

TRANSPORTATION DATA COLLECTION



BLUE RIDGE PARKWAY

National Park Service

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INTRODUCTION

In August 2002 a study of visitor use and carrying capacity was conducted along the Blue Ridge Parkway. The study consisted of directional traffic counts, parking information, and roadside surveys. The data collection was performed by the team made up of National Park Service (NPS) Staff, David Evans and Associates Inc. (DEA) and TRA Inc. A concurrent visitor survey was conducted by the University of Vermont (UVM), Natural Resources Center, documented under separate cover. This report is intended to provide information on transportation and vehicular circulation of Park visitors and others that drive along the Parkway. This information will be used to support the General Management Plan and Environmental Impact Statement to be subsequently completed for the Blue Ridge Parkway.

For the purposes of this report, the Parkway has been divided into six separate segments. **Figure 1** defines these segments. Following a description of the data collection process, the report outlines the data relevant to each segment. As shown in Figure 1 the segments are broken down as follows:

- North of Roanoke – 115 mile segment
- South of Roanoke – 55 mile segment
- Between Rocky Knob and Cumberland Knob Visitor Centers – 48 mile segment
- North of Blowing Rock – 75 mile segment
- North of Asheville – 92 mile segment
- South of Asheville – 84 mile segment



Figure 1: Blue Ridge Parkway Map



METHODOLOGY

TRAFFIC VOLUMES

The methodology used for the traffic volume data collection is described below.

Historic Traffic Volumes

The National Park Service (NPS) routinely collects historic traffic data at access points along the Parkway. The Raw Data Appendix contains historic monthly traffic volumes from the last three years used to identify monthly variation in traffic volume. These volumes are highly variable as shown in the percent change per year. There are a variety of factors that effect the fluctuation including construction on the Parkway or ramps, closures due to weather or maintenance, and malfunctioning counters. Unlike typical streets, the Parkway is a National Park and there are alternate routes available for users. For this reason closures may happen more frequently and may last longer than on the general highway system.

The information collected during this study identified locations where previous data had been collected for comparative purposes. The NPS was contacted to obtain permanent count station data; however, none of the four stations along the parkway have been operational. For this reason data is not available.

Recent annual average daily traffic volumes were also collected from North Carolina and Virginia Departments of Transportation. This data included volumes on major roadways near their intersection with the Blue Ridge Parkway. The information from Virginia is based on 2001 counts, and that from North Carolina is based on 2000 counts.

Daily Traffic Volumes

Automatic traffic counters were placed on the Blue Ridge Parkway at locations in each of the six segments and hourly directional traffic volumes and vehicle classifications were collected. The counters were set up for a 24-hour period on a weekday and a weekend in August 2002. All of the data collected during the study is available in the Raw Data Appendix under separate cover.

Counters were also set up on entrance and exit ramps at the intersections of major roadways with the Blue Ridge Parkway. These directional daily traffic volumes were collected at 21 intersections.

Peak Hour Turning Movements

Peak hour turn counts were collected at major roadway intersections in the AM, mid-day and PM peaks on a weekday in August 2002. The AM peak data was collected for 1.5 hours between 7:00 and 9:00 AM. The mid-day and PM peaks were also collected for 1.5 hours between 11:30 AM and 1:00 PM and between 4:00 and 6:00 PM respectively.



ACTIVITY CENTERS

Driveway Traffic Volumes

Automatic traffic counters were placed in the driveways of 11 high activity locations along the Parkway. The counters were set up for a 24-hour period on a weekday and weekend in August 2002.

Parking Data Collection Methodology

Parking lot data was collected at the same 11 activity center locations. The number of occupied spaces, vehicle classification and illegally parked vehicles were noted at 15-minute intervals from 11:00AM to 3:00 PM on a weekday in August 2002.

TRAVEL PATTERNS

Survey Preparation

The roadside survey questionnaire was developed by DEA staff with input from UVM, the NPS and the Office of Management and Budget (OMB). The survey form was one page in length, and took an average of three minutes to complete. The survey included questions regarding travel origin/destination and trip purpose. The survey form is included in Appendix A.

The time periods selected for the surveys were from 7:30 AM to 5:30 PM on the weekdays and from 10:00 AM to 2:00 PM on the weekends. During the weekday surveys, two breaks for personal and administrative purposes were taken from 9:30 AM to 11:00 AM and from 1:00 PM to 3:30 PM. This resulted in six hours of data collection on weekdays and four hours of data collection on weekends.

The locations for the survey were determined based on NPS input. Appendix C includes maps used in discussions to highlight areas with external pressures, internal pressures, community access, and transportation hot spots.

Survey Conduct

The surveys were conducted at six locations along the Parkway. Parkway overlooks were used since they provided space for pulling over vehicles and collecting data safely. The specific locations within each study segment were:

- North of Roanoke (Wednesday August 14, 2002)
Northbound at Mile Post 92.5 – *Sharp Top Parking Widening*
Southbound at Mile Post 91.8 – *Mills Gap Parking Widening*
- South of Roanoke (Tuesday August 13, 2002)
Northbound at Mile Post 157.6 – *Shortt's Knob Parking Overlook*
Southbound at Mile Post 162.4 – *Rakes Mill Pond Parking Overlook*



- Between Rocky Knob and Cumberland Knob Visitor Centers (Sunday August 11 and Monday August 12, 2002)
Northbound at Mile Post 189.1 – *Pilot Mountain Parking Overlook*
Southbound at Mile Post 189.9 – *Puckett Cabin Parking Area*
- North of Blowing Rock (Thursday August 8, 2002)
Northbound at Mile Post 235.7 – *Devils Garden Parking Overlook*
Southbound at Mile Post 236.9 – *Air Bellows Gap Parking Overlook*
- North of Asheville (Wednesday August 7 and Saturday August 10, 2002)
Northbound at Mile Post 361.2 – *Glassmine Falls Overlook*
Southbound at Mile Post 359.8 – *Balsam Gap Parking Area*
- South of Asheville (Tuesday August 6, 2002)
Northbound at Mile Post 404.5 – *Mills River Valley Overlook*
Southbound at Mile Post 404.2 – *Hominy Valley Overlook*

Each survey location had one flagger to control the traffic, and one data collector. One back-up data collector/supervisor was available and communication between the two sites was maintained using two-way radios.

A general traffic control plan was used and modified for effectiveness at each location. Large “Flagger Ahead” signs were used to warn approaching drivers of the activity ahead and orange cones were used to direct the traffic off the Parkway. The flagger used a stop/slow paddle and an orange flag to direct the traffic to stop for the survey or to continue traveling on the Parkway while the surveyor was interviewing drivers.



Figure 2: Roadside survey taken south of Asheville at Mile Post (MP) 404.5



The hourly directional traffic counts mentioned earlier were conducted at locations on the Blue Ridge Parkway close to where the roadside surveys were conducted in order to facilitate evaluation of sample expansion factors for future analysis.



SEGMENT 1: NORTH OF ROANOKE

This segment begins near Waynesboro at the southern end of Skyline Drive. It extends 115 miles south to central Roanoke. The area is in the Ridge District of the Blue Ridge Parkway. Near Roanoke, development is close to the Parkway and in some areas the development can be seen from the Parkway.

Figure 3: Development along Parkway at MP 107



TRAFFIC VOLUMES

These tables present traffic volumes collected using the National Park Service counters at several ramp locations. Those shown are only those also studied during the August 2002 study period.

Table 1: National Park Service Ramp Historic Traffic Volumes – Segment 1

US 250:

Month	2000	2001	2002	% Change 00-01	% Change 01-02
January	3,495	0	7,240	-100.0	0.0
February	2,233	2,228	12,298	-0.2	452.0
March	14,594	13,867	16,802	-5.0	21.2
April	14,254	16,412	13,654	15.1	-16.8
May	23,273	20,856	17,406	-10.4	-16.5
June	28,966	27,661	28,069	-4.5	1.5
July	25,116	26,104	26,115	3.9	0.0
August	16,997	26,926	23,142	58.4	-14.1
September	26,481	24,860	27,535	-6.1	10.8
October	42,846	25,158	25,644	-41.3	1.9
November	18,220	19,124		5.0	
December	8,000	12,984		62.3	



VA 43:

Month	2000	2001	2002	% Change 00-01	% Change 01-02
January	6,239	5,088	8,053	-18.4	58.3
February	7,193	6,146	9,352	-14.6	52.2
March	8,669	9,230	9,201	6.5	-0.3
April	8,982	9,890	10,211	10.1	3.2
May	11,891	11,936	15,542	0.4	30.2
June	14,989	13,265	17,534	-11.5	32.2
July	12,792	18,630	14,821	45.6	-20.4
August	16,893	13,894	16,316	-17.8	17.4
September	14,286	13,964	12,426	-2.3	-11.0
October	19,824	20,151	17,892	1.6	-11.2
November	11,901	9,195		-22.7	
December	5,946	4,896		-17.7	

US 460:

Month	2000	2001	2002	% Change 00-01	% Change 01-02
January	15,593	15,581	23,042	-0.1	47.9
February	17,727	18,863	25,065	6.4	32.9
March	13,152	16,114	28,570	22.5	77.3
April	18,926	32,618	41,878	72.3	28.4
May	24,260	32,489	33,010	33.9	1.6
June	27,487	33,880	38,351	23.3	13.2
July	28,290	25,376	28,291	-10.3	11.5
August	34,360	31,462	34,961	-8.4	11.1
September	25,388	32,406	27,866	27.6	-14.0
October	34,381	39,493	38,162	14.9	-3.4
November	28,113	20,081		-28.6	
December	21,062	27,352		29.9	



VA 24:

Month	2000	2001	2002	% Change 00-01	% Change 01-02
January	45,383	35,399	36,988	-22.0	4.5
February	19,041	32,793	40,381	72.2	23.1
March	51,097	50,901	49,122	-0.4	-3.5
April	44,434	39,740	56,934	-10.6	43.3
May	47,197	44,495	58,092	-5.7	30.6
June	52,578	50,556	61,840	-3.8	22.3
July	43,551	48,216	62,708	10.7	30.1
August	42,091	49,197	62,732	16.9	27.5
September	58,849	47,001	57,801	-20.1	23.0
October	44,797	62,764	59,524	40.1	-5.2
November	48,927	34,181		-30.1	
December	39,122	51,355		31.3	

Weekday and weekend traffic volumes along the Parkway, cross streets and at intersections in this segment are shown in **Figures 4, 5 and 6**.



Figure 4: Weekday Daily Traffic Counts – Segment 1



Figure 5: Weekend Daily Traffic Counts – Segment 1



Figure 6: Weekday/Weekend Turning Movements – Segment 1



The automatic traffic counters were set up on the Blue Ridge Parkway at MP 107 on August 11 and 12, 2002. The following figures illustrate the traffic volumes and vehicle classifications collected at this location.

Figure 7: Weekday Hourly Traffic By Direction – Parkway MP 107

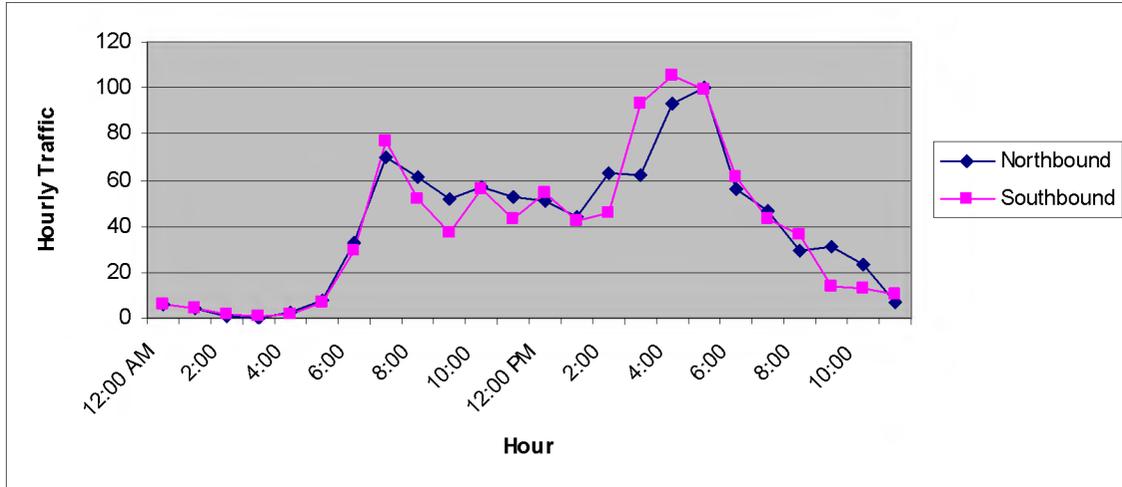


Figure 8: Weekend Hourly Traffic By Direction – Parkway MP 107

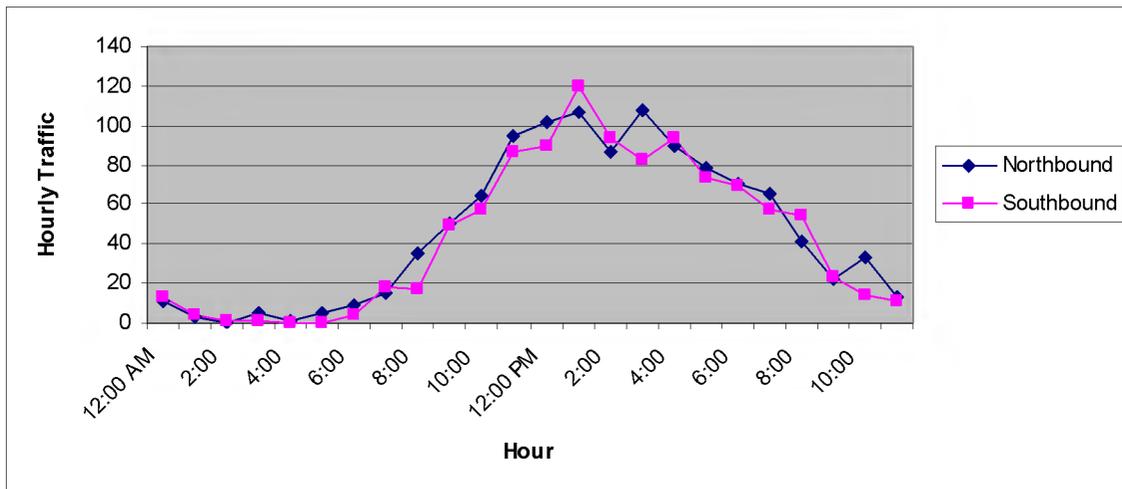




Figure 9: Weekday vs. Weekend Combined – Parkway MP 107

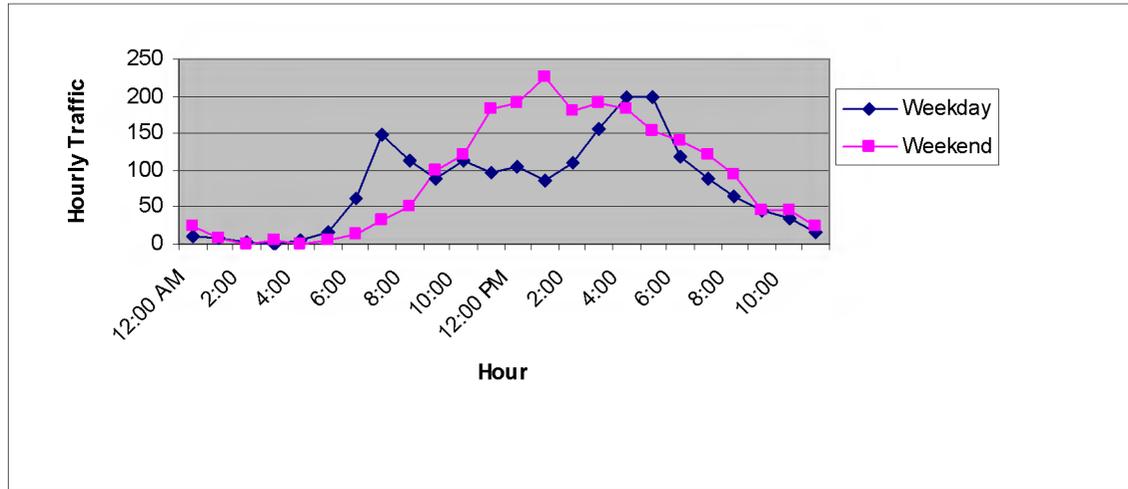


Figure 10: Weekday Vehicle Classification – Parkway MP 107

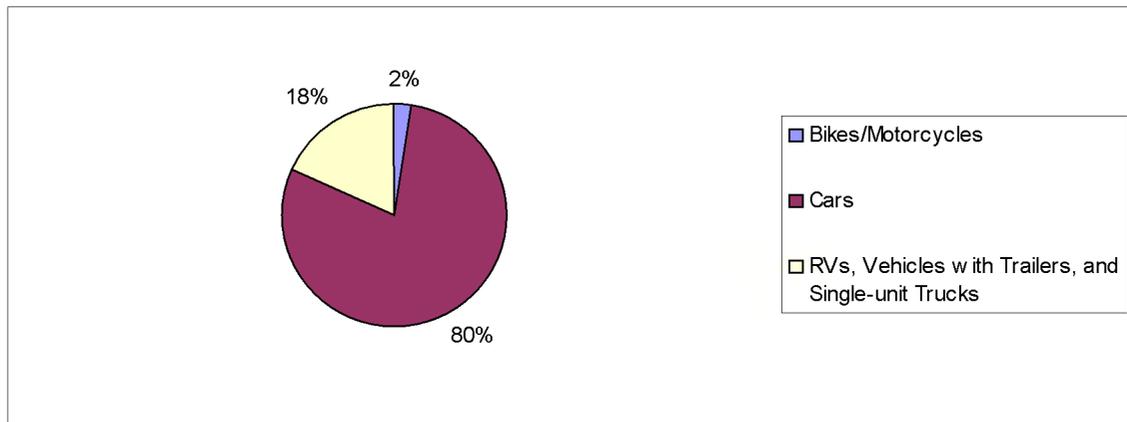
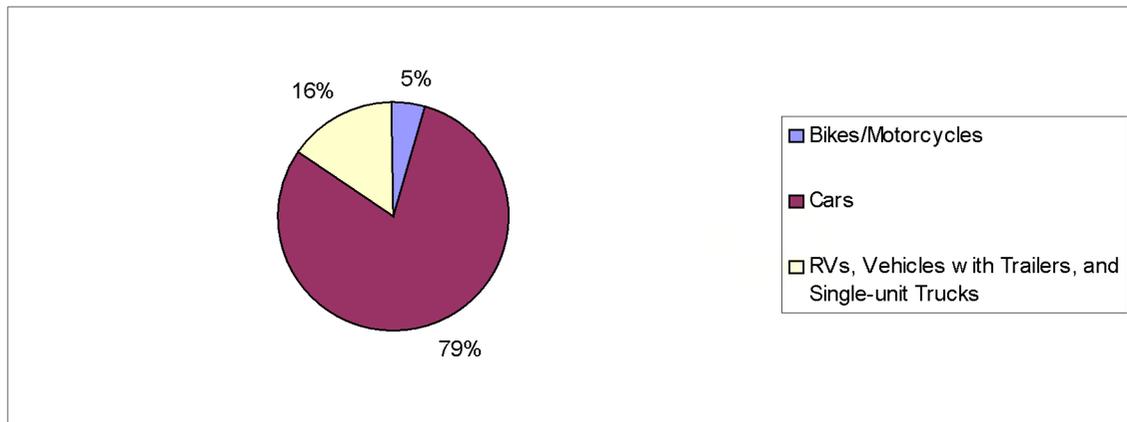


Figure 11: Weekend Vehicle Classification – Parkway MP 107





ACTIVITY CENTERS

The **Peaks of Otter Visitor Center** was chosen as a high activity area within this segment. **Figure 14** shows the layout of the driveways, parking lot and visitor center, as well as the 24-hour traffic volumes for both weekday and weekend. There are 29 total parking spaces and on the weekday studied, the parking lot was never more than 55% full. As shown in **Figure 12**, only a few illegally parked cars were recorded.

