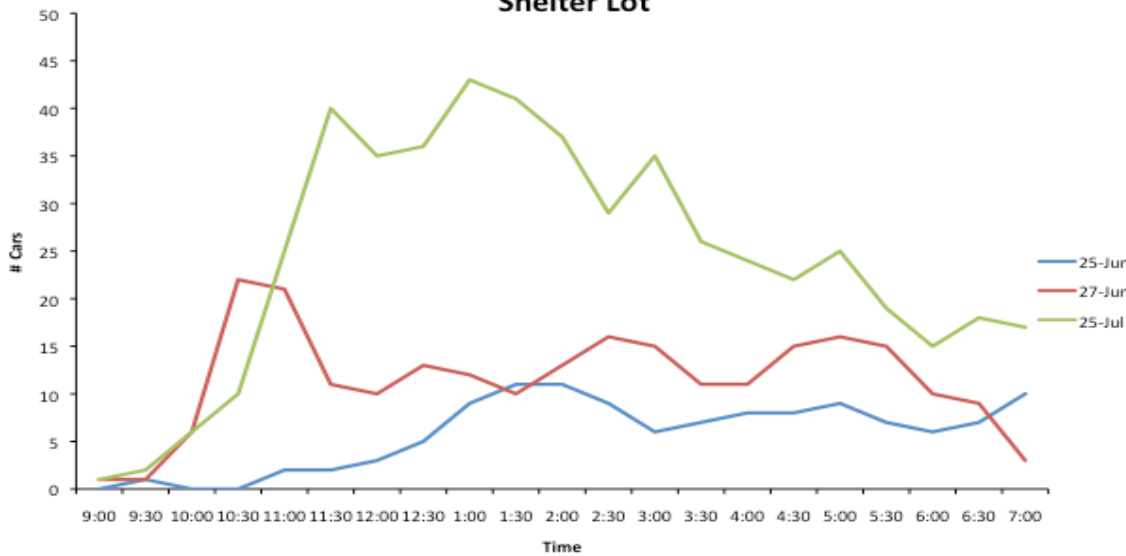


IN SHELTER LOT

SHELTER	6/25/2009 Thurs	6/27/2009 Sat	7/25/2009 Sat	TOTAL
9:00	0	1	1	2
9:30	1	1	2	4
10:00	0	6	6	12
10:30	0	22	10	32
11:00	2	21	25	48
11:30	2	11	40	53
12:00	3	10	35	48
12:30	5	13	36	54
1:00	9	12	43	64
1:30	11	10	41	62
2:00	11	13	37	61
2:30	9	16	29	54
3:00	6	15	35	56
3:30	7	11	26	44
4:00	8	11	24	43

4:30	8	15	22	45
5:00	9	16	25	50
5:30	7	15	19	41
6:00	6	10	15	31
6:30	7	9	18	34
7:00	10	3	17	30

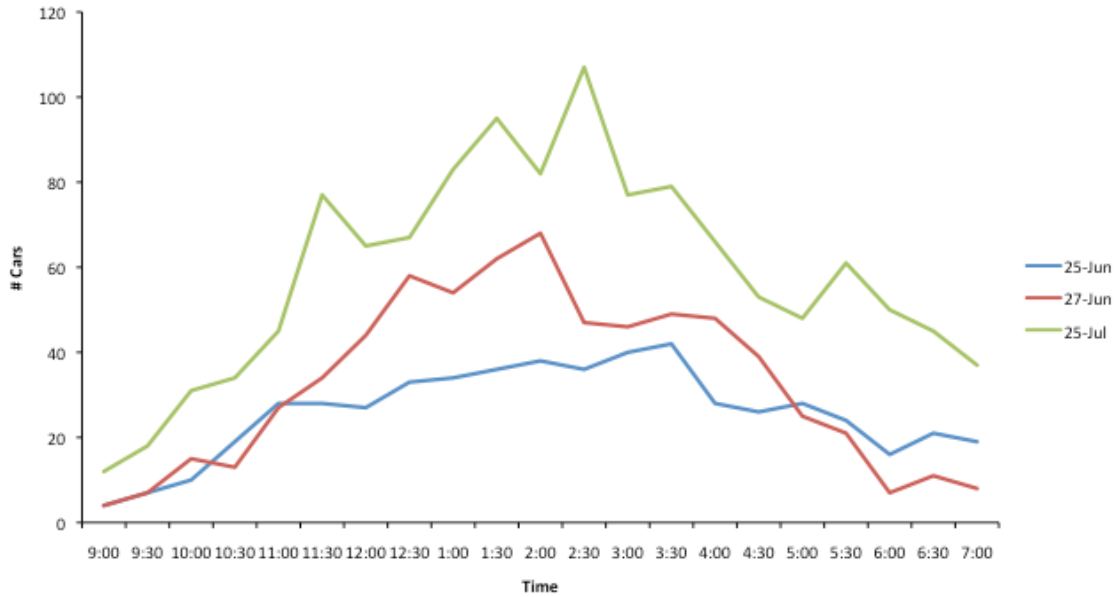
**Number of Cars Per Half Hour
Shelter Lot**



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CENTRAL	6/25/2009 Thurs	6/27/2009 Sat	7/25/2009 Sat	TOTAL
9:00	4	4	12	20
9:30	7	7	18	32
10:00	10	15	31	56
10:30	19	13	34	66
11:00	28	27	45	100
11:30	28	34	77	139
12:00	27	44	65	136
12:30	33	58	67	136
1:00	34	54	83	171
1:30	36	62	95	193
2:00	38	68	82	188
2:30	36	47	107	190
3:00	40	46	77	163
3:30	42	49	79	170
4:00	28	48	66	142
4:30	26	39	53	118
5:00	28	25	48	101
5:30	24	21	61	106
6:00	16	7	50	73
6:30	21	11	45	77
7:00	19	8	37	64

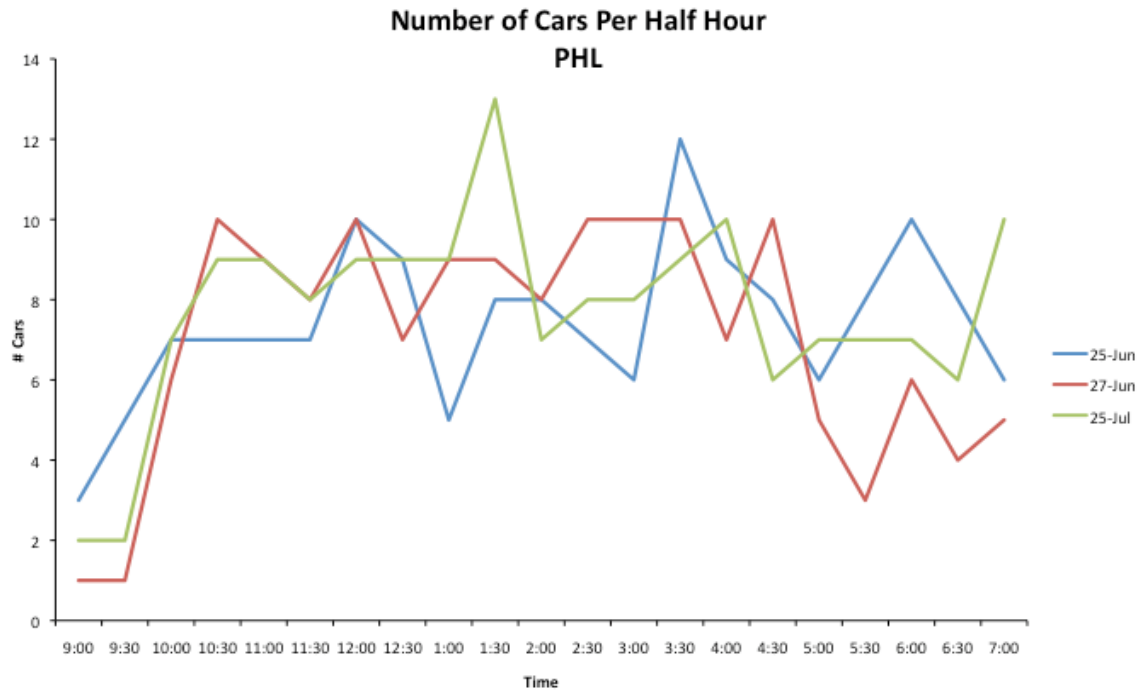
Number of Cars Per Half Hour Central Lot



