



**U.S. Department of Transportation
Pipeline and Hazardous Materials Safety Administration**

**Natural Gas Distribution Infrastructure Safety and Modernization
Grant Program
Laurens Commission of Public Works, SC
Tier 2 Site Specific Environmental Assessment
NGDISM-FY22-EA-2023-02**

PHMSA Approval:

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Overview:

The purpose of this Tier 2 Site Specific Environmental Assessment (Tier 2) is to (1) document the proposed action (the Project) and the need for the action (2) identify existing conditions; (3) assess the social, economic, and environmental effects using appropriate tools and agency coordination to comply with local, state, and federal environmental laws, regulations, and ordinances; to (4) document applicable mitigation commitments that will avoid, minimize, or mitigate potential effects; and (5) seek comments from the public. This Tier 2 analysis informs PHMSA's assessment as to whether the Project is consistent with the impacts described in the Tier 1 Nationwide Environmental Assessment for the Natural Gas Distribution Infrastructure Safety and Modernization Grant Program.¹

As part of this Tier 2, PHMSA is soliciting public comments through a public comment period. This Tier 2 is available on PHMSA's website where comments can be submitted to the contact noted below. PHMSA will accept public comments for 30 days on this Tier 2. PHMSA will consider comments received and incorporate them in the decision-making process. Consultation with appropriate agencies on related processes, regulations, and permits is ongoing. Please submit all comments to: PHMSABILGrantNEPAComments@dot.gov and reference NGDISM-FY22-EA-2023-02 in your response.

At the conclusion of the EA process, PHMSA will either issue a "Finding of No Significant Impact," further supplement this EA with additional analysis, mitigation measures, or prepare an Environmental Impact Statement.

I. Project Description/Proposed Action

Project Title	Laurens Commission of Public Works (LCPW)
Project Location	Laurens and Fountain Inn, SC

Project Description/Proposed Action:

The Proposed Action would replace approximately eight miles of pipeline in various locations within Laurens and Fountain Inn South Carolina (See Appendix A, Project Maps). The existing mains in the project area, consisting of bare or poorly coated steel, would be replaced with polyethylene (PE) mains. Bare steel service lines and meters would also be replaced throughout the project area that serves residents and businesses. The new pipe would be installed using horizontal directional drilling (HDD) with excavation at entry and exit points. A majority of the new pipeline would be installed within 3 to 5 ft of the existing gas lines at a depth of approximately 36 inches. All work would take place within existing right-of-way (ROW) or easements.

One section of pipe that crosses Howard Branch stream in Fountain Inn would be removed and both ends capped. The remainder of the existing pipeline would be abandoned in place. Abandonment of the existing pipeline (versus excavation and removal) would minimize ground disturbance and facilitate the replacement process in a more efficient manner. PHMSA has specific requirements for gas and hazardous liquid pipeline abandonment, found in 49 CFR 192.727 and 195.402(c)(10). These requirements include disconnecting pipelines from all sources and supplies of gas, purging all combustibles and sealing the facilities left in place.

¹ <https://www.federalregister.gov/documents/2022/11/09/2022-24378/pipeline-safety-notice-of-availability-of-the-tier-1-nationwide-environmental-assessment-for-the>

By complying with PHMSA requirements for purging and sealing abandoned pipelines LCPW would ensure that the abandoned pipelines pose no risk to safety in their abandoned state.

No Action:

The No Action alternative, as required under NEPA, serves as a baseline, and is used to compare impacts resulting from the Proposed Action. Under the No Action alternative, PHMSA would not fund this pipeline replacement project. Additionally, PHMSA would not be able to reduce the inventory of methane leaks and reduce safety risks by replacing pipe prone to leakage. Under this alternative, LCPW would continue to use bare steel leak prone pipeline material and conduct repairs or replacements in the future using non-federal sources of funding, and potentially on an emergency basis, when a pipeline fails. Impacts and benefits associated with replacing the leak prone pipeline within Laurens and Fountain Inn with updated material would not be undertaken or would be undertaken at a later, uncertain date. The safety risks and methane leaks would persist. Impacts and benefits associated with replacement of leak prone pipe would not be seen in the near term. Even if pipe replacement were to happen at some point in the future, environmental mitigation measures during such a replacement would be unknown. Furthermore, existing economic losses, and increased risk associated with prolonged gas leaks would continue.

Need for the Project:

The LCPW averages seven corrosion leaks per year on steel service lines. It is estimated that 70% of these leaks were located within the project area. The project would replace these leak prone pipelines, improving the safety of the pipeline system and reducing the risk of natural gas leaks. The overall needs addressed by this project would include (1) improving upon the safe delivery of energy by reducing the likelihood of incidents, as well as methane leaks; (2) avoiding economic losses caused by pipeline failures; and (3) protecting our environment and reducing climate impacts by remediating aged and failing pipelines and pipe prone to leakage.

Description of the Environmental Setting of the Project Area:

The proposed project takes place within an urban environment with a mix of residential housing and commercial businesses. The pipeline infrastructure and location of the new pipe is located adjacent to roadways within existing transportation or utility ROW with several waterways and associated wetland habitat.

