Greenville-Pickens Area
Transportation Study

HORIZON 2050 LONG RANGE TRANSPORTATION PLAN

OCTOBER 2026



CHAPTER 10
Environmental Review & Mitigation

CHAPTER 10: ENVIRONMENTAL REVIEW & MITIGATION

The GPATS study area was evaluated for environmental resources within both the natural and built environments. Federal, state, and tribal agencies with responsibilities related to environmental management, regulation, and wildlife resources were consulted during the draft plan phase of the LRTP update.

In accordance with the National Environmental Policy Act (NEPA) of 1969, federal agencies are required to consider environmental resources and potential impacts during the planning and design phases of projects that receive federal funding. Accordingly, this analysis identifies environmental resources within the GPATS study area that may warrant additional consideration during future project development and implementation.

Environmental Screening & Considerations

HUMAN ENVIRONMENTAL CONSTRAINTS

Environmental resources that could potentially be affected by transportation projects within the Study Area are discussed in this section. **Figures 43–45** show some of the environmentally sensitive natural and human-built areas in the GPATS Study Area. Discussion regarding the resources shown in the figures, such as recreational resources and waters of the United States, are detailed below.

Archaeological & Historic Resources

Consideration of impacts on cultural resources is governed by federal laws, primarily Section 106 of the National Historic Preservation Act. Section 106 requires federal agencies and recipients of federal funds to evaluate the effects of their projects on historic properties—defined as districts, sites, buildings, structures, or objects listed on or eligible for the National Register of Historic Places (NRHP). This evaluation begins early in project planning and involves consultation to identify historic properties within the Area of Potential Effects (APE), assess their NRHP eligibility and significance, and determine project impacts. The goal is to avoid, minimize, or mitigate adverse effects.

Cultural resource data are gathered through records searches and surveys. A GIS-based site search is conducted to identify known historic properties within the APE, which may include structures and districts in the study area. Early in project development, the APE is defined by the sponsoring agencies (e.g., SCDOT and local governments), and inventories of known and potential historic resources are reviewed, including field surveys for NRHP-listed and eligible properties.

While historic resources are scattered across the GPATS region, there is a concentration of historic resources, including historic sites and districts, in the vicinity of Downtown Greenville, Downtown Pickens, Downtown Easley, and Downtown Fountain Inn. Other notable historic resources in the GPATS region include Paris Mountain State Park, Conestee Park and Nature Preserve, and Hopkins Farm.

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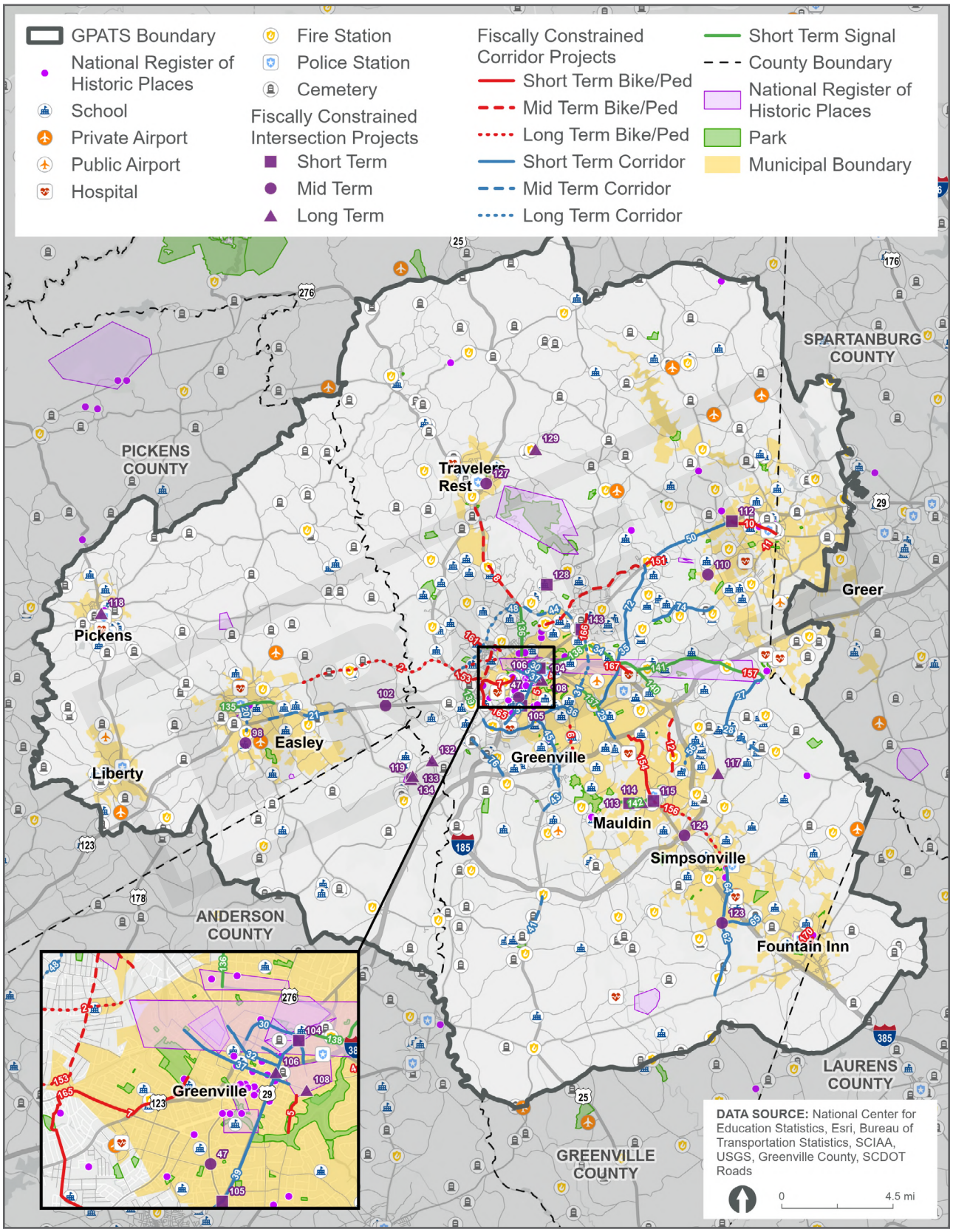


