

Bass Harbor Lighthouse Road Traffic for Fall 2017
Acadia National Park Resources Report 2017 – 11
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A JAMAR portable traffic counter was installed on the Bass Harbor Lighthouse Road on August 29, 2017 and removed in early November. We report here the data for the months of September and October. The traffic counter was validated by Rec Tech Becca Flesh 3 times. The two September validations were 95% to 101% for inbound and outbound traffic. The October validations for each were 133% (inbound) and 55% (outbound). The outbound traffic counts declined slowly, suggesting a failing tube in the mat. The inbound traffic counts continued at about the same rate as the first half of the month until October 22 and then declined slowly, suggestive of a normal traffic pattern throughout the park for the end of October. The numbers make sense based on the September traffic counts, our understanding of typical October use patterns for October, and the anecdotal observations that the weather was very good through the end of October and the park was very busy through about October 22. We treat this data as valid but with a little skepticism.

Results

Traffic entering Bass Harbor Lighthouse Road in September and October was essentially the same, averaging about 540 vehicles per day. Peak Daily Traffic was 748 and 800 respectively for each month, and each peak occurred on Sunday of the Holiday weekends, September 3 and October 8. October traffic was a little more variable as traffic began to decline after Sunday October 22.

**TABLE 1: SOUTHBOUND (ENTERING) TOTAL, MEAN, AND MAXIMUM DAILY AND HOURLY TRAFFIC COUNTS
ON THE BASS HARBOR LIGHTHOUSE ROAD, SEPTEMBER – OCTOBER 2017**

Month	Total Traffic	Mean Daily Traffic (95%)	Peak Daily Traffic	Peak Hourly Traffic	# Hours Traffic >100
Sept	16,405	547 +/- 25	748	111	1
Oct	16,596	535 +/- 56	800	107	2

1. Number of days of collection for each month were Sept=30; Oct=31.

The average level of traffic to the Bass Harbor Lighthouse in September and October – about 540 vehicles per day, is about the same as the number of vehicles entering the one way Schoodic Loop Road in July and August. The average length of stay at Bass Harbor Lighthouse is 37 minutes based on work by Robert Manning of the University of Vermont in 2004. The average length of stay at Schoodic is just under 3 hours based on work by Manning in 2001. Overflow parking counts in August 2017 at the Bass Harbor Lighthouse parking area showed that between 10 am and 4pm typically 3-4 cars were parked on the shoulder of the road, but the peak number of cars parked on the shoulder sometimes exceeded 20. However, there are often cars waiting to enter the lot (up to 16) and traffic is reduced to one lane because of the cars on the shoulder.

Visitation to the Bass Harbor Lighthouse can be approximated using the 3 persons per vehicle multiplier for Acadia used in the Public Use Statistics Program. Based on the traffic counts, September use would then be about 49,000 visits and October use about 50,000. This is unusual in that for overall park use, October visitation is usually much less than September visitation. For example September 2017 park visitation was 595,388 and October 2017 was 507,595. Similar differences extend each year back to 1990. As mentioned above, it is possible that the October traffic count data is high due to a traffic counter problem. For now, we will trust it.

A coarse approximation of visitation to the Bass Harbor Lighthouse from May through October can be made using a ratio estimator. We used September 2017 park use (595,388) and September Bass Harbor Lighthouse Road use (49,000) as the basis for this. We took park use for May, June, July and August and divided it by September 2017 park use and multiplied that by 49,000. For example May park use was 222,978 and the ratio of this to September park use (595,388) was .37 or 37%. We multiplied this number by 49,000 and estimated the May Bass Harbor Lighthouse Road use as 18,351. The other monthly estimates are shown in the table below. Overall use of the Bass Harbor Lighthouse was estimated as 280,000 visits.

TABLE 1: ESTIMATED VISITATION TO THE BASS HARBOR LIGHTHOUSE 2017					
May	June	July	August	September	October
18351	39190	61192	62748	49000	50,000

A full season of traffic count data in 2018 will give a more reliable estimate of Bass Harbor Lighthouse vehicle traffic and visitor use.