II. Resource Review

Air Quality and Greenhouse Gases (GHG)	
Question	Information and Justification
Is the project located in an area designated by the EPA as non-attainment or maintenance status for one or more of the National Ambient Air Quality Standards (NAAQS)?	No, based on review of the EPA Greenbook. ²
Will the construction activities produce emissions that exceed de minimis thresholds (tons per year)?	NA
Will mitigation measures be used to capture blowdown ³ ?	Yes, all methane would be captured using cross compression technology during construction.
Does the system have the capability to reduce pressure on the segments to be replaced? If yes, what is the lowest psi your system can reach prior to venting?	No
Will project proponent commit to reducing pressure on the line to this psi prior to venting? Please calculate venting emissions based on this commitment and also provide comparison figure of venting emissions volume without pressure reduction/drawdown using calculation methods identified in the initial Tier 2 EA worksheet.	The existing system operates at between 30 and 275 pounds per square inch (PSI). Based on the size of the existing pipe, 11.4 thousand cubic feet (MCF) or 351 kg of methane would be vented during construction. However, methane would be captured using cross compression technology during construction.
Estimate the current leak rate per mile based on the type of pipeline material. Based on mileage of replacement and new pipeline material, estimate the total reduction of methane.	The existing leak rate is estimated at 16,978 kg/year. Replacement would result in a leak rate of 230 kg/year or a reduction of 16,748 kg/year. ⁴
<p>Conclusion:</p> <p>The project area is in Greenville and Laurens counties South Carolina which are designated by the EPA as in attainment for all National Ambient Air Quality Standards (NAAQS).</p> <p>No Action:</p> <p>Under the No Action alternative, existing and planned pipeline activities, including construction and maintenance activities, would continue unchanged. The project proponent would continue to use legacy bare steel leak prone pipe material. Under the No Action alternative, PHMSA estimates that 16,978 kg of methane</p>	

² <https://www.epa.gov/green-book/green-book-national-area-and-county-level-multi-pollutant-information>

³ Blowdown refers to the venting of natural gas in current facilities, in order to begin rehabilitation, repair, or replacement activities.

⁴ Leak rates are based on Pre-1990 Installation emission factors found in *Table 1 Average methane emission factors for natural gas pipelines (adopted from EPA GHG Inventory, Annex 3.6, Table 3.62)* in the November 9, 2022, PHMSA: Natural Gas Distribution Infrastructure Safety and Modernization Grant Program Programmatic Environmental Assessment, Tier 1 Nationwide Environmental Analysis.

would be released each year from the existing pipelines within the project area. The total methane emissions within the project area were extrapolated over 20 years to represent the continuation of methane release under the No Action alternative. This amounts to 339,560 kg of methane over a 20-year time frame. See Appendix B for the methane leak rate calculations.

Proposed Action:

The Proposed Action alternative would result in minor air quality impacts associated with construction activities. Pipeline blowdowns are typically necessary to ensure that construction and maintenance work can be conducted safely on depressurized natural gas facilities and pipelines. Venting methane is required when service is switched from the existing line to the newly constructed line, but the volume of vented gas can depend on the ability to reduce pressure on the pipe segment or other mitigation actions. LCPW would utilize methane capture technology to prevent the release of methane. Without methane capture measures, PHMSA estimates 11.4 MCF of methane (or 351 kg) would be vented into the atmosphere during construction. As described in the Tier 1 EA, methane leaks from natural gas distribution pipelines increase with age and are considerably higher for bare steel pipelines, as compared with plastic. Replacing leak prone pipe with newer, more durable materials would reduce leaks and methane emissions. Based on the current leak rate of the existing pipe within the project area, this project would reduce overall emissions by 16,748 kg of methane per year. This amounts to a reduction of 334,960 kg of methane over a 20-year time frame. See Appendix B for the methane reduction calculations. Therefore, it is PHMSA's assessment that the proposed project would provide a net positive benefit to air quality from the overall reduction of greenhouse gas emissions and that no indirect or cumulative impacts would result from the Proposed Action.

Mitigation Measures:

LCPW shall implement the following mitigation measures:

- Efficient use of on-road and non-road vehicles, by minimizing speeds and vehicles
- Minimizing excavation to the greatest extent practical
- Use of cleaner, newer, non-road equipment as practicable
- Minimizing all vehicle idling and at minimum, conforming with local idling regulations
- Ensuring that all vehicles and equipment are in proper operating condition
- On-road and non-road engines must meet EPA exhaust emission standards (40 CFR Parts 85, 86, and 89)
- Covering open-bodied trucks while transporting materials
- Watering, or use of other approved dust suppressants, at construction sites and on unpaved roadways, as necessary
- Minimizing the area of soil disturbance to those necessary for construction
- Minimizing construction site traffic by the use of offsite parking and shuttle buses, as necessary
- Cross-compression technology will be used to capture methane

Water Resources	
Question	Information and Justification
Are there water resources within the project area, such as wetlands, streams, rivers, or floodplains? If so, would the project temporarily or permanently impact wetlands or waterways?	Yes, wetlands and waterways (Reedy Fork, Little River, and Howard Branch) are located within the project area according to United States Fish and Wildlife (USFWS) National Wetland Inventory (NWI).
Under the Clean Water Act, is a Section 401 State certification potentially required? If yes, describe anticipated permit and how project proponent will ensure permit compliance.	No
Under the Clean Water Act, is a USACE Section 404 Permit required for the discharge of dredge and fill material? If yes, describe anticipated permit and how project proponent will ensure permit compliance.	No, USACE section 404 permit is not required.
Under the Clean Water Act, is an EPA or State Section 402 permit required for the discharge of pollutants into the waters of the United States? Is a Stormwater Pollution Prevention Plan (SWPPP) required?	Construction activities might exceed soil disturbance thresholds and a 402 permit would be required prior to construction.
Will work activities take place within a FEMA designated floodplain? If so, describe any permanent or temporary impacts and the required coordination efforts with state or local floodplain regulatory agencies.	Yes, based on review of FEMA National Flood Hazard Layer FIRMette map.
Will the proposed project activities potentially occur within a coastal zone ⁵ or affect any coastal use or natural resource of the coastal zone, requiring a Consistency Determination and Certification?	No, the project is not located within a coastal area.
<p>Conclusion:</p> <p>PHMSA reviewed NWI maps, as well as the FEMA National Flood Hazard Layer FIRMette map. Three water resources are located within the project area: Reedy Fork, Little River, and Howard Branch. Wetlands were identified on the NWI maps adjacent to the project area near the waterways. FEMA's FIRMette map indicated portions of the project area is located in a FEMA Zone AE, which is a special flood hazard areas and corresponds to the one percent annual chance of flooding. Additionally, PHMSA reviewed the NRCS soils survey which identified some soils within the project area as hydric. These hydric soils are located near the water crossings which supports the conclusion wetlands are located near the waterways. See Appendix C for water resource related documentation.</p> <p>No Action:</p> <p>Under the No Action alternative, the existing pipeline would remain in the current location and normal maintenance activities would continue without any impact anticipated to water resources. Minor impacts to waterways and wetlands could occur due to maintenance and repair.</p>	

⁵ The term "coastal zone" means the coastal waters (including the lands therein and thereunder) and the adjacent shorelands (including the waters therein and thereunder), strongly influenced by each other and in proximity to the shorelines of the several coastal states, and includes islands, transitional and intertidal areas, salt marshes, wetlands, and beaches.)