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and
Light**

PHL	6/25/2009 Thurs	6/27/2009 Sat	7/25/2009 Sat	TOTAL
9:00	3	1	2	6
9:30	5	1	2	8
10:00	7	6	7	21
10:30	7	10	9	26
11:00	7	9	9	25
11:30	7	8	8	23
12:00	10	10	9	29
12:30	9	7	9	26
1:00	5	9	9	23
1:30	8	9	13	30
2:00	8	8	7	23
2:30	7	10	8	25
3:00	6	10	8	24
3:30	12	10	9	31
4:00	9	7	10	26
4:30	8	10	6	24
5:00	6	5	7	18
5:30	8	3	7	18
6:00	10	6	7	23
6:30	8	4	6	18
7:00	6	5	10	21



TABL

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Time	6/25/09	6/27/09	7/25/09
9:00	11	12	24
9:30	25	15	37
10:00	44	40	78
10:30	57	76	89
11:00	75	95	134
11:30	73	117	215
12:00	78	133	209
12:30	87	160	203
1:00	96	173	253
1:30	110	199	265
2:00	109	203	246
2:30	100	168	241
3:00	109	159	206
3:30	118	127	191
4:00	96	116	176
4:30	89	113	166
5:00	83	98	146
5:30	79	77	139
6:00	88	50	116
6:30	78	49	109
7:00	62	39	108

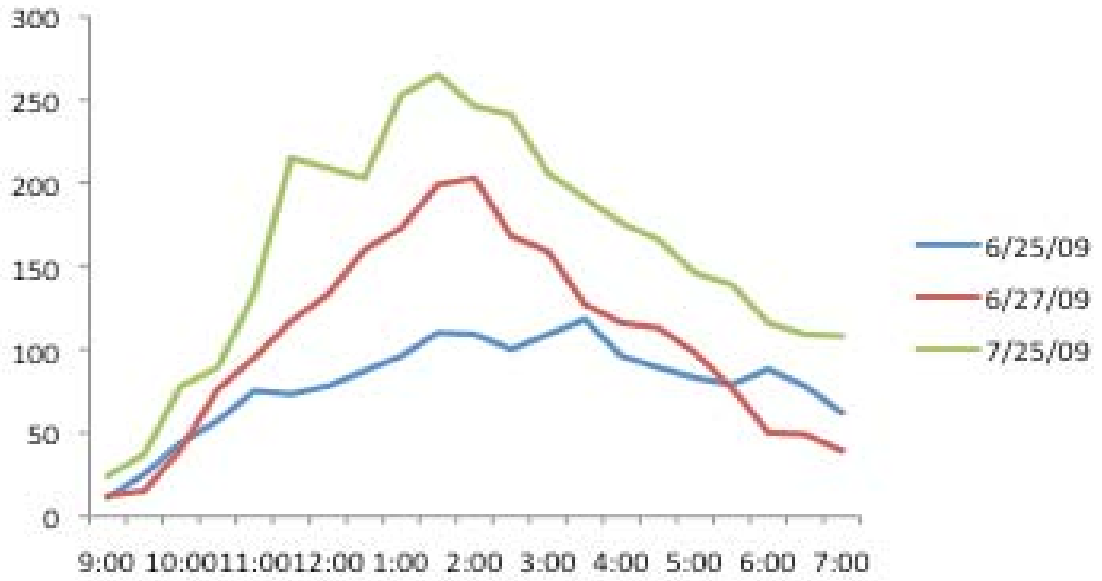


Table 6

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totals. There are charts that represent the length of stay for each day and one that aggregates all of the dates.

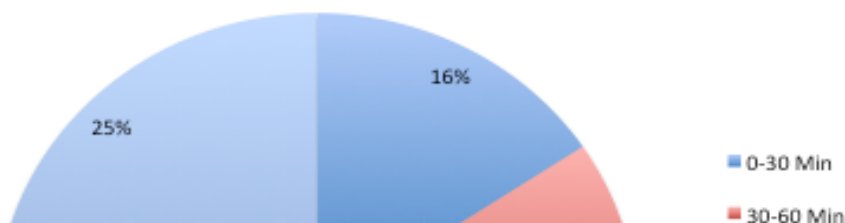
Seventy-five percent of vehicles stayed in the park, 0-90 minutes. On the 25th of July there is an increase in the number of vehicles that stayed over 3 hours; this was most likely caused by 2 weddings near the Head Light and a gathering in the Shelter area.

Maine Vehicles Length of Stay

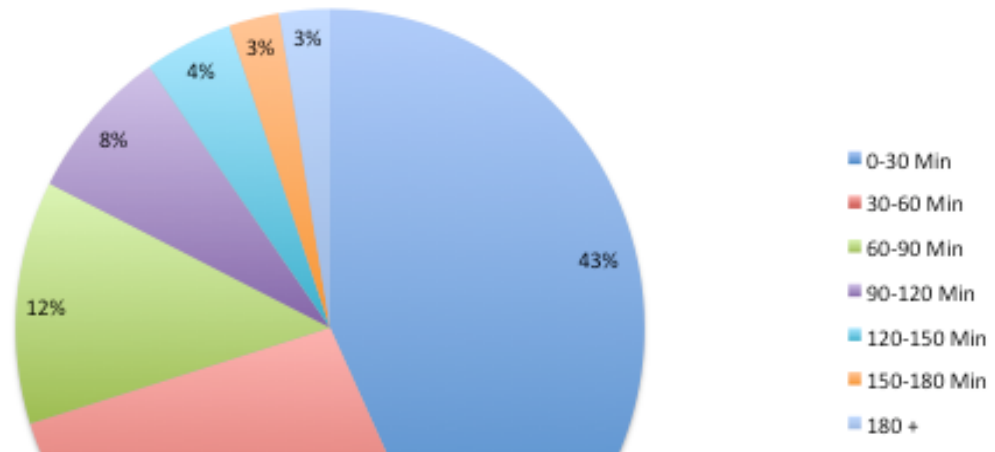
6/25/09	Maine		Out-of-State		All Vehicles	
0-30 Min	193	30.6%	42	18.3%	235	27.3%
30-60 Min	188	29.8%	80	34.8%	268	31.1%
60-90 Min	122	19.3%	52	22.6%	174	20.2%
90-120 Min	59	9.4%	30	13.0%	89	10.3%
120-150 Min	22	3.5%	14	6.1%	36	4.2%
150-180 Min	21	3.3%	6	2.6%	27	3.1%
180 +	26	4.1%	6	2.6%	32	3.7%
Total	631		230		861	
6/27/09						
0-30 Min	179	29.9%	39	15.7%	218	25.7%
30-60 Min	145	24.2%	95	38.3%	240	28.3%
60-90 Min	108	18.0%	60	24.2%	168	19.8%
90-120 Min	68	11.4%	27	10.9%	95	11.2%
120-150 Min	29	4.8%	11	4.4%	40	4.7%
150-180 Min	16	2.7%	10	4.0%	26	3.1%
180 +	54	9.0%	6	2.4%	60	7.1%
Total	599		248		847	
7/25/09						
0-30 Min	56	15.6%	31	19.7%	87	16.9%
30-60 Min	55	15.4%	58	36.9%	113	21.9%
60-90 Min	51	14.2%	33	21.0%	84	16.3%
90-120 Min	43	12.0%	17	10.8%	60	11.7%
120-150 Min	34	9.5%	8	5.1%	42	8.2%
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Total	358		157		515	
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0-30 Min	133	43.2%	29	24.0%	162	37.8%
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150-180 Min	8	2.6%	7	5.8%	15	3.5%
180 +	8	2.6%	3	2.5%	11	2.6%
Total	308		121		429	
All Days						
0-30 Min	561	29.6%	141	18.7%	702	26.5%
30-60 Min	471	24.8%	269	35.6%	740	27.9%
60-90 Min	319	16.8%	172	22.8%	491	18.5%
90-120 Min	194	10.2%	85	11.2%	279	10.5%
120-150 Min	99	5.2%	41	5.4%	140	5.3%
150-180 Min	75	4.0%	29	3.8%	104	3.9%
180 +	177	9.3%	19	2.5%	196	7.4%
Total	1896		756		2652	

