

ORNL/M-5910/V5
5910/V5

Vol. 5 of 6



**OAK RIDGE
NATIONAL
LABORATORY**



Foothills Parkway Section 8B
Final Environmental Report

RECEIVED
AUG 23 1999
SMOKEY MOUNTAINS

Volume 5

Appendices J-M

- Appendix J Roadway Traffic Volume and Level-of-Service
Results for the Five Build Options
- Appendix K Intersection Traffic Volume Results for
the Five Build Options
- Appendix L Noise Data
- Appendix M Aesthetic Resources

July 1999

Prepared for

The National Park Service
Denver Service Center and
The Great Smoky Mountains National Park

MANAGED AND OPERATED BY
LOCKHEED MARTIN ENERGY RESEARCH CORPORATION
FOR THE UNITED STATES
DEPARTMENT OF ENERGY

DISCLAIMER

This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, make any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.

DISCLAIMER

Portions of this document may be illegible in electronic image products. Images are produced from the best available original document.

VOLUME 5 SUMMARY

In 1994, Oak Ridge National Laboratory (ORNL) was tasked by the National Park Service (NPS) to prepare an Environmental Report (ER) for Section 8B of the Foothills Parkway in the Great Smoky Mountains National Park (GSMNP). Section 8B represents 27.7 km (14.2 miles) of a total of 115 km (72 miles) of the planned Foothills Parkway and would connect the Cosby community on the east to the incorporated town of Pittman Center to the west. The major deliverables for the project are listed below.

Study Plan	August 1994
First Field/Progress Report	October 1994
Second Progress Report	February 1995
Third Progress Report	June 1995
Draft Environmental Report	April 1997
Final Environmental Report	July 1999

From August 1995 through October 1996, NPS, GSMNP, and ORNL staff interacted with Federal Highway Administration staff to develop a conceptual design plan for Section 8B with the intent of protecting critical resources identified during the ER process to the extent possible. In addition, ORNL arranged for bioengineering experts to discuss techniques that might be employed on Section 8B with NPS, GSMNP, and ORNL staff during September 1996.

For the purposes of this ER, there are two basic alternatives under consideration: (1) a build alternative and (2) a no-build alternative. Within the build alternative are a number of options including constructing Section 8B with no interchanges, constructing Section 8B with an interchange at SR 416 or U.S. 321, constructing Section 8B with a spur road on Webb Mountain, and considering operation of Section 8B both before and after the operation of Section 8C. The no-build alternative is considered the no-action alternative and is not to construct Section 8B.

This volume of the ER consists of Appendices J through M, which describe potential impacts regarding traffic, noise, and aesthetics. The results of the traffic studies described in these appendices resulted in the following conclusions: Unacceptable levels of service will occur on numerous roads within and outside of the park increasingly in the future based upon current and future regional growth. However, the results of the traffic assessment indicated that there would be no significant or cumulative impact from the addition of Section 8B or the completion of the Foothills Parkway as a whole within the study area by 2026. The results of the noise studies described in these appendices resulted in the following four-step plan regarding noise impacts of construction:

1. **Community relations**—Early communication with the public is vital. The public should be informed of any potential construction noise impacts as well as procedures planned to mitigate them. Also, a responsive complaint mechanism should be established and publicized for the duration of the project.
2. **Design considerations**—To the extent possible, construction operations should be located and sequenced to minimize noise impacts near sensitive receptors. Permanent noise barriers planned for the site can be erected early in the construction process to minimize noise, and quieter construction alternatives (e.g., rubber-tired equipment rather than tracked equipment; cast-in piles rather than driven piles) should be used where feasible.
3. **Source control**—Using newer, quieter equipment or equipment with mufflers will often lessen noise impacts.
4. **Site control**—Modifying the time, place, or method of operation for particular noise sources can reduce noise impacts. This usually entails limiting the hours of operation near sensitive receptors.

Several recommendations regarding potential impacts to aesthetic resources were also suggested:

- The western exit ramp across the Little Pigeon River should be used.
- The tunnel option east of SR 416 should be selected.
- The SR 416 option rather than the U.S. 321 option should be chosen.
- A ramp should be used at Webb Creek Road if the U.S. 321 option is chosen.
- Both the Webb Mountain lower parking lot and the Webb Mountain loop access road should be built.

Appendix J

ROADWAY TRAFFIC VOLUME AND LEVEL-OF-SERVICE RESULTS FOR THE FIVE BUILD OPTIONS

S. M. Chin
Oak Ridge National Laboratory
Oak Ridge, Tennessee

R. Gibson
Oak Ridge National Laboratory
Oak Ridge, Tennessee

August 1995

[The page contains extremely faint and illegible text, likely bleed-through from the reverse side of the document. The text is arranged in several vertical columns and is not readable.]

INTRODUCTION

The traffic projection tables in this appendix list the results of the capacity analyses conducted as part of the traffic study. The traffic conditions predicted by the capacity analyses are discussed in terms of level of service (LOS). For persons not familiar with this terminology, the following discussion is provided in the National Research Council's Highway Capacity Manual of 1994.

Discussion of Level of Service

The concept of levels of service uses qualitative measures that characterize operational conditions within a traffic stream and their perception by motorists and passengers. The descriptions of individual levels of service characterize these conditions in terms of such factors as speed and travel time, delay, freedom to maneuver, traffic interruptions, and comfort and convenience.

Six levels of service are defined for each type of facility for which analysis procedures are available. They are given letter designations, from A to F, with LOS A representing the best operating conditions and LOS F the worst. Each LOS represents a range of traffic conditions. LOS A represents the highest quality of traffic service, with subsequent LOS categories representing incremental declines in such attributes as travel speed and maneuverability. LOS E corresponds to the maximum flow rate, or capacity, on the facility, while LOS F represents conditions where demand exceeds capacity.

Although higher LOS conditions are more desirable, there is usually a trade-off between construction cost and LOS of service when designing highways. For most design or planning purposes, LOS C and D are typically used. However, acceptable and desirable LOS for highways is usually a decision made by political entities. In this study, we assume LOS A through C to be acceptable for GSMNP and Foothills Parkway roads. For roads outside the park, LOS A through D is considered acceptable.

Different highway facility types have differing operational goals and characteristics, and travelers have different expectations regarding traffic movement on them. Thus, the procedures for determining LOS for a highway facility, along with the qualitative characteristics of LOS, depend upon the type of facility being analyzed. Most of the roadways within the survey are currently rural two-lane highways, and some will soon be upgraded to rural multilane roads. Therefore, the capacity of each roadway, both for existing and future highway sections, is determined using the procedure appropriate for that facility type. All intersections in the study area are stop-sign controlled, and the corresponding capacity analysis procedures and LOS have been applied. The following paragraphs describe traffic conditions under the six LOS categories for the two types of highways analyzed in this study.

Level of Service for Rural Two-Lane Highways

LOS A. The highest quality of traffic service. Motorists are able to drive at their desired speed. Without strict enforcement, this can result in speeds approaching the maximum design speed and exceeding posted speed limits (which are usually lower). The passing frequency required to maintain desired speeds has not reached a demanding level, and almost no platoons of three or more vehicles are observed (platoons are vehicles driving together on a highway section, either voluntarily or involuntarily due to signal control, geometrics, or other factors). Drivers would be

delayed (i.e., would not be able to travel at their desired speed) no more than 30 percent of the time by slow-moving vehicles.

LOS B. Passing demand needed to maintain desired speeds becomes significant and approximately equals the passing capacity at the lower boundary of LOS B. Drivers are delayed up to 45 percent of the time.

LOS C. Noticeable increases in platoon formation, platoon size, and frequency of passing impediments become noticeable. While traffic flow is stable, it is becoming susceptible to congestion due to turning and slow-moving traffic. Percent time delays can reach 60 percent.

LOS D. Passing becomes extremely difficult as passing demand becomes very high and passing capacity nears zero. Mean platoon sizes of 5 to 10 vehicles are common, and the percentage of time motorists are delayed reaches up to 75 percent.

LOS E. Percent delay time exceeds 75 percent. Passing is virtually impossible under LOS E, and platooning becomes intense when slower vehicles or other interruptions are encountered.

LOS F. This represents heavily congested flow with traffic demand exceeding capacity.

Level of Service for Rural Multilane Highways

LOS A. Traffic operates under free-flow conditions. Vehicle operation is virtually unaffected by the presence of other vehicles and is only affected by highway geometry and driver preferences. Maneuverability is good, and minor disruptions to flow are easily absorbed without a change in travel speed.

LOS B. This LOS is also indicative of free flow, although the presence of other vehicles begins to be noticeable. Average travel speeds are the same as for LOS A, but drivers have slightly less freedom to maneuver.

LOS C. The influence of traffic density becomes marked. The ability to maneuver within the traffic stream is now clearly affected by the presence of other vehicles, and average travel speeds begin to show some reduction for multilane highways with free-flow speeds over 50 mph. Minor disruptions may be expected to cause serious local deterioration in service, and queues may form behind any significant traffic disruption. (A queue is a line of vehicles that is moving very slowly or has stopped, typically at traffic signs or signals or due to some interruption in traffic flow.)

LOS D. The ability to maneuver is severely restricted because of traffic congestion, and travel speed begins to be reduced by increasing volumes. For the majority of multilane highways with free-flow speeds between 45 and 60 mph, passenger car speeds at capacity generally range from 44 to 57 mph. Only minor disruptions can be absorbed without the formation of extensive queues and the deterioration to LOS E and F.

LOS E. This LOS represents near-capacity conditions and is quite unstable. Vehicles are operating with the minimum spacing at which uniform flow can be maintained. For the majority of multilane highways with free-flow speeds between 45 and 60 mph, passenger car speeds at capacity generally range from 42 to 55 mph but are highly variable and unpredictable within that range. As capacity is reached, disruptions cannot be damped or readily dissipated, and most disruptions will cause queues to form and service to deteriorate to LOS F.

LOS F. This represents forced or breakdown flow. Operations within queues are highly unstable, with vehicles experiencing brief periods of movement followed by stoppages. Average travel times with queues are generally less than 30 mph.

Level of Service for Unsignalized Intersections

Levels of service for movements at unsignalized intersections are determined by the average total delay experienced by vehicles making that movement at the intersection. Total delay, measured in seconds per vehicle, is defined as the total elapsed time from when a vehicle first stops at the end of a queue until the vehicle departs from the stop line. The delay ranges corresponding to each LOS are provided in Table J.1. Note that LOS is not applicable to movements that have a continuous right of way since these vehicles are not required to stop at an intersection.

Table J.1. Level of service criteria for unsignalized intersections

Level of service	Average total delay (seconds per vehicle)
A	≤ 5
B	> 5 and ≤ 10
C	> 10 and ≤ 20
D	> 20 and ≤ 30
E	> 30 and ≤ 45
F	> 45

**Table J.2. Weekday A.M. peak hour traffic projections for 2006—construction
of Section 8B with no interchanges option**

Road section name	Range	Traffic volume	Directional split		Percentage of trucks
U.S. 321	From Intersection with Foothills Parkway Section 8A to Convergence with SR 32	951	NB	57%	9.00%
		LOS=B	SB	43%	
U.S. 321	From U.S. 321 Convergence with SR 32 to Intersection with SR 416	805	WB	53%	7.00%
		LOS=D	EB	47%	
SR 416	From Intersection with U.S. 321 to Intersection with Webb Creek Rd	214	NB	49%	7.00%
		LOS=B	SB	51%	
U.S. 321	From Intersection with SR 416 to Outside of Gatlinburg	1151	EB	36%	5.00%
		LOS=B	WB	64%	
Foothill 8B	From Cosby to Pittman Center	186	EB	52%	0.00%
		LOS=B	WB	48%	

**Table J.3. Weekday A.M. peak hour traffic projections for 2026—construction
of Section 8B with no interchanges option**

Road section name	Range	Traffic volume	Directional split		Percentage of trucks
U.S. 321	From Intersection with Foothills Parkway Section 8A to Convergence with SR 32	1242	NB	56%	9.00%
		LOS=B	SB	44%	
U.S. 321	From U.S. 321 Convergence with SR 32 to Intersection with SR 416	1118	WB	55%	7.00%
		LOS=D	EB	45%	
SR 416	From Intersection with U.S. 321 to Intersection with Webb Creek Rd	247	NB	36%	7.00%
		LOS=B	SB	64%	
U.S. 321	From Intersection with SR 416 to Outside of Gatlinburg	1571	EB	30%	5.00%
		LOS=C	WB	70%	
Foothill 8B	From Cosby to Pittman Center	263	EB	58%	0.00%
		LOS=C	WB	42%	

**Table J.4. Weekday P.M. peak hour traffic projections for 2006—construction
of Section 8B with no interchanges option**

Road section name	Range	Traffic volume	Directional split		Percentage of trucks
U.S. 321	From Intersection with Foothills Parkway Section 8A to Convergence with SR 32	1005	NB	59%	9.00%
		LOS=B	SB	41%	
U.S. 321	From U.S. 321 Convergence with SR 32 to Intersection with SR 416	846	WB	51%	7.00%
		LOS=D	EB	49%	
SR 416	From Intersection with U.S. 321 to Intersection with Webb Creek Rd	203	NB	54%	7.00%
		LOS=B	SB	46%	
U.S. 321	From Intersection with SR 416 to Outside of Gatlinburg	933	EB	28%	5.00%
		LOS=B	WB	72%	
Foothill 8B	From Cosby to Pittman Center	221	EB	58%	0.00%
		LOS=C	WB	42%	

**Table J.5. Weekday P.M. peak hour traffic projections for 2026—construction
of Section 8B with no interchanges option**

Road section name	Range	Traffic volume	Directional split		Percentage of trucks
U.S. 321	From Intersection with Foothills Parkway Section 8A to Convergence with SR 32	1316	NB	59%	9.00%
		LOS=B	SB	41%	
U.S. 321	From U.S. 321 Convergence with SR 32 to Intersection with SR 416	1152	WB	52%	7.00%
		LOS=D	EB	48%	
SR 416	From Intersection with U.S. 321 to Intersection with Webb Creek Rd	245	NB	43%	7.00%
		LOS=B	SB	57%	
U.S. 321	From Intersection with SR 416 to Outside of Gatlinburg	1395	EB	28%	5.00%
		LOS=B	WB	72%	
Foothill 8B	From Cosby to Pittman Center	313	EB	64%	0.00%
		LOS=C	WB	36%	

**Table J.6. Weekend A.M. peak hour traffic projections for 2006—construction
of Section 8B with no interchanges option**

Road section name	Range	Traffic volume	Directional split		Percentage of trucks
U.S. 321	From Intersection with Foothills Parkway Section 8A to Convergence with SR 32	1333	NB	52%	9.00%
		LOS=B	SB	48%	
U.S. 321	From U.S. 321 Convergence with SR 32 to Intersection with SR 416	1104	WB	45%	7.00%
		LOS=D	EB	55%	
SR 416	From Intersection with U.S. 321 to Intersection with Webb Creek Rd	219	NB	54%	7.00%
		LOS=B	SB	46%	
U.S. 321	From Intersection with SR 416 to Outside of Gatlinburg	1413	EB	38%	5.00%
		LOS=B	WB	62%	
Foothill 8B	From Cosby to Pittman Center	241	EB	55%	0.00%
		LOS=C	WB	45%	

**Table J.7. Weekend A.M. peak hour traffic projections for 2026—construction
of Section 8B with no interchanges option**

Road section name	Range	Traffic volume	Directional split		Percentage of trucks
U.S. 321	From Intersection with Foothills Parkway Section 8A to Convergence with SR 32	1746	NB	51%	9.00%
		LOS=C	SB	49%	
U.S. 321	From U.S. 321 Convergence with SR 32 to Intersection with SR 416	1530	WB	57%	7.00%
		LOS=E	EB	43%	
SR 416	From Intersection with U.S. 321 to Intersection with Webb Creek Rd	231	NB	38%	7.00%
		LOS=B	SB	62%	
U.S. 321	From Intersection with SR 416 to Outside of Gatlinburg	1916	EB	31%	5.00%
		LOS=C	WB	69%	
Foothill 8B	From Cosby to Pittman Center	348	EB	60%	0.00%
		LOS=C	WB	40%	

**Table J.8. Weekend P.M. peak hour traffic projections for 2006—construction
of Section 8B with no interchanges option**

Road section name	Range	Traffic volume	Directional split		Percentage of trucks
U.S. 321	From Intersection with Foothills Parkway Section 8A to Convergence with SR 32	1273	NB	55%	9.00%
		LOS=B	SB	45%	
U.S. 321	From U.S. 321 Convergence with SR 32 to Intersection with SR 416	1156	WB	54%	7.00%
		LOS=D	EB	46%	
SR 416	From Intersection with U.S. 321 to Intersection with Webb Creek Rd	269	NB	49%	7.00%
		LOS=B	SB	51%	
U.S. 321	From Intersection with SR 416 to Outside of Gatlinburg	1304	EB	28%	5.00%
		LOS=B	WB	72%	
Foothill 8B	From Cosby to Pittman Center	264	EB	58%	0.00%
		LOS=C	WB	42%	

**Table J.9. Weekend P.M. peak hour traffic projections for 2026—construction
of Section 8B with no interchanges option**

Road section name	Range	Traffic volume	Directional split		Percentage of trucks
U.S. 321	From Intersection with Foothills Parkway Section 8A to Convergence with SR 32	1671	NB	54%	9.00%
		LOS=C	SB	46%	
U.S. 321	From U.S. 321 Convergence with SR 32 to Intersection with SR 416	1577	WB	55%	7.00%
		LOS=E	EB	45%	
SR 416	From Intersection with U.S. 321 to Intersection with Webb Creek Rd	315	NB	37%	7.00%
		LOS=B	SB	63%	
U.S. 321	From Intersection with SR 416 to Outside of Gatlinburg	1957	EB	29%	5.00%
		LOS=C	WB	71%	
Foothill 8B	From Cosby to Pittman Center	376	EB	64%	0.00%
		LOS=C	WB	36%	

**Table J.10. Weekday A.M. peak hour traffic projections for 2006—interchange
at Highway 416 (both options)—8B not opened until 8C completed**

Road section name	Range	Traffic volume	Directional split		Percentage of trucks
U.S. 321	From Intersection with Foothills Parkway Section 8A to Convergence with SR 32	951	NB	57%	9.00%
		LOS=B	SB	43%	
U.S. 321	From U.S. 321 Convergence with SR 32 to Intersection with SR 416	833	WB	55%	7.00%
		LOS=D	EB	45%	
SR 416	From Intersection with U.S. 321 to Intersection with Webb Creek Rd	241	NB	69%	7.00%
		LOS=B	SB	31%	
U.S. 321	From Intersection with SR 416 to Outside of Gatlinburg	1106	EB	36%	5.00%
		LOS=B	WB	64%	
Foothill 8B	From Cosby to Pittman Center	186	EB	52%	0.00%
		LOS=B	WB	48%	

**Table J.11. Weekday A.M. peak hour traffic projections for 2026—interchange
at Highway 416 (both options)—8B not opened until 8C completed**

Road section name	Range	Traffic volume	Directional split		Percentage of trucks
U.S. 321	From Intersection with Foothills Parkway Section 8A to Convergence with SR 32	1242	NB	56%	9.00%
		LOS=B	SB	44%	
U.S. 321	From U.S. 321 Convergence with SR 32 to Intersection with SR 416	1116	WB	55%	7.00%
		LOS=D	EB	45%	
SR 416	From Intersection with U.S. 321 to Intersection with Webb Creek Rd	237	NB	63%	7.00%
		LOS=B	SB	37%	
U.S. 321	From Intersection with SR 416 to Outside of Gatlinburg	1433	EB	32%	5.00%
		LOS=B	WB	68%	
Foothill 8B	From Cosby to Pittman Center	263	EB	58%	0.00%
		LOS=C	WB	42%	

**Table J.12. Weekday P.M. peak hour traffic projections for 2006—interchange
at Highway 416 (both options)—8B not opened until 8C completed**

Road section name	Range	Traffic volume	Directional split		Percentage of trucks
U.S. 321	From Intersection with Foothills Parkway Section 8A to Convergence with SR 32	1005	NB	59%	9.00%
		LOS=B	SB	41%	
U.S. 321	From U.S. 321 Convergence with SR 32 to Intersection with SR 416	908	WB	54%	7.00%
		LOS=D	EB	46%	
SR 416	From Intersection with U.S. 321 to Intersection with Webb Creek Rd	283	NB	78%	7.00%
		LOS=B	SB	22%	
U.S. 321	From Intersection with SR 416 to Outside of Gatlinburg	965	EB	33%	5.00%
		LOS=B	WB	67%	
Foothill 8B	From Cosby to Pittman Center	221	EB	58%	0.00%
		LOS=C	WB	42%	

**Table J.13. Weekday P.M. peak hour traffic projections for 2026—interchange
at Highway 416 (both options)—8B not opened until 8C completed**

Road section name	Range	Traffic volume	Directional split		Percentage of trucks
U.S. 321	From Intersection with Foothills Parkway Section 8A to Convergence with SR 32	1316	NB	59%	9.00%
		LOS=B	SB	41%	
U.S. 321	From U.S. 321 Convergence with SR 32 to Intersection with SR 416	1189	WB	53%	7.00%
		LOS=D	EB	47%	
SR 416	From Intersection with U.S. 321 to Intersection with Webb Creek Rd	289	NB	76%	7.00%
		LOS=B	SB	24%	
U.S. 321	From Intersection with SR 416 to Outside of Gatlinburg	1286	EB	30%	5.00%
		LOS=B	WB	70%	
Foothill 8B	From Cosby to Pittman Center	313	EB	64%	0.00%
		LOS=C	WB	36%	

**Table J.14. Weekend A.M. peak hour traffic projections for 2006—interchange
at Highway 416 (both options)—8B not opened until 8C completed**

Road section name	Range	Traffic volume	Directional split		Percentage of trucks
U.S. 321	From Intersection with Foothills Parkway Section 8A to Convergence with SR 32	1333	NB	52%	9.00%
		LOS=B	SB	48%	
U.S. 321	From U.S. 321 Convergence with SR 32 to Intersection with SR 416	1140	WB	57%	7.00%
		LOS=D	EB	43%	
SR 416	From Intersection with U.S. 321 to Intersection with Webb Creek Rd	247	NB	73%	7.00%
		LOS=B	SB	27%	
U.S. 321	From Intersection with SR 416 to Outside of Gatlinburg	1357	EB	38%	5.00%
		LOS=B	WB	62%	
Foothill 8B	From Cosby to Pittman Center	241	EB	55%	0.00%
		LOS=C	WB	45%	

**Table J.15. Weekend A.M. peak hour traffic projections for 2026—interchange
at Highway 416 (both options)—8B not opened until 8C completed**

Road section name	Range	Traffic volume	Directional split		Percentage of trucks
U.S. 321	From Intersection with Foothills Parkway Section 8A to Convergence with SR 32	1746	NB	51%	9.00%
		LOS=C	SB	49%	
U.S. 321	From U.S. 321 Convergence with SR 32 to Intersection with SR 416	1529	WB	57%	7.00%
		LOS=E	EB	43%	
SR 416	From Intersection with U.S. 321 to Intersection with Webb Creek Rd	233	NB	64%	7.00%
		LOS=B	SB	36%	
U.S. 321	From Intersection with SR 416 to Outside of Gatlinburg	1754	EB	33%	5.00%
		LOS=C	WB	67%	
Foothill 8B	From Cosby to Pittman Center	348	EB	60%	0.00%
		LOS=C	WB	40%	

**Table J.16. Weekend P.M. peak hour traffic projections for 2006—interchange
at Highway 416 (both options)—8B not opened until 8C completed**

Road section name	Range	Traffic volume	Directional split		Percentage of trucks
U.S. 321	From Intersection with Foothills Parkway Section 8A to Convergence with SR 32	1273	NB	55%	9.00%
		LOS=B	SB	45%	
U.S. 321	From U.S. 321 Convergence with SR 32 to Intersection with SR 416	1239	WB	57%	7.00%
		LOS=D	EB	43%	
SR 416	From Intersection with U.S. 321 to Intersection with Webb Creek Rd	358	NB	74%	7.00%
		LOS=C	SB	26%	
U.S. 321	From Intersection with SR 416 to Outside of Gatlinburg	1342	EB	33%	5.00%
		LOS=B	WB	67%	
Foothill 8B	From Cosby to Pittman Center	264	EB	58%	0.00%
		LOS=C	WB	42%	

**Table J.17. Weekend P.M. peak hour traffic projections for 2026—interchange
at Highway 416 (both options)—8B not opened until 8C completed**

Road section name	Range	Traffic volume	Directional split		Percentage of trucks
U.S. 321	From Intersection with Foothills Parkway Section 8A to Convergence with SR 32	1671	NB	54%	9.00%
		LOS=C	SB	46%	
U.S. 321	From U.S. 321 Convergence with SR 32 to Intersection with SR 416	1627	WB	56%	7.00%
		LOS=E	EB	44%	
SR 416	From Intersection with U.S. 321 to Intersection with Webb Creek Rd	360	NB	70%	7.00%
		LOS=C	SB	30%	
U.S. 321	From Intersection with SR 416 to Outside of Gatlinburg	1788	EB	31%	5.00%
		LOS=C	WB	69%	
Foothill 8B	From Cosby to Pittman Center	376	EB	64%	0.00%
		LOS=C	WB	36%	

**Table J.18. Weekday A.M. peak hour traffic projections for 2006—interchange
at U.S. 321 (both options)—8B not opened until 8C completed**

Road section name	Range	Traffic volume	Directional split		Percentage of trucks
U.S. 321	From Intersection with Foothills Parkway Section 8A to Convergence with SR 32	950	NB	57%	9.00%
		LOS=B	SB	43%	
U.S. 321	From U.S. 321 Convergence with SR 32 to Intersection with SR 416	812	WB	54%	7.00%
		LOS=D	EB	46%	
SR 416	From Intersection with U.S. 321 to Intersection with Webb Creek Rd	215	NB	49%	7.00%
		LOS=B	SB	51%	
U.S. 321	From Intersection with SR 416 to Outside of Gatlinburg	1141	EB	36%	5.00%
		LOS=B	WB	64%	
Foothill 8B	From Cosby to Pittman Center	185	EB	52%	0.00%
		LOS=B	WB	48%	

**Table J.19. Weekday A.M. peak hour traffic projections for 2026—interchange
at U.S. 321 (both options)—8B not opened until 8C completed**

Road section name	Range	Traffic volume	Directional split		Percentage of trucks
U.S. 321	From Intersection with Foothills Parkway Section 8A to Convergence with SR 32	1242	NB	56%	9.00%
		LOS=B	SB	44%	
U.S. 321	From U.S. 321 Convergence with SR 32 to Intersection with SR 416	1086	WB	54%	7.00%
		LOS=D	EB	46%	
SR 416	From Intersection with U.S. 321 to Intersection with Webb Creek Rd	248	NB	36%	7.00%
		LOS=B	SB	64%	
U.S. 321	From Intersection with SR 416 to Outside of Gatlinburg	1503	EB	31%	5.00%
		LOS=B	WB	69%	
Foothill 8B	From Cosby to Pittman Center	263	EB	58%	0.00%
		LOS=C	WB	42%	

**Table J.20. Weekday P.M. peak hour traffic projections for 2006—interchange
at U.S. 321 (both options)—8B not opened until 8C completed**

Road section name	Range	Traffic volume	Directional split		Percentage of trucks
U.S. 321	From Intersection with Foothills Parkway Section 8A to Convergence with SR 32	1005	NB	59%	9.00%
		LOS=B	SB	41%	
U.S. 321	From U.S. 321 Convergence with SR 32 to Intersection with SR 416	859	WB	51%	7.00%
		LOS=D	EB	49%	
SR 416	From Intersection with U.S. 321 to Intersection with Webb Creek Rd	214	NB	56%	7.00%
		LOS=B	SB	44%	
U.S. 321	From Intersection with SR 416 to Outside of Gatlinburg	989	EB	32%	5.00%
		LOS=B	WB	68%	
Foothill 8B	From Cosby to Pittman Center	220	EB	58%	0.00%
		LOS=C	WB	42%	

**Table J.21. Weekday P.M. peak hour traffic projections for 2026—interchange
at U.S. 321 (both options)—8B not opened until 8C completed**

Road section name	Range	Traffic volume	Directional split		Percentage of trucks
U.S. 321	From Intersection with Foothills Parkway Section 8A to Convergence with SR 32	1316	NB	59%	9.00%
		LOS=B	SB	41%	
U.S. 321	From U.S. 321 Convergence with SR 32 to Intersection with SR 416	1123	WB	50%	7.00%
		LOS=D	EB	50%	
SR 416	From Intersection with U.S. 321 to Intersection with Webb Creek Rd	247	NB	44%	7.00%
		LOS=B	SB	56%	
U.S. 321	From Intersection with SR 416 to Outside of Gatlinburg	1332	EB	30%	5.00%
		LOS=B	WB	70%	
Foothill 8B	From Cosby to Pittman Center	313	EB	64%	0.00%
		LOS=C	WB	36%	

Table J.22. Weekend A.M. peak hour traffic projections for 2006—interchange at U.S. 321 (both options)—8B not opened until 8C completed

Road section name	Range	Traffic volume	Directional split		Percentage of trucks
U.S. 321	From Intersection with Foothills Parkway Section 8A to Convergence with SR 32	1332	NB	52%	9.00%
		LOS=B	SB	48%	
U.S. 321	From U.S. 321 Convergence with SR 32 to Intersection with SR 416	1112	WB	55%	7.00%
		LOS=D	EB	45%	
SR 416	From Intersection with U.S. 321 to Intersection with Webb Creek Rd	220	NB	55%	7.00%
		LOS=B	SB	45%	
U.S. 321	From Intersection with SR 416 to Outside of Gatlinburg	1395	EB	37%	5.00%
		LOS=B	WB	63%	
Foothill 8B	From Cosby to Pittman Center	240	EB	55%	0.00%
		LOS=C	WB	45%	

Table J.23. Weekend A.M. peak hour traffic projections for 2026—interchange at U.S. 321 (both options)—8B not opened until 8C completed

Road section name	Range	Traffic volume	Directional split		Percentage of trucks
U.S. 321	From Intersection with Foothills Parkway Section 8A to Convergence with SR 32	1746	NB	51%	9.00%
		LOS=C	SB	49%	
U.S. 321	From U.S. 321 Convergence with SR 32 to Intersection with SR 416	1491	WB	55%	7.00%
		LOS=E	EB	45%	
SR 416	From Intersection with U.S. 321 to Intersection with Webb Creek Rd	231	NB	38%	7.00%
		LOS=B	SB	62%	
U.S. 321	From Intersection with SR 416 to Outside of Gatlinburg	1833	EB	33%	5.00%
		LOS=C	WB	67%	
Foothill 8B	From Cosby to Pittman Center	348	EB	60%	0.00%
		LOS=C	WB	40%	

**Table J.24. Weekend P.M. peak hour traffic projections for 2006—interchange
at U.S. 321 (both options)—8B not opened until 8C completed**

Road section name	Range	Traffic volume	Directional split		Percentage of trucks
U.S. 321	From Intersection with Foothills Parkway Section 8A to Convergence with SR 32	1272	NB	55%	9.00%
		LOS=B	SB	45%	
U.S. 321	From U.S. 321 Convergence with SR 32 to Intersection with SR 416	1174	WB	54%	7.00%
		LOS=D	EB	46%	
SR 416	From Intersection with U.S. 321 to Intersection with Webb Creek Rd	282	NB	52%	7.00%
		LOS=B	SB	48%	
U.S. 321	From Intersection with SR 416 to Outside of Gatlinburg	1384	EB	33%	5.00%
		LOS=B	WB	67%	
Foothill 8B	From Cosby to Pittman Center	263	EB	58%	0.00%
		LOS=C	WB	42%	

**Table J.25. Weekend P.M. peak hour traffic projections for 2026—interchange
at U.S. 321 (both options)—8B not opened until 8C completed**

Road section name	Range	Traffic volume	Directional split		Percentage of trucks
U.S. 321	From Intersection with Foothills Parkway Section 8A to Convergence with SR 32	1671	NB	54%	9.00%
		LOS=C	SB	46%	
U.S. 321	From U.S. 321 Convergence with SR 32 to Intersection with SR 416	1538	WB	53%	7.00%
		LOS=E	EB	47%	
SR 416	From Intersection with U.S. 321 to Intersection with Webb Creek Rd	316	NB	38%	7.00%
		LOS=B	SB	62%	
U.S. 321	From Intersection with SR 416 to Outside of Gatlinburg	1871	EB	30%	5.00%
		LOS=C	WB	70%	
Foothill 8B	From Cosby to Pittman Center	376	EB	64%	0.00%
		LOS=C	WB	36%	

Table J.26. Weekday A.M. peak hour traffic projections for 2006—interchange at Highway 416 (both options)—8B opened prior to completion of 8C

Road section name	Range	Traffic volume	Directional split		Percentage of trucks
U.S. 321	From Intersection with Foothills Parkway Section 8A to Convergence with SR 32	950	NB	57%	9.00%
		LOS=B	SB	43%	
U.S. 321	From U.S. 321 Convergence with SR 32 to Intersection with SR 416	834	WB	55%	7.00%
		LOS=D	EB	45%	
SR 416	From Intersection with U.S. 321 to Intersection with Webb Creek Rd	364	NB	56%	7.00%
		LOS=B	SB	44%	
U.S. 321	From Intersection with SR 416 to Outside of Gatlinburg	1414	EB	37%	5.00%
		LOS=B	WB	63%	
Foothill 8B	From Cosby to Pittman Center	185	EB	52%	0.00%
		LOS=B	WB	48%	

Table J.27. Weekday A.M. peak hour traffic projections for 2026—interchange at Highway 416 (both options)—8B opened prior to completion of 8C

Road section name	Range	Traffic volume	Directional split		Percentage of trucks
U.S. 321	From Intersection with Foothills Parkway Section 8A to Convergence with SR 32	1242	NB	56%	9.00%
		LOS=B	SB	44%	
U.S. 321	From U.S. 321 Convergence with SR 32 to Intersection with SR 416	1117	WB	55%	7.00%
		LOS=D	EB	45%	
SR 416	From Intersection with U.S. 321 to Intersection with Webb Creek Rd	469	NB	52%	7.00%
		LOS=C	SB	48%	
U.S. 321	From Intersection with SR 416 to Outside of Gatlinburg	1861	EB	34%	5.00%
		LOS=C	WB	66%	
Foothill 8B	From Cosby to Pittman Center	263	EB	58%	0.00%
		LOS=C	WB	42%	

Table J.28. Weekday P.M. peak hour traffic projections for 2006—interchange at Highway 416 (both options)—8B opened prior to completion of 8C

Road section name	Range	Traffic volume	Directional split		Percentage of trucks
U.S. 321	From Intersection with Foothills Parkway Section 8A to Convergence with SR 32	1005	NB	59%	9.00%
		LOS=B	SB	41%	
U.S. 321	From U.S. 321 Convergence with SR 32 to Intersection with SR 416	873	WB	52%	7.00%
		LOS=D	EB	48%	
SR 416	From Intersection with U.S. 321 to Intersection with Webb Creek Rd	329	NB	61%	7.00%
		LOS=B	SB	39%	
U.S. 321	From Intersection with SR 416 to Outside of Gatlinburg	1175	EB	32%	5.00%
		LOS=B	WB	68%	
Foothill 8B	From Cosby to Pittman Center	220	EB	58%	0.00%
		LOS=C	WB	42%	

Table J.29. Weekday P.M. peak hour traffic projections for 2026—interchange at Highway 416 (both options)—8B opened prior to completion of 8C

Road section name	Range	Traffic volume	Directional split		Percentage of trucks
U.S. 321	From Intersection with Foothills Parkway Section 8A to Convergence with SR 32	1316	NB	59%	9.00%
		LOS=B	SB	41%	
U.S. 321	From U.S. 321 Convergence with SR 32 to Intersection with SR 416	1151	WB	52%	7.00%
		LOS=D	EB	48%	
SR 416	From Intersection with U.S. 321 to Intersection with Webb Creek Rd	433	NB	58%	7.00%
		LOS=C	SB	42%	
U.S. 321	From Intersection with SR 416 to Outside of Gatlinburg	1570	EB	31%	5.00%
		LOS=C	WB	69%	
Foothill 8B	From Cosby to Pittman Center	313	EB	64%	0.00%
		LOS=C	WB	36%	

Table J.30. Weekend A.M. peak hour traffic projections for 2006—interchange at Highway 416 (both options)—8B opened prior to completion of 8C

Road section name	Range	Traffic volume	Directional split		Percentage of trucks
U.S. 321	From Intersection with Foothills Parkway Section 8A to Convergence with SR 32	1332	NB	52%	9.00%
		LOS=B	SB	48%	
U.S. 321	From U.S. 321 Convergence with SR 32 to Intersection with SR 416	1139	WB	57%	7.00%
		LOS=D	EB	43%	
SR 416	From Intersection with U.S. 321 to Intersection with Webb Creek Rd	405	NB	62%	7.00%
		LOS=C	SB	38%	
U.S. 321	From Intersection with SR 416 to Outside of Gatlinburg	1723	EB	38%	5.00%
		LOS=C	WB	62%	
Foothill 8B	From Cosby to Pittman Center	240	EB	55%	0.00%
		LOS=C	WB	45%	

Table J.31. Weekend A.M. peak hour traffic projections for 2026—interchange at Highway 416 (both options)—8B opened prior to completion of 8C

Road section name	Range	Traffic volume	Directional split		Percentage of trucks
U.S. 321	From Intersection with Foothills Parkway Section 8A to Convergence with SR 32	1746	NB	51%	9.00%
		LOS=C	SB	49%	
U.S. 321	From U.S. 321 Convergence with SR 32 to Intersection with SR 416	1529	WB	57%	7.00%
		LOS=E	EB	43%	
SR 416	From Intersection with U.S. 321 to Intersection with Webb Creek Rd	509	NB	58%	7.00%
		LOS=C	SB	42%	
U.S. 321	From Intersection with SR 416 to Outside of Gatlinburg	2263	EB	36%	5.00%
		LOS=D	WB	64%	
Foothill 8B	From Cosby to Pittman Center	348	EB	60%	0.00%
		LOS=C	WB	40%	

Table J.32. Weekend P.M. peak hour traffic projections for 2006—interchange at Highway 416 (both options)—8B opened prior to completion of 8C

Road section name	Range	Traffic volume	Directional split		Percentage of trucks
U.S. 321	From Intersection with Foothills Parkway Section 8A to Convergence with SR 32	1272	NB	55%	9.00%
		LOS=B	SB	45%	
U.S. 321	From U.S. 321 Convergence with SR 32 to Intersection with SR 416	1192	WB	55%	7.00%
		LOS=D	EB	45%	
SR 416	From Intersection with U.S. 321 to Intersection with Webb Creek Rd	449	NB	55%	7.00%
		LOS=C	SB	45%	
U.S. 321	From Intersection with SR 416 to Outside of Gatlinburg	1677	EB	32%	5.00%
		LOS=C	WB	68%	
Foothill 8B	From Cosby to Pittman Center	263	EB	58%	0.00%
		LOS=C	WB	42%	

Table J.33. Weekend P.M. peak hour traffic projections for 2026—interchange at Highway 416 (both options)—8B opened prior to completion of 8C

Road section name	Range	Traffic volume	Directional split		Percentage of trucks
U.S. 321	From Intersection with Foothills Parkway Section 8A to Convergence with SR 32	1671	NB	54%	9.00%
		LOS=C	SB	46%	
U.S. 321	From U.S. 321 Convergence with SR 32 to Intersection with SR 416	1577	WB	55%	7.00%
		LOS=E	EB	45%	
SR 416	From Intersection with U.S. 321 to Intersection with Webb Creek Rd	581	NB	52%	7.00%
		LOS=C	SB	48%	
U.S. 321	From Intersection with SR 416 to Outside of Gatlinburg	2246	EB	30%	5.00%
		LOS=D	WB	70%	
Foothill 8B	From Cosby to Pittman Center	376	EB	64%	0.00%
		LOS=C	WB	36%	

**Table J.34. Weekday A.M. peak hour traffic projections for 2006—interchange
at U.S. 321 (both options)—8B opened prior to completion of 8C**

Road section name	Range	Traffic volume	Directional split		Percentage of trucks
U.S. 321	From Intersection with Foothills Parkway Section 8A to Convergence with SR 32	950	NB	57%	9.00%
		LOS=B	SB	43%	
U.S. 321	From U.S. 321 Convergence with SR 32 to Intersection with SR 416	930	WB	54%	7.00%
		LOS=D	EB	46%	
SR 416	From Intersection with U.S. 321 to Intersection with Webb Creek Rd	214	NB	49%	7.00%
		LOS=B	SB	51%	
U.S. 321	From Intersection with SR 416 to Outside of Gatlinburg	1404	EB	37%	5.00%
		LOS=B	WB	63%	
Foothill 8B	From Cosby to Pittman Center	185	EB	52%	0.00%
		LOS=B	WB	48%	

**Table J.35. Weekday A.M. peak hour traffic projections for 2026—interchange
at U.S. 321 (both options)—8B opened prior to completion of 8C**

Road section name	Range	Traffic volume	Directional split		Percentage of trucks
U.S. 321	From Intersection with Foothills Parkway Section 8A to Convergence with SR 32	1242	NB	56%	9.00%
		LOS=B	SB	44%	
U.S. 321	From U.S. 321 Convergence with SR 32 to Intersection with SR 416	1257	WB	53%	7.00%
		LOS=D	EB	47%	
SR 416	From Intersection with U.S. 321 to Intersection with Webb Creek Rd	247	NB	36%	7.00%
		LOS=B	SB	64%	
U.S. 321	From Intersection with SR 416 to Outside of Gatlinburg	1850	EB	34%	5.00%
		LOS=C	WB	66%	
Foothill 8B	From Cosby to Pittman Center	263	EB	58%	0.00%
		LOS=C	WB	42%	

Table J.36. Weekday P.M. peak hour traffic projections for 2006—interchange at U.S. 321 (both options)—8B opened prior to completion of 8C

Road section name	Range	Traffic volume	Directional split		Percentage of trucks
U.S. 321	From Intersection with Foothills Parkway Section 8A to Convergence with SR 32	1005	NB	59%	9.00%
		LOS=B	SB	41%	
U.S. 321	From U.S. 321 Convergence with SR 32 to Intersection with SR 416	961	WB	52%	7.00%
		LOS=D	EB	48%	
SR 416	From Intersection with U.S. 321 to Intersection with Webb Creek Rd	204	NB	54%	7.00%
		LOS=B	SB	46%	
U.S. 321	From Intersection with SR 416 to Outside of Gatlinburg	1226	EB	34%	5.00%
		LOS=B	WB	66%	
Foothill 8B	From Cosby to Pittman Center	220	EB	58%	0.00%
		LOS=C	WB	42%	

Table J.37. Weekday P.M. peak hour traffic projections for 2026—interchange at U.S. 321 (both options)—8B opened prior to completion of 8C

Road section name	Range	Traffic volume	Directional split		Percentage of trucks
U.S. 321	From Intersection with Foothills Parkway Section 8A to Convergence with SR 32	1316	NB	59%	9.00%
		LOS=B	SB	41%	
U.S. 321	From U.S. 321 Convergence with SR 32 to Intersection with SR 416	1277	WB	51%	7.00%
		LOS=D	EB	49%	
SR 416	From Intersection with U.S. 321 to Intersection with Webb Creek Rd	245	NB	43%	7.00%
		LOS=B	SB	57%	
U.S. 321	From Intersection with SR 416 to Outside of Gatlinburg	1645	EB	33%	5.00%
		LOS=C	WB	67%	
Foothill 8B	From Cosby to Pittman Center	313	EB	64%	0.00%
		LOS=C	WB	36%	

**Table J.38. Weekend A.M. peak hour traffic projections for 2006—interchange
at U.S. 321 (both options)—8B opened prior to completion of 8C**

Road section name	Range	Traffic volume	Directional split		Percentage of trucks
U.S. 321	From Intersection with Foothills Parkway Section 8A to Convergence with SR 32	1332	NB	52%	9.00%
		LOS=B	SB	48%	
U.S. 321	From U.S. 321 Convergence with SR 32 to Intersection with SR 416	1259	WB	56%	7.00%
		LOS=D	EB	44%	
SR 416	From Intersection with U.S. 321 to Intersection with Webb Creek Rd	220	NB	55%	7.00%
		LOS=B	SB	45%	
U.S. 321	From Intersection with SR 416 to Outside of Gatlinburg	1723	EB	38%	5.00%
		LOS=C	WB	62%	
Foothill 8B	From Cosby to Pittman Center	240	EB	55%	0.00%
		LOS=C	WB	45%	

**Table J.39. Weekend A.M. peak hour traffic projections for 2026—interchange
at U.S. 321 (both options)—8B opened prior to completion of 8C**

Road section name	Range	Traffic volume	Directional split		Percentage of trucks
U.S. 321	From Intersection with Foothills Parkway Section 8A to Convergence with SR 32	1746	NB	51%	9.00%
		LOS=C	SB	49%	
U.S. 321	From U.S. 321 Convergence with SR 32 to Intersection with SR 416	1703	WB	55%	7.00%
		LOS=E	EB	45%	
SR 416	From Intersection with U.S. 321 to Intersection with Webb Creek Rd	231	NB	38%	7.00%
		LOS=B	SB	62%	
U.S. 321	From Intersection with SR 416 to Outside of Gatlinburg	2263	EB	36%	5.00%
		LOS=D	WB	64%	
Foothill 8B	From Cosby to Pittman Center	348	EB	60%	0.00%
		LOS=C	WB	40%	