Proposed Action:

Where the pipeline crosses waterways, directional boring would be used to avoid impacts to water resources. At Howard Branch, entry and exit pits would be excavated within previously disturbed soils approximately 130 to 150 feet from the waterway. The excavation would take place within an existing gravel parking lot and next to a sidewalk along Howard Drive. The existing pipe that traverses over this waterway would be removed.

At Little River and Reedy Fork crossings wetland habitat is immediately adjacent to these waterways. All excavation associated with boring would take place 100 ft from the waterway, outside of potential wetland habitat within the mowed ROW. The existing pipeline at these waterways would be abandoned in place.

Based on the construction methods which would utilize boring or directional drilling, all work would take place outside of the designated FEMA Zone AE floodplain, avoiding potential impacts.

Based on information provided by the project proponent and a review of available information, PHMSA's assessment is that there would be no temporary or permanent impacts to water resources. The new pipeline placement and abandonment of the existing pipeline is not anticipated to cause any reasonably foreseeable indirect effects or cumulative effects to water resources as none are in the footprint of the proposed work. Therefore, it is PHMSA's assessment that there would be no adverse impacts to water resources.

Mitigation Measures:

LCPW shall implement the following mitigation measures:

- Project will avoid staging and laydown areas within wetlands or floodplains. Site will be restored to pre-construction contours.
- All water crossings will be conducted via directional boring at least 100 ft from waterways with entry and exit pits located within previously disturbed areas.
- Applicant will develop and implement a stormwater pollution prevention plan.
- Applicant will restore the construction area to pre-construction contours.

Groundwater and Hazardous Materials/Waste	
Question	Information and Justification
Does the project have potential to encounter and impact groundwater? If yes, describe potential impacts from construction activities.	Yes, groundwater runoff is possible during construction activities.
Will the project require boring or directional drilling that may require pits containing mud and inadvertent return fluids? If yes, describe measures that will be taken during construction activities to prevent impacts to groundwater resources.	Yes, directional drilling techniques would be utilized. Erosion control measures would be implemented to mitigate groundwater/mud runoff as described in the Stormwater Pollution Prevention plan. A groundwater management plan would be implemented.
Will the project potentially involve a site(s) contaminated by hazardous waste? Is there any indication that the pipeline was ever used to convey coal gas? If yes, PHMSA will work with the project	No

proponent for required studies.	
Does the project have the potential to encounter or disturb lead pipes or asbestos?	No potential to encounter or disturb lead pipes or asbestos.
<p>Conclusion:</p> <p>PHMSA reviewed EPA's EnviroAtlas⁶ to identify any brownfield properties, hazardous waste sites, and superfund sites. There are several brownfield properties near the project area but not within the construction limits. A high groundwater table exists within portions of the project area.</p> <p>No Action:</p> <p>Under the No Action alternative, pipes would remain in their current location and ongoing and routine maintenance activities would occur. Pipes would be replaced under failed circumstances. While there are no adverse impacts to groundwater anticipated by the No Action alternative, increased methane emissions are likely to occur if the leak prone pipes remain (EPA, PRO Fact Sheet No. 402⁷) and the risk of failure is higher among these types of pipes. Therefore, under the no action alternative, PHMSA anticipates an increased risk for the release of methane, both as leaks and during a pipeline failure, which could then result in ground disturbances from construction activities, potentially impacting groundwater.</p> <p>Proposed Action:</p> <p>Except for the pipe crossing Howard Branch, all of the existing gas line would be abandoned, in accordance with PHMSA requirements, and would be purged of natural gas and sealed on each end. The new gas lines would be installed at a depth of 36 inches below grade and would be installed by either directional drilling or cut and cover (trenching). All excavated trench materials would be stored on site and used to back fill, unless otherwise deemed unsuitable. In these cases, unsuitable soils would be hauled offsite and the trench would be backfilled with clean soils. All disturbed areas would be re-seeded or paved (as appropriate) and restored to preexisting conditions. Should groundwater be intercepted by construction activities, dewatering may be required during construction. In these cases, groundwater would be kept to just below the work area so that the proposed work to be completed would not be compromised.</p> <p>Where directional drilling would occur at stream crossings, LCPW would implement appropriate dewatering and erosion control measures. PHMSA's assessment is that there would be no adverse impacts to groundwater associated with the project. Additionally, there are no hazardous waste or brownfield, or superfund sites within the immediate project area that could be potentially impacted by the Proposed Action alternative. PHMSA has not identified any indirect or cumulative effects to groundwater or hazardous materials.</p>	
<p>Mitigation Measures:</p> <p>LCPW shall implement the following mitigation measures:</p> <ul style="list-style-type: none"> • A Stormwater Pollution Prevention plan will be developed and implemented to prevent groundwater/mud runoff. • An incident response plan will be developed to control and minimize impacts to sensitive resources. 	

⁷ Insert Gas Main Flexible Liners at <https://www.epa.gov/sites/default/files/2016-06/documents/insertgasmainflexibleliners.pdf#:~:text=Methane%20emissions%20reductions%20come%20from%20lower%20leakage%20rates,pipe%20and%20external%20corrosion%20in%20unprotected%20steel%20piping.>

- LCPW will develop and implement a groundwater management plan.