Maine Vehicles Length of Stay

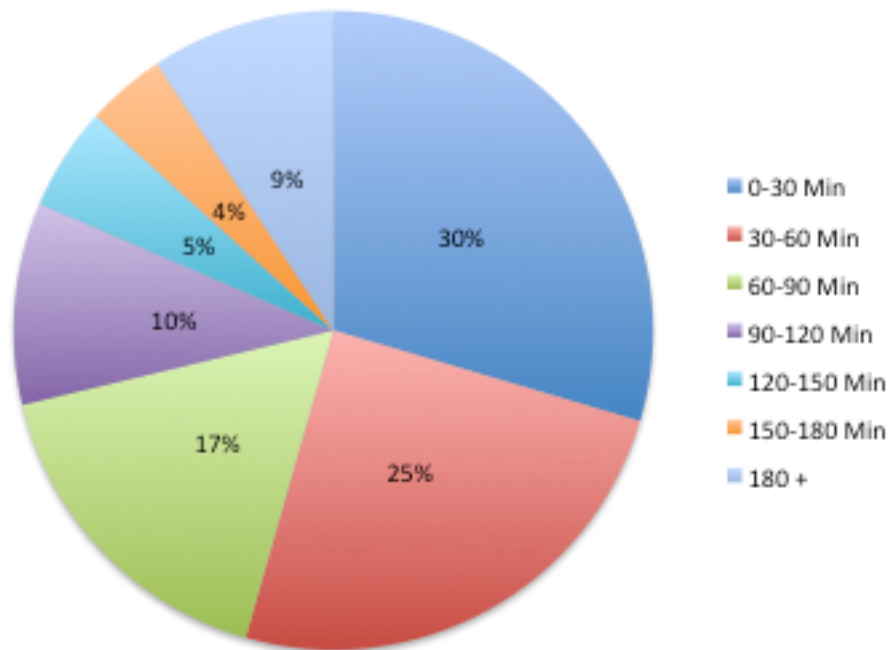
Saturday 7-25-09



Saturday 8-8-09

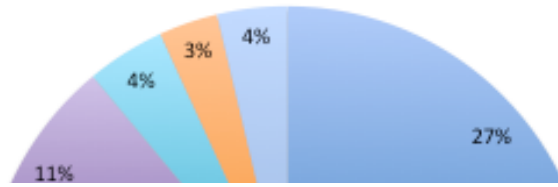


All Dates



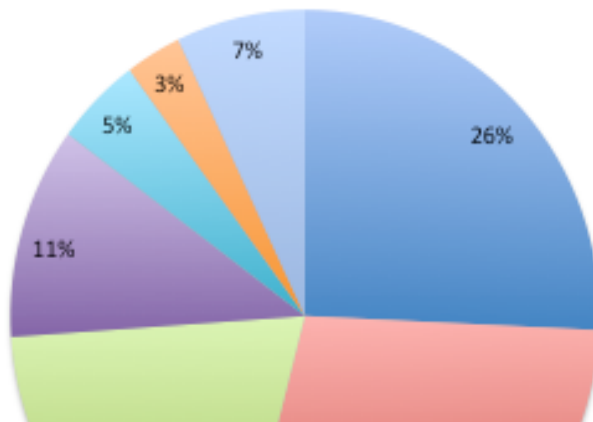
**All
of Stay**

Thursday 6-25-09



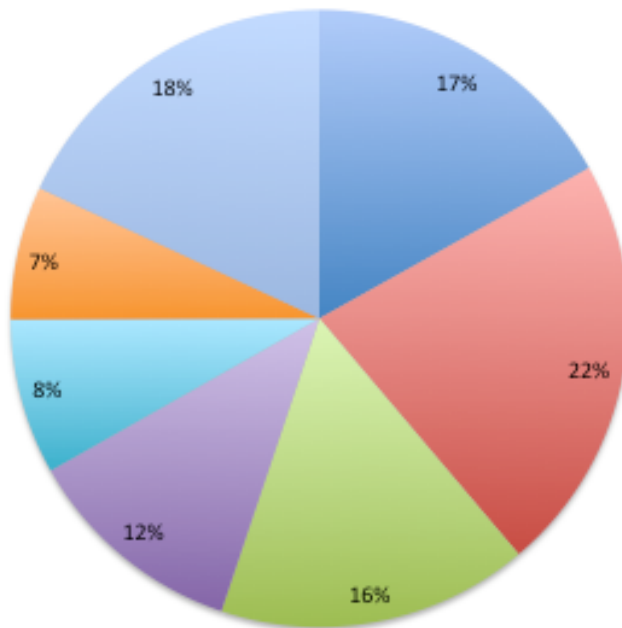
All
stay

Saturday 6-27-09



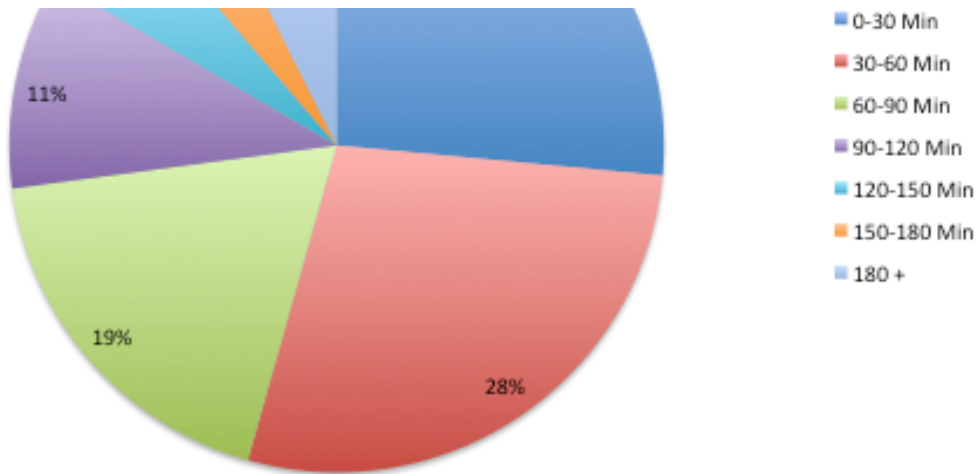
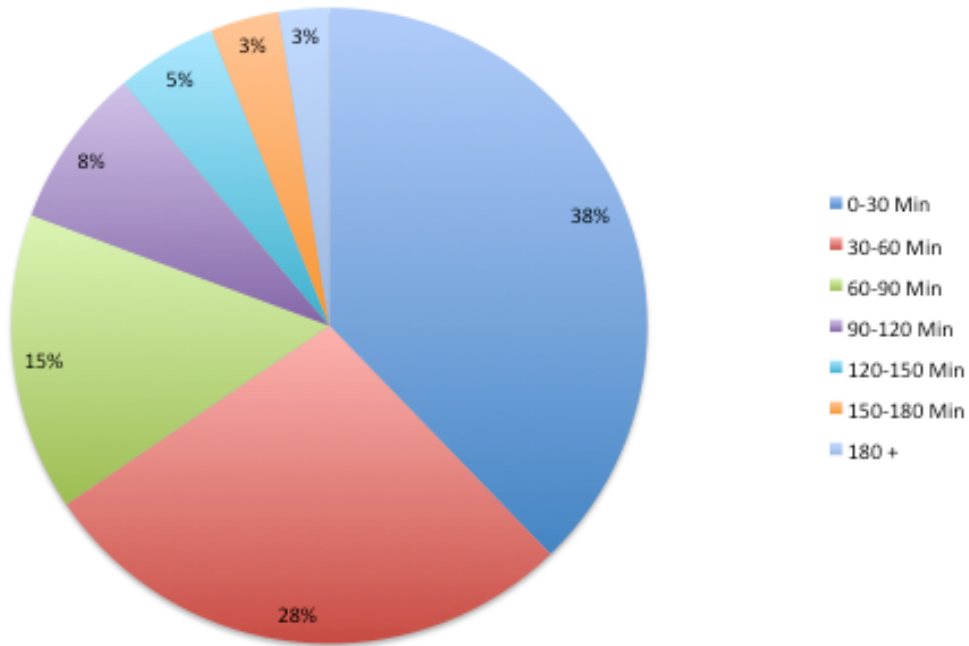
- 0-30 Min
- 30-60 Min
- 60-90 Min
- 90-120 Min
- 120-150 Min
- 150-180 Min

Saturday 7-25-09



- 0-30 Min
- 30-60 Min
- 60-90 Min
- 90-120 Min
- 120-150 Min
- 150-180 Min
- 180 +

8-8-09



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vehicles parked in the two parking lots on either end of the playground every 30minutes, and the state of origin of the vehicles. Secondly random individuals were questioned inside of the playground. The information gathered includes length of stay within playground, how often the respondent visited the playground and their residence.