Figure 43 | Human Environmental Constraints

The potential for unknown archaeological resources is evaluated through site-specific surveys. Archaeological data is not publicly available, and therefore GIS data is not assessed in this plan. In consultation with the State Historic Preservation Office (SHPO), project effects are categorized as No Historic Properties Affected, No Adverse Effect, or Adverse Effect. If adverse effects cannot be avoided, the Federal Highway Administration (FHWA) coordinates with the Advisory Council on Historic Preservation and SHPO to develop mitigation measures. These measures are formalized in a Memorandum of Agreement (MOA) among FHWA, SHPO, and the sponsoring agency, completing the Section 106 process unless project changes occur.

Section 4(f) & Section 6(f) Resources

Section 4(f) of the Department of Transportation Act of 1966 protects publicly owned parks, recreation areas, wildlife and waterfowl refuges, and historic sites of national, state, or local significance. The U.S. Department of Transportation (USDOT), including FHWA, cannot approve projects using these resources unless there is no feasible and prudent alternative and all possible planning has been undertaken to minimize harm, or the use results in a de minimis impact (i.e., no adverse effect on the resource's protected features or activities).

Section 4(f) use is categorized as exceptions, de minimis use, direct use, or constructive use. Direct use involves permanent incorporation of protected land, while temporary occupancy (a common exception) allows short-term use during construction. Constructive use occurs when project impacts, such as noise or proximity, substantially impair the resource. The Study Area includes parks and other Section 4(f) properties, including, but not limited to, the following list which will be further evaluated during preliminary project planning to determine potential impacts as a result of transportation projects.

Greenville County

- Lake Conestee Park and Nature Preserve
- Cleveland Park
- Falls Park on the Reedy
- Unity Park
- Cancer Survivors Park
- Legacy Park
- Holmes Park
- Timmons Park
- Gower Estates Park
- Runway Park at GMU Airport
- Paris Mountain State Park
- Lake Robinson Park
- Lake Cunningham Recreation Area
- Herdklotz Park
- East Riverside Park
- Greer City Park
- Century Park (Greer)
- Gateway Park (Travelers Rest)
- Trailblazer Park (Travelers Rest)
- Southside Park (Greenville)
- Gary L. Pittman Memorial Park (Mauldin)
- City Park (Mauldin)
- Springfield Park (Mauldin)
- Heritage Park (Simpsonville)
- Alder Park (Simpsonville)
- Southside Regional Park

Pickens County

- Nalley Brown Nature Park (Easley)
- Pope Field Park (Easley)
- J.B. "Red" Owens Recreation Complex (Easley)
- Hagood Park (Pickens)
- Bruce Field (Pickens)
- Jaycee Park (Liberty)
- Pickens County Recreation Complex facilities
- Table Rock State Park
- Keowee-Toxaway State Park