**Table J.40. Weekend P.M. peak hour traffic projections for 2006—interchange
at U.S. 321 (both options)—8B opened prior to completion of 8C**

Road section name	Range	Traffic volume	Directional split		Percentage of trucks
U.S. 321	From Intersection with Foothills Parkway Section 8A to Convergence with SR 32	1272	NB	55%	9.00%
		LOS=B	SB	45%	
U.S. 321	From U.S. 321 Convergence with SR 32 to Intersection with SR 416	1313	WB	54%	7.00%
		LOS=E	EB	46%	
SR 416	From Intersection with U.S. 321 to Intersection with Webb Creek Rd	269	NB	50%	7.00%
		LOS=B	SB	50%	
U.S. 321	From Intersection with SR 416 to Outside of Gatlinburg	1711	EB	34%	5.00%
		LOS=C	WB	66%	
Foothill 8B	From Cosby to Pittman Center	263	EB	58%	0.00%
		LOS=C	WB	42%	

**Table J.41. Weekend P.M. peak hour traffic projections for 2026—interchange
at U.S. 321 (both options)—8B opened prior to completion of 8C**

Road section name	Range	Traffic volume	Directional split		Percentage of trucks
U.S. 321	From Intersection with Foothills Parkway Section 8A to Convergence with SR 32	1671	NB	54%	9.00%
		LOS=C	SB	46%	
U.S. 321	From U.S. 321 Convergence with SR 32 to Intersection with SR 416	1751	WB	53%	7.00%
		LOS=E	EB	47%	
SR 416	From Intersection with U.S. 321 to Intersection with Webb Creek Rd	315	NB	37%	7.00%
		LOS=B	SB	63%	
U.S. 321	From Intersection with SR 416 to Outside of Gatlinburg	2304	EB	33%	5.00%
		LOS=D	WB	67%	
Foothill 8B	From Cosby to Pittman Center	376	EB	64%	0.00%
		LOS=C	WB	36%	

Table J.42. Weekday A.M. peak hour traffic projections for 2006—no-build alternative

Road section name	Range	Traffic volume	Directional split		Percentage of trucks
U.S. 321	From Intersection with Foothills Parkway Section 8A to Convergence with SR 32	1042	NB	56%	9.00%
		LOS=B	SB	44%	
U.S. 321	From U.S. 321 Convergence with SR 32 to Intersection with SR 416	940	WB	55%	7.00%
		LOS=D	EB	45%	
SR 416	From Intersection with U.S. 321 to Intersection with Webb Creek Rd	214	NB	49%	7.00%
		LOS=B	SB	51%	
U.S. 321	From Intersection with SR 416 to Outside of Gatlinburg	1334	EB	35%	5.00%
		LOS=B	WB	65%	
Foothill 8B	From Cosby to Pittman Center	0	EB	0%	0.00%
			WB	0%	

Table J.43. Weekday A.M. peak hour traffic projections for 2026—no-build alternative

Road section name	Range	Traffic volume	Directional split		Percentage of trucks
U.S. 321	From Intersection with Foothills Parkway Section 8A to Convergence with SR 32	1212	NB	54%	9.00%
		LOS=B	SB	46%	
U.S. 321	From U.S. 321 Convergence with SR 32 to Intersection with SR 416	1051	WB	52%	7.00%
		LOS=D	EB	48%	
SR 416	From Intersection with U.S. 321 to Intersection with Webb Creek Rd	173	NB	37%	7.00%
		LOS=B	SB	63%	
U.S. 321	From Intersection with SR 416 to Outside of Gatlinburg	1649	EB	29%	5.00%
		LOS=C	WB	71%	
Foothill 8B	From Cosby to Pittman Center	0	EB	0%	0.00%
			WB	0%	

Table J.44. Weekday P.M. peak hour traffic projections for 2006—no-build alternative

Road section name	Range	Traffic volume	Directional split		Percentage of trucks
U.S. 321	From Intersection with Foothills Parkway Section 8A to Convergence with SR 32	1106	NB	58%	9.00%
		LOS=B	SB	42%	
U.S. 321	From U.S. 321 Convergence with SR 32 to Intersection with SR 416	981	WB	52%	7.00%
		LOS=D	EB	48%	
SR 416	From Intersection with U.S. 321 to Intersection with Webb Creek Rd	204	NB	54%	7.00%
		LOS=B	SB	46%	
U.S. 321	From Intersection with SR 416 to Outside of Gatlinburg	1164	EB	32%	5.00%
		LOS=B	WB	68%	
Foothill 8B	From Cosby to Pittman Center	0	EB	0%	0.00%
			WB	0%	

Table J.45. Weekday P.M. peak hour traffic projections for 2026—no-build alternative

Road section name	Range	Traffic volume	Directional split		Percentage of trucks
U.S. 321	From Intersection with Foothills Parkway Section 8A to Convergence with SR 32	1446	NB	58%	9.00%
		LOS=B	SB	42%	
U.S. 321	From U.S. 321 Convergence with SR 32 to Intersection with SR 416	1290	WB	51%	7.00%
		LOS=D	EB	49%	
SR 416	From Intersection with U.S. 321 to Intersection with Webb Creek Rd	245	NB	43%	7.00%
		LOS=B	SB	57%	
U.S. 321	From Intersection with SR 416 to Outside of Gatlinburg	1535	EB	30%	5.00%
		LOS=B	WB	70%	
Foothill 8B	From Cosby to Pittman Center	0	EB	0%	0.00%
			WB	0%	

Table J.46. Weekend A.M. peak hour traffic projections for 2006—no-build alternative

Road section name	Range	Traffic volume	Directional split		Percentage of trucks
U.S. 321	From Intersection with Foothills Parkway Section 8A to Convergence with SR 32	1458	NB	51%	9.00%
		LOS=B	SB	49%	
U.S. 321	From U.S. 321 Convergence with SR 32 to Intersection with SR 416	1291	WB	56%	7.00%
		LOS=E	EB	44%	
SR 416	From Intersection with U.S. 321 to Intersection with Webb Creek Rd	220	NB	55%	7.00%
		LOS=B	SB	45%	
U.S. 321	From Intersection with SR 416 to Outside of Gatlinburg	1635	EB	37%	5.00%
		LOS=C	WB	63%	
Foothill 8B	From Cosby to Pittman Center	0	EB	0%	0.00%
			WB	0%	

Table J.47. Weekend A.M. peak hour traffic projections for 2026—no-build alternative

Road section name	Range	Traffic volume	Directional split		Percentage of trucks
U.S. 321	From Intersection with Foothills Parkway Section 8A to Convergence with SR 32	1905	NB	51%	9.00%
		LOS=C	SB	49%	
U.S. 321	From U.S. 321 Convergence with SR 32 to Intersection with SR 416	1722	WB	56%	7.00%
		LOS=E	EB	44%	
SR 416	From Intersection with U.S. 321 to Intersection with Webb Creek Rd	231	NB	38%	7.00%
		LOS=B	SB	62%	
U.S. 321	From Intersection with SR 416 to Outside of Gatlinburg	2108	EB	33%	5.00%
		LOS=D	WB	67%	
Foothill 8B	From Cosby to Pittman Center	0	EB	0%	0.00%
			WB	0%	

Table J.48. Weekend P.M. peak hour traffic projections for 2006—no-build alternative

Road section name	Range	Traffic volume	Directional split	Percentage of trucks	
U.S. 321	From Intersection with Foothills Parkway Section 8A to Convergence with SR 32	1404	NB	54%	9.00%
		LOS=B	SB	46%	
U.S. 321	From U.S. 321 Convergence with SR 32 to Intersection with SR 416	1344	WB	55%	7.00%
		LOS=E	EB	45%	
SR 416	From Intersection with U.S. 321 to Intersection with Webb Creek Rd	269	NB	50%	7.00%
		LOS=B	SB	50%	
U.S. 321	From Intersection with SR 416 to Outside of Gatlinburg	1622	EB	32%	5.00%
		LOS=C	WB	68%	
Foothill 8B	From Cosby to Pittman Center	0	EB	0%	0.00%
			WB	0%	

Table J.49. Weekend P.M. peak hour traffic projections for 2026—no-build alternative

Road section name	Range	Traffic volume	Directional split	Percentage of trucks	
U.S. 321	From Intersection with Foothills Parkway Section 8A to Convergence with SR 32	1837	NB	54%	9.00%
		LOS=C	SB	46%	
U.S. 321	From U.S. 321 Convergence with SR 32 to Intersection with SR 416	1771	WB	54%	7.00%
		LOS=E	EB	46%	
SR 416	From Intersection with U.S. 321 to Intersection with Webb Creek Rd	315	NB	37%	7.00%
		LOS=B	SB	63%	
U.S. 321	From Intersection with SR 416 to Outside of Gatlinburg	2150	EB	30%	5.00%
		LOS=D	WB	70%	
Foothill 8B	From Cosby to Pittman Center	0	EB	0%	0.00%
			WB	0%	

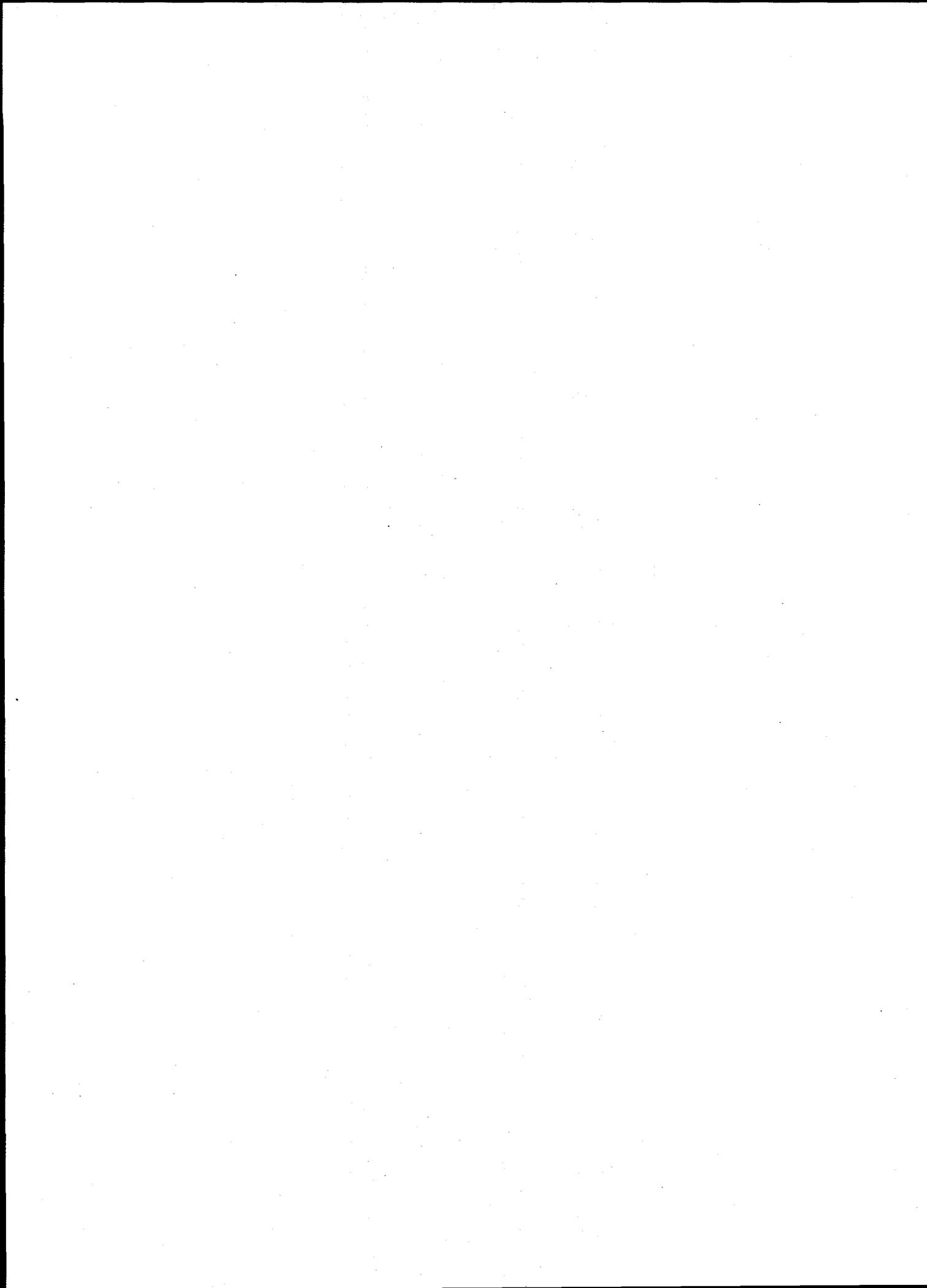
Appendix K

INTERSECTION TRAFFIC VOLUME RESULTS FOR THE FIVE BUILD OPTIONS

S. M. Chin
Oak Ridge National Laboratory
Oak Ridge, Tennessee

R. Gibson
Oak Ridge National Laboratory
Oak Ridge, Tennessee

August 1995



**Table K.1. Weekday A.M. peak-hour intersection volume projections for
2006—construct 8B with no interchanges option**

Intersection location	Approach	Total vehicles per hour	Directional information			
			Turning movement	Percent	Counts	
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	222	Right Turn	13.06%	29	
			Through	7.66%	17	
			Left Turn	79.28%	176	
	FH Pkwy 8B EB	97	Right Turn	6.19%	6	
			Through	50.52%	49	
			Left Turn	43.30%	42	
	U.S. 321 SB	537	Right Turn	12.66%	68	
			Through	77.47%	416	
			Left Turn	9.87%	53	
	U.S. 321 NB	660	Right Turn	21.67%	143	
			Through	77.73%	513	
			Left Turn	0.61%	4	
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	416	Right Turn	12.74%	53	
			Left Turn	87.26%	363	
	U.S. 321 SB	228	Right Turn	71.05%	162	
			Through	28.95%	66	
	SR 32 NB	76	Through	71.05%	54	
			Left Turn	28.95%	22	
U.S. 321 Intersection w/ SR 416	SR 416 SB	126	Right Turn	76.19%	96	
			Left Turn	23.81%	30	
	U.S. 321 WB	675	Right Turn	5.04%	34	
			Through	94.96%	641	
	U.S. 321 EB	416	Through	73.56%	306	
			Left Turn	26.44%	110	
	SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	54	Right Turn	3.70%	2
				Left Turn	96.30%	52
		SR 416 SB	42	Through	97.62%	41
Left Turn				2.38%	1	
SR 416 NB		65	Right Turn	49.23%	32	
			Through	50.77%	33	
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	83	Right Turn	0.00%	0	
			Through	100.00%	83	
			Left Turn	0.00%	0	
	FH Pkwy 8C EB	96	Right Turn	0.00%	0	
			Through	100.00%	96	
			Left Turn	0.00%	0	
	SR 416 SB	93	Right Turn	0.00%	0	
			Through	100.00%	93	
			Left Turn	0.00%	0	
	SR 416 NB	65	Right Turn	0.00%	0	
			Through	100.00%	65	
			Left Turn	0.00%	0	

**Table K.2. Weekday P.M. peak-hour intersection volume projections for
2006—construct 8B with no interchanges option**

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	163	Right Turn	15.95%	26
			Through	7.36%	12
			Left Turn	76.69%	125
	FH Pkwy 8B EB	128	Right Turn	6.25%	8
			Through	50.78%	65
			Left Turn	42.97%	55
	U.S. 321 SB	555	Right Turn	13.69%	76
			Through	83.24%	462
			Left Turn	3.06%	17
	U.S. 321 NB	671	Right Turn	14.31%	96
			Through	84.95%	570
			Left Turn	0.75%	5
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	551	Right Turn	13.07%	72
			Left Turn	86.93%	479
	U.S. 321 SB	228	Right Turn	71.49%	163
			Through	28.51%	65
	SR 32 NB	54	Through	68.52%	37
			Left Turn	31.48%	17
U.S. 321 Intersection w/ SR 416	SR 416 SB	82	Right Turn	79.27%	65
			Left Turn	20.73%	17
	U.S. 321 WB	680	Right Turn	10.88%	74
			Through	89.12%	606
	U.S. 321 EB	325	Through	81.54%	265
			Left Turn	18.46%	60
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	58	Right Turn	5.17%	3
			Left Turn	94.83%	55
	SR 416 SB	53	Through	98.11%	52
			Left Turn	1.89%	1
	SR 416 NB	84	Right Turn	45.24%	38
			Through	54.76%	46
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	84	Right Turn	0.00%	0
			Through	100.00%	84
			Left Turn	0.00%	0
	FH Pkwy 8C EB	126	Right Turn	0.00%	0
			Through	100.00%	126
			Left Turn	0.00%	0
	SR 416 SB	107	Right Turn	0.00%	0
			Through	100.00%	107
			Left Turn	0.00%	0
	SR 416 NB	84	Right Turn	0.00%	0
			Through	100.00%	84
			Left Turn	0.00%	0

**Table K.3. Weekend A.M. peak-hour intersection volume projections for
2006—construct 8B with no interchanges option**

Intersection location	Approach	Total vehicles per hour	Directional information			
			Turning movement	Percent	Counts	
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	375	Right Turn	13.07%	49	
			Through	7.73%	29	
			Left Turn	79.20%	297	
	FH Pkwy 8B EB	132	Right Turn	6.06%	8	
			Through	50.76%	67	
			Left Turn	43.18%	57	
	U.S. 321 SB	591	Right Turn	12.69%	75	
			Through	77.33%	457	
			Left Turn	9.98%	59	
	U.S. 321 NB	813	Right Turn	21.77%	177	
			Through	77.61%	631	
			Left Turn	0.62%	5	
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	570	Right Turn	12.81%	73	
			Left Turn	87.19%	497	
	U.S. 321 SB	519	Right Turn	70.91%	368	
			Through	29.09%	151	
	SR 32 NB	104	Through	72.12%	75	
			Left Turn	27.88%	29	
U.S. 321 Intersection w/ SR 416	SR 416 SB	137	Right Turn	76.64%	105	
			Left Turn	23.36%	32	
	U.S. 321 WB	821	Right Turn	5.24%	43	
			Through	94.76%	778	
	U.S. 321 EB	530	Through	73.21%	388	
			Left Turn	26.79%	142	
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	34	Right Turn	2.94%	1	
			Left Turn	97.06%	33	
	SR 416 SB	31	Through	96.77%	30	
			Left Turn	3.23%	1	
	SR 416 NB	54	Right Turn	48.15%	26	
			Through	51.85%	28	
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	108	Right Turn	0.00%		
			Through	100.00%	108	
			Left Turn	0.00%		
	FH Pkwy 8C EB	131	Right Turn	0.00%		
			Through	100.00%	131	
			Left Turn	0.00%		
	SR 416 SB	63	Right Turn	0.00%		
			Through	100.00%	63	
	SR 416 NB	54	Right Turn	0.00%		
			Through	100.00%	54	
				Left Turn	0.00%	

**Table K.4. Weekend P.M. peak-hour intersection volume projections for
2006—construct 8B with no interchanges option**

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	229	Right Turn	16.59%	38
			Through	7.42%	17
			Left Turn	75.98%	174
	FH Pkwy 8B EB	153	Right Turn	5.88%	9
			Through	50.98%	78
			Left Turn	43.14%	66
	U.S. 321 SB	651	Right Turn	13.67%	89
			Through	83.26%	542
			Left Turn	3.07%	20
	U.S. 321 NB	766	Right Turn	14.23%	109
			Through	85.12%	652
			Left Turn	0.65%	5
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	663	Right Turn	13.12%	87
			Left Turn	86.88%	576
	U.S. 321 SB	432	Right Turn	71.30%	308
			Through	28.70%	124
	SR 32 NB	69	Through	68.12%	47
			Left Turn	31.88%	22
U.S. 321 Intersection w/ SR 416	SR 416 SB	160	Right Turn	78.75%	126
			Left Turn	21.25%	34
	U.S. 321 WB	908	Right Turn	10.79%	98
			Through	89.21%	810
	U.S. 321 EB	461	Through	81.78%	377
			Left Turn	18.22%	84
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	43	Right Turn	4.65%	2
			Left Turn	95.35%	41
	SR 416 SB	72	Through	98.61%	71
			Left Turn	1.39%	1
	SR 416 NB	84	Right Turn	45.24%	38
			Through	54.76%	46
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	101	Right Turn	0.00%	0
			Through	100.00%	101
			Left Turn	0.00%	0
	FH Pkwy 8C EB	152	Right Turn	0.00%	0
			Through	100.00%	152
			Left Turn	0.00%	0
	SR 416 SB	112	Right Turn	0.00%	0
			Through	100.00%	112
			Left Turn	0.00%	0
	SR 416 NB	84	Right Turn	0.00%	0
			Through	100.00%	84
			Left Turn	0.00%	0

**Table K.5. Weekday A.M. peak-hour intersection volume projections for
2026—construct 8B with no interchanges option**

Intersection location	Approach	Total vehicles per hour	Directional information			
			Turning movement	Percent	Counts	
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	300	Right Turn	12.00%	36	
			Through	10.00%	30	
			Left Turn	78.00%	234	
	FH Pkwy 8B EB	152	Right Turn	5.92%	9	
			Through	57.89%	88	
			Left Turn	36.18%	55	
	U.S. 321 SB	680	Right Turn	11.32%	77	
			Through	80.15%	545	
			Left Turn	8.53%	58	
U.S. 321 NB	849	Right Turn	20.49%	174		
		Through	79.03%	671		
		Left Turn	0.47%	4		
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	547	Right Turn	12.43%	68	
			Left Turn	87.57%	479	
	U.S. 321 SB	306	Right Turn	73.53%	225	
			Through	26.47%	81	
	SR 32 NB	90	Through	68.89%	62	
			Left Turn	31.11%	28	
U.S. 321 Intersection w/ SR 416	SR 416 SB	176	Right Turn	81.25%	143	
			Left Turn	18.75%	33	
	U.S. 321 WB	976	Right Turn	1.84%	18	
			Through	98.16%	958	
	U.S. 321 EB	470	Through	90.64%	426	
			Left Turn	9.36%	44	
	SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	82	Right Turn	3.66%	3
				Left Turn	96.34%	79
		SR 416 SB	65	Through	96.92%	63
Left Turn				3.08%	2	
SR 416 NB		113	Right Turn	47.79%	54	
			Through	52.21%	59	
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	107	Right Turn	0.00%	0	
			Through	100.00%	107	
			Left Turn	0.00%	0	
	FH Pkwy 8C EB	151	Right Turn	0.00%	0	
			Through	100.00%	151	
			Left Turn	0.00%	0	
	SR 416 SB	142	Right Turn	0.00%	0	
			Through	100.00%	142	
			Left Turn	0.00%	0	
	SR 416 NB	115	Right Turn	0.00%	0	
			Through	100.00%	115	
			Left Turn	0.00%	0	

**Table K.6. Weekday P.M. peak-hour intersection volume projections for
2026—construct 8B with no interchanges option**

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	221	Right Turn	14.93%	33
			Through	9.50%	21
			Left Turn	75.57%	167
	FH Pkwy 8B EB	201	Right Turn	5.97%	12
			Through	57.71%	116
			Left Turn	36.32%	73
	U.S. 321 SB	711	Right Turn	12.10%	86
			Through	85.23%	606
			Left Turn	2.67%	19
	U.S. 321 NB	867	Right Turn	13.49%	117
			Through	85.93%	745
			Left Turn	0.58%	5
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	724	Right Turn	12.71%	92
			Left Turn	87.29%	632
	U.S. 321 SB	306	Right Turn	74.18%	227
			Through	25.82%	79
	SR 32 NB	63	Through	66.67%	42
			Left Turn	33.33%	21
U.S. 321 Intersection w/ SR 416	SR 416 SB	115	Right Turn	84.35%	97
			Left Turn	15.65%	18
	U.S. 321 WB	944	Right Turn	4.13%	39
			Through	95.87%	905
	U.S. 321 EB	393	Through	93.89%	369
			Left Turn	6.11%	24
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	89	Right Turn	6.74%	6
			Left Turn	93.26%	83
	SR 416 SB	80	Through	98.75%	79
			Left Turn	1.25%	1
	SR 416 NB	146	Right Turn	43.84%	64
			Through	56.16%	82
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	108	Right Turn	0.00%	0
			Through	100.00%	108
			Left Turn	0.00%	0
	FH Pkwy 8C EB	200	Right Turn	0.00%	0
			Through	100.00%	200
			Left Turn	0.00%	0
	SR 416 SB	163	Right Turn	0.00%	0
			Through	100.00%	163
			Left Turn	0.00%	0
	SR 416 NB	149	Right Turn	0.00%	0
			Through	100.00%	149
			Left Turn	0.00%	0

**Table K.7. Weekend A.M. peak-hour intersection volume projections for
2026—construct 8B with no interchanges option**

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	507	Right Turn	12.03%	61
			Through	9.86%	50
			Left Turn	78.11%	396
	FH Pkwy 8B EB	208	Right Turn	5.77%	12
			Through	57.69%	120
			Left Turn	36.54%	76
	U.S. 321 SB	749	Right Turn	11.35%	85
			Through	79.97%	599
			Left Turn	8.68%	65
	U.S. 321 NB	1046	Right Turn	20.65%	216
			Through	78.87%	825
			Left Turn	0.48%	5
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	749	Right Turn	12.42%	93
			Left Turn	87.58%	656
	U.S. 321 SB	696	Right Turn	73.56%	512
			Through	26.44%	184
	SR 32 NB	123	Through	69.92%	86
			Left Turn	30.08%	37
U.S. 321 Intersection w/ SR 416	SR 416 SB	191	Right Turn	81.68%	156
			Left Turn	18.32%	35
	U.S. 321 WB	1185	Right Turn	1.94%	23
			Through	98.06%	1162
	U.S. 321 EB	598	Through	90.47%	541
			Left Turn	9.53%	57
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	52	Right Turn	3.85%	2
			Left Turn	96.15%	50
	SR 416 SB	48	Through	95.83%	46
			Left Turn	4.17%	2
	SR 416 NB	94	Right Turn	46.81%	44
			Through	53.19%	50
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	139	Right Turn	0.00%	
			Through	100.00%	139
			Left Turn	0.00%	
	FH Pkwy 8C EB	207	Right Turn	0.00%	
			Through	100.00%	207
			Left Turn	0.00%	
	SR 416 SB	96	Right Turn	0.00%	
			Through	100.00%	96
			Left Turn	0.00%	
	SR 416 NB	96	Right Turn	0.00%	
			Through	100.00%	96
			Left Turn	0.00%	

**Table K.8. Weekend P.M. peak-hour intersection volume projections for
2026—construct 8B with no interchanges option**

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	308	Right Turn	15.26%	47
			Through	9.42%	29
			Left Turn	75.32%	232
	FH Pkwy 8B EB	241	Right Turn	5.81%	14
			Through	57.68%	139
			Left Turn	36.51%	88
	U.S. 321 SB	833	Right Turn	12.12%	101
			Through	85.23%	710
			Left Turn	2.64%	22
	U.S. 321 NB	991	Right Turn	13.42%	133
			Through	86.07%	853
			Left Turn	0.50%	5
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	871	Right Turn	12.74%	111
			Left Turn	87.26%	760
	U.S. 321 SB	580	Right Turn	73.97%	429
			Through	26.03%	151
	SR 32 NB	82	Through	65.85%	54
			Left Turn	34.15%	28
U.S. 321 Intersection w/ SR 416	SR 416 SB	224	Right Turn	83.48%	187
			Left Turn	16.52%	37
	U.S. 321 WB	1263	Right Turn	4.20%	53
			Through	95.80%	1210
	U.S. 321 EB	560	Through	93.93%	526
			Left Turn	6.07%	34
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	68	Right Turn	7.35%	5
			Left Turn	92.65%	63
	SR 416 SB	110	Through	99.09%	109
			Left Turn	0.91%	1
	SR 416 NB	146	Right Turn	43.84%	64
			Through	56.16%	82
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	130	Right Turn	0.00%	0
			Through	100.00%	130
			Left Turn	0.00%	0
	FH Pkwy 8C EB	240	Right Turn	0.00%	0
			Through	100.00%	240
			Left Turn	0.00%	0
	SR 416 SB	171	Right Turn	0.00%	0
			Through	100.00%	171
			Left Turn	0.00%	0
	SR 416 NB	149	Right Turn	0.00%	0
			Through	100.00%	149
			Left Turn	0.00%	0

Table K.9. Weekday A.M. peak-hour intersection volume projections for 2006—interchange at Highway 416 (north ramp option)—8B not opened until 8C completed

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	222	Right Turn	13.06%	29
			Through	7.66%	17
			Left Turn	79.28%	176
	FH Pkwy 8B EB	97	Right Turn	6.19%	6
			Through	50.52%	49
			Left Turn	43.30%	42
	U.S. 321 SB	537	Right Turn	12.66%	68
			Through	77.47%	416
			Left Turn	9.87%	53
	U.S. 321 NB	660	Right Turn	21.67%	143
			Through	77.73%	513
			Left Turn	0.61%	4
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	416	Right Turn	12.74%	53
			Left Turn	87.26%	363
	U.S. 321 SB	228	Right Turn	71.05%	162
			Through	28.95%	66
	SR 32 NB	76	Through	71.05%	54
			Left Turn	28.95%	22
U.S. 321 Intersection w/ SR 416	SR 416 SB	95	Right Turn	68.42%	65
			Left Turn	31.58%	30
	U.S. 321 WB	732	Right Turn	12.43%	91
			Through	87.57%	641
	U.S. 321 EB	400	Through	76.25%	305
			Left Turn	23.75%	95
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	79	Right Turn	2.53%	2
			Through	31.65%	25
			Left Turn	65.82%	52
	SR 416 SB	66	Right Turn	36.36%	24
			Through	62.12%	41
			Left Turn	1.52%	1
	SR 416 NB	156	Right Turn	20.51%	32
			Through	21.15%	33
			Left Turn	58.33%	91
	FH Pkwy ramp	16	Right Turn	68.75%	11
			Through	12.50%	2
			Left Turn	18.75%	3
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	83	Through	100.00%	83
	FH Pkwy 8C EB	96	Through	100.00%	96
	SR 416 SB	44	Through	100.00%	44
	SR 416 NB	56	Through	100.00%	56

Table K.10. Weekday P.M. peak-hour intersection volume projections for 2006—interchange at Highway 416 (north ramp option)—8B not opened until 8C completed

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	163	Right Turn	15.95%	26
			Through	7.36%	12
			Left Turn	76.69%	125
	FH Pkwy 8B EB	128	Right Turn	6.25%	8
			Through	50.78%	65
			Left Turn	42.97%	55
	U.S. 321 SB	555	Right Turn	13.69%	76
			Through	83.24%	462
			Left Turn	3.06%	17
	U.S. 321 NB	671	Right Turn	14.31%	96
			Through	84.95%	570
			Left Turn	0.75%	5
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	551	Right Turn	13.07%	72
			Left Turn	86.93%	479
	U.S. 321 SB	228	Right Turn	71.49%	163
			Through	28.51%	65
	SR 32 NB	54	Through	68.52%	37
			Left Turn	31.48%	17
U.S. 321 Intersection w/ SR 416	SR 416 SB	61	Right Turn	72.13%	44
			Left Turn	27.87%	17
	U.S. 321 WB	804	Right Turn	24.75%	199
			Through	75.25%	605
	U.S. 321 EB	316	Through	83.54%	264
			Left Turn	16.46%	52
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	86	Right Turn	3.49%	3
			Through	32.56%	28
			Left Turn	63.95%	55
	SR 416 SB	81	Right Turn	34.57%	28
			Through	64.20%	52
			Left Turn	1.23%	1
	SR 416 NB	202	Right Turn	18.81%	38
			Through	22.77%	46
			Left Turn	58.42%	118
	FH Pkwy ramp	21	Right Turn	66.67%	14
			Through	14.29%	3
			Left Turn	19.05%	4
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	84	Through	100.00%	84
	FH Pkwy 8C EB	126	Through	100.00%	126
	SR 416 SB	51	Through	100.00%	51
	SR 416 NB	73	Through	100.00%	73

Table K.11. Weekend A.M. peak-hour intersection volume projections for 2006—interchange at Highway 416 (north ramp option)—8B not opened until 8C completed

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	375	Right Turn	13.07%	49
			Through	7.73%	29
			Left Turn	79.20%	297
	FH Pkwy 8B EB	132	Right Turn	6.06%	8
			Through	50.76%	67
			Left Turn	43.18%	57
	U.S. 321 SB	591	Right Turn	12.69%	75
			Through	77.33%	457
			Left Turn	9.98%	59
	U.S. 321 NB	813	Right Turn	21.77%	177
			Through	77.61%	631
			Left Turn	0.62%	5
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	570	Right Turn	12.81%	73
			Left Turn	87.19%	497
	U.S. 321 SB	519	Right Turn	70.91%	368
			Through	29.09%	151
	SR 32 NB	104	Through	72.12%	75
			Left Turn	27.88%	29
U.S. 321 Intersection w/ SR 416	SR 416 SB	103	Right Turn	68.93%	71
			Left Turn	31.07%	32
	U.S. 321 WB	893	Right Turn	12.99%	116
			Through	87.01%	777
	U.S. 321 EB	509	Through	76.03%	387
			Left Turn	23.97%	122
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	52	Right Turn	1.92%	1
			Through	34.62%	18
			Left Turn	63.46%	33
	SR 416 SB	46	Right Turn	32.61%	15
			Through	65.22%	30
			Left Turn	2.17%	1
	SR 416 NB	130	Right Turn	20.00%	26
			Through	21.54%	28
			Left Turn	58.46%	76
	FH Pkwy ramp	22	Right Turn	68.18%	15
			Through	13.64%	3
			Left Turn	18.18%	4
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	108	Through	100.00%	108
	FH Pkwy 8C EB	131	Through	100.00%	131
	SR 416 SB	30	Through	100.00%	30
	SR 416 NB	47	Through	100.00%	47

Table K.12. Weekend P.M. peak-hour intersection volume projections for 2006—interchange at Highway 416 (north ramp option)—8B not opened until 8C completed

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	229	Right Turn	16.59%	38
			Through	7.42%	17
			Left Turn	75.98%	174
	FH Pkwy 8B EB	153	Right Turn	5.88%	9
			Through	50.98%	78
			Left Turn	43.14%	66
	U.S. 321 SB	651	Right Turn	13.67%	89
			Through	83.26%	542
			Left Turn	3.07%	20
	U.S. 321 NB	766	Right Turn	14.23%	109
			Through	85.12%	652
			Left Turn	0.65%	5
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	663	Right Turn	13.12%	87
			Left Turn	86.88%	576
	U.S. 321 SB	432	Right Turn	71.30%	308
			Through	28.70%	124
	SR 32 NB	69	Through	68.12%	47
			Left Turn	31.88%	22
U.S. 321 Intersection w/ SR 416	SR 416 SB	119	Right Turn	71.43%	85
			Left Turn	28.57%	34
	U.S. 321 WB	1074	Right Turn	24.67%	265
			Through	75.33%	809
	U.S. 321 EB	448	Through	83.93%	376
			Left Turn	16.07%	72
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	72	Right Turn	2.78%	2
			Through	40.28%	29
			Left Turn	56.94%	41
	SR 416 SB	102	Right Turn	29.41%	30
			Through	69.61%	71
			Left Turn	0.98%	1
	SR 416 NB	202	Right Turn	18.81%	38
			Through	22.77%	46
			Left Turn	58.42%	118
	FH Pkwy ramp	25	Right Turn	68.00%	17
			Through	16.00%	4
			Left Turn	16.00%	4
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	101	Through	100.00%	101
	FH Pkwy 8C EB	152	Through	100.00%	152
	SR 416 SB	53	Through	100.00%	53
	SR 416 NB	73	Through	100.00%	73

Table K.13. Weekday A.M. peak-hour intersection volume projections for 2026—interchange at Highway 416 (north ramp option)—8B not opened until 8C completed

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	300	Right Turn	12.00%	36
			Through	10.00%	30
			Left Turn	78.00%	234
	FH Pkwy 8B EB	152	Right Turn	5.92%	9
			Through	57.89%	88
			Left Turn	36.18%	55
	U.S. 321 SB	680	Right Turn	11.32%	77
			Through	80.15%	545
			Left Turn	8.53%	58
	U.S. 321 NB	849	Right Turn	20.49%	174
			Through	79.03%	671
			Left Turn	0.47%	4
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	547	Right Turn	12.43%	68
			Left Turn	87.57%	479
	U.S. 321 SB	306	Right Turn	73.53%	225
			Through	26.47%	81
	SR 32 NB	90	Through	68.89%	62
			Left Turn	31.11%	28
U.S. 321 Intersection w/ SR 416	SR 416 SB	121	Right Turn	72.73%	88
			Left Turn	27.27%	33
	U.S. 321 WB	972	Right Turn	8.44%	82
			Through	91.56%	890
	U.S. 321 EB	455	Through	93.63%	426
			Left Turn	6.37%	29
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	127	Right Turn	2.36%	3
			Through	35.43%	45
			Left Turn	62.20%	79
	SR 416 SB	109	Right Turn	40.37%	44
			Through	57.80%	63
			Left Turn	1.83%	2
	SR 416 NB	159	Right Turn	0.63%	1
			Through	37.11%	59
			Left Turn	62.26%	99
	FH Pkwy ramp	15	Right Turn	6.67%	1
			Through	46.67%	7
			Left Turn	46.67%	7
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	107	Through	100.00%	107
	FH Pkwy 8C EB	151	Through	100.00%	151
	SR 416 SB	53	Through	100.00%	53
	SR 416 NB	90	Through	100.00%	90

Table K.14. Weekday P.M. peak-hour intersection volume projections for 2026—interchange at Highway 416 (north ramp option)—8B not opened until 8C completed

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	221	Right Turn	14.93%	33
			Through	9.50%	21
			Left Turn	75.57%	167
	FH Pkwy 8B EB	201	Right Turn	5.97%	12
			Through	57.71%	116
			Left Turn	36.32%	73
	U.S. 321 SB	711	Right Turn	12.10%	86
			Through	85.23%	606
			Left Turn	2.67%	19
	U.S. 321 NB	867	Right Turn	13.49%	117
			Through	85.93%	745
			Left Turn	0.58%	5
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	724	Right Turn	12.71%	92
			Left Turn	87.29%	632
	U.S. 321 SB	306	Right Turn	74.18%	227
			Through	25.82%	79
	SR 32 NB	63	Through	66.67%	42
			Left Turn	33.33%	21
U.S. 321 Intersection w/ SR 416	SR 416 SB	78	Right Turn	76.92%	60
			Left Turn	23.08%	18
	U.S. 321 WB	1019	Right Turn	17.47%	178
			Through	82.53%	841
	U.S. 321 EB	385	Through	95.84%	369
			Left Turn	4.16%	16
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	140	Right Turn	4.29%	6
			Through	36.43%	51
			Left Turn	59.29%	83
	SR 416 SB	131	Right Turn	38.93%	51
			Through	60.31%	79
			Left Turn	0.76%	1
	SR 416 NB	275	Right Turn	23.27%	64
			Through	29.82%	82
			Left Turn	46.91%	129
	FH Pkwy ramp	19	Right Turn	5.26%	1
			Through	47.37%	9
			Left Turn	47.37%	9
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	108	Through	100.00%	108
	FH Pkwy 8C EB	200	Through	100.00%	200
	SR 416 SB	61	Through	100.00%	61
	SR 416 NB	116	Through	100.00%	116

Table K.15. Weekend A.M. peak-hour intersection volume projections for 2026—interchange at Highway 416 (north ramp option)—8B not opened until 8C completed

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	507	Right Turn	12.03%	61
			Through	9.86%	50
			Left Turn	78.11%	396
	FH Pkwy 8B EB	208	Right Turn	5.77%	12
			Through	57.69%	120
			Left Turn	36.54%	76
	U.S. 321 SB	749	Right Turn	11.35%	85
			Through	79.97%	599
			Left Turn	8.68%	65
	U.S. 321 NB	1046	Right Turn	20.65%	216
			Through	78.87%	825
			Left Turn	0.48%	5
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	749	Right Turn	12.42%	93
			Left Turn	87.58%	656
	U.S. 321 SB	696	Right Turn	73.56%	512
			Through	26.44%	184
	SR 32 NB	123	Through	69.92%	86
			Left Turn	30.08%	37
U.S. 321 Intersection w/ SR 416	SR 416 SB	131	Right Turn	73.28%	96
			Left Turn	26.72%	35
	U.S. 321 WB	1184	Right Turn	8.78%	104
			Through	91.22%	1080
	U.S. 321 EB	578	Through	93.60%	541
			Left Turn	6.40%	37
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	82	Right Turn	2.44%	2
			Through	36.59%	30
			Left Turn	60.98%	50
	SR 416 SB	78	Right Turn	38.46%	30
			Through	58.97%	46
			Left Turn	2.56%	2
	SR 416 NB	177	Right Turn	24.86%	44
			Through	28.25%	50
			Left Turn	46.89%	83
	FH Pkwy ramp	20	Right Turn	5.00%	1
			Through	45.00%	9
			Left Turn	50.00%	10
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	139	Through	100.00%	139
	FH Pkwy 8C EB	207	Through	100.00%	207
	SR 416 SB	36	Through	100.00%	36
	SR 416 NB	75	Through	100.00%	75

Table K.16. Weekend P.M. peak-hour intersection volume projections for 2026—interchange at Highway 416 (north ramp option)—8B not opened until 8C completed

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	308	Right Turn	15.26%	47
			Through	9.42%	29
			Left Turn	75.32%	232
	FH Pkwy 8B EB	241	Right Turn	5.81%	14
			Through	57.68%	139
			Left Turn	36.51%	88
	U.S. 321 SB	833	Right Turn	12.12%	101
			Through	85.23%	710
			Left Turn	2.64%	22
	U.S. 321 NB	991	Right Turn	13.42%	133
			Through	86.07%	853
			Left Turn	0.50%	5
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	871	Right Turn	12.74%	111
			Left Turn	87.26%	760
	U.S. 321 SB	580	Right Turn	73.97%	429
			Through	26.03%	151
	SR 32 NB	82	Through	65.85%	54
			Left Turn	34.15%	28
U.S. 321 Intersection w/ SR 416	SR 416 SB	152	Right Turn	75.66%	115
			Left Turn	24.34%	37
	U.S. 321 WB	1363	Right Turn	17.46%	238
			Through	82.54%	1125
	U.S. 321 EB	548	Through	95.99%	526
			Left Turn	4.01%	22
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	122	Right Turn	4.10%	5
			Through	44.26%	54
			Left Turn	51.64%	63
	SR 416 SB	163	Right Turn	32.52%	53
			Through	66.87%	109
			Left Turn	0.61%	1
	SR 416 NB	275	Right Turn	23.27%	64
			Through	29.82%	82
			Left Turn	46.91%	129
	FH Pkwy ramp	23	Right Turn	4.35%	1
			Through	47.83%	11
			Left Turn	47.83%	11
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	130	Through	100.00%	130
	FH Pkwy 8C EB	240	Through	100.00%	240
	SR 416 SB	64	Through	100.00%	64
	SR 416 NB	116	Through	100.00%	116

Table K.17. Weekday A.M. peak-hour intersection volume projections for 2006—interchange at Highway 416 (south ramp option)—8B not opened until 8C completed

Intersection location	Approach	Total vehicles per hour	Directional information			
			Turning movement	Percent	Counts	
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	222	Right Turn	13.06%	29	
			Through	7.66%	17	
			Left Turn	79.28%	176	
	FH Pkwy 8B EB	97	Right Turn	6.19%	6	
			Through	50.52%	49	
			Left Turn	43.30%	42	
	U.S. 321 SB	537	Right Turn	12.66%	68	
			Through	77.47%	416	
			Left Turn	9.87%	53	
	U.S. 321 NB	660	Right Turn	21.67%	143	
			Through	77.73%	513	
			Left Turn	0.61%	4	
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	416	Right Turn	12.74%	53	
			Left Turn	87.26%	363	
	U.S. 321 SB	228	Right Turn	71.05%	162	
			Through	28.95%	66	
	SR 32 NB	76	Through	71.05%	54	
			Left Turn	28.95%	22	
U.S. 321 Intersection w/ SR 416	SR 416 SB	95	Right Turn	68.42%	65	
			Left Turn	31.58%	30	
	U.S. 321 WB	732	Right Turn	12.43%	91	
			Through	87.57%	641	
	U.S. 321 EB	400	Through	76.25%	305	
			Left Turn	23.75%	95	
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	54	Right Turn	3.70%	2	
			Left Turn	96.30%	52	
	SR 416 SB	42	Through	97.62%	41	
			Left Turn	2.38%	1	
	SR 416 NB	65	Right Turn	49.23%	32	
			Through	50.77%	33	
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	83	Through	100.00%	83	
	FH Pkwy 8C EB	96	Through	100.00%	96	
	SR 416 SB	93	Through	100.00%	93	
	SR 416 NB	61	Through	100.00%	61	
	SR 416 Intersection w/ Foothills Pkwy ramp	FH Pkwy ramp SB	16	Right Turn	68.75%	11
				Left Turn	31.25%	5
SR 416 EB		147	Through	38.10%	56	
	Left Turn		61.90%	91		
SR 416 WB	93	Right Turn	52.69%	49		
		Through	47.31%	44		