Thursday June 25:

There were 85 total vehicles counted in the two playground parking lots, 68 counted were from Maine and 17 were out of state. Eleven individuals were interviewed, five from Cape Elizabeth, four from South Portland, two from Scarborough, and one from Windham. Four said they stay between 30-60 minutes, five stay 60-90 minutes, and two stay more than 90 minutes. Three said

they visit the playground weekly, seven bi-weekly and one monthly.

Saturday June 27:

There were 93 total vehicles counted in the two playground parking lots. 70 counted were from Maine and 23 were out of state. Twelve individuals were interviewed, five were from Cape Elizabeth, three from South Portland, two from Portland, one from Gorham and one from Brunswick. Six of the individuals stay between 30-60 minutes, five stay 60-90 minutes and, one stays more than 90 minutes. Seven said they visit the playground weekly, two bi-weekly and three monthly.

Saturday July 25:

There were 163 total vehicles counted in the two playground parking lots. 121 counted were from Maine and 42 were from out of state. Eleven individuals were interviewed, five were from Cape Elizabeth, three from South Portland, two from Portland, one from Gorham. Four individuals said they stay 30-60 minutes, six stay 60-90 minutes and one stays more than 90 minutes. Five visit the park weekly, three bi-weekly and three monthly.

FORT WILLIAMS PARK SURVEY

The Town of Cape Elizabeth, asked the Greater Portland Council of Governments to perform a survey of vehicle access to and from Fort Williams Park for the primary purpose of documenting the number and origin of vehicles utilizing the park. The survey was conducted on four separate days during the summer of 2009 as summarized in the below Survey Schedule. In order to minimize costs it was agreed that the survey would be conducted using GPCOG interns with GPCOG staff oversight.

As a working policy guide for the Town the key survey data are considered as follows:

- Total number of vehicles entering and leaving the park.
- Number of out of town vehicles.
- Average length of stay.

In addition to the above, the Survey results as detailed in Appendix A. include the following:

- Direction of automobiles entering and exiting the park on Shore Road
- Number of Passengers in automobiles
- Thirty (30) minute counts of vehicles parked in each parking lot.
- Total number of cars entering each parking lot
- Number of vehicles visiting the playground area,
- Out-of-state or Maine license plate information.

Survey Schedule and Site Conditions

Date	Day	Time	Conditions
6/25	Thursday	9am – 7pm	Cold & windy
6/27	Saturday	9am – 7pm	Warm & Sunny
7/25	Saturday	12pm – 7pm	Warm & Sunny

Survey Methodology

Vehicles entering and leaving the park – Two surveyors were stationed at the park entrance equipped with tape recorders to document the turning movements, number of occupants and license plate information of vehicles entering and leaving the park. The time was noted at fifteen minute intervals. One surveyor recorded information on vehicles entering the park while the other recorded those leaving. Comparison of the license plate numbers determined each vehicle's length of stay.

License plate numbers were also intended to be used to determine the town of origin of Maine registered vehicles and give a snapshot of other states represented by visitors.

Total number of cars entering each parking lot – Two additional surveyors were stationed where they could observe and record which parking lot vehicles went to once inside the park. A fifth, roving surveyor counted the number of vehicles parked in each lot at 30 minute intervals. This person also conducted informal interviews with people at the playground.

Constraining Factors & Limitations

- The survey is a sample only.
 - Each sample day did not span the total hours the park was open.
 - The methodology did not lend itself to capturing all of the information about every vehicle, every time.
 - Most of the entering and exiting vehicles were counted accurately.
 - During periods of high vehicle volumes, and/or when surveyors didn't enunciate well into the voice recorders, license plate numbers were lost.
 - It was also not easy to count the number of passengers in the vehicles during these high activity periods.
 - Analyses based on comparison of the same vehicles entering and exiting the park (sorted by license plate numbers) yielded a smaller sample due to these cumulative errors.
- Privacy protection laws prevented the use of license plate numbers to determine town of origin of all Maine registered vehicles
-

Key Summary Findings

- Approximately one quarter of all vehicles counted entered or exited south
- Most vehicles were occupied by two persons (48%) or one person (24%)
- The number of vehicles in the park tended to peak between 1:00 and 2:00
- Approximately 27% of all vehicles, regardless of state of origin, stayed in the park for thirty minutes or less.
- Another 25% of Maine registered vehicles and 36% of all others, stayed for thirty to sixty minutes.

Appendix A

TABLE 1

Total # of Vehicles that Entered Fort Williams Park

This table displays a count of the total number of automobiles that entered the park each day of the survey. Days 6/25 & 6/27 the Cape Elizabeth Police Department placed a marker inside the park the counted entering vehicles. On 6/25 & 6/27 the table includes a total from the Cape Elizabeth Police Department and GPCOG. The remaining days (7/25 & 8/8) were counted only by GPCOG

	6/25/09	6/27/09	7/25/09	8/8/09
GPCOG	1012	1359	1184	1028
Cape Elizabeth Police Department	1137	1330	N/A	N/A

Table 2

Maine & Out-of State Vehicles That Entered the Park

This table shows the total number of Maine vehicles and a separate total of out-of-state vehicles that entered the park on each day surveyed.

	Maine Vehicles	Out-of State Vehicles
6/25/09	748 73.9%	264 26.1%
6/27/09	971 71.4%	388 28.6%
7/25/09	839 70.9%	345 29.1%
8/8/09	666 64.8%	362 35.2%

TABLE 3

Direction of Vehicles

The direction of the automobiles was recorded as they entered and as they exited the park. They were recorded as north, toward South Portland or south, toward Cape Elizabeth. Direction of vehicles was not recorded on 6/25.

The data from table 3 is inconsistent with tables 1 and 2, because though vehicles were counted as they entered and exited the direction was not always included due mainly to the heavy traffic during peak hours

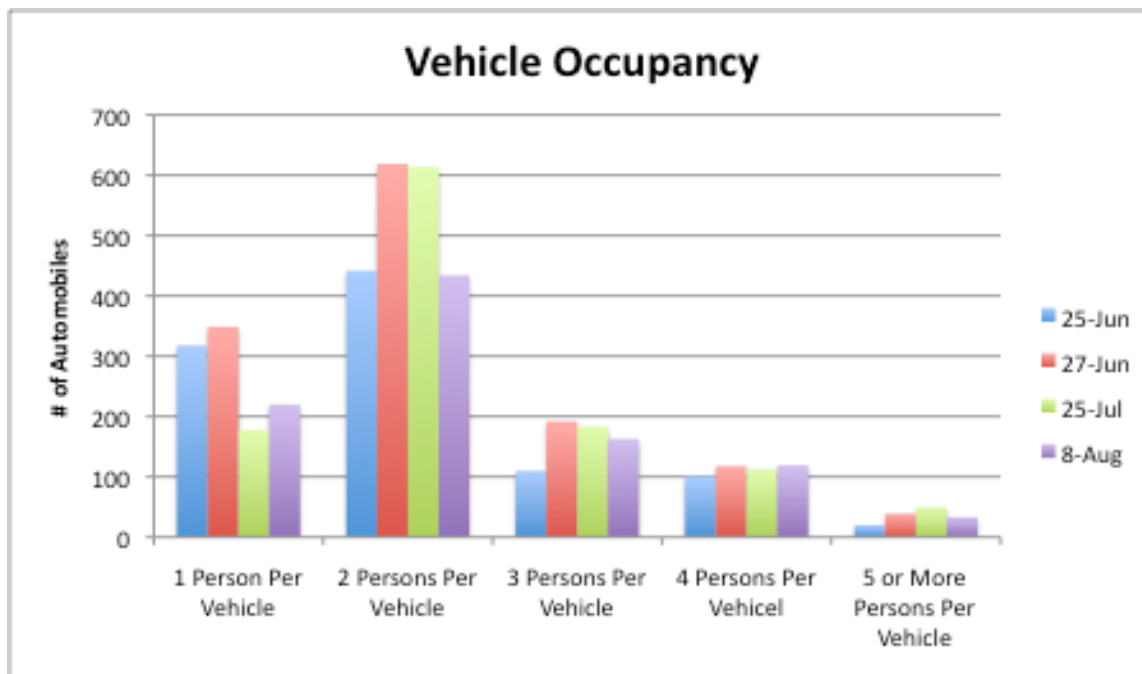
	ENTER		Total	EXIT		Total
	North	South		North	South	
6/27/09	847 65.9%	438 34.1%	1285	932 73.1%	343 26.9%	1275
7/25/09	846 73.9%	299 26.1%	1145	1051 76.8%	318 23.2%	1369
8/8/09	653 68.7%	297 31.3%	950	399 67.4%	193 32.6%	592
TOTAL	2346 74.8%	1034 25.2%	3380	2382 73.7%	854 26.3%	3236

Table 4 Number of Passengers

This table shows the number of individuals that occupied each automobile that entered the park. As in table 3, not every vehicle's occupants were counted due to how busy it was at times.