Soils	
Will all bare soils be stabilized using methods using methods identified in the initial Tier 2 EA worksheet? Will additional measures be required?	Yes, erosion and sediment control would be utilized during the project. All impacted areas would be restored to pre-construction contours. Soil disturbance associated with boring would be stabilized using seeding and erosion control material.
Will the project require unique impacts related to soils?	No, the project would not require unique impacts to soils.
<p>Conclusion:</p> <p>PHMSA reviewed the USDA, NRCS's web soil survey which indicates that the project area is comprised of a variety of soil types.⁸ Undisturbed soil is anticipated to be encountered throughout the project area.</p> <p>No Action:</p> <p>Under the No Action alternative, the existing pipes would remain in their current location and soils would remain in their current state and condition. Normal maintenance activities would occur, and pipes would be replaced under failed circumstances. Some soil disturbance would occur during emergency repairs and the affected areas would be restored upon completion. Under either scenario, no adverse impacts to soils would be anticipated under the No Action alternative.</p> <p>Proposed Action:</p> <p>The new gas lines would be installed at a depth of 36 inches below grade and by directional drilling. Little soil disturbance would occur. All disturbed areas would be re-seeded or paved (as appropriate) and restored to pre-existing conditions. Therefore, PHMSA's assessment is that there would be no adverse impact to soils resulting from the Proposed Action alternative. Additionally, there are no indirect or cumulative impacts anticipated as the LPCW would restore all areas to pre-construction conditions.</p>	
<p>Mitigation Measures:</p> <p>LCPW shall utilize best management practices, as appropriate, to control sediment and erosion during construction which may include silt fencing, check dams, and promptly covering all bare areas. All impacted areas shall be restored to pre-construction conditions.</p>	

⁸ <https://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>

Biological Resources	
Question	Information and Justification
Based on review of IPaC and NOAA Fisheries database, are there any federally threatened or endangered species and/or critical habitat potentially occurring within the geographic range of the project area? If no, no further analysis is required.	Yes, based on review of the USFWS's Information for Planning and Consultation (IPaC). ⁹ South Carolina state resources were also reviewed to identify potential state listed species.
Will the project impact any areas in or adjacent to habitat for Federally, listed threatened or endangered species or their critical habitat? If no, provide justification and avoidance measures. If yes, PHMSA will work with the project proponent to conduct necessary consultation with resource agencies.	No habitat would be impacted.
<p>Conclusion:</p> <p>The project would take place in a predominately urban area within previously disturbed areas or along roadsides. The only areas that contain vegetation and pervious surfaces are in residential backyards or vegetated buffer areas along the streets and near stream crossings. PHMSA requested an official species list through the USFWS's IPaC website. See Appendix D, Biological Resources, for the list of federally threatened, endangered, proposed endangered and candidate species. No critical habitat is within the project area. No additional state listed species were identified as potentially occurring within the project area.¹⁰</p> <p>No Action:</p> <p>Under the No Action alternative, existing conditions would remain, and normal maintenance activities would occur. The project area is in an urbanized environment and therefore has very limited biological resources present. Additionally, the project area does not contain suitable habitat and therefore, no impacts to biological resources would occur under the No Action alternative.</p> <p>Proposed Action:</p> <p>Because these areas are within mowed ROW that has been previously impacted (pipeline laid in the ground in close proximity to the location where new pipes would be bored) the immediate project area has very limited biological resources present. Additionally, the project area does not contain suitable or critical habitat for federally listed species. Therefore, in accordance with Section 7 of the Endangered Species Act¹¹ PHMSA's assessment is that the project would have no effect on federally listed species. Under Section 7(a)(4) of the Endangered Species Act (ESA), Federal agencies must confer with the USFWS if their action would jeopardize the continued existence of a proposed species. As a candidate species, the monarch butterfly receives no statutory protection under the ESA. The tricolored bat is proposed for listing and the project is unlikely to jeopardize this species existence. PHMSA's assessment is that the project would have no adverse impacts to state listed species</p>	

⁹ <https://ipac.ecosphere.fws.gov/>

¹⁰ <https://experience.arcgis.com/experience/af61ba156d054cc7b3e27d09a0c35c0f>

¹¹ 50 CFR § 402.02

or other biological resources and that there are no indirect or cumulative impacts anticipated as no impacts to habitat or species would occur.

Mitigation Measures:

There are no biological resource impacts, therefore no mitigative measures are necessary.

Cultural Resources	
Question	Information and Justification
Does the project include any ground disturbing activities, modifications to buildings or structures, or construction or installation of any new aboveground components?	Yes, ground disturbing activities would include excavations for service installs and HDDs. No modifications to buildings or structures, or construction or installation of new aboveground components would be performed.
Is the project located within a previously identified local, state, or National Register historic district or adjacent to any locally or nationally recognized historic properties? This information can be gathered from the local government and/or State Historic Preservation Office. ¹²	Yes, a portion of proposed pipe replacement is within the Laurens Historical District. There is pre-existing pipe in this location. The project work within the historic district is limited to service replacements.
Does the project or any part of the project take place on tribal lands or land where a tribal cultural interest may exist? ¹³	No known tribal lands or nearby tribal cultural interests
Are there any nearby properties or resources that either appear to be or are documented to have been constructed more than 45 years ago? ¹⁴ Does there appear to be a group of properties of similar age, design, or method of construction? Any designed landscapes such as a park or cemetery? Please provide photographs to show the context of the project area and adjacent properties.	Yes, properties appear to or are documented to have been constructed more than 45 years ago. In general properties are of a similar age, design, or construction method. No designed landscapes within project boundaries.
Has the entire area and depth of construction for the project been previously disturbed by the original installation or other activities? If so, provide any documentation of prior ground disturbances.	Yes, the entire project zone has been previously disturbed during the time of original pipe installation.
Will project implementation require removal or disturbance of any stone or brick sidewalk, roadway, or landscape materials or other old or unique features? Please provide photos of the project area that include	No removal or disturbance of sidewalk, roadway, or landscape materials with old or unique features would occur during the project.

