

2. OVERVIEW OF ALTERNATIVES CONSIDERED

The corridor for Section 8B transferred to NPS is approximately 305 m (1000 ft) wide, with a considerably wider section on Webb Mountain. The NPS proposes to construct and subsequently operate Section 8B of the Foothills Parkway in the GSMNP. Section 8B would extend from the existing interchange of the Foothills Parkway (Section 8A) and U.S. 321 at Cosby, Tennessee, approximately 22.7 km (14.2 miles) to Pittman Center, Tennessee (Figs. 1A and 1B). Gatlinburg is the next community to the west of Pittman Center; Newport is north and east of Cosby.

Approximately midway between Cosby and Pittman Center the ROW crosses the small community of Rocky Flats. The topography of Section 8B is rugged and includes a large portion of Webb Mountain. Section 8B traverses many large and small streams including Cosby Creek at the east end and the Little Pigeon River at the west end.

The following discussion of no build and build alternatives is a very general description of those that will be considered. The build alternative options are based upon the conceptual design plans provided from FHWA in January of 1997. Since these are conceptual plans, it is probable that the alternative options may change in refinement of detail, but would be re-evaluated if changes were substantial. However, for the purposes of this ER, they are considered in order to assess the potential impacts that could be expected if they were implemented. There are two basic alternatives: (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.

2.1 BUILD ALTERNATIVE

Potential impacts for the construction of most of the ROW will be very similar among all build options and would be the result of clearing, cutting, filling, paving, and operating Section 8B. If the build alternative is ultimately chosen, it may become a combination of options discussed in Sects. 2.1.1-2.1.4.

2.1.1 Construct Section 8B with no Interchanges Option

No interchanges would be designed for the western end of Section 8B at Pittman Center under this build option. Sections 8B and 8C would be one single continuous section of the Foothills Parkway from Cosby to U.S. 441 (on the Pigeon Forge to Gatlinburg Spur). No interchanges in the Pittman Center area would be provided. This option would result in a total of about 39 km (24 miles) without an interchange. Emergency roads and access gates would be provided at selected interim locations.

Included in the assessment of impacts for this option are the two variations of construction in the Rocky Flats area and the tunnel option near SR 416 (Fig. 1B). In the Rocky Flats area, one option is to have the road constructed into the ridge above the valley drainage. This would require

extensive cutting into the hillside but would require little fill in the drainage area. The other option is to take the roadway through the valley on fill material. Large amounts of fill would be necessary, but the large cuts into the hillside could be avoided.

Just east of SR 416 in Pittman Center, two possible options for construction are being considered. One would involve extensive cuts into the ridge that lies east and overlooks SR 416. An option is to place a tunnel in this same location, to limit the amount of cutting into the ridge. The tunnel would significantly decrease the amount of cutting that would be required and would limit the visual impacts to the area.

2.1.2 Western Terminus Options

The no-interchange option (Sect. 2.1.1) will be assessed and the options for interchanges at either SR 416 or U.S. 321 will be added. Interchange options (north and south) for SR 416 at Pittman Center along with the options for U.S. 321 (interchange directly to U.S. 321 and interchange indirectly to Webb Creek Road) will be considered as part of the build alternative.

The SR 416 north interchange option at Pittman Center would be a ramp that exits to the northeast and crosses the flood plain of the Little Pigeon River and the Little Pigeon River itself. Construction would require a bridge large enough to accommodate flooding over the Little Pigeon River, the purchase of a small amount of land to complete the ramp at SR 416, and the reconstruction of the SR 416 bridge over Webb Creek. The ramp would then connect to SR 416 directly opposite Webb Creek Road. Large amounts of fill material would be required for the roadbed of the ramp. The SR 416 south option would entail a longer ramp that would meander to the southwest. This option would also require large amounts of fill and a bridge over the Little Pigeon River. It also would require that the NPS either acquire land areas easement in the field opposite the ramp entrance along SR 416 to maintain adequate parkway character.

Another interchange is being considered for U.S. 321. Two exit ramp options are being evaluated. One ramp would exit the parkway to the south and connect directly to U.S. 321 just east of Webb Creek Road. This option would require massive cuts into the hillside above U.S. 321 and would require acquisition of additional land. The second option would be to construct a ramp just west of Webb Creek Road which would exit to the south and then east, connecting to Webb Creek Road. This ramp would travel over part of the flood plain of Webb Creek and would therefore require large amounts of fill material. A bridge over Webb Creek would be part of the connection at Webb Creek Road.

2.1.3 Webb Mountain Options

All the elements of the previously discussed alternative options (Sects. 2.1.1 and 2.1.2) will be assessed as well as the two options for Webb Mountain. These options include a parking area along the edge of the parkway ROW at the foot of Webb Mountain (this option would include a trail system up to and around Webb Mountain) or a spur road leading to an overlook facility and associated parking area on top of Webb Mountain.

The main parkway option would provide a parking area north of the main parkway and south of the Matthew Creek drainage. Some cutting into the hillside would be necessary. The upper

overlook facility option would be much more extensive. A spur road would wind to the top of Webb Mountain. This road would start to the northeast and then would circle to the south and then to the west. A loop road would be constructed on top of Webb Mountain, along with a comfort station and a parking area. The loop road would cross two areas of the Matthew Creek drainage as well as a tributary of Jones Creek to the north. Large amounts of cuts and fills would be used for the construction of the spur road and the overlook loop and facilities. Large retaining walls would be required in two different areas along the south side of the access road.

2.1.4 Operational Timing Options

All the considerations of the previously discussed options (Sects. 2.1.1–2.1.3) for the build alternative will be assessed along with a consideration of the timing of the initiation of operation of Section 8B. The options to be assessed here are (1) Section 8B to be constructed as described but not to be operational until Section 8C is completed or (2) Section 8B to be constructed and put into operation before the completion of Section 8C. Possibilities under this option would also include constructing the roadway but not paving it, or finishing all construction (including pavement) but securing the section so it could not be used until Section 8C was completed.

Under the first operational timing option, the constructed parkway might be used in the same way as other sections (8E and 8F) that are not fully completed. These sections are opened to the public for 2 weekends in the fall and spring to experience the fall colors, wildflowers, and the mountain and valley views. If Section 8B were constructed and operational before Section 8C (i.e., option 2), this section of the parkway would have two exits. One would be at Cosby (at the connection to Section 8A) and one would be at Pittman Center (either at SR 416 or U.S. 321).

2.2 NO-ACTION ALTERNATIVE (NO-BUILD)

Under this alternative, Section 8B of the Foothills Parkway would not be constructed. It is assumed that the missing link between Sections E and F will be completed, Section 8D probably would be completed, and Section 8C would not be built. Thus, the final Foothills Parkway would consist of Sections A, B, E, F, G, and H. Under this alternative, it is uncertain what the future land use of Sections 8B and 8C would be. Any change of use (i.e., use other than a parkway) would require a change in legislation.