	1 Person Per Vehicle	2 Persons Per Vehicle	3 Persons Per Vehicle	4 Persons Per Vehicle	5 or More Persons Per Vehicle	Total
6/25/09	318 32.1%	442 44.6%	110 11.1%	101 10.2%	20 2.0%	991
6/27/09	349 26.5%	619 47.0%	192 14.6%	118 9.0%	39 3.0%	1317
7/25/09	178 15.6%	614 53.9%	184 16.2%	113 9.9%	50 4.4%	1139
8/8/09	220 22.7%	434 44.8%	163 16.8%	119 12.3%	33 3.4%	969
Total	1065 24.1%	2109 47.8%	649 14.7%	451 10.2%	142 3.2%	4416

The following tables and accompanying graphs illustrate the total number of cars parked in each



parking lot (Beach, Parade, Shelter, Central & Portland Head Light, PHL) at 30 minute intervals.

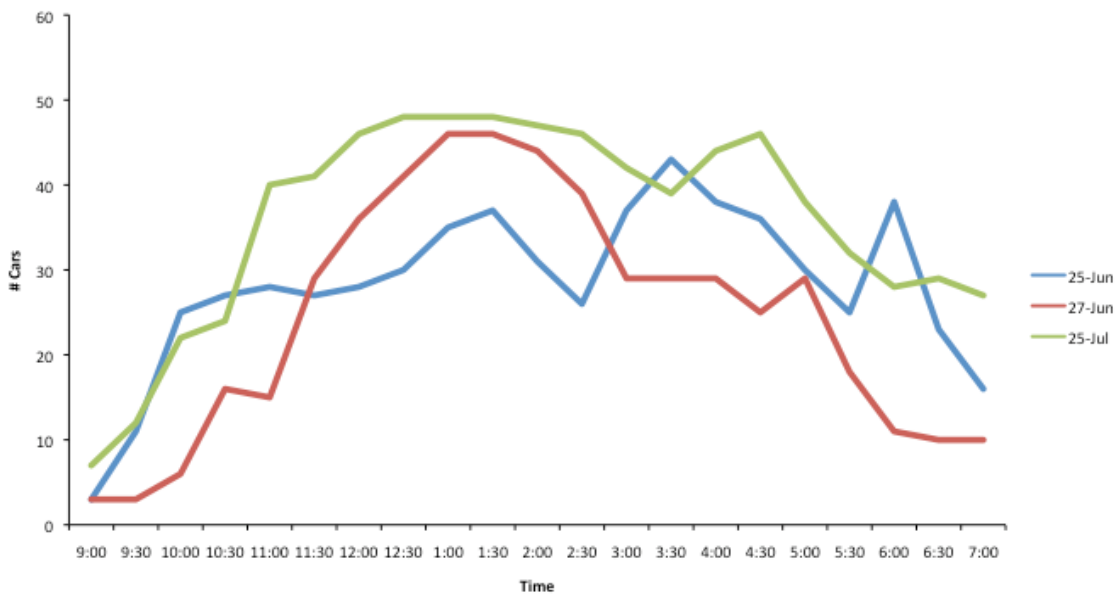
TABLE 5a

30 Minute Count of Cars Parked in Beach Lot

BEACH	6/25/2009 Thurs	6/27/2009 Sat	7/25/2009 Sat	TOTAL
9:00	3	3	7	13
9:30	11	3	12	26
10:00	25	6	22	53

10:30	27	16	24	67
11:00	28	15	40	83
11:30	27	29	41	97
12:00	28	36	46	110
12:30	30	41	48	119
1:00	35	46	48	129
1:30	37	46	48	131
2:00	31	44	47	122
2:30	26	39	46	111
3:00	37	29	42	108
3:30	43	29	39	111
4:00	38	29	44	111
4:30	36	25	46	107
5:00	30	29	38	97
5:30	25	18	32	75
6:00	38	11	28	77
6:30	23	10	29	62
7:00	16	10	27	53

**Number of Cars Per Half Hour
Beach Lot**

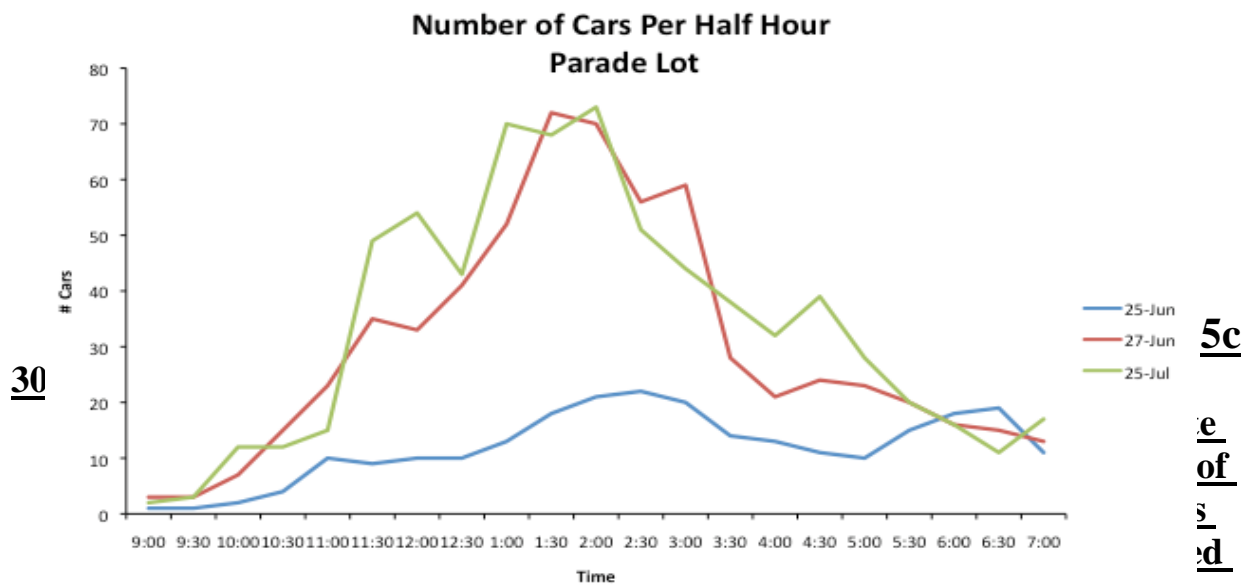


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PARADE	6/25/2009 Thurs	6/27/2009 Sat	7/25/2009 Sat	TOTAL
9:00	1	3	2	6
9:30	1	3	3	7
10:00	2	7	12	21
10:30	4	15	12	31
11:00	10	23	15	48
11:30	9	35	49	93
12:00	10	33	54	97
12:30	10	41	43	94
1:00	13	52	70	135

1:30	18	72	68	158
2:00	21	70	73	164
2:30	22	56	51	129
3:00	20	59	44	123
3:30	14	28	38	80
4:00	13	21	32	66
4:30	11	24	39	74
5:00	10	23	28	61
5:30	15	20	20	55
6:00	18	16	16	50
6:30	19	15	11	45
7:00	11	13	17	41