Table K.18. Weekday P.M. peak-hour intersection volume projections for 2006—interchange at Highway 416 (south ramp option)—8B not opened until 8C completed

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	163	Right Turn	15.95%	26
			Through	7.36%	12
			Left Turn	76.69%	125
	FH Pkwy 8B EB	128	Right Turn	6.25%	8
			Through	50.78%	65
			Left Turn	42.97%	55
	U.S. 321 SB	555	Right Turn	13.69%	76
			Through	83.24%	462
			Left Turn	3.06%	17
U.S. 321 NB	671	Right Turn	14.31%	96	
		Through	84.95%	570	
		Left Turn	0.75%	5	
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	551	Right Turn	13.07%	72
			Left Turn	86.93%	479
	U.S. 321 SB	228	Right Turn	71.49%	163
			Through	28.51%	65
	SR 32 NB	54	Through	68.52%	37
			Left Turn	31.48%	17
U.S. 321 Intersection w/ SR 416	SR 416 SB	61	Right Turn	72.13%	44
			Left Turn	27.87%	17
	U.S. 321 WB	804	Right Turn	24.75%	199
			Through	75.25%	605
	U.S. 321 EB	316	Through	83.54%	264
			Left Turn	16.46%	52
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	58	Right Turn	5.17%	3
			Left Turn	94.83%	55
	SR 416 SB	53	Through	98.11%	52
			Left Turn	1.89%	1
	SR 416 NB	84	Right Turn	45.24%	38
			Through	54.76%	46
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	84	Through	100.00%	84
	FH Pkwy 8C EB	126	Through	100.00%	126
	SR 416 SB	107	Through	100.00%	107
	SR 416 NB	80	Through	100.00%	80
	SR 416 Intersection w/ Foothills Pkwy ramp	FH Pkwy ramp SB	21	Right Turn	66.67%
Left Turn				33.33%	7
SR 416 EB		191	Through	38.22%	73
			Left Turn	61.78%	118
SR 416 WB		107	Right Turn	52.34%	56
Through	47.66%	51			

Table K.19. Weekend A.M. peak-hour intersection volume projections for 2006—interchange at Highway 416 (south ramp option)—8B not opened until 8C completed

Intersection location	Approach	Total vehicles per hour	Directional information			
			Turning movement	Percent	Counts	
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	375	Right Turn	13.07%	49	
			Through	7.73%	29	
			Left Turn	79.20%	297	
	FH Pkwy 8B EB	132	Right Turn	6.06%	8	
			Through	50.76%	67	
			Left Turn	43.18%	57	
	U.S. 321 SB	591	Right Turn	12.69%	75	
			Through	77.33%	457	
			Left Turn	9.98%	59	
	U.S. 321 NB	813	Right Turn	21.77%	177	
			Through	77.61%	631	
			Left Turn	0.62%	5	
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	570	Right Turn	12.81%	73	
			Left Turn	87.19%	497	
	U.S. 321 SB	519	Right Turn	70.91%	368	
			Through	29.09%	151	
	SR 32 NB	104	Through	72.12%	75	
			Left Turn	27.88%	29	
U.S. 321 Intersection w/ SR 416	SR 416 SB	103	Right Turn	68.93%	71	
			Left Turn	31.07%	32	
	U.S. 321 WB	893	Right Turn	12.99%	116	
			Through	87.01%	777	
	U.S. 321 EB	509	Through	76.03%	387	
			Left Turn	23.97%	122	
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	34	Right Turn	2.94%	1	
			Left Turn	97.06%	33	
	SR 416 SB	31	Through	96.77%	30	
			Left Turn	3.23%	1	
	SR 416 NB	54	Right Turn	48.15%	26	
			Through	51.85%	28	
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	108	Through	100.00%	108	
	FH Pkwy 8C EB	131	Through	100.00%	131	
	SR 416 SB	63	Through	100.00%	63	
	SR 416 NB	54	Through	100.00%	54	
	SR 416 Intersection w/ Foothills Pkwy ramp	FH Pkwy ramp SB	22	Right Turn	68.18%	15
				Left Turn	31.82%	7
SR 416 EB		123	Through	38.21%	47	
	Left Turn		61.79%	76		
SR 416 WB	63	Right Turn	52.38%	33		
		Through	47.62%	30		

Table K.20. Weekend P.M. peak-hour intersection volume projections for 2006—interchange at Highway 416 (south ramp option)—8B not opened until 8C completed

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	229	Right Turn	16.59%	38
			Through	7.42%	17
			Left Turn	75.98%	174
	FH Pkwy 8B EB	153	Right Turn	5.88%	9
			Through	50.98%	78
			Left Turn	43.14%	66
	U.S. 321 SB	651	Right Turn	13.67%	89
			Through	83.26%	542
			Left Turn	3.07%	20
	U.S. 321 NB	766	Right Turn	14.23%	109
			Through	85.12%	652
			Left Turn	0.65%	5
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	663	Right Turn	13.12%	87
			Left Turn	86.88%	576
	U.S. 321 SB	432	Right Turn	71.30%	308
			Through	28.70%	124
	SR 32 NB	69	Through	68.12%	47
			Left Turn	31.88%	22
U.S. 321 Intersection w/ SR 416	SR 416 SB	119	Right Turn	71.43%	85
			Left Turn	28.57%	34
	U.S. 321 WB	1074	Right Turn	24.67%	265
			Through	75.33%	809
	U.S. 321 EB	448	Through	83.93%	376
			Left Turn	16.07%	72
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	43	Right Turn	4.65%	2
			Left Turn	95.35%	41
	SR 416 SB	72	Through	98.61%	71
			Left Turn	1.39%	1
	SR 416 NB	84	Right Turn	45.24%	38
			Through	54.76%	46
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	101	Through	100.00%	101
	FH Pkwy 8C EB	152	Through	100.00%	152
	SR 416 SB	112	Through	100.00%	112
	SR 416 NB	81	Through	100.00%	81
	SR 416 Intersection w/ Foothills Pkwy ramp	FH Pkwy ramp SB	25	Right Turn	68.00%
Left Turn				32.00%	8
SR 416 EB		191	Through	38.22%	73
			Left Turn	61.78%	118
SR 416 WB		112	Right Turn	52.68%	59
			Through	47.32%	53

Table K.21. Weekday A.M. peak-hour intersection volume projections for 2026—interchange at Highway 416 (south ramp option)—8B not opened until 8C completed

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	300	Right Turn	12.00%	36
			Through	10.00%	30
			Left Turn	78.00%	234
	FH Pkwy 8B EB	152	Right Turn	5.92%	9
			Through	57.89%	88
			Left Turn	36.18%	55
	U.S. 321 SB	680	Right Turn	11.32%	77
			Through	80.15%	545
			Left Turn	8.53%	58
	U.S. 321 NB	849	Right Turn	20.49%	174
			Through	79.03%	671
			Left Turn	0.47%	4
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	547	Right Turn	12.43%	68
			Left Turn	87.57%	479
	U.S. 321 SB	306	Right Turn	73.53%	225
			Through	26.47%	81
	SR 32 NB	90	Through	68.89%	62
			Left Turn	31.11%	28
U.S. 321 Intersection w/ SR 416	SR 416 SB	121	Right Turn	72.73%	88
			Left Turn	27.27%	33
	U.S. 321 WB	972	Right Turn	8.44%	82
			Through	91.56%	890
	U.S. 321 EB	455	Through	93.63%	426
			Left Turn	6.37%	29
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	82	Right Turn	3.66%	3
			Left Turn	96.34%	79
	SR 416 SB	65	Through	96.92%	63
			Left Turn	3.08%	2
	SR 416 NB	113	Right Turn	47.79%	54
			Through	52.21%	59
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	107	Through	100.00%	107
	FH Pkwy 8C EB	151	Through	100.00%	151
	SR 416 SB	142	Through	100.00%	142
	SR 416 NB	104	Through	100.00%	104
SR 416 Intersection w/ Foothills Pkwy ramp	FH Pkwy ramp SB	15	Right Turn	6.67%	1
			Left Turn	93.33%	14
	SR 416 EB	189	Through	47.62%	90
			Left Turn	52.38%	99
	SR 416 WB	142	Right Turn	62.68%	89
			Through	37.32%	53

Table K.22. Weekday P.M. peak-hour intersection volume projections for 2026—interchange at Highway 416 (south ramp option)—8B not opened until 8C completed

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	221	Right Turn	14.93%	33
			Through	9.50%	21
			Left Turn	75.57%	167
	FH Pkwy 8B EB	201	Right Turn	5.97%	12
			Through	57.71%	116
			Left Turn	36.32%	73
	U.S. 321 SB	711	Right Turn	12.10%	86
			Through	85.23%	606
			Left Turn	2.67%	19
	U.S. 321 NB	867	Right Turn	13.49%	117
			Through	85.93%	745
			Left Turn	0.58%	5
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	724	Right Turn	12.71%	92
			Left Turn	87.29%	632
	U.S. 321 SB	306	Right Turn	74.18%	227
			Through	25.82%	79
	SR 32 NB	63	Through	66.67%	42
			Left Turn	33.33%	21
U.S. 321 Intersection w/ SR 416	SR 416 SB	78	Right Turn	76.92%	60
			Left Turn	23.08%	18
	U.S. 321 WB	1019	Right Turn	17.47%	178
			Through	82.53%	841
	U.S. 321 EB	385	Through	95.84%	369
			Left Turn	4.16%	16
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	89	Right Turn	6.74%	6
			Left Turn	93.26%	83
	SR 416 SB	80	Through	98.75%	79
			Left Turn	1.25%	1
	SR 416 NB	146	Right Turn	43.84%	64
			Through	56.16%	82
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	108	Through	100.00%	108
	FH Pkwy 8C EB	200	Through	100.00%	200
	SR 416 SB	163	Through	100.00%	163
	SR 416 NB	134	Through	100.00%	134
	SR 416 Intersection w/ Foothills Pkwy ramp	FH Pkwy ramp SB	19	Right Turn	5.26%
Left Turn				94.74%	18
SR 416 EB		245	Through	47.35%	116
			Left Turn	52.65%	129
SR 416 WB		163	Right Turn	62.58%	102
			Through	37.42%	61

Table K.23. Weekend A.M. peak-hour intersection volume projections for 2026—interchange at Highway 416 (south ramp option)—8B not opened until 8C completed

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	507	Right Turn	12.03%	61
			Through	9.86%	50
			Left Turn	78.11%	396
	FH Pkwy 8B EB	208	Right Turn	5.77%	12
			Through	57.69%	120
			Left Turn	36.54%	76
	U.S. 321 SB	749	Right Turn	11.35%	85
			Through	79.97%	599
			Left Turn	8.68%	65
	U.S. 321 NB	1046	Right Turn	20.65%	216
			Through	78.87%	825
			Left Turn	0.48%	5
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	749	Right Turn	12.42%	93
			Left Turn	87.58%	656
	U.S. 321 SB	696	Right Turn	73.56%	512
			Through	26.44%	184
	SR 32 NB	123	Through	69.92%	86
			Left Turn	30.08%	37
U.S. 321 Intersection w/ SR 416	SR 416 SB	131	Right Turn	73.28%	96
			Left Turn	26.72%	35
	U.S. 321 WB	1184	Right Turn	8.78%	104
			Through	91.22%	1080
	U.S. 321 EB	578	Through	93.60%	541
			Left Turn	6.40%	37
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	52	Right Turn	3.85%	2
			Left Turn	96.15%	50
	SR 416 SB	48	Through	95.83%	46
			Left Turn	4.17%	2
	SR 416 NB	94	Right Turn	46.81%	44
			Through	53.19%	50
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	139	Through	100.00%	139
	FH Pkwy 8C EB	207	Through	100.00%	207
	SR 416 SB	96	Through	100.00%	96
	SR 416 NB	94	Through	100.00%	94
SR 416 Intersection w/ Foothills Pkwy ramp	FH Pkwy ramp SB	20	Right Turn	5.00%	1
			Left Turn	95.00%	19
	SR 416 EB	158	Through	47.47%	75
			Left Turn	52.53%	83
	SR 416 WB	96	Right Turn	62.50%	60
			Through	37.50%	36

Table K.24. Weekend P.M. peak-hour intersection volume projections for 2026—interchange at Highway 416 (south ramp option)—8B not opened until 8C completed

Intersection location	Approach	Total vehicles per hour	Directional information			
			Turning movement	Percent	Counts	
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	308	Right Turn	15.26%	47	
			Through	9.42%	29	
			Left Turn	75.32%	232	
	FH Pkwy 8B EB	241	Right Turn	5.81%	14	
			Through	57.68%	139	
			Left Turn	36.51%	88	
	U.S. 321 SB	833	Right Turn	12.12%	101	
			Through	85.23%	710	
			Left Turn	2.64%	22	
	U.S. 321 NB	991	Right Turn	13.42%	133	
			Through	86.07%	853	
			Left Turn	0.50%	5	
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	871	Right Turn	12.74%	111	
			Left Turn	87.26%	760	
	U.S. 321 SB	580	Right Turn	73.97%	429	
			Through	26.03%	151	
	SR 32 NB	82	Through	65.85%	54	
			Left Turn	34.15%	28	
U.S. 321 Intersection w/ SR 416	SR 416 SB	152	Right Turn	75.66%	115	
			Left Turn	24.34%	37	
	U.S. 321 WB	1363	Right Turn	17.46%	238	
			Through	82.54%	1125	
	U.S. 321 EB	548	Through	95.99%	526	
			Left Turn	4.01%	22	
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	68	Right Turn	7.35%	5	
			Left Turn	92.65%	63	
	SR 416 SB	110	Through	99.09%	109	
			Left Turn	0.91%	1	
	SR 416 NB	146	Right Turn	43.84%	64	
			Through	56.16%	82	
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	130	Through	100.00%	130	
			FH Pkwy 8C EB	240	Through	100.00%
	SR 416 SB	171			Through	100.00%
			SR 416 NB	138	Through	100.00%
	SR 416 Intersection w/ Foothills Pkwy ramp	FH Pkwy ramp SB			23	Right Turn
			Left Turn	95.65%		22
SR 416 EB		245	Through	47.35%	116	
			Left Turn	52.65%	129	
SR 416 WB		171	Right Turn	62.57%	107	
			Through	37.43%	64	

Table K.25. Weekday A.M. peak-hour intersection volume projections for 2006—interchange at U.S. 321 (both options)—8B not opened until 8C completed

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	222	Right Turn	13.06%	29
			Through	7.66%	17
			Left Turn	79.28%	176
	FH Pkwy 8B EB	96	Right Turn	6.25%	6
			Through	51.04%	49
			Left Turn	42.71%	41
	U.S. 321 SB	536	Right Turn	12.69%	68
			Through	77.43%	415
			Left Turn	9.89%	53
	U.S. 321 NB	660	Right Turn	21.67%	143
			Through	77.73%	513
			Left Turn	0.61%	4
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	416	Right Turn	12.74%	53
			Left Turn	87.26%	363
	U.S. 321 SB	227	Right Turn	70.93%	161
			Through	29.07%	66
	SR 32 NB	76	Through	71.05%	54
			Left Turn	28.95%	22
U.S. 321 Intersection w/ SR 416	SR 416 SB	126	Right Turn	74.60%	94
			Left Turn	25.40%	32
	U.S. 321 WB	687	Right Turn	6.70%	46
			Through	93.30%	641
	U.S. 321 EB	406	Through	75.37%	306
			Left Turn	24.63%	100
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	54	Right Turn	3.70%	2
			Left Turn	96.30%	52
	SR 416 SB	42	Through	97.62%	41
			Left Turn	2.38%	1
	SR 416 NB	66	Right Turn	50.00%	33
			Through	50.00%	33
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	141	Right Turn	0.00%	0
			Through	100.00%	141
			Left Turn	0.00%	0
	FH Pkwy 8C EB	106	Right Turn	0.00%	0
			Through	100.00%	106
			Left Turn	0.00%	0
	SR 416 SB	93	Right Turn	0.00%	0
			Through	100.00%	93
			Left Turn	0.00%	0
	SR 416 NB	66	Right Turn	0.00%	0
			Through	100.00%	66
			Left Turn	0.00%	0

Table K.25. Weekday A.M. peak-hour intersection volume projections for 2006—interchange at U.S. 321 (directly connected)—8B not opened until 8C completed (continued)

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy 8B	FH Pkwy 8B	12	Right Turn	100.00%	12
			Left Turn	0.00%	0
	U.S. 321 WB	728	Right Turn	7.28%	53
			Through	92.72%	675
	U.S. 321 EB	332	Through	99.40%	330
			Left Turn	0.60%	2

Table K.25. Weekday A.M. peak-hour intersection volume projections for 2006—interchange at U.S. 321 (Webb Creek Rd. connection)—8B not opened until 8C completed (continued)

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
Foothills Pkwy 8B/Webb Creek Rd to US 321	FH Pkwy 8B	56	Right Turn	60.71%	34
			Left Turn	39.29%	22
	U.S. 321 WB	750	Right Turn	10.00%	75
			Through	90.00%	675
	U.S. 321 EB	354	Through	93.22%	330
			Left Turn	6.78%	24

Table K.26. Weekday P.M. peak-hour intersection volume projections for 2006—interchange at U.S. 321 (both options)—8B not opened until 8C completed

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	163	Right Turn	15.95%	26
			Through	7.36%	12
			Left Turn	76.69%	125
	FH Pkwy 8B EB	127	Right Turn	6.30%	8
			Through	51.18%	65
			Left Turn	42.52%	54
	U.S. 321 SB	554	Right Turn	13.72%	76
			Through	83.21%	461
			Left Turn	3.07%	17
	U.S. 321 NB	671	Right Turn	14.31%	96
			Through	84.95%	570
			Left Turn	0.75%	5
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	551	Right Turn	13.07%	72
			Left Turn	86.93%	479
	U.S. 321 SB	228	Right Turn	71.49%	163
			Through	28.51%	65
	SR 32 NB	54	Through	68.52%	37
			Left Turn	31.48%	17
U.S. 321 Intersection w/ SR 416	SR 416 SB	82	Right Turn	78.05%	64
			Left Turn	21.95%	18
	U.S. 321 WB	704	Right Turn	14.06%	99
			Through	85.94%	605
	U.S. 321 EB	320	Through	82.81%	265
			Left Turn	17.19%	55
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	58	Right Turn	5.17%	3
			Left Turn	94.83%	55
	SR 416 SB	53	Through	98.11%	52
			Left Turn	1.89%	1
	SR 416 NB	85	Right Turn	45.88%	39
			Through	54.12%	46
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	142	Right Turn	0.00%	0
			Through	100.00%	142
			Left Turn	0.00%	0
	FH Pkwy 8C EB	140	Right Turn	0.00%	0
			Through	100.00%	140
			Left Turn	0.00%	0
	SR 416 SB	107	Right Turn	0.00%	0
			Through	100.00%	107
			Left Turn	0.00%	0
	SR 416 NB	85	Right Turn	0.00%	0
			Through	100.00%	85
			Left Turn	0.00%	0

Table K.26. Weekday P.M. peak-hour intersection volume projections for 2006—interchange at U.S. 321 (directly connected)—8B not opened until 8C completed (continued)

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy 8B	FH Pkwy 8B	15	Right Turn	100.00%	15
			Left Turn	0.00%	0
	U.S. 321 WB	708	Right Turn	9.89%	70
			Through	90.11%	638
	U.S. 321 EB	289	Through	98.96%	286
			Left Turn	1.04%	3

Table K.26. Weekday P.M. peak-hour intersection volume projections for 2006—interchange at U.S. 321 (Webb Creek Rd. connection)—8B not opened until 8C completed (continued)

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
Foothills Pkwy 8B/Webb Creek Rd to US 321	FH Pkwy 8B	65	Right Turn	61.54%	40
			Left Turn	38.46%	25
	U.S. 321 WB	733	Right Turn	12.96%	95
			Through	87.04%	638
	U.S. 321 EB	314	Through	91.08%	286
			Left Turn	8.92%	28

Table K.27. Weekend A.M. peak-hour intersection volume projections for 2006—interchange at U.S. 321 (both options)—8B not opened until 8C completed

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	375	Right Turn	13.07%	49
			Through	7.73%	29
			Left Turn	79.20%	297
	FH Pkwy 8B EB	131	Right Turn	6.11%	8
			Through	51.15%	67
			Left Turn	42.75%	56
	U.S. 321 SB	590	Right Turn	12.71%	75
			Through	77.29%	456
			Left Turn	10.00%	59
	U.S. 321 NB	813	Right Turn	21.77%	177
			Through	77.61%	631
			Left Turn	0.62%	5
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	570	Right Turn	12.81%	73
			Left Turn	87.19%	497
	U.S. 321 SB	518	Right Turn	70.85%	367
			Through	29.15%	151
	SR 32 NB	104	Through	72.12%	75
			Left Turn	27.88%	29
U.S. 321 Intersection w/ SR 416	SR 416 SB	136	Right Turn	75.00%	102
			Left Turn	25.00%	34
	U.S. 321 WB	835	Right Turn	6.95%	58
			Through	93.05%	777
	U.S. 321 EB	516	Through	75.19%	388
			Left Turn	24.81%	128
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	34	Right Turn	2.94%	1
			Left Turn	97.06%	33
	SR 416 SB	31	Through	96.77%	30
			Left Turn	3.23%	1
	SR 416 NB	55	Right Turn	49.09%	27
			Through	50.91%	28
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	183	Right Turn	0.00%	
			Through	100.00%	183
			Left Turn	0.00%	
	FH Pkwy 8C EB	145	Right Turn	0.00%	
			Through	100.00%	145
			Left Turn	0.00%	
	SR 416 SB	63	Right Turn	0.00%	
			Through	100.00%	63
			Left Turn	0.00%	
	SR 416 NB	55	Right Turn	0.00%	
			Through	100.00%	55
			Left Turn	0.00%	

Table K.27. Weekend A.M. peak-hour intersection volume projections for 2006—interchange at U.S. 321 (directly connected)—8B not opened until 8C completed (continued)

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy 8B	FH Pkwy 8B	16	Right Turn Left Turn	100.00% 0.00%	16 0
	U.S. 321 WB	892	Right Turn Through	8.18% 91.82%	73 819
	U.S. 321 EB	547	Through Left Turn	76.60% 23.40%	419 3

Table K.27. Weekend A.M. peak-hour intersection volume projections for 2006—interchange at U.S. 321 (Webb Creek Rd. connection)—8B not opened until 8C completed (continued)

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
Foothills Pkwy 8B/Webb Creek Rd to US 321	FH Pkwy 8B	46	Right Turn Left Turn	67.39% 32.61%	31 15
	U.S. 321 WB	907	Right Turn Through	9.70% 90.30%	88 819
	U.S. 321 EB	547	Through Left Turn	76.60% 23.40%	419 18

Table K.28. Weekend P.M. peak-hour intersection volume projections for 2006—interchange at U.S. 321 (both options)—8B not opened until 8C completed

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	229	Right Turn	16.59%	38
			Through	7.42%	17
			Left Turn	75.98%	174
	FH Pkwy 8B EB	152	Right Turn	5.92%	9
			Through	51.32%	78
			Left Turn	42.76%	65
	U.S. 321 SB	650	Right Turn	13.69%	89
			Through	83.23%	541
			Left Turn	3.08%	20
U.S. 321 NB	766	Right Turn	14.23%	109	
		Through	85.12%	652	
		Left Turn	0.65%	5	
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	663	Right Turn	13.12%	87
			Left Turn	86.88%	576
	U.S. 321 SB	431	Right Turn	71.23%	307
			Through	28.77%	124
	SR 32 NB	69	Through	68.12%	47
			Left Turn	31.88%	22
U.S. 321 Intersection w/ SR 416	SR 416 SB	158	Right Turn	77.22%	122
			Left Turn	22.78%	36
	U.S. 321 WB	942	Right Turn	14.12%	133
			Through	85.88%	809
	U.S. 321 EB	453	Through	83.22%	377
			Left Turn	16.78%	76
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	43	Right Turn	4.65%	2
			Left Turn	95.35%	41
	SR 416 SB	72	Through	98.61%	71
			Left Turn	1.39%	1
	SR 416 NB	85	Right Turn	45.88%	39
			Through	54.12%	46
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	171	Right Turn	0.00%	0
			Through	100.00%	171
			Left Turn	0.00%	0
	FH Pkwy 8C EB	168	Right Turn	0.00%	0
			Through	100.00%	168
			Left Turn	0.00%	0
	SR 416 SB	112	Right Turn	0.00%	0
			Through	100.00%	112
			Left Turn	0.00%	0
	SR 416 NB	85	Right Turn	0.00%	0
			Through	100.00%	85
			Left Turn	0.00%	0

Table K.28. Weekend P.M. peak-hour intersection volume projections for 2006—interchange at U.S. 321 (directly connected)—8B not opened until 8C completed (continued)

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy 8B	FH Pkwy 8B	19	Right Turn	100.00%	19
			Left Turn	0.00%	0
	U.S. 321 WB	938	Right Turn	9.06%	85
			Through	90.94%	853
	U.S. 321 EB	410	Through	99.27%	407
			Left Turn	0.73%	3

Table K.28. Weekend P.M. peak-hour intersection volume projections for 2006—interchange at U.S. 321 (Webb Creek Rd. connection)—8B not opened until 8C completed (continued)

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
Foothills Pkwy 8B/Webb Creek Rd to US 321	FH Pkwy 8B	69	Right Turn	63.77%	44
			Left Turn	36.23%	25
	U.S. 321 WB	963	Right Turn	11.42%	110
			Through	88.58%	853
	U.S. 321 EB	435	Through	93.56%	407
			Left Turn	6.44%	28

Table K.29. Weekday A.M. peak-hour intersection volume projections for 2026—interchange at U.S. 321 (both options)—8B not opened until 8C completed

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	300	Right Turn	12.00%	36
			Through	10.00%	30
			Left Turn	78.00%	234
	FH Pkwy 8B EB	152	Right Turn	5.92%	9
			Through	57.89%	88
			Left Turn	36.18%	55
	U.S. 321 SB	680	Right Turn	11.32%	77
			Through	80.15%	545
			Left Turn	8.53%	58
U.S. 321 NB	849	Right Turn	20.49%	174	
		Through	79.03%	671	
		Left Turn	0.47%	4	
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	547	Right Turn	12.43%	68
			Left Turn	87.57%	479
	U.S. 321 SB	306	Right Turn	73.53%	225
			Through	26.47%	81
	SR 32 NB	90	Through	68.89%	62
			Left Turn	31.11%	28
U.S. 321 Intersection w/ SR 416	SR 416 SB	176	Right Turn	80.68%	142
			Left Turn	19.32%	34
	U.S. 321 WB	911	Right Turn	2.20%	20
			Through	97.80%	891
	U.S. 321 EB	470	Through	90.85%	427
			Left Turn	9.15%	43
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	82	Right Turn	3.66%	3
			Left Turn	96.34%	79
	SR 416 SB	65	Through	96.92%	63
			Left Turn	3.08%	2
	SR 416 NB	115	Right Turn	48.70%	56
			Through	51.30%	59
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	170	Right Turn	0.00%	0
			Through	100.00%	170
			Left Turn	0.00%	0
	FH Pkwy 8C EB	153	Right Turn	0.00%	0
			Through	100.00%	153
			Left Turn	0.00%	0
	SR 416 SB	142	Right Turn	0.00%	0
			Through	100.00%	142
			Left Turn	0.00%	0
	SR 416 NB	115	Right Turn	0.00%	0
			Through	100.00%	115
			Left Turn	0.00%	0

Table K.29. Weekday A.M. peak-hour intersection volume projections for 2026—interchange at U.S. 321 (directly connected)—8B not opened until 8C completed (continued)

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy 8B	FH Pkwy 8B	2	Right Turn	100.00%	2
			Left Turn	0.00%	0
	U.S. 321 WB	968	Right Turn Through	6.10% 93.91%	59 909
U.S. 321 EB	455	Through	99.78%	454	
		Left Turn	0.22%	1	

Table K.29. Weekday A.M. peak-hour intersection volume projections for 2026—interchange at U.S. 321 (Webb Creek Rd. connection)—8B not opened until 8C completed (continued)

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
Foothills Pkwy 8B/Webb Creek Rd to US 321	FH Pkwy 8B	72	Right Turn	51.39%	37
			Left Turn	48.61%	35
	U.S. 321 WB	1003	Right Turn Through	9.37% 90.63%	94 909
U.S. 321 EB	490	Through	92.65%	454	
		Left Turn	7.35%	36	

Table K.30. Weekday P.M. peak-hour intersection volume projections for 2026—interchange at U.S. 321 (both options)—8B not opened until 8C completed

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	221	Right Turn	14.93%	33
			Through	9.50%	21
			Left Turn	75.57%	167
	FH Pkwy 8B EB	201	Right Turn	5.97%	12
			Through	57.71%	116
			Left Turn	36.32%	73
	U.S. 321 SB	711	Right Turn	12.10%	86
			Through	85.23%	606
			Left Turn	2.67%	19
U.S. 321 NB	867	Right Turn	13.49%	117	
		Through	85.93%	745	
		Left Turn	0.58%	5	
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	724	Right Turn	12.71%	92
			Left Turn	87.29%	632
	U.S. 321 SB	306	Right Turn	74.18%	227
			Through	25.82%	79
	SR 32 NB	63	Through	66.67%	42
			Left Turn	33.33%	21
U.S. 321 Intersection w/ SR 416	SR 416 SB	116	Right Turn	83.62%	97
			Left Turn	16.38%	19
	U.S. 321 WB	885	Right Turn	4.86%	43
			Through	95.14%	842
	U.S. 321 EB	393	Through	94.15%	370
			Left Turn	5.85%	23
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	89	Right Turn	6.74%	6
			Left Turn	93.26%	83
	SR 416 SB	80	Through	98.75%	79
			Left Turn	1.25%	1
	SR 416 NB	148	Right Turn	44.59%	66
			Through	55.41%	82
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	172	Right Turn	0.00%	0
			Through	100.00%	172
			Left Turn	0.00%	0
	FH Pkwy 8C EB	201	Right Turn	0.00%	0
			Through	100.00%	201
			Left Turn	0.00%	0
	SR 416 SB	163	Right Turn	0.00%	0
			Through	100.00%	163
			Left Turn	0.00%	0
	SR 416 NB	149	Right Turn	0.00%	0
			Through	100.00%	149
			Left Turn	0.00%	0

Table K.30. Weekday P.M. peak-hour intersection volume projections for 2026—interchange at U.S. 321 (directly connected)—8B not opened until 8C completed (continued)

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy 8B	FH Pkwy 8B	3	Right Turn	100.00%	3
			Left Turn	0.00%	0
	U.S. 321 WB	937	Right Turn	8.32%	78
			Through	91.68%	859
	U.S. 321 EB	395	Through	99.49%	393
			Left Turn	0.51%	2

Table K.30. Weekday P.M. peak-hour intersection volume projections for 2026—interchange at U.S. 321 (Webb Creek Rd. connection)—8B not opened until 8C completed (continued)

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
Foothills Pkwy 8B/Webb Creek Rd to US 321	FH Pkwy 8B	83	Right Turn	51.81%	43
			Left Turn	48.19%	40
	U.S. 321 WB	977	Right Turn	12.08%	118
			Through	87.92%	859
	U.S. 321 EB	435	Through	90.34%	393
			Left Turn	9.66%	42

Table K.31. Weekend A.M. peak-hour intersection volume projections for 2026—interchange at U.S. 321 (both options)—8B not opened until 8C completed

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	507	Right Turn	12.03%	61
			Through	9.86%	50
			Left Turn	78.11%	396
	FH Pkwy 8B EB	208	Right Turn	5.77%	12
			Through	57.69%	120
			Left Turn	36.54%	76
U.S. 321 SB	749	Right Turn	11.35%	85	
		Through	79.97%	599	
		Left Turn	8.68%	65	
U.S. 321 NB	1046	Right Turn	20.65%	216	
		Through	78.87%	825	
		Left Turn	0.48%	5	
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	749	Right Turn	12.42%	93
			Left Turn	87.58%	656
	U.S. 321 SB	696	Right Turn	73.56%	512
			Through	26.44%	184
SR 32 NB	123	Through	69.92%	86	
		Left Turn	30.08%	37	
U.S. 321 Intersection w/ SR 416	SR 416 SB	191	Right Turn	81.15%	155
			Left Turn	18.85%	36
	U.S. 321 WB	1106	Right Turn	2.26%	25
			Through	97.74%	1081
U.S. 321 EB	597	Through	90.79%	542	
		Left Turn	9.21%	55	
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	52	Right Turn	3.85%	2
			Left Turn	96.15%	50
	SR 416 SB	48	Through	95.83%	46
			Left Turn	4.17%	2
SR 416 NB	96	Right Turn	47.92%	46	
		Through	52.08%	50	
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	221	Right Turn	0.00%	
			Through	100.00%	221
			Left Turn	0.00%	
	FH Pkwy 8C EB	209	Right Turn	0.00%	
			Through	100.00%	209
			Left Turn	0.00%	
SR 416 SB	96	Right Turn	0.00%		
		Through	100.00%	96	
		Left Turn	0.00%		
SR 416 NB	96	Right Turn	0.00%		
		Through	100.00%	96	
		Left Turn	0.00%		

Table K.31. Weekend A.M. peak-hour intersection volume projections for 2026—interchange at U.S. 321 (directly connected)—8B not opened until 8C completed (continued)

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy 8B	FH Pkwy 8B	3	Right Turn	100.00%	3
			Left Turn	0.00%	0
	U.S. 321 WB	1184	Right Turn	6.84%	81
			Through	93.16%	1103
U.S. 321 EB	578	Through	99.65%	576	
		Left Turn	0.35%	2	

Table K.31. Weekend A.M. peak-hour intersection volume projections for 2026—interchange at U.S. 321 (Webb Creek Rd. connection)—8B not opened until 8C completed (continued)

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
Foothills Pkwy 8B/Webb Creek Rd to US 321	FH Pkwy 8B	53	Right Turn	52.83%	28
			Left Turn	47.17%	25
	U.S. 321 WB	1209	Right Turn	8.77%	106
			Through	91.23%	1103
U.S. 321 EB	603	Through	95.52%	576	
		Left Turn	4.48%	27	

Table K.32. Weekend P.M. peak-hour intersection volume projections for 2026—interchange at U.S. 321 (both options)—8B not opened until 8C completed

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	308	Right Turn	15.26%	47
			Through	9.42%	29
			Left Turn	75.32%	232
	FH Pkwy 8B EB	241	Right Turn	5.81%	14
			Through	57.68%	139
			Left Turn	36.51%	88
	U.S. 321 SB	833	Right Turn	12.12%	101
			Through	85.23%	710
			Left Turn	2.64%	22
	U.S. 321 NB	991	Right Turn	13.42%	133
			Through	86.07%	853
			Left Turn	0.50%	5
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	871	Right Turn	12.74%	111
			Left Turn	87.26%	760
	U.S. 321 SB	580	Right Turn	73.97%	429
			Through	26.03%	151
	SR 32 NB	82	Through	65.85%	54
			Left Turn	34.15%	28
U.S. 321 Intersection w/ SR 416	SR 416 SB	223	Right Turn	82.96%	185
			Left Turn	17.04%	38
	U.S. 321 WB	1183	Right Turn	4.82%	57
			Through	95.18%	1126
	U.S. 321 EB	560	Through	94.11%	527
			Left Turn	5.89%	33
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	68	Right Turn	7.35%	5
			Left Turn	92.65%	63
	SR 416 SB	110	Through	99.09%	109
			Left Turn	0.91%	1
	SR 416 NB	148	Right Turn	44.59%	66
			Through	55.41%	82
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	207	Right Turn	0.00%	0
			Through	100.00%	207
			Left Turn	0.00%	0
	FH Pkwy 8C EB	242	Right Turn	0.00%	0
			Through	100.00%	242
			Left Turn	0.00%	0
	SR 416 SB	171	Right Turn	0.00%	0
			Through	100.00%	171
			Left Turn	0.00%	0
	SR 416 NB	149	Right Turn	0.00%	0
			Through	100.00%	149
			Left Turn	0.00%	0

Table K.32. Weekend P.M. peak-hour intersection volume projections for 2026—interchange at U.S. 321 (directly connected)—8B not opened until 8C completed (continued)

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy 8B	FH Pkwy 8B	4	Right Turn Left Turn	100.00% 0.00%	4 0
	U.S. 321 WB	1243	Right Turn Through	7.56% 92.44%	94 1149
	U.S. 321 EB	562	Through Left Turn	99.64% 0.36%	560 2

Table K.32. Weekend P.M. peak-hour intersection volume projections for 2026—interchange at U.S. 321 (Webb Creek Rd. connection)—8B not opened until 8C completed (continued)

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
Foothills Pkwy 8B/Webb Creek Rd to US 321	FH Pkwy 8B	74	Right Turn Left Turn	52.70% 47.30%	39 35
	U.S. 321 WB	1278	Right Turn Through	10.09% 89.91%	129 1149
	U.S. 321 EB	597	Through Left Turn	93.80% 6.20%	560 37

Table K.33. Weekday A.M. peak-hour intersection volume projections for 2006—interchange at Highway 416 (north ramp option)—8B opened prior to completion of 8C

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	222	Right Turn	13.06%	29
			Through	7.66%	17
			Left Turn	79.28%	176
	FH Pkwy 8B EB	96	Right Turn	6.25%	6
			Through	51.04%	49
			Left Turn	42.71%	41
	U.S. 321 SB	536	Right Turn	12.69%	68
			Through	77.43%	415
			Left Turn	9.89%	53
	U.S. 321 NB	660	Right Turn	21.67%	143
			Through	77.73%	513
			Left Turn	0.61%	4
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	416	Right Turn	12.74%	53
			Left Turn	87.26%	363
	U.S. 321 SB	227	Right Turn	70.93%	161
			Through	29.07%	66
	SR 32 NB	76	Through	71.05%	54
			Left Turn	28.95%	22
U.S. 321 Intersection w/ SR 416	SR 416 SB	226	Right Turn	86.73%	196
			Left Turn	13.27%	30
	U.S. 321 WB	734	Right Turn	4.63%	34
			Through	95.37%	700
	U.S. 321 EB	518	Through	58.88%	305
			Left Turn	41.12%	213
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	54	Right Turn	3.70%	2
			Through	0.00%	0
			Left Turn	96.30%	52
	SR 416 SB	42	Right Turn	0.00%	0
			Through	97.62%	41
			Left Turn	2.38%	1
	SR 416 NB	162	Right Turn	20.37%	33
			Through	20.37%	33
			Left Turn	59.26%	96
	FH Pkwy ramp	84	Right Turn	100.00%	84
			Through	0.00%	0
			Left Turn	0.00%	0
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	84	Through	100.00%	84
	FH Pkwy 8C EB	0	Through		0
	SR 416 SB	93	Through	100.00%	93
	SR 416 NB	162	Through	100.00%	162

Table K.34. Weekday P.M. peak-hour intersection volume projections for 2006—interchange at Highway 416 (north ramp option)—8B opened prior to completion of 8C

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	163	Right Turn	15.95%	26
			Through	7.36%	12
			Left Turn	76.69%	125
	FH Pkwy 8B EB	127	Right Turn	6.30%	8
			Through	51.18%	65
			Left Turn	42.52%	54
	U.S. 321 SB	554	Right Turn	13.72%	76
			Through	83.21%	461
			Left Turn	3.07%	17
	U.S. 321 NB	671	Right Turn	14.31%	96
			Through	84.95%	570
			Left Turn	0.75%	5
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	551	Right Turn	13.07%	72
			Left Turn	86.93%	479
	U.S. 321 SB	228	Right Turn	71.49%	163
			Through	28.51%	65
	SR 32 NB	54	Through	68.52%	37
			Left Turn	31.48%	17
U.S. 321 Intersection w/ SR 416	SR 416 SB	150	Right Turn	88.67%	133
			Left Turn	11.33%	17
	U.S. 321 WB	735	Right Turn	10.07%	74
			Through	89.93%	661
	U.S. 321 EB	381	Through	69.29%	264
			Left Turn	30.71%	117
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	58	Right Turn	5.17%	3
			Through	0.00%	0
			Left Turn	94.83%	55
	SR 416 SB	53	Right Turn	0.00%	0
			Through	98.11%	52
			Left Turn	1.89%	1
	SR 416 NB	211	Right Turn	18.48%	39
			Through	21.80%	46
			Left Turn	59.72%	126
	FH Pkwy ramp	85	Right Turn	100.00%	85
			Through	0.00%	0
			Left Turn	0.00%	0
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	85	Through	100.00%	85
	FH Pkwy 8C EB	0	Through		0
	SR 416 SB	107	Through	100.00%	107
	SR 416 NB	211	Through	100.00%	211

Table K.35. Weekend A.M. peak-hour intersection volume projections for 2006—interchange at Highway 416 (north ramp option)—8B opened prior to completion of 8C

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	375	Right Turn	13.07%	49
			Through	7.73%	29
			Left Turn	79.20%	297
	FH Pkwy 8B EB	131	Right Turn	6.11%	8
			Through	51.15%	67
			Left Turn	42.75%	56
	U.S. 321 SB	590	Right Turn	12.71%	75
			Through	77.29%	456
			Left Turn	10.00%	59
	U.S. 321 NB	813	Right Turn	21.77%	177
			Through	77.61%	631
			Left Turn	0.62%	5
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	570	Right Turn	12.81%	73
			Left Turn	87.19%	497
	U.S. 321 SB	518	Right Turn	70.85%	367
			Through	29.15%	151
	SR 32 NB	104	Through	72.12%	75
			Left Turn	27.88%	29
U.S. 321 Intersection w/ SR 416	SR 416 SB	245	Right Turn	86.94%	213
			Left Turn	13.06%	32
	U.S. 321 WB	892	Right Turn	4.82%	43
			Through	95.18%	849
	U.S. 321 EB	661	Through	58.55%	387
			Left Turn	41.45%	274
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	34	Right Turn	2.94%	1
			Through	0.00%	0
			Left Turn	97.06%	33
	SR 416 SB	31	Right Turn	0.00%	0
			Through	96.77%	30
			Left Turn	3.23%	1
	SR 416 NB	186	Right Turn	14.52%	27
			Through	15.05%	28
			Left Turn	70.43%	131
	FH Pkwy ramp	109	Right Turn	100.00%	109
			Through	0.00%	0
			Left Turn	0.00%	0
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	109	Through	100.00%	109
	FH Pkwy 8C EB	0	Through		0
	SR 416 SB	63	Through	100.00%	63
	SR 416 NB	186	Through	100.00%	186

Table K.36. Weekend P.M. peak-hour intersection volume projections for 2006—interchange at Highway 416 (north ramp option)—8B opened prior to completion of 8C

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	229	Right Turn	16.59%	38
			Through	7.42%	17
			Left Turn	75.98%	174
	FH Pkwy 8B EB	152	Right Turn	5.92%	9
			Through	51.32%	78
			Left Turn	42.76%	65
	U.S. 321 SB	650	Right Turn	13.69%	89
			Through	83.23%	541
			Left Turn	3.08%	20
	U.S. 321 NB	766	Right Turn	14.23%	109
			Through	85.12%	652
			Left Turn	0.65%	5
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	663	Right Turn	13.12%	87
			Left Turn	86.88%	576
	U.S. 321 SB	431	Right Turn	71.23%	307
			Through	28.77%	124
	SR 32 NB	69	Through	68.12%	47
			Left Turn	31.88%	22
U.S. 321 Intersection w/ SR 416	SR 416 SB	289	Right Turn	88.24%	255
			Left Turn	11.76%	34
	U.S. 321 WB	982	Right Turn	9.98%	98
			Through	90.02%	884
	U.S. 321 EB	538	Through	69.89%	376
			Left Turn	30.11%	162
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	43	Right Turn	4.65%	2
			Through	0.00%	0
			Left Turn	95.35%	41
	SR 416 SB	72	Right Turn	0.00%	0
			Through	98.61%	71
			Left Turn	1.39%	1
	SR 416 NB	237	Right Turn	16.46%	39
			Through	19.41%	46
			Left Turn	64.14%	152
	FH Pkwy ramp	102	Right Turn	100.00%	102
			Through	0.00%	0
			Left Turn	0.00%	0
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	102	Through	100.00%	102
	FH Pkwy 8C EB	0	Through		0
	SR 416 SB	112	Through	100.00%	112
	SR 416 NB	237	Through	100.00%	237

Table K.37. Weekday A.M. peak-hour intersection volume projections for 2026—interchange at Highway 416 (north ramp option)—8B opened prior to completion of 8C