Figure 12: Parked Vehicles by Category – Peaks of Otter Visitor Center

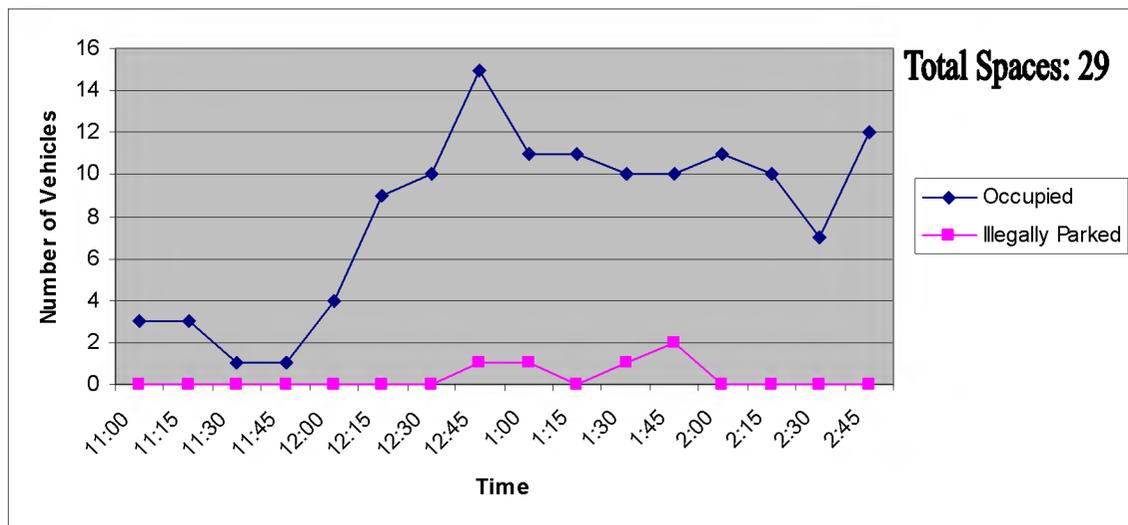


Figure 13: Parked Vehicle Classification - Peaks of Otter Visitor Center

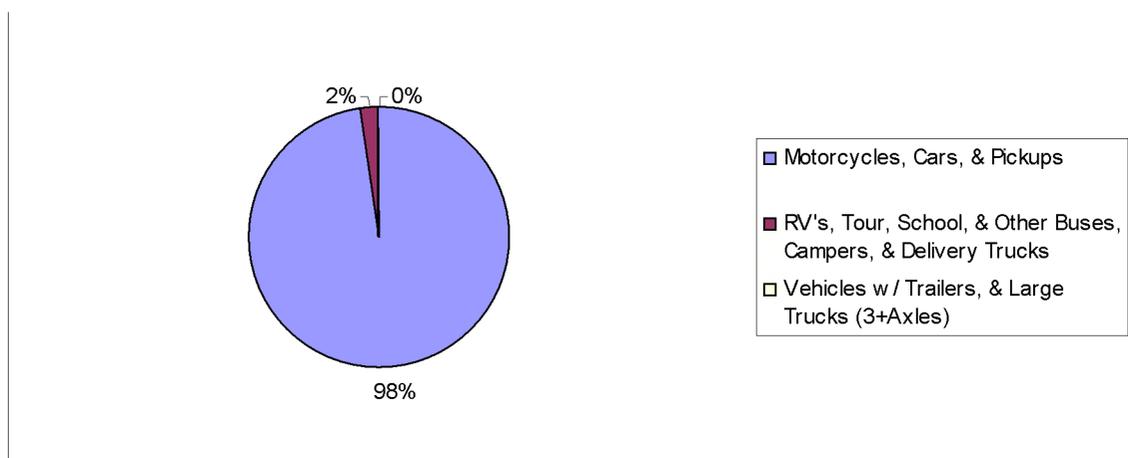




Figure 14: Peaks of Otter Visitor Center Driveway Daily Traffic Volumes

**TRAVEL PATTERNS**

The roadside survey was set up at MP 92.5 (northbound) and MP 91.8 (southbound), on Wednesday August 14, 2002. A total of 97 vehicles were stopped, 91 drivers answered the survey, and 6 drivers refused. Most of the drivers in this segment were using the Parkway for outdoor recreation, and 20% of them entered the Parkway at the intersection with US 221/460. In general, drivers in this area thought the Parkway was beautiful and well kept, although several people commented on overgrown overlooks in this area.

Table 2: Travel Patterns Data - Segment 1

Trip Purpose:

Purpose	Percent
Outdoor Recreation	71
Commute	8
Travel For Work	7
Personal Business	8
Shopping/Dining	2
Transporting Others	1
Other	3

Weekday Vehicle Occupancy:

Occupancy	Frequency	Percent
1	33	36
2	44	48
3	7	8
4	1	1
5	5	6
6	1	1
7	0	0
8	0	0
9	0	0
10 or more	0	0

N = 91; Mean = 1.9; Median = 2

Visitors vs. Locals:

Purpose	Percent
Visitors	89
Locals	11



Most Common Parkway Ramps:

Intersection with Blue Ridge Parkway	Percent
US 221/460	20
VA 43	18
Skyline Drive	16

Most Common General Comments:

Comment:	Percent
Beautiful/ Enjoy it/Like it/ Love it	36
Well maintained	7
Keep overlooks trimmed	5

**SEGMENT 2: SOUTH OF ROANOKE**

This segment begins in central Roanoke and extends south 55 miles to the Rocky Knob Visitor Center. It is located within the Plateau District of the Blue Ridge Parkway. This area is fairly flat with relatively few views and overlooks. There are several local roads that intersect the Parkway in this area. Therefore, it is used heavily by locals for personal business. During the study period Franklin Pike (VA 681) was closed north of VA 860 and, although the Parkway was not signed as a detour, many locals were using it as such.

TRAFFIC VOLUMES

These tables present traffic volumes collected using the National Park Service counters at several ramp locations. Those shown are only those also studied during the August 2002 study period.

Table 3: National Park Service Ramp Historic Traffic Volumes – Segment 2**US 220:**

Month	2000	2001	2002	% Change 00-01	% Change 01-02
January	36,699	21,195	22,066	-42.2	4.1
February	10,334	17,503	25,773	69.4	47.2
March	40,664	36,233	31,210	-10.9	-13.9
April	41,530	57,102	38,101	37.5	-33.3
May	44,267	60,899	39,267	37.6	-35.5
June	43,769	71,680	41,943	63.8	-41.5
July	45,016	69,348	43,517	54.1	-37.2
August	38,159	43,406	43,541	13.8	0.3
September	55,475	61,345	44,414	10.6	-27.6
October	52,600	86,599	63,854	64.6	-26.3
November	45,575	43,159		-5.3	
December	39,982	36,434		-8.9	

VA 8:

Month	2000	2001	2002	% Change 00-01	% Change 01-02
January	4,045	2,600	4,718	-35.7	81.5
February	2,220	5,665	6,942	155.2	22.5
March	7,266	4,429	3,832	-39.0	-13.5
April	7,329	7,043	7,345	-3.9	4.3
May	8,391	9,483	10,202	13.0	7.6
June	6,952	10,144	10,909	45.9	7.5
July	11,925	11,068	13,737	-7.2	24.1
August	11,735	11,884	12,490	1.3	5.1
September	7,832	3,182	8,992	-59.4	182.6
October	14,623	12,742	12,249	-12.9	-3.9
November	9,309	10,044		7.9	
December	3,322	4,908		47.7	



Weekday and weekend traffic volumes along the Parkway, cross streets and at intersections in this segment are shown in **Figures 17, 18 and 19.**

The automatic traffic counters were set up on the Blue Ridge Parkway at MP 127 on August 11 and 13, 2002. The following figures illustrate the traffic volumes and vehicle classifications collected at this location. The weekday hourly traffic by direction confirms the northbound AM and southbound PM commuting patterns of local traffic.

Figure 15: Weekday Hourly Traffic By Direction – Parkway MP 127

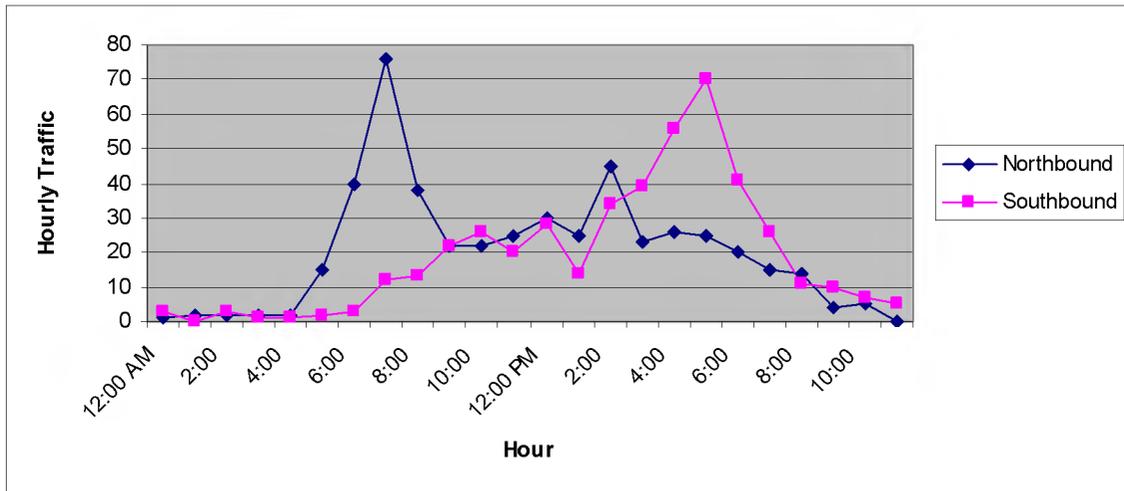


Figure 16: Weekend Hourly Traffic By Direction – Parkway MP 127

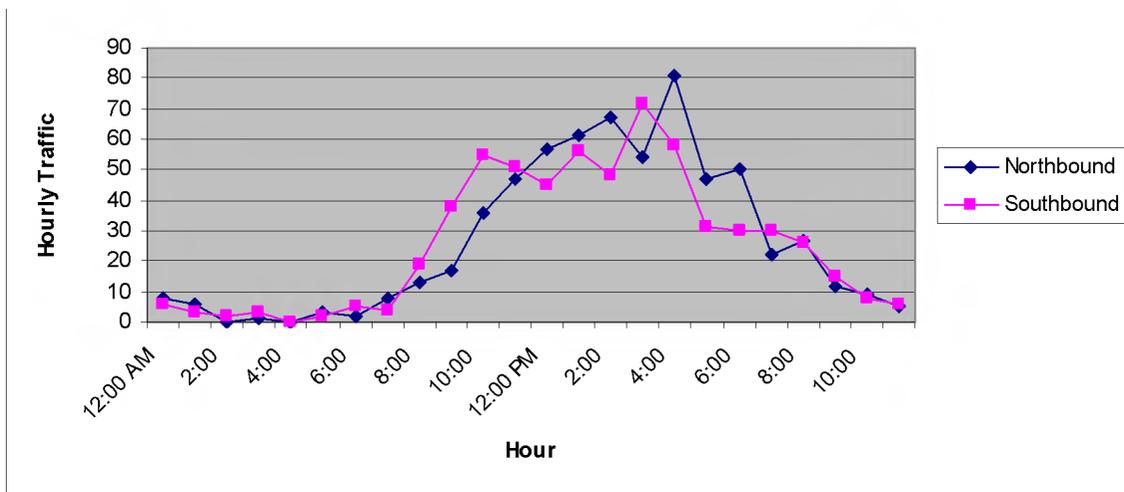




Figure 17: Weekday Daily Traffic Counts – Segment 2



Figure 18: Weekend Daily Traffic Counts – Segment 2



Figure 19: Weekday/Weekend Turning Movements – Segment 2



Figure 20: Weekday vs. Weekend Combined – Parkway MP 127

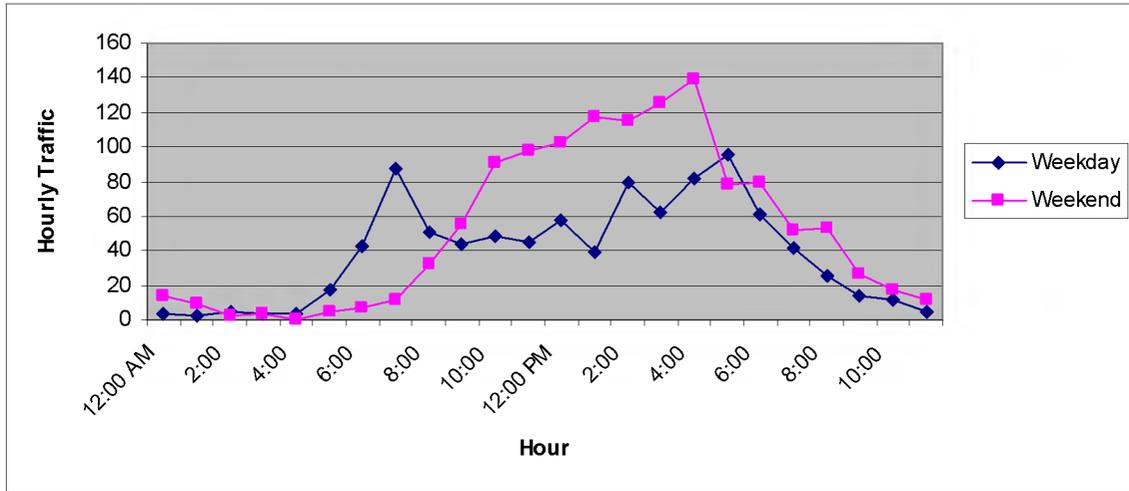


Figure 21: Weekday Vehicle Classification – Parkway MP 127

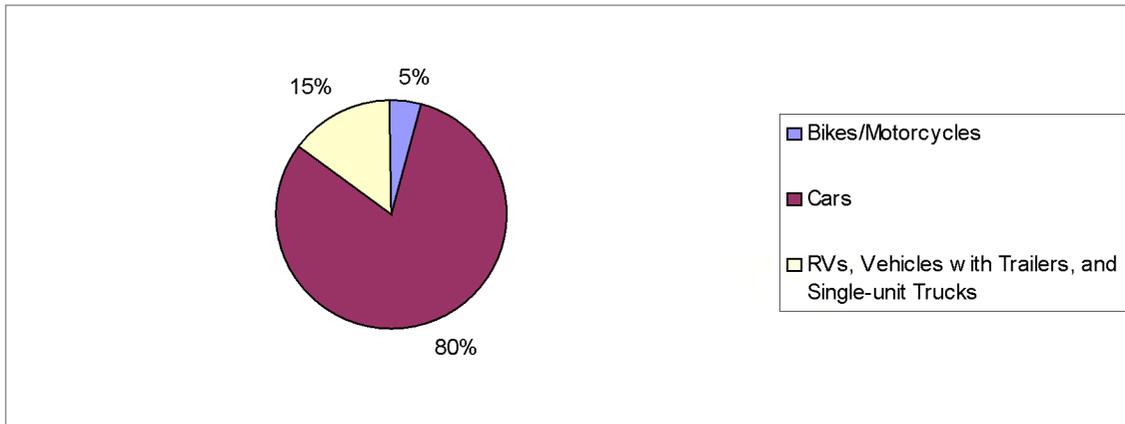
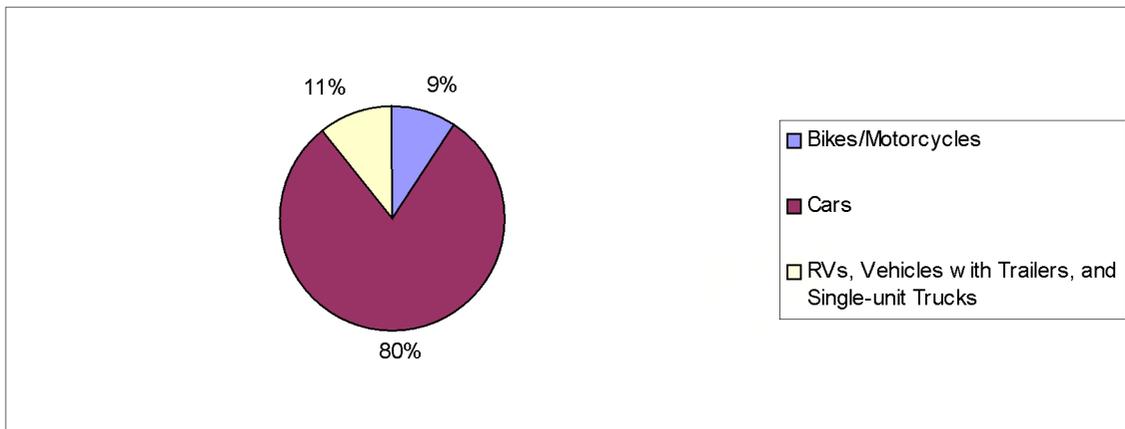


Figure 22: Weekend Vehicle Classification – Parkway MP 127





ACTIVITY CENTERS

The **Rocky Knob Visitor Center** was chosen as a high activity area within this segment. **Figure 25** shows the layout of the driveways, parking lot and visitor center, as well as the 24-hour traffic volumes collected for both weekday and weekend. The Rocky Knob Visitor Center has a total of 35 parking spaces. The maximum usage was 20% and only two illegally parked vehicles were noted during the study period.