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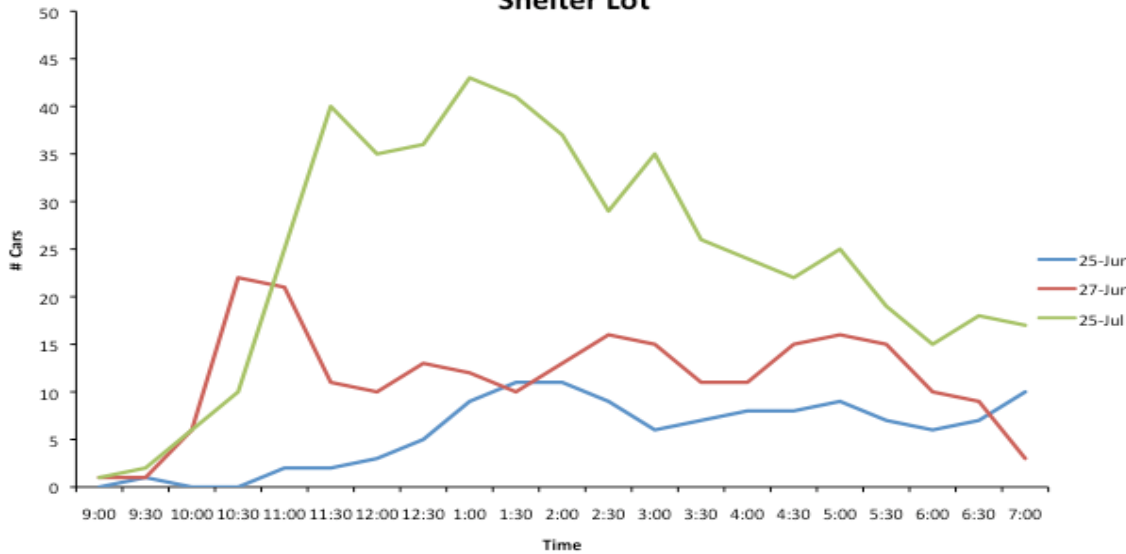
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IN SHELTER LOT

SHELTER	6/25/2009 Thurs	6/27/2009 Sat	7/25/2009 Sat	TOTAL
9:00	0	1	1	2
9:30	1	1	2	4
10:00	0	6	6	12
10:30	0	22	10	32
11:00	2	21	25	48
11:30	2	11	40	53
12:00	3	10	35	48
12:30	5	13	36	54
1:00	9	12	43	64
1:30	11	10	41	62
2:00	11	13	37	61
2:30	9	16	29	54
3:00	6	15	35	56
3:30	7	11	26	44
4:00	8	11	24	43

4:30	8	15	22	45
5:00	9	16	25	50
5:30	7	15	19	41
6:00	6	10	15	31
6:30	7	9	18	34
7:00	10	3	17	30

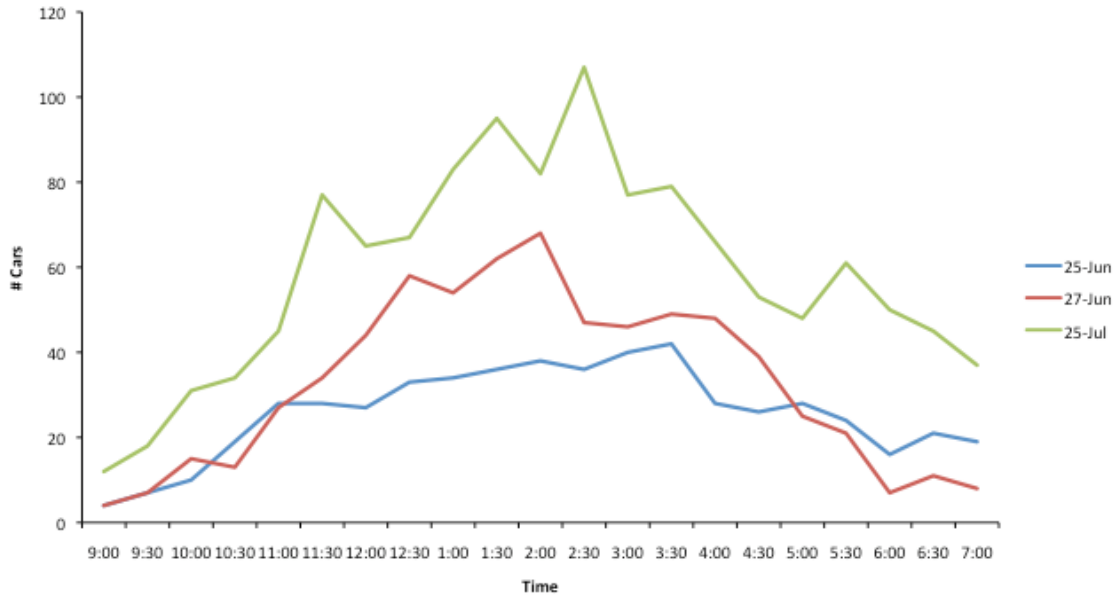
**Number of Cars Per Half Hour
Shelter Lot**



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CENTRAL	6/25/2009 Thurs	6/27/2009 Sat	7/25/2009 Sat	TOTAL
9:00	4	4	12	20
9:30	7	7	18	32
10:00	10	15	31	56
10:30	19	13	34	66
11:00	28	27	45	100
11:30	28	34	77	139
12:00	27	44	65	136
12:30	33	58	67	136
1:00	34	54	83	171
1:30	36	62	95	193
2:00	38	68	82	188
2:30	36	47	107	190
3:00	40	46	77	163
3:30	42	49	79	170
4:00	28	48	66	142
4:30	26	39	53	118
5:00	28	25	48	101
5:30	24	21	61	106
6:00	16	7	50	73
6:30	21	11	45	77
7:00	19	8	37	64

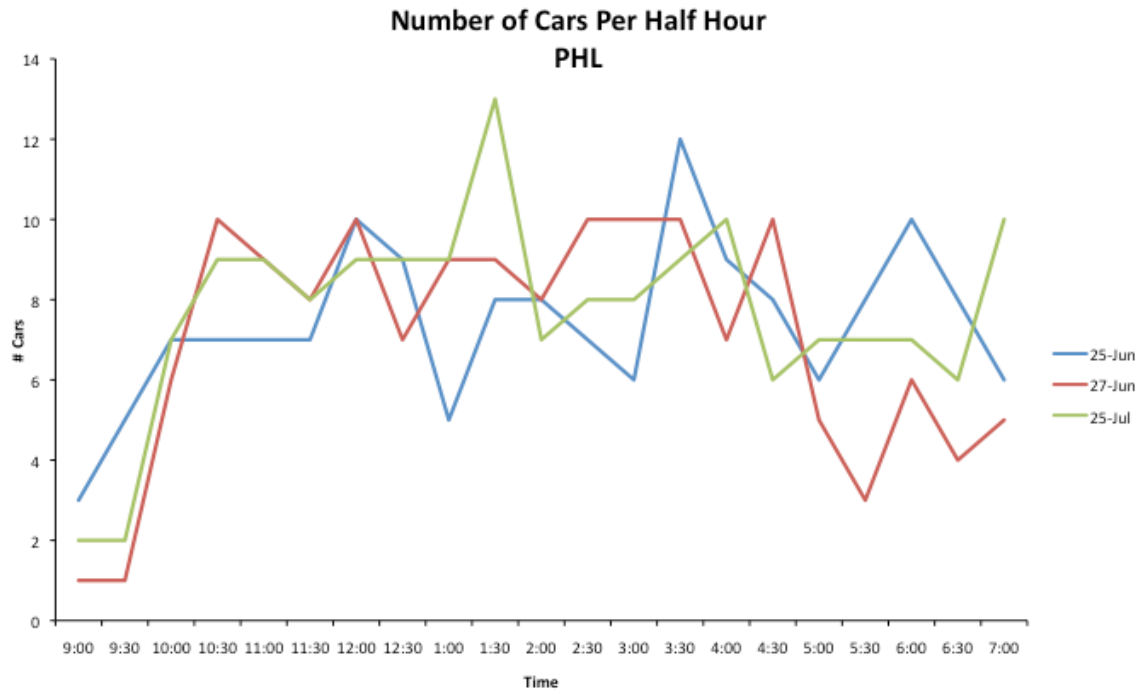
Number of Cars Per Half Hour Central Lot



