

# GREAT SMOKY MOUNTAINS NATIONAL PARK

## VISITOR USE COUNTING AND REPORTING INSTRUCTIONS

Following are detailed instructions for collecting data and estimating visitor use statistics for **Great Smoky Mountains National Park**. These instructions are effective the date of issuance and will continue in effect unless changed by agreement between the NPS Social Science Program and the Park Superintendent.

### Recreation Visits

1. An inductive loop traffic counter (Station 401 Lane 2) is located across the southbound lane of Newfound Gap Road at the Sugarlands entrance. The traffic count is reduced by the number of buses and 992 non-reportable/NPS vehicles per month. The reduced traffic count is multiplied by 2.5 persons per vehicle August through May and 3 persons per vehicle June and July.
2. The number of buses at Sugarlands Visitor Center times 45 persons per bus.
3. Inductive loop traffic counters (Station 403 Lanes 3 and 4) are located across the northbound lanes of Newfound Gap Road south of the entrance to Oconaluftee Visitor Center at the Oconaluftee entrance. The traffic count is reduced by 976 non-reportable/NPS vehicles per month November through May and 1,022 non-reportable vehicles per month June through October. The reduced traffic count is multiplied by 2.4 persons per vehicle September through March and 2.7 persons per vehicle April through August.
4. An inductive loop traffic counter (Station 404 Lane 2) is located across the southbound lane of Tennessee 73 inside the park boundary at the Townsend entrance. The traffic count is reduced by 592 non-reportable/NPS vehicles per month. The reduced traffic count is multiplied by 2.4 persons per vehicle September through March and 2.7 persons per vehicle April through August.
5. An inductive loop traffic counter is located at the Abrams Creek entrance. The traffic count is reduced by 39 vehicles per month. The reduced traffic count is multiplied by 2.5 persons per vehicle October through April and 2.8 persons per vehicle May through September.
6. An inductive loop (Station 415 Lane 1) traffic counter is located across the northbound entrance lane of Heintooga Ridge Road. The traffic count is reduced by 78 vehicles per month December through April and 80 vehicles per month May through November. The reduced traffic count is multiplied by 2.5 persons per vehicle October through April and 2.8 persons per vehicle May through September.
7. An inductive loop traffic counter is located across the road to Big Creek Camping Area. The raw traffic count is divided by two to adjust for vehicles entering and exiting the unit. The traffic count is reduced by 83 vehicles per month. The reduced traffic count is multiplied by 2.5 persons per vehicle October through April and 2.8 persons per vehicle May through September.
8. An inductive loop traffic counter is located across the entrance lane of Cataloochee. The traffic count is reduced by 104 vehicles per month November through February, 105 vehicle per

month March through May, 116 vehicles per month June through August, and 115 vehicles per month September and October. The reduced traffic count is multiplied by 2.5 persons per vehicle October through April and 2.8 persons per vehicle May through September.

9. An inductive loop traffic counter is located across the northbound exit lane to Cosby campground. The traffic count is reduced by 134 vehicles per month. The reduced traffic count is multiplied by 2.5 persons per vehicle October through April and 2.8 persons per vehicle May through September.
10. An inductive loop traffic counter is located at Foothills Parkway East (Station 416 Lanes 1 and 2). The traffic count is reduced by 85 vehicles per month. The reduced traffic counts are multiplied by 2.5 persons per vehicle October through April and 2.8 persons per vehicle May through September.
11. An inductive loop traffic counter is located across the entrance lane of Deep Creek. The traffic count is reduced by 313 vehicles per month November through May, 346 vehicles per month June through August, and 323 vehicles per month September and October. The reduced traffic count is multiplied by 2.5 persons per vehicle October through April and 2.8 persons per vehicle May through September.
12. An inductive loop traffic counter is located across the entrance of Lakeview Drive. The traffic count is reduced by 76 vehicles per month. The reduced traffic count is multiplied by 2.5 persons per vehicle October through April and 2.8 persons per vehicle May through September.
13. An inductive loop traffic counter is located across the entrance lane by the Greenbrier Ranger Station. The traffic count is reduced by 79 vehicles per month. The reduced traffic count is multiplied by 2.5 persons per vehicle October through April and 2.8 persons per vehicle May through September.
14. An inductive loop (Station 418 Lane 2) traffic counter is on Cherokee Orchard Road to count vehicles using Cherokee Orchard Road but not entering Roaring Fork Motor Nature Trail. The traffic count is reduced by 142 vehicles per month. The reduced traffic count is multiplied by 2.5 persons per vehicle October through April and 2.8 persons per vehicle May through September.
15. The traffic at Twentymile road is estimated in Table 2. The traffic count is reduced by 57 non-reportable vehicles per month. The reduced traffic count is multiplied by 2.5 persons per vehicle October through April and 2.8 persons per vehicle May through September.
16. An inductive loop traffic counter is located across the entrance of Wear Cove Road. The traffic count is reduced by 233 non-reportable vehicles per month. The reduced traffic count is multiplied 2.5 persons per vehicle October through April and 2.8 persons per vehicle May through September.
17. Five inductive loop traffic counters are summed to get total traffic for Foothills Parkway West / Look Rock: entrance lane from Hwy 129; entrance lane from Hwy 321, entrance lane from Flats Road, entrance lane from Wears Valley (Station 407 Lane 1), and entrance lane from Walland (Station 406 Lane 1). The summed traffic count is reduced by 405 vehicles per month. The reduced total traffic count is multiplied by 2.5 persons per vehicle October through April and 2.8 persons per vehicle May through September.

