

4.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

4.1 Introduction

This chapter presents the affected environment and the direct effects (environmental consequences) anticipated from the Project. For each topic, an introduction (including an overview of applicable regulations), data collection and analysis methodology, existing conditions (affected environment), and impacts are presented for the No Build and Build Alternatives. Indirect effects and cumulative impacts are discussed in Chapter 5.

4.1.1 Resources Dismissed from Further Analysis

Based on a review of the 2007 DEIS, the following resources are dismissed from further analysis for this FEIS: federal/state river and coastal zone management programs and farmland.

Federal/State River and Coastal Zone Management Programs

Under the Wild and Scenic Rivers Act of 1968 (Public Law 92-542, 16 USC 1271), the National Park Service (NPS) is responsible for reviewing federal actions that may adversely impact rivers that are designated or currently under study for inclusion in the National Wild and Scenic Rivers system or rivers that are listed in the National Rivers Inventory. None of the waterbodies near the Build Alternatives are designated or currently under study for inclusion in the National Wild and Scenic Rivers system or are listed in the National Rivers Inventory; therefore, no impacts would occur as a result of the Project.

In 1988, the NH Legislature passed the Rivers Management and Protection Act (Revised Statutes Annotated [RSA] 483), which regulates the quantity and quality of in-stream flow along certain protected rivers or along segments of protected rivers that are designated as Natural, Rural, Rural-Community, or Community Rivers. The NH Rivers Management Protection Program reviews federal, state, or local permits for any project that would affect a designated section of a river. No rivers near the Project are currently listed as designated rivers in the Rivers Management Protection Program system.

The Project lies outside the limits of the Coastal Zone management area; therefore, no impacts would occur on this resource, regardless of the alternative selected.

Farmland

The Farmland Protection Policy Act of 1984 (FPPA) (Section 1539-1549, Public Law 97-98, 95 Statute 1341-1344 [7 U.S.C. 4201 et seq.]) requires that federal agencies assess the effect of converting existing or potential farmland areas to areas of non-agricultural use. Specifically, the FPPA directs federal agencies to identify the effect of a federally funded project on farmland; consider alternatives that minimize impacts on farmlands; and ensure that the Project is compatible, to the extent practicable, with local, state, or federal programs that protect farmlands. For this Project, impacts on farmland soils were assessed by overlaying the Build Alternatives on maps depicting soil series identified by the U.S. Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS), as having the characteristics of Prime Farmlands or Farmlands of Statewide or Local Importance. The FHWA Technical Advisory document

T6640.8A (October 30, 1987) further directs assessment of impacts on farmlands as part of the NEPA process for all transportation projects.

The majority of the footprints for Build Alternatives A, B, C, D, and F are located almost entirely within Urbanized Areas as defined by the U.S. Census Bureau. The only Build Alternatives that include areas outside designated Urban Areas are Alternatives C and D. These two alternatives have a small portion of NH 28 in Londonderry, located outside the Urban Area, but are also not in proximity to any Prime or Unique Farmlands or Farmlands of Statewide or Local Importance. All other portions of the Build Alternatives would be within mapped Urban Areas. Those farmland areas that are within these Urbanized Areas are not protected under the FPPA. Therefore, no farmland impacts would be anticipated as a result of implementing any of the Build Alternatives. A copy of the completed Farmland Conversion Impact Rating Form AD 1006 is provided in Appendix A, *Agency Correspondence*. NRCS responded on February 27, 2006, and determined that no further action will be required under the FPPA regardless of the Build Alternative selected.

Additional coordination with NRCS was undertaken in July 2018. The farmland conversion impact rating for corridor type projects was updated for each Build Alternative, and the relative value of each alternative corridor is 34 or less. Also, because the preferred alternative does not include any land that is prime, statewide, or locally important farmland, it is not subject to the FPPA.

4.1.2 Study Area

The study area defined for the initial screening of alternatives encompassed about 26 square miles within western portions of Derry and eastern Londonderry in western Rockingham County, NH (Figure 4.1-1). A large study area was necessary at that stage of the Project to consider a wide range of potential alternatives for meeting the Project purpose and need. The 26-square-mile study area was also used for the 2007 DEIS and concurred with by federal and state regulatory/resource agencies at an agency Scoping Meeting on July 30, 1998. For this FEIS, the study area for each resource was redefined to focus data collection and reporting on existing conditions to the area where there is the potential for direct impacts from the Build Alternatives (A, B, C, D, and F). The rationale for each of the updated resource study areas is described in the appropriate resource sections. Finally, a larger, five-town study area is used to identify potential indirect effects and cumulative impacts related to the Project (see Chapter 5).⁸

4.2 Traffic and Transportation

4.2.1 Affected Environment

Existing Access to Interstate 93

I-93 is a north-south highway, which connects Interstate 91 near St. Johnsbury, Vermont, to Interstate 95 in Canton, Massachusetts, and it is a major link in the Interstate system and an important part of the National Highway System. The highway passes through the Towns, nearly

⁸ The limits of the economic study area were agreed upon in consultation with state and federal agency staff at a meeting held on August 25, 2005. Given that there are no major changes in the basic alignment of the alternatives under consideration since the 2007 DEIS, the previously agreed on study area remains reasonable for this FEIS.