Figure 23: Parked Vehicles by Category – Rocky Knob Visitor Center

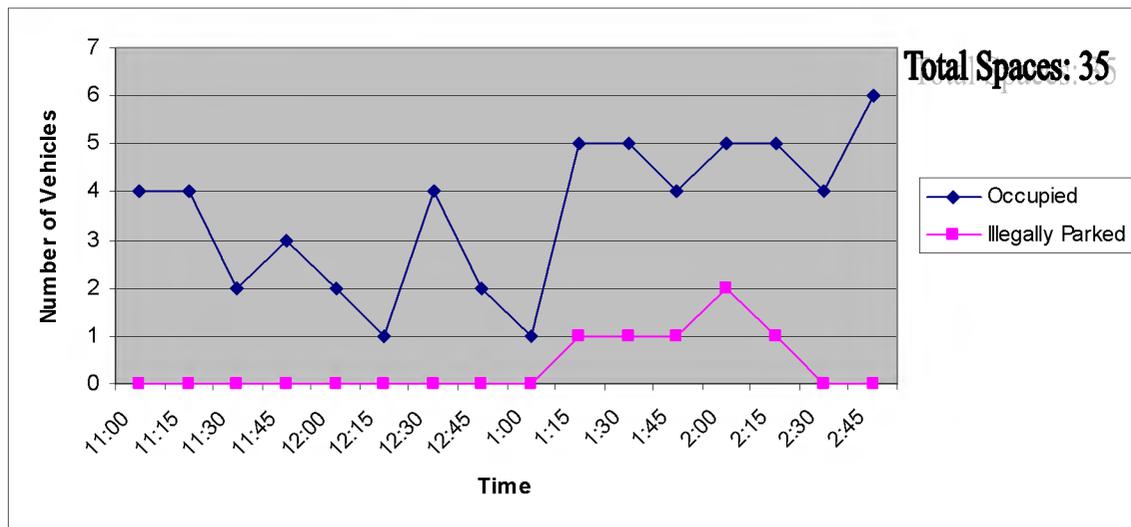


Figure 24: Parked Vehicle Classification - Rocky Knob Visitor Center

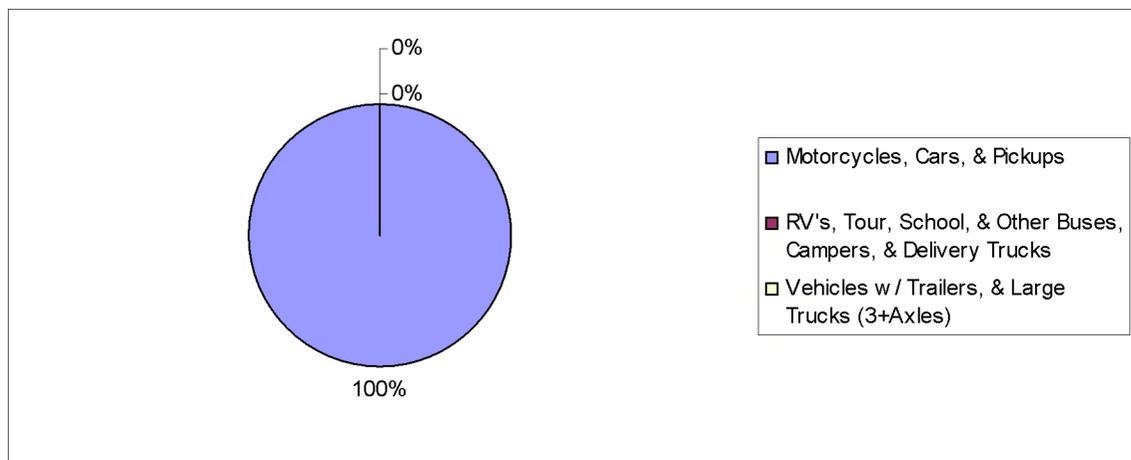




Figure 25: Rocky Knob Visitor Center Driveway Daily Traffic Volumes

**TRAVEL PATTERNS**

The roadside survey was set up at MP 157.6 (northbound) and MP 162.4 (southbound), on Tuesday August 13, 2002. A total of 152 vehicles were stopped, 144 drivers answered the survey, and 8 drivers refused. Most of the drivers in this segment were using the Parkway for outdoor recreation, although a relatively high percentage of drivers were locals using the Parkway for work travel or personal business. A total of 19% of the drivers surveyed entered the Parkway at the intersection with VA 860. In general, drivers in this area thought the Parkway was beautiful and well maintained, but several mentioned the need for more enforcement of the speed limit.

Table 4: Travel Patterns Data - Segment 2

Trip Purpose:

Purpose	Percent
Outdoor Recreation	51
Commute	10
Travel For Work	6
Personal Business	19
Shopping/Dining	11
Transporting Others	2
Other	1

Weekday Vehicle Occupancy:

Occupancy	Frequency	Percent
1	73	51
2	44	30
3	12	8
4	11	8
5	4	3
6	0	0
7	0	0
8	0	0
9	0	0
10 or more	0	0

N = 144; Mean = 1.8; Median = 1

Visitors vs. Locals:

Purpose	Percent
Visitors	71
Locals	29



Most Common Parkway Ramps:

Intersection with Blue Ridge Parkway	Percent
VA 860	19
VA 8	11
US 220	8

Most Common General Comments:

Comment:	Percent
Beautiful/ Enjoy it/Like it/ Love it	27
Well Maintained	5
Need more rangers/enforcement	3



SEGMENT 3: BETWEEN ROCKY KNOB AND CUMBERLAND KNOB VISITOR CENTERS

This segment begins at the Rocky Knob Visitor Center and extends to the Cumberland Knob Visitor Center. This area is within the Plateau District of the Blue Ridge Parkway. It includes Mabry Mill, a large destination for food. The road in this area has a straighter alignment and has more residential and agricultural land adjacent to the Parkway.

Figure 26: Blue Ridge Parkway at Mabry Mill – MP 176.2



TRAFFIC VOLUMES

These tables present traffic volumes collected using the National Park Service counters at several ramp locations. Those shown are only those also studied during the August 2002 study period.

**Table 5: National Park Service Ramp Historic Traffic Volumes – Segment 3**

US 58:

Month	2000	2001	2002	% Change 00-01	% Change 01-02
January	11,409	8,629	11,661	-24.4	35.1
February	4,545	14,754	14,375	224.6	-2.6
March	15,965	8,743	10,596	-45.2	21.2
April	14,622	16,288	17,361	11.4	6.6
May	15,356	20,039	23,578	30.5	17.7
June	28,998	20,941	16,871	-27.8	-19.4
July	22,930	18,547	26,678	-19.1	43.8
August	24,509	8,362	21,459	-65.9	156.6
September	22,359	21,408	19,287	-4.3	-9.9
October	32,095	22,062	28,246	-31.3	28.0
November	20,133	19,698		-2.2	
December	8,037	11,608		44.4	

US 52:

Month	2000	2001	2002	% Change 00-01	% Change 01-02
January	19,116	11,458	21,536	-40.1	88.0
February	6,794	19,132	26,419	181.6	38.1
March	26,196	18,738	19,084	-28.5	1.8
April	34,704	18,587	26,599	-46.4	43.1
May	26,027	34,016	37,034	30.7	8.9
June	44,217	39,177	44,262	-11.4	13.0
July	38,547	39,581	47,713	2.7	20.5
August	32,809	31,501	36,767	-4.0	16.7
September	26,537	36,961	35,091	39.3	-5.1
October	38,735	52,346	43,835	35.1	-16.3
November	33,279	35,311		6.1	
December	14,284	19,373		35.6	



VA 89:

Month	2000	2001	2002	% Change 00-01	% Change 01-02
January	149	3,183	4,874	2036.2	53.1
February	55	5,142	6,069	9249.1	18.0
March	819	4,691	3,616	472.8	-22.9
April	6,955	5,382	3,513	-22.6	-34.7
May	6,981	8,064	964	15.5	-88.0
June	6,885	5,444	13,011	-20.9	139.0
July	7,427	10,060	7,658	35.5	-23.9
August	2,336	8,419	6,813	260.4	-19.1
September	7,870	5,154	8,271	-34.5	60.5
October	9,320	8,094	8,448	-13.2	4.4
November	8,938	5,945		-33.5	
December	3,450	5,095		47.7	

Weekday and weekend traffic volumes along the Parkway, cross streets and at intersections in this segment are shown in **Figures 27, 28 and 29**.



Figure 27: Weekday Daily Traffic Counts – Segment 3



Figure 28: Weekend Daily Traffic Counts – Segment 3



Figure 29: Weekday/Weekend Turning Movements – Segment 3



The automatic traffic counters were set up on the Blue Ridge Parkway at MP 189.5 on August 11 and 12, 2002. The following figures illustrate the traffic volumes and vehicle classifications collected at this location.

Figure 30: Weekday Hourly Traffic By Direction – Parkway MP 189.5

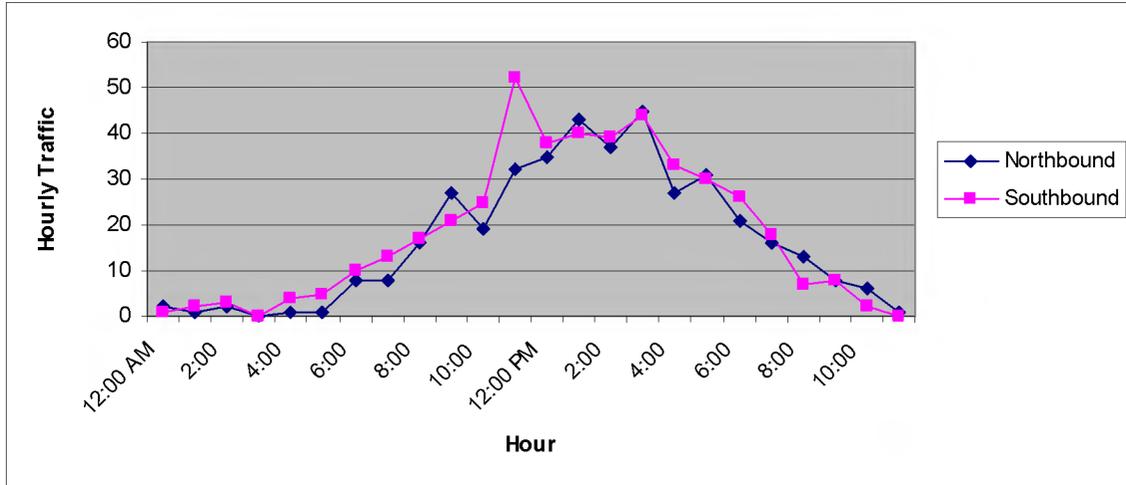


Figure 31: Weekend Hourly Traffic by Direction – Parkway MP 189.5

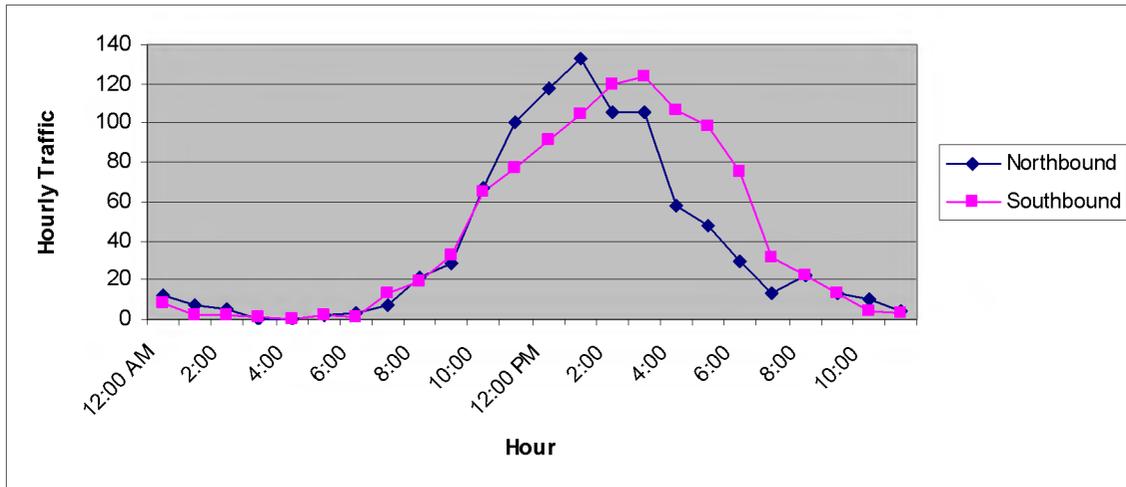




Figure 32: Weekday vs. Weekend Combined – Parkway MP 189.5

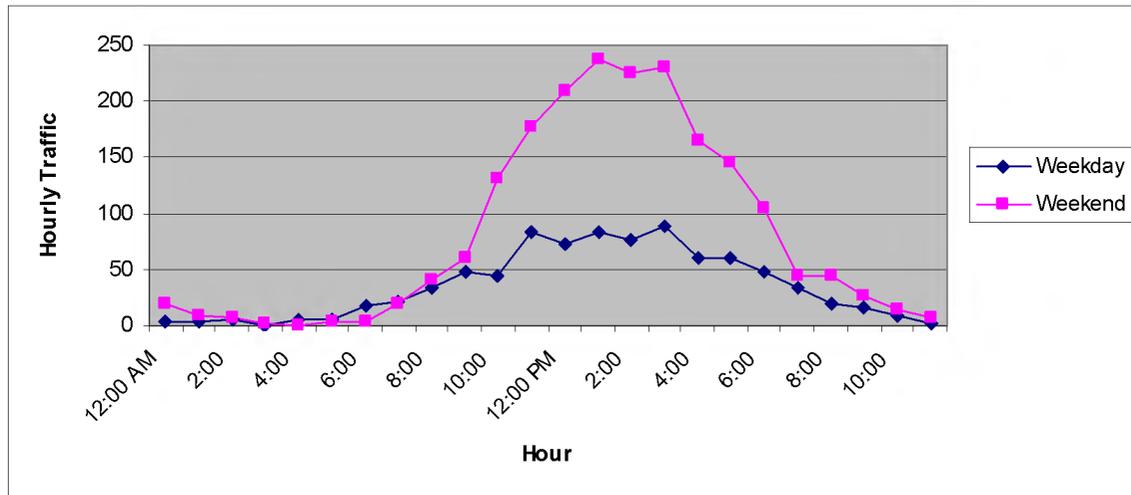


Figure 33: Weekday Vehicle Classification – Parkway MP 189.5

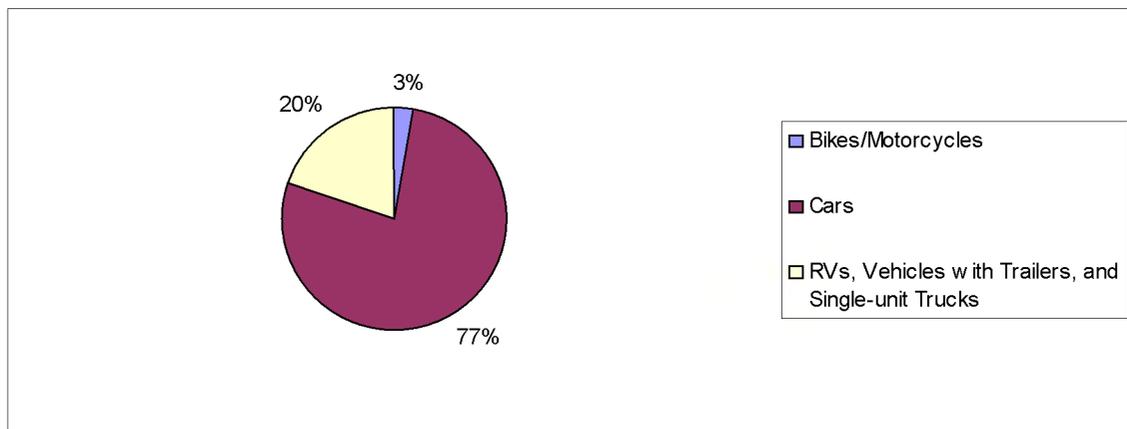
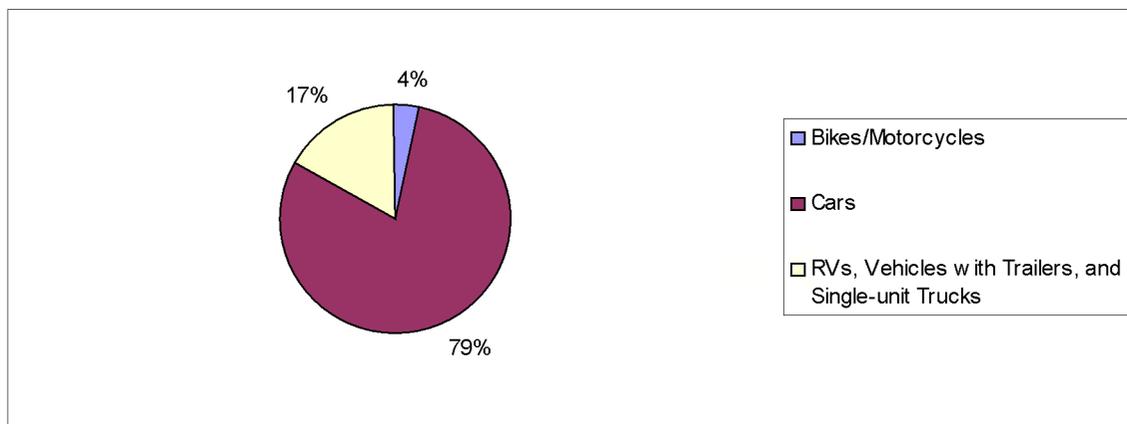


Figure 34: Weekend Vehicle Classification – Parkway MP 189.5





ACTIVITY CENTERS

The **Cumberland Knob Visitor Center** was chosen as a high activity area within this segment. **Figure 37** shows the layout of the driveways, parking lot and visitor center, as well as the 24-hour traffic volumes for both weekday and weekend. Cumberland Knob Visitor Center has a total of 55 parking spaces. During the study period no more than 18% of the spaces were used, and only one illegally parked vehicle was noted.