If any lanes of the Federal Highway Administration traffic counters (1, 3, 4, 6, 10, 14, 17) are inoperative

for less than 14 days in a month, the current monthly Average Daily Traffic (ADT) will be used to estimate vehicle counts for the missing days and added to the monthly daily traffic total. If the lane is inoperative for more than 14 days in a month, the appropriate value in Table 1 will be used to estimate vehicle counts for the missing days and added to the monthly daily traffic total.

**To eliminate duplicate reporting, total recreation visits are reduced by 20% June through August and 16% September through May.**

**Table 1. Average Daily Traffic Counts by Location and Month<sup>1</sup>**

Location	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Sugarlands Sta 401, Ln 2	1920	2030	3732	4544	4653	6000	6554	5318	5121	6802	4536	3301
Oconaluftee Sta 403, Ln 3	222	271	452	683	673	861	1045	754	553	642	393	395
Oconaluftee Sta 403, Ln 4	933	1053	1458	1898	1783	2519	2914	2420	2802	3686	2362	1584
Townsend Sta 404, Ln 2	740	786	1428	1844	2338	2731	2895	2082	2203	2971	1848	1220
Walland Sta 406, Ln 1	381	286	431	455	588	539	495	457	526	718	503	263
Wears Valley Sta 407, Ln 1	315	248	371	406	551	511	464	447	494	667	461	253
Heintooga Sta 415, Ln 1	50	50	50	50	77	108	130	113	119	158	79	50
FHP East Sta 416, Ln 1	278	256	301	421	447	593	688	589	505	597	452	388
FHP East Sta 416, Ln 2	300	329	396	504	524	692	817	703	648	744	556	509
Cher Orchard Sta 418, Ln 2	223	230	526	716	832	1061	1133	921	805	1207	697	325

<sup>1</sup> Original data for averages supplied by Federal Highway Administration, NPS Traffic Data Program. Averages are derived using traffic data from 2015 to 2020.

### Non-Recreation Visits

Traffic counts on the Gatlinburg Spur are estimated in Table 2. The traffic counts are divided by two to correct for duplicate reporting. The adjusted traffic counts are multiplied by 2 persons per vehicle.

**Table 2. Traffic Estimates by Month**

Location	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Twentymile Road	75	85	350	350	400	500	500	500	350	350	100	75
Gatlinburg Spur (in thousands)	686	701	920	870	805	999	1,016	964	994	1,239	996	642

### Recreation Visitor Hours

1. Recreation visits at Sugarlands are multiplied by 2.2 hours per visit October through April and 2.5 hours per visit May through September.
2. Recreation visits at Oconaluftee are multiplied by 1.5 hours per visit October through

April and 2.5 hours per visit May through September.

3. Recreation visits at Townsend are multiplied by 2.6 hours per visit October through April and 3.2 hours per visit May through September.
4. Recreation visits at other areas of the park are multiplied by 2.2 hours per visit October through April and 3.2 hours per visit May through September.
5. Overnight stays are multiplied by 22 hours per stay.

### **Non-Recreation Visitor Hours**

Non-recreation visits are multiplied by 0.5 hours per visit.

### **Overnight Stays**

#### Concessioner Lodging - LeConte Lodge

The number of overnight stays as reported by the concessioner.

#### NPS Campgrounds

1. The number of overnight stays by tent campers in NPS campgrounds as recorded in recreation.gov.
2. The number of overnight stays by RV campers in NPS campgrounds as recorded in recreation.gov.

#### NPS Backcountry

The number of overnight stays by backcountry campers

#### NPS Miscellaneous

1. The number of overnight stays at group camps (Big Creek, Cades Cove, Cataloochee, Cosby, Elkmont, Deep Creek, and Smokemont campgrounds)
2. The number of overnight stays at horse camps (Anthony Creek, Big Creek, Cataloochee, Round Bottom, Tow String campgrounds)