Intersection location	Approach	Total vehicles per hour	Directional information			
			Turning movement	Percent	Counts	
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	300	Right Turn	12.00%	36	
			Through	10.00%	30	
			Left Turn	78.00%	234	
	FH Pkwy 8B EB	152	Right Turn	5.92%	9	
			Through	57.89%	88	
			Left Turn	36.18%	55	
	U.S. 321 SB	680	Right Turn	11.32%	77	
			Through	80.15%	545	
			Left Turn	8.53%	58	
	U.S. 321 NB	849	Right Turn	20.49%	174	
			Through	79.03%	671	
			Left Turn	0.47%	4	
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	547	Right Turn	12.43%	68	
			Left Turn	87.57%	479	
	U.S. 321 SB	306	Right Turn	73.53%	225	
			Through	26.47%	81	
	SR 32 NB	90	Through	68.89%	62	
			Left Turn	31.11%	28	
U.S. 321 Intersection w/ SR 416	SR 416 SB	305	Right Turn	89.18%	272	
			Left Turn	10.82%	33	
	U.S. 321 WB	975	Right Turn	1.85%	18	
			Through	98.15%	957	
	U.S. 321 EB	632	Through	67.41%	426	
			Left Turn	32.59%	206	
	SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	82	Right Turn	3.66%	3
				Through	0.00%	0
				Left Turn	96.34%	79
SR 416 SB		65	Right Turn	0.00%	0	
			Through	96.92%	63	
			Left Turn	3.08%	2	
SR 416 NB		267	Right Turn	20.97%	56	
			Through	22.10%	59	
			Left Turn	56.93%	152	
FH Pkwy ramp		108	Right Turn	100.00%	108	
			Through	0.00%	0	
			Left Turn	0.00%	0	
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	108	Through	100.00%	108	
	FH Pkwy 8C EB	0	Through		0	
	SR 416 SB	142	Through	100.00%	142	
	SR 416 NB	267	Through	100.00%	267	

Table K.38. Weekday P.M. peak-hour intersection volume projections for 2026—interchange at Highway 416 (north ramp option)—8B opened prior to completion of 8C

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	221	Right Turn	14.93%	33
			Through	9.50%	21
			Left Turn	75.57%	167
	FH Pkwy 8B EB	201	Right Turn	5.97%	12
			Through	57.71%	116
			Left Turn	36.32%	73
	U.S. 321 SB	711	Right Turn	12.10%	86
			Through	85.23%	606
			Left Turn	2.67%	19
	U.S. 321 NB	867	Right Turn	13.49%	117
			Through	85.93%	745
			Left Turn	0.58%	5
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	724	Right Turn	12.71%	92
			Left Turn	87.29%	632
	U.S. 321 SB	306	Right Turn	74.18%	227
			Through	25.82%	79
	SR 32 NB	63	Through	66.67%	42
			Left Turn	33.33%	21
U.S. 321 Intersection w/ SR 416	SR 416 SB	202	Right Turn	91.09%	184
			Left Turn	8.91%	18
	U.S. 321 WB	943	Right Turn	4.14%	39
			Through	95.86%	904
	U.S. 321 EB	482	Through	76.56%	369
			Left Turn	23.44%	113
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	89	Right Turn	6.74%	6
			Through	0.00%	0
			Left Turn	93.26%	83
	SR 416 SB	80	Right Turn	0.00%	0
			Through	98.75%	79
			Left Turn	1.25%	1
	SR 416 NB	348	Right Turn	18.97%	66
			Through	23.56%	82
			Left Turn	57.47%	200
	FH Pkwy ramp	109	Right Turn	100.00%	109
			Through	0.00%	0
			Left Turn	0.00%	0
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	109	Through	100.00%	109
	FH Pkwy 8C EB	0	Through		0
	SR 416 SB	163	Through	100.00%	163
	SR 416 NB	349	Through	100.00%	349

Table K.39. Weekend A.M. peak-hour intersection volume projections for 2026—interchange at Highway 416 (north ramp option)—8B opened prior to completion of 8C

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	507	Right Turn	12.03%	61
			Through	9.86%	50
			Left Turn	78.11%	396
	FH Pkwy 8B EB	208	Right Turn	5.77%	12
			Through	57.69%	120
			Left Turn	36.54%	76
	U.S. 321 SB	749	Right Turn	11.35%	85
			Through	79.97%	599
			Left Turn	8.68%	65
	U.S. 321 NB	1046	Right Turn	20.65%	216
			Through	78.87%	825
			Left Turn	0.48%	5
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	749	Right Turn	12.42%	93
			Left Turn	87.58%	656
	U.S. 321 SB	696	Right Turn	73.56%	512
			Through	26.44%	184
	SR 32 NB	123	Through	69.92%	86
			Left Turn	30.08%	37
U.S. 321 Intersection w/ SR 416	SR 416 SB	331	Right Turn	89.43%	296
			Left Turn	10.57%	35
	U.S. 321 WB	1184	Right Turn	1.94%	23
			Through	98.06%	1161
	U.S. 321 EB	806	Through	67.12%	541
			Left Turn	32.88%	265
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	52	Right Turn	3.85%	2
			Through	0.00%	0
			Left Turn	96.15%	50
	SR 416 SB	48	Right Turn	0.00%	0
			Through	95.83%	46
			Left Turn	4.17%	2
	SR 416 NB	304	Right Turn	15.13%	46
			Through	16.45%	50
			Left Turn	68.42%	208
	FH Pkwy ramp	140	Right Turn	100.00%	140
			Through	0.00%	0
			Left Turn	0.00%	0
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	140	Through	100.00%	140
	FH Pkwy 8C EB	0	Through		0
	SR 416 SB	96	Through	100.00%	96
	SR 416 NB	304	Through	100.00%	304

Table K.40. Weekend P.M. peak-hour intersection volume projections for 2026—interchange at Highway 416 (north ramp option)—8B opened prior to completion of 8C

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	308	Right Turn	15.26%	47
			Through	9.42%	29
			Left Turn	75.32%	232
	FH Pkwy 8B EB	241	Right Turn	5.81%	14
			Through	57.68%	139
			Left Turn	36.51%	88
	U.S. 321 SB	833	Right Turn	12.12%	101
			Through	85.23%	710
			Left Turn	2.64%	22
	U.S. 321 NB	991	Right Turn	13.42%	133
			Through	86.07%	853
			Left Turn	0.50%	5
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	871	Right Turn	12.74%	111
			Left Turn	87.26%	760
	U.S. 321 SB	580	Right Turn	73.97%	429
			Through	26.03%	151
	SR 32 NB	82	Through	65.85%	54
			Left Turn	34.15%	28
U.S. 321 Intersection w/ SR 416	SR 416 SB	391	Right Turn	90.54%	354
			Left Turn	9.46%	37
	U.S. 321 WB	1262	Right Turn	4.20%	53
			Through	95.80%	1209
	U.S. 321 EB	683	Through	77.01%	526
			Left Turn	22.99%	157
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	68	Right Turn	7.35%	5
			Through	0.00%	0
			Left Turn	92.65%	63
	SR 416 SB	110	Right Turn	0.00%	0
			Through	99.09%	109
			Left Turn	0.91%	1
	SR 416 NB	389	Right Turn	16.97%	66
			Through	21.08%	82
			Left Turn	61.95%	241
	FH Pkwy ramp	131	Right Turn	100.00%	131
			Through	0.00%	0
			Left Turn	0.00%	0
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	131	Through	100.00%	131
	FH Pkwy 8C EB	0	Through		0
	SR 416 SB	171	Through	100.00%	171
	SR 416 NB	390	Through	100.00%	390

Table K.41. Weekday A.M. peak-hour intersection volume projections for 2006—interchange at Highway 416 (south ramp option)—8B opened prior to completion of 8C

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	222	Right Turn	13.06%	29
			Through	7.66%	17
			Left Turn	79.28%	176
	FH Pkwy 8B EB	96	Right Turn	6.25%	6
			Through	51.04%	49
			Left Turn	42.71%	41
	U.S. 321 SB	536	Right Turn	12.69%	68
			Through	77.43%	415
			Left Turn	9.89%	53
	U.S. 321 NB	660	Right Turn	21.67%	143
			Through	77.73%	513
			Left Turn	0.61%	4
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	416	Right Turn	12.74%	53
			Left Turn	87.26%	363
	U.S. 321 SB	227	Right Turn	70.93%	161
			Through	29.07%	66
	SR 32 NB	76	Through	71.05%	54
			Left Turn	28.95%	22
U.S. 321 Intersection w/ SR 416	SR 416 SB	226	Right Turn	86.73%	196
			Left Turn	13.27%	30
	U.S. 321 WB	734	Right Turn	4.63%	34
			Through	95.37%	700
	U.S. 321 EB	518	Through	58.88%	305
			Left Turn	41.12%	213
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	54	Right Turn	3.70%	2
			Left Turn	96.30%	52
	SR 416 SB	42	Through	97.62%	41
			Left Turn	2.38%	1
	SR 416 NB	66	Right Turn	50.00%	33
			Through	50.00%	33
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	84	Through	100.00%	84
	FH Pkwy 8C EB	0	Through		0
	SR 416 SB	93	Through	100.00%	93
	SR 416 NB	66	Through	100.00%	66
SR 416 Intersection w/ Foothills Pkwy ramp	FH Pkwy ramp SB	84	Right Turn	100.00%	84
			Left Turn	0.00%	0
	SR 416 EB	162	Through	40.74%	66
			Left Turn	59.26%	96
SR 416 WB	93	Right Turn	0.00%	0	
			Through	100.00%	93

Table K.42. Weekday P.M. peak-hour intersection volume projections for 2006—interchange at Highway 416 (south ramp option)—8B opened prior to completion of 8C

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	163	Right Turn	15.95%	26
			Through	7.36%	12
			Left Turn	76.69%	125
	FH Pkwy 8B EB	127	Right Turn	6.30%	8
			Through	51.18%	65
			Left Turn	42.52%	54
	U.S. 321 SB	554	Right Turn	13.72%	76
			Through	83.21%	461
			Left Turn	3.07%	17
	U.S. 321 NB	671	Right Turn	14.31%	96
			Through	84.95%	570
			Left Turn	0.75%	5
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	551	Right Turn	13.07%	72
			Left Turn	86.93%	479
	U.S. 321 SB	228	Right Turn	71.49%	163
			Through	28.51%	65
	SR 32 NB	54	Through	68.52%	37
			Left Turn	31.48%	17
U.S. 321 Intersection w/ SR 416	SR 416 SB	150	Right Turn	88.67%	133
			Left Turn	11.33%	17
	U.S. 321 WB	735	Right Turn	10.07%	74
			Through	89.93%	661
	U.S. 321 EB	381	Through	69.29%	264
			Left Turn	30.71%	117
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	58	Right Turn	5.17%	3
			Left Turn	94.83%	55
	SR 416 SB	53	Through	98.11%	52
			Left Turn	1.89%	1
	SR 416 NB	85	Right Turn	45.88%	39
			Through	54.12%	46
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	85	Through	100.00%	85
	FH Pkwy 8C EB	0	Through		0
	SR 416 SB	107	Through	100.00%	107
	SR 416 NB	85	Through	100.00%	85
	SR 416 Intersection w/ Foothills Pkwy ramp	FH Pkwy ramp SB	85	Right Turn	100.00%
Left Turn				0.00%	0
SR 416 EB		211	Through	40.28%	85
			Left Turn	59.72%	126
SR 416 WB		107	Right Turn	0.00%	0
Through	100.00%	107			

Table K.43. Weekend A.M. peak-hour intersection volume projections for 2006—interchange at Highway 416 (south ramp option)—8B opened prior to completion of 8C

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	375	Right Turn	13.07%	49
			Through	7.73%	29
			Left Turn	79.20%	297
	FH Pkwy 8B EB	131	Right Turn	6.11%	8
			Through	51.15%	67
			Left Turn	42.75%	56
	U.S. 321 SB	590	Right Turn	12.71%	75
			Through	77.29%	456
			Left Turn	10.00%	59
	U.S. 321 NB	813	Right Turn	21.77%	177
			Through	77.61%	631
			Left Turn	0.62%	5
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	570	Right Turn	12.81%	73
			Left Turn	87.19%	497
	U.S. 321 SB	518	Right Turn	70.85%	367
			Through	29.15%	151
	SR 32 NB	104	Through	72.12%	75
			Left Turn	27.88%	29
U.S. 321 Intersection w/ SR 416	SR 416 SB	245	Right Turn	86.94%	213
			Left Turn	13.06%	32
	U.S. 321 WB	892	Right Turn	4.82%	43
			Through	95.18%	849
	U.S. 321 EB	661	Through	58.55%	387
			Left Turn	41.45%	274
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	34	Right Turn	2.94%	1
			Left Turn	97.06%	33
	SR 416 SB	31	Through	96.77%	30
			Left Turn	3.23%	1
	SR 416 NB	55	Right Turn	49.09%	27
			Through	50.91%	28
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	109	Through	100.00%	109
	FH Pkwy 8C EB	0	Through		0
	SR 416 SB	63	Through	100.00%	63
	SR 416 NB	55	Through	100.00%	55
	SR 416 Intersection w/ Foothills Pkwy ramp	FH Pkwy ramp SB	109	Right Turn	100.00%
Left Turn				0.00%	0
SR 416 EB		186	Through	29.57%	55
			Left Turn	70.43%	131
SR 416 WB		63	Right Turn	0.00%	0
Through	100.00%	63			

Table K.44. Weekend P.M. peak-hour intersection volume projections for 2006—interchange at Highway 416 (south ramp option)—8B opened prior to completion of 8C

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	229	Right Turn	16.59%	38
			Through	7.42%	17
			Left Turn	75.98%	174
	FH Pkwy 8B EB	152	Right Turn	5.92%	9
			Through	51.32%	78
			Left Turn	42.76%	65
	U.S. 321 SB	650	Right Turn	13.69%	89
			Through	83.23%	541
			Left Turn	3.08%	20
	U.S. 321 NB	766	Right Turn	14.23%	109
			Through	85.12%	652
			Left Turn	0.65%	5
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	663	Right Turn	13.12%	87
			Left Turn	86.88%	576
	U.S. 321 SB	431	Right Turn	71.23%	307
			Through	28.77%	124
	SR 32 NB	69	Through	68.12%	47
			Left Turn	31.88%	22
U.S. 321 Intersection w/ SR 416	SR 416 SB	289	Right Turn	88.24%	255
			Left Turn	11.76%	34
	U.S. 321 WB	982	Right Turn	9.98%	98
			Through	90.02%	884
	U.S. 321 EB	538	Through	69.89%	376
			Left Turn	30.11%	162
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	43	Right Turn	4.65%	2
			Left Turn	95.35%	41
	SR 416 SB	72	Through	98.61%	71
			Left Turn	1.39%	1
	SR 416 NB	85	Right Turn	45.88%	39
			Through	54.12%	46
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	102	Through	100.00%	102
	FH Pkwy 8C EB	0	Through		0
	SR 416 SB	112	Through	100.00%	112
	SR 416 NB	85	Through	100.00%	85
	SR 416 Intersection w/ Foothills Pkwy ramp	FH Pkwy ramp SB	102	Right Turn	100.00%
Left Turn				0.00%	0
SR 416 EB		237	Through	35.87%	85
			Left Turn	64.14%	152
SR 416 WB		112	Right Turn	0.00%	0
Through	100.00%	112			

Table K.45. Weekday A.M. peak-hour intersection volume projections for 2026—interchange at Highway 416 (south ramp option)—8B opened prior to completion of 8C

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	300	Right Turn	12.00%	36
			Through	10.00%	30
			Left Turn	78.00%	234
	FH Pkwy 8B EB	152	Right Turn	5.92%	9
			Through	57.89%	88
			Left Turn	36.18%	55
	U.S. 321 SB	680	Right Turn	11.32%	77
			Through	80.15%	545
			Left Turn	8.53%	58
	U.S. 321 NB	849	Right Turn	20.49%	174
			Through	79.03%	671
			Left Turn	0.47%	4
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	547	Right Turn	12.43%	68
			Left Turn	87.57%	479
	U.S. 321 SB	306	Right Turn	73.53%	225
			Through	26.47%	81
	SR 32 NB	90	Through	68.89%	62
			Left Turn	31.11%	28
U.S. 321 Intersection w/ SR 416	SR 416 SB	305	Right Turn	89.18%	272
			Left Turn	10.82%	33
	U.S. 321 WB	975	Right Turn	1.85%	18
			Through	98.15%	957
	U.S. 321 EB	632	Through	67.41%	426
			Left Turn	32.59%	206
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	82	Right Turn	3.66%	3
			Left Turn	96.34%	79
	SR 416 SB	65	Through	96.92%	63
			Left Turn	3.08%	2
	SR 416 NB	115	Right Turn	48.70%	56
			Through	51.30%	59
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	108	Through	100.00%	108
	FH Pkwy 8C EB	0	Through		0
	SR 416 SB	142	Through	100.00%	142
	SR 416 NB	115	Through	100.00%	115
SR 416 Intersection w/ Foothills Pkwy ramp	FH Pkwy ramp SB	108	Right Turn	100.00%	108
			Left Turn	0.00%	0
	SR 416 EB	267	Through	43.07%	115
			Left Turn	56.93%	152
	SR 416 WB	142	Right Turn	0.00%	0
Through	100.00%	142			

Table K.46. Weekday P.M. peak-hour intersection volume projections for 2026—interchange at Highway 416 (south ramp option)—8B opened prior to completion of 8C

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	221	Right Turn	14.93%	33
			Through	9.50%	21
			Left Turn	75.57%	167
	FH Pkwy 8B EB	201	Right Turn	5.97%	12
			Through	57.71%	116
			Left Turn	36.32%	73
	U.S. 321 SB	711	Right Turn	12.10%	86
			Through	85.23%	606
			Left Turn	2.67%	19
	U.S. 321 NB	867	Right Turn	13.49%	117
			Through	85.93%	745
			Left Turn	0.58%	5
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	724	Right Turn	12.71%	92
			Left Turn	87.29%	632
	U.S. 321 SB	306	Right Turn	74.18%	227
			Through	25.82%	79
	SR 32 NB	63	Through	66.67%	42
			Left Turn	33.33%	21
U.S. 321 Intersection w/ SR 416	SR 416 SB	202	Right Turn	91.09%	184
			Left Turn	8.91%	18
	U.S. 321 WB	943	Right Turn	4.14%	39
			Through	95.86%	904
	U.S. 321 EB	482	Through	76.56%	369
			Left Turn	23.44%	113
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	89	Right Turn	6.74%	6
			Left Turn	93.26%	83
	SR 416 SB	80	Through	98.75%	79
			Left Turn	1.25%	1
	SR 416 NB	148	Right Turn	44.59%	66
			Through	55.41%	82
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	109	Through	100.00%	109
	FH Pkwy 8C EB	0	Through		0
	SR 416 SB	163	Through	100.00%	163
	SR 416 NB	149	Through	100.00%	149
	SR 416 Intersection w/ Foothills Pkwy ramp	FH Pkwy ramp SB	109	Right Turn	100.00%
Left Turn				0.00%	0
SR 416 EB		349	Through	42.69%	149
			Left Turn	57.31%	200
SR 416 WB		163	Right Turn	0.00%	0
Through	100.00%	163			

Table K.47. Weekend A.M. peak-hour intersection volume projections for 2026—interchange at Highway 416 (south ramp option)—8B opened prior to completion of 8C

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	507	Right Turn	12.03%	61
			Through	9.86%	50
			Left Turn	78.11%	396
	FH Pkwy 8B EB	208	Right Turn	5.77%	12
			Through	57.69%	120
			Left Turn	36.54%	76
	U.S. 321 SB	749	Right Turn	11.35%	85
			Through	79.97%	599
			Left Turn	8.68%	65
	U.S. 321 NB	1046	Right Turn	20.65%	216
			Through	78.87%	825
			Left Turn	0.48%	5
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	749	Right Turn	12.42%	93
			Left Turn	87.58%	656
	U.S. 321 SB	696	Right Turn	73.56%	512
			Through	26.44%	184
	SR 32 NB	123	Through	69.92%	86
			Left Turn	30.08%	37
U.S. 321 Intersection w/ SR 416	SR 416 SB	331	Right Turn	89.43%	296
			Left Turn	10.57%	35
	U.S. 321 WB	1184	Right Turn	1.94%	23
			Through	98.06%	1161
	U.S. 321 EB	806	Through	67.12%	541
			Left Turn	32.88%	265
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	52	Right Turn	3.85%	2
			Left Turn	96.15%	50
	SR 416 SB	48	Through	95.83%	46
			Left Turn	4.17%	2
	SR 416 NB	96	Right Turn	47.92%	46
			Through	52.08%	50
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	140	Through	100.00%	140
	FH Pkwy 8C EB	0	Through		0
	SR 416 SB	96	Through	100.00%	96
	SR 416 NB	96	Through	100.00%	96
	SR 416 Intersection w/ Foothills Pkwy ramp	FH Pkwy ramp SB	140	Right Turn	100.00%
Left Turn				0.00%	0
SR 416 EB		304	Through	31.58%	96
			Left Turn	68.42%	208
SR 416 WB		96	Right Turn	0.00%	0
Through	100.00%	96			

Table K.48. Weekend P.M. peak-hour intersection volume projections for 2026—interchange at Highway 416 (south ramp option)—8B opened prior to completion of 8C

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	308	Right Turn	15.26%	47
			Through	9.42%	29
			Left Turn	75.32%	232
	FH Pkwy 8B EB	241	Right Turn	5.81%	14
			Through	57.68%	139
			Left Turn	36.51%	88
	U.S. 321 SB	833	Right Turn	12.12%	101
			Through	85.23%	710
			Left Turn	2.64%	22
	U.S. 321 NB	991	Right Turn	13.42%	133
			Through	86.07%	853
			Left Turn	0.50%	5
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	871	Right Turn	12.74%	111
			Left Turn	87.26%	760
	U.S. 321 SB	580	Right Turn	73.97%	429
			Through	26.03%	151
	SR 32 NB	82	Through	65.85%	54
			Left Turn	34.15%	28
U.S. 321 Intersection w/ SR 416	SR 416 SB	391	Right Turn	90.54%	354
			Left Turn	9.46%	37
	U.S. 321 WB	1262	Right Turn	4.20%	53
			Through	95.80%	1209
	U.S. 321 EB	683	Through	77.01%	526
			Left Turn	22.99%	157
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	68	Right Turn	7.35%	5
			Left Turn	92.65%	63
	SR 416 SB	110	Through	99.09%	109
			Left Turn	0.91%	1
	SR 416 NB	148	Right Turn	44.59%	66
			Through	55.41%	82
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	131	Through	100.00%	131
	FH Pkwy 8C EB	0	Through		0
	SR 416 SB	171	Through	100.00%	171
	SR 416 NB	149	Through	100.00%	149
	SR 416 Intersection w/ Foothills Pkwy ramp	FH Pkwy ramp SB	131	Right Turn	100.00%
Left Turn				0.00%	0
SR 416 EB		390	Through	38.21%	149
			Left Turn	61.79%	241
SR 416 WB		171	Right Turn	0.00%	0
Through	100.00%	171			

Table K.49. Weekday A.M. peak-hour intersection volume projections for 2006—interchange at U.S. 321 (both options)—8B opened prior to completion of 8C

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	222	Right Turn	13.06%	29
			Through	7.66%	17
			Left Turn	79.28%	176
	FH Pkwy 8B EB	96	Right Turn	6.25%	6
			Through	51.04%	49
			Left Turn	42.71%	41
	U.S. 321 SB	536	Right Turn	12.69%	68
			Through	77.43%	415
			Left Turn	9.89%	53
	U.S. 321 NB	660	Right Turn	21.67%	143
			Through	77.73%	513
			Left Turn	0.61%	4
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	416	Right Turn	12.74%	53
			Left Turn	87.26%	363
	U.S. 321 SB	227	Right Turn	70.93%	161
			Through	29.07%	66
	SR 32 NB	76	Through	71.05%	54
			Left Turn	28.95%	22
U.S. 321 Intersection w/ SR 416	SR 416 SB	125	Right Turn	76.00%	95
			Left Turn	24.00%	30
	U.S. 321 WB	824	Right Turn	4.13%	34
			Through	95.87%	790
	U.S. 321 EB	519	Through	78.61%	408
			Left Turn	21.39%	111
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	54	Right Turn	3.70%	2
			Left Turn	96.30%	52
	SR 416 SB	42	Through	97.62%	41
			Left Turn	2.38%	1
	SR 416 NB	66	Right Turn	50.00%	33
			Through	50.00%	33
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	0	Right Turn		0
			Through		0
			Left Turn		0
	FH Pkwy 8C EB	0	Right Turn		0
			Through		0
			Left Turn		0
	SR 416 SB	93	Right Turn	0.00%	0
			Through	100.00%	93
			Left Turn	0.00%	0
	SR 416 NB	66	Right Turn	0.00%	0
			Through	100.00%	66
			Left Turn	0.00%	0

Table K.49. Weekday A.M. peak-hour intersection volume projections for 2006—interchange at U.S. 321 (directly connected)—8B opened prior to 8C completion (continued)

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy 8B	FH Pkwy 8B	139	Right Turn	100.00%	139
			Left Turn	0.00%	0
	U.S. 321 WB	735	Right Turn	0.00%	0
			Through	100.00%	735
	U.S. 321 EB	426	Through	77.46%	330
			Left Turn	22.54%	96

Table K.49. Weekday A.M. peak-hour intersection volume projections for 2006—interchange at U.S. 321 (Webb Creek Rd. connection)—8B opened prior to 8C completion (continued)

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
Foothills Pkwy 8B/Webb Creek Rd to US 321	FH Pkwy 8B	183	Right Turn	87.98%	161
			Left Turn	12.02%	22
	U.S. 321 WB	757	Right Turn	2.91%	22
			Through	97.09%	735
	U.S. 321 EB	448	Through	73.66%	330
			Left Turn	26.34%	118

Table K.50. Weekday P.M. peak-hour intersection volume projections for 2006—interchange at U.S. 321 (both options)—8B opened prior to completion of 8C

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	163	Right Turn	15.95%	26
			Through	7.36%	12
			Left Turn	76.69%	125
	FH Pkwy 8B EB	127	Right Turn	6.30%	8
			Through	51.18%	65
			Left Turn	42.52%	54
	U.S. 321 SB	554	Right Turn	13.72%	76
			Through	83.21%	461
			Left Turn	3.07%	17
	U.S. 321 NB	671	Right Turn	14.31%	96
			Through	84.95%	570
			Left Turn	0.75%	5
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	551	Right Turn	13.07%	72
			Left Turn	86.93%	479
	U.S. 321 SB	228	Right Turn	71.49%	163
			Through	28.51%	65
	SR 32 NB	54	Through	68.52%	37
			Left Turn	31.48%	17
U.S. 321 Intersection w/ SR 416	SR 416 SB	82	Right Turn	79.27%	65
			Left Turn	20.73%	17
	U.S. 321 WB	820	Right Turn	9.02%	74
			Through	90.98%	746
	U.S. 321 EB	415	Through	85.30%	354
			Left Turn	14.70%	61
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	58	Right Turn	5.17%	3
			Left Turn	94.83%	55
	SR 416 SB	53	Through	98.11%	52
			Left Turn	1.89%	1
	SR 416 NB	85	Right Turn	45.88%	39
			Through	54.12%	46
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	0	Right Turn		0
			Through		0
			Left Turn		0
	FH Pkwy 8C EB	0	Right Turn		0
			Through		0
			Left Turn		0
	SR 416 SB	107	Right Turn	0.00%	0
			Through	100.00%	107
			Left Turn	0.00%	0
	SR 416 NB	85	Right Turn	0.00%	0
			Through	100.00%	85
			Left Turn	0.00%	0

Table K.50. Weekday P.M. peak-hour intersection volume projections for 2006—interchange at U.S. 321 (directly connected)—8B opened prior to 8C completion (continued)

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy 8B	FH Pkwy 8B	183	Right Turn Left Turn	100.00% 0.00%	183 0
	U.S. 321 WB	695	Right Turn Through	0.00% 100.00%	0 695
	U.S. 321 EB	412	Through Left Turn	69.42% 30.58%	286 126

Table K.50. Weekday P.M. peak-hour intersection volume projections for 2006—interchange at U.S. 321 (Webb Creek Rd. connection)—8B opened prior to 8C completion (continued)

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
Foothills Pkwy 8B/Webb Creek Rd to US 321	FH Pkwy 8B	233	Right Turn Left Turn	89.27% 10.73%	208 25
	U.S. 321 WB	720	Right Turn Through	3.47% 96.53%	25 695
	U.S. 321 EB	437	Through Left Turn	65.45% 34.55%	286 151

Table K.51. Weekend A.M. peak-hour intersection volume projections for 2006—interchange at U.S. 321 (both options)—8B opened prior to completion of 8C

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	375	Right Turn	13.07%	49
			Through	7.73%	29
			Left Turn	79.20%	297
	FH Pkwy 8B EB	131	Right Turn	6.11%	8
			Through	51.15%	67
			Left Turn	42.75%	56
	U.S. 321 SB	590	Right Turn	12.71%	75
			Through	77.29%	456
			Left Turn	10.00%	59
U.S. 321 NB	813	Right Turn	21.77%	177	
		Through	77.61%	631	
		Left Turn	0.62%	5	
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	570	Right Turn	12.81%	73
			Left Turn	87.19%	497
	U.S. 321 SB	518	Right Turn	70.85%	367
			Through	29.15%	151
	SR 32 NB	104	Through	72.12%	75
			Left Turn	27.88%	29
U.S. 321 Intersection w/ SR 416	SR 416 SB	136	Right Turn	76.47%	104
			Left Turn	23.53%	32
	U.S. 321 WB	1001	Right Turn	4.30%	43
			Through	95.70%	958
	U.S. 321 EB	661	Through	78.37%	518
			Left Turn	21.63%	143
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	34	Right Turn	2.94%	1
			Left Turn	97.06%	33
	SR 416 SB	31	Through	96.77%	30
			Left Turn	3.23%	1
	SR 416 NB	55	Right Turn	49.09%	27
			Through	50.91%	28
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	0	Right Turn		
			Through		
			Left Turn		
	FH Pkwy 8C EB	0	Right Turn		
			Through		
			Left Turn		
	SR 416 SB	63	Right Turn	0.00%	
			Through	100.00%	63
SR 416 NB	55	Left Turn	0.00%		
		Right Turn	0.00%		
		Through	100.00%	55	
			Left Turn	0.00%	

Table K.51. Weekend A.M. peak-hour intersection volume projections for 2006—interchange at U.S. 321 (directly connected)—8B opened prior to 8C completion (continued)

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy 8B	FH Pkwy 8B	190	Right Turn Left Turn	100.00% 0.00%	190 0
	U.S. 321 WB	892	Right Turn Through	0.00% 100.00%	0 892
	U.S. 321 EB	550	Through Left Turn	76.18% 23.82%	419 131

Table K.51. Weekend A.M. peak-hour intersection volume projections for 2006—interchange at U.S. 321 (Webb Creek Rd. connection)—8B opened prior to 8C completion (continued)

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
Foothills Pkwy 8B/Webb Creek Rd to US 321	FH Pkwy 8B	220	Right Turn Left Turn	93.18% 6.82%	205 15
	U.S. 321 WB	907	Right Turn Through	1.65% 98.35%	15 892
	U.S. 321 EB	565	Through Left Turn	74.16% 25.84%	419 146

Table K.52. Weekend P.M. peak-hour intersection volume projections for 2006—interchange at U.S. 321 (both options)—8B opened prior to completion of 8C

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	229	Right Turn	16.59%	38
			Through	7.42%	17
			Left Turn	75.98%	174
	FH Pkwy 8B EB	152	Right Turn	5.92%	9
			Through	51.32%	78
			Left Turn	42.76%	65
	U.S. 321 SB	650	Right Turn	13.69%	89
			Through	83.23%	541
			Left Turn	3.08%	20
U.S. 321 NB	766	Right Turn	14.23%	109	
		Through	85.12%	652	
		Left Turn	0.65%	5	
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	663	Right Turn	13.12%	87
			Left Turn	86.88%	576
	U.S. 321 SB	431	Right Turn	71.23%	307
			Through	28.77%	124
	SR 32 NB	69	Through	68.12%	47
			Left Turn	31.88%	22
U.S. 321 Intersection w/ SR 416	SR 416 SB	158	Right Turn	78.48%	124
			Left Turn	21.52%	34
	U.S. 321 WB	1096	Right Turn	8.94%	98
			Through	91.06%	998
	U.S. 321 EB	589	Through	85.57%	504
			Left Turn	14.43%	85
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	43	Right Turn	4.65%	2
			Left Turn	95.35%	41
	SR 416 SB	72	Through	98.61%	71
			Left Turn	1.39%	1
	SR 416 NB	85	Right Turn	45.88%	39
			Through	54.12%	46
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	0	Right Turn		0
			Through		0
			Left Turn		0
	FH Pkwy 8C EB	0	Right Turn		0
			Through		0
			Left Turn		0
	SR 416 SB	112	Right Turn	0.00%	0
			Through	100.00%	112
			Left Turn	0.00%	0
	SR 416 NB	85	Right Turn	0.00%	0
			Through	100.00%	85
			Left Turn	0.00%	0

Table K.52. Weekend P.M. peak-hour intersection volume projections for 2006—interchange at U.S. 321 (directly connected)—8B opened prior to 8C completion (continued)

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy 8B	FH Pkwy 8B	220	Right Turn Left Turn	100.00% 0.00%	220 0
	U.S. 321 WB	929	Right Turn Through	0.00% 100.00%	0 929
	U.S. 321 EB	559	Through Left Turn	72.81% 27.19%	407 152

Table K.52. Weekend P.M. peak-hour intersection volume projections for 2006—interchange at U.S. 321 (Webb Creek Rd. connection)—8B opened prior to 8C completion (continued)

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
Foothills Pkwy 8B/Webb Creek Rd to US 321	FH Pkwy 8B	270	Right Turn Left Turn	90.74% 9.26%	245 25
	U.S. 321 WB	954	Right Turn Through	2.62% 97.38%	25 929
	U.S. 321 EB	584	Through Left Turn	69.69% 30.31%	407 177

Table K.53. Weekday A.M. peak-hour intersection volume projections for 2026—interchange at U.S. 321 (both options)—8B opened prior to completion of 8C

Intersection location	Approach	Total vehicles per hour	Directional information			
			Turning movement	Percent	Counts	
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	300	Right Turn	12.00%	36	
			Through	10.00%	30	
			Left Turn	78.00%	234	
	FH Pkwy 8B EB	152	Right Turn	5.92%	9	
			Through	57.89%	88	
			Left Turn	36.18%	55	
	U.S. 321 SB	680	Right Turn	11.32%	77	
			Through	80.15%	545	
			Left Turn	8.53%	58	
U.S. 321 NB	849	Right Turn	20.49%	174		
		Through	79.03%	671		
		Left Turn	0.47%	4		
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	547	Right Turn	12.43%	68	
			Left Turn	87.57%	479	
	U.S. 321 SB	306	Right Turn	73.53%	225	
			Through	26.47%	81	
	SR 32 NB	90	Through	68.89%	62	
			Left Turn	31.11%	28	
U.S. 321 Intersection w/ SR 416	SR 416 SB	176	Right Turn	81.25%	143	
			Left Turn	18.75%	33	
	U.S. 321 WB	1091	Right Turn	1.65%	18	
			Through	98.35%	1073	
	U.S. 321 EB	634	Through	93.06%	590	
			Left Turn	6.94%	44	
	SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	82	Right Turn	3.66%	3
				Left Turn	96.34%	79
		SR 416 SB	65	Through	96.92%	63
Left Turn				3.08%	2	
SR 416 NB		115	Right Turn	48.70%	56	
			Through	51.30%	59	
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	0	Right Turn		0	
			Through		0	
			Left Turn		0	
	FH Pkwy 8C EB	0	Right Turn		0	
			Through		0	
			Left Turn		0	
	SR 416 SB	142	Right Turn	0.00%	0	
			Through	100.00%	142	
			Left Turn	0.00%	0	
	SR 416 NB	115	Right Turn	0.00%	0	
			Through	100.00%	115	
			Left Turn	0.00%	0	

Table K.53. Weekday A.M. peak-hour intersection volume projections for 2026—interchange at U.S. 321 (directly connected)—8B opened prior to 8C completion (continued)

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy 8B	FH Pkwy 8B	102	Right Turn Left Turn	100.00% 0.00%	102 0
	U.S. 321 WB	976	Right Turn Through	0.00% 100.00%	0 976
	U.S. 321 EB	606	Through Left Turn	74.92% 25.08%	454 152

Table K.53. Weekday A.M. peak-hour intersection volume projections for 2026—interchange at U.S. 321 (Webb Creek Rd. connection)—8B opened prior to 8C completion (continued)

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
Foothills Pkwy 8B/Webb Creek Rd to US 321	FH Pkwy 8B	172	Right Turn Left Turn	79.65% 20.35%	137 35
	U.S. 321 WB	1011	Right Turn Through	3.46% 96.54%	35 976
	U.S. 321 EB	641	Through Left Turn	70.83% 29.17%	454 187

Table K.54. Weekday P.M. peak-hour intersection volume projections for 2026—interchange at U.S. 321 (both options)—8B opened prior to completion of 8C

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	221	Right Turn	14.93%	33
			Through	9.50%	21
			Left Turn	75.57%	167
	FH Pkwy 8B EB	201	Right Turn	5.97%	12
			Through	57.71%	116
			Left Turn	36.32%	73
	U.S. 321 SB	711	Right Turn	12.10%	86
			Through	85.23%	606
			Left Turn	2.67%	19
U.S. 321 NB	867	Right Turn	13.49%	117	
		Through	85.93%	745	
		Left Turn	0.58%	5	
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	724	Right Turn	12.71%	92
			Left Turn	87.29%	632
	U.S. 321 SB	306	Right Turn	74.18%	227
			Through	25.82%	79
	SR 32 NB	63	Through	66.67%	42
			Left Turn	33.33%	21
U.S. 321 Intersection w/ SR 416	SR 416 SB	115	Right Turn	84.35%	97
			Left Turn	15.65%	18
	U.S. 321 WB	1052	Right Turn	3.71%	39
			Through	96.29%	1013
	U.S. 321 EB	535	Through	95.51%	511
			Left Turn	4.49%	24
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	89	Right Turn	6.74%	6
			Left Turn	93.26%	83
	SR 416 SB	80	Through	98.75%	79
			Left Turn	1.25%	1
	SR 416 NB	148	Right Turn	44.59%	66
			Through	55.41%	82
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	0	Right Turn		0
			Through		0
			Left Turn		0
	FH Pkwy 8C EB	0	Right Turn		0
			Through		0
			Left Turn		0
	SR 416 SB	163	Right Turn	0.00%	0
			Through	100.00%	163
			Left Turn	0.00%	0
	SR 416 NB	149	Right Turn	0.00%	0
			Through	100.00%	149
			Left Turn	0.00%	0

Table K.54. Weekday P.M. peak-hour intersection volume projections for 2026—interchange at U.S. 321 (directly connected)—8B opened prior to 8C completion (continued)

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy 8B	FH Pkwy 8B	135	Right Turn Left Turn	100.00% 0.00%	135 0
	U.S. 321 WB	922	Right Turn Through	0.00% 100.00%	0 922
	U.S. 321 EB	593	Through Left Turn	66.27% 33.73%	393 200

Table K.54. Weekday P.M. peak-hour intersection volume projections for 2026—interchange at U.S. 321 (Webb Creek Rd. connection)—8B opened prior to 8C completion (continued)

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
Foothills Pkwy 8B/Webb Creek Rd to US 321	FH Pkwy 8B	215	Right Turn Left Turn	81.40% 18.60%	175 40
	U.S. 321 WB	962	Right Turn Through	4.16% 95.84%	40 922
	U.S. 321 EB	633	Through Left Turn	62.09% 37.91%	393 240

Table K.55. Weekend A.M. peak-hour intersection volume projections for 2026—interchange at U.S. 321 (both options)—8B opened prior to completion of 8C

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	507	Right Turn	12.03%	61
			Through	9.86%	50
			Left Turn	78.11%	396
	FH Pkwy 8B EB	208	Right Turn	5.77%	12
			Through	57.69%	120
			Left Turn	36.54%	76
	U.S. 321 SB	749	Right Turn	11.35%	85
			Through	79.97%	599
			Left Turn	8.68%	65
	U.S. 321 NB	1046	Right Turn	20.65%	216
			Through	78.87%	825
			Left Turn	0.48%	5
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	749	Right Turn	12.42%	93
			Left Turn	87.58%	656
	U.S. 321 SB	696	Right Turn	73.56%	512
			Through	26.44%	184
	SR 32 NB	123	Through	69.92%	86
			Left Turn	30.08%	37
U.S. 321 Intersection w/ SR 416	SR 416 SB	191	Right Turn	81.68%	156
			Left Turn	18.32%	35
	U.S. 321 WB	1324	Right Turn	1.74%	23
			Through	98.26%	1301
	U.S. 321 EB	806	Through	92.93%	749
			Left Turn	7.07%	57
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	52	Right Turn	3.85%	2
			Left Turn	96.15%	50
	SR 416 SB	48	Through	95.83%	46
			Left Turn	4.17%	2
	SR 416 NB	96	Right Turn	47.92%	46
			Through	52.08%	50
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	0	Right Turn		
			Through		
			Left Turn		
	FH Pkwy 8C EB	0	Right Turn		
			Through		
			Left Turn		
	SR 416 SB	96	Right Turn	0.00%	
			Through	100.00%	96
			Left Turn	0.00%	
	SR 416 NB	96	Right Turn	0.00%	
			Through	100.00%	96
			Left Turn	0.00%	

Table K.55. Weekend A.M. peak-hour intersection volume projections for 2026—interchange at U.S. 321 (directly connected)—8B opened prior to 8C completion (continued)

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy 8B	FH Pkwy 8B	140	Right Turn	100.00%	140
			Left Turn	0.00%	0
	U.S. 321 WB	1184	Right Turn	0.00%	0
			Through	100.00%	1184
	U.S. 321 EB	784	Through	73.47%	576
			Left Turn	26.53%	208

Table K.55. Weekend A.M. peak-hour intersection volume projections for 2026—interchange at U.S. 321 (Webb Creek Rd. connection)—8B opened prior to 8C completion (continued)

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
Foothills Pkwy 8B/Webb Creek Rd to US 321	FH Pkwy 8B	190	Right Turn	86.84%	165
			Left Turn	13.16%	25
	U.S. 321 WB	1209	Right Turn	2.07%	25
			Through	97.93%	1184
	U.S. 321 EB	809	Through	71.20%	576
			Left Turn	28.80%	233

Table K.56. Weekend P.M. peak-hour intersection volume projections for 2026—interchange at U.S. 321 (both options)—8B opened prior to completion of 8C

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	308	Right Turn	15.26%	47
			Through	9.42%	29
			Left Turn	75.32%	232
	FH Pkwy 8B EB	241	Right Turn	5.81%	14
			Through	57.68%	139
			Left Turn	36.51%	88
	U.S. 321 SB	833	Right Turn	12.12%	101
			Through	85.23%	710
			Left Turn	2.64%	22
U.S. 321 NB	991	Right Turn	13.42%	133	
		Through	86.07%	853	
		Left Turn	0.50%	5	
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	871	Right Turn	12.74%	111
			Left Turn	87.26%	760
	U.S. 321 SB	580	Right Turn	73.97%	429
			Through	26.03%	151
	SR 32 NB	82	Through	65.85%	54
			Left Turn	34.15%	28
U.S. 321 Intersection w/ SR 416	SR 416 SB	224	Right Turn	83.48%	187
			Left Turn	16.52%	37
	U.S. 321 WB	1408	Right Turn	3.76%	53
			Through	96.24%	1355
	U.S. 321 EB	762	Through	95.54%	728
			Left Turn	4.46%	34
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	68	Right Turn	7.35%	5
			Left Turn	92.65%	63
	SR 416 SB	110	Through	99.09%	109
			Left Turn	0.91%	1
	SR 416 NB	148	Right Turn	44.59%	66
			Through	55.41%	82
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	0	Right Turn		0
			Through		0
			Left Turn		0
	FH Pkwy 8C EB	0	Right Turn		0
			Through		0
			Left Turn		0
	SR 416 SB	171	Right Turn	0.00%	0
			Through	100.00%	171
			Left Turn	0.00%	0
	SR 416 NB	149	Right Turn	0.00%	0
			Through	100.00%	149
			Left Turn	0.00%	0

Table K.56. Weekend P.M. peak-hour intersection volume projections for 2026—interchange at U.S. 321 (directly connected)—8B opened prior to 8C completion (continued)

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy 8B	FH Pkwy 8B	162	Right Turn Left Turn	100.00% 0.00%	162 0
	U.S. 321 WB	1233	Right Turn Through	0.00% 100.00%	0 1233
	U.S. 321 EB	801	Through Left Turn	69.91% 30.09%	560 241

Table K.56. Weekend P.M. peak-hour intersection volume projections for 2026—interchange at U.S. 321 (Webb Creek Rd. connection)—8B opened prior to 8C completion (continued)

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
Foothills Pkwy 8B/Webb Creek Rd to US 321	FH Pkwy 8B	232	Right Turn Left Turn	84.91% 15.09%	197 35
	U.S. 321 WB	1268	Right Turn Through	2.76% 97.24%	35 1233
	U.S. 321 EB	836	Through Left Turn	66.99% 33.01%	560 276