¹² Many SHPOs have an [online system](https://www.nps.gov/subjects/nationalregister/state-historic-preservation-offices.htm) at <https://www.nps.gov/subjects/nationalregister/state-historic-preservation-offices.htm> that can tell you previously identified historic properties in your project area. The [National Register list](https://www.nps.gov/subjects/nationalregister/database-research.htm) at <https://www.nps.gov/subjects/nationalregister/database-research.htm> can also be accessed online.

¹³ The SHPO may have information on areas of tribal interest, or a good source is the [HUD TDAT website](https://egis.hud.gov/TDAT/) at <https://egis.hud.gov/TDAT/>.

¹⁴ Local tax and property records or historic maps may indicate dates of construction.

the roadway and sidewalk materials in the project and staging areas.	
<p>Conclusion:</p> <p>PHMSA must consider the impact of projects for which they provide funding on historic and archeological properties¹⁵ in accordance with Section 106 of the National Historic Preservation Act (Section 106). Pursuant to 36 CFR 800.4(a)(1), the Area of Potential Effects (APE) is defined as the geographic area(s) within which the Undertaking may directly or indirectly affect historic resources. Based on the proposed scope of work, PHMSA has delineated the APE for this project to encompass the existing ROW, which includes the limits of disturbance and any staging or access areas. See Appendix E, Cultural Resources, for the APE.</p> <p>No Action:</p> <p>Under the No Action alternative, existing conditions would remain, and normal maintenance activities would occur. These activities could result in ground disturbance that might affect archaeological resources.</p> <p>Proposed Action:</p> <p>U.S. DOT staff identified properties based on available information on previously identified historic properties in the APE, including the National Register of Historic Places (NRHP) database and data received from the South Carolina Division of Historical Resources. U.S. DOT staff also conducted research to determine if there are any previously unidentified properties within the APE that are 45 years of age or older and may be eligible for the NRHP. Two previously documented historic properties are located within the APE: the Laurens Cotton Mill Historic District, which is eligible for listing in the NRHP, and the Laurens Historic District, which is listed in the NRHP (the boundary extension for the Laurens Historic District is eligible for listing in the NRHP). South Carolina's archaeological site file database, SC ArchSite, was examined to identify the presence of previously recorded archaeological sites and previously conducted archaeological surveys within the APE. One previous survey was identified as intersecting parts of the Laurens APE, and one previously recorded archaeological site was identified adjacent to the APE. Background research revealed 12 archaeological sites and nine surveys within a half-mile of the APE, and one historic archaeological site and one archaeological survey within the APE. Examination of soils within the APE indicates suitable conditions for human habitation. Historic topographic maps and aerials indicate that historic archaeological deposits may be present in parts of the APE. While these factors may suggest a potential for archaeological deposits, the Undertaking will occur near or within previous road construction and utility installation corridors. Therefore, no archaeological survey is recommended at this time. See Appendix E, Cultural Resources for additional information about the APE and the properties identified.</p> <p>While the NRHP-eligible and NRHP-listed historic properties are located in the APE, the Undertaking will not alter any of the characteristics or contributing features of these historic properties that qualify them for inclusion in the NRHP in a manner that would diminish their integrity. Project work is limited to the replacement of existing pipelines in areas that demonstrate a low probability for intact significant archaeological resources. No work would take place within the known archeological sites.</p> <p>Based on this assessment, in accordance with 36 CFR Part 800.5, PHMSA has determined the Undertaking would have No Adverse Effect on historic properties.</p>	

¹⁵ Historic property means any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places (National Register) maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria.

A letter was sent on December 27, 2023 to the South Carolina State Historic Preservation Officer (SHPO), federally recognized tribes with a potential interest in the project area, and all consulting parties outlining the Section 106 process, including a description of the undertaking, delineation and justification of the APE, identification of historic properties and an evaluation and proposed finding of no historic properties affected. PHMSA requested comments on the Section 106 process, identification of historic properties, and proposed finding within 30 days of receipt of the letter. See Appendix E, Cultural Resources, for additional information.

Mitigation Measures:

If, during project implementation, a previously undiscovered archaeological or cultural resource that is or could reasonably be a historic property is encountered or a previously known historic property will be affected in an unanticipated manner, all project activities in the vicinity of the discovery will cease and LCPW will immediately notify PHMSA. This may include discovery of cultural features (e.g., foundations, water wells, trash pits, etc.) and/or artifacts (e.g., pottery, stone tools and flakes, animal bones, etc.) or damage to a historic property that was not anticipated. PHMSA will notify the State Historic Preservation Office and participating federally recognized tribes and conduct consultation as appropriate in accordance with 36 CFR § 800.13. Construction in the area of the discovery must not resume until PHMSA provides further direction.

In the event that unmarked human remains are encountered during permitted activities, all work shall halt and LCPW shall immediately contact PHMSA as well as the proper authorities in accordance with applicable state statutes to determine if the discovery is subject to a criminal investigation, of Native American origin, or associated with a potential archaeological resource. At all times human remains must be treated with the utmost dignity and respect. Human remains and associated artifacts will be left in place and not disturbed. No skeletal remains or materials associated with the remains will be photographed, collected, or removed until PHMSA has conducted the appropriate consultation and developed a plan of action. Project activities shall not resume until PHMSA provides further direction.

All work, material, equipment, and staging to remain within the road's existing right-of-way or utility easement or other staging areas as identified in the environmental documentation. If the scope of work changes in any way that may alter the effects to historic properties as described herein, the grant recipient must notify PHMSA, and consultation may be reopened under Section 106.