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PHL	6/25/2009 Thurs	6/27/2009 Sat	7/25/2009 Sat	TOTAL
9:00	3	1	2	6
9:30	5	1	2	8
10:00	7	6	7	21
10:30	7	10	9	26
11:00	7	9	9	25
11:30	7	8	8	23
12:00	10	10	9	29
12:30	9	7	9	26
1:00	5	9	9	23
1:30	8	9	13	30
2:00	8	8	7	23
2:30	7	10	8	25
3:00	6	10	8	24
3:30	12	10	9	31
4:00	9	7	10	26
4:30	8	10	6	24
5:00	6	5	7	18
5:30	8	3	7	18
6:00	10	6	7	23
6:30	8	4	6	18
7:00	6	5	10	21



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Time	6/25/09	6/27/09	7/25/09
9:00	11	12	24
9:30	25	15	37
10:00	44	40	78
10:30	57	76	89
11:00	75	95	134
11:30	73	117	215
12:00	78	133	209
12:30	87	160	203
1:00	96	173	253
1:30	110	199	265
2:00	109	203	246
2:30	100	168	241
3:00	109	159	206
3:30	118	127	191
4:00	96	116	176
4:30	89	113	166
5:00	83	98	146
5:30	79	77	139
6:00	88	50	116
6:30	78	49	109
7:00	62	39	108

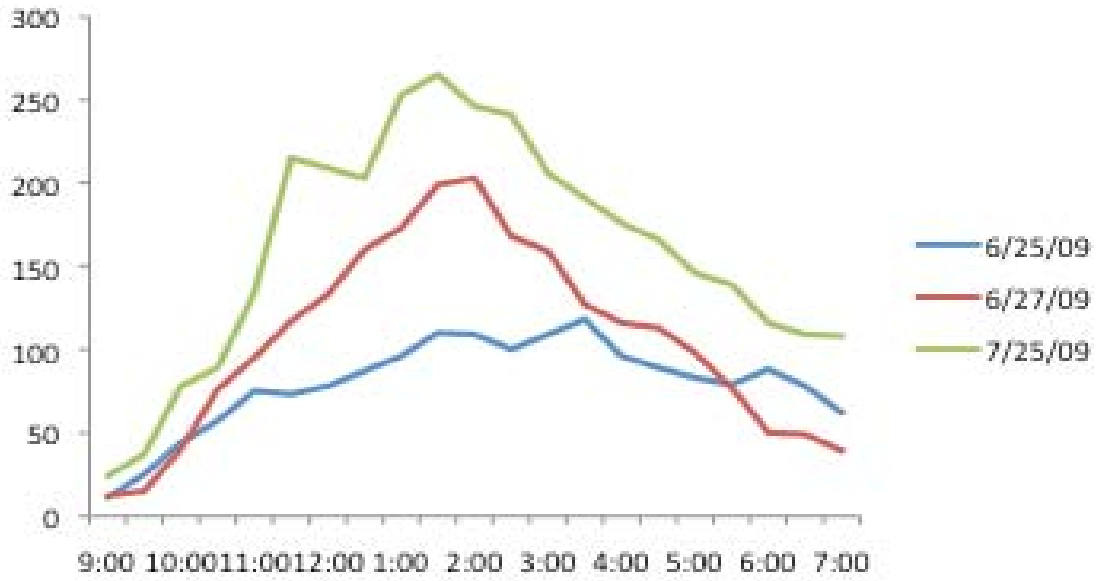


Table 6

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totals. There are charts that represent the length of stay for each day and one that aggregates all of the dates.

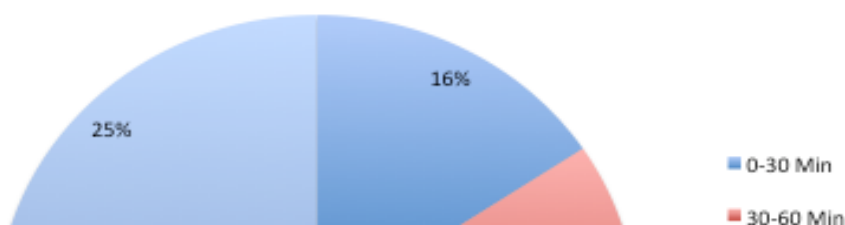
Seventy-five percent of vehicles stayed in the park, 0-90 minutes. On the 25th of July there is an increase in the number of vehicles that stayed over 3 hours; this was most likely caused by 2 weddings near the Head Light and a gathering in the Shelter area.

Maine Vehicles Length of Stay

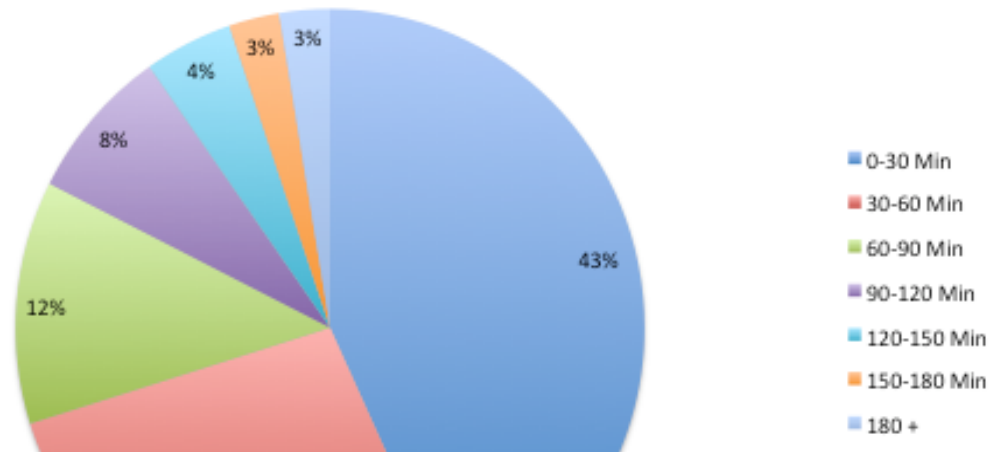
6/25/09	Maine		Out-of-State		All Vehicles	
0-30 Min	193	30.6%	42	18.3%	235	27.3%
30-60 Min	188	29.8%	80	34.8%	268	31.1%
60-90 Min	122	19.3%	52	22.6%	174	20.2%
90-120 Min	59	9.4%	30	13.0%	89	10.3%
120-150 Min	22	3.5%	14	6.1%	36	4.2%
150-180 Min	21	3.3%	6	2.6%	27	3.1%
180 +	26	4.1%	6	2.6%	32	3.7%
Total	631		230		861	
6/27/09						
0-30 Min	179	29.9%	39	15.7%	218	25.7%
30-60 Min	145	24.2%	95	38.3%	240	28.3%
60-90 Min	108	18.0%	60	24.2%	168	19.8%
90-120 Min	68	11.4%	27	10.9%	95	11.2%
120-150 Min	29	4.8%	11	4.4%	40	4.7%
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Maine Vehicles Length of Stay