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Regional Trail & Recreation Resources

- Prisma Health Swamp Rabbit Trail
- Doodle Trail
- Lake Hartwell recreation areas within the MPO boundary
- Saluda Lake public access recreation areas

Section 6(f) of the Land and Water Conservation Act protects parks and recreation areas funded through the Land and Water Conservation Fund (LWCF). These lands cannot be converted to non-recreational use without approval from the National Park Service and the South Carolina Department of Parks, Recreation and Tourism. Conversion is allowed only if no practicable alternatives exist and replacement land of equal value and utility is provided. Many parks within the GPATS area have utilized partial State and Local Assistance Funds under the LWCF Grant program. Potential Section 6(f) properties will require specific identification and evaluation during project development.

Regulated & Hazardous Material Sites

Regulated materials are hazardous substances governed by federal, state, or local regulations due to their potential to cause environmental contamination and impact public health. Avoiding highly contaminated sites helps minimize costs, liability, and project delays associated with remediation.

The Study Area was evaluated using Brownfield and Superfund site GIS data from the South Carolina Department of Environmental Services (SCDES). Brownfield and Superfund sites are present within the Study Area, with a large concentration of sites near Downtown Greenville. Smaller concentrations of Brownfield sites are located in Pickens, Liberty, and Easley. More detailed assessments and impacts to SCDES Brownfields and Superfund sites will be required as projects advance through the planning and environmental review process.

PHYSICAL ENVIRONMENTAL CONSTRAINTS

Wetlands & Waters of the United States

Under the Clean Water Act (CWA), “waters of the United States” include navigable waters, interstate waters and wetlands, territorial seas, impoundments, and tributaries. These waters fall under the jurisdiction of the U.S. Army Corps of Engineers (USACE), and a permit is required for projects that discharge dredged or fill material into them, including wetlands.

The Study Area was reviewed using the National Wetlands Inventory (NWI) and aerial imagery to identify potential wetlands and other jurisdictional waters. Such resources are present within the Study Area and are largely evenly distributed throughout the GPATS region. Wetland delineations are recommended early in project development to define boundaries and coordinate with USACE to determine jurisdiction.

Floodplains

Floodplain development is regulated by the Federal Emergency Management Agency (FEMA) and the South Carolina Department of Natural Resources (SCDNR). Projects in floodplains require hydraulic analysis to assess impacts on the 100-year flood elevation, and FEMA prohibits encroachments in floodways unless a no-rise analysis demonstrates no increase in flood levels. Most projects also require a floodplain permit from SCDNR or local authorities.

Review of FEMA Flood Insurance Rate Maps for the GPATS area indicates that portions of the Study Area lie within floodplains and floodways, particularly in areas with major streams, rivers and other bodies of water. Potential impacts from transportation projects in these areas will require further evaluation during project development.