Section 4(f)	
Question	Information and Justification
Are there Section 4(f) properties within or immediately adjacent to the project area? If yes, provide a list of properties or as an attachment.	A portion of the project area traverses near River St. Park.
Will any construction activities occur within the property boundaries of a Section 4(f) property? If so, please detail these activities and indicate if these are temporary or permanent uses of the Section 4(f) property. Further coordination with PHMSA is required for all projects that might impact a Section 4(f) property.	No
<p>Conclusion:</p> <p>Section 4(f) of the US Department of Transportation (USDOT) Act of 1966 as amended (Section 4(f)) (49 U.S.C. § 303(c)); is a federal law that applies to transportation projects that require funding or other approvals by the</p>	

USDOT. Section 4(f) prohibits the Secretary of Transportation from approving any program or project which requires the use of any publicly owned land from a public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance, or any land from an historic site of national, state, or local significance unless:

- There is no feasible and prudent alternative to the use of the land;
- The program or project includes all possible planning to minimize harm to such park, recreational area, wildlife and waterfowl refuge, or historic site, resulting from such use.

PHMSA conducted a review of properties that are located within the Project Area to identify properties that qualify as Section 4(f). One Section 4(f) property, the River St. Park is located adjacent to the project area along River St.

No Action:

Under the No Action alternative, there would be no change to existing pipeline infrastructure pursuant to federal funding or approval authorized by the Program. Therefore, there would be no use of Section 4(f) property under the No Action alternative.

Proposed Action:

Under the Proposed Action alternative, construction activities would occur adjacent to River St Park, a 4(f) property; however, no work would take place within the boundary of the park. Access to the facility would remain throughout the duration of construction and no physical use of the park would occur. In addition, as described in the Noise section of this Tier 2 EA, no adverse impacts associated with construction noise have been identified that could affect the use of this property. Therefore, PHMSA's assessment is that there would be no use of Section 4(f) resources.

Mitigation Measures:

No mitigation measures are necessary.

Land Use and Transportation	
Question	Information and Justification
Will the full extent of the project boundaries remain within the existing right-of-way or easements? If no, please describe any right-of-way acquisitions or additional easements needed.	Yes, all work would be contained within existing ROW and easements.
Will the project result in detours, transportation restrictions, or other impacts to normal traffic flow or to existing transportation facilities during construction? Will there be any permanent change to existing transportation facilities? If so, what are the changes, and how would changes affect the public?	No detours or other transportation impacts would occur during construction. No permanent changes to existing transportation facilities.
Will the project interrupt or impede emergency response services from fire, police, ambulance or any other emergency or safety response providers? If so, describe any coordination that will occur with emergency response providers?	No, the project would not interrupt or impede emergency response services, however emergency response providers would be notified of construction work in the project area.
<p>Conclusion:</p> <p>The project is located in an urbanized area comprised of both commercial and residential areas. The only areas containing natural habitat are in residential yards or mowed vegetated buffer areas along the streets and near waterway crossings.</p> <p>No Action:</p> <p>Under the No Action alternative, the existing leak prone pipes would remain in their current location and no changes to land use would occur. Normal maintenance activities would occur, and pipes would be replaced under failed circumstances.</p> <p>Proposed Action:</p> <p>The new pipeline would be installed within the existing infrastructure ROW with all work occurring along the edge of streets within previously disturbed soils or within residential yards. The area would be restored to pre-existing condition and contours. Therefore, PHMSA has determined that there would be no permanent change to land use. The project is replacing/upgrading the existing pipe and would not include new pipeline to serve any additional areas. Additionally, PHMSA's assessment is that there are no indirect impacts anticipated as land use remains the same.</p> <p>During construction potential impacts include an increase in noise, dust, and transportation accessibility, as a result of construction and construction staging. Local and state regulations guide the transport of machinery, equipment, and automobiles around the construction areas. The project would not result in detours and the regular flow of traffic would be maintained. Therefore, because the work consists of the replacement of existing pipeline, would not convert any new areas into a different use and impacts would only occur during construction, PHMSA's assessment is that impacts related to land use are considered minor and temporary and there would be no cumulative impacts on land use or transportation.</p>	

<p>Mitigation Measures:</p> <p>A traffic control plan will be developed. LCPW will coordinate with emergency services and other agencies.</p> <p>LCPW will notify residents and businesses of parking impacts. Impacted areas will be restored to pre-construction conditions.</p>	
<p>Noise and Vibration</p>	
<p>Question</p>	<p>Information and Justification</p>
<p>Will the project construction occur for longer than a month at a single project location?</p>	<p>No, construction would not occur for longer than a month at any location.</p>
<p>Will the project location be in proximity (less than 50-ft.) to noise sensitive receivers (residences, schools, houses of worship, etc.)? If so, what measures will be taken to reduce noise and vibration impacts to sensitive receptors?</p>	<p>Yes, service replacement would occur within 50 feet of the building it serves.</p>
<p>Will the project require high-noise and vibration inducing construction methods? If so, please specify.</p>	<p>No</p>
<p>Will the project comply with state and local ordinances? If so, identify applicable ordinances and limitations on noise/vibration times or sound levels.</p>	<p>Yes, the project would comply with applicable ordinances and limitations to noise/vibration times or sound levels.</p>
<p>Will construction activities require large bulldozers, hoe ram, or other vibratory equipment within 20 feet of a structure?</p>	<p>No.</p>
<p>Conclusion:</p> <p>The ambient noise within the project area consists of a combination of environmental noise from road traffic, construction, industry, the built environment, population density and other sources. Several sensitive noise receptors are within the project area including businesses and residential properties.</p> <p>No Action:</p> <p>Under the No Action, the project would not move forward and the pipelines identified for replacement would not be replaced at this time. It is likely that these pipelines would be repaired or replaced due to a leak under emergency conditions and only in the immediately affected areas. If replacement or repairs occur under emergency conditions, noise from construction equipment would add to that of the current ambient noise and would be of a shorter duration.</p> <p>Proposed Action:</p>	