**Table K.57. Weekday A.M. peak-hour intersection volume projections for
2006—no build alternative**

Intersection location	Approach	Total vehicles per hour	Directional information			
			Turning movement	Percent	Counts	
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	207	Right Turn	14.01%	29	
			Through	0.00%	0	
			Left Turn	85.99%	178	
	FH Pkwy 8B EB	0	Right Turn		0	
			Through		0	
			Left Turn		0	
	U.S. 321 SB	536	Right Turn	0.00%	0	
			Through	90.11%	483	
			Left Turn	9.89%	53	
U.S. 321 NB	705	Right Turn	20.71%	146		
		Through	79.29%	559		
		Left Turn	0.00%	0		
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	466	Right Turn	12.66%	59	
			Left Turn	87.34%	407	
	U.S. 321 SB	259	Right Turn	75.68%	196	
			Through	24.32%	63	
	SR 32 NB	77	Through	66.23%	51	
			Left Turn	33.77%	26	
U.S. 321 Intersection w/ SR 416	SR 416 SB	125	Right Turn	76.00%	95	
			Left Turn	24.00%	30	
	U.S. 321 WB	803	Right Turn	4.23%	34	
			Through	95.77%	769	
	U.S. 321 EB	470	Through	76.38%	359	
			Left Turn	23.62%	111	
	SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	54	Right Turn	3.70%	2
				Left Turn	96.30%	52
		SR 416 SB	42	Through	97.62%	41
Left Turn				2.38%	1	
SR 416 NB		66	Right Turn	50.00%	33	
			Through	50.00%	33	
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	0	Right Turn		0	
			Through		0	
			Left Turn		0	
	FH Pkwy 8C EB	0	Right Turn		0	
			Through		0	
			Left Turn		0	
	SR 416 SB	93	Right Turn	0.00%	0	
			Through	100.00%	93	
			Left Turn	0.00%	0	
	SR 416 NB	66	Right Turn	0.00%	0	
			Through	100.00%	66	
			Left Turn	0.00%	0	

Table K.58. Weekday P.M. peak-hour intersection volume projections for 2006—no build alternative

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	153	Right Turn	16.99%	26
			Through	0.00%	0
			Left Turn	83.01%	127
	FH Pkwy 8B EB	0	Right Turn		0
			Through		0
			Left Turn		0
	U.S. 321 SB	554	Right Turn	0.00%	0
			Through	96.93%	537
			Left Turn	3.07%	17
	U.S. 321 NB	718	Right Turn	13.65%	98
			Through	86.35%	620
			Left Turn	0.00%	0
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	617	Right Turn	12.97%	80
			Left Turn	87.03%	537
	U.S. 321 SB	259	Right Turn	76.06%	197
			Through	23.94%	62
	SR 32 NB	53	Through	64.15%	34
			Left Turn	35.85%	19
U.S. 321 Intersection w/ SR 416	SR 416 SB	82	Right Turn	79.27%	65
			Left Turn	20.73%	17
	U.S. 321 WB	801	Right Turn	9.24%	74
			Through	90.76%	727
	U.S. 321 EB	372	Through	83.60%	311
			Left Turn	16.40%	61
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	58	Right Turn	5.17%	3
			Left Turn	94.83%	55
	SR 416 SB	53	Through	98.11%	52
			Left Turn	1.89%	1
	SR 416 NB	85	Right Turn	45.88%	39
			Through	54.12%	46
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	0	Right Turn		0
			Through		0
			Left Turn		0
	FH Pkwy 8C EB	0	Right Turn		0
			Through		0
			Left Turn		0
	SR 416 SB	107	Right Turn	0.00%	0
			Through	100.00%	107
			Left Turn	0.00%	0
	SR 416 NB	85	Right Turn	0.00%	0
			Through	100.00%	85
			Left Turn	0.00%	0

**Table K.59. Weekend A.M. peak-hour intersection volume projections for
2006—no build alternative**

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	350	Right Turn	14.00%	49
			Through	0.00%	0
			Left Turn	86.00%	301
	FH Pkwy 8B EB	0	Right Turn	0.00%	0
			Through	0.00%	0
			Left Turn	0.00%	0
	U.S. 321 SB	590	Right Turn	0.00%	0
			Through	90.00%	531
			Left Turn	10.00%	59
	U.S. 321 NB	868	Right Turn	20.85%	181
			Through	79.15%	687
			Left Turn	0.00%	0
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	638	Right Turn	12.70%	81
			Left Turn	87.30%	557
	U.S. 321 SB	589	Right Turn	75.72%	446
			Through	24.28%	143
	SR 32 NB	104	Through	67.31%	70
			Left Turn	32.69%	34
U.S. 321 Intersection w/ SR 416	SR 416 SB	136	Right Turn	76.47%	104
			Left Turn	23.53%	32
	U.S. 321 WB	976	Right Turn	4.41%	43
			Through	95.59%	933
	U.S. 321 EB	598	Through	76.09%	455
			Left Turn	23.91%	143
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	34	Right Turn	2.94%	1
			Left Turn	97.06%	33
	SR 416 SB	31	Through	96.77%	30
			Left Turn	3.23%	1
	SR 416 NB	55	Right Turn	49.09%	27
			Through	50.91%	28
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	0	Right Turn	0.00%	0
			Through	0.00%	0
			Left Turn	0.00%	0
	FH Pkwy 8C EB	0	Right Turn	0.00%	0
			Through	0.00%	0
			Left Turn	0.00%	0
	SR 416 SB	63	Right Turn	0.00%	0
			Through	100.00%	63
			Left Turn	0.00%	0
	SR 416 NB	55	Right Turn	0.00%	0
			Through	100.00%	55
			Left Turn	0.00%	0

**Table K.60. Weekend P.M. peak-hour intersection volume projections for
2006—no build alternative**

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	215	Right Turn	17.67%	38
			Through	0.00%	0
			Left Turn	82.33%	177
	FH Pkwy 8B EB	0	Right Turn		0
			Through		0
			Left Turn		0
	U.S. 321 SB	650	Right Turn	0.00%	0
			Through	96.92%	630
			Left Turn	3.08%	20
U.S. 321 NB	821	Right Turn	13.52%	111	
		Through	86.48%	710	
		Left Turn	0.00%	0	
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	743	Right Turn	13.06%	97
			Left Turn	86.94%	646
	U.S. 321 SB	490	Right Turn	76.12%	373
			Through	23.88%	117
	SR 32 NB	70	Through	62.86%	44
			Left Turn	37.14%	26
U.S. 321 Intersection w/ SR 416	SR 416 SB	158	Right Turn	78.48%	124
			Left Turn	21.52%	34
	U.S. 321 WB	1069	Right Turn	9.17%	98
			Through	90.83%	971
	U.S. 321 EB	527	Through	83.87%	442
			Left Turn	16.13%	85
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	43	Right Turn	4.65%	2
			Left Turn	95.35%	41
	SR 416 SB	72	Through	98.61%	71
			Left Turn	1.39%	1
	SR 416 NB	85	Right Turn	45.88%	39
			Through	54.12%	46
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	0	Right Turn		0
			Through		0
			Left Turn		0
	FH Pkwy 8C EB	0	Right Turn		0
			Through		0
			Left Turn		0
	SR 416 SB	112	Right Turn	0.00%	0
			Through	100.00%	112
			Left Turn	0.00%	0
	SR 416 NB	85	Right Turn	0.00%	0
			Through	100.00%	85
			Left Turn	0.00%	0

**Table K.61. Weekday A.M. peak-hour intersection volume projections for
2026—no build alternative**

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	274	Right Turn	13.14%	36
			Through	0.00%	0
			Left Turn	86.86%	238
	FH Pkwy 8B EB	0	Right Turn		0
			Through		0
			Left Turn		0
	U.S. 321 SB	680	Right Turn	0.00%	0
			Through	91.47%	622
			Left Turn	8.53%	58
U.S. 321 NB	915	Right Turn	19.89%	182	
		Through	80.11%	733	
		Left Turn	0.00%	0	
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	617	Right Turn	12.32%	76
			Left Turn	87.68%	541
	U.S. 321 SB	340	Right Turn	77.94%	265
			Through	22.06%	75
	SR 32 NB	91	Through	64.84%	59
			Left Turn	35.16%	32
U.S. 321 Intersection w/ SR 416	SR 416 SB	176	Right Turn	81.25%	143
			Left Turn	18.75%	33
	U.S. 321 WB	1054	Right Turn	1.71%	18
			Through	98.29%	1036
	U.S. 321 EB	547	Through	91.96%	503
			Left Turn	8.04%	44
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	82	Right Turn	3.66%	3
			Left Turn	96.34%	79
	SR 416 SB	65	Through	96.92%	63
			Left Turn	3.08%	2
	SR 416 NB	115	Right Turn	48.70%	56
			Through	51.30%	59
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	0	Right Turn		0
			Through		0
			Left Turn		0
	FH Pkwy 8C EB	0	Right Turn		0
			Through		0
			Left Turn		0
	SR 416 SB	142	Right Turn	0.00%	0
			Through	100.00%	142
			Left Turn	0.00%	0
	SR 416 NB	115	Right Turn	0.00%	0
			Through	100.00%	115
			Left Turn	0.00%	0

Table K.62. Weekday P.M. peak-hour intersection volume projections for 2026—no build alternative

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	202	Right Turn	16.34%	33
			Through	0.00%	0
			Left Turn	83.66%	169
	FH Pkwy 8B EB	0	Right Turn		0
			Through		0
			Left Turn		0
	U.S. 321 SB	711	Right Turn	0.00%	0
			Through	97.33%	692
			Left Turn	2.67%	19
	U.S. 321 NB	936	Right Turn	13.03%	122
			Through	86.97%	814
			Left Turn	0.00%	0
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	817	Right Turn	12.61%	103
			Left Turn	87.39%	714
	U.S. 321 SB	341	Right Turn	78.30%	267
			Through	21.70%	74
	SR 32 NB	64	Through	62.50%	40
			Left Turn	37.50%	24
U.S. 321 Intersection w/ SR 416	SR 416 SB	115	Right Turn	84.35%	97
			Left Turn	15.65%	18
	U.S. 321 WB	1018	Right Turn	3.83%	39
			Through	96.17%	979
	U.S. 321 EB	459	Through	94.77%	435
			Left Turn	5.23%	24
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	89	Right Turn	6.74%	6
			Left Turn	93.26%	83
	SR 416 SB	80	Through	98.75%	79
			Left Turn	1.25%	1
	SR 416 NB	148	Right Turn	44.59%	66
			Through	55.41%	82
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	0	Right Turn		0
			Through		0
			Left Turn		0
	FH Pkwy 8C EB	0	Right Turn		0
			Through		0
			Left Turn		0
	SR 416 SB	163	Right Turn	0.00%	0
			Through	100.00%	163
			Left Turn	0.00%	0
	SR 416 NB	149	Right Turn	0.00%	0
			Through	100.00%	149
			Left Turn	0.00%	0

Table K.63. Weekend A.M. peak-hour intersection volume projections for 2026—no build alternative

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	463	Right Turn	13.17%	61
			Through	0.00%	0
			Left Turn	86.83%	402
	FH Pkwy 8B EB	0	Right Turn	0.00%	0
			Through	0.00%	0
			Left Turn	0.00%	0
	U.S. 321 SB	749	Right Turn	0.00%	0
			Through	91.32%	684
			Left Turn	8.68%	65
	U.S. 321 NB	1126	Right Turn	19.98%	225
			Through	80.02%	901
			Left Turn	0.00%	0
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	846	Right Turn	12.41%	105
			Left Turn	87.59%	741
	U.S. 321 SB	775	Right Turn	77.81%	603
			Through	22.19%	172
	SR 32 NB	123	Through	65.85%	81
			Left Turn	34.15%	42
U.S. 321 Intersection w/ SR 416	SR 416 SB	191	Right Turn	81.68%	156
			Left Turn	18.32%	35
	U.S. 321 WB	1280	Right Turn	1.80%	23
			Through	98.20%	1257
	U.S. 321 EB	695	Through	91.80%	638
			Left Turn	8.20%	57
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	52	Right Turn	3.85%	2
			Left Turn	96.15%	50
	SR 416 SB	48	Through	95.83%	46
			Left Turn	4.17%	2
	SR 416 NB	96	Right Turn	47.92%	46
			Through	52.08%	50
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	0	Right Turn	0.00%	0
			Through	0.00%	0
			Left Turn	0.00%	0
	FH Pkwy 8C EB	0	Right Turn	0.00%	0
			Through	0.00%	0
			Left Turn	0.00%	0
	SR 416 SB	96	Right Turn	0.00%	0
			Through	100.00%	96
			Left Turn	0.00%	0
	SR 416 NB	96	Right Turn	0.00%	0
			Through	100.00%	96
			Left Turn	0.00%	0

**Table K.64. Weekend P.M. peak-hour intersection volume projections for
2026—no build alternative**

Intersection location	Approach	Total vehicles per hour	Directional information		
			Turning movement	Percent	Counts
U.S. 321 Intersection w/ Foothills Pkwy	FH Pkwy 8A WB	283	Right Turn	16.61%	47
			Through	0.00%	0
			Left Turn	83.39%	236
	FH Pkwy 8B EB	0	Right Turn		0
			Through		0
			Left Turn		0
	U.S. 321 SB	833	Right Turn	0.00%	0
			Through	97.36%	811
			Left Turn	2.64%	22
	U.S. 321 NB	1069	Right Turn	12.91%	138
			Through	87.09%	931
			Left Turn	0.00%	0
U.S. 321 Convergence w/ SR 32	U.S. 321 EB	985	Right Turn	12.79%	126
			Left Turn	87.21%	859
	U.S. 321 SB	647	Right Turn	78.05%	505
			Through	21.95%	142
	SR 32 NB	83	Through	61.45%	51
			Left Turn	38.55%	32
U.S. 321 Intersection w/ SR 416	SR 416 SB	224	Right Turn	83.48%	187
			Left Turn	16.52%	37
	U.S. 321 WB	1362	Right Turn	3.89%	53
			Through	96.11%	1309
	U.S. 321 EB	654	Through	94.80%	620
			Left Turn	5.20%	34
SR 416 Intersection w/ Webb Creek Rd	Webb Cr Rd WB	68	Right Turn	7.35%	5
			Left Turn	92.65%	63
	SR 416 SB	110	Through	99.09%	109
			Left Turn	0.91%	1
	SR 416 NB	148	Right Turn	44.59%	66
			Through	55.41%	82
SR 416 Intersection w/ Foothills Pkwy 8B/8C	FH Pkwy 8B WB	0	Right Turn		0
			Through		0
			Left Turn		0
	FH Pkwy 8C EB	0	Right Turn		0
			Through		0
			Left Turn		0
	SR 416 SB	171	Right Turn	0.00%	0
			Through	100.00%	171
			Left Turn	0.00%	0
	SR 416 NB	149	Right Turn	0.00%	0
			Through	100.00%	149
			Left Turn	0.00%	0

Appendix L
NOISE DATA

S. M. Chin
Oak Ridge National Laboratory
Oak Ridge, Tennessee

R. Gibson
Oak Ridge National Laboratory
Oak Ridge, Tennessee

August 1995

The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that every entry, no matter how small, should be recorded to ensure the integrity of the financial statements. This includes not only sales and purchases but also expenses and income. The document provides a detailed list of items that should be tracked, such as inventory levels, accounts payable, and accounts receivable. It also outlines the proper procedures for recording these transactions, including the use of double-entry bookkeeping and the importance of regular reconciliations.

The second part of the document focuses on the analysis of the recorded data. It explains how to interpret the financial statements to identify trends and potential areas of concern. Key indicators such as profit margins, liquidity ratios, and debt-to-equity ratios are discussed in detail. The document provides examples of how these ratios can be used to compare a company's performance against industry benchmarks and to identify areas for improvement. It also discusses the importance of regular financial reviews and the role of management in making informed decisions based on the financial data.

The final part of the document provides a summary of the key points discussed and offers some practical advice for implementing the principles outlined. It emphasizes the importance of consistency and accuracy in financial reporting and encourages companies to seek professional advice when needed. The document concludes with a statement of the author's hope that the information provided will be helpful and informative.

L.1 CONSTRUCT SECTIONS 8B AND 8C WITH NO INTERCHANGES

The opening on Sections 8B and 8C would divert tourist related traffic from U.S. 321 to Foothills Parkway. The Foothills Parkway traffic would be light and most of the U.S. 321 traffic would stay on U.S. 321. Similar to the option described above, most sites would encounter little traffic noise impacts and would experience noise levels within the standard for residential areas. In 2006, the highest L_{eq} noise level at 34 sites would be below 50 dBA; no sites would experience levels between 50–60 dBA; and 5 sites would experience levels between 60–67 dBA. In 2026, the highest L_{eq} noise level at 34 sites would be below 50 dBA; and 5 sites would experience levels between 60–67 dBA. Noise levels at 2 sites (sites 6 and 19) would exceed standards by 2006. The addition of Section 8B would slightly decrease the traffic volume along U.S. 321, thereby decreasing the projected noise levels for sites 6 and 19.

Sites 16, 17, 18, 25, 26, 27 and 40 would experience significant increases in noise level, as much as 12 dBA during some peak periods, compared to the no-build alternative. The significant increases in noise levels at these sites are due to the low existing noise levels. The projected noise levels for these sites are still low, ranging from 30 to 42 dBA. It should be noted that the existing noise levels measured at these sites are higher than the projected traffic noise levels. This suggests that ambient noise other than traffic noise dominates the noise level at these sites.

L.2 FOOTHILLS PARKWAY INTERCHANGE AT SR 416 WITH NORTH RAMP OR SOUTH RAMP

Under these build options, some of the traffic on Sections 8B and 8C will use SR 416. However, Parkway-related traffic on SR 416 would be very low, and the noise impact would be similar to the no interchange option. That is, most sites would encounter little traffic noise impacts, even by 2026, and would experience noise levels within the standard for residential areas. The highest L_{eq} noise level at 34 sites would still be below 50 dBA by 2026; and 5 sites would experience levels between 60–67 dBA. However, all sites along SR 416 would experience noise levels below the FHWA-established standard. Noise levels at sites 6 and 19 along U.S. 321 would exceed standards by 2006.

Sites 16, 17, 18, 25, 26, 27, and 40 would experience significant increases in noise level, as much as 12 dBA during some peak periods, compared to the no-build alternative. These increases are identical for those resulting from the no interchange option. The significant increases in noise levels at these sites are due to the low existing noise levels. The projected noise levels for these sites are still low, ranging from 30 to 42 dBA, and fall well below the FHWA-established standard for residential areas. As indicated, the existing noise levels measured at these sites are higher than the projected traffic noise level. This indicates that other ambient noise rather than traffic noise dominates the noise level at these sites.

L.3 FOOTHILLS PARKWAY INTERCHANGE AT U.S. 321 WITH TWO DIFFERENT RAMP CONNECTION CONFIGURATION OPTIONS

These build options are very similar to the SR 416 interchange option except that the Foothills Parkway/Pittman Center interchange would be at U.S. 321 instead of at SR 416. Some of the Section 8B and 8C traffic would use U.S. 321 directly, but such traffic would be very light. Similar to the previously described options, most sites would encounter little traffic noise impacts

and would experience noise levels within the standard for residential areas. By 2026 the highest L_{eq} noise level at 34 sites would still be below 50 dBA; and 5 sites would experience levels between 60–67 dBA. Noise levels at sites 6 and 19, however, would exceed FHWA standards by 2006.

Sites 16, 17, 18, 25, 26, 27, and 40 would experience significant increases in noise level, as much as 12 dBA during some peak periods, compared to the no-build alternative. These increases are identical for those resulting from the SR 416 interchange option. The significant increases in noise levels at these sites are due to the low existing noise levels. The projected noise levels for these sites are low, ranging from 30 to 42 dBA, and fall well below the FHWA-established standard for residential areas. As indicated, the existing noise level measured at these sites is higher than the projected traffic noise. This indicates that ambient noise other than traffic noise dominates the noise level at these sites.

L.4 8B WOULD BE OPERATIONAL PRIOR TO THE COMPLETION SECTION 8C WITH INTERCHANGE AT SR 416

Under this build option, all traffic on Section 8B must use SR 416 to enter and exit the Foothills Parkway and continue their trips on U.S. 321. Consequently, the noise levels at Site 10, in addition to Sites 6 and 19, near SR 416 would experience traffic noise impacts with noise levels exceeding FHWA residential noise standards by 2006. Most other sites would encounter little traffic noise impacts and would experience noise levels within the standard for residential areas. The highest L_{eq} noise level at 34 sites would be below 50 dBA, and 4 sites would experience levels between 60–67 dBA.

Sites 10, 11, 16, 17, 18, 25, 26, 27, and 40 would experience significant increases in noise level, as much as 12 dBA during some peak periods, compared to the no-build alternative. The increase in noise levels at Sites 10 and 11 are due to the addition of Section 8B traffic on SR 416. Noise level increases at the other sites are identical to those described for the SR 416 interchange option. The significant increases in noise levels at these sites are due to the low existing noise levels. Still, the projected noise levels for these sites are low, ranging from 30 to 42 dBA, and fall well below the FHWA-established standard for residential areas. As indicated, the existing noise levels measured at these sites are higher than the projected traffic noises. This indicates that ambient noise other than traffic noise dominates the noise level at these sites.

L.5 8B WOULD BE OPERATIONAL PRIOR TO THE COMPLETION SECTION 8C WITH INTERCHANGE AT U.S. 321

Under this build option, all traffic on Section 8B would use U.S. 321 directly to enter and exit the Foothills Parkway. No Foothills Parkway-related traffic would use SR 416. Thus, as in the U.S. 321 interchange options, most sites would encounter little traffic noise impacts and would experience noise levels within the standard for residential areas. The highest L_{eq} noise level at 34 sites would be below 50 dBA; and 5 sites would experience levels between 60–67 dBA. Noise levels at sites 6 and 19 would exceed standards by 2006.

Sites 16, 17, 18, 25, 26, 27, and 40 would experience significant increases in noise levels, as much as 12 dBA during some peak periods, compared to the no-build alternative. These increases would range from 3 to 10 dBA for different peak time periods. The significant increases in traffic noise

levels at these sites are due to the low existing noise levels. Still, the projected noise levels for these sites are low, ranging from 30 to 42 dBA, and fall well below the FHWA-established standard for residential areas. As indicated, the existing noise levels measured at these sites are higher than the projected traffic noises. This indicates that other ambient noise rather than traffic noise dominates the noise level at these sites.

L.6 NO-ACTION ALTERNATIVE (NO-BUILD)

ORNL's noise projections for the study area indicate that, for this build option, most sites would encounter little traffic noise impacts and would experience traffic noise levels below the FHWA-established standard for residential areas through the year 2026. Most sites (34 sites) have a projected noise level of less than 50 dBA during the noisiest peak period in both 2006 and 2026; 2 sites have levels 50–60; and only 3 sites have levels between 60 and 67 dBA.

Two sites along U.S. 321 would experience noise levels that exceed this standard by the year 2006 due to their close proximity to the highway and the large volume of traffic expected to travel along it. The projected L_{eq} noise levels at these sites (i.e., sites 6 and 19) would range from 70 to 73 dBA by 2006 and from 70 to 75 dBA by 2026.

Table L.1. Noise level projections—construct 8B with no interchanges option

Site no.	Location	Noise level (Leq)									
		Existing	2006				2026				
			Weekday		Weekend		Weekday		Weekend		
			A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	
1	Foothills Pkwy Sec. 8A—1st Scenic Overlook from U.S. 321	47.3	59	58	61	59	61	59	62	61	
2	Foothills Pkwy Sec. 8A—1st Scenic Overlook from I-40	47.3	59	58	61	59	61	59	62	61	
3	Burnett Memorial Methodist Church—Pittman Center	49.0	43	43	43	43	45	45	45	45	
4	Pittman Center Elementary School—Playground	42.6	43	43	43	43	45	45	45	45	
5	Pittman Center City Hall—Parking lot	51.3	45	45	46	46	47	47	47	48	
6	House #3355 between Mile Markers 20 and 21 on U.S. 321—Front yard	67.2	71	71	73	73	73	73	74	74	
7	House #5106 on SR 416—Front yard	47.7	43	43	43	43	45	45	45	45	
8	House #3010 on Webb Creek Road—Front yard	40.7	43	43	43	43	45	45	45	45	
9	House #5005 on SR 416—Front yard	62.4	43	43	43	43	45	45	45	45	
10	House #5215 on SR 416—Front yard	49.7	65	65	66	66	66	66	66	67	
11	House #5328 on SR 416—Front yard	54.3	60	60	60	61	60	60	60	62	
12	Greenbrier View Rental Cottage on Tunis Branch Road	39.4	35	35	35	35	37	38	38	38	
13	House #209 on Teaberry Hill Road—Front yard	39.1	45	45	45	45	47	47	47	47	
14	House #4705 on Townsend Road—Front yard	45.8	40	41	42	42	42	42	43	43	
15	House at End of Branam Hollow Road—Back yard of guest house	38.7	38	38	38	38	40	40	40	40	
16	House #612 on Branam Hollow Road—Driveway	35.5	30	31	31	31	32	32	33	33	
17	House #5258 Off of Mathis Branch Road—Front yard	53.2	28	28	29	29	29	30	30	31	
18	House Off of Rocky Flatts Road—Back yard	64.0	39	39	40	40	41	41	42	42	
19	House #5039 on U.S. 321—Front yard	63.1	69	69	71	71	71	71	72	72	
20	House #4022 on U.S. 321—Back yard	53.6	43	43	43	43	45	45	45	45	
21	Young's Taxedermly Off U.S 321—Driveway	51.8	58	59	60	60	60	60	61	61	
22	House #4140 on Chavis Road—Front yard	49.3	45	45	45	45	48	48	48	48	

Table L.1. Continued

Site no.	Location	Existing	Noise level (Leq)							
			2006				2026			
			Weekday		Weekend		Weekday		Weekend	
A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.			
23	Waters-Large Cemetery—Entrance	37.6	45	45	46	46	46	46	47	47
24	House #227 Teaberry Lane	42.0	40	40	42	42	42	42	43	43
25	House #5310 on Otto Williams Road—Back yard	52.4	36	37	37	38	38	38	39	39
26	House #327 on Costner Road—Back yard	44.4	35	36	36	36	37	38	38	38
27	House #430 Appletree Lane—Front yard	40.3	29	29	30	30	31	31	32	32
28	House on Sunshine Trail in Cobbly Knob—Balcony	41.8	33	33	33	34	35	35	36	36
29	Rental House on McKinzi Way—Front yard	39.7	43	43	43	43	45	45	45	45
30	House on Shultz Road—Driveway	39.6	43	43	43	43	45	45	45	45
31	Copeland Rental Cabins—Copeland Road	47.1	43	43	43	43	45	45	45	45
32	House on The Way (last house)—Front yard	41.1	43	43	44	44	45	45	46	46
33	House on The Way (second to last house)—Front deck	45.6	41	41	42	43	43	43	44	44
34	House #429 on Appletree Lane	50.8	46	46	46	46	49	49	49	49
35	House at Intersection of Waters Cemetery Road and Chavis Road	49.5	39	39	40	40	42	42	42	42
36	House Off of Shultz Road	46.9	45	45	47	47	47	47	48	48
37	House #916 Scenic Trail (Whistler's Watch) in Cobbly Knob—Driveway	41.3	41	41	41	41	43	43	43	43
38	House on Sutton Place (Hidden Haven) in Cobbly Knob—Driveway	35.1	32	33	33	33	35	35	35	35
39	Gateway Near House on Black Gum Gap Road in Cobbly Knob	54.4	42	42	42	42	44	44	44	44
40	House (under construction) at the End of Squirrel Trail in Cobbly Knob—Near driveway	36.6	33	33	33	34	35	35	35	36
41	House (uninhabited or under construction) on Rocky Flatts Road	48.4	44	44	44	44	46	46	46	46

**Table L.2. Noise level projections—interchange at Highway 416
(both options)—8B not opened until 8C completed**

Site no.	Location	Noise level (Leq)									
		Existing	2006				2026				
			Weekday		Weekend		Weekday		Weekend		
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		
1	Foothills Pkwy Sec. 8A—1st Scenic Overlook from U.S. 321	47.3	59	58	61	59	61	59	62	61	
2	Foothills Pkwy Sec. 8A—1st Scenic Overlook from I-40	47.3	59	58	61	59	61	59	62	61	
3	Burnett Memorial Methodist Church—Pittman Center	49.0	43	43	43	43	45	45	45	45	
4	Pittman Center Elementary School—Playground	42.6	43	43	43	43	45	45	45	45	
5	Pittman Center City Hall—Parking lot	51.3	46	46	46	47	47	47	47	48	
6	House #3355 between Mile Markers 20 and 21 on U.S. 321—Front yard	67.2	71	72	73	73	73	73	74	74	
7	House #5106 on SR 416—Front yard	47.7	43	43	43	43	45	45	45	45	
8	House #3010 on Webb Creek Road—Front yard	40.7	43	43	43	43	45	45	45	45	
9	House #5005 on SR 416—Front yard	62.4	43	43	43	43	45	45	45	45	
10	House #5215 on SR 416—Front yard	49.7	66	67	66	68	66	67	66	68	
11	House #5328 on SR 416—Front yard	54.3	60	61	60	62	60	61	60	62	
12	Greenbrier View Rental Cottage on Tunis Branch Road	39.4	35	35	35	35	37	38	38	38	
13	House #209 on Teaberry Hill Road—Front yard	39.1	45	45	45	46	47	47	47	47	
14	House #4705 on Townsend Road—Front yard	45.8	41	41	42	42	42	42	43	43	
15	House at End of Branam Hollow Road—Back yard of guest house	38.7	38	38	38	38	40	40	40	40	
16	House #612 on Branam Hollow Road—Driveway	35.5	30	31	31	31	32	32	33	33	
17	House #5258 Off of Mathis Branch Road—Front yard	53.2	28	28	29	29	29	30	30	31	
18	House Off of Rocky Flatts Road—Back yard	64.0	39	39	40	40	41	41	42	42	
19	House #5039 on U.S. 321—Front yard	63.1	69	70	71	71	71	71	72	72	
20	House #4022 on U.S. 321—Back yard	53.6	43	43	43	43	45	45	45	45	

Table L.2. Continued

Site no.	Location	Existing	Noise level (Leq)							
			2006				2026			
			Weekday		Weekend		Weekday		Weekend	
A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.			
21	Young's Taxedermery Off U.S 321— Driveway	51.8	59	59	60	60	60	60	61	61
22	House #4140 on Chavis Road—Front yard	49.3	45	45	45	45	48	48	48	48
23	Waters-Large Cemetery—Entrance	37.6	45	45	46	46	46	46	47	47
24	House #227 Teaberry Lane	42.0	40	41	42	42	42	42	43	43
25	House #5310 on Otto Williams Road—Back yard	52.4	36	37	37	38	38	38	39	39
26	House #327 on Costner Road—Back yard	44.4	35	36	36	36	37	38	38	38
27	House #430 Appletree Lane—Front yard	40.3	29	29	30	30	31	31	32	32
28	House on Sunshine Trail in Cobbly Knob—Balcony	41.8	33	33	33	34	35	35	36	36
29	Rental House on McKinzi Way—Front yard	39.7	43	43	43	43	45	45	45	45
30	House on Shultz Road—Driveway	39.6	43	43	43	43	45	45	45	45
31	Copeland Rental Cabins—Copeland Road	47.1	43	43	43	43	45	45	45	45
32	House on The Way (last house)—Front yard	41.1	43	43	44	44	45	45	46	46
33	House on The Way (second to last house)—Front deck	45.6	41	42	42	43	42	43	44	44
34	House #429 on Appletree Lane	50.8	46	46	46	46	49	49	49	49
35	House at Intersection of Waters Cemetery Road and Chavis Road	49.5	39	39	40	40	42	42	42	42
36	House Off of Shultz Road	46.9	45	46	47	47	47	47	48	48
37	House #916 Scenic Trail (Whistler's Watch) in Cobbly Knob—Driveway	41.3	41	41	41	41	43	43	43	43
38	House on Sutton Place (Hidden Haven) in Cobbly Knob—Driveway	35.1	32	33	33	33	35	35	35	35
39	Gateway Near House on Black Gum Gap Road in Cobbly Knob	54.4	42	42	42	42	44	44	44	44
40	House (under construction) at the End of Squirrel Trail in Cobbly Knob—Near driveway	36.6	33	33	33	34	35	35	35	36
41	House (uninhabited or under construction) on Rocky Flatts Road	48.4	44	44	44	44	46	46	46	46

**Table L.3. Noise level projections—interchange at U.S. 321
(both options)—8B not opened until 8C completed**

Site no.	Location	Existing	Noise level (Leq)							
			2006				2026			
			Weekday		Weekend		Weekday		Weekend	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	
1	Foothills Pkwy Sec. 8A—1st Scenic Overlook from U.S. 321	47.3	59	58	61	59	61	59	62	61
2	Foothills Pkwy Sec. 8A—1st Scenic Overlook from I-40	47.3	59	58	61	59	61	59	62	61
3	Burnett Memorial Methodist Church—Pittman Center	49.0	43	43	43	43	45	45	45	45
4	Pittman Center Elementary School—Playground	42.6	43	43	43	43	45	45	45	45
5	Pittman Center City Hall—Parking lot	51.3	45	45	46	46	47	47	47	48
6	House #3355 between Mile Markers 20 and 21 on U.S. 321—Front yard	67.2	71	71	73	73	73	73	74	74
7	House #5106 on SR 416—Front yard	47.7	43	43	43	43	45	45	45	45
8	House #3010 on Webb Creek Road—Front yard	40.7	43	43	43	43	45	45	45	45
9	House #5005 on SR 416—Front yard	62.4	43	43	43	43	45	45	45	45
10	House #5215 on SR 416—Front yard	49.7	65	65	66	67	66	66	66	67
11	House #5328 on SR 416—Front yard	54.3	60	60	60	61	60	60	60	62
12	Greenbrier View Rental Cottage on Tunis Branch Road	39.4	35	35	35	35	37	38	38	38
13	House #209 on Teaberry Hill Road—Front yard	39.1	45	45	45	45	47	47	47	47
14	House #4705 on Townsend Road—Front yard	45.8	40	41	42	42	42	42	43	43
15	House at End of Branam Hollow Road—Back yard of guest house	38.7	38	38	38	38	40	40	40	40
16	House #612 on Branam Hollow Road—Driveway	35.5	30	31	31	31	32	32	33	33
17	House #5258 Off of Mathis Branch Road—Front yard	53.2	28	28	29	29	29	30	30	31
18	House Off of Rocky Flatts Road—Back yard	64.0	39	39	40	40	41	41	42	42
19	House #5039 on U.S. 321—Front yard	63.1	69	69	71	71	71	71	72	72
20	House #4022 on U.S. 321—Back yard	53.6	43	43	43	43	45	45	45	45
21	Young's Taxedermly Off U.S 321—Driveway	51.8	58	59	60	60	60	60	61	61

Table L.3. Continued

Site no.	Location	Existing	Noise level (Leq)							
			2006				2026			
			Weekday		Weekend		Weekday		Weekend	
A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.			
22	House #4140 on Chavis Road—Front yard	49.3	45	45	45	45	48	48	48	48
23	Waters-Large Cemetery—Entrance	37.6	45	45	46	46	46	46	47	47
24	House #227 Teaberry Lane	42.0	40	40	42	42	42	42	43	43
25	House #5310 on Otto Williams Road—Back yard	52.4	36	37	37	38	38	38	39	39
26	House #327 on Costner Road—Back yard	44.4	35	36	36	36	37	38	38	38
27	House #430 Appletree Lane—Front yard	40.3	29	29	30	30	31	31	32	32
28	House on Sunshine Trail in Cobbly Knob—Balcony	41.8	33	33	33	34	35	35	36	36
29	Rental House on McKinzi Way—Front yard	39.7	43	43	43	43	45	45	45	45
30	House on Shultz Road—Driveway	39.6	43	43	43	43	45	45	45	45
31	Copeland Rental Cabins—Copeland Road	47.1	43	43	43	43	45	45	45	45
32	House on The Way (last house)—Front yard	41.1	43	43	44	44	45	45	46	46
33	House on The Way (second to last house)—Front deck	45.6	41	41	42	43	42	43	44	44
34	House #429 on Appletree Lane	50.8	46	46	46	46	49	49	49	49
35	House at Intersection of Waters Cemetery Road and Chavis Road	49.5	39	39	39	40	42	42	42	42
36	House Off of Shultz Road	46.9	45	45	47	47	47	47	48	48
37	House #916 Scenic Trail (Whistler's Watch) in Cobbly Knob—Driveway	41.3	41	41	41	41	43	43	43	43
38	House on Sutton Place (Hidden Haven) in Cobbly Knob—Driveway	35.1	32	33	33	33	35	35	35	35
39	Gateway Near House on Black Gum Gap Road in Cobbly Knob	54.4	42	42	42	42	44	44	44	44
40	House (under construction) at the End of Squirrel Trail in Cobbly Knob—Near driveway	36.6	33	33	33	34	35	35	35	36
41	House (uninhabited or under construction) on Rocky Flatts Road	48.4	44	44	44	44	46	46	46	46

**Table L.4. Noise level projections—interchange at Highway 416
(both options)—8B opened prior to 8C completion**

Site no.	Location	Existing	Noise level (Leq)							
			2006				2026			
			Weekday		Weekend		Weekday		Weekend	
			A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
1	Foothills Pkwy Sec. 8A—1st Scenic Overlook from U.S. 321	47.3	59	58	61	59	61	59	62	61
2	Foothills Pkwy Sec. 8A—1st Scenic Overlook from I-40	47.3	59	58	61	59	61	59	62	61
3	Burnett Memorial Methodist Church—Pittman Center	49.0	43	43	43	43	45	45	45	45
4	Pittman Center Elementary School—Playground	42.6	43	43	43	43	45	45	45	45
5	Pittman Center City Hall—Parking lot	51.3	47	46	47	47	48	48	49	49
6	House #3355 between Mile Markers 20 and 21 on U.S. 321—Front yard	67.2	71	72	73	73	73	73	74	74
7	House #5106 on SR 416—Front yard	47.7	43	43	43	43	45	45	45	45
8	House #3010 on Webb Creek Road—Front yard	40.7	43	43	43	43	45	45	45	45
9	House #5005 on SR 416—Front yard	62.4	43	43	43	43	45	45	45	45
10	House #5215 on SR 416—Front yard	49.7	68	67	68	69	69	68	69	70
11	House #5328 on SR 416—Front yard	54.3	62	62	63	63	63	63	64	64
12	Greenbrier View Rental Cottage on Tunis Branch Road	39.4	35	35	35	35	37	38	38	38
13	House #209 on Teaberry Hill Road—Front yard	39.1	45	45	45	45	47	47	47	47
14	House #4705 on Townsend Road—Front yard	45.8	41	41	42	42	42	42	43	43
15	House at End of Branam Hollow Road—Back yard of guest house	38.7	38	38	38	38	40	40	40	40
16	House #612 on Branam Hollow Road—Driveway	35.5	30	31	31	31	32	32	33	33
17	House #5258 Off of Mathis Branch Road—Front yard	53.2	28	28	29	29	29	30	30	31
18	House Off of Rocky Flats Road—Back yard	64.0	39	39	40	40	41	41	42	42
19	House #5039 on U.S. 321—Front yard	63.1	69	70	71	71	71	71	72	72
20	House #4022 on U.S. 321—Back yard	53.6	43	43	43	43	45	45	45	45
21	Young's Taxedemy Off U.S 321—Driveway	51.8	59	59	60	60	60	60	61	61

Table L.4. Continued

Site no.	Location	Existing	Noise level (Leq)							
			2006				2026			
			Weekday		Weekend		Weekday		Weekend	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	
22	House #4140 on Chavis Road—Front yard	49.3	45	45	45	45	48	48	48	48
23	Waters-Large Cemetery—Entrance	37.6	45	45	46	46	46	46	47	47
24	House #227 Teaberry Lane	42.0	40	41	42	42	42	42	43	43
25	House #5310 on Otto Williams Road—Back yard	52.4	36	37	37	38	38	38	39	39
26	House #327 on Costner Road—Back yard	44.4	35	36	36	36	37	38	38	38
27	House #430 Appletree Lane—Front yard	40.3	29	29	30	30	31	31	32	32
28	House on Sunshine Trail in Cobbly Knob—Balcony	41.8	33	33	33	34	35	35	36	36
29	Rental House on McKinzi Way—Front yard	39.7	43	43	43	43	45	45	45	45
30	House on Shultz Road—Driveway	39.6	43	43	43	43	45	45	45	45
31	Copeland Rental Cabins—Copeland Road	47.1	43	43	43	43	45	45	45	45
32	House on The Way (last house)—Front yard	41.1	43	43	44	44	45	45	46	46
33	House on The Way (second to last house)—Front deck	45.6	41	41	42	43	43	43	44	44
34	House #429 on Appletree Lane	50.8	46	46	46	46	49	49	49	49
35	House at Intersection of Waters Cemetery Road and Chavis Road	49.5	39	39	39	40	42	42	42	42
36	House Off of Shultz Road	46.9	45	46	47	47	47	47	48	48
37	House #916 Scenic Trail (Whistler's Watch) in Cobbly Knob—Driveway	41.3	41	41	41	41	43	43	43	43
38	House on Sutton Place (Hidden Haven) in Cobbly Knob—Driveway	35.1	32	33	33	33	35	35	35	35
39	Gateway Near House on Black Gum Gap Road in Cobbly Knob	54.4	42	42	42	42	44	44	44	44
40	House (under construction) at the End of Squirrel Trail in Cobbly Knob—Near driveway	36.6	33	33	33	34	35	35	35	36
41	House (uninhabited or under construction) on Rocky Flatts Road	48.4	44	44	44	44	46	46	46	46

**Table L.5. Noise level projections—interchange at U.S. 321
(both options)—8B opened prior to 8C completion**

Site no.	Location	Existing	Noise level (Leq)							
			2006				2026			
			Weekday		Weekend		Weekday		Weekend	
A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.			
1	Foothills Pkwy Sec. 8A—1st Scenic Overlook from U.S. 321	47.3	59	58	61	59	61	59	62	61
2	Foothills Pkwy Sec. 8A—1st Scenic Overlook from I-40	47.3	59	58	61	59	61	59	62	61
3	Burnett Memorial Methodist Church—Pittman Center	49.0	43	43	43	43	45	45	45	45
4	Pittman Center Elementary School—Playground	42.6	43	43	43	43	45	45	45	45
5	Pittman Center City Hall—Parking lot	51.3	45	45	46	46	47	47	47	48
6	House #3355 between Mile Markers 20 and 21 on U.S. 321—Front yard	67.2	72	72	73	73	73	73	74	75
7	House #5106 on SR 416—Front yard	47.7	43	43	43	43	45	45	45	45
8	House #3010 on Webb Creek Road—Front yard	40.7	43	43	43	43	45	45	45	45
9	House #5005 on SR 416—Front yard	62.4	43	43	43	43	45	45	45	45
10	House #5215 on SR 416—Front yard	49.7	65	65	66	66	66	66	66	67
11	House #5328 on SR 416—Front yard	54.3	60	60	60	61	60	60	60	62
12	Greenbrier View Rental Cottage on Tunis Branch Road	39.4	35	35	35	35	37	38	38	38
13	House #209 on Teaberry Hill Road—Front yard	39.1	45	45	46	46	47	47	48	48
14	House #4705 on Townsend Road—Front yard	45.8	41	41	42	42	42	42	44	44
15	House at End of Branam Hollow Road—Back yard of guest house	38.7	38	38	38	38	40	40	40	40
16	House #612 on Branam Hollow Road—Driveway	35.5	30	31	31	31	32	32	33	33
17	House #5258 Off of Mathis Branch Road—Front yard	53.2	28	28	29	29	29	30	30	31
18	House Off of Rocky Flatts Road—Back yard	64.0	39	39	40	40	41	41	42	42
19	House #5039 on U.S. 321—Front yard	63.1	70	70	71	71	71	71	72	73
20	House #4022 on U.S. 321—Back yard	53.6	43	43	43	43	45	45	45	45
21	Young's Taxedermly Off U.S 321—Driveway	51.8	59	59	60	60	60	60	62	62

Table L.5. Continued

Site no.	Location	Existing	Noise level (Leq)							
			2006				2026			
			Weekday		Weekend		Weekday		Weekend	
A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.			
22	House #4140 on Chavis Road—Front yard	49.3	45	45	45	45	48	48	48	48
23	Waters-Large Cemetery—Entrance	37.6	45	45	46	46	46	46	47	47
24	House #227 Teaberry Lane	42.0	41	41	42	42	42	42	43	43
25	House #5310 on Otto Williams Road—Back yard	52.4	36	37	37	38	38	38	39	39
26	House #327 on Costner Road—Back yard	44.4	35	36	36	36	37	38	38	38
27	House #430 Appletree Lane—Front yard	40.3	29	29	30	30	31	31	32	32
28	House on Sunshine Trail in Cobbly Knob—Balcony	41.8	33	33	33	34	35	35	36	36
29	Rental House on McKinzi Way—Front yard	39.7	43	43	43	43	45	45	45	45
30	House on Shultz Road—Driveway	39.6	43	43	43	43	45	45	45	45
31	Copeland Rental Cabins—Copeland Road	47.1	43	43	43	43	45	45	45	45
32	House on The Way (last house)—Front yard	41.1	43	43	44	44	45	45	46	46
33	House on The Way (second to last house)—Front deck	45.6	42	42	43	43	43	43	44	44
34	House #429 on Appletree Lane	50.8	46	46	46	46	49	49	49	49
35	House at Intersection of Waters Cemetery Road and Chavis Road	49.5	39	39	39	40	42	42	42	42
36	House Off of Shultz Road	46.9	46	46	47	47	47	47	48	49
37	House #916 Scenic Trail (Whistler's Watch) in Cobbly Knob—Driveway	41.3	41	41	41	41	43	43	43	43
38	House on Sutton Place (Hidden Haven) in Cobbly Knob—Driveway	35.1	32	33	33	33	35	35	35	35
39	Gateway Near House on Black Gum Gap Road in Cobbly Knob	54.4	42	42	42	42	44	44	44	44
40	House (under construction) at the End of Squirrel Trail in Cobbly Knob—Near driveway	36.6	33	33	33	34	35	35	35	36
41	House (uninhabited or under construction) on Rocky Flatts Road	48.4	44	44	44	44	46	46	46	46