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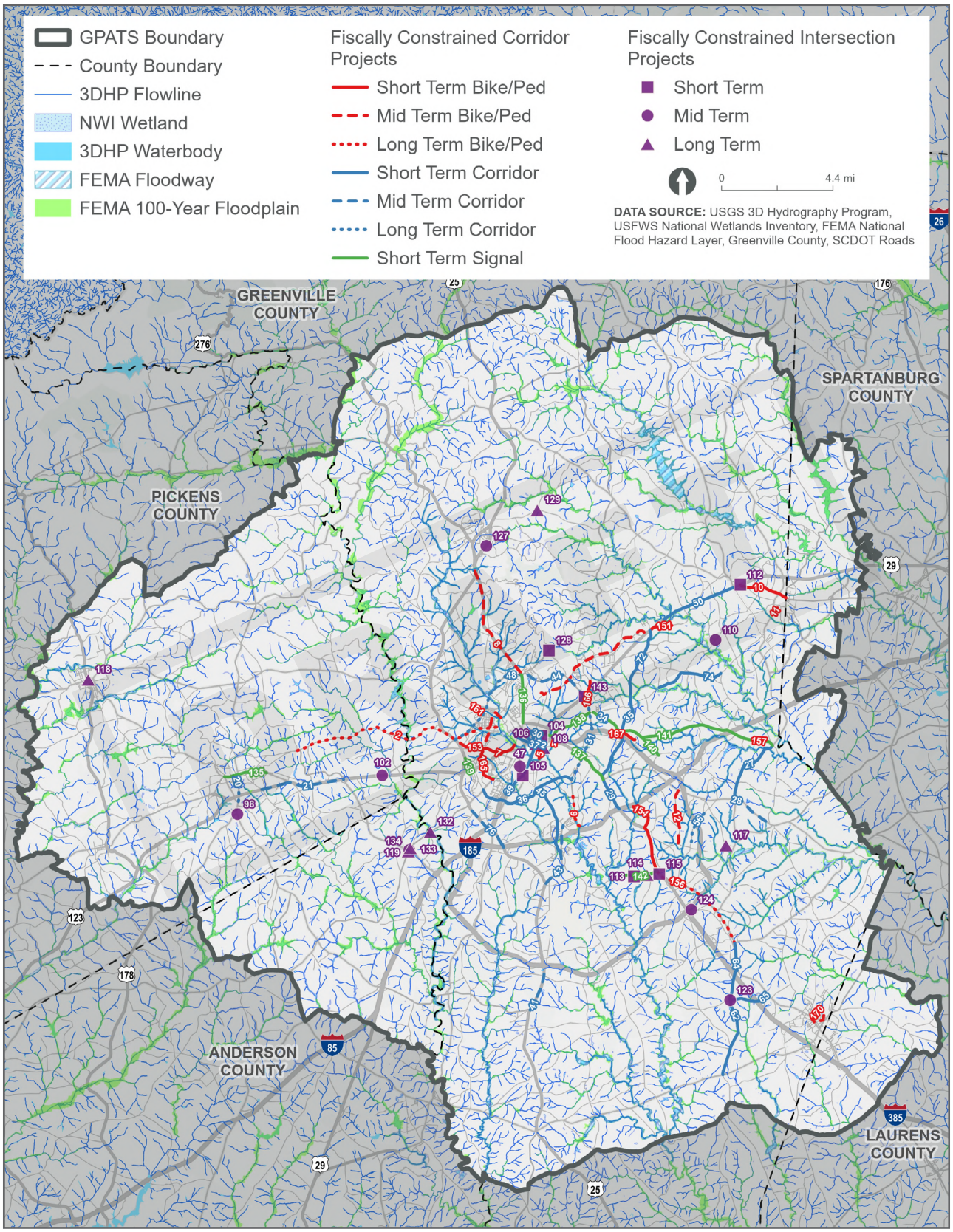


Figure 44 | Physical Environmental Constraints

Threatened & Endangered Species

Threatened and endangered species protected under the federal Endangered Species Act (ESA) and the South Carolina Department of Natural Resources (SCDNR), as well as state-listed species and species of concern, must be considered for each transportation project. Coordination with the U.S. Fish and Wildlife Service (USFWS) and the SCDNR is required to identify species that may occur in the project area and assess potential impacts.

Projects advancing in planning will require further evaluation, including habitat surveys and continued consultation with USFWS and SCDNR, to determine potential effects on listed species.

COMMUNITY IMPACTS

Community Composition

The NEPA requires federal, state, and local agencies receiving federal funding to evaluate the environmental and socioeconomic impacts of proposed projects, including effects on communities and reasonable alternatives to avoid or minimize harm. Special consideration is given to underserved populations, including minority, low-income, and persistently impoverished communities.

The Study Area was reviewed using demographic, income, and linguistic isolation data to identify these populations. As projects advance, detailed analysis will assess potential impacts such as noise, pollution, reduced access to services, and disruption of community cohesion or economic vitality. In locations where impacts are identified, mitigation measures will be developed to minimize harm and enhance benefits, such as improved access to jobs, healthcare, and economic opportunities.

Public involvement is a key component of this process. Affected communities must have opportunities to participate in project evaluation using tools such as the MPO's Public Participation Plan. Input from the public, including vulnerable populations, will inform the analysis, and outcomes—along with any mitigation measures—will be documented in subsequent NEPA reviews.

Community Resources

Community resources are considered as part of a comprehensive evaluation of how a proposed action may affect the human environment. Early in the process, agencies identify relevant community resources—such as neighborhoods, public services, parks, schools, businesses, airports, hospitals, and cultural or historic sites—through scoping and coordination with local stakeholders. According to local and statewide GIS data sets, the GPATS region contains numerous Community Resources. Many of these community resources are concentrated within municipal limits, but generally resources are scattered throughout the GPATS region. Various businesses, such as restaurants, grocery stores, places of worship, and medical facilities are located along major corridors throughout the community.