The pipeline replacement project would result in temporary construction noise impacts; however, no vibration impact should occur. Excavators, dump trucks, skid steers, and other similar construction equipment would be used to excavate a trench, lay pipe, compact soils and restore the area to pre-existing conditions and contours. The use of construction equipment would result in temporary noise impacts. Construction for the project is not anticipated to last any longer than one month at any single project location. Construction activities would occur in close proximity (less than 50-ft.) to noise sensitive receivers (residences, schools, houses of worship, etc.) in order to install service lines. While there would be a temporary increase in noise due to construction equipment, PHMSA's assessment is that these impacts would be minor and temporary. PHMSA considered the cumulative effects of this action with ongoing and planned transportation related construction projects that could cumulatively have an impact on the noise and vibration impacts. No other planned construction projects are occurring within the project area. Adhering to state and local noise ordinances would ensure the project does not cause cumulatively more than minor adverse noise or vibration impacts.

Mitigation Measures:

LCPW will adhere to state and local noise regulations. Activities will be limited to occur only during normal weekday business hours when noise restrictions are not in place. Proper maintenance of equipment mufflers will be performed.

Pipe is expected to be installed using HDD methods near the Fletcher Funeral and Cremation Services building. The property owner has been notified of upcoming construction activities and construction work will pause while the building is hosting a service.

Pipeline installation will occur near Elite Baseball and Softball Academy on Main Street in Fountain Inn SC. This business has been notified of upcoming construction plans.

LCPW will adhere to state and local noise regulations. Activities will be limited to occurring only during normal weekday business hours when noise restrictions are not in place. Proper maintenance of equipment mufflers will be performed. Construction noise is exempt from local noise ordinances during normal business hours (7 am to 9 pm).

LCPW will ensure project activities only occur only during weekday business hours (7AM to 9 PM).

Environmental Justice	
Question	Information and Justification
Using the EPA EJScreen or census data ¹⁶ , is the project located in an area of minority and/or low-income individuals as defined by USDOT Order 5610.2(c)? If so, provide demographic data for minority and/or low-income individuals within ½ mile from the project area as a percentage of the total population.	Yes, based on review of socioeconomic data using the EPAs EJScreen, the population residing within the general project area contains 30% in Laurens and 29% in Fountain Inn low income and 45% in Laurens to 47% in Fountain Inn minority populations.
Will the project displace existing residents or workers from their homes and communities? If so, what is the expected duration?	No
Will the project require service disruptions to homes and communities? If so, what is the expected communication and outreach plan to the residents and the duration of the outages?	Yes, outages are only expected on the day a natural gas service is tied over to a new natural gas main. The disruption to each resident would last between 30 minutes to an hour. LCPW would reach out to residents for outage schedule and duration.
Are there populations with Limited English Proficiency located in the project area? If so, what measures will be taken to provide communications in other languages?	Yes, the population within the project area contains 76% limited English-speaking populations. LCPW would make announcements of communications available in multiple languages.
<p>Conclusion:</p> <p>Executive Order (E.O.) 14096—"Revitalizing Our Nation's Commitment to Environmental Justice for All" was enacted on April 21, 2023. E.O. 14096 on environmental justice does not rescind E.O. 12898 – "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," which has been in effect since February 11, 1994 and is currently implemented through DOT Order 5610.2C. This implementation will continue until further guidance is provided regarding the implementation of the new E.O. 14096 on environmental justice.</p> <p>PHMSA reviewed socioeconomic data using the EPAs EJScreen and found the population residing within the project area contains 30% in Laurens and 29% in Fountain Inn low income and 45% in Laurens to 47% in Fountain Inn minority populations. The percentage of these populations is above the county average in Fountain Inn and below the county average in Laurens. See Appendix F, Environmental Justice, for socioeconomic data.</p> <p>No Action:</p> <p>Under the No Action alternative, existing and planned pipeline activities, including construction and maintenance activities, would continue unchanged. The project proponent would continue to use leak prone pipe material that could lead to safety incidents and service disruptions. Additionally, if a pipeline segment is not repaired or replaced prior to failure, it is likely to be associated with even more emissions under the No Action alternative. Thus, emissions benefits to the community associated with repairing or replacing existing pipelines with updated material would not be achieved and the incident risks and leaks would remain. There may be some degree of air pollution associated with construction activity for maintenance and repairs of existing pipelines</p>	

¹⁶ <https://www.census.gov/quickfacts/fact/table/US/PST045222>

under the No Action alternative, either through planned repair or replacement efforts or unplanned, emergency repairs or replacements.

Proposed Action:

The Proposed Action alternative would result in an overall reduction in GHG emissions. Construction activities would result in minor temporary air quality impacts. Noise impacts associated with construction are anticipated to be minor. Traffic impacts would be temporary and only minor disruptions would occur. However, removal of leak prone pipe would reduce leaks and the potential for incidents, resulting in an increase in pipeline safety across the system while also improving operation and reliability. Therefore, consistent with Executive Order 12898 and DOT Order 5610.2(c), PHMSA's assessment is that the project would not result in disproportionately high and adverse effects on minority or low-income populations, or other underserved and disadvantaged communities. PHMSA's assessment is that the project would have an overall beneficial effect on environmental justice populations and would not result in indirect or cumulative impacts.

Mitigation Measures:

LCPW will provide advanced notification of service disruptions and the construction schedule will be communicated to the community. Services will be maintained at temporary facilities if appropriate.

LCPW would make announcements of communications available in multiple languages.