Table L.6. Noise level projections—no-build alternative

Site no.	Location	Existing	Noise level (Leq)							
			2006				2026			
			Weekday		Weekend		Weekday		Weekend	
A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.			
1	Foothills Pkwy Sec. 8A—1st Scenic Overlook from U.S. 321	47.3	59	57	60	58	60	58	61	59
2	Foothills Pkwy Sec. 8A—1st Scenic Overlook from I-40	47.3	59	57	60	58	60	58	61	59
3	Burnett Memorial Methodist Church—Pittman Center	49.0	42	42	42	42	45	45	45	45
4	Pittman Center Elementary School—Playground	42.6	42	42	42	42	45	45	45	45
5	Pittman Center City Hall—Parking lot	51.3	45	45	45	46	46	47	47	47
6	House #3355 between Mile Markers 20 and 21 on U.S. 321—Front yard	67.2	72	72	73	73	72	73	75	75
7	House #5106 on SR 416—Front yard	47.7	42	42	42	42	45	45	45	45
8	House #3010 on Webb Creek Road—Front yard	40.7	42	42	42	42	45	45	45	45
9	House #5005 on SR 416—Front yard	62.4	42	42	42	42	45	45	45	45
10	House #5215 on SR 416—Front yard	49.7	65	65	66	66	65	66	66	67
11	House #5328 on SR 416—Front yard	54.3	60	60	60	61	59	60	60	62
12	Greenbrier View Rental Cottage on Tunis Branch Road	39.4	34	34	34	34	37	37	37	37
13	House #209 on Teaberry Hill Road—Front yard	39.1	45	45	45	46	47	47	47	47
14	House #4705 on Townsend Road—Front yard	45.8	41	41	42	42	41	42	43	43
15	House at End of Branam Hollow Road—Back yard of guest house	38.7	37	37	37	37	40	40	40	40
16	House #612 on Branam Hollow Road—Driveway	35.5	26	26	26	26	29	29	29	29
17	House #5258 Off of Mathis Branch Road—Front yard	53.2	19	19	19	19	22	22	22	22
18	House Off of Rocky Flatts Road—Back yard	64.0	34	34	34	34	36	36	36	36
19	House #5039 on U.S. 321—Front yard	63.1	70	70	71	71	70	71	72	73
20	House #4022 on U.S. 321—Back yard	53.6	42	42	42	42	45	45	45	45
21	Young's Taxedermly Off U.S 321—Driveway	51.8	59	59	60	61	59	60	62	62
22	House #4140 on Chavis Road—Front yard	49.3	45	45	45	45	48	48	48	48

Table L.6. Continued

Site no.	Location	Existing	Noise level (Leq)							
			2006				2026			
			Weekday		Weekend		Weekday		Weekend	
A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.			
23	Waters-Large Cemetery—Entrance	37.6	45	45	46	46	46	46	48	47
24	House #227 Teaberry Lane	42.0	40	41	42	42	41	42	43	43
25	House #5310 on Otto Williams Road—Back yard	52.4	26	26	26	26	29	29	29	29
26	House #327 on Costner Road—Back yard	44.4	32	32	32	32	34	34	34	34
27	House #430 Appletree Lane—Front yard	40.3	24	24	24	24	26	26	26	26
28	House on Sunshine Trail in Cobbly Knob—Balcony	41.8	31	31	31	31	33	33	33	33
29	Rental House on McKinzi Way—Front yard	39.7	42	42	42	42	45	45	45	45
30	House on Shultz Road—Driveway	39.6	42	42	42	42	45	45	45	45
31	Copeland Rental Cabins—Copeland Road	47.1	42	42	42	42	45	45	45	45
32	House on The Way (last house)—Front yard	41.1	43	43	44	44	45	45	46	46
33	House on The Way (second to last house)—Front deck	45.6	41	42	43	43	42	43	44	44
34	House #429 on Appletree Lane	50.8	46	46	46	46	49	49	49	49
35	House at Intersection of Waters Cemetery Road and Chavis Road	49.5	39	39	39	39	42	42	42	42
36	House Off of Shultz Road	46.9	46	46	47	47	46	47	48	48
37	House #916 Scenic Trail (Whistler's Watch) in Cobbly Knob—Driveway	41.3	40	40	40	40	43	43	43	43
38	House on Sutton Place (Hidden Haven) in Cobbly Knob—Driveway	35.1	30	30	30	30	33	33	33	33
39	Gateway Near House on Black Gum Gap Road in Cobbly Knob	54.4	42	42	42	42	44	44	44	44
40	House (under construction) at the End of Squirrel Trail in Cobbly Knob—Near driveway	36.6	30	30	30	30	33	33	33	33
41	House (uninhabited or under construction) on Rocky Flatts Road	48.4	41	41	41	41	44	44	44	44

Table L.7. Noise level comparison—no-build vs construct 8B with no interchanges

Site no.	Location	Existing	Noise level (Leq)								
			2006				2026				
			Weekday		Weekend		Weekday		Weekend		
			A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	
1	Foothills Pkwy Sec. 8A—1st Scenic Overlook from U.S. 321	47.3	0	1	1	1	1	1	1	1	2
2	Foothills Pkwy Sec. 8A—1st Scenic Overlook from I-40	47.3	0	1	1	1	1	1	1	1	2
3	Burnett Memorial Methodist Church—Pittman Center	49.0	1	1	1	1	0	0	0	0	0
4	Pittman Center Elementary School—Playground	42.6	1	1	1	1	0	0	0	0	0
5	Pittman Center City Hall—Parking lot	51.3	0	0	1	0	1	0	0	0	1
6	House #3355 between Mile Markers 20 and 21 on U.S. 321—Front yard	67.2	-1	-1	0	0	1	0	-1	-1	-1
7	House #5106 on SR 416—Front yard	47.7	1	1	1	1	0	0	0	0	0
8	House #3010 on Webb Creek Road—Front yard	40.7	1	1	1	1	0	0	0	0	0
9	House #5005 on SR 416—Front yard	62.4	1	1	1	1	0	0	0	0	0
10	House #5215 on SR 416—Front yard	49.7	0	0	0	0	1	0	0	0	0
11	House #5328 on SR 416—Front yard	54.3	0	0	0	0	1	0	0	0	0
12	Greenbrier View Rental Cottage on Tunis Branch Road	39.4	1	1	1	1	0	1	1	1	1
13	House #209 on Teaberry Hill Road—Front yard	39.1	0	0	0	-1	0	0	0	0	0
14	House #4705 on Townsend Road—Front yard	45.8	-1	0	0	0	1	0	0	0	0
15	House at End of Branam Hollow Road—Back yard of guest house	38.7	1	1	1	1	0	0	0	0	0
16	House #612 on Branam Hollow Road—Driveway	35.5	4	5	5	5	3	3	4	4	4
17	House #5258 Off of Mathis Branch Road—Front yard	53.2	9	9	10	10	7	8	8	8	9
18	House Off of Rocky Flatts Road—Back yard	64.0	5	5	6	6	5	5	6	6	6
19	House #5039 on U.S. 321—Front yard	63.1	-1	-1	0	0	1	0	0	0	-1
20	House #4022 on U.S. 321—Back yard	53.6	1	1	1	1	0	0	0	0	0
21	Young's Taxedermly Off U.S 321—Driveway	51.8	-1	0	0	-1	1	0	-1	-1	-1
22	House #4140 on Chavis Road—Front yard	49.3	0	0	0	0	0	0	0	0	0

Table L.7. Continued

Site no.	Location	Existing	Noise level (Leq)								
			2006				2026				
			Weekday		Weekend		Weekday		Weekend		
			A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	
23	Waters-Large Cemetery—Entrance	37.6	0	0	0	0	0	0	0	-1	0
24	House #227 Teaberry Lane	42.0	0	-1	0	0	1	0	0	0	0
25	House #5310 on Otto Williams Road—Back yard	52.4	10	11	11	12	9	9	10	10	10
26	House #327 on Costner Road—Back yard	44.4	3	4	4	4	3	4	4	4	4
27	House #430 Appletree Lane—Front yard	40.3	5	5	6	6	5	5	6	6	6
28	House on Sunshine Trail in Cobbly Knob—Balcony	41.8	2	2	2	3	2	2	3	3	3
29	Rental House on McKinzi Way—Front yard	39.7	1	1	1	1	0	0	0	0	0
30	House on Shultz Road—Driveway	39.6	1	1	1	1	0	0	0	0	0
31	Copeland Rental Cabins—Copeland Road	47.1	1	1	1	1	0	0	0	0	0
32	House on The Way (last house)—Front yard	41.1	0	0	0	0	0	0	0	0	0
33	House on The Way (second to last house)—Front deck	45.6	0	-1	-1	0	1	0	0	0	0
34	House #429 on Appletree Lane	50.8	0	0	0	0	0	0	0	0	0
35	House at Intersection of Waters Cemetery Road and Chavis Road	49.5	0	0	1	1	0	0	0	0	0
36	House Off of Shultz Road	46.9	-1	-1	0	0	1	0	0	0	0
37	House #916 Scenic Trail (Whistler's Watch) in Cobbly Knob—Driveway	41.3	1	1	1	1	0	0	0	0	0
38	House on Sutton Place (Hidden Haven) in Cobbly Knob—Driveway	35.1	2	3	3	3	2	2	2	2	2
39	Gateway Near House on Black Gum Gap Road in Cobbly Knob	54.4	0	0	0	0	0	0	0	0	0
40	House (under construction) at the End of Squirrel Trail in Cobbly Knob—Near driveway	36.6	3	3	3	4	2	2	2	2	3
41	House (uninhabited or under construction) on Rocky Flatts Road	48.4	3	3	3	3	2	2	2	2	2

**Table L.8. Comparison of no-build alternative to interchange at Highway 416
(both options)—8B not opened until 8C completion**

Site no.	Location	Noise level (Leq)									
		Existing	2006				2026				
			Weekday		Weekend		Weekday		Weekend		
			A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	
1	Foothills Pkwy Sec. 8A—1st Scenic Overlook from U.S. 321	47.3	0	1	1	1	1	1	1	1	2
2	Foothills Pkwy Sec. 8A—1st Scenic Overlook from I-40	47.3	0	1	1	1	1	1	1	1	2
3	Burnett Memorial Methodist Church—Pitman Center	49.0	1	1	1	1	0	0	0	0	0
4	Pitman Center Elementary School—Playground	42.6	1	1	1	1	0	0	0	0	0
5	Pitman Center City Hall—Parking lot	51.3	1	1	1	1	1	0	0	0	1
6	House #3355 between Mile Markers 20 and 21 on U.S. 321—Front yard	67.2	-1	0	0	0	1	0	-1	-1	-1
7	House #5106 on SR 416—Front yard	47.7	1	1	1	1	0	0	0	0	0
8	House #3010 on Webb Creek Road—Front yard	40.7	1	1	1	1	0	0	0	0	0
9	House #5005 on SR 416—Front yard	62.4	1	1	1	1	0	0	0	0	0
10	House #5215 on SR 416—Front yard	49.7	1	2	0	2	1	1	0	0	1
11	House #5328 on SR 416—Front yard	54.3	0	1	0	1	1	1	0	0	0
12	Greenbrier View Rental Cottage on Tunis Branch Road	39.4	1	1	1	1	0	1	1	1	1
13	House #209 on Teaberry Hill Road—Front yard	39.1	0	0	0	0	0	0	0	0	0
14	House #4705 on Townsend Road—Front yard	45.8	0	0	0	0	1	0	0	0	0
15	House at End of Branam Hollow Road—Back yard of guest house	38.7	1	1	1	1	0	0	0	0	0
16	House #612 on Branam Hollow Road—Driveway	35.5	4	5	5	5	3	3	4	4	4
17	House #5258 Off of Mathis Branch Road—Front yard	53.2	9	9	10	10	7	8	8	8	9
18	House Off of Rocky Flatts Road—Back yard	64.0	5	5	6	6	5	5	6	6	6
19	House #5039 on U.S. 321—Front yard	63.1	-1	0	0	0	1	0	0	0	-1
20	House #4022 on U.S. 321—Back yard	53.6	1	1	1	1	0	0	0	0	0
21	Young's Taxedermly Off U.S 321—Driveway	51.8	0	0	0	-1	1	0	-1	-1	-1

Table L.8. Continued

Site no.	Location	Existing	Noise level (Leq)							
			2006				2026			
			Weekday		Weekend		Weekday		Weekend	
A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.			
22	House #4140 on Chavis Road—Front yard	49.3	0	0	0	0	0	0	0	0
23	Waters-Large Cemetery—Entrance	37.6	0	0	0	0	0	0	-1	0
24	House #227 Teaberry Lane	42.0	0	0	0	0	1	0	0	0
25	House #5310 on Otto Williams Road—Back yard	52.4	10	11	11	12	9	9	10	10
26	House #327 on Costner Road—Back yard	44.4	3	4	4	4	3	4	4	4
27	House #430 Appletree Lane—Front yard	40.3	5	5	6	6	5	5	6	6
28	House on Sunshine Trail in Cobbly Knob—Balcony	41.8	2	2	2	3	2	2	3	3
29	Rental House on McKinzi Way—Front yard	39.7	1	1	1	1	0	0	0	0
30	House on Shultz Road—Driveway	39.6	1	1	1	1	0	0	0	0
31	Copeland Rental Cabins—Copeland Road	47.1	1	1	1	1	0	0	0	0
32	House on The Way (last house)—Front yard	41.1	0	0	0	0	0	0	0	0
33	House on The Way (second to last house)—Front deck	45.6	0	0	-1	0	0	0	0	0
34	House #429 on Appletree Lane	50.8	0	0	0	0	0	0	0	0
35	House at Intersection of Waters Cemetery Road and Chavis Road	49.5	0	0	1	1	0	0	0	0
36	House Off of Shultz Road	46.9	-1	0	0	0	1	0	0	0
37	House #916 Scenic Trail (Whistler's Watch) in Cobbly Knob—Driveway	41.3	1	1	1	1	0	0	0	0
38	House on Sutton Place (Hidden Haven) in Cobbly Knob—Driveway	35.1	2	3	3	3	2	2	2	2
39	Gateway Near House on Black Gum Gap Road in Cobbly Knob	54.4	0	0	0	0	0	0	0	0
40	House (under construction) at the End of Squirrel Trail in Cobbly Knob—Near driveway	36.6	3	3	3	4	2	2	2	3
41	House (uninhabited or under construction) on Rocky Flatts Road	48.4	3	3	3	3	2	2	2	2

**Table L.9. Comparison of no-build alternative to interchange at U.S. 321
(both options)—8B not opened until 8C completion**

Site no.	Location	Existing	Noise level (Leq)								
			2006				2026				
			Weekday		Weekend		Weekday		Weekend		
			A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	
1	Foothills Pkwy Sec. 8A—1st Scenic Overlook from U.S. 321	47.3	0	1	1	1	1	1	1	1	2
2	Foothills Pkwy Sec. 8A—1st Scenic Overlook from I-40	47.3	0	1	1	1	1	1	1	1	2
3	Burnett Memorial Methodist Church—Pittman Center	49.0	1	1	1	1	0	0	0	0	0
4	Pittman Center Elementary School—Playground	42.6	1	1	1	1	0	0	0	0	0
5	Pittman Center City Hall—Parking lot	51.3	0	0	1	0	1	0	0	0	1
6	House #3355 between Mile Markers 20 and 21 on U.S. 321—Front yard	67.2	-1	-1	0	0	1	0	-1	-1	-1
7	House #5106 on SR 416—Front yard	47.7	1	1	1	1	0	0	0	0	0
8	House #3010 on Webb Creek Road—Front yard	40.7	1	1	1	1	0	0	0	0	0
9	House #5005 on SR 416—Front yard	62.4	1	1	1	1	0	0	0	0	0
10	House #5215 on SR 416—Front yard	49.7	0	0	0	1	1	0	0	0	0
11	House #5328 on SR 416—Front yard	54.3	0	0	0	0	1	0	0	0	0
12	Greenbrier View Rental Cottage on Tunis Branch Road	39.4	1	1	1	1	0	1	1	1	1
13	House #209 on Teaberry Hill Road—Front yard	39.1	0	0	0	-1	0	0	0	0	0
14	House #4705 on Townsend Road—Front yard	45.8	-1	0	0	0	1	0	0	0	0
15	House at End of Branam Hollow Road—Back yard of guest house	38.7	1	1	1	1	0	0	0	0	0
16	House #612 on Branam Hollow Road—Driveway	35.5	4	5	5	5	3	3	4	4	4
17	House #5258 Off of Mathis Branch Road—Front yard	53.2	9	9	10	10	7	8	8	8	9
18	House Off of Rocky Flatts Road—Back yard	64.0	5	5	6	6	5	5	6	6	6
19	House #5039 on U.S. 321—Front yard	63.1	-1	-1	0	0	1	0	0	0	-1
20	House #4022 on U.S. 321—Back yard	53.6	1	1	1	1	0	0	0	0	0
21	Young's Taxedermly Off U.S 321—Driveway	51.8	-1	0	0	-1	1	0	-1	-1	-1

Table L.9. Continued

Site no.	Location	Existing	Noise level (Leq)							
			2006				2026			
			Weekday		Weekend		Weekday		Weekend	
A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.			
22	House #4140 on Chavis Road—Front yard	49.3	0	0	0	0	0	0	0	0
23	Waters-Large Cemetery—Entrance	37.6	0	0	0	0	0	0	-1	0
24	House #227 Teaberry Lane	42.0	0	-1	0	0	1	0	0	0
25	House #5310 on Otto Williams Road—Back yard	52.4	10	11	11	12	9	9	10	10
26	House #327 on Costner Road—Back yard	44.4	3	4	4	4	3	4	4	4
27	House #430 Appletree Lane—Front yard	40.3	5	5	6	6	5	5	6	6
28	House on Sunshine Trail in Cobbly Knob—Balcony	41.8	2	2	2	3	2	2	3	3
29	Rental House on McKinzi Way—Front yard	39.7	1	1	1	1	0	0	0	0
30	House on Shultz Road—Driveway	39.6	1	1	1	1	0	0	0	0
31	Copeland Rental Cabins—Copeland Road	47.1	1	1	1	1	0	0	0	0
32	House on The Way (last house)—Front yard	41.1	0	0	0	0	0	0	0	0
33	House on The Way (second to last house)—Front deck	45.6	0	-1	-1	0	0	0	0	0
34	House #429 on Appletree Lane	50.8	0	0	0	0	0	0	0	0
35	House at Intersection of Waters Cemetery Road and Chavis Road	49.5	0	0	0	1	0	0	0	0
36	House Off of Shultz Road	46.9	-1	-1	0	0	1	0	0	0
37	House #916 Scenic Trail (Whistler's Watch) in Cobbly Knob—Driveway	41.3	1	1	1	1	0	0	0	0
38	House on Sutton Place (Hidden Haven) in Cobbly Knob—Driveway	35.1	2	3	3	3	2	2	2	2
39	Gateway Near House on Black Gum Gap Road in Cobbly Knob	54.4	0	0	0	0	0	0	0	0
40	House (under construction) at the End of Squirrel Trail in Cobbly Knob—Near driveway	36.6	3	3	3	4	2	2	2	3
41	House (uninhabited or under construction) on Rocky Flatts Road	48.4	3	3	3	3	2	2	2	2

**Table L.10. Comparison of no-build alternative to interchange at Highway 416
(both options)—8B opened prior to 8C completion**

Site no.	Location	Existing	Noise level (Leq)								
			2006				2026				
			Weekday		Weekend		Weekday		Weekend		
			A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	
1	Foothills Pkwy Sec. 8A—1st Scenic Overlook from U.S. 321	47.3	0	1	1	1	1	1	1	1	2
2	Foothills Pkwy Sec. 8A—1st Scenic Overlook from I-40	47.3	0	1	1	1	1	1	1	1	2
3	Burnett Memorial Methodist Church—Pittman Center	49.0	1	1	1	1	0	0	0	0	0
4	Pittman Center Elementary School—Playground	42.6	1	1	1	1	0	0	0	0	0
5	Pittman Center City Hall—Parking lot	51.3	2	1	2	1	2	1	2	2	2
6	House #3355 between Mile Markers 20 and 21 on U.S. 321—Front yard	67.2	-1	0	0	0	1	0	-1	-1	-1
7	House #5106 on SR 416—Front yard	47.7	1	1	1	1	0	0	0	0	0
8	House #3010 on Webb Creek Road—Front yard	40.7	1	1	1	1	0	0	0	0	0
9	House #5005 on SR 416—Front yard	62.4	1	1	1	1	0	0	0	0	0
10	House #5215 on SR 416—Front yard	49.7	3	2	2	3	4	2	3	3	3
11	House #5328 on SR 416—Front yard	54.3	2	2	3	2	4	3	4	2	2
12	Greenbrier View Rental Cottage on Tunis Branch Road	39.4	1	1	1	1	0	1	1	1	1
13	House #209 on Teaberry Hill Road—Front yard	39.1	0	0	0	-1	0	0	0	0	0
14	House #4705 on Townsend Road—Front yard	45.8	0	0	0	0	1	0	0	0	0
15	House at End of Branam Hollow Road—Back yard of guest house	38.7	1	1	1	1	0	0	0	0	0
16	House #612 on Branam Hollow Road—Driveway	35.5	4	5	5	5	3	3	4	4	4
17	House #5258 Off of Mathis Branch Road—Front yard	53.2	9	9	10	10	7	8	8	8	9
18	House Off of Rocky Flatts Road—Back yard	64.0	5	5	6	6	5	5	6	6	6
19	House #5039 on U.S. 321—Front yard	63.1	-1	0	0	0	1	0	0	0	-1
20	House #4022 on U.S. 321—Back yard	53.6	1	1	1	1	0	0	0	0	0
21	Young's Taxedermly Off U.S 321—Driveway	51.8	0	0	0	-1	1	0	-1	-1	-1

Table L.10. Continued

Site no.	Location	Existing	Noise level (Leq)							
			2006				2026			
			Weekday		Weekend		Weekday		Weekend	
A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.			
22	House #4140 on Chavis Road—Front yard	49.3	0	0	0	0	0	0	0	0
23	Waters-Large Cemetery—Entrance	37.6	0	0	0	0	0	0	-1	0
24	House #227 Teaberry Lane	42.0	0	0	0	0	1	0	0	0
25	House #5310 on Otto Williams Road—Back yard	52.4	10	11	11	12	9	9	10	10
26	House #327 on Costner Road—Back yard	44.4	3	4	4	4	3	4	4	4
27	House #430 Appletree Lane—Front yard	40.3	5	5	6	6	5	5	6	6
28	House on Sunshine Trail in Cobbly Knob—Balcony	41.8	2	2	2	3	2	2	3	3
29	Rental House on McKinzi Way—Front yard	39.7	1	1	1	1	0	0	0	0
30	House on Shultz Road—Driveway	39.6	1	1	1	1	0	0	0	0
31	Copeland Rental Cabins—Copeland Road	47.1	1	1	1	1	0	0	0	0
32	House on The Way (last house)—Front yard	41.1	0	0	0	0	0	0	0	0
33	House on The Way (second to last house)—Front deck	45.6	0	-1	-1	0	1	0	0	0
34	House #429 on Appletree Lane	50.8	0	0	0	0	0	0	0	0
35	House at Intersection of Waters Cemetery Road and Chavis Road	49.5	0	0	0	1	0	0	0	0
36	House Off of Shultz Road	46.9	-1	0	0	0	1	0	0	0
37	House #916 Scenic Trail (Whistler's Watch) in Cobbly Knob—Driveway	41.3	1	1	1	1	0	0	0	0
38	House on Sutton Place (Hidden Haven) in Cobbly Knob—Driveway	35.1	2	3	3	3	2	2	2	2
39	Gateway Near House on Black Gum Gap Road in Cobbly Knob	54.4	0	0	0	0	0	0	0	0
40	House (under construction) at the End of Squirrel Trail in Cobbly Knob—Near driveway	36.6	3	3	3	4	2	2	2	3
41	House (uninhabited or under construction) on Rocky Flatts Road	48.4	3	3	3	3	2	2	2	2

**Table L.11. Comparison of no-build alternative to interchange at U.S. 321
(both options)—8B opened prior to 8C completion**

Site no.	Location	Existing	Noise level (Leq)								
			2006				2026				
			Weekday		Weekend		Weekday		Weekend		
			A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	
1	Foothills Pkwy Sec. 8A—1st Scenic Overlook from U.S. 321	47.3	0	1	1	1	1	1	1	1	2
2	Foothills Pkwy Sec. 8A—1st Scenic Overlook from I-40	47.3	0	1	1	1	1	1	1	1	2
3	Burnett Memorial Methodist Church—Pittman Center	49.0	1	1	1	1	0	0	0	0	0
4	Pittman Center Elementary School—Playground	42.6	1	1	1	1	0	0	0	0	0
5	Pittman Center City Hall—Parking lot	51.3	0	0	1	0	1	0	0	0	1
6	House #3355 between Mile Markers 20 and 21 on U.S. 321—Front yard	67.2	0	0	0	0	1	0	-1	0	0
7	House #5106 on SR 416—Front yard	47.7	1	1	1	1	0	0	0	0	0
8	House #3010 on Webb Creek Road—Front yard	40.7	1	1	1	1	0	0	0	0	0
9	House #5005 on SR 416—Front yard	62.4	1	1	1	1	0	0	0	0	0
10	House #5215 on SR 416—Front yard	49.7	0	0	0	0	1	0	0	0	0
11	House #5328 on SR 416—Front yard	54.3	0	0	0	0	1	0	0	0	0
12	Greenbrier View Rental Cottage on Tunis Branch Road	39.4	1	1	1	1	0	1	1	1	1
13	House #209 on Teaberry Hill Road—Front yard	39.1	0	0	1	0	0	0	1	1	1
14	House #4705 on Townsend Road—Front yard	45.8	0	0	0	0	1	0	1	1	1
15	House at End of Branam Hollow Road—Back yard of guest house	38.7	1	1	1	1	0	0	0	0	0
16	House #612 on Branam Hollow Road—Driveway	35.5	4	5	5	5	3	3	4	4	4
17	House #5258 Off of Mathis Branch Road—Front yard	53.2	9	9	10	10	7	8	8	8	9
18	House Off of Rocky Flatts Road—Back yard	64.0	5	5	6	6	5	5	6	6	6
19	House #5039 on U.S. 321—Front yard	63.1	0	0	0	0	1	0	0	0	0
20	House #4022 on U.S. 321—Back yard	53.6	1	1	1	1	0	0	0	0	0
21	Young's Taxedemy Off U.S 321—Driveway	51.8	0	0	0	-1	1	0	0	0	0

Table L.11. Continued

Site no.	Location	Existing	Noise level (Leq)							
			2006				2026			
			Weekday		Weekend		Weekday		Weekend	
			A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
22	House #4140 on Chavis Road—Front yard	49.3	0	0	0	0	0	0	0	0
23	Waters-Large Cemetery—Entrance	37.6	0	0	0	0	0	0	-1	0
24	House #227 Teaberry Lane	42.0	1	0	0	0	1	0	0	0
25	House #5310 on Otto Williams Road—Back yard	52.4	10	11	11	12	9	9	10	10
26	House #327 on Costner Road—Back yard	44.4	3	4	4	4	3	4	4	4
27	House #430 Appletree Lane—Front yard	40.3	5	5	6	6	5	5	6	6
28	House on Sunshine Trail in Cobbly Knob—Balcony	41.8	2	2	2	3	2	2	3	3
29	Rental House on McKinzi Way—Front yard	39.7	1	1	1	1	0	0	0	0
30	House on Shultz Road—Driveway	39.6	1	1	1	1	0	0	0	0
31	Copeland Rental Cabins—Copeland Road	47.1	1	1	1	1	0	0	0	0
32	House on The Way (last house)—Front yard	41.1	0	0	0	0	0	0	0	0
33	House on The Way (second to last house)—Front deck	45.6	1	0	0	0	1	0	0	0
34	House #429 on Appletree Lane	50.8	0	0	0	0	0	0	0	0
35	House at Intersection of Waters Cemetery Road and Chavis Road	49.5	0	0	0	1	0	0	0	0
36	House Off of Shultz Road	46.9	0	0	0	0	1	0	0	1
37	House #916 Scenic Trail (Whistler's Watch) in Cobbly Knob—Driveway	41.3	1	1	1	1	0	0	0	0
38	House on Sutton Place (Hidden Haven) in Cobbly Knob—Driveway	35.1	2	3	3	3	2	2	2	2
39	Gateway Near House on Black Gum Gap Road in Cobbly Knob	54.4	0	0	0	0	0	0	0	0
40	House (under construction) at the End of Squirrel Trail in Cobbly Knob—Near driveway	36.6	3	3	3	4	2	2	2	3
41	House (uninhabited or under construction) on Rocky Flatts Road	48.4	3	3	3	3	2	2	2	2

Appendix M
AESTHETIC RESOURCES

Carl Petrich
Oak Ridge National Laboratory
Oak Ridge, Tennessee

August 1995

Part 1: Aesthetic Resource Methods M-3

Jack Ranney
Joint Institute for Energy and Environment
Knoxville, Tennessee

April 1997

Part 2: Aesthetic Evaluation Worksheets M-7

The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that every entry, no matter how small, should be recorded to ensure the integrity of the financial statements. This includes not only sales and purchases but also expenses and income. The document provides a detailed list of items that should be tracked, such as inventory levels, accounts receivable, and accounts payable. It also outlines the procedures for reconciling these accounts and identifying any discrepancies. The second part of the document focuses on the preparation of financial statements. It explains the different types of statements, including the balance sheet, income statement, and cash flow statement, and provides a step-by-step guide to their preparation. The document also discusses the importance of reviewing these statements regularly and seeking professional advice when necessary. Finally, the document concludes with a summary of the key points and a list of references.

PART 1

With shrinking maintenance funds available to construct overlooks and keep scenic vistas open, it is paramount to select for establishment and long-term maintenance only those vistas with the highest potential for pleasing the parkway traveler. While there are no specific studies of viewer preferences along the existing sections of the Foothills Parkway, there are recent studies for the Blue Ridge Parkway of visitor preferences and maintenance regimes to support preferred vistas (Noe and Hammitt 1988).

Hammitt (1988) determined that the scenic vistas travelers on the Blue Ridge Parkway most prefer are those with water (ponds, fast-moving streams, rivers, waterfalls) in the landscape. Motorists least preferred vistas in which the foreground and midground woody vegetation had grown to partially block the views. The importance of identifying and selecting viewing points where vegetation can and will be maintained effectively and inexpensively is clear.

Based on the southern section of the Blue Ridge Parkway (i.e., those areas most nearly like Section 8B of the Foothills Parkway), Hammitt found that, other than water scenes, those vistas offering open views of a series of receding mountain ridges, usually three or more in depth, were most preferred. These typically include mountain peaks and valleys that suggest smaller, dissected landscape units that are inviting to the curious viewer. Vistas of this type foster what is known as involvement. An involving scene draws the observer into it to find out more than what is only partially revealed from the observer's vantage point (Herzog 1984).

The next most preferred vista type was characterized by mountain valleys containing farms or rural community development. The third-favored scenes were of one or two background mountain ridges in which the vistas are partially blocked by foreground trees and shrubs. Hammitt interpreted the findings as viewers not minding some vegetation in the foreground as long as the foreground view of the mountains is not blocked. Preference declines as foreground foliage increases. The least preferred landscape type was of scenes with only one mountain ridge that occupied three-fourths of the mid-foreground view. Hammitt interpreted these scenes to offer the viewer little opportunity for further visual involvement.

Looking at more scenic preferences from travelers along the entire stretch of the Blue Ridge Parkway, Hammitt produced a *Vista Preference Typology* for the parkway. By proxy and the lack of other sources of information, this typology can guide evaluation of the scenic potential along Section 8B of the Foothills Parkway. Hammitt's data suggest that parkway visitor's preferences will fall along a continuum as follows:

Most Preferred

- rapidly moving water
- stationary water
- mountains with several ridges
- pastoral development
- mountains with one ridge
- unmaintained vegetation

Least Preferred

In a later study, Hammitt and Patterson (1990) delimited nine major classifications of scenic landscapes viewable from overlooks along the Blue Ridge Parkway. These vary little from the

typology elicited in the 1988 work, substantiating the earlier findings. Pastoral development is more accurately classified as scenes characterized by "broad, rolling plateau valleys; a mosaic of pastures, farms, and hardwood forests." Less desired were scenes characterized by grassy fields and open valleys.

Hammit also found that opening vistas where vegetation blocks more than half of the view can greatly enhance the visual preference for such vistas. Viewers appear to tolerate vegetation blocking a small portion of vistas, and may even prefer a small amount of low, foreground vegetation. A certain amount of such growth might provide vista framing, flowering shrubs, and bird and small mammal habitat. A mixture of enclosed and open vistas might provide landscape diversity, also a desired management objective. Whether foreground vegetation should be removed depends on the whole set of scenic vistas provided tourists in a given region, with "region" being based, at least in part, on visitation patterns (Wellman et al. 1988).

Those who grew up (until age 16) in rural areas preferred the open vistas more than those who grew up in cities (Hampe 1988). In another study of the Blue Ridge Parkway, Noe (1988) found that most tourists believed that they needed to pull off, stop, and leave their vehicles to have an adequate sightseeing experience. For them, taking photographs was a dominant experience. Tourists also enjoy the full range of scenery from natural cliffs, peaks, and streams to the more man-influenced rural scenes such as farms and fields.

Wellman et al. (1988) concluded that perceived visual impacts to a landscape do not necessarily increase or decrease linearly with actual changes in the physical environment. They believe that scenic beauty acts on the margin; that is, a small amount of impact can be perceived as significantly deleterious, after which additional damage seems to create little further negative perceptions. From the positive perspective, a little vegetation management on selected vistas might substantially enhance their perceived scenic beauty, while extensive and expensive work on heavily overgrown sites may effect little improvement in visitor appreciation.

All these factors are critical in identifying, at the front end, those sites most appropriate for supporting scenic overlooks or otherwise managed viewing areas. Open vistas should be kept as central and integral experiences of the parkway visitor. Historically, parkways have been designed to facilitate "making pictures as you drive" (Forgery 1989). The average parkway users will receive most of their aesthetic experiences at scenic vistas. About a third of the visiting public heavily uses pull-offs and overlooks. A strategic concentration of resources on these pull-offs would have the maximum effect for an investment of resources.

Evaluation of Section 8B's aesthetic resources needs to be considered in the context of the potential of the larger parkway experience. While only portions of the parkway have been built, and not all portions have yet been evaluated, there are elements of the likely contiguous experience that can inform the analysis of Section 8B. The quality of individual views from Section 8B needs to be assessed in terms of the relative frequency and quality among all views available or potentially available along the parkway. Where a given view falls in the sequence of all views experienced depends on driving direction and is vitally important in assessing its quality. Certain assumptions have to be made about how unbuilt portions of the parkway will likely be designed and about how much of the parkway most drivers are likely to drive at one time.

Aesthetic enjoyment of driving the parkway will depend on visual inputs that lead to a satisfying sense of orientation and variety. The well-designed parkway will signal the traveler with simple, understandable, and anticipated low-order systems of visual stimuli that lead to increasing levels of

orientation. The traveler should easily grasp what the environment observed is about, something of the landscape's evolution, where he or she is in that environment, and progress made along the route. The critical element in this grammar is that, beyond a certain range, the messages can be so often repeated that they become banal, visual clichés. "The optimal combination of visual messages must include a share of redundant (repetitive, anticipated) messages, to provide orientation, and a share of highly informative (new) messages, to provide variety" (Lozano 1988). Lozano describes this ideal combination of information in a variety of ways: "redundancy and new information, low order and high order, immediate understanding and incomplete understanding, orientation and variety."¹ The parkway must allow the natural environment to reveal its most critical, new information in a considered sequence relative to the other information it communicates. High-quality views build on each other and are complemented and reinforced by appropriate sequences and frequencies of the other, lower-order visual experiences offered.

In the segment descriptions in Sect. 3.8.4, for example, the views from Webb Mountain certainly are the likely highlight of the Section 8B aesthetic experience and, possibly of the entire parkway. At Webb Mountain, the parkway is at one of its highest elevations, overlooking one of its deepest valleys, and is at its nearest proximity to the spine of the Great Smoky Mountains. The views selected and designed that lead up to it from either direction will determine, in part, the quality of travelers' experiences. From Section 8A, only two views of the GSMNP are remotely comparable, and those are from a much farther distance: more panoramic but less dramatic. Section 8C has not been surveyed for this analysis. Sections 8A and 8D (and much of 8B) offer substantial travel through oak-pine forest, with primarily near, foreground views of the adjacent forest. Only in the area of Flat Branch in 8D does the ROW reach the crest of Cove Mountain and offer views toward Mount LeConte and the GSMNP (National Park Service 1995). Thus, within the context of travel from Wear Valley to I-40 in the north and east, the importance of Webb Mountain becomes clearer than when considered only from the 8B assessment.

The designer needs to consider whether proximate, ancillary views reveal too much of what is likely to be seen so that the Webb Mountain views are somewhat anticlimactic. Have secondary views provided sufficient glimpses of the grandeur to come in a way that teases the observer? Has there been tension created by a competing view revealed earlier? Surely, the view from Webb Mountain captures the expectations of what one unfamiliar with the Great Smoky Mountains might expect based on the region's popularized image. Because of this heightened anticipation, the importance of its presentation (identification, design, sequencing, development, maintenance) is correspondingly heightened.

Because travelers (especially drivers) are free from having to pay attention to the normal load of decisionmaking while on a parkway, and because of the slow speeds and low traffic volumes on a parkway, it is the designer's role to create an adequate range of visual complexity to sustain travelers' interest. As with any artistic creation, the designer seeks to provide a clear organization of sequences and a meaningful visual composition (Hornbeck and Okerlund 1973): "Sequential experience is the phrasing and composition of what the driver sees." To avoid monotony and to

¹Mathematician Alfred North Whitehead laid out these ideas most powerfully in his *Principles of Natural Knowledge* (1925, New York, Cambridge University Press): "A rhythm involves a pattern, and to that extent is always self-identical. But no rhythm can be a mere pattern; for the rhythmic quality depends equally upon the differences involved in each exhibition of the pattern. The essence of rhythm is the fusion of sameness and novelty, so that the whole never loses the essential unity of the pattern, while the parts exhibit the contrast arising from the novelty of their detail. A mere recurrence kills rhythm as surely as does a mere confusion of detail."

provide interest, contrast, and continuity for the traveler's experience, the designer seeks to structure a meaningful, continuous sequence.

PART 2

[The page contains extremely faint and illegible text, likely bleed-through from the reverse side of the document. No specific content can be transcribed.]

Aesthetic Experience Worksheet

Foothills Parkway Extension 8-B

*** Views From the Parkway Extension ***

View 'A', Little Pigeon River, 1-400 to 1-680

Presentation of View (pick one)

- Best** - View along outside of moderate road curve with long line of sight on road; view for 6+ seconds at speed limit
- Better*** - View along outside of moderate/sharp road curve with moderate line of sight on road, view 4-6 seconds at speed limit
- Good** - View along straight roadside with long to moderate line of sight on road; view 3-4 seconds at speed limit
- Fair** - Along tight curves and short lines of sight on road; view less than 3 seconds at speed limit

Foreground Condition (pick one)

Special Experience Opportunity	Presentation of View			
	Best	Better	Good	Fair
I	1	1	1	2
II	1	2*	2	2
III	2	3	3	3
IV	3	3	3	4
V	4	4	4	4

Special Experience Opportunity (pick one)

- I. Fall color; spring blooms; water sounds; cool in summer; very special lighting effects
- II.* Morning or evening back/side lighting; mists; winter ice/frosts; deep woods; cool wet smells
- III. Wildlife viewing (birds, deer, etc.); special geology; cool woods smell; big trees; unusual vegetation; noticeable ecological processes
- IV. Mostly normal mountain vegetation; little unusual lighting effects or sensory experiences expected
- V. Blinding sun; heavy fog; bad smells; bad traffic situation; noisy; strong winds; dead and dying vegetation; hot in summer; trash in view

Opportunity of View (pick one)

- A.* Horizontal view angle >180°; vertical view angle >20°; pull over present
- B. Horizontal view angle 90-180°; vertical view angle 15-20°; pull over present
- C. Horizontal view angle 45-90°; vertical angle 10-15°; pull over available; larger viewing angles with no pull over available
- D. Horizontal view angle 30-45°; no pull over available
- E. Horizontal view angle <30°; no pull over

Quality of View (pick one)

- Very Best** - Water scenes with long views of series of receding mountain ridges and valleys
- Best** - Long views of receding mountain ridges or water scenes but not both; close views of wooded mountain streams
- Better*** - Long but partially blocked views of mountain ridges or water scenes; more midground ridges than long view
- Good** - Midground views of opposing ridges; rustic valleys, little to no long views
- Fair** - Midground to foreground views of opposing ridges, close views of roads, traffic; development may be present

Aesthetic Experience (pick one)

Quality of View

Viewing Condition	Quality of View				
	Very Best	Best	Better	Good	Fair
vg	1	1	2*	3	3
g	1	1	2	3	4
m	2	2	3	4	5
f	3	3	4	4	5
p	3	3	4	5	5

1 = outstanding; 2 = very good; 3 = positive; 4 = somewhat neutral; 5 = negative

Viewing Condition (pick one)

Foreground Condition

Opportunity to View	1	2	3	4
	A	vg	vg*	m
B	vg	g	f	f
C	g	m	f	p
D	g	m	f	p
E	m	f	p	p

vg = very good; g = good; m = moderate; p = poor

Aesthetic Experience Worksheet

Foothills Parkway Extension 8-B

*** Views From the Parkway Extension ***

View 'B', Tunis Branch, 2-170

M-10

Presentation of View (pick one)

- Best** - View along outside of moderate road curve with long line of sight on road; view for 6+ seconds at speed limit
- Better** - View along outside of moderate/sharp road curve with moderate line of sight on road, view 4-6 seconds at speed limit
- Good*** - View along straight roadside with long to moderate line of sight on road; view 3-4 seconds at speed limit
- Fair** - Along tight curves and short lines of sight on road; view less than 3 seconds at speed limit

Special Experience Opportunity (pick one)

- I.** Fall color; spring blooms; water sounds; cool in summer; very special lighting effects
- II.** Morning or evening back/side lighting; mists; winter ice/frosts; deep woods; cool wet smells
- III.*** Wildlife viewing (birds, deer, etc.); special geology; cool woods smell; big trees; unusual vegetation; noticeable ecological processes
- IV.** Mostly normal mountain vegetation; little unusual lighting effects or sensory experiences expected
- V.** Blinding sun; heavy fog; bad smells; bad traffic situation; noisy; strong winds; dead and dying vegetation; hot in summer; trash in view

Foreground Condition (pick one)

Special Experience Opportunity	Presentation of View			
	Best	Better	Good	Fair
I	1	1	1	2
II	1	2	2	2
III	2	3	3*	3
IV	3	3	3	4
V	4	4	4	4

Opportunity of View (pick one)

- A.** Horizontal view angle >180°; vertical view angle >20°; pull over present
- B.** Horizontal view angle 90-180°; vertical view angle 15-20°; pull over present
- C.*** Horizontal view angle 45-90°; vertical angle 10-15°; pull over available; larger viewing angles with no pull over available
- D.** Horizontal view angle 30-45°; no pull over available
- E.** Horizontal view angle <30°; no pull over

Quality of View (pick one)

- Very Best** - Water scenes with long views of series of receding mountain ridges and valleys
- Best** - Long views of receding mountain ridges or water scenes but not both; close views of wooded mountain streams
- Better** - Long but partially blocked views of mountain ridges or water scenes; more midground ridges than long view
- Good*** - Midground views of opposing ridges; rustic valleys, little to no long views
- Fair** - Midground to foreground views of opposing ridges, close views of roads, traffic; development may be present

Aesthetic Experience (pick one)

		Quality of View				
		Very Best	Best	Better	Good	Fair
Viewing Condition	vg	1	1	2	3	3
	g	1	1	2	3	4
	m	2	2	3	4	5
	f	3	3	4	4*	5
	p	3	3	4	5	5

1 = outstanding; 2 = very good; 3 = positive; 4 = somewhat neutral; 5 = negative

Viewing Condition (pick one)

		Foreground Condition			
		1	2	3	4
Opportunity in View	A	vg	vg	m	f
	B	vg	g	f	f
	C	g	m	f	p
	D	g	m	f	p
	E	m	f	p	p

vg = very good; g = good; m = moderate; p = poor

Choices are marked with an asterisk.