Community resource considerations also inform the comparison of project alternatives, with preference given to options that minimize disruption and preserve access to essential services. When adverse impacts cannot be avoided, mitigation measures, such as relocation assistance, replacement facilities, or improved connectivity, are developed and documented.

Public involvement plays a central role, as agencies gather input through meetings, comment periods, and outreach to understand community concerns and values. This information helps shape the analysis of direct, indirect, and cumulative impacts on these resources, including potential displacement, changes in access, effects on community cohesion, and economic shifts.

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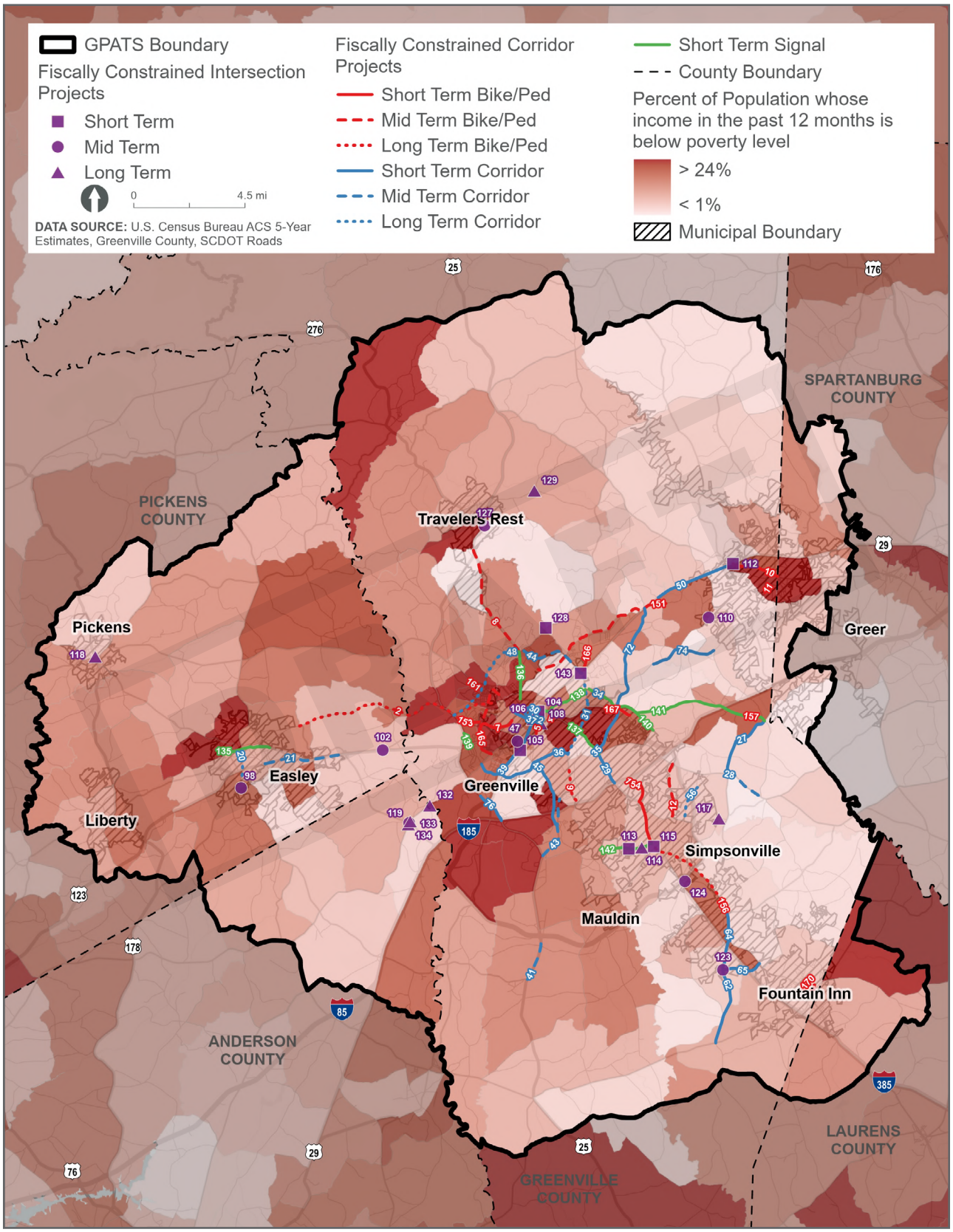


Figure 45 | Low Income Populations

GPATS Horizon 2050

LONG-RANGE TRANSPORTATION PLAN

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