Figure 35: Parked Vehicles by Category – Cumberland Knob Visitor Center

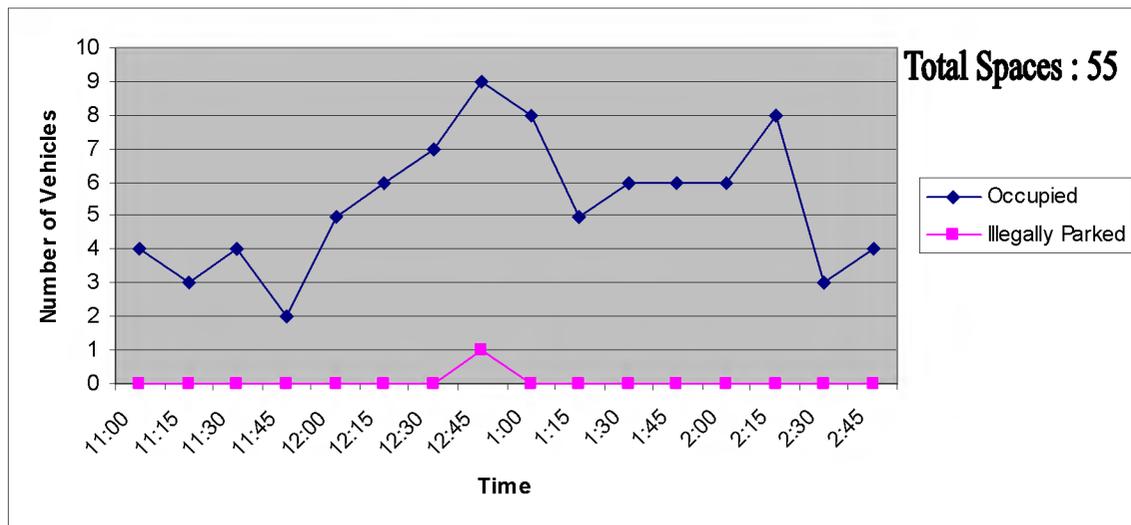


Figure 36: Parked Vehicle Classification - Cumberland Knob Visitor Center

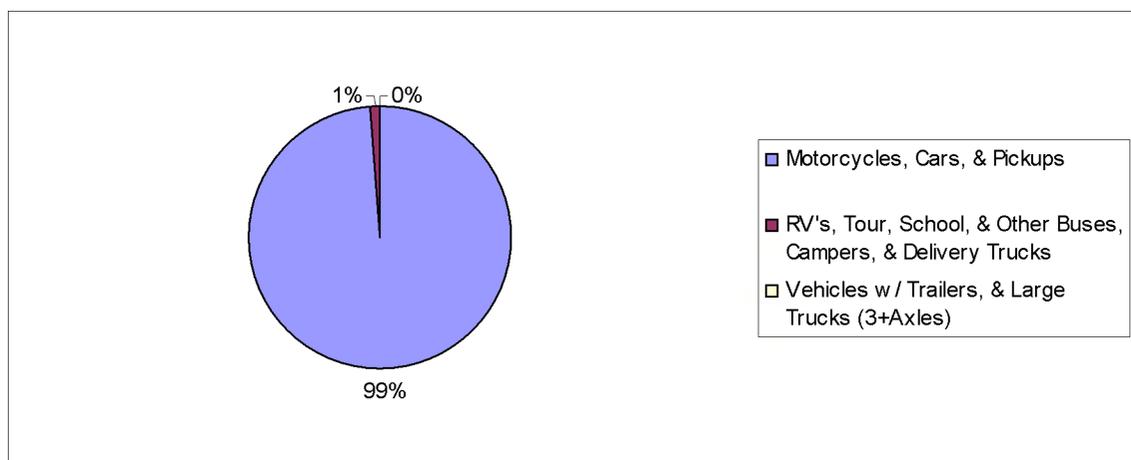




Figure 37: Cumberland Knob Visitor Center Driveway Daily Traffic Volumes

**TRAVEL PATTERNS**

The roadside survey was set up at MP 189.1 (northbound) and MP 189.9 (southbound), on Sunday August 11, 2002, and Monday August 12, 2002. On Sunday, 181 vehicles were stopped, 173 drivers answered the survey, and 8 drivers refused. On Monday, 187 vehicles were stopped, 173 drivers answered the survey, and 14 drivers refused. The data in this segment is based on surveys from both Sunday and Monday. Most of the drivers in this segment were using the Parkway for outdoor recreation, although a significant number of visitors were driving the Parkway for shopping/dining and personal business, most likely traveling between Fancy Gap and the Mabry Mill/Meadows of Dan areas. 35% of the drivers surveyed entered the Parkway at the intersection with US 52 near Fancy Gap and I-77. In the weekday survey, 26% of the drivers were locals while only 6% of the weekend drivers surveyed were local. The mean vehicle occupancy for the weekend (2.2) versus the weekday (1.9) also supports the increase in local drivers on the weekday. In general, drivers in this area thought the Parkway was beautiful, but there was mixed review on the maintenance of this segment.

Table 6: Travel Patterns Data - Segment 3

Trip Purpose:

Purpose	Percent
Outdoor Recreation	64
Commute	6
Travel For Work	5
Personal Business	12
Shopping/Dining	10
Transporting Others	1
Other	2

Weekday vs. Weekend Vehicle Occupancy:

Occupancy	Weekday		Weekend	
	Frequency	Percent	Frequency	Percent
1	66	38	34	20
2	76	44	98	57
3	16	9	19	11
4	9	5	15	9
5	5	3	6	3
6	0	0	0	0
7	1	1	1	0
8	0	0	0	0
9	0	0	0	0
10 or more	0	0	0	0

Weekday: N = 173; Mean = 1.9; Median = 2

Weekend: N = 173; Mean = 2.2; Median = 2



Weekday vs. Weekend /Visitors vs. Locals:

Purpose	Weekday	Weekend
	Percent	Percent
Visitors	74	94
Locals	26	6

Most Common Parkway Ramps:

Intersection with Blue Ridge Parkway	Percent
US 52	35
US 58	16
Skyline Drive	5

Most Common General Comments:

Comment:	Percent
Beautiful/ Enjoy it/Like it/ Love it	34
Well maintained	4
Needs better maintenance	3

**SEGMENT 4: NORTH OF BLOWING ROCK**

This segment begins at the Cumberland Knob Visitor Center and extends south 75 miles to the town of Blowing Rock. This area is within the Highlands District of the Blue Ridge Parkway. The Parkway has been closed from MP 270 to MP 281 for the last three years. The detour through Deep Gap is well signed along US 221 and NC 163, and has information centers at either end on the Parkway.

TRAFFIC VOLUMES

These tables present traffic volumes collected using the National Park Service counters at several ramp locations. Those shown are only those also studied during the August 2002 study period.

Table 7: National Park Service Ramp Historic Traffic Volumes – Segment 4**US 21:**

Month	2000	2001	2002	% Change 00-01	% Change 01-02
January	4,360	4,569	6,615	4.8	44.8
February	5,223	8,078	7,145	54.7	-11.5
March	6,346	6,680	7,588	5.3	13.6
April	10,214	11,377	10,123	11.4	-11.0
May	11,317	12,415	12,021	9.7	-3.2
June	14,708	15,465	27,550	5.1	78.1
July	18,499	15,719	12,674	-15.0	-19.4
August	15,679	17,605	12,455	12.3	-29.3
September	14,677	17,229	16,975	17.4	-1.5
October	17,960	19,920	21,282	10.9	6.8
November	10,426	12,072		15.8	
December	7,170	7,427		3.6	

NC 18:

Month	2000	2001	2002	% Change 00-01	% Change 01-02
January	3,672	4,687	4,707	27.6	0.4
February	6,204	5,162	5,095	-16.8	-1.3
March	2,376	4,499	4,485	89.4	-0.3
April	6,371	7,166	6,891	12.5	-3.8
May	7,687	8,513	8,211	10.7	-3.5
June	7,420	10,675	29,436	43.9	175.7
July	14,845	11,253	13,546	-24.2	20.4
August	11,373	11,529	12,479	1.4	8.2
September	10,779	11,880	11,692	10.2	-1.6
October	15,875	11,956	15,225	-24.7	27.3
November	8,389	8,811		5.0	
December	5,743	5,847		1.8	



US 421:

Month	2000	2001	2002	% Change 00-01	% Change 01-02
January	21,427	14,492	12,188	-32.4	-15.9
February	30,120	21,801	21,269	-27.6	-2.4
March	24,691	22,685	73,225	-8.1	222.8
April	29,154	29,640	23,108	1.7	-22.0
May	51,676	41,692	55,541	-19.3	33.2
June	37,681	38,442	49,794	2.0	29.5
July	42,221	36,298	69,810	-14.0	92.3
August	46,931	59,750	50,837	27.3	-14.9
September	40,981	28,645	50,986	-30.1	78.0
October	48,800	60,815	52,730	24.6	-13.3
November	32,924	19,691		-40.2	
December	13,657	26,826		96.4	

US 221/321:

Month	2000	2001	2002	% Change 00-01	% Change 01-02
January	25,507	25,490	22,313	-0.1	-12.5
February	20,728	33,840	33,841	63.3	0.0
March	33,930	27,479	17,384	-19.0	-36.7
April	41,740	75,341	20,771	80.5	-72.4
May	60,893	59,883	64,069	-1.7	7.0
June	61,378	60,033	58,699	-2.2	-2.2
July	73,655	83,279	86,512	13.1	3.9
August	78,905	76,211	77,147	-3.4	1.2
September	74,075	74,984	72,784	1.2	-2.9
October	84,084	87,678	85,121	4.3	-2.9
November	52,974	33,283		-37.2	
December	21,935	33,159		51.2	

Weekday and weekend traffic volumes along the Parkway, cross streets and at intersections in this segment are shown in **Figures 38, 39 and 40**.



Figure 38: Weekday Daily Traffic Counts – Segment 4



Figure 39: Weekend Daily Traffic Counts – Segment 4



Figure 40: Weekday/Weekend Turning Movements – Segment 4



The automatic traffic counters were set up on the Blue Ridge Parkway at MP 286 on August 4 and 8, 2002. The following figures illustrate the traffic volumes and vehicle classifications collected at this location.

Figure 41: Weekday Hourly Traffic By Direction – Parkway MP 286

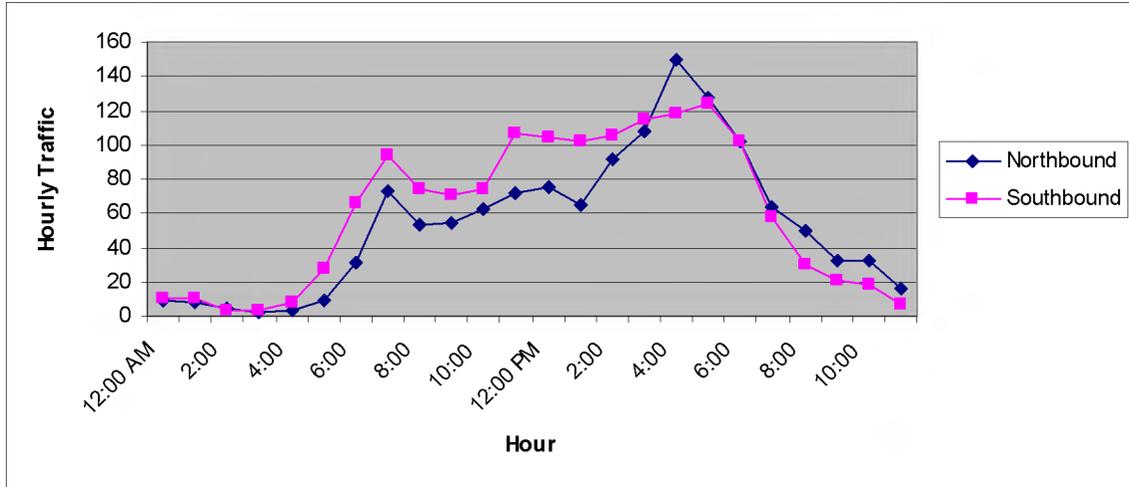


Figure 42: Weekend Hourly Traffic by Direction – Parkway MP 286

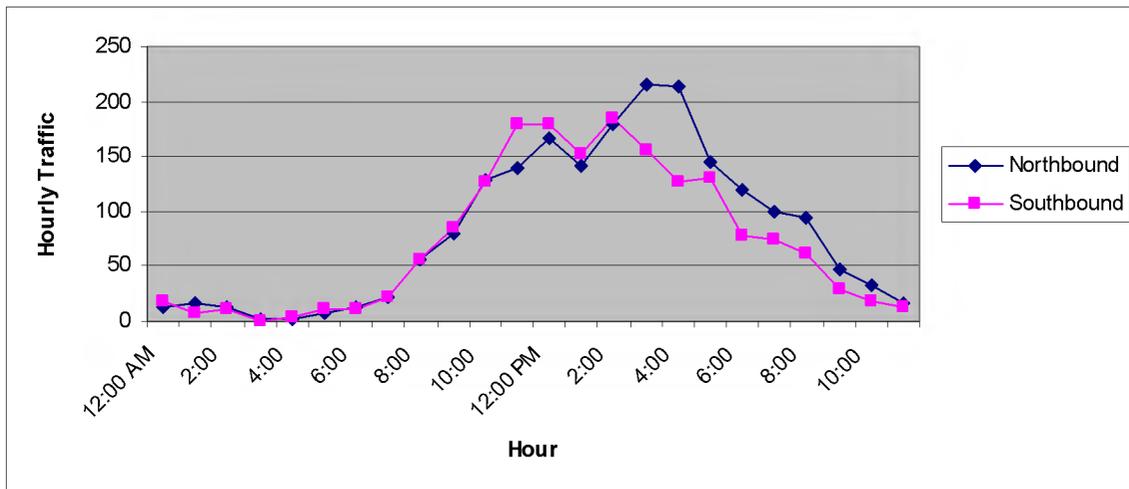




Figure 43: Weekday vs. Weekend Combined – Parkway MP 286

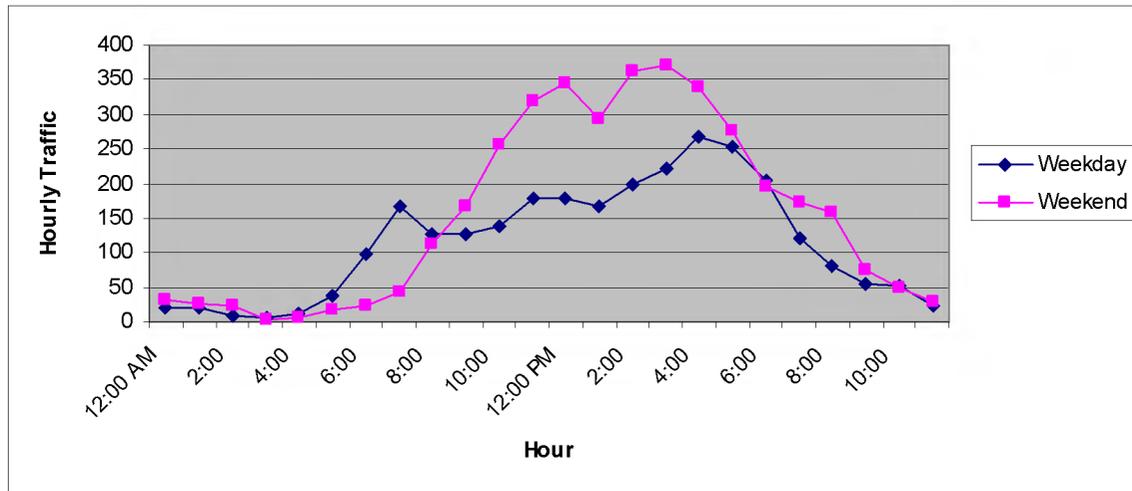


Figure 44: Weekday Vehicle Classification – Parkway MP 286

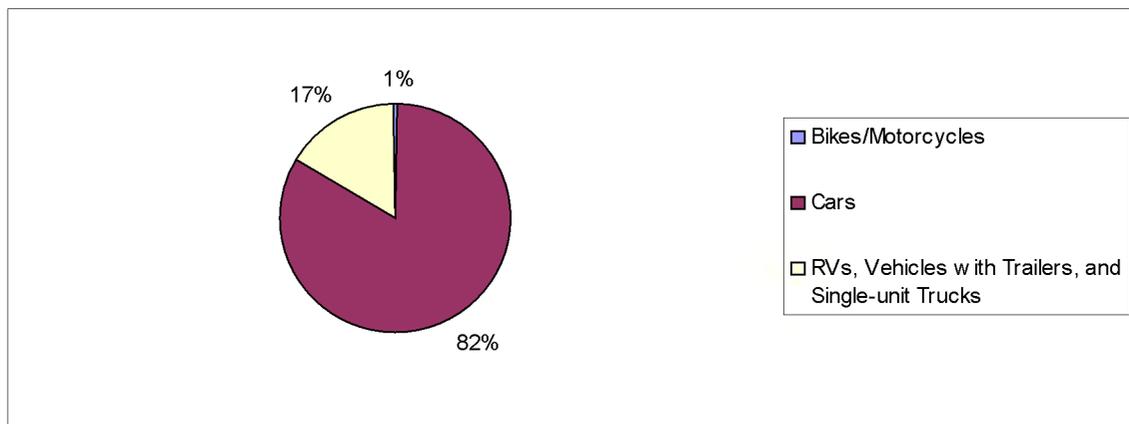
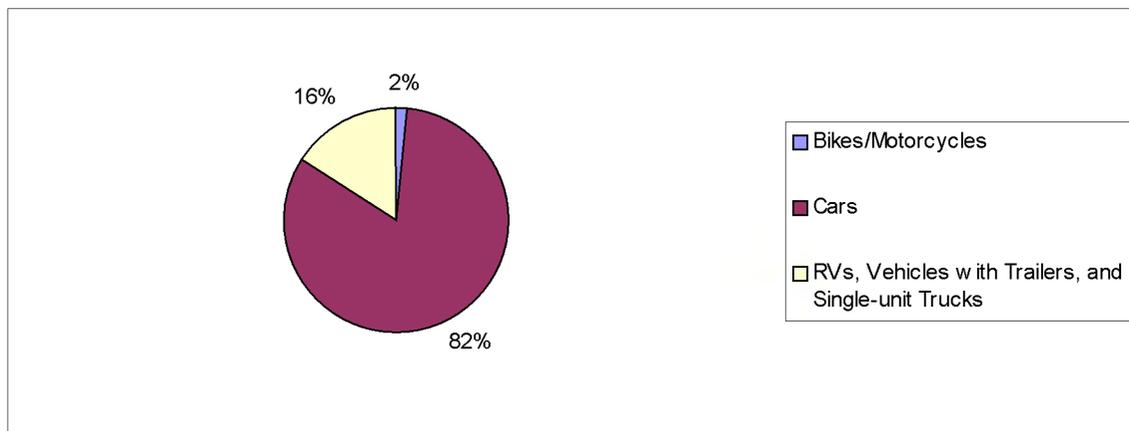


Figure 45: Weekend Vehicle Classification – Parkway MP 286





ACTIVITY CENTERS

Moses H. Cone Memorial Park was recognized as a high activity area within this segment. **Figure 48** shows the layout of the driveways, parking lot and visitor center, as well as the 24-hour traffic volumes collected for both weekday and weekend. The park has 45 total spaces and during the study period was never more than 58% full. Very few illegally parked vehicles were noted during the weekday study period, although photos from Saturday August 10, 2002 show several illegally parked vehicles.

