

Preliminary
Alternatives Report

North Shore Road
Environmental Impact
Statement

Appendix B

Screening Criteria

Screening Criteria

Geology and Soils

- Problematic rock formations are located throughout the study area and are unavoidable. If a build or partial-build alternative is selected as the “preferred alternative,” geologic investigations would identify the mineral content as well as stability issues.
- Soil surveys for the study area exist from the 1940s and 1950s; however, this information has not yet been updated by the Natural Resources Conservation Service and is outdated. If a build or partial-build alternative is selected as the “preferred alternative,” soil testing would identify any special concerns.
- Avoid or minimize impacts to mines.
- Avoid or minimize construction impacts west of the convergence of Hazel Creek and Fontana Lake where the underlying rocks are believed to have the highest potential for acid production and are likely to contain higher concentrations of metallic minerals than the surrounding rocks.
- Avoid or minimize known locations of hazardous materials. Hazardous material and waste sites are regulated by the Resource Conservation and Recovery Act of 1976 (RCRA), as amended; the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended; and the Superfund Amendments and Reauthorization Act of 1986 (SARA). The presence of hazardous waste sites north of Fontana Lake is unknown. If a build or partial-build alternative is selected as the “preferred alternative,” soil sampling will identify any hazardous material and/or soil contamination.

Water-Related Resources

- Avoid or minimize impacts to the critical area of the water supply watershed in the western portion of the study area that includes portions of Eagle Creek, Hazel Creek, and Powell Branch unless no other practicable alternative exists, in accordance with 15A - NC Administrative Code 02B.0216 Fresh Surface Water Quality Standards for WS-IV Waters, North Carolina Department of Environment and Natural Resources.
- Avoid or minimize impacts associated with sections of the Nantahala and Tuckasegee Rivers that are on the National Rivers Inventory designated by 16 USC 1271-1287, for consideration as Wild and Scenic Rivers under Section 5(d) of the National Wild and Scenic Rivers Act.
- Avoid or minimize stream relocation and the number of stream crossings. Utilize 90-degree (+/- 15 degrees) stream crossings whenever possible. Make efforts to protect a riparian zone between a build or partial-build alternative and the stream. Utilize the flatter terrain parallel to streams to allow for minimization of overall impacts to the environment by minimizing excavation and embankment.
- Avoid or minimize wetland impacts in accordance with EO 11990 that establishes the "Protection of Wetlands" for federal agencies. Develop build and partial-build alternatives based on information contained in the National Wetland Inventory. Refine avoidance and minimization of wetland impacts based on field identification, which will occur once detailed study alternatives are selected.

- Avoid or minimize floodplain impacts by avoiding construction within the Federal Emergency Management Agency (FEMA) 100-year floodplain and/or bridging the floodplains in accordance with EO 11988 on Floodplain Management, as well as the DOI's Director's Order #77-2: Floodplain Management and under the Forest Service Manual Section 2500: Watershed and Air Management. In addition, design crossings of floodplains to minimize surface area (90-degree crossings).
- There are no Wellhead Protection Areas within the study area; however, groundwater recharge areas cover almost the entire study area and are unavoidable. Groundwater is protected from harmful contaminants as part of the 1986 Amendments to the Safe Drinking Water Act.

Natural Resources

- Avoid known populations of federal and state protected species and designated federal critical habitats in accordance with Section 7 of the Endangered Species Act of 1973, as amended, as well as the Migratory Bird Treaty Act, the Bald and Gold Eagle Protection Act, the North Carolina Endangered Species Act of 1987, and the North Carolina Plant Protection and Conservation Act of 1979. Avoid or minimize impacts to potential habitats for federally listed threatened and endangered (T&E) species where feasible. Potential habitat cannot be entirely avoided for some T&E species because it extends throughout the study area. In addition, the Plant Protection and Conservation Act (Chapter 106, Article 19B; 202.12-202.22; of the General Statutes of North Carolina), authorizes the North Carolina Department of Agriculture to monitor and protect rare plant species in the state. While state laws do not normally apply to a federal project, it is NPS policy “to inventory, monitor, and manage state and locally listed species in a manner similar to its treatment of federally listed species, to the greatest extent possible.”
- Minimize areas of disturbance by utilizing existing roads or old roadbeds and railroad beds, where feasible.