Aesthetic Experience Worksheet

Foothills Parkway Extension 8-B

*** Views From the Parkway Extension ***

View '1', Webb Creek Valley, 2-380 to 2-970

Quality of View (pick one)

Very Best – Water scenes with long views of series of receding mountain ridges and valleys

Best – Long views of receding mountain ridges or water scenes but not both; close views of wooded mountain streams

Better* – Long but partially blocked views of mountain ridges or water scenes; more midground ridges than long view

Good – Midground views of opposing ridges; rustic valleys, little to no long views

Fair – Midground to foreground views of opposing ridges, close views of roads, traffic; development may be present

Presentation of View (pick one)

Best* – View along outside of moderate road curve with long line of sight on road; view for 6+ seconds at speed limit

Better – View along outside of moderate/sharp road curve with moderate line of sight on road, view 4–6 seconds at speed limit

Good – View along straight roadside with long to moderate line of sight on road; view 3–4 seconds at speed limit

Fair – Along tight curves and short lines of sight on road; view less than 3 seconds at speed limit

Aesthetic Experience (pick one)

Quality of View

	Very	Best	Best	Better	Good	Fair
vg	1	1	2*	3	3	3
g	1	1	2	3	4	4
m	2	2	3	4	5	5
f	3	3	4	4	5	5
p	3	3	4	5	5	5

1 = outstanding; 2 = very good; 3 = positive; 4 = somewhat neutral; 5 = negative

Foreground Condition (pick one)

Presentation of View

	Best	Better	Good	Fair
I	1	1	1	2
II	1*	2	2	2
III	2	3	3	3
IV	3	3	3	4
V	4	4	4	4

Viewing Condition (pick one)

Foreground Condition

	1	2	3	4
A	vg*	vg	m	f
B	vg	g	f	f
C	g	m	f	p
D	g	m	f	p
E	m	f	p	p

vg = very good; g = good; m = moderate; p = poor

Opportunity of View (pick one)

A.* Horizontal view angle >180°; vertical view angle >20°; pull over present

B. Horizontal view angle 90–180°; vertical view angle 15–20°; pull over present

C. Horizontal view angle 45–90°; vertical angle 10–15°; pull over available; larger viewing angles with no pull over available

D. Horizontal view angle 30–45°; no pull over available

E. Horizontal view angle <30°; no pull over

Special Experience Opportunity (pick one)

I. Fall color; spring blooms; water sounds; cool in summer; very special lighting effects

II.* Morning or evening back/side lighting; mists; winter ice/frosts; deep woods; cool wet smells

III. Wildlife viewing (birds, deer, etc.); special geology; cool woods smell; big trees; unusual vegetation; noticeable ecological processes

IV. Mostly normal mountain vegetation; little unusual lighting effects or sensory experiences expected

V. Blinding sun; heavy fog; bad smells; bad traffic situation; noisy; strong winds; dead and dying vegetation; hot in summer; trash in view

M-11

Choices are marked with an asterisk.

Aesthetic Experience Worksheet

Foothills Parkway Extension 8-B

*** Views From the Parkway Extension ***

View 'D', Soak Ash Creek, 3-320 to 3-550
(Serial View)

Presentation of View (pick one)

- Best** - View along outside of moderate road curve with long line of sight on road; view for 6+ seconds at speed limit
- Better** - View along outside of moderate/sharp road curve with moderate line of sight on road, view 4-6 seconds at speed limit
- Good*** - View along straight roadside with long to moderate line of sight on road; view 3-4 seconds at speed limit
- Fair** - Along tight curves and short lines of sight on road; view less than 3 seconds at speed limit

Special Experience Opportunity (pick one)

- I.** Fall color; spring blooms; water sounds; cool in summer; very special lighting effects
- II.** Morning or evening back/side lighting; mists; winter ice/frosts; deep woods; cool wet smells
- III.** Wildlife viewing (birds, deer, etc.); special geology; cool woods smell; big trees; unusual vegetation; noticeable ecological processes
- IV.*** Mostly normal mountain vegetation; little unusual lighting effects or sensory experiences expected
- V.** Blinding sun; heavy fog; bad smells; bad traffic situation; noisy; strong winds; dead and dying vegetation; hot in summer; trash in view

Foreground Condition (pick one)

Special Experience Opportunity	Presentation of View			
	Best	Better	Good	Fair
	I	1	1	1
II	1	2	2	2
III	2	3	3	3
IV	3	3	3*	4
V	4	4	4	4

Opportunity of View (pick one)

- A.** Horizontal view angle >180°; vertical view angle >20°; pull over present
- B.** Horizontal view angle 90-180°; vertical view angle 15-20°; pull over present
- C.*** Horizontal view angle 45-90°; vertical angle 10-15°; pull over available; larger viewing angles with no pull over available
- D.** Horizontal view angle 30-45°; no pull over available
- E.** Horizontal view angle <30°; no pull over

Quality of View (pick one)

- Very Best** - Water scenes with long views of series of receding mountain ridges and valleys
- Best** - Long views of receding mountain ridges or water scenes but not both; close views of wooded mountain streams
- Better** - Long but partially blocked views of mountain ridges or water scenes; more midground ridges than long view
- Good*** - Midground views of opposing ridges; rustic valleys, little to no long views
- Fair** - Midground to foreground views of opposing ridges, close views of roads, traffic; development may be present

Aesthetic Experience (pick one)

Viewing Condition	Quality of View				
	Very Best	Best	Better	Good	Fair
	vg	1	1	2	3
g	1	1	2	3	4
m	2	2	3	4	5
f	3	3	4	4*	5
p	3	3	4	5	5

1 = outstanding; 2 = very good; 3 = positive; 4 = somewhat neutral; 5 = negative

Viewing Condition (pick one)

Opportunity to View	Foreground Condition			
	1	2	3	4
A	vg	vg	m	f
B	vg	g	f	f
C	g	m	f	p
D	g	m	f	p
E	m	f	p	p

vg = very good; g = good; m = moderate; p = poor

Choices are marked with an asterisk.

Aesthetic Experience Worksheet

Foothills Parkway Extension 8-B

*** Views From the Parkway Extension ***

View '2', West up Webb Creek Valley, 4-580 to 4-700

Quality of View (pick one)

Very Best – Water scenes with long views of series of receding mountain ridges and valleys

Best* – Long views of receding mountain ridges or water scenes but not both; close views of wooded mountain streams

Better – Long but partially blocked views of mountain ridges or water scenes; more midground ridges than long view

Good – Midground views of opposing ridges; rustic valleys, little to no long views

Fair – Midground to foreground views of opposing ridges, close views of roads, traffic; development may be present

Presentation of View (pick one)

Best – View along outside of moderate road curve with long line of sight on road; view for 6+ seconds at speed limit

Better* – View along outside of moderate/sharp road curve with moderate line of sight on road, view 4–6 seconds at speed limit

Good – View along straight roadside with long to moderate line of sight on road; view 3–4 seconds at speed limit

Fair – Along tight curves and short lines of sight on road; view less than 3 seconds at speed limit

Foreground Condition (pick one)

Special Experience Opportunity	Presentation of View			
	Best	Better	Good	Fair
	I	1	1	1
II	1	2	2	2
III	2	3	3	3
IV	3	3*	3	4
V	4	4	4	4

Aesthetic Experience (pick one)

Quality of View

Viewing Condition	Very				
	Best	Best	Better	Good	Fair
vg	1	1	2	3	3
g	1	1	2	3	4
m	2	2	3	4	5
f	3	3*	4	4	5
p	3	3	4	5	5

1 = outstanding; 2 = very good; 3 = positive; 4 = somewhat neutral; 5 = negative

- Special Experience Opportunity (pick one)**
- Fall color; spring blooms; water sounds; cool in summer; very special lighting effects
 - Morning or evening back/side lighting; mists; winter ice/frosts; deep woods; cool wet smells
 - Wildlife viewing (birds, deer, etc.); special geology; cool woods smell; big trees; unusual vegetation; noticeable ecological processes
 - * Mostly normal mountain vegetation; little unusual lighting effects or sensory experiences expected
 - Blinding sun; heavy fog; bad smells; bad traffic situation; noisy; strong winds; dead and dying vegetation; hot in summer; trash in view

- Opportunity of View (pick one)**
- Horizontal view angle >180°; vertical view angle >20°; pull over present
 - Horizontal view angle 90–180°; vertical view angle 15–20°; pull over present
 - * Horizontal view angle 45–90°; vertical angle 10–15°; pull over available; larger viewing angles with no pull over available
 - Horizontal view angle 30–45°; no pull over available
 - Horizontal view angle <30°; no pull over

Viewing Condition (pick one)

Opportunity to View	Foreground Condition			
	1	2	3	4
A	vg	vg	m	f
B	vg	g	f	f
C	g	m	f	p
D	g	m	f	p
E	m	f	p	p

vg = very good; g = good; m = moderate; p = poor

M-13

Choices are marked with an asterisk.

Aesthetic Experience Worksheet

Foothills Parkway Extension 8-B

*** Views From the Parkway Extension ***

View '3', Timothy Creek, 4-940 to 5-200

Presentation of View (pick one)

- Best** - View along outside of moderate road curve with long line of sight on road; view for 6+ seconds at speed limit
- Better** - View along outside of moderate/sharp road curve with moderate line of sight on road, view 4-6 seconds at speed limit
- Good*** - View along straight roadside with long to moderate line of sight on road; view 3-4 seconds at speed limit
- Fair** - Along tight curves and short lines of sight on road; view less than 3 seconds at speed limit

Quality of View (pick one)

- Very Best** - Water scenes with long views of series of receding mountain ridges and valleys
- Best*** - Long views of receding mountain ridges or water scenes but not both; close views of wooded mountain streams
- Better** - Long but partially blocked views of mountain ridges or water scenes; more midground ridges than long view
- Good** - Midground views of opposing ridges; rustic valleys, little to no long views
- Fair** - Midground to foreground views of opposing ridges, close views of roads, traffic; development may be present

Aesthetic Experience (pick one)

Quality of View

Viewing Condition	Quality of View				
	Very Best	Best	Better	Good	Fair
vg	1	1	2	3	3
g	1	1	2	3	4
m	2	2*	3	4	5
f	3	3	4	4	5
p	3	3	4	5	5

1 = outstanding; 2 = very good; 3 = positive; 4 = somewhat neutral; 5 = negative

Foreground Condition (pick one)

Presentation of View

Special Experience Opportunity	Presentation of View			
	Best	Better	Good	Fair
I	1	1	1	2
II	1	2	2*	2
III	2	3	3	3
IV	3	3	3	4
V	4	4	4	4

Special Experience Opportunity (pick one)

- I.** Fall color; spring blooms; water sounds; cool in summer; very special lighting effects
- II.*** Morning or evening back/side lighting; mists; winter ice/frosts; deep woods; cool wet smells
- III.** Wildlife viewing (birds, deer, etc.); special geology; cool woods smell; big trees; unusual vegetation; noticeable ecological processes
- IV.** Mostly normal mountain vegetation; little unusual lighting effects or sensory experiences expected
- V.** Blinding sun; heavy fog; bad smells; bad traffic situation; noisy; strong winds; dead and dying vegetation; hot in summer; trash in view

Opportunity of View (pick one)

- A.** Horizontal view angle >180°; vertical view angle >20°; pull over present
- B.** Horizontal view angle 90-180°; vertical view angle 15-20°; pull over present
- C.*** Horizontal view angle 45-90°; vertical angle 10-15°; pull over available; larger viewing angles with no pull over available
- D.** Horizontal view angle 30-45°; no pull over available
- E.** Horizontal view angle <30°; no pull over

Viewing Condition (pick one)

Foreground Condition

Opportunity to View	Foreground Condition			
	1	2	3	4
A	vg	vg	m	f
B	vg	g	f	f
C	g	m*	f	p
D	g	m	f	p
E	m	f	p	p

vg = very good; g = good; m = moderate; p = poor

Choices are marked with an asterisk.

Aesthetic Experience Worksheet

Foothills Parkway Extension 8-B

*** Views From the Parkway Extension ***

View 'E', SW Valley View, 6-000

Quality of View (pick one)

Very Best – Water scenes with long views of series of receding mountain ridges and valleys

Best – Long views of receding mountain ridges or water scenes but not both; close views of wooded mountain streams

Better – Long but partially blocked views of mountain ridges or water scenes; more midground ridges than long view

Good – Midground views of opposing ridges; rustic valleys, little to no long views

Fair* – Midground to foreground views of opposing ridges, close views of roads, traffic; development may be present

Presentation of View (pick one)

Best – View along outside of moderate road curve with long line of sight on road; view for 6+ seconds at speed limit

Better – View along outside of moderate/sharp road curve with moderate line of sight on road, view 4–6 seconds at speed limit

Good* – View along straight roadside with long to moderate line of sight on road; view 3–4 seconds at speed limit

Fair – Along tight curves and short lines of sight on road; view less than 3 seconds at speed limit

Foreground Condition (pick one)

Special Experience Opportunity	Presentation of View			
	Best	Better	Good	Fair
I	1	1	1	2
II	1	2	2	2
III	2	3	3	3
IV	3	3	3*	4
V	4	4	4	4

Aesthetic Experience (pick one)

Quality of View

Viewing Condition	Quality of View				
	Very Best	Best	Better	Good	Fair
vg	1	1	2	3	3
g	1	1	2	3	4
m	2	2	3	4	5
f	3	3	4	4	5*
p	3	3	4	5	5

1 = outstanding; 2 = very good; 3 = positive; 4 = somewhat neutral; 5 = negative

Special Experience Opportunity (pick one)

I. Fall color; spring blooms; water sounds; cool in summer; very special lighting effects

II. Morning or evening back/side lighting; mists; winter ice/frosts; deep woods; cool wet smells

III. Wildlife viewing (birds, deer, etc.); special geology; cool woods smell; big trees; unusual vegetation; noticeable ecological processes

IV.* Mostly normal mountain vegetation; little unusual lighting effects or sensory experiences expected

V. Blinding sun; heavy fog; bad smells; bad traffic situation; noisy; strong winds; dead and dying vegetation; hot in summer; trash in view

Opportunity of View (pick one)

A. Horizontal view angle >180°; vertical view angle >20°; pull over present

B. Horizontal view angle 90–180°; vertical view angle 15–20°; pull over present

C. Horizontal view angle 45–90°; vertical angle 10–15°; pull over available; larger viewing angles with no pull over available

D.* Horizontal view angle 30–45°; no pull over available

E. Horizontal view angle <30°; no pull over

Viewing Condition (pick one)

Opportunity to View	Foreground Condition			
	1	2	3	4
A	vg	vg	m	f
B	vg	g	f	f
C	g	m	f	p
D	g	m	f*	p
E	m	f	p	p

vg = very good; g = good; m = moderate; p = poor

SI-15

Choices are marked with an asterisk.

Aesthetic Experience Worksheet

Foothills Parkway Extension 8-B

*** Views From the Parkway Extension ***

View '4', Lower Mill Dam Branch, 6-300 to 6-400

Presentation of View (pick one)

- Best** - View along outside of moderate road curve with long line of sight on road; view for 6+ seconds at speed limit
- Better*** - View along outside of moderate/sharp road curve with moderate line of sight on road, view 4-6 seconds at speed limit
- Good** - View along straight roadside with long to moderate line of sight on road; view 3-4 seconds at speed limit
- Fair** - Along tight curves and short lines of sight on road; view less than 3 seconds at speed limit

Quality of View (pick one)

- Very Best** - Water scenes with long views of series of receding mountain ridges and valleys
- Best*** - Long views of receding mountain ridges or water scenes but not both; close views of wooded mountain streams
- Better** - Long but partially blocked views of mountain ridges or water scenes; more midground ridges than long view
- Good** - Midground views of opposing ridges; rustic valleys, little to no long views
- Fair** - Midground to foreground views of opposing ridges, close views of roads, traffic; development may be present

Aesthetic Experience (pick one)

Quality of View

	Very Best	Best	Better	Good	Fair
vg	1	1	2	3	3
g	1	1	2	3	4
m	2	2*	3	4	5
f	3	3	4	4	5
p	3	3	4	5	5

1 = outstanding; 2 = very good; 3 = positive; 4 = somewhat neutral; 5 = negative

Foreground Condition (pick one)

Presentation of View

	Best	Better	Good	Fair
I	1	1	1	2
II	1	2*	2	2
III	2	3	3	3
IV	3	3	3	4
V	4	4	4	4

Special Experience Opportunity (pick one)

- I. Fall color; spring blooms; water sounds; cool in summer; very special lighting effects
- II.* Morning or evening back/side lighting; mists; winter ice/frosts; deep woods; cool wet smells
- III. Wildlife viewing (birds, deer, etc.); special geology; cool woods smell; big trees; unusual vegetation; noticeable ecological processes
- IV. Mostly normal mountain vegetation; little unusual lighting effects or sensory experiences expected
- V. Blinding sun; heavy fog; bad smells; bad traffic situation; noisy; strong winds; dead and dying vegetation; hot in summer; trash in view

Opportunity of View (pick one)

- A. Horizontal view angle >180°; vertical view angle >20°; pull over present
- B. Horizontal view angle 90-180°; vertical view angle 15-20°; pull over present
- C.* Horizontal view angle 45-90°; vertical angle 10-15°; pull over available; larger viewing angles with no pull over available
- D. Horizontal view angle 30-45°; no pull over available
- E. Horizontal view angle <30°; no pull over

Viewing Condition (pick one)

Foreground Condition

	1	2	3	4
A	vg	vg	m	f
B	vg	g	f	f
C	g	m*	f	p
D	g	m	f	p
E	m	f	p	p

vg = very good; g = good; m = moderate; p = poor

M-16

Choices are marked with an asterisk.

Aesthetic Experience Worksheet

Foothills Parkway Extension 8-B

*** Views From the Parkway Extension ***

View 'F', Webb Mountain Top, Parking Lot

Presentation of View (pick one)

Best* - View along outside of moderate road curve with long line of sight on road; view for 6+ seconds at speed limit

Better - View along outside of moderate/sharp road curve with moderate line of sight on road, view 4-6 seconds at speed limit

Good - View along straight roadside with long to moderate line of sight on road; view 3-4 seconds at speed limit

Fair - Along tight curves and short lines of sight on road; view less than 3 seconds at speed limit

Quality of View (pick one)

Very Best - Water scenes with long views of series of receding mountain ridges and valleys

Best* - Long views of receding mountain ridges or water scenes but not both; close views of wooded mountain streams

Better - Long but partially blocked views of mountain ridges or water scenes; more midground ridges than long view

Good - Midground views of opposing ridges; rustic valleys, little to no long views

Fair - Midground to foreground views of opposing ridges, close views of roads, traffic; development may be present

Aesthetic Experience (pick one)

Quality of View

Viewing Condition	Quality of View				
	Very Best	Best	Better	Good	Fair
vg	1	1*	2	3	3
g	1	1	2	3	4
m	2	2	3	4	5
f	3	3	4	4	5
p	3	3	4	5	5

1 = outstanding; 2 = very good; 3 = positive; 4 = somewhat neutral; 5 = negative

Foreground Condition (pick one)

Special Experience Opportunity	Presentation of View			
	Best	Better	Good	Fair
I	1	1	1	2
II	1*	2	2	2
III	2	3	3	3
IV	3	3	3	4
V	4	4	4	4

Special Experience Opportunity (pick one)

I. Fall color; spring blooms; water sounds; cool in summer; very special lighting effects

II.* Morning or evening back/side lighting; mists; winter ice/frosts; deep woods; cool wet smells

III. Wildlife viewing (birds, deer, etc.); special geology; cool woods smell; big trees; unusual vegetation; noticeable ecological processes

IV. Mostly normal mountain vegetation; little unusual lighting effects or sensory experiences expected

V. Blinding sun; heavy fog; bad smells; bad traffic situation; noisy; strong winds; dead and dying vegetation; hot in summer; trash in view

Opportunity of View (pick one)

A.* Horizontal view angle >180°; vertical view angle >20°; pull over present

B. Horizontal view angle 90-180°; vertical view angle 15-20°; pull over present

C. Horizontal view angle 45-90°; vertical angle 10-15°; pull over available; larger viewing angles with no pull over available

D. Horizontal view angle 30-45°; no pull over available

E. Horizontal view angle <30°; no pull over

Viewing Condition (pick one)

Opportunity to View	Foreground Condition			
	1	2	3	4
A	vg*	vg	m	f
B	vg	g	f	f
C	g	m	f	p
D	g	m	f	p
E	m	f	p	p

vg = very good; g = good; m = moderate; p = poor

Choices are marked with an asterisk.

M-17

Aesthetic Experience Worksheet

Foothills Parkway Extension 8-B

*** Views From the Parkway Extension ***

View '5', Warden Branch, 7-810

81-W

Presentation of View (pick one)

- Best** - View along outside of moderate road curve with long line of sight on road; view for 6+ seconds at speed limit
- Better*** - View along outside of moderate/sharp road curve with moderate line of sight on road, view 4-6 seconds at speed limit
- Good** - View along straight roadside with long to moderate line of sight on road; view 3-4 seconds at speed limit
- Fair** - Along tight curves and short lines of sight on road; view less than 3 seconds at speed limit

Special Experience Opportunity (pick one)

- I.** Fall color; spring blooms; water sounds; cool in summer; very special lighting effects
- II.** Morning or evening back/side lighting; mists; winter ice/frosts; deep woods; cool wet smells
- III.** Wildlife viewing (birds, deer, etc.); special geology; cool woods smell; big trees; unusual vegetation; noticeable ecological processes
- IV.*** Mostly normal mountain vegetation; little unusual lighting effects or sensory experiences expected
- V.** Blinding sun; heavy fog; bad smells; bad traffic situation; noisy; strong winds; dead and dying vegetation; hot in summer; trash in view

Foreground Condition (pick one)

Special Experience Opportunity	Presentation of View			
	Best	Better	Good	Fair
I	1	1	1	2
II	1	2	2	2
III	2	3	3	3
IV	3	3*	3	4
V	4	4	4	4

Opportunity of View (pick one)

- A.** Horizontal view angle >180°; vertical view angle >20°; pull over present
- B.** Horizontal view angle 90-180°; vertical view angle 15-20°; pull over present
- C.** Horizontal view angle 45-90°; vertical angle 10-15°; pull over available; larger viewing angles with no pull over available
- D.*** Horizontal view angle 30-45°; no pull over available
- E.** Horizontal view angle <30°; no pull over

Quality of View (pick one)

- Very Best** - Water scenes with long views of series of receding mountain ridges and valleys
- Best*** - Long views of receding mountain ridges or water scenes but not both; close views of wooded mountain streams
- Better** - Long but partially blocked views of mountain ridges or water scenes; more midground ridges than long view
- Good** - Midground views of opposing ridges; rustic valleys, little to no long views
- Fair** - Midground to foreground views of opposing ridges, close views of roads, traffic; development may be present

Aesthetic Experience (pick one)

Viewing Condition	Quality of View				
	Very Best	Best	Better	Good	Fair
vg	1	1	2	3	3
g	1	1	2	3	4
m	2	2	3	4	5
f	3	3*	4	4	5
p	3	3	4	5	5

1 = outstanding; 2 = very good; 3 = positive; 4 = somewhat neutral; 5 = negative

Viewing Condition (pick one)

Opportunity to View	Foreground Condition			
	1	2	3	4
A	vg	vg	m	f
B	vg	g	f	f
C	g	m	f	p
D	g	m	f*	p
E	m	f	p	p

vg = very good; g = good; m = moderate; p = poor

Choices are marked with an asterisk.

Aesthetic Experience Worksheet

Foothills Parkway Extension 8-B

*** Views From the Parkway Extension ***

View '6', Upper Warden Branch, 8-120 to 9-170

Quality of View (pick one)

Very Best – Water scenes with long views of series of receding mountain ridges and valleys

Best* – Long views of receding mountain ridges or water scenes but not both; close views of wooded mountain streams

Better – Long but partially blocked views of mountain ridges or water scenes; more midground ridges than long view

Good – Midground views of opposing ridges; rustic valleys, little to no long views

Fair – Midground to foreground views of opposing ridges, close views of roads, traffic; development may be present

Presentation of View (pick one)

Best* – View along outside of moderate road curve with long line of sight on road; view for 6+ seconds at speed limit

Better – View along outside of moderate/sharp road curve with moderate line of sight on road, view 4–6 seconds at speed limit

Good – View along straight roadside with long to moderate line of sight on road; view 3–4 seconds at speed limit

Fair – Along tight curves and short lines of sight on road; view less than 3 seconds at speed limit

Foreground Condition (pick one)

Special Experience Opportunity	Presentation of View			
	Best	Better	Good	Fair
	I	I*	1	1
II	1	2	2	2
III	2	3	3	3
IV	3	3	3	4
V	4	4	4	4

Aesthetic Experience (pick one)

Viewing Condition	Quality of View				
	Very Best	Best	Better	Good	Fair
	vg	1	I*	2	3
g	1	1	2	3	4
m	2	2	3	4	5
f	3	3	4	4	5
p	3	3	4	5	5

1 = outstanding; 2 = very good; 3 = positive; 4 = somewhat neutral; 5 = negative

Special Experience Opportunity (pick one)

I.* Fall color; spring blooms; water sounds; cool in summer; very special lighting effects

II. Morning or evening back/side lighting; mists; winter ice/frosts; deep woods; cool wet smells

III. Wildlife viewing (birds, deer, etc.); special geology; cool woods smell; big trees; unusual vegetation; noticeable ecological processes

IV. Mostly normal mountain vegetation; little unusual lighting effects or sensory experiences expected

V. Blinding sun; heavy fog; bad smells; bad traffic situation; noisy; strong winds; dead and dying vegetation; hot in summer; trash in view

Opportunity of View (pick one)

A. Horizontal view angle >180°; vertical view angle >20°; pull over present

B.* Horizontal view angle 90–180°; vertical view angle 15–20°; pull over present

C. Horizontal view angle 45–90°; vertical angle 10–15°; pull over available; larger viewing angles with no pull over available

D. Horizontal view angle 30–45°; no pull over available

E. Horizontal view angle <30°; no pull over

Viewing Condition (pick one)

Opportunity to View	Foreground Condition			
	I	2	3	4
A	vg	vg	m	f
B	vg*	g	f	f
C	g	m	f	p
D	g	m	f	p
E	m	f	p	p

vg = very good; g = good; m = moderate; p = poor

Choices are marked with an asterisk.

Aesthetic Experience Worksheet

Foothills Parkway Extension 8-B

*** Views From the Parkway Extension ***

View '7', Jones Gap N, Webb Mtn. Parking Access Rd.

M-20

Presentation of View (pick one)

- Best** - View along outside of moderate road curve with long line of sight on road; view for 6+ seconds at speed limit
- Better*** - View along outside of moderate/sharp road curve with moderate line of sight on road, view 4-6 seconds at speed limit
- Good** - View along straight roadside with long to moderate line of sight on road; view 3-4 seconds at speed limit
- Fair** - Along tight curves and short lines of sight on road; view less than 3 seconds at speed limit

Special Experience Opportunity (pick one)

- I.** Fall color; spring blooms; water sounds; cool in summer; very special lighting effects
- II.*** Morning or evening back/side lighting; mists; winter ice/frosts; deep woods; cool wet smells
- III.** Wildlife viewing (birds, deer, etc.); special geology; cool woods smell; big trees; unusual vegetation; noticeable ecological processes
- IV.** Mostly normal mountain vegetation; little unusual lighting effects or sensory experiences expected
- V.** Blinding sun; heavy fog; bad smells; bad traffic situation; noisy; strong winds; dead and dying vegetation; hot in summer; trash in view

Foreground Condition (pick one)

Special Experience Opportunity	Presentation of View			
	Best	Better	Good	Fair
I	1	1	1	2
II	1	2*	2	2
III	2	3	3	3
IV	3	3	3	4
V	4	4	4	4

Opportunity of View (pick one)

- A.** Horizontal view angle >180°; vertical view angle >20°; pull over present
- B.** Horizontal view angle 90-180°; vertical view angle 15-20°; pull over present
- C.*** Horizontal view angle 45-90°; vertical angle 10-15°; pull over available; larger viewing angles with no pull over available
- D.** Horizontal view angle 30-45°; no pull over available
- E.** Horizontal view angle <30°; no pull over

Quality of View (pick one)

- Very Best** - Water scenes with long views of series of receding mountain ridges and valleys
- Best*** - Long views of receding mountain ridges or water scenes but not both; close views of wooded mountain streams
- Better** - Long but partially blocked views of mountain ridges or water scenes; more midground ridges than long view
- Good** - Midground views of opposing ridges; rustic valleys, little to no long views
- Fair** - Midground to foreground views of opposing ridges, close views of roads, traffic; development may be present

Aesthetic Experience (pick one)

Viewing Condition	Quality of View				
	Very Best	Best	Better	Good	Fair
vg	1	1	2	3	3
g	1	1	2	3	4
m	2	2*	3	4	5
f	3	3	4	4	5
p	3	3	4	5	5

1 = outstanding; 2 = very good; 3 = positive; 4 = somewhat neutral; 5 = negative

Viewing Condition (pick one)

Opportunity to View	Foreground Condition			
	1	2	3	4
A	vg	vg	m	f
B	vg	g	f	f
C	g	m*	f	p
D	g	m	f	p
E	m	f	p	p

vg = very good; g = good; m = moderate; p = poor

Choices are marked with an asterisk.

Aesthetic Experience Worksheet

Foothills Parkway Extension 8-B

*** Views From the Parkway Extension ***

View 'G', Black Gum Gap S, 10-450

Presentation of View (pick one)

- Best** - View along outside of moderate road curve with long line of sight on road; view for 6+ seconds at speed limit
- Better** - View along outside of moderate/sharp road curve with moderate line of sight on road, view 4-6 seconds at speed limit
- Good** - View along straight roadside with long to moderate line of sight on road; view 3-4 seconds at speed limit
- Fair*** - Along tight curves and short lines of sight on road; view less than 3 seconds at speed limit

Special Experience Opportunity (pick one)

- I.** Fall color; spring blooms; water sounds; cool in summer; very special lighting effects
- II.*** Morning or evening back/side lighting; mists; winter ice/frosts; deep woods; cool wet smells
- III.** Wildlife viewing (birds, deer, etc.); special geology; cool woods smell; big trees; unusual vegetation; noticeable ecological processes
- IV.** Mostly normal mountain vegetation; little unusual lighting effects or sensory experiences expected
- V.** Blinding sun; heavy fog; bad smells; bad traffic situation; noisy; strong winds; dead and dying vegetation; hot in summer; trash in view

Foreground Condition (pick one)

Special Experience Opportunity	Presentation of View			
	Best	Better	Good	Fair
	I	1	1	1
II	1	2	2	2*
III	2	3	3	3
IV	3	3	3	4
V	4	4	4	4

Opportunity of View (pick one)

- A.** Horizontal view angle >180°; vertical view angle >20°; pull over present
- B.** Horizontal view angle 90-180°; vertical view angle 15-20°; pull over present
- C.** Horizontal view angle 45-90°; vertical angle 10-15°; pull over available; larger viewing angles with no pull over available
- D.*** Horizontal view angle 30-45°; no pull over available
- E.** Horizontal view angle <30°; no pull over

Quality of View (pick one)

- Very Best** - Water scenes with long views of series of receding mountain ridges and valleys
- Best** - Long views of receding mountain ridges or water scenes but not both; close views of wooded mountain streams
- Better*** - Long but partially blocked views of mountain ridges or water scenes; more midground ridges than long view
- Good** - Midground views of opposing ridges; rustic valleys, little to no long views
- Fair** - Midground to foreground views of opposing ridges, close views of roads, traffic; development may be present

Aesthetic Experience (pick one)

Viewing Condition	Quality of View				
	Very Best	Best	Better	Good	Fair
	vg	1	1	2	3
g	1	1	2	3	4
m	2	2	3*	4	5
f	3	3	4	4	5
p	3	3	4	5	5

1 = outstanding; 2 = very good; 3 = positive; 4 = somewhat neutral; 5 = negative

Viewing Condition (pick one)

Opportunity to View	Foreground Condition			
	1	2	3	4
	A	vg	vg	m
B	vg	g	f	f
C	g	m	f	p
D	g	m*	f	p
E	m	f	p	p

vg = very good; g = good; m = moderate; p = poor

Aesthetic Experience Worksheet

Foothills Parkway Extension 8-B

*** Views From the Parkway Extension ***

View 'H', Black Gum Gap N, 10-450

M-22

Presentation of View (pick one)

- Best** – View along outside of moderate road curve with long line of sight on road; view for 6+ seconds at speed limit
- Better** – View along outside of moderate/sharp road curve with moderate line of sight on road, view 4–6 seconds at speed limit
- Good*** – View along straight roadside with long to moderate line of sight on road; view 3–4 seconds at speed limit
- Fair** – Along tight curves and short lines of sight on road; view less than 3 seconds at speed limit

Special Experience Opportunity (pick one)

- I.** Fall color; spring blooms; water sounds; cool in summer; very special lighting effects
- II.** Morning or evening back/side lighting; mists; winter ice/frosts; deep woods; cool wet smells
- III.** Wildlife viewing (birds, deer, etc.); special geology; cool woods smell; big trees; unusual vegetation; noticeable ecological processes
- IV.*** Mostly normal mountain vegetation; little unusual lighting effects or sensory experiences expected
- V.** Blinding sun; heavy fog; bad smells; bad traffic situation; noisy; strong winds; dead and dying vegetation; hot in summer; trash in view

Foreground Condition (pick one)

Special Experience Opportunity	Presentation of View			
	Best	Better	Good	Fair
	I	1	1	1
II	1	2	2	2
III	2	3	3	3
IV	3	3	3*	4
V	4	4	4	4

Opportunity of View (pick one)

- A.** Horizontal view angle >180°; vertical view angle >20°; pull over present
- B.** Horizontal view angle 90–180°; vertical view angle 15–20°; pull over present
- C.** Horizontal view angle 45–90°; vertical angle 10–15°; pull over available; larger viewing angles with no pull over available
- D.*** Horizontal view angle 30–45°; no pull over available
- E.** Horizontal view angle <30°; no pull over

Quality of View (pick one)

- Very Best** – Water scenes with long views of series of receding mountain ridges and valleys
- Best** – Long views of receding mountain ridges or water scenes but not both; close views of wooded mountain streams
- Better** – Long but partially blocked views of mountain ridges or water scenes; more midground ridges than long view
- Good*** – Midground views of opposing ridges; rustic valleys, little to no long views
- Fair** – Midground to foreground views of opposing ridges, close views of roads, traffic; development may be present

Aesthetic Experience (pick one)

Quality of View

Viewing Condition	Very Quality of View				
	Best	Best	Better	Good	Fair
vg	1	1	2	3	3
g	1	1	2	3	4
m	2	2	3	4	5
f	3	3	4	4*	5
p	3	3	4	5	5

1 = outstanding; 2 = very good; 3 = positive; 4 = somewhat neutral; 5 = negative

Viewing Condition (pick one)

Foreground Condition

Opportunity to View	1	2	3	4
	A	vg	vg	m
B	vg	g	f	f
C	g	m	f	p
D	g	m	f*	p
E	m	f	p	p

vg = very good; g = good; m = moderate; p = poor

Choices are marked with an asterisk.

Aesthetic Experience Worksheet

Foothills Parkway Extension 8-B

*** Views From the Parkway Extension ***

View '8', Table Ridge, 11-500 to 11-950

M-23

Presentation of View (pick one)

- Best*** – View along outside of moderate road curve with long line of sight on road; view for 6+ seconds at speed limit
- Better** – View along outside of moderate/sharp road curve with moderate line of sight on road, view 4–6 seconds at speed limit
- Good** – View along straight roadside with long to moderate line of sight on road; view 3–4 seconds at speed limit
- Fair** – Along tight curves and short lines of sight on road; view less than 3 seconds at speed limit

Special Experience Opportunity (pick one)

- I. Fall color; spring blooms; water sounds; cool in summer; very special lighting effects
- II. Morning or evening back/side lighting; mists; winter ice/frosts; deep woods; cool wet smells
- III.* Wildlife viewing (birds, deer, etc.); special geology; cool woods smell; big trees; unusual vegetation; noticeable ecological processes
- IV. Mostly normal mountain vegetation; little unusual lighting effects or sensory experiences expected
- V. Blinding sun; heavy fog; bad smells; bad traffic situation; noisy; strong winds; dead and dying vegetation; hot in summer; trash in view

Foreground Condition (pick one)

Special Experience Opportunity	Presentation of View			
	Best	Better	Good	Fair
	I	1	1	1
II	1	2	2	2
III	2*	3	3	3
IV	3	3	3	4
V	4	4	4	4

Opportunity of View (pick one)

- A.* Horizontal view angle >180°; vertical view angle >20°; pull over present
- B. Horizontal view angle 90–180°; vertical view angle 15–20°; pull over present
- C. Horizontal view angle 45–90°; vertical angle 10–15°; pull over available; larger viewing angles with no pull over available
- D. Horizontal view angle 30–45°; no pull over available
- E. Horizontal view angle <30°; no pull over

Quality of View (pick one)

- Very Best** – Water scenes with long views of series of receding mountain ridges and valleys
- Best*** – Long views of receding mountain ridges or water scenes but not both; close views of wooded mountain streams
- Better** – Long but partially blocked views of mountain ridges or water scenes; more midground ridges than long view
- Good** – Midground views of opposing ridges; rustic valleys, little to no long views
- Fair** – Midground to foreground views of opposing ridges, close views of roads, traffic; development may be present

Aesthetic Experience (pick one)

Viewing Condition	Quality of View				
	Very Best	Best	Better	Good	Fair
	vg	1	1*	2	3
g	1	1	2	3	4
m	2	2	3	4	5
f	3	3	4	4	5
p	3	3	4	5	5

1 = outstanding; 2 = very good; 3 = positive; 4 = somewhat neutral; 5 = negative

Viewing Condition (pick one)

Opportunity to View	Foreground Condition			
	1	2	3	4
A	vg	vg*	m	f
B	vg	g	f	f
C	g	m	f	p
D	g	m	f	p
E	m	f	p	p

vg = very good; g = good; m = moderate; p = poor

Choices are marked with an asterisk.

Aesthetic Experience Worksheet

Foothills Parkway Extension 8-B

*** Views From the Parkway Extension ***

View '9', Branam Hollow, 12-300 to 12-410

Presentation of View (pick one)

- Best** – View along outside of moderate road curve with long line of sight on road; view for 6+ seconds at speed limit
- Better** – View along outside of moderate/sharp road curve with moderate line of sight on road, view 4–6 seconds at speed limit
- Good** – View along straight roadside with long to moderate line of sight on road; view 3–4 seconds at speed limit
- Fair*** – Along tight curves and short lines of sight on road; view less than 3 seconds at speed limit

Special Experience Opportunity (pick one)

- I.** Fall color; spring blooms; water sounds; cool in summer; very special lighting effects
- II.** Morning or evening back/side lighting; mists; winter ice/frosts; deep woods; cool wet smells
- III.*** Wildlife viewing (birds, deer, etc.); special geology; cool woods smell; big trees; unusual vegetation; noticeable ecological processes
- IV.** Mostly normal mountain vegetation; little unusual lighting effects or sensory experiences expected
- V.** Blinding sun; heavy fog; bad smells; bad traffic situation; noisy; strong winds; dead and dying vegetation; hot in summer; trash in view

Foreground Condition (pick one)

Special Experience Opportunity	Presentation of View			
	Best	Better	Good	Fair
I	1	1	1	2
II	1	2	2	2
III	2	3	3	3*
IV	3	3	3	4
V	4	4	4	4

Opportunity of View (pick one)

- A.** Horizontal view angle >180°; vertical view angle >20°; pull over present
- B.** Horizontal view angle 90–180°; vertical view angle 15–20°; pull over present
- C.** Horizontal view angle 45–90°; vertical angle 10–15°; pull over available; larger viewing angles with no pull over available
- D.*** Horizontal view angle 30–45°; no pull over available
- E.** Horizontal view angle <30°; no pull over

Quality of View (pick one)

- Very Best** – Water scenes with long views of series of receding mountain ridges and valleys
- Best** – Long views of receding mountain ridges or water scenes but not both; close views of wooded mountain streams
- Better** – Long but partially blocked views of mountain ridges or water scenes; more midground ridges than long view
- Good*** – Midground views of opposing ridges; rustic valleys, little to no long views
- Fair** – Midground to foreground views of opposing ridges, close views of roads, traffic; development may be present

Aesthetic Experience (pick one)

Viewing Condition	Quality of View				
	Very Best	Best	Better	Good	Fair
vg	1	1	2	3	3
g	1	1	2	3 -	4
m	2	2	3	4	5
f	3	3	4	4*	5
p	3	3	4	5	5

1 = outstanding; 2 = very good; 3 = positive; 4 = somewhat neutral; 5 = negative

Viewing Condition (pick one)

Opportunity to View	Foreground Condition			
	1	2	3	4
A	vg	vg	m	f
B	vg	g	f	f
C	g	m	f	p
D	g	m	f*	p
E	m	f	p	p

vg = very good; g = good; m = moderate; p = poor

M-24

Choices are marked with an asterisk.

Aesthetic Experience Worksheet

Foothills Parkway Extension 8-B

*** Views From the Parkway Extension ***

View '10', Pine Cove, 12-510

Quality of View (pick one)

- Very Best – Water scenes with long views of series of receding mountain ridges and valleys
- Best – Long views of receding mountain ridges or water scenes but not both; close views of wooded mountain streams
- Better – Long but partially blocked views of mountain ridges or water scenes; more midground ridges than long view
- Good* – Midground views of opposing ridges; rustic valleys, little to no long views
- Fair – Midground to foreground views of opposing ridges, close views of roads, traffic; development may be present

Presentation of View (pick one)

- Best – View along outside of moderate road curve with long line of sight on road; view for 6+ seconds at speed limit
- Better – View along outside of moderate/sharp road curve with moderate line of sight on road, view 4–6 seconds at speed limit
- Good – View along straight roadside with long to moderate line of sight on road; view 3–4 seconds at speed limit
- Fair* – Along tight curves and short lines of sight on road; view less than 3 seconds at speed limit

Foreground Condition (pick one)

Special Experience Opportunity	Presentation of View			
	Best	Better	Good	Fair
I	1	1	1	2
II	1	2	2	2
III	2	3	3	3*
IV	3	3	3	4
V	4	4	4	4

Aesthetic Experience (pick one)

Viewing Condition	Quality of View				
	Very Best	Best	Better	Good	Fair
	vg	1	1	2	3
g	1	1	2	3	4
m	2	2	3	4	5
f	3	3	4	4*	5
p	3	3	4	5	5

1 = outstanding; 2 = very good; 3 = positive; 4 = somewhat neutral; 5 = negative

Special Experience Opportunity (pick one)

- I. Fall color; spring blooms; water sounds; cool in summer; very special lighting effects
- II. Morning or evening back/side lighting; mists; winter ice/frosts; deep woods; cool wet smells
- III.* Wildlife viewing (birds, deer, etc.); special geology; cool woods smell; big trees; unusual vegetation; noticeable ecological processes
- IV. Mostly normal mountain vegetation; little unusual lighting effects or sensory experiences expected
- V. Blinding sun; heavy fog; bad smells; bad traffic situation; noisy; strong winds; dead and dying vegetation; hot in summer; trash in view

Opportunity of View (pick one)

- A. Horizontal view angle >180°; vertical view angle >20°; pull over present
- B. Horizontal view angle 90–180°; vertical view angle 15–20°; pull over present
- C. Horizontal view angle 45–90°; vertical angle 10–15°; pull over available; larger viewing angles with no pull over available
- D.* Horizontal view angle 30–45°; no pull over available
- E. Horizontal view angle <30°; no pull over

Viewing Condition (pick one)

Opportunity to View	Foreground Condition			
	1	2	3	4
A	vg	vg	m	f
B	vg	g	f	f
C	g	m	f	p
D	g	m	f*	p
E	m	f	p	p

vg = very good; g = good; m = moderate; p = poor

M-25

Choices are marked with an asterisk.

Aesthetic Experience Worksheet

Foothills Parkway Extension 8-B

*** Views From the Parkway Extension ***

View 'I', Texas Creek Valley Overview S, 12-670

M-26

Presentation of View (pick one)

- Best** - View along outside of moderate road curve with long line of sight on road; view for 6+ seconds at speed limit
- Better*** - View along outside of moderate/sharp road curve with moderate line of sight on road, view 4-6 seconds at speed limit
- Good** - View along straight roadside with long to moderate line of sight on road; view 3-4 seconds at speed limit
- Fair** - Along tight curves and short lines of sight on road; view less than 3 seconds at speed limit

Special Experience Opportunity (pick one)

- I.** Fall color; spring blooms; water sounds; cool in summer; very special lighting effects
- II.** Morning or evening back/side lighting; mists; winter ice/frosts; deep woods; cool wet smells
- III.** Wildlife viewing (birds, deer, etc.); special geology; cool woods smell; big trees; unusual vegetation; noticeable ecological processes
- IV.*** Mostly normal mountain vegetation; little unusual lighting effects or sensory experiences expected
- V.** Blinding sun; heavy fog; bad smells; bad traffic situation; noisy; strong winds; dead and dying vegetation; hot in summer; trash in view

Foreground Condition (pick one)

Special Experience Opportunity	Presentation of View			
	Best	Better	Good	Fair
	I	1	1	1
II	1	2	2	2
III	2	3	3	3
IV	3	3*	3	4
V	4	4	4	4

Opportunity of View (pick one)

- A.** Horizontal view angle >180°; vertical view angle >20°; pull over present
- B.** Horizontal view angle 90-180°; vertical view angle 15-20°; pull over present
- C.** Horizontal view angle 45-90°; vertical angle 10-15°; pull over available; larger viewing angles with no pull over available
- D.*** Horizontal view angle 30-45°; no pull over available
- E.** Horizontal view angle <30°; no pull over

Quality of View (pick one)

- Very Best** - Water scenes with long views of series of receding mountain ridges and valleys
- Best*** - Long views of receding mountain ridges or water scenes but not both; close views of wooded mountain streams
- Better** - Long but partially blocked views of mountain ridges or water scenes; more midground ridges than long view
- Good** - Midground views of opposing ridges; rustic valleys, little to no long views
- Fair** - Midground to foreground views of opposing ridges, close views of roads, traffic; development may be present

Aesthetic Experience (pick one)

Viewing Condition	Quality of View				
	Very Best	Best	Better	Good	Fair
	vg	1	1	2	3
g	1	1	2	3	4
m	2	2	3	4	5
f	3	3*	4	4	5
p	3	3	4	5	5

1 = outstanding; 2 = very good; 3 = positive; 4 = somewhat neutral; 5 = negative

Viewing Condition (pick one)

Opportunity to View	Foreground Condition			
	1	2	3	4
A	vg	vg	m	f
B	vg	g	f	f
C	g	m	f	p
D	g	m	f*	p
E	m	f	p	p

vg = very good; g = good; m = moderate; p = poor

Choices are marked with an asterisk.