Safety	
Question	Information and Justification
Has a risk profile been developed to describe the condition of the current infrastructure and potential safety concerns?	Yes, a risk profile has been developed to describe the condition of the current infrastructure and potential safety concerns in LCPW Distribution Integrity Management Program (DIMP).
Has a public awareness program been developed and implemented that follows the guidance provided by the American Petroleum Institute (API) Recommended Practice (RP) 1162?	Yes, a public awareness program has been developed and would be implemented by LCPW prior to and during construction.
Does the project area include pipes prone to leakage?	Yes
Will construction safety methods and procedures to protect human health and prevent/minimize hazardous materials releases during construction, including personal protection, workplace monitoring and site-specific health and safety plans, be utilized? If yes, document measures and reference appropriate safety plans.	Yes, LCPW Resolution No. 22-10 describes the safety procedures and plans that would be implemented during construction.
Has an assessment of the project been performed to analyze the risk and benefits of implementation?	Yes, an assessment of the project has been performed.
<p>Conclusion:</p> <p>The proposed project would replace leak prone pipe. Pipelines that are known to leak based on the material include cast iron, bare steel, wrought iron, and early vintage PVC plastics with known issues (PIPES Act of 2020). PHMSA establishes safety regulations for all pipelines (49 CFR Parts 190-199). In 2011, following major natural gas pipeline incidents, DOT and PHMSA issued a Call to Action to accelerate the repair, rehabilitation, and replacement of the highest-risk pipeline infrastructure. Among other factors, pipeline age and material are significant risk indicators. Pipelines constructed of cast and wrought iron, as well as bare steel, are among the pipelines that pose the highest risk. PHMSA continues to encourage legacy pipeline repair or replacement to increase the safety of these segments of the gas distribution systems. Pipeline incidents can result in death, injury, property damage, and environmental damage.</p> <p>No Action:</p> <p>Under the No Action alternative, existing leak prone pipes would remain in their current condition. Normal maintenance activities would occur, and pipes would be replaced under failed circumstances. Safety risks resulting from existing leak prone pipes remaining in place would persist until the existing pipes are replaced.</p> <p>Proposed Action:</p> <p>The proposed project is necessary to replace leak prone pipes. This replacement is in alignment with LCPW DIMP plan, increasing the overall safety of the community.</p> <p>The project would reduce the risk profile of existing pipeline systems prone to methane leakage and would also benefit disadvantaged rural and urban communities with the safe provision of natural gas. The project responds to the need to address the potentially unsafe condition of the natural gas distribution system of pipelines. The</p>	

repair, rehabilitation, or replacement of pipelines would be constructed in accordance with industry best practices and would comply with all local, state, and federal regulations, including those for safety.

The abandonment of the existing pipeline would be conducted in accordance with PHMSA requirements found in 49 CFR 192.727 and 195.402(c)(10). These requirements include disconnecting pipelines from all sources and supplies of gas, purging all combustibles and sealing the facilities left in place. These requirements for purging and sealing abandoned pipelines would ensure that the abandoned pipelines are properly purged and cleaned and pose no risk to safety in their abandoned state. Therefore, PHMSA's assessment is that this replacement project would improve the overall safety of Lauren and Fountain Inn infrastructure.

Mitigation Measures:

LCPW shall use standard construction safety methods and procedures; and conduct regular safety audits of crews performing work in the field and subsequent follow-up reporting and/or training, as required.

LCPW will incorporate public awareness programs and adhere to City of Laurens Commission of Public Works safety standards.

LCPW will use standard construction safety measures and procedures in addition to City of Laurens safety procedures.

LCPW shall ensure their DIMP procedures are updated as necessary, the work is constructed in accordance with industry best practices and the project will comply with all local, state, and federal regulations, including those for safety and any required inspections.

III. Public Involvement

On November 9, 2022, PHMSA published a Federal Register notice (87 FR 67748) with a 30-day comment period soliciting comments on the "Tier 1 Nationwide Environmental Assessment for the Natural Gas Distribution Infrastructure Safety and Modernization Grant Program." During the 30-day comment period, PHMSA received one comment letter from the APGA on various aspects of the program and air quality related analysis in the EA on December 9, 2022. This APGA letter is available for public review at the Docket No: PHMSA-2022-0123.¹⁷ PHMSA reviewed the comment letter and determined the comments were not substantial and did not warrant further analysis. One comment provided by the APGA indicated that the majority of construction methods used for pipe replacements would be replacement by open trenching and that some may want to abandon the existing pipe rather than removing it for replacement. Any departures from methods described in the Tier 1 will require additional documentation from the project proponent, as reflected in this Tier 2.

As part of this Tier 2, PHMSA is soliciting public comments through a public comment period. This Tier 2 EA is available on PHMSA's website where comments can be submitted to the contact noted below. PHMSA will accept public comments for 30 days on this Tier 2 EA. PHMSA will consider comments received and incorporate them in the decision-making process. Consultation with appropriate agencies on related processes, regulations, and permits is ongoing. Please submit all comments to: PHMSABILgrantNEPAcomments@dot.gov and reference NGDISM-FY22-EA-2023-02 in your response.

¹⁷ <https://www.regulations.gov/document/PHMSA-2022-0123-0002/comment>

Appendix A

Project Map



LAURENS CPW NATURAL GAS
REHABILITATION- PHASE 5

REDACTED

Appendix B
Air Quality Analysis

Table 1 Average methane emission factors for natural gas pipelines (adapted from EPA GHG Inventory, Annex 3.6, Table 3.6-2)

Pipeline Material	Pre-1990 Installation (kg/mile)	1990-2020 Installation (kg/mile)	Average Rate (kg/mile/year)
Cast Iron	4,597.40	1,157.30	2,877.35
Unprotected steel	2,122.30	861.3	1,491.80
Protected steel	59.1	96.7	77.90
Plastic	190.9	28.8	109.85

Table 2 No Action Leak Rate

Pipeline Material Type	Average Rate (kg/mile/year)	Miles	Current Methane Leak Rate (kg/year)
Unprotected steel	2,122.30	8	16978
Total Annual Methane Leak Rate			16978
20-year Methane Emissions			339560