Figure 46: Moses H. Cone Memorial Park Parking Area - Weekend



Figure 47: Parked Vehicle by Category – Moses H. Cone Memorial Park

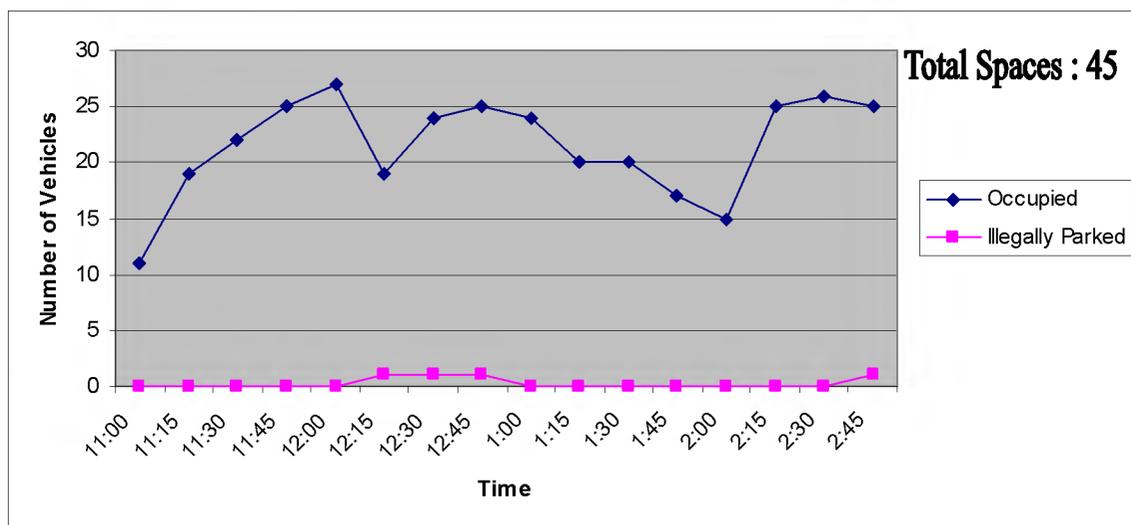
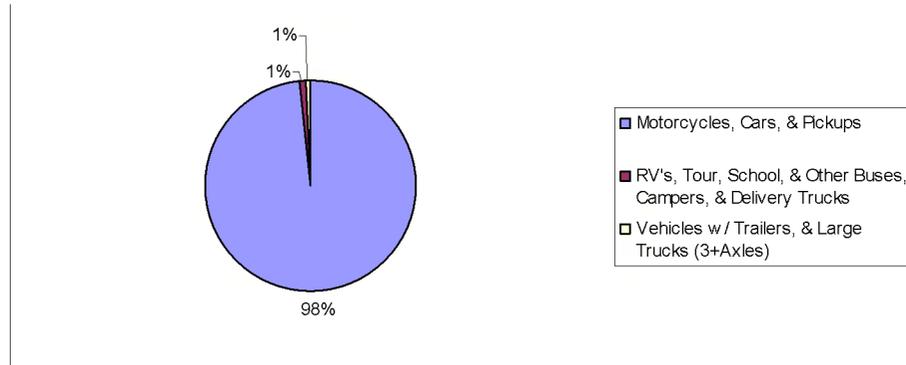




Figure 48: Moses H. Cone Memorial Park Driveway Daily Traffic Volumes



Figure 49: Parked Vehicle Classification - Moses H. Cone Memorial Park



TRAVEL PATTERNS

The roadside survey was set up at MP 235.7 (northbound) and MP 236.9 (southbound), on Thursday August 8, 2002. A total of 135 vehicles were stopped, 119 drivers answered the survey, and 16 drivers refused. Most of the drivers in this segment were using the Parkway for outdoor recreation, although 26% if them were locals. 19% of the drivers surveyed entered the Parkway at the intersection with US 21 near Sparta. In general, drivers in this area thought the Parkway was beautiful, but there were a few complaints about the detour.

Table 8: Travel Patterns Data - Segment 4

Trip Purpose:

Purpose	Percent
Outdoor Recreation	80
Commute	8
Travel For Work	3
Personal Business	7
Shopping/Dining	2
Transporting Others	0
Other	0

Visitors vs. Locals:

Purpose	Percent
Visitors	74
Locals	26



Weekday Vehicle Occupancy:

Occupancy	Frequency	Percent
1	39	33
2	56	47
3	11	9
4	9	8
5	3	2
6	1	1
7	0	0
8	0	0
9	0	0
10 or more	0	0

N = 119; Mean = 1.6; Median = 2

Most Common Parkway Ramps:

Intersection with Blue Ridge Parkway	Percent
US 21	19
US 421	13
US 52	8

Most Common General Comments:

Comment:	Percent
Beautiful/ Enjoy it/Like it/ Love it	31
Well maintained	6
Complaints about the construction/detour	3

**SEGMENT 5: NORTH OF ASHEVILLE**

This segment begins in Blowing Rock and extends south 92 miles to Asheville. This area is in the Black Mountain and Pisgah Districts of the Blue Ridge Parkway. The segment includes Mt. Mitchell, the highest point east of the Mississippi River, and several other visitor centers. Many people from Asheville take day trips within this segment.

TRAFFIC VOLUMES

These tables present traffic volumes collected using the National Park Service counters at several ramp locations. Those shown are only those also studied during the August 2002 study period.

Table 9: National Park Service Ramp Historic Traffic Volumes – Segment 5**US 221:**

Month	2000	2001	2002	% Change 00-01	% Change 01-02
January	8,059	2,920	10,902	-63.8	273.4
February	3,086	3,102	9,954	0.5	220.9
March	10,720	6,692	3,979	-37.6	-40.5
April	16,310	13,451	19,281	-17.5	43.3
May	18,321	17,637	17,751	-3.7	0.6
June	25,100	17,493	22,465	-30.3	28.4
July	28,330	28,943	29,476	2.2	1.8
August	24,135	25,918	27,798	7.4	7.3
September	17,675	20,700	19,428	17.1	-6.1
October	25,601	27,450	23,587	7.2	-14.1
November	13,581	15,874		16.9	
December	5,182	8,989		73.5	

NC 226:

Month	2000	2001	2002	% Change 00-01	% Change 01-02
January	7,639	4,159	12,767	-45.6	207.0
February	2,508	11,685	13,757	365.9	17.7
March	13,503	10,815	9,878	-19.9	-8.7
April	19,710	20,272	23,688	2.9	16.9
May	22,965	23,142	21,987	0.8	-5.0
June	33,323	34,474	27,974	3.5	-18.9
July	34,989	36,827	35,726	5.3	-3.0
August	34,640	35,861	35,000	3.5	-2.4
September	27,127	27,922	27,108	2.9	-2.9
October	31,006	30,944	22,779	-0.2	-26.4
November	17,720	21,716		22.6	
December	8,000	12,095		51.2	



US 70:

Month	2000	2001	2002	% Change 00-01	% Change 01-02
January	37,408	39,417	36,582	5.4	-7.2
February	23,173	29,600	48,504	27.7	63.9
March	45,499	23,928	34,800	-47.4	45.4
April	50,080	43,543	40,244	-13.1	-7.6
May	56,535	31,370	55,428	-44.5	76.7
June	60,160	51,310	56,780	-14.7	10.7
July	65,635	62,427	61,062	-4.9	-2.2
August	62,557	52,268	60,701	-16.4	16.1
September	72,717	60,899	48,870	-16.3	-19.8
October	73,800	65,348	75,468	-11.5	15.5
November	51,000	48,851		-4.2	
December	43,250	28,140		-34.9	

US 74:

Month	2000	2001	2002	% Change 00-01	% Change 01-02
January	46,274	53,726	44,775	16.1	-16.7
February	25,415	45,825	64,260	80.3	40.2
March	39,414	28,742	64,322	-27.1	123.8
April	49,650	49,357	36,951	-0.6	-25.1
May	44,288	56,810	52,387	28.3	-7.8
June	71,193	60,261	68,789	-15.4	14.2
July	61,732	65,430	72,850	6.0	11.3
August	74,431	79,605	76,684	7.0	-3.7
September	56,119	56,813	75,838	1.2	33.5
October	66,591	114,041	83,795	71.3	-26.5
November	54,175	57,287		5.7	
December	35,000	34,097		-2.6	

Weekday and weekend traffic volumes along the Parkway, cross streets and at intersections in this segment are shown in **Figures 50, 51 and 52**.



Figure 50: Weekday Daily Traffic Counts – Segment 5



Figure 51: Weekend Daily Traffic Counts – Segment 5



Figure 52: Weekday/Weekend Turning Movements – Segment 5



The automatic traffic counters were set up on the Blue Ridge Parkway at MP 378 on August 7 and 10, 2002. The following figures illustrate the traffic volumes and vehicle classifications collected at this location.

Figure 53: Weekday Hourly Traffic By Direction – Parkway MP 378

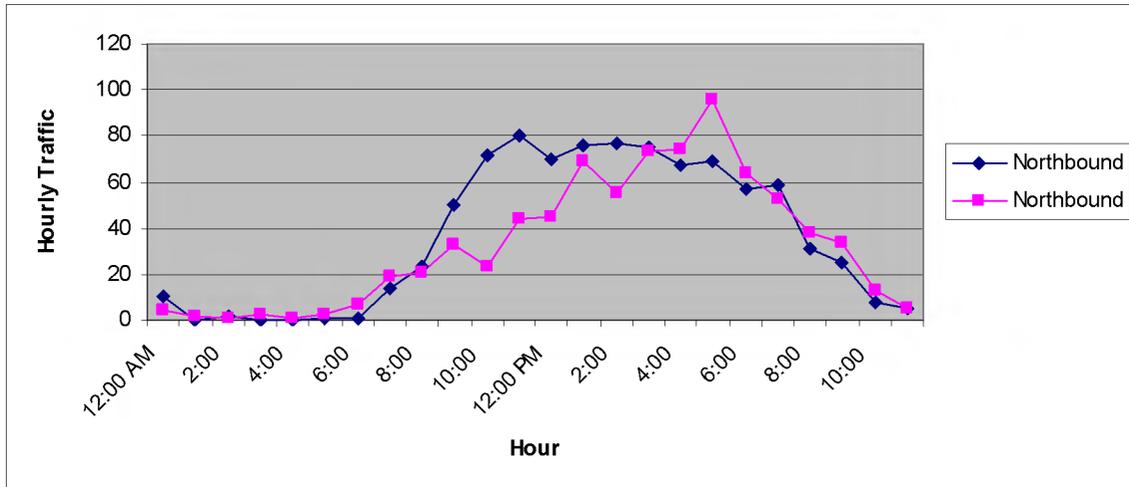


Figure 54: Weekend Hourly Traffic by Direction – Parkway MP 378

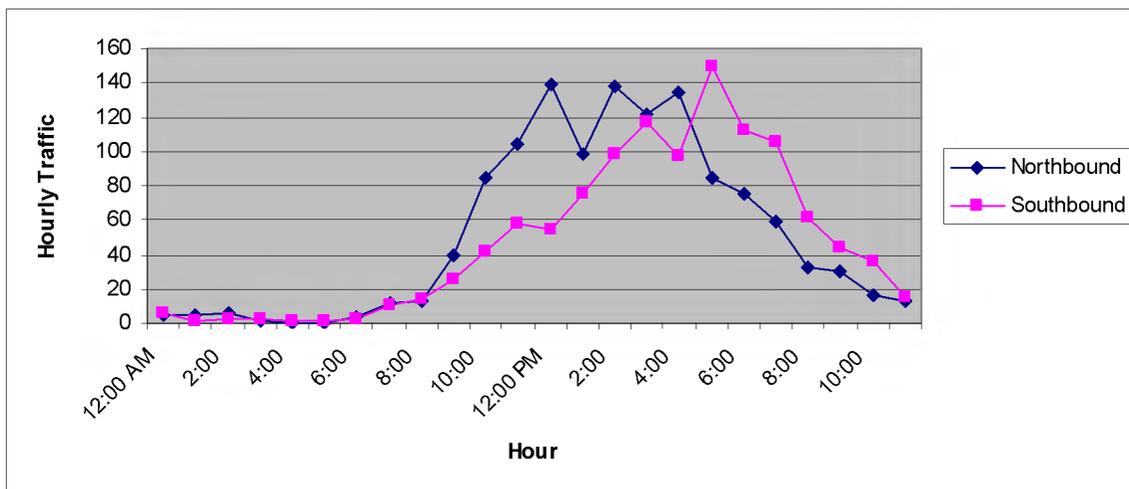




Figure 55: Weekday vs. Weekend Combined – Parkway MP 378

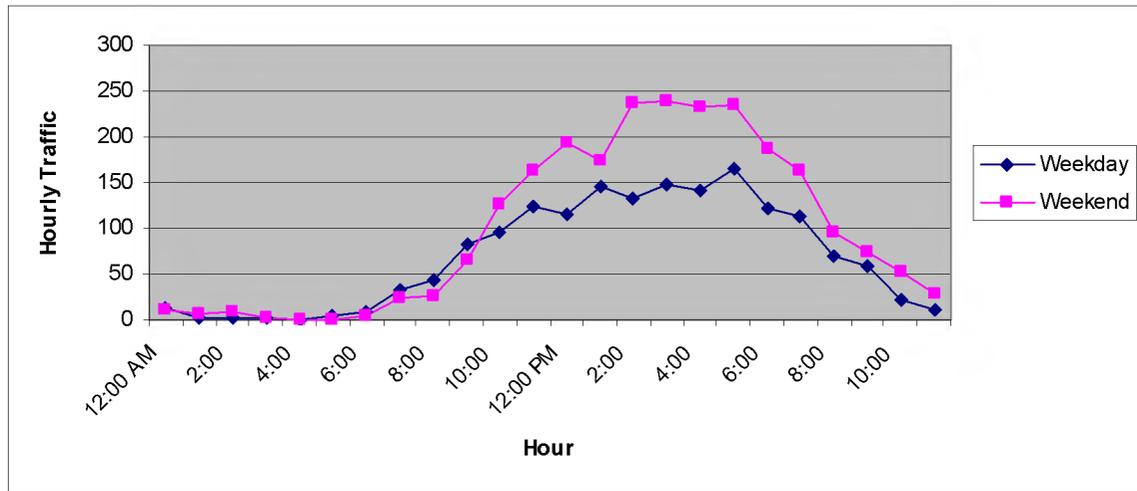


Figure 56: Weekday Vehicle Classification – Parkway MP 378

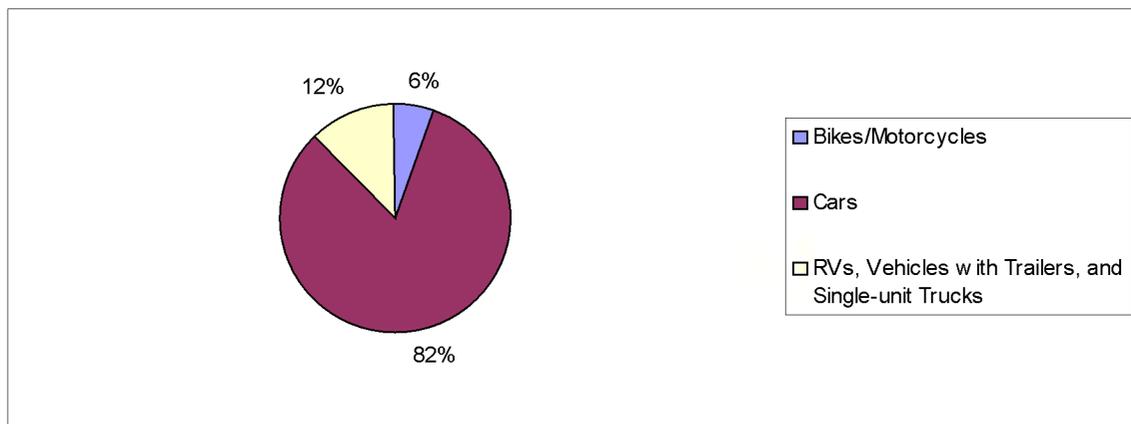
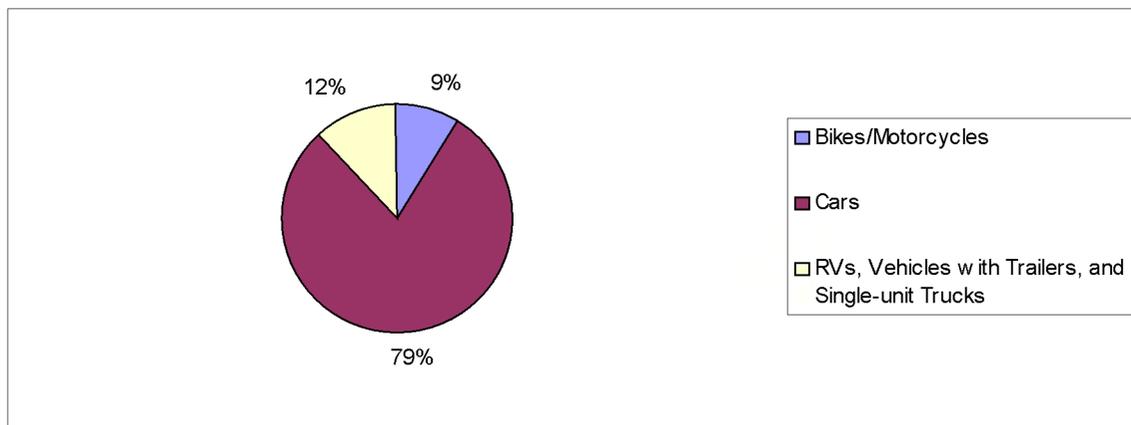


Figure 57: Weekend Vehicle Classification – Parkway MP 378





ACTIVITY CENTERS

There are several high activity areas within this segment. Those studied were Julian Price Memorial Park, Linn Cove Viaduct Visitor Center, Linville Falls Visitor Center, and the Folk Art Center. **Figures 59, 64, 67, and 70** respectively show the layout of the driveways, parking lot and visitor center, as well as the 24-hour traffic volumes for both weekday and weekend at each area.