Aesthetic Experience Worksheet

Foothills Parkway Extension 8-B

*** Views From the Parkway Extension ***

View '11', Evergreen View N, 12-750

M-27

Presentation of View (pick one)

- Best** – View along outside of moderate road curve with long line of sight on road; view for 6+ seconds at speed limit
- Better** – View along outside of moderate/sharp road curve with moderate line of sight on road, view 4–6 seconds at speed limit
- Good** – View along straight roadside with long to moderate line of sight on road; view 3–4 seconds at speed limit
- Fair*** – Along tight curves and short lines of sight on road; view less than 3 seconds at speed limit

Special Experience Opportunity (pick one)

- I. Fall color; spring blooms; water sounds; cool in summer; very special lighting effects
- II. Morning or evening back/side lighting; mists; winter ice/frosts; deep woods; cool wet smells
- III.* Wildlife viewing (birds, deer, etc.); special geology; cool woods smell; big trees; unusual vegetation; noticeable ecological processes
- IV. Mostly normal mountain vegetation; little unusual lighting effects or sensory experiences expected
- V. Blinding sun; heavy fog; bad smells; bad traffic situation; noisy; strong winds; dead and dying vegetation; hot in summer; trash in view

Foreground Condition (pick one)

Special Experience Opportunity	Presentation of View			
	Best	Better	Good	Fair
I	1	1	1	2
II	1	2	2	2
III	2	3	3	3*
IV	3	3	3	4
V	4	4	4	4

Opportunity of View (pick one)

- A. Horizontal view angle >180°; vertical view angle >20°; pull over present
- B. Horizontal view angle 90–180°; vertical view angle 15–20°; pull over present
- C. Horizontal view angle 45–90°; vertical angle 10–15°; pull over available; larger viewing angles with no pull over available
- D. Horizontal view angle 30–45°; no pull over available
- E.* Horizontal view angle <30°; no pull over

Quality of View (pick one)

- Very Best** – Water scenes with long views of series of receding mountain ridges and valleys
- Best** – Long views of receding mountain ridges or water scenes but not both; close views of wooded mountain streams
- Better** – Long but partially blocked views of mountain ridges or water scenes; more midground ridges than long view
- Good*** – Midground views of opposing ridges; rustic valleys, little to no long views
- Fair** – Midground to foreground views of opposing ridges, close views of roads, traffic; development may be present

Aesthetic Experience (pick one)

Viewing Condition	Quality of View				
	Very Best	Best	Better	Good	Fair
vg	1	1	2	3	3
g	1	1	2	3	4
m	2	2	3	4	5
f	3	3	4	4	5
p	3	3	4	5*	5

1 = outstanding; 2 = very good; 3 = positive; 4 = somewhat neutral; 5 = negative

Viewing Condition (pick one)

Opportunity to View	Foreground Condition			
	1	2	3	4
A	vg	vg	m	f
B	vg	g	f	f
C	g	m	f	p
D	g	m	f	p
E	m	f	p*	p

vg = very good; g = good; m = moderate; p = poor

Choices are marked with an asterisk.

Aesthetic Experience Worksheet

Foothills Parkway Extension 8-B

*** Views From the Parkway Extension ***

View '12', Valley Cove Mountain View, 13-250 to 13-450

M-28

Presentation of View (pick one)

- Best*** - View along outside of moderate road curve with long line of sight on road; view for 6+ seconds at speed limit
- Better** - View along outside of moderate/sharp road curve with moderate line of sight on road, view 4-6 seconds at speed limit
- Good** - View along straight roadside with long to moderate line of sight on road; view 3-4 seconds at speed limit
- Fair** - Along tight curves and short lines of sight on road; view less than 3 seconds at speed limit

Special Experience Opportunity (pick one)

- I. Fall color; spring blooms; water sounds; cool in summer; very special lighting effects
- II. Morning or evening back/side lighting; mists; winter ice/frosts; deep woods; cool wet smells
- III. Wildlife viewing (birds, deer, etc.); special geology; cool woods smell; big trees; unusual vegetation; noticeable ecological processes
- IV.* Mostly normal mountain vegetation; little unusual lighting effects or sensory experiences expected
- V. Blinding sun; heavy fog; bad smells; bad traffic situation; noisy; strong winds; dead and dying vegetation; hot in summer; trash in view

Foreground Condition (pick one)

Special Experience Opportunity	Presentation of View			
	Best	Better	Good	Fair
	I	1	1	1
II	1	2	2	2
III	2	3	3	3
IV*	3*	3	3	4
V	4	4	4	4

Opportunity of View (pick one)

- A. Horizontal view angle >180°; vertical view angle >20°; pull over present
- B.* Horizontal view angle 90-180°; vertical view angle 15-20°; pull over present
- C. Horizontal view angle 45-90°; vertical angle 10-15°; pull over available; larger viewing angles with no pull over available
- D. Horizontal view angle 30-45°; no pull over available
- E. Horizontal view angle <30°; no pull over

Quality of View (pick one)

- Very Best** - Water scenes with long views of series of receding mountain ridges and valleys
- Best*** - Long views of receding mountain ridges or water scenes but not both; close views of wooded mountain streams
- Better** - Long but partially blocked views of mountain ridges or water scenes; more midground ridges than long view
- Good** - Midground views of opposing ridges; rustic valleys, little to no long views
- Fair** - Midground to foreground views of opposing ridges, close views of roads, traffic; development may be present

Aesthetic Experience (pick one)

Viewing Condition	Quality of View				
	Very Best	Best	Better	Good	Fair
	vg	1	1	2	3
g	1	1	2	3	4
m	2	2	3	4	5
f	3	3*	4	4	5
p	3	3	4	5	5

1 = outstanding; 2 = very good; 3 = positive; 4 = somewhat neutral; 5 = negative

Viewing Condition (pick one)

Opportunity to View	Foreground Condition			
	1	2	3	4
A	vg	vg	m	f
B	vg	g	f	f
C	g	m	f	p
D	g	m	f	p
E	m	f	p	p

vg = very good; g = good; m = moderate; p = poor

Choices are marked with an asterisk.

Aesthetic Experience Worksheet

Foothills Parkway Extension 8-B

*** Views From the Parkway Extension ***

View '13', Little no-name Gap, 13-700

Presentation of View (pick one)

- Best** – View along outside of moderate road curve with long line of sight on road; view for 6+ seconds at speed limit
- Better*** – View along outside of moderate/sharp road curve with moderate line of sight on road, view 4–6 seconds at speed limit
- Good** – View along straight roadside with long to moderate line of sight on road; view 3–4 seconds at speed limit
- Fair** – Along tight curves and short lines of sight on road; view less than 3 seconds at speed limit

Special Experience Opportunity (pick one)

- I.** Fall color; spring blooms; water sounds; cool in summer; very special lighting effects
- II.*** Morning or evening back/side lighting; mists; winter ice/frosts; deep woods; cool wet smells
- III.** Wildlife viewing (birds, deer, etc.); special geology; cool woods smell; big trees; unusual vegetation; noticeable ecological processes
- IV.** Mostly normal mountain vegetation; little unusual lighting effects or sensory experiences expected
- V.** Blinding sun; heavy fog; bad smells; bad traffic situation; noisy; strong winds; dead and dying vegetation; hot in summer; trash in view

Foreground Condition (pick one)

Special Experience Opportunity	Presentation of View			
	Best	Better	Good	Fair
I	1	1	1	2
II	1	2*	2	2
III	2	3	3	3
IV	3	3	3	4
V	4	4	4	4

Opportunity of View (pick one)

- A.*** Horizontal view angle >180°; vertical view angle >20°; pull over present
- B.** Horizontal view angle 90–180°; vertical view angle 15–20°; pull over present
- C.** Horizontal view angle 45–90°; vertical angle 10–15°; pull over available; larger viewing angles with no pull over available
- D.** Horizontal view angle 30–45°; no pull over available
- E.** Horizontal view angle <30°; no pull over

Quality of View (pick one)

- Very Best** – Water scenes with long views of series of receding mountain ridges and valleys
- Best** – Long views of receding mountain ridges or water scenes but not both; close views of wooded mountain streams
- Better*** – Long but partially blocked views of mountain ridges or water scenes; more midground ridges than long view
- Good** – Midground views of opposing ridges; rustic valleys, little to no long views
- Fair** – Midground to foreground views of opposing ridges, close views of roads, traffic; development may be present

Aesthetic Experience (pick one)

Viewing Condition	Quality of View				
	Very Best	Best	Better	Good	Fair
	vg	g	m	f	p
1	1	2*	3	3	
2	1	2	3	4	
3	2	3	4	5	
4	3	3	4	5	
5	3	3	4	5	

1 = outstanding; 2 = very good; 3 = positive; 4 = somewhat neutral; 5 = negative

Viewing Condition (pick one)

Opportunity to View	Foreground Condition			
	1	2	3	4
A	vg	vg*	m	f
B	vg	g	f	f
C	g	m	f	p
D	g	m	f	p
E	m	f	p	p

vg = very good; g = good; m = moderate; p = poor

M-29

Choices are marked with an asterisk.

Aesthetic Experience Worksheet

Foothills Parkway Extension 8-B

*** Views From the Parkway Extension ***

View 'K, Shults Grove Church, 16-350 to 16-570

M-30

Presentation of View (pick one)

- Best*** - View along outside of moderate road curve with long line of sight on road; view for 6+ seconds at speed limit
- Better** - View along outside of moderate/sharp road curve with moderate line of sight on road, view 4-6 seconds at speed limit
- Good** - View along straight roadside with long to moderate line of sight on road; view 3-4 seconds at speed limit
- Fair** - Along tight curves and short lines of sight on road; view less than 3 seconds at speed limit

Special Experience Opportunity (pick one)

- I.** Fall color; spring blooms; water sounds; cool in summer; very special lighting effects
- II.** Morning or evening back/side lighting; mists; winter ice/frosts; deep woods; cool wet smells
- III.*** Wildlife viewing (birds, deer, etc.); special geology; cool woods smell; big trees; unusual vegetation; noticeable ecological processes
- IV.** Mostly normal mountain vegetation; little unusual lighting effects or sensory experiences expected
- V.** Blinding sun; heavy fog; bad smells; bad traffic situation; noisy; strong winds; dead and dying vegetation; hot in summer; trash in view

Foreground Condition (pick one)

Special Experience Opportunity	Presentation of View			
	Best	Better	Good	Fair
I	1	1	1	2
II	1	2	2	2
III	2*	3	3	3
IV	3	3	3	4
V	4	4	4	4

Opportunity of View (pick one)

- A.** Horizontal view angle >180°; vertical view angle >20°; pull over present
- B.** Horizontal view angle 90-180°; vertical view angle 15-20°; pull over present
- C.*** Horizontal view angle 45-90°; vertical angle 10-15°; pull over available; larger viewing angles with no pull over available
- D.** Horizontal view angle 30-45°; no pull over available
- E.** Horizontal view angle <30°; no pull over

Quality of View (pick one)

- Very Best** - Water scenes with long views of series of receding mountain ridges and valleys
- Best** - Long views of receding mountain ridges or water scenes but not both; close views of wooded mountain streams
- Better** - Long but partially blocked views of mountain ridges or water scenes; more midground ridges than long view
- Good*** - Midground views of opposing ridges; rustic valleys, little to no long views
- Fair** - Midground to foreground views of opposing ridges, close views of roads, traffic; development may be present

Aesthetic Experience (pick one)

Viewing Condition	Quality of View				
	Very Best	Best	Better	Good	Fair
vg	1	1	2	3	3
g	1	1	2	3	4
m	2	2	3	4*	5
f	3	3	4	4	5
p	3	3	4	5	5

1 = outstanding; 2 = very good; 3 = positive; 4 = somewhat neutral; 5 = negative

Viewing Condition (pick one)

Opportunity to View	Foreground Condition			
	1	2	3	4
A	vg	vg	m	f
B	vg	g	f	f
C	g	m*	f	p
D	g	m	f	p
E	m	f	p	p

vg = very good; g = good; m = moderate; p = poor

Choices are marked with an asterisk.

Aesthetic Experience Worksheet

Foothills Parkway Extension 8-B

*** Views From the Parkway Extension ***

View 'L', Rocky Grove View S, 16-850 to 17-000

M-31

Presentation of View (pick one)

- Best** - View along outside of moderate road curve with long line of sight on road; view for 6+ seconds at speed limit
- Better*** - View along outside of moderate/sharp road curve with moderate line of sight on road, view 4-6 seconds at speed limit
- Good** - View along straight roadside with long to moderate line of sight on road; view 3-4 seconds at speed limit
- Fair** - Along tight curves and short lines of sight on road; view less than 3 seconds at speed limit

Special Experience Opportunity (pick one)

- I.** Fall color; spring blooms; water sounds; cool in summer; very special lighting effects
- II.** Morning or evening back/side lighting; mists; winter ice/frosts; deep woods; cool wet smells
- III.** Wildlife viewing (birds, deer, etc.); special geology; cool woods smell; big trees; unusual vegetation; noticeable ecological processes
- IV.*** Mostly normal mountain vegetation; little unusual lighting effects or sensory experiences expected
- V.** Blinding sun; heavy fog; bad smells; bad traffic situation; noisy; strong winds; dead and dying vegetation; hot in summer; trash in view

Foreground Condition (pick one)

Special Experience Opportunity	Presentation of View			
	Best	Better	Good	Fair
I	1	1	1	2
II	1	2	2	2
III	2	3	3	3
IV	3	3*	3	4
V	4	4	4	4

Opportunity of View (pick one)

- A.** Horizontal view angle >180°; vertical view angle >20°; pull over present
- B.** Horizontal view angle 90-180°; vertical view angle 15-20°; pull over present
- C.** Horizontal view angle 45-90°; vertical angle 10-15°; pull over available; larger viewing angles with no pull over available
- D.*** Horizontal view angle 30-45°; no pull over available
- E.** Horizontal view angle <30°; no pull over

Quality of View (pick one)

- Very Best** - Water scenes with long views of series of receding mountain ridges and valleys
- Best** - Long views of receding mountain ridges or water scenes but not both; close views of wooded mountain streams
- Better*** - Long but partially blocked views of mountain ridges or water scenes; more midground ridges than long view
- Good** - Midground views of opposing ridges; rustic valleys, little to no long views
- Fair** - Midground to foreground views of opposing ridges, close views of roads, traffic; development may be present

Aesthetic Experience (pick one)

Viewing Condition	Quality of View				
	Very Best	Best	Better	Good	Fair
	vg	1	1	2	3
g	1	1	2	3	4
m	2	2	3	4	5
f	3	3	4*	4	5
p	3	3	4	5	5

1 = outstanding; 2 = very good; 3 = positive; 4 = somewhat neutral; 5 = negative

Viewing Condition (pick one)

Opportunity to View	Foreground Condition			
	1	2	3	4
A	vg	vg	m	f
B	vg	g	f	f
C	g	m	f	p
D	g	m	f	p
E	m	f	p	p

vg = very good; g = good; m = moderate; p = poor

Choices are marked with an asterisk.

Aesthetic Experience Worksheet

Foothills Parkway Extension 8-B

*** Views From the Parkway Extension ***

View 'M', Cole Creek S, 17-860

Presentation of View (pick one)

- Best*** - View along outside of moderate road curve with long line of sight on road; view for 6+ seconds at speed limit
- Better** - View along outside of moderate/sharp road curve with moderate line of sight on road, view 4-6 seconds at speed limit
- Good** - View along straight roadside with long to moderate line of sight on road; view 3-4 seconds at speed limit
- Fair** - Along tight curves and short lines of sight on road; view less than 3 seconds at speed limit

Special Experience Opportunity (pick one)

- I. Fall color; spring blooms; water sounds; cool in summer; very special lighting effects
- II.* Morning or evening back/side lighting; mists; winter ice/frosts; deep woods; cool wet smells
- III. Wildlife viewing (birds, deer, etc.); special geology; cool woods smell; big trees; unusual vegetation; noticeable ecological processes
- IV. Mostly normal mountain vegetation; little unusual lighting effects or sensory experiences expected
- V. Blinding sun; heavy fog; bad smells; bad traffic situation; noisy; strong winds; dead and dying vegetation; hot in summer; trash in view

Foreground Condition (pick one)

Special Experience Opportunity	Presentation of View			
	Best	Better	Good	Fair
I	1	1	1	2
II	I*	2	2	2
III	2	3	3	3
IV	3	3	3	4
V	4	4	4	4

Opportunity of View (pick one)

- A. Horizontal view angle >180°; vertical view angle >20°; pull over present
- B. Horizontal view angle 90-180°; vertical view angle 15-20°; pull over present
- C. Horizontal view angle 45-90°; vertical angle 10-15°; pull over available; larger viewing angles with no pull over available
- D. Horizontal view angle 30-45°; no pull over available
- E.* Horizontal view angle <30°; no pull over

Quality of View (pick one)

- Very Best** - Water scenes with long views of series of receding mountain ridges and valleys
- Best** - Long views of receding mountain ridges or water scenes but not both; close views of wooded mountain streams
- Better*** - Long but partially blocked views of mountain ridges or water scenes; more midground ridges than long view
- Good** - Midground views of opposing ridges; rustic valleys, little to no long views
- Fair** - Midground to foreground views of opposing ridges, close views of roads, traffic; development may be present

Aesthetic Experience (pick one)

		Quality of View				
		Very Best	Best	Better	Good	Fair
Viewing Condition	vg	1	1	2	3	3
	g	1	1	2	3	4
	m	2	2	3*	4	5
	f	3	3	4	4	5
	p	3	3	4	5	5

1 = outstanding; 2 = very good; 3 = positive; 4 = somewhat neutral; 5 = negative

Viewing Condition (pick one)

Opportunity to View	Foreground Condition			
	1	2	3	4
A	vg	vg	m	f
B	vg	g	f	f
C	g	m	f	p
D	g	m	f	p
E	m*	f	p	p

vg = very good; g = good; m = moderate; p = poor

Choices are marked with an asterisk.

Aesthetic Experience Worksheet

Foothills Parkway Extension 8-B

*** Views From the Parkway Extension ***

View '14', Buckeye Creek S, 18-300

M-33

Presentation of View (pick one)

- Best** – View along outside of moderate road curve with long line of sight on road; view for 6+ seconds at speed limit
- Better** – View along outside of moderate/sharp road curve with moderate line of sight on road, view 4–6 seconds at speed limit
- Good*** – View along straight roadside with long to moderate line of sight on road; view 3–4 seconds at speed limit
- Fair** – Along tight curves and short lines of sight on road; view less than 3 seconds at speed limit

Special Experience Opportunity (pick one)

- I.** Fall color; spring blooms; water sounds; cool in summer; very special lighting effects
- II.** Morning or evening back/side lighting; mists; winter ice/frosts; deep woods; cool wet smells
- III.** Wildlife viewing (birds, deer, etc.); special geology; cool woods smell; big trees; unusual vegetation; noticeable ecological processes
- IV.*** Mostly normal mountain vegetation; little unusual lighting effects or sensory experiences expected
- V.** Blinding sun; heavy fog; bad smells; bad traffic situation; noisy; strong winds; dead and dying vegetation; hot in summer; trash in view

Foreground Condition (pick one)

Special Experience Opportunity	Presentation of View			
	Best	Better	Good	Fair
	I	1	1	1
II	1	2	2	2
III	2	3	3	3
IV	3	3	3*	4
V	4	4	4	4

Opportunity of View (pick one)

- A.** Horizontal view angle >180°; vertical view angle >20°; pull over present
- B.** Horizontal view angle 90–180°; vertical view angle 15–20°; pull over present
- C.** Horizontal view angle 45–90°; vertical angle 10–15°; pull over available; larger viewing angles with no pull over available
- D.*** Horizontal view angle 30–45°; no pull over available
- E.** Horizontal view angle <30°; no pull over

Quality of View (pick one)

- Very Best** – Water scenes with long views of series of receding mountain ridges and valleys
- Best*** – Long views of receding mountain ridges or water scenes but not both; close views of wooded mountain streams
- Better** – Long but partially blocked views of mountain ridges or water scenes; more midground ridges than long view
- Good** – Midground views of opposing ridges; rustic valleys, little to no long views
- Fair** – Midground to foreground views of opposing ridges, close views of roads, traffic; development may be present

Aesthetic Experience (pick one)

		Quality of View				
		Very Best	Best	Better	Good	Fair
Viewing Condition	vg	1	1	2	3	3
	g	1	1	2	3	4
	m	2	2	3	4	5
	f	3	3*	4	4	5
	p	3	3	4	5	5

1 = outstanding; 2 = very good; 3 = positive; 4 = somewhat neutral; 5 = negative

Viewing Condition (pick one)

Opportunity to View	Foreground Condition			
	1	2	3	4
A	vg	vg	m	f
B	vg	g	f	f
C	g	m	f	p
D	g	m	f*	p
E	m	f	p	p

vg = very good; g = good; m = moderate; p = poor

Choices are marked with an asterisk.

Aesthetic Experience Worksheet

Foothills Parkway Extension 8-B

*** Views From the Parkway Extension ***

View 'N', Indian Creek E, 18-850

M-34

Presentation of View (pick one)

- Best** – View along outside of moderate road curve with long line of sight on road; view for 6+ seconds at speed limit
- Better** – View along outside of moderate/sharp road curve with moderate line of sight on road, view 4–6 seconds at speed limit
- Good*** – View along straight roadside with long to moderate line of sight on road; view 3–4 seconds at speed limit
- Fair** – Along tight curves and short lines of sight on road; view less than 3 seconds at speed limit

Special Experience Opportunity (pick one)

- I.** Fall color; spring blooms; water sounds; cool in summer; very special lighting effects
- II.** Morning or evening back/side lighting; mists; winter ice/frosts; deep woods; cool wet smells
- III.*** Wildlife viewing (birds, deer, etc.); special geology; cool woods smell; big trees; unusual vegetation; noticeable ecological processes
- IV.** Mostly normal mountain vegetation; little unusual lighting effects or sensory experiences expected
- V.** Blinding sun; heavy fog; bad smells; bad traffic situation; noisy; strong winds; dead and dying vegetation; hot in summer; trash in view

Foreground Condition (pick one)

Special Experience Opportunity	Presentation of View			
	Best	Better	Good	Fair
I	1	1	1	2
II	1	2	2	2
III	2	3	3*	3
IV	3	3	3	4
V	4	4	4	4

Opportunity of View (pick one)

- A.** Horizontal view angle >180°; vertical view angle >20°; pull over present
- B.** Horizontal view angle 90–180°; vertical view angle 15–20°; pull over present
- C.** Horizontal view angle 45–90°; vertical angle 10–15°; pull over available; larger viewing angles with no pull over available
- D.*** Horizontal view angle 30–45°; no pull over available
- E.** Horizontal view angle <30°; no pull over

Quality of View (pick one)

- Very Best** – Water scenes with long views of series of receding mountain ridges and valleys
- Best** – Long views of receding mountain ridges or water scenes but not both; close views of wooded mountain streams
- Better** – Long but partially blocked views of mountain ridges or water scenes; more midground ridges than long view
- Good*** – Midground views of opposing ridges; rustic valleys, little to no long views
- Fair** – Midground to foreground views of opposing ridges, close views of roads, traffic; development may be present

Aesthetic Experience (pick one)

Viewing Condition	Quality of View				
	Very Best	Best	Better	Good	Fair
vg	1	1	2	3	3
g	1	1	2	3	4
m	2	2	3	4	5
f	3	3	4	4*	5
p	3	3	4	5	5

1 = outstanding; 2 = very good; 3 = positive; 4 = somewhat neutral; 5 = negative

Viewing Condition (pick one)

Opportunity to View	Foreground Condition			
	1	2	3	4
A	vg	vg	m	f
B	vg	g	f	f
C	g	m	f	p
D	g	m	f	p
E	m	f	p	p

vg = very good; g = good; m = moderate; p = poor

Choices are marked with an asterisk.

Aesthetic Experience Worksheet

Foothills Parkway Extension 8-B

*** Views From the Parkway Extension ***

View '15', Sandy Hollow E, 19-650

Presentation of View (pick one)

- Best** – View along outside of moderate road curve with long line of sight on road; view for 6+ seconds at speed limit
- Better** – View along outside of moderate/sharp road curve with moderate line of sight on road, view 4–6 seconds at speed limit
- Good*** – View along straight roadside with long to moderate line of sight on road; view 3–4 seconds at speed limit
- Fair** – Along tight curves and short lines of sight on road; view less than 3 seconds at speed limit

Special Experience Opportunity (pick one)

- I.** Fall color; spring blooms; water sounds; cool in summer; very special lighting effects
- II.** Morning or evening back/side lighting; mists; winter ice/frosts; deep woods; cool wet smells
- III.*** Wildlife viewing (birds, deer, etc.); special geology; cool woods smell; big trees; unusual vegetation; noticeable ecological processes
- IV.** Mostly normal mountain vegetation; little unusual lighting effects or sensory experiences expected
- V.** Blinding sun; heavy fog; bad smells; bad traffic situation; noisy; strong winds; dead and dying vegetation; hot in summer; trash in view

Foreground Condition (pick one)

Special Experience Opportunity	Presentation of View			
	Best	Better	Good	Fair
	I	1	1	1
II	1	2	2	2
III	2	3	3*	3
IV	3	3	3	4
V	4	4	4	4

Opportunity of View (pick one)

- A.** Horizontal view angle >180°; vertical view angle >20°; pull over present
- B.** Horizontal view angle 90–180°; vertical view angle 15–20°; pull over present
- C.*** Horizontal view angle 45–90°; vertical angle 10–15°; pull over available; larger viewing angles with no pull over available
- D.** Horizontal view angle 30–45°; no pull over available
- E.** Horizontal view angle <30°; no pull over

Quality of View (pick one)

- Very Best** – Water scenes with long views of series of receding mountain ridges and valleys
- Best** – Long views of receding mountain ridges or water scenes but not both; close views of wooded mountain streams
- Better** – Long but partially blocked views of mountain ridges or water scenes; more midground ridges than long view
- Good*** – Midground views of opposing ridges; rustic valleys, little to no long views
- Fair** – Midground to foreground views of opposing ridges, close views of roads, traffic; development may be present

Aesthetic Experience (pick one)

Viewing Condition	Quality of View				
	Very Best	Best	Better	Good	Fair
	vg	1	1	2	3
g	1	1	2	3	4
m	2	2	3	4*	5
f	3	3	4	4	5
p	3	3	4	5	5

1 = outstanding; 2 = very good; 3 = positive; 4 = somewhat neutral; 5 = negative

Viewing Condition (pick one)

Opportunity to View	Foreground Condition			
	1	2	3	4
	A	vg	vg	m
B	vg	g	f	f
C	g	m	f*	p
D	g	m	f	p
E	m	f	p	p

vg = very good; g = good; m = moderate; p = poor

M-35

Choices are marked with an asterisk.

Aesthetic Experience Worksheet

Foothills Parkway Extension 8-B

*** Views From the Parkway Extension ***

View '16', Chavis Creek W, 19-800 to 20-000

M-36

Presentation of View (pick one)

- Best** - View along outside of moderate road curve with long line of sight on road; view for 6+ seconds at speed limit
- Better*** - View along outside of moderate/sharp road curve with moderate line of sight on road, view 4-6 seconds at speed limit
- Good** - View along straight roadside with long to moderate line of sight on road; view 3-4 seconds at speed limit
- Fair** - Along tight curves and short lines of sight on road; view less than 3 seconds at speed limit

Special Experience Opportunity (pick one)

- I. Fall color; spring blooms; water sounds; cool in summer; very special lighting effects
- II. Morning or evening back/side lighting; mists; winter ice/frosts; deep woods; cool wet smells
- III.* Wildlife viewing (birds, deer, etc.); special geology; cool woods smell; big trees; unusual vegetation; noticeable ecological processes
- IV. Mostly normal mountain vegetation; little unusual lighting effects or sensory experiences expected
- V. Blinding sun; heavy fog; bad smells; bad traffic situation; noisy; strong winds; dead and dying vegetation; hot in summer; trash in view

Foreground Condition (pick one)

Special Experience Opportunity	Presentation of View			
	Best	Better	Good	Fair
	I	1	1	1
II	1	2	2	2
III	2	3*	3	3
IV	3	3	3	4
V	4	4	4	4

Opportunity of View (pick one)

- A. Horizontal view angle >180°; vertical view angle >20°; pull over present
- B. Horizontal view angle 90-180°; vertical view angle 15-20°; pull over present
- C.* Horizontal view angle 45-90°; vertical angle 10-15°; pull over available; larger viewing angles with no pull over available
- D. Horizontal view angle 30-45°; no pull over available
- E. Horizontal view angle <30°; no pull over

Quality of View (pick one)

- Very Best** - Water scenes with long views of series of receding mountain ridges and valleys
- Best** - Long views of receding mountain ridges or water scenes but not both; close views of wooded mountain streams
- Better** - Long but partially blocked views of mountain ridges or water scenes; more midground ridges than long view
- Good*** - Midground views of opposing ridges; rustic valleys, little to no long views
- Fair** - Midground to foreground views of opposing ridges, close views of roads, traffic; development may be present

Aesthetic Experience (pick one)

Viewing Condition	Quality of View				
	Very Best	Best	Better	Good	Fair
	vg	1	1	2	3
g	1	1	2	3	4
m	2	2	3	4	5
f	3	3	4	4*	5
p	3	3	4	5	5

1 = outstanding; 2 = very good; 3 = positive; 4 = somewhat neutral; 5 = negative

Viewing Condition (pick one)

Opportunity to View	Foreground Condition			
	1	2	3	4
A	vg	vg	m	f
B	vg	g	f	f
C	g	m	f	p
D	g	m	f	p
E	m	f	p	p

vg = very good; g = good; m = moderate; p = poor

Choices are marked with an asterisk.

Aesthetic Experience Worksheet

Foothills Parkway Extension 8-B

*** Views From the Parkway Extension ***

View '17', Big Ridge N, 20-500

M-37

Presentation of View (pick one)

- Best** - View along outside of moderate road curve with long line of sight on road; view for 6+ seconds at speed limit
- Better** - View along outside of moderate/sharp road curve with moderate line of sight on road, view 4-6 seconds at speed limit
- Good** - View along straight roadside with long to moderate line of sight on road; view 3-4 seconds at speed limit
- Fair*** - Along tight curves and short lines of sight on road; view less than 3 seconds at speed limit

Special Experience Opportunity (pick one)

- I.** Fall color; spring blooms; water sounds; cool in summer; very special lighting effects
- II.** Morning or evening back/side lighting; mists; winter ice/frosts; deep woods; cool wet smells
- III.** Wildlife viewing (birds, deer, etc.); special geology; cool woods smell; big trees; unusual vegetation; noticeable ecological processes
- IV.*** Mostly normal mountain vegetation; little unusual lighting effects or sensory experiences expected
- V.** Blinding sun; heavy fog; bad smells; bad traffic situation; noisy; strong winds; dead and dying vegetation; hot in summer; trash in view

Foreground Condition (pick one)

Special Experience Opportunity	Presentation of View			
	Best	Better	Good	Fair
I	1	1	1	2
II	1	2	2	2
III	2	3	3	3
IV	3	3	3	4*
V	4	4	4	4

Opportunity of View (pick one)

- A.** Horizontal view angle >180°; vertical view angle >20°; pull over present
- B.** Horizontal view angle 90-180°; vertical view angle 15-20°; pull over present
- C.*** Horizontal view angle 45-90°; vertical angle 10-15°; pull over available; larger viewing angles with no pull over available
- D.** Horizontal view angle 30-45°; no pull over available
- E.** Horizontal view angle <30°; no pull over

Quality of View (pick one)

- Very Best** - Water scenes with long views of series of receding mountain ridges and valleys
- Best** - Long views of receding mountain ridges or water scenes but not both; close views of wooded mountain streams
- Better** - Long but partially blocked views of mountain ridges or water scenes; more midground ridges than long view
- Good*** - Midground views of opposing ridges; rustic valleys, little to no long views
- Fair** - Midground to foreground views of opposing ridges, close views of roads, traffic; development may be present

Aesthetic Experience (pick one)

Viewing Condition	Quality of View				
	Very Best	Best	Better	Good	Fair
vg	1	1	2	3	3
g	1	1	2	3	4
m	2	2	3	4	5
f	3	3	4	4	5
p	3	3	4	5*	5

1 = outstanding; 2 = very good; 3 = positive; 4 = somewhat neutral; 5 = negative

Viewing Condition (pick one)

Opportunity to View	Foreground Condition			
	1	2	3	4
A	vg	vg	m	f
B	vg	g	f	f
C	g	m	f	p*
D	g	m	f	p
E	m	f	p	p

vg = very good; g = good; m = moderate; p = poor

Choices are marked with an asterisk.

Aesthetic Experience Worksheet

Foothills Parkway Extension 8-B

*** Views From the Parkway Extension ***

View 'O', Camp Creek-Sandy Hollow SE, 21-200

M-38

Presentation of View (pick one)

- Best** – View along outside of moderate road curve with long line of sight on road; view for 6+ seconds at speed limit
- Better*** – View along outside of moderate/sharp road curve with moderate line of sight on road, view 4–6 seconds at speed limit
- Good** – View along straight roadside with long to moderate line of sight on road; view 3–4 seconds at speed limit
- Fair** – Along tight curves and short lines of sight on road; view less than 3 seconds at speed limit

Special Experience Opportunity (pick one)

- I. Fall color; spring blooms; water sounds; cool in summer; very special lighting effects
- II.* Morning or evening back/side lighting; mists; winter ice/frosts; deep woods; cool wet smells
- III. Wildlife viewing (birds, deer, etc.); special geology; cool woods smell; big trees; unusual vegetation; noticeable ecological processes
- IV. Mostly normal mountain vegetation; little unusual lighting effects or sensory experiences expected
- V. Blinding sun; heavy fog; bad smells; bad traffic situation; noisy; strong winds; dead and dying vegetation; hot in summer; trash in view

Foreground Condition (pick one)

Special Experience Opportunity	Presentation of View			
	Best	Better	Good	Fair
I	1	1	1	2
II	1	2*	2	2
III	2	3	3	3
IV	3	3	3	4
V	4	4	4	4

Opportunity of View (pick one)

- A. Horizontal view angle >180°; vertical view angle >20°; pull over present
- B. Horizontal view angle 90–180°; vertical view angle 15–20°; pull over present
- C.* Horizontal view angle 45–90°; vertical angle 10–15°; pull over available; larger viewing angles with no pull over available
- D. Horizontal view angle 30–45°; no pull over available
- E. Horizontal view angle <30°; no pull over

Quality of View (pick one)

- Very Best** – Water scenes with long views of series of receding mountain ridges and valleys
- Best** – Long views of receding mountain ridges or water scenes but not both; close views of wooded mountain streams
- Better*** – Long but partially blocked views of mountain ridges or water scenes; more midground ridges than long view
- Good** – Midground views of opposing ridges; rustic valleys, little to no long views
- Fair** – Midground to foreground views of opposing ridges, close views of roads, traffic; development may be present

Aesthetic Experience (pick one)

Viewing Condition	Quality of View				
	Very Best	Best	Better	Good	Fair
vg	1	1	2	3	3
g	1	1	2	3	4
m	2	2	3*	4	5
f	3	3	4	4	5
p	3	3	4	5	5

1 = outstanding; 2 = very good; 3 = positive; 4 = somewhat neutral; 5 = negative

Viewing Condition (pick one)

Opportunity to View	Foreground Condition			
	1	2	3	4
A	vg	vg	m	f
B	vg	g	f	f
C	g	m*	f	p
D	g	m	f	p
E	m	f	p	p

vg = very good; g = good; m = moderate; p = poor

Choices are marked with an asterisk.

Aesthetic Experience Worksheet

Foothills Parkway Extension 8-B

*** Views From the Parkway Extension ***

View 'Q', East end climb

M-39

Presentation of View (pick one)

- Best** - View along outside of moderate road curve with long line of sight on road; view for 6+ seconds at speed limit
- Better*** - View along outside of moderate/sharp road curve with moderate line of sight on road, view 4-6 seconds at speed limit
- Good** - View along straight roadside with long to moderate line of sight on road; view 3-4 seconds at speed limit
- Fair** - Along tight curves and short lines of sight on road; view less than 3 seconds at speed limit

Special Experience Opportunity (pick one)

- I. Fall color; spring blooms; water sounds; cool in summer; very special lighting effects
- II. Morning or evening back/side lighting; mists; winter ice/frosts; deep woods; cool wet smells
- III. Wildlife viewing (birds, deer, etc.); special geology; cool woods smell; big trees; unusual vegetation; noticeable ecological processes
- IV.* Mostly normal mountain vegetation; little unusual lighting effects or sensory experiences expected
- V. Blinding sun; heavy fog; bad smells; bad traffic situation; noisy; strong winds; dead and dying vegetation; hot in summer; trash in view

Foreground Condition (pick one)

Special Experience Opportunity	Presentation of View			
	Best	Better	Good	Fair
I	1	1	1	2
II	1	2	2	2
III	2	3	3	3
IV	3	3*	3	4
V	4	4	4	4

Opportunity of View (pick one)

- A. Horizontal view angle >180°; vertical view angle >20°; pull over present
- B. Horizontal view angle 90-180°; vertical view angle 15-20°; pull over present
- C.* Horizontal view angle 45-90°; vertical angle 10-15°; pull over available; larger viewing angles with no pull over available
- D. Horizontal view angle 30-45°; no pull over available
- E. Horizontal view angle <30°; no pull over

Quality of View (pick one)

- Very Best** - Water scenes with long views of series of receding mountain ridges and valleys
- Best** - Long views of receding mountain ridges or water scenes but not both; close views of wooded mountain streams
- Better*** - Long but partially blocked views of mountain ridges or water scenes; more midground ridges than long view
- Good** - Midground views of opposing ridges; rustic valleys, little to no long views
- Fair** - Midground to foreground views of opposing ridges, close views of roads, traffic; development may be present

Aesthetic Experience (pick one)

Viewing Condition	Quality of View				
	Very Best	Best	Better	Good	Fair
vg	1	1	2	3	3
g	1	1	2	3	4
m	2	2	3	4	5
f	3	3	4*	4	5
p	3	3	4	5	5

1 = outstanding; 2 = very good; 3 = positive; 4 = somewhat neutral; 5 = negative

Viewing Condition (pick one)

Opportunity to View	Foreground Condition			
	1	2	3	4
A	vg	vg	m	f
B	vg	g	f	f
C	g	m	f*	p
D	g	m	f	p
E	m	f	p	p

vg = very good; g = good; m = moderate; p = poor

Choices are marked with an asterisk.

Aesthetic Experience Worksheet

Foothills Parkway Extension 8-B

*** Views From the Parkway Extension ***

View '18', East bridge over 321 EW, 23-800

M-40

Presentation of View (pick one)

- Best** - View along outside of moderate road curve with long line of sight on road; view for 6+ seconds at speed limit
- Better** - View along outside of moderate/sharp road curve with moderate line of sight on road, view 4-6 seconds at speed limit
- Good*** - View along straight roadside with long to moderate line of sight on road; view 3-4 seconds at speed limit
- Fair** - Along tight curves and short lines of sight on road; view less than 3 seconds at speed limit

Special Experience Opportunity (pick one)

- I.** Fall color; spring blooms; water sounds; cool in summer; very special lighting effects
- II.*** Morning or evening back/side lighting; mists; winter ice/frosts; deep woods; cool wet smells
- III.** Wildlife viewing (birds, deer, etc.); special geology; cool woods smell; big trees; unusual vegetation; noticeable ecological processes
- IV.** Mostly normal mountain vegetation; little unusual lighting effects or sensory experiences expected
- V.** Blinding sun; heavy fog; bad smells; bad traffic situation; noisy; strong winds; dead and dying vegetation; hot in summer; trash in view

Foreground Condition (pick one)

Special Experience Opportunity	Presentation of View			
	Best	Better	Good	Fair
I	1	1	1	2
II	1	2	2*	2
III	2	3	3	3
IV	3	3	3	4
V	4	4	4	4

Opportunity of View (pick one)

- A.** Horizontal view angle >180°; vertical view angle >20°; pull over present
- B.** Horizontal view angle 90-180°; vertical view angle 15-20°; pull over present
- C.** Horizontal view angle 45-90°; vertical angle 10-15°; pull over available; larger viewing angles with no pull over available
- D.*** Horizontal view angle 30-45°; no pull over available
- E.** Horizontal view angle <30°; no pull over

Quality of View (pick one)

- Very Best** - Water scenes with long views of series of receding mountain ridges and valleys
- Best** - Long views of receding mountain ridges or water scenes but not both; close views of wooded mountain streams
- Better*** - Long but partially blocked views of mountain ridges or water scenes; more midground ridges than long view
- Good** - Midground views of opposing ridges; rustic valleys, little to no long views
- Fair** - Midground to foreground views of opposing ridges, close views of roads, traffic; development may be present

Aesthetic Experience (pick one)

Quality of View

Viewing Condition	Quality of View				
	Very Best	Best	Better	Good	Fair
vg	1	1	2	3	3
g	1	1	2	3	4
m	2	2	3*	4	5
f	3	3	4	4	5
p	3	3	4	5	5

1 = outstanding; 2 = very good; 3 = positive; 4 = somewhat neutral; 5 = negative

Viewing Condition (pick one)

Foreground Condition

Opportunity to View	Foreground Condition			
	1	2	3	4
A	vg	vg	m	f
B	vg	g	f	f
C	g	m	f	p
D	g	m*	f	p
E	m	f	p	p

vg = very good; g = good; m = moderate; p = poor

Choices are marked with an asterisk.

Aesthetic Experience Worksheet

Foothills Parkway Extension 8-B

*** Views From the Parkway Extension ***

Walk-Up Overlook on Webb Mtn., km 8.600

M-41

Presentation of View (pick one)

- Best*** – View along outside of moderate road curve with long line of sight on road; view for 6+ seconds at speed limit
- Better** – View along outside of moderate/sharp road curve with moderate line of sight on road, view 4–6 seconds at speed limit
- Good** – View along straight roadside with long to moderate line of sight on road; view 3–4 seconds at speed limit
- Fair** – Along tight curves and short lines of sight on road; view less than 3 seconds at speed limit

Special Experience Opportunity (pick one)

- I. Fall color; spring blooms; water sounds; cool in summer; very special lighting effects
- II.* Morning or evening back/side lighting; mists; winter ice/frosts; deep woods; cool wet smells
- III. Wildlife viewing (birds, deer, etc.); special geology; cool woods smell; big trees; unusual vegetation; noticeable ecological processes
- IV. Mostly normal mountain vegetation; little unusual lighting effects or sensory experiences expected
- V. Blinding sun; heavy fog; bad smells; bad traffic situation; noisy; strong winds; dead and dying vegetation; hot in summer; trash in view

Foreground Condition (pick one)

Special Experience Opportunity	Presentation of View			
	Best	Better	Good	Fair
I	1	1	1	2
II	I*	2	2	2
III	2	3	3	3
IV	3	3	3	4
V	4	4	4	4

Opportunity of View (pick one)

- A.* Horizontal view angle >180°; vertical view angle >20°; pull over present
- B. Horizontal view angle 90–180°; vertical view angle 15–20°; pull over present
- C. Horizontal view angle 45–90°; vertical angle 10–15°; pull over available; larger viewing angles with no pull over available
- D. Horizontal view angle 30–45°; no pull over available
- E. Horizontal view angle <30°; no pull over

Quality of View (pick one)

- Very Best** – Water scenes with long views of series of receding mountain ridges and valleys
- Best*** – Long views of receding mountain ridges or water scenes but not both; close views of wooded mountain streams
- Better** – Long but partially blocked views of mountain ridges or water scenes; more midground ridges than long view
- Good** – Midground views of opposing ridges; rustic valleys, little to no long views
- Fair** – Midground to foreground views of opposing ridges, close views of roads, traffic; development may be present

Aesthetic Experience (pick one)

Viewing Condition	Quality of View				
	Very Best	Best	Better	Good	Fair
vg	1	I*	2	3	3
g	1	1	2	3	4
m	2	2	3	4	5
f	3	3	4	4	5
p	3	3	4	5	5

1 = outstanding; 2 = very good; 3 = positive; 4 = somewhat neutral; 5 = negative

Viewing Condition (pick one)

Opportunity to View	Foreground Condition			
	1	2	3	4
A	vg*	vg	m	f
B	vg	g	f	f
C	g	m	f	p
D	g	m	f	p
E	m	f	p	p

vg = very good; g = good; m = moderate; p = poor

Choices are marked with an asterisk.