Climate and Air Quality

- Air quality could be affected by the mode of transportation and the type of facility designed; therefore, air quality cannot be addressed until detailed study alternatives are selected. The United States Environmental Protection Agency (USEPA) established criteria for evaluating air quality in accordance with the 1970 Clean Air Act (CAA) and 1990 CAA Amendments.

Socioeconomic Conditions

- Avoid acquisition of privately held lands.
- Avoid relocation of homes, churches, schools, and businesses. Minority and low-income communities are protected from disproportionate and adverse impacts by EO 12898 on Environmental Justice and the Civil Rights Act of 1964.
- Originate build and partial-build alternatives from the Bryson City side of Lake View Road.
- Address potential economic development benefits (for the no-build, partial-build, and build alternatives) in the DEIS once detailed study alternatives are selected.

Visitor Use and Experience

- Minimize impacts to the Appalachian National Scenic Trail, which is protected under the National Trail System Act of 1968.
- Address protection of GSMNP experience once detailed study alternatives are selected.

Traffic Conditions

- Address protection of the natural soundscape once detailed study alternatives are selected. For example, impacts to the natural soundscape in relation to a build alternative could be in conflict with aesthetics because vehicular noise can be compounded in a valley where a road may have less impact on the viewshed.

Aesthetic Resources

- Address aesthetics once detailed study alternatives are selected. Enhancement options will be proposed if a build or partial-build alternative is selected as the “preferred alternative.”
- Consider the scenic view of and from any construction proposed.
- Avoid or minimize viewshed encroachment as seen from the Appalachian National Scenic Trail.

Cultural Resources

- Avoid or minimize impacts to areas of high probability for cultural resources. The significance of cultural resources including archaeological sites, historic structures and other above-ground resources, cemeteries, and Traditional Cultural Properties (TCPs) is evaluated in terms of their eligibility for the National Register of Historic Places (NRHP), as outlined in 36 CFR 60.4. Cultural Resources are also protected by such federal and state statutes as the Archaeological Resources Protection Act (ARPA) of 1979 (graves over 100 years old), Native American Graves Protection and Repatriation Act (NAGPRA) of 1990 (Native American graves on federal land), and North Carolina General Statutes 65 (Cemeteries) and 70.3 (The Unmarked Human Burial and Skeletal Remains Protection Act). Once detailed study alternatives have been selected, field surveys will be conducted to identify and avoid, or minimize, impacts to traditional cultural properties and sites that are on or eligible for the NRHP in accordance with the NHPA.

Indirect Impacts - Unintended and foreseeable actions that occur as a result of the project (for example, a new business).

- Indirect impacts will be addressed in the DEIS once detailed study alternatives are selected.

Cumulative Impacts - Actions other than the North Shore Road Project that affect the same resources (for example, Ravensford Land Exchange).

- Address cumulative impacts, as defined in 40 CFR 1508.7, in the DEIS once detailed study alternatives are selected.

Other Engineering Constraints and Considerations

- Maximize the use of existing contours (i.e., follow the existing terrain) to minimize excavation and embankment, which minimizes the footprint of the roadway and therefore reduces the area of potential impact for all natural and cultural resources.
- Adhere to National Park Service Park Road Standards. The roadway design criteria for three main options, the Principal Park Road, the Special Purpose Park Road, and the Primitive Park Road/Administrative Access Road, is listed on page 8. The Principal Park Road would be a continuation of the existing Lake View Road typical section while the other options reduce the footprint of the roadway, providing additional impact minimization.
- Consider the remaining segments of old roadbeds (specifically old NC 288, now Lake Shore Trail) as possible corridor locations.
- Review the use of bridges and tunnels to minimize impacts.