Julian Price Memorial Park has a total of 221 parking spaces. The majority of this area is not striped so the number of spaces could vary. Only 17% of the parking lot was used during the study period. Only one illegally parked vehicle was noted during the weekday study period, although pictures from Saturday August 10, 2002 show several illegally parked vehicles.

Figure 58: Julian Price Memorial Park Parking Area - Weekend





Figure 59: Julian Price Memorial Park Driveway Daily Traffic Volumes



Figure 60: Parked Vehicle by Category – Julian Price Memorial Park

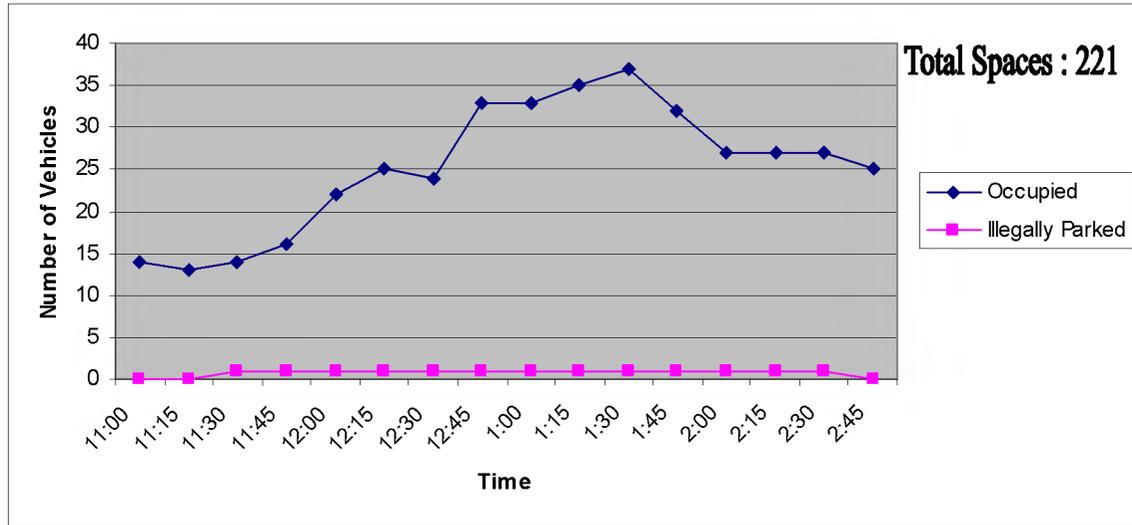
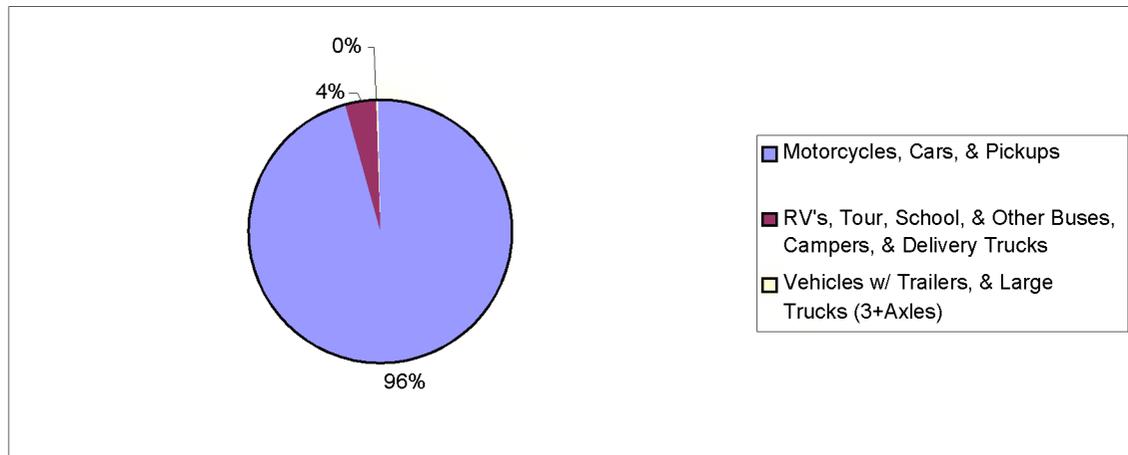


Figure 61: Parked Vehicle Classification - Julian Price Memorial Park





Linn Cove Viaduct Visitor Center has a total of 40 parking spaces, and the parking lot was never more than 28% full during the study period. No illegally parked vehicles were recorded.

Figure 62: Parked Vehicle by Category – Linn Cove Viaduct Visitor Center

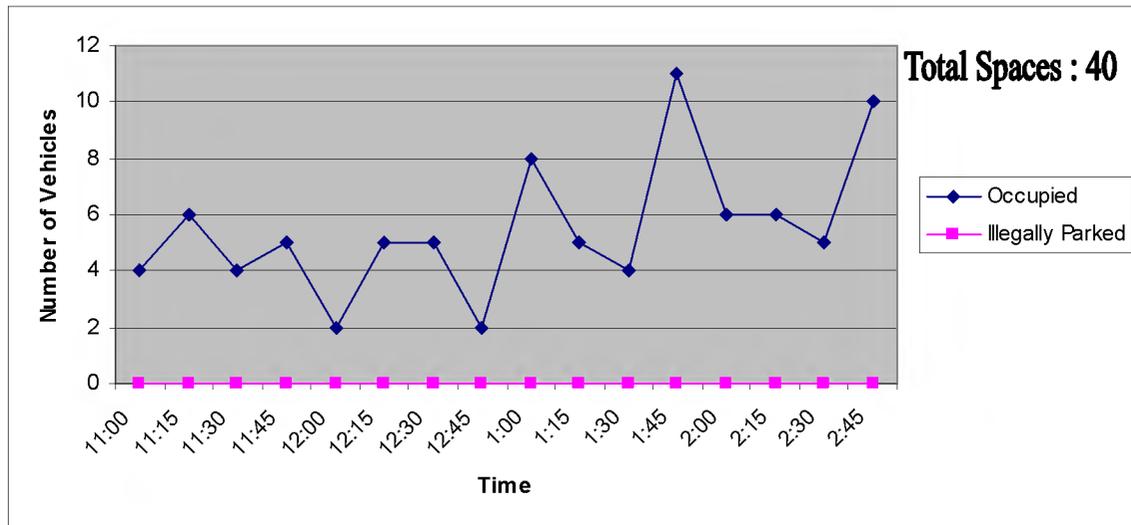


Figure 63: Parked Vehicle Classification - Linn Cove Viaduct Visitor Center

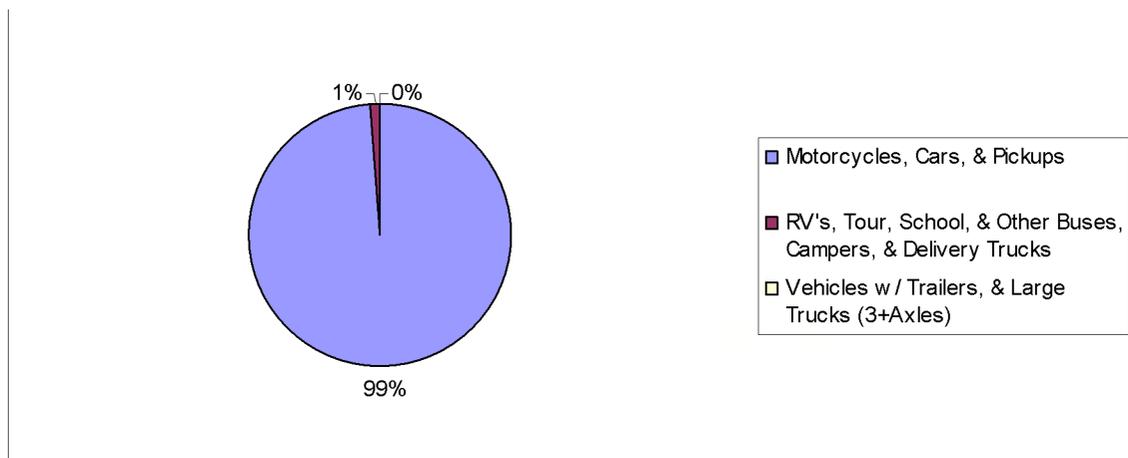




Figure 64: Linn Cove Viaduct Visitor Center Driveway Daily Traffic Volumes



Linville Falls Visitor Center has a total of 85 parking spaces, and the parking lot was never more than 44% full during the study period. Only one illegally parked car was recorded during the study period.

Figure 65: Parked Vehicle by Classification – Linville Falls Visitor Center

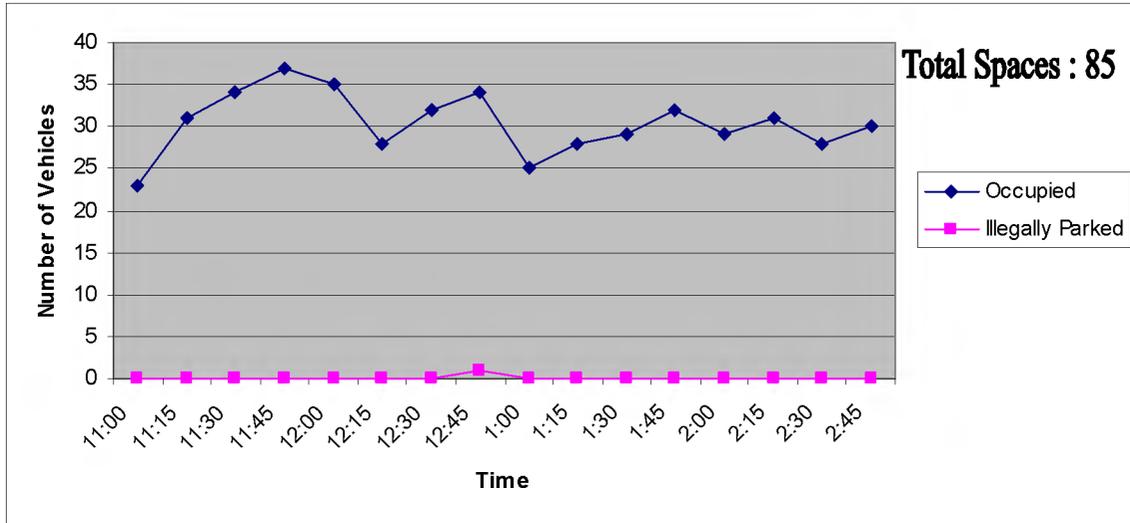


Figure 66: Parked Vehicle Classification - Linville Falls Visitor Center

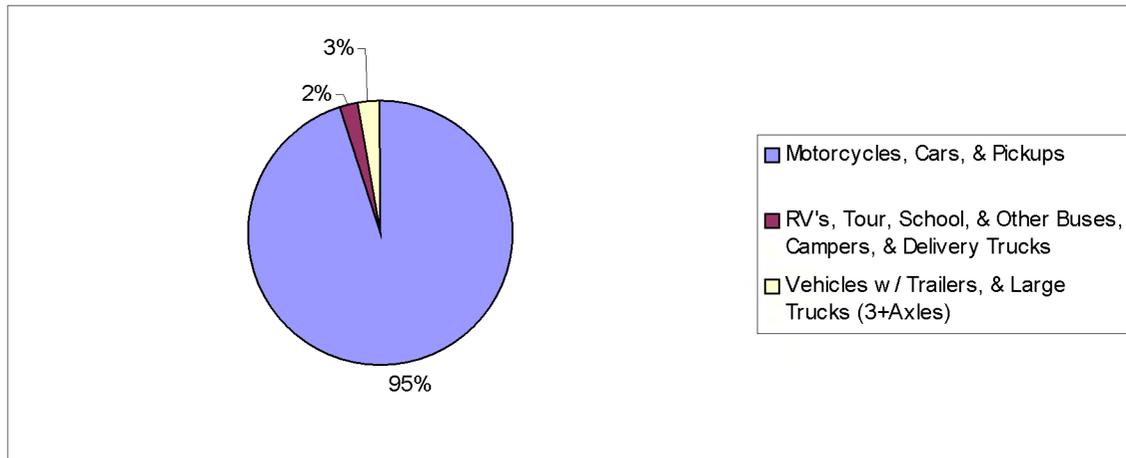




Figure 67: Linville Falls Visitor Center Driveway Daily Traffic Volumes



The **Folk Art Center** has a total of 150 parking spaces. This parking lot was never more than 24% full during the study period, and no illegally parked vehicles were recorded.

Figure 68: Parked Vehicle by Category – Folk Art Center

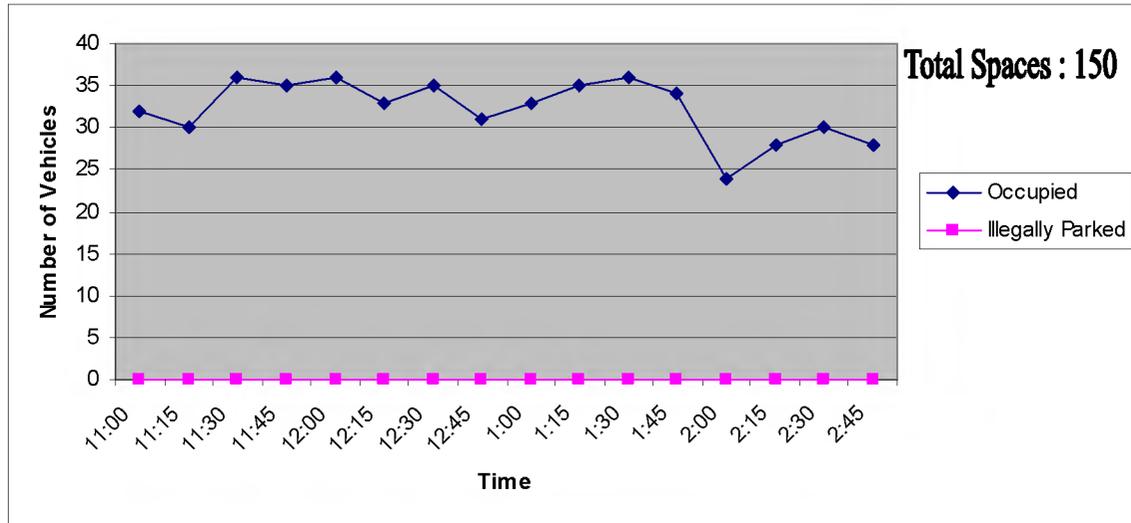


Figure 69: Parked Vehicle Classification - Folk Art Center

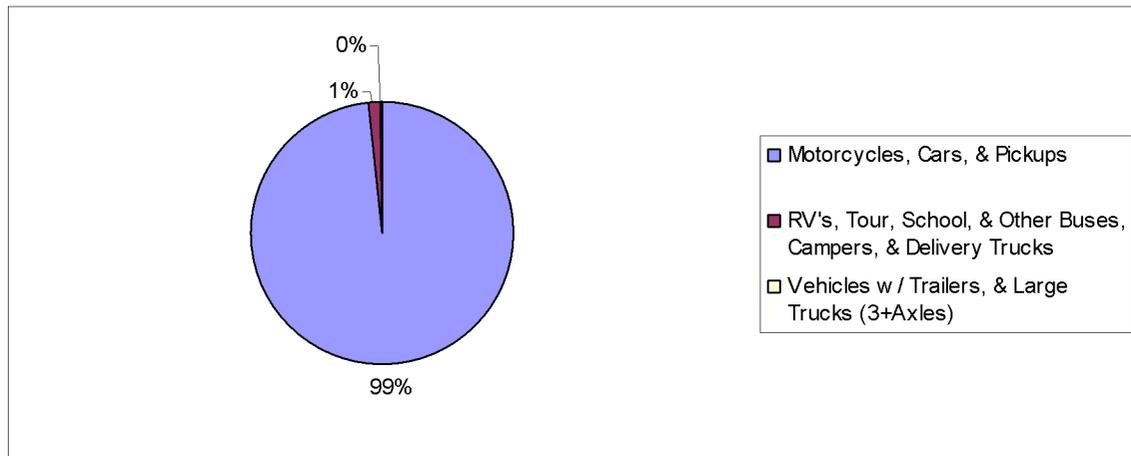




Figure 70: Folk Art Center Driveway Daily Traffic Volumes

**TRAVEL PATTERNS**

The roadside survey was set up at MP 361.2 (northbound) and MP 359.8 (southbound), on both Wednesday August 7, 2002 and Saturday August 10, 2002. On Wednesday, 126 vehicles were stopped, 120 drivers answered the survey, and 6 drivers refused. On Saturday, 155 vehicles were stopped, 146 drivers answered the survey, and 9 drivers refused. The data for this segment includes both the Wednesday and Saturday surveys. The vast majority of the drivers in this segment were using the Parkway for outdoor recreation, and 33% of them entered the Parkway at the intersection with US 70 just north of Asheville. There was not a large difference in the percentage of locals versus visitors stopped in the weekday and the weekend surveys and the mean vehicle occupancy for both the weekday and weekend was 2.4. In general, drivers in this area thought the Parkway was beautiful, although several drivers commented on the lack of informational and directional signs.

Table 10: Travel Pattern Data - Segment 5

Trip Purpose:

Purpose	Percent
Outdoor Recreation	95
Commute	2
Travel For Work	0
Personal Business	1
Shopping/Dining	2
Transporting Others	0
Other	0

Weekday vs. Weekend Vehicle Occupancy:

Occupancy	Weekday		Weekend	
	Frequency	Percent	Frequency	Percent
1	30	25	24	16
2	51	43	77	53
3	15	12	16	11
4	15	12	22	15
5	6	5	4	3
6	3	3	1	1
7	0	0	1	1
8	0	0	0	0
9	0	0	0	0
10 or more	0	0	1	0

Weekday: N = 120; Mean = 2.4; Median = 2

Weekend: N = 146; Mean = 2.4; Median = 2



Weekday vs. Weekend / Visitors vs. Locals:

Purpose	Weekday	Weekend
	Percent	Percent
Visitors	87	86
Locals	13	14

Most Common Parkway Ramps:

Intersection with Blue Ridge Parkway	Percent
US 70	33
US 74	11
US 321	10

Most Common General Comments:

Comment:	Percent
Beautiful/ Enjoy it/Like it/ Love it	33
Well maintained	8
Lacking information/direction signs	3



SEGMENT 6: SOUTH OF ASHEVILLE

This segment is the southernmost segment of the Parkway that extends from Asheville 84 miles to the southern end of the Parkway. The Parkway ends in the Cherokee Indian Reservation, near the town of Cherokee. This area is within the Pisgah District of the Blue Ridge Parkway and contains the highest point on the Parkway at MP 431.4. It also contains Mt. Pisgah, a popular restaurant and lodge, and Graveyard Fields, a popular berry picking and hiking area. During the study period there were several overlooks closed and the Parkway was flagged for one lane closure due to construction activity in the vicinity of MP 420 to 430.