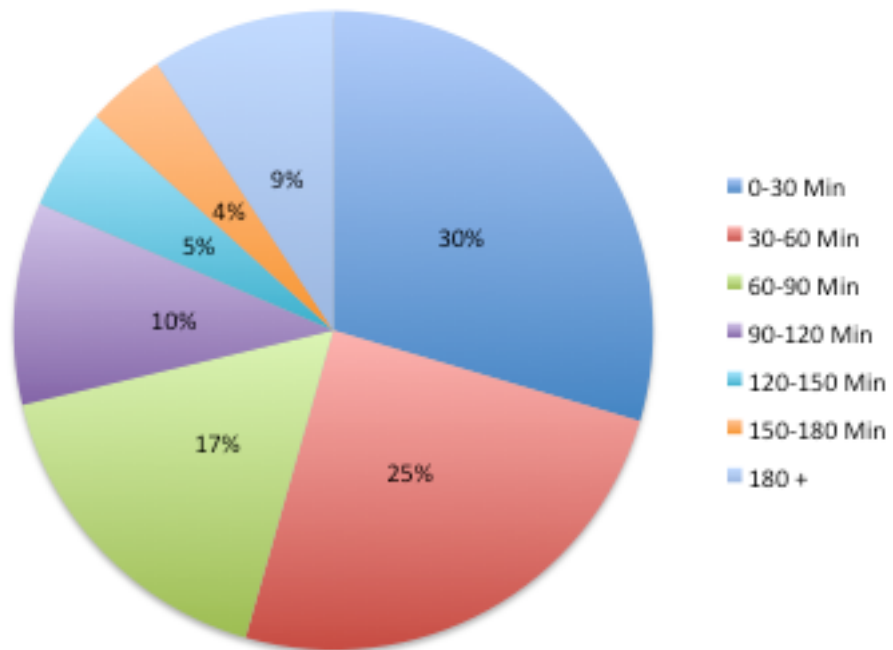
Saturday 7-25-09



Saturday 8-8-09

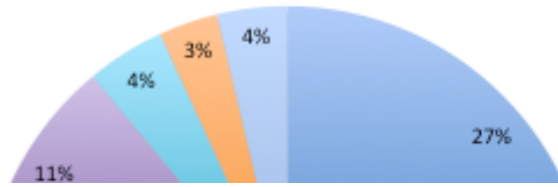


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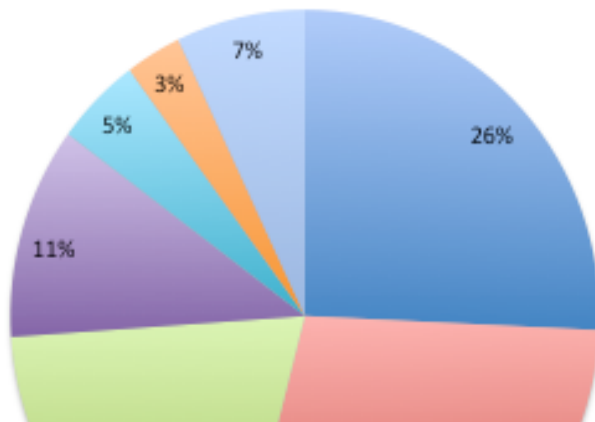
**All
of Stay**

Thursday 6-25-09



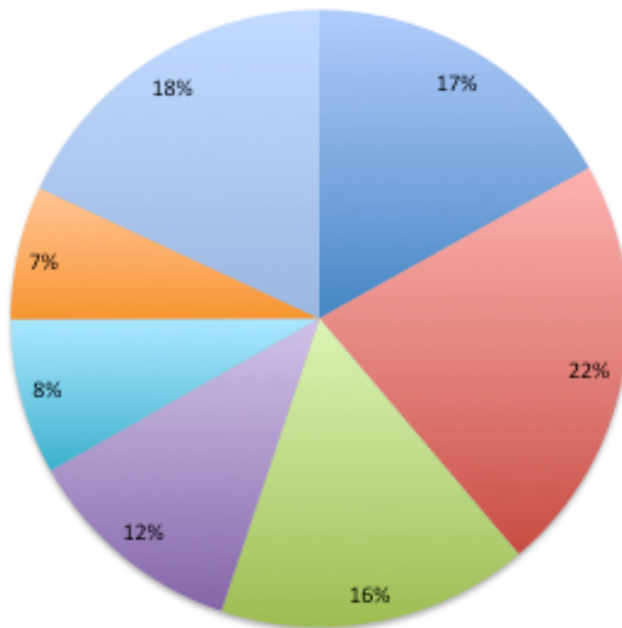
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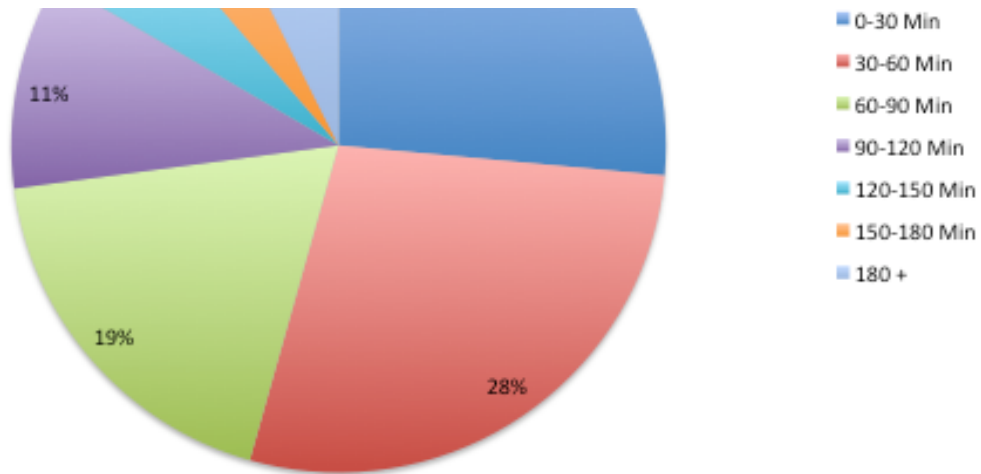
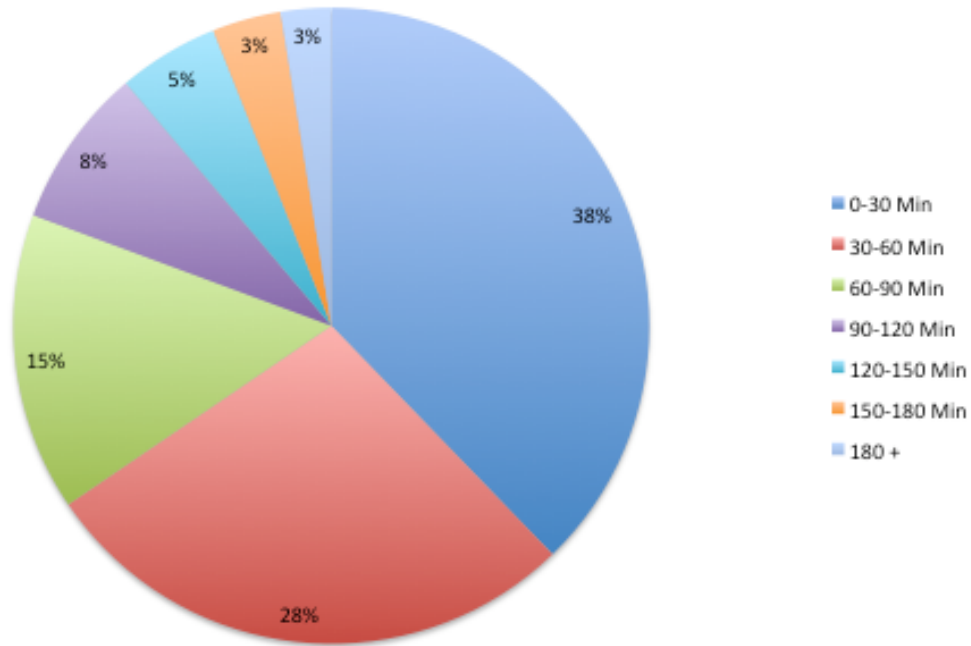
- 0-30 Min
- 30-60 Min
- 60-90 Min
- 90-120 Min
- 120-150 Min
- 150-180 Min

Saturday 7-25-09



- 0-30 Min
- 30-60 Min
- 60-90 Min
- 90-120 Min
- 120-150 Min
- 150-180 Min
- 180 +

8-8-09



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vehicles parked in the two parking lots on either end of the playground every 30minutes, and the state of origin of the vehicles. Secondly random individuals were questioned inside of the playground. The information gathered includes length of stay within playground, how often the respondent visited the playground and their residence.

Thursday June 25:

There were 85 total vehicles counted in the two playground parking lots, 68 counted were from Maine and 17 were out of state. Eleven individuals were interviewed, five from Cape Elizabeth, four from South Portland, two from Scarborough, and one from Windham. Four said they stay between 30-60 minutes, five stay 60-90 minutes, and two stay more than 90 minutes. Three said

they visit the playground weekly, seven bi-weekly and one monthly.

Saturday June 27:

There were 93 total vehicles counted in the two playground parking lots. 70 counted were from Maine and 23 were out of state. Twelve individuals were interviewed, five were from Cape Elizabeth, three from South Portland, two from Portland, one from Gorham and one from Brunswick. Six of the individuals stay between 30-60 minutes, five stay 60-90 minutes and, one stays more than 90 minutes. Seven said they visit the playground weekly, two bi-weekly and three monthly.

Saturday July 25:

There were 163 total vehicles counted in the two playground parking lots. 121 counted were from Maine and 42 were from out of state. Eleven individuals were interviewed, five were from Cape Elizabeth, three from South Portland, two from Portland, one from Gorham. Four individuals said they stay 30-60 minutes, six stay 60-90 minutes and one stays more than 90 minutes. Five visit the park weekly, three bi-weekly and three monthly.