

## **4.0 SECONDARY AND CUMULATIVE EFFECTS**

This chapter presents a preliminary evaluation of the potential secondary (indirect) impacts and cumulative (incremental) impacts of the project as compared to the No-Build Alternative.

### **4.1 Methodology**

Secondary (indirect) effects are defined as “impacts which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable.” Secondary impacts could include growth-inducing impacts and other impacts related to changes in the pattern of land use, population density or growth rate, and related impacts on air and water and on other natural systems, including ecosystems” (40 CFR 1508.8(b)). An example of a secondary effect is when a new rail station is built in an undeveloped area and commercial uses, which otherwise would not have been built, develop in the station area. It should be noted that the provision of transit does not in and of itself cause secondary development to occur.

Cumulative impacts are changes to the environment that are brought about by an action in combination with other past, present, and future human actions. In simplest terms, analyzing cumulative impacts means considering and accounting for the impacts of a proposed action in the context of the existing transportation system and improvements to it that are reasonably foreseeable in the vicinity. For the purposes of this Tier 1 DEIS, the basis for the estimation of potential cumulative impacts relies on the Build Alternatives for the project design year of 2030 and on the No-Build Alternative.

The secondary and cumulative effects analysis qualitatively addresses each resource type identified in the study area and makes an assessment of whether or not the resource has the potential to be affected by secondary or cumulative effects.

Based on guidance from the CEQ, USDOT, Federal Highway Administration (FHWA), and the USEPA, the following methodology was developed. This methodology serves to provide a Tier 1 level assessment of potential secondary and cumulative effects. It is assumed that a greater level of analysis would be undertaken during the Tier 2 analysis.

The following steps were applied to this Tier 1 analysis:

- Identify potential sensitive resources and potential area of effect;
- Identify potential sources of effects; and
- Identify potential effects.

### **4.2 Legal and Regulatory Context**

#### **4.2.1 Secondary Impacts**

The Council on Environmental Quality (CEQ) NEPA regulations require that there be an analysis of potential secondary impacts for federally funded projects. The CEQ implementing regulations (40 CFR 1500-1508) require that an EIS include a discussion of preliminary environmental consequences, including “indirect effects and their significance” (40 CFR 1502.16). In addressing potential uncertainties in this type of analysis, the CEQ regulations require the EIS to make a “good faith effort” to identify and disclose indirect or secondary impacts (CEQ, 1981).

## **4.2.2 Cumulative Impacts**

The CEQ/NEPA regulations also require that an analysis of potential cumulative impacts take place for federally funded projects. The CEQ/NEPA implementing regulations (40 CFR 1500-1508) require that an EIS include a discussion of preliminary environmental consequences, including “the impact on the environment, which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (federal or non-federal) or person undertakes such other actions” (40 CFR 1508.7). In addressing potential uncertainties in this type of analysis, CEQ requires the EIS to make a “good faith effort” to identify and disclose cumulative impacts (CEQ, 1981).

## **4.3 Potential for Secondary and Cumulative Impacts**

As described in Chapter 1.1, the proposed transit and trails elements of the Atlanta BeltLine are part of a comprehensive economic development effort that combines greenspace, trails, transit, and new development along 22 miles of historic rail segments that encircle central Atlanta. The combination of the following elements: transportation, affordable housing, Brownfield redevelopment, land use, historic preservation, parks and recreation, and economic development is intended to attract and organize some of the region’s future growth around parks, transit, and trails. A desired secondary effect of the Atlanta BeltLine is to change the pattern of regional sprawl in the coming decades, which will lead to a more livable Atlanta with an enhanced quality of life and sustained economic growth.

### **4.3.1 Potential Sensitive Resources**

For purposes of this analysis, sensitive resources are defined as those areas that have been identified as being directly affected or those resources that could be affected by potential secondary development or those resources that are particularly susceptible to cumulative effects. Based on the analysis provided in this Tier 1 DEIS, the following potentially sensitive resources have been identified:

- Property owners and occupiers within and near the potential Atlanta BeltLine ROW
- Land Use
- Historic Resources
- Parks
- Hazardous Materials
- Noise
- Streams
- Water Quality

### **4.3.2 Potential Area of Effect**

The Atlanta BeltLine study area encompasses a large geographic area, mostly focused around the central core of Atlanta. However, from a cumulative effects perspective, potential effects on sensitive resources, such as water quality, may not be limited to the defined study area and therefore should consider the potential effects to identified resources from a more regional perspective. For this reason, the potential area of effect

should extend to the boundaries of the watershed associated with the study area. It is assumed, that during Tier 2 analysis, the potential area of effect will be further refined.

### **4.3.3 Potential for Secondary Effects**

#### **4.3.3.1 No-Build Alternative**

Under the No-Build Alternative, it is assumed that various transportation projects programmed into the 2013 TIP would occur and may result in some level of secondary effects. Secondary effects related to the No-Build Alternative may include development of underdeveloped and/or undeveloped land near proposed transit stations or stops. This development, should it occur, may also result in changes to population, employment, and community facilities and services.

#### **4.3.3.2 Build Alternatives**

Owners and occupiers of property within and near the Atlanta BeltLine ROW have the potential to experience secondary effects due any of the Build Alternatives. It is likely that secondary effects would be focused in and around proposed station areas, taking the form of development that would likely result in changes in population, employment and community facilities and services. During Tier 2 analysis, specific secondary effects would be identified.

### **4.3.4 Potential for Cumulative Effects**

#### **4.3.4.1 No-Build Alternative**

The projects in the No-Build Alternative, in aggregate, have the potential for cumulative effects on ROW, historic resources, parks, hazardous materials, noise, streams, and water quality (due to increases in impervious surfaces).

#### **4.3.4.2 Build Alternatives**

The various transportation projects planned within the study area, in combination with the Atlanta BeltLine project, would potentially have impacts on ROW, historic resources, parks, hazardous materials, noise, streams, and water quality (due to increases in impervious surfaces). During Tier 2 analysis, an assessment of potential cumulative effects will occur to determine the likelihood and appropriate mitigation for potential cumulative effects.