Figure 71: Highest Point on the Parkway at MP 431.4



**TRAFFIC VOLUMES**

These tables present traffic volumes collected using the National Park Service counters at several ramp locations. Those shown are only those also studied during the August 2002 study period.

Table 11: National Park Service Ramp Historic Traffic Volumes – Segment 6**US 25:**

Month	2000	2001	2002	% Change 00-01	% Change 01-02
January	35,814	38,622	35,730	7.8	-7.5
February	64,944	65,550	79,695	0.9	21.6
March	58,469	56,548	30,787	-3.3	-45.6
April	102,010	96,223	105,734	-5.7	9.9
May	80,969	111,075	121,332	37.2	9.2
June	110,483	109,191	94,738	-1.2	-13.2
July	118,612	121,575	105,989	2.5	-12.8
August	116,351	113,581	108,909	-2.4	-4.1
September	120,275	119,301	108,710	-0.8	-8.9
October	125,700	147,930	129,512	17.7	-12.5
November	104,000	111,366		7.1	
December	53,360	56,677		6.2	

US 276:

Month	2000	2001	2002	% Change 00-01	% Change 01-02
January	3,377	1,105	4,201	-67.3	280.2
February	2,323	2,380	2,875	2.5	20.8
March	4,307	2,500	2,110	-42.0	-15.6
April	6,340	4,320	8,867	-31.9	105.3
May	10,172	9,323	14,518	-8.3	55.7
June	16,394	16,808	11,626	2.5	-30.8
July	12,888	18,064	17,112	40.2	-5.3
August	15,417	19,771	15,941	28.2	-19.4
September	11,426	9,565	10,600	-16.3	10.8
October	19,104	18,198	14,907	-4.7	-18.1
November	22,439	6,711		-70.1	
December	2,144	2,465		15.0	



US 23/74:

Month	2000	2001	2002	% Change 00-01	% Change 01-02
January	516	72	1,572	-86.0	2083.3
February	217	591	274	172.4	-53.6
March	570	1,021	3,305	79.1	223.7
April	4,718	4,902	5,670	3.9	15.7
May	10,201	8,321	11,206	-18.4	34.7
June	11,024	11,327	2,096	2.7	-81.5
July	9,358	10,450	10,500	11.7	0.5
August	9,060	10,132	10,883	11.8	7.4
September	9,169	6,524	11,801	-28.8	80.9
October	14,451	15,397	13,173	6.5	-14.4
November	3,799	5,955		56.8	
December	778	2,115		171.9	

US 19:

Month	2000	2001	2002	% Change 00-01	% Change 01-02
January	3,464	3,270	3,784	-5.6	15.7
February	1,980	4,218	2,739	113.0	-35.1
March	4,261	6,091	6,108	42.9	0.3
April	9,218	9,757	14,361	5.8	47.2
May	14,581	13,516	14,724	-7.3	8.9
June	21,764	21,977	10,526	1.0	-52.1
July	15,461	19,413	18,989	25.6	-2.2
August	14,324	15,385	16,118	7.4	4.8
September	13,031	12,965	18,079	-0.5	39.4
October	20,287	31,298	24,466	54.3	-21.8
November	7,922	8,949		13.0	
December	2,858	4,245		48.5	

Weekday and weekend traffic volumes along the Parkway, cross streets and at intersections in this segment are shown in **Figures 72, 73 and 74**.



Figure 72: Weekday Daily Traffic Counts – Segment 6



Figure 73: Weekend Daily Traffic Counts – Segment 6



Figure 74: Weekday/Weekend Turning Movements – Segment 6



The automatic traffic counters were set up on the Blue Ridge Parkway at MP 397 on August 4 and 6, 2002. The following figures illustrate the traffic volumes and vehicle classifications collected at this location.

Figure 75: Weekday Hourly Traffic By Direction – Parkway MP 397

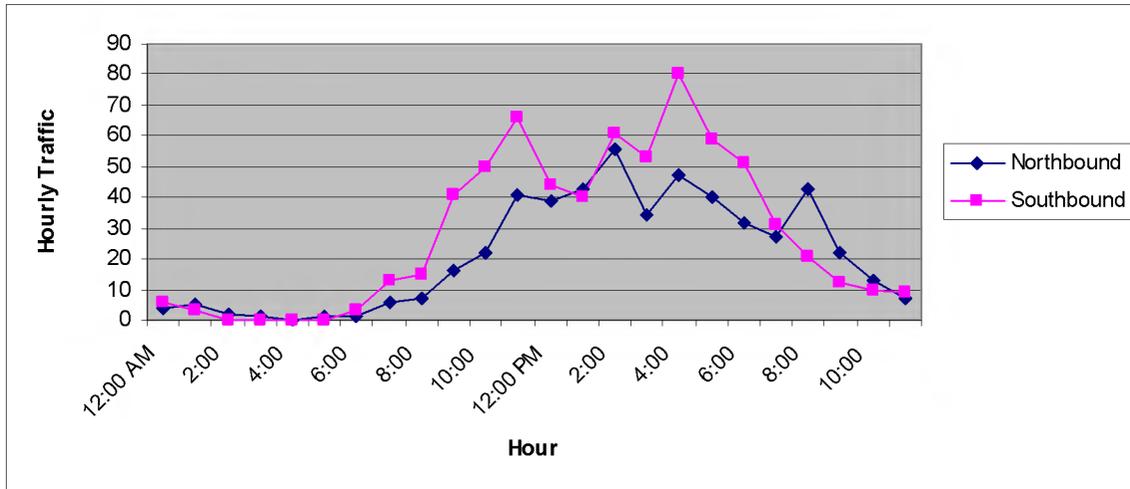


Figure 76: Weekend Hourly Traffic by Direction – Parkway MP 397

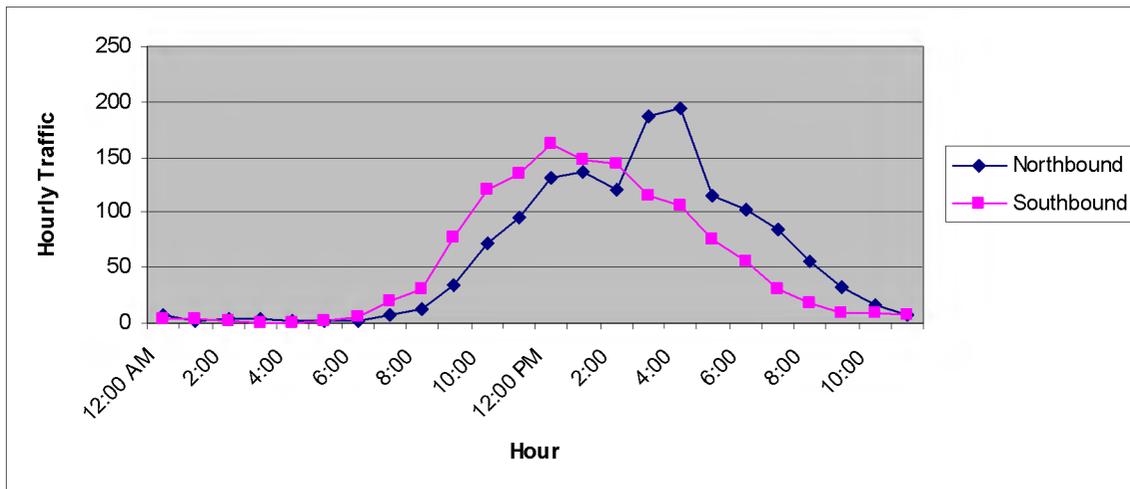




Figure 77: Weekday vs. Weekend Combined – Parkway MP 397

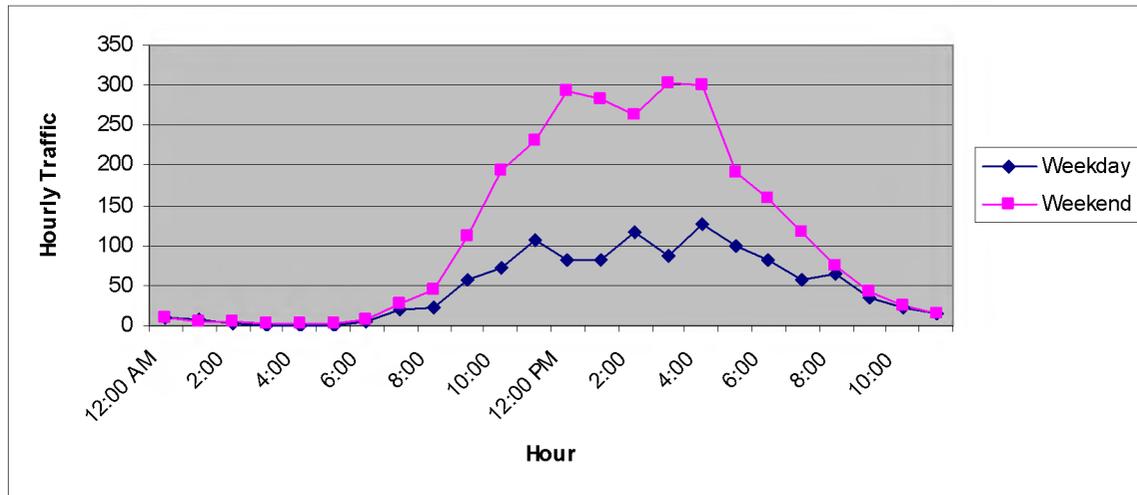


Figure 78: Weekday Vehicle Classification – Parkway MP 397

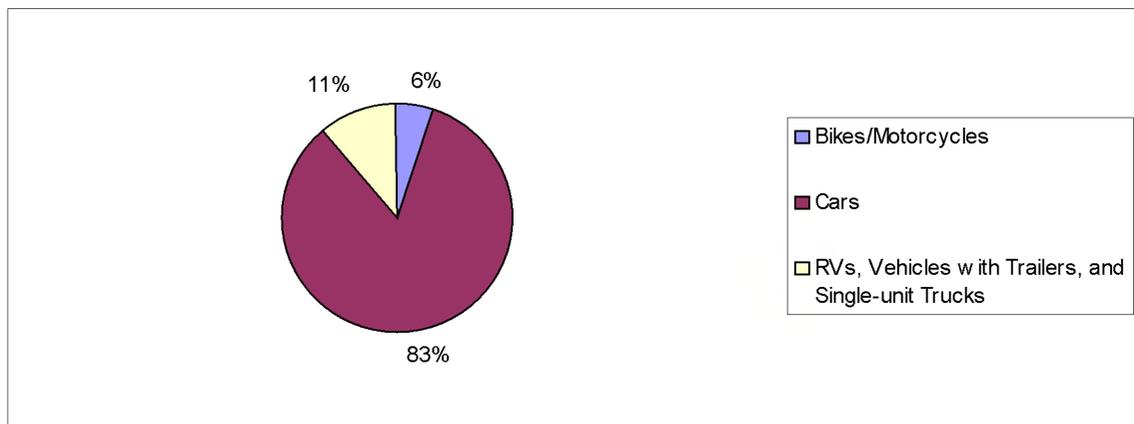
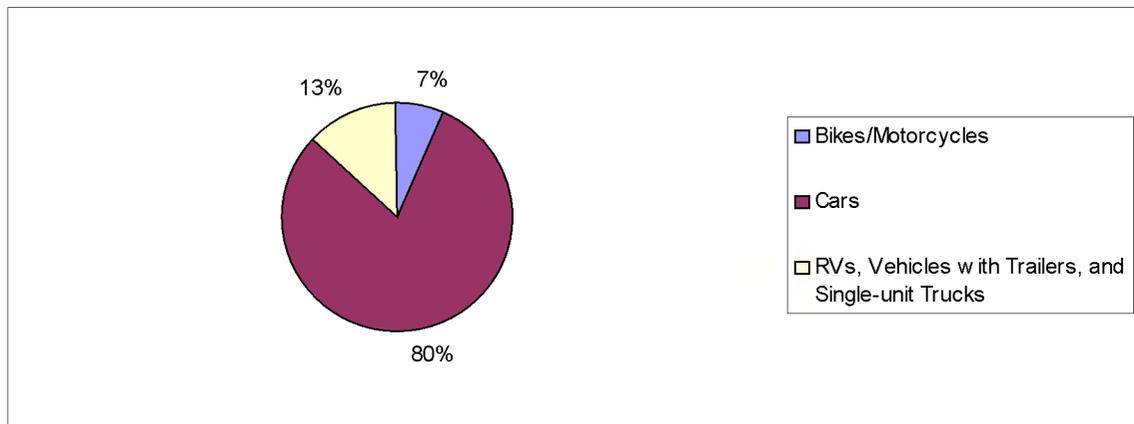


Figure 79: Weekend Vehicle Classification – Parkway MP 397





ACTIVITY CENTERS

Several high activity areas were designated in this segment. Looking Glass Rock Overlook, Graveyard Fields, and Waterrock Knob Visitor Center were all studied. **Figures 82, 85, and 88** respectively show the layout of the driveways, parking lot and visitor center, as well as the 24-hour traffic volumes for both weekday and weekend at each area.

Looking Glass Rock Overlook has a total of 30 parking spaces. The parking lot was never more than 20% full during the study period, and no illegally parked vehicles were recorded.

Figure 80: Parked Vehicle by Category – Looking Glass Rock Overlook

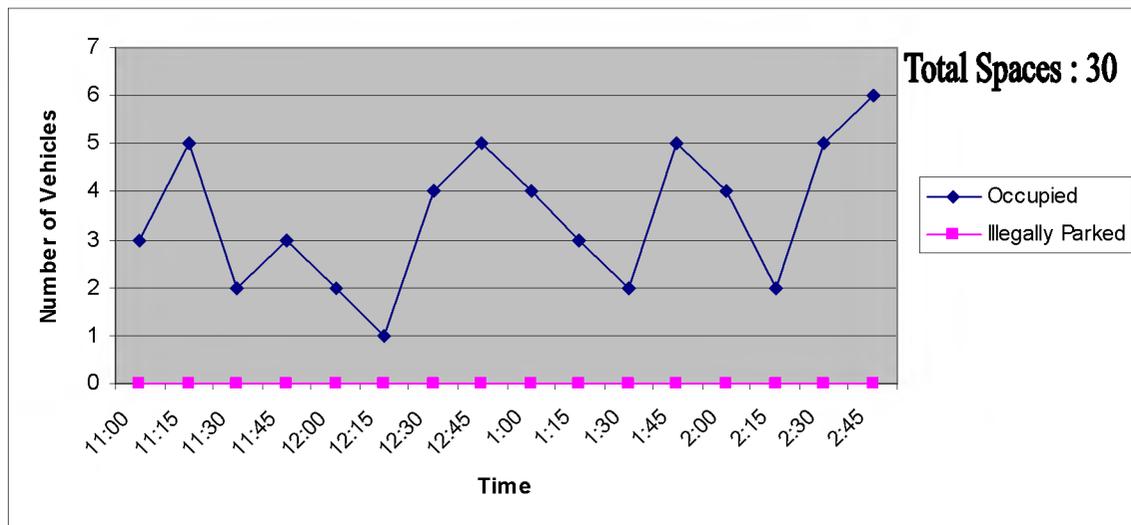


Figure 81: Parked Vehicle Classification - Looking Glass Rock Overlook

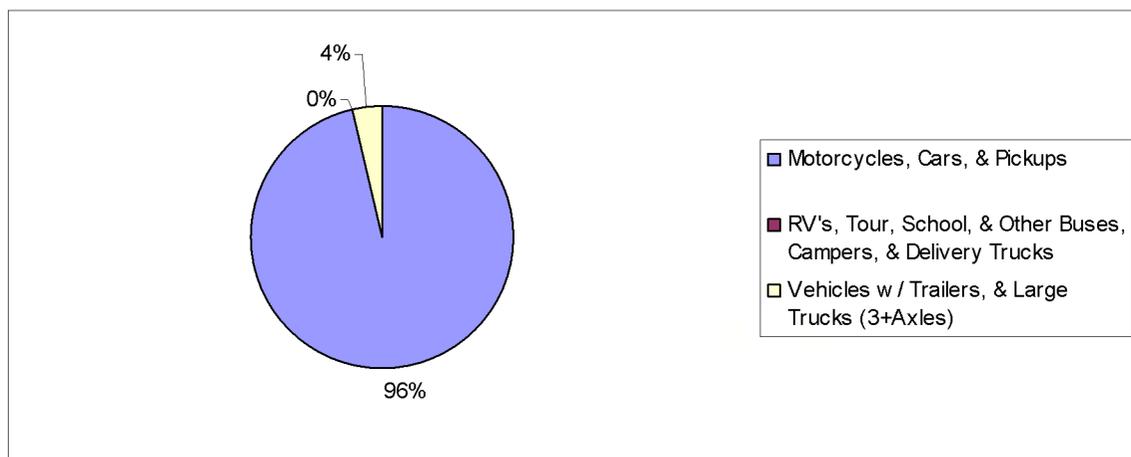




Figure 82: Looking Glass Rock Overlook Driveway Daily Traffic Volumes



Graveyard Fields Overlook is a very popular location for berry picking and hiking. There are a total of 30 parking spaces, and many illegally parked vehicles were noted during the study period.

Figure 83: Parked Vehicle by Category – Graveyard Fields Overlook

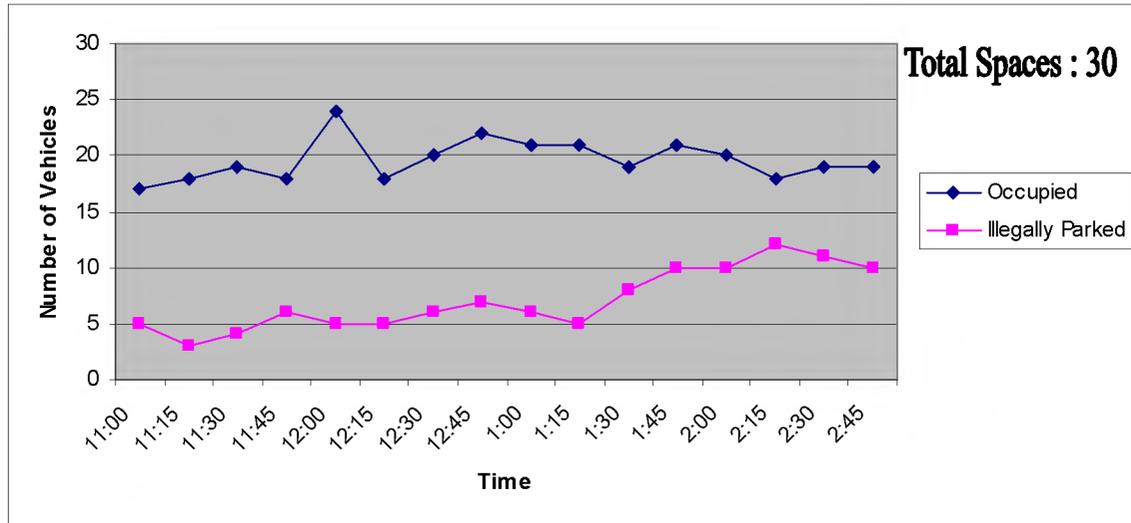


Figure 84: Parked Vehicle Classification - Graveyard Fields Overlook

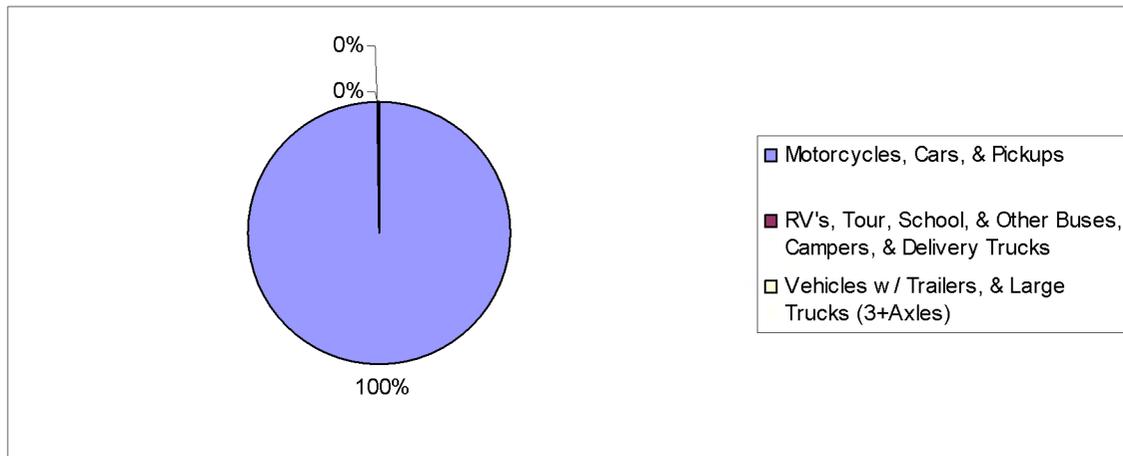




Figure 85: Graveyard Fields Overlook Driveway Daily Traffic Volumes



Waterrock Knob Visitor Center has a total of 110 parking spaces and was never more than 15% full during the study period. No illegally parked vehicles were noted.

Figure 86: Parked Vehicle by Category – Waterrock Knob Visitor Center

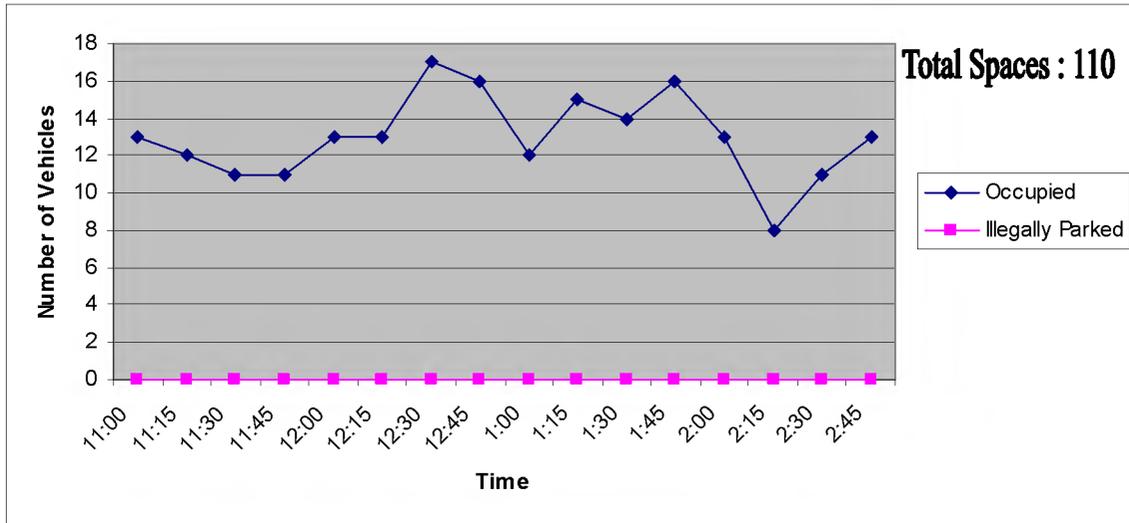


Figure 87: Parked Vehicle Classification - Waterrock Knob Visitor Center

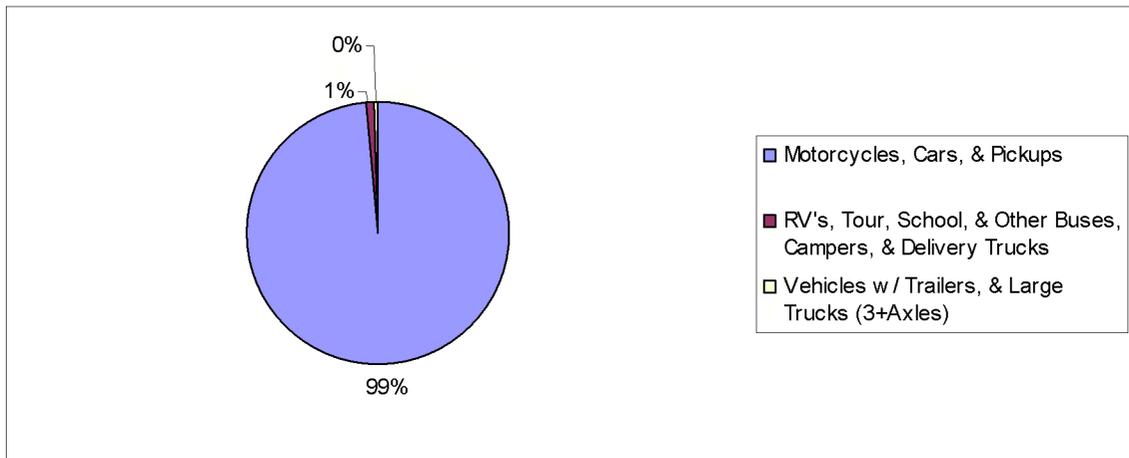




Figure 88: Waterrock Knob Visitor Center Driveway Daily Traffic Volumes

**TRAVEL PATTERNS**

The roadside survey was set up at MP 404.5 (northbound) and MP 404.2 (southbound), on Tuesday August 6, 2002. A total of 158 vehicles were stopped, 141 drivers answered the survey, and 17 drivers refused. Most of the drivers in this segment were using the Parkway for outdoor recreation, and 43% of them entered the Parkway at the intersection with NC 191 just south of Asheville. In general, drivers in this area thought the Parkway was beautiful, although several mentioned the need for more facilities such as gas stations, restrooms, and picnic tables.

Table 12: Travel Pattern Data - Segment 6

Trip Purpose:

Purpose	Percent
Outdoor Recreation	84
Commute	4
Travel For Work	2
Personal Business	2
Shopping/Dining	7
Transporting Others	0
Other	1

Weekday Vehicle Occupancy:

Occupancy	Frequency	Percent
1	24	17
2	72	51
3	15	11
4	19	13
5	5	4
6	5	3
7	0	0
8	0	0
9	0	0
10 or more	1	1

N = 141; Mean = 2.4; Median = 2

Visitors vs. Locals:

Purpose	Percent
Visitors	83
Locals	17



Most Common Parkway Ramps:

Intersection with Blue Ridge Parkway	Percent
NC 191	43
US 441	17
US 276	13

Most Common General Comments:

Comment:	Percent
Beautiful/ Enjoy it/Like it/ Love it	16
Well maintained	7
Needs more facilities (gas, restrooms, lodging, picnic tables, etc.)	6



ENTIRE PARKWAY

TRAFFIC VOLUME

None of the Parkway had a very high volume of traffic during the study period. Segment 4 had the highest traffic volumes. The counts for Segment 4 were taken north of Blowing Rock, and south of the detour. The second highest volumes on the Parkway were in Segment 1, taken just north of Roanoke. The lowest volumes on the Parkway were in Segment 3, taken just south of Mabry Mill.

The most heavily used ramps were those in the vicinity of Asheville, with the highest ramp volumes occurring at the US 25 ramp. This is supported by the NPS monthly reports, which show US 25 as consistently one of the highest used ramps along the Parkway.

ACTIVITY CENTERS

Parking at the activity centers was not found to be a problem at a majority of the sites. The counts were taken on a weekday and may not accurately represent weekend conditions, as observed during the visit. Because of this further study is recommended. From data collected, it is evident that three of the locations need to be further studied for possible improvements. These are Moses H. Cone Memorial Park Parking Area, Julian Price Memorial Park Parking Area, and Graveyard Fields Overlook.

TRAVEL PATTERNS

Overall 1,107 drivers were surveyed. As shown in Table 7 most were from North Carolina and Virginia. Only 15% of them were first time visitors. It is estimated that 20% of the users were locals that used the Parkway on a weekly basis. The average number of days traveling the Parkway was 2.1, but only 9% used lodging or campgrounds within the Blue Ridge Parkway. About 4% were traveling the entire length of the Parkway during this trip.

In all segments Outdoor Recreation was the most common trip purpose, with the highest percentage (95%) in Segment 5. The second most common purpose varies by location with the next highest percentage (19%) for Personal Business in Segment 2. This is also the segment with the highest percentage (29%) of locals. Segments 3 and 4 had the second highest percentage (26%) of locals using the Parkway. In the weekend surveys, 90% of the drivers stopped along the entire Parkway were visitors while 21% of those surveyed on the weekdays were locals. The mean vehicle occupancy for the weekday was 2.1 and the weekend was 2.3.

**Table 13: Travel Pattern Data – Entire Parkway**

Most Common Trip:

Trip Description	Percent
Round Trip from US 52 (Fancy Gap/I-77)	6.7
Round Trip from US 70 (North Asheville)	4.8
Round Trip from NC 191 (South Asheville)	4.2
Between Skyline Drive and Cherokee	3.7
Between US 52 and US 58 (Fancy Gap/I-77 and Meadows of Dan)	2.4

Most Common Trip Purpose:

	Segment 1	Segment 2	Segment 3	Segment 4	Segment 5	Segment 6
Purpose	Percent	Percent	Percent	Percent	Percent	Percent
Outdoor Recreation	71	51	64	80	95	84
Commute	8	10	6	8	2	4
Travel For Work	7	6	5	3	0	2
Personal Business	8	19	12	7	1	2
Shopping/Dining	2	11	10	2	2	7
Transporting Others	1	2	1	0	0	0
Other	3	1	2	0	0	1

Most Common States to Visit From:

State	Percent
North Carolina	34
Virginia	26
Florida	7
South Carolina	5
Tennessee	3
Georgia	3
Pennsylvania	3



Weekday vs. Weekend Vehicle Occupancy:

Occupancy	Weekday		Weekend	
	Frequency	Percent	Frequency	Percent
1	265	34	58	18
2	343	43	175	55
3	76	10	35	11
4	64	8	37	12
5	28	4	10	3
6	10	1	1	0
7	1	0	2	1
8	0	0	0	0
9	0	0	0	0
10 or more	1	0	1	0

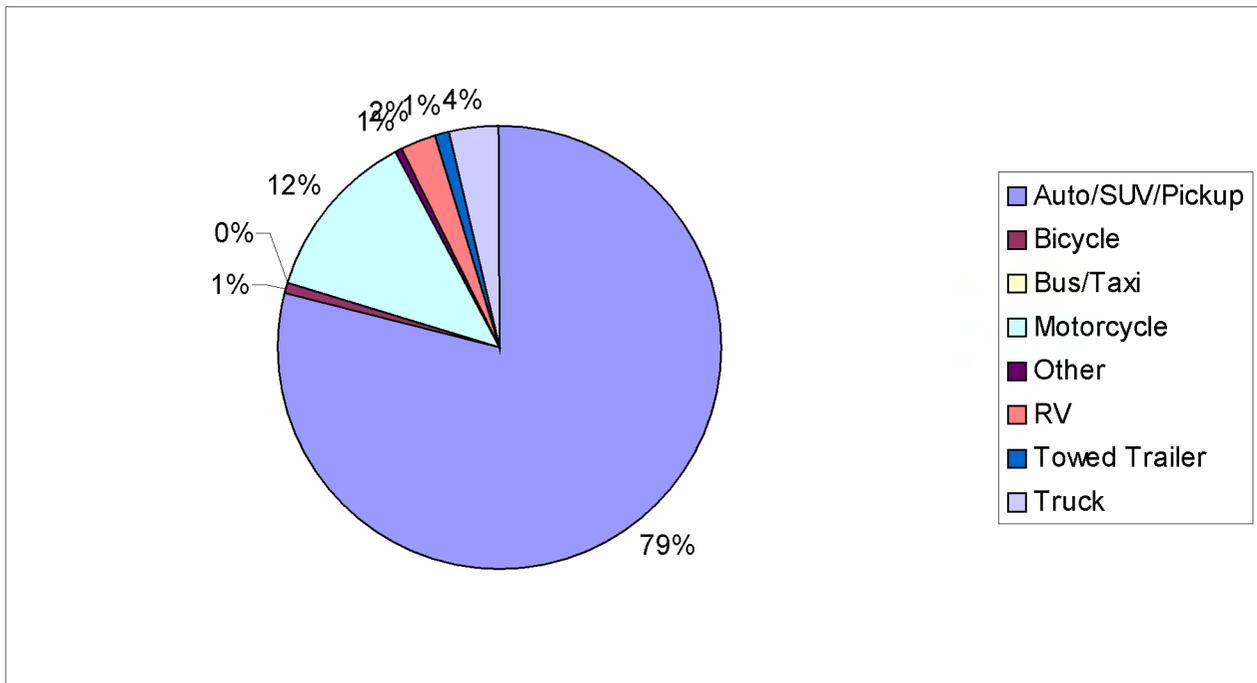
Weekday: N = 788; Mean = 2.1; Median = 2

Weekend: N = 319; Mean = 2.3; Median = 2

Weekday vs. Weekend / Visitors vs. Locals:

Purpose	Weekday	Weekend
	Percent	Percent
Visitors	79	90
Locals	21	10

Figure 89: Vehicle Classification Based on Roadside Survey





The large majority of the users thought the Parkway was beautiful and had positive things to say about it. The comments from motorcyclists were looked at separately, but they were found to have the same comments as users on the whole. In all segments the motorcyclists had either a greater than or equal number of good things to say as compared all vehicle classifications.

A few of the most common complaints/suggestions from users were:

- The Parkway is dangerous for bikers, need shoulders or bike lanes.
- Could use more signs, both directional and informational.
- Some of the overlooks need to be trimmed back.
- Need to patrol speeders.
- Need to make slow drivers pull off.
- Could use more gas stations and restrooms, or better signs for next facilities.

Recreational visitors commented more frequently on need for facilities and signage, and maintenance of the overlooks. Local users commented more frequently on the need for roadway maintenance and desire for slow drivers to pull over.



FUTURE ANALYSIS

ORIGIN-DESTINATION SURVEY

An interest in a future shuttle service has been expressed in some of the more populated areas. An origin destination survey in these areas would help determine the demand for this service.

Figure 89 shows the most common entrance and exits on the Parkway as found in the roadside survey conducted in August 2002. It is recommended that the origin-destination studies be conducted in the following areas: Asheville, Fancy Gap, Cherokee, and Skyline Drive. These areas were determined based on the roadside survey data, town interest, and high ramp volumes.

PARKING TURNOVER STUDY

The parking lot counts for this study were taken on a weekday. It is recommended that weekend counts and a parking turnover study be done as a follow up study at several high use locations. The following activity centers are noted as high use locations: Peaks of Otter Visitor Center, Rocky Knob Visitor Center, Moses H. Cone Memorial Park, Julian Price Memorial Park, and Graveyard Fields Overlook. These locations had a high number of illegally parked vehicles, a large ratio of volume to parking spaces or problem areas noticed during the study period.

The University of Vermont Study showed that users would tolerate more people at each overlook than current parking space allows. A further parking study would be warranted to determine if providing more parking at these high use locations would be beneficial.

CAPACITY ANALYSIS

A capacity analysis is recommended at the high volume locations determined in the origin-destination study. The analysis would determine if intersection improvements or grade separations are warranted on the Parkway.

SPEED STUDY

A common suggestion from users was to increase, decrease, or enforce the speed limit. These comments were most common in Segment 2, South of Roanoke. A speed study in this area would help determine if a problem exists and be used as a basis for subsequent recommendations.

ACCIDENT STUDY

Accident data along the entire parkway is recommended to be collected and summarized. Accident trends would be identified to confirm user comments on safety concerns and to develop possible corrective measures.

SIGN INVENTORY

Another common suggestion from users was that more signs are needed. These comments were most common in Segments 5 & 6, North and South of Asheville. An existing sign inventory in this area would help to make recommendations on additional roadway, overlook, and hiking trail signs that are necessary.



INTERSECTING ROADWAY IMPROVEMENT IMPACTS

Improvement projects on intersecting roads by the Virginia and North Carolina DOT's are on hold because of the concern regarding the impact that additional traffic may have on the Parkway if connecting roads are improved. Historic ramp volumes should be used to analyze the impacts of improvements. Additional traffic volumes at the locations of the proposed improvements should also be collected at the time of the future studies to help quantify the possible impacts.

The NPS is considering eliminating all of the existing ramp counters. Given the variation in yearly changes in the volumes collected by the counters, the usefulness of the data at most locations is questionable. However, it is recommended that those at the intersection of roads with proposed improvements be kept for future analysis. A hierarchy of importance of intersecting roads should be developed, and the visitor use data from this study should be used to update the methodology of the NPS visitor use estimates.



Figure 90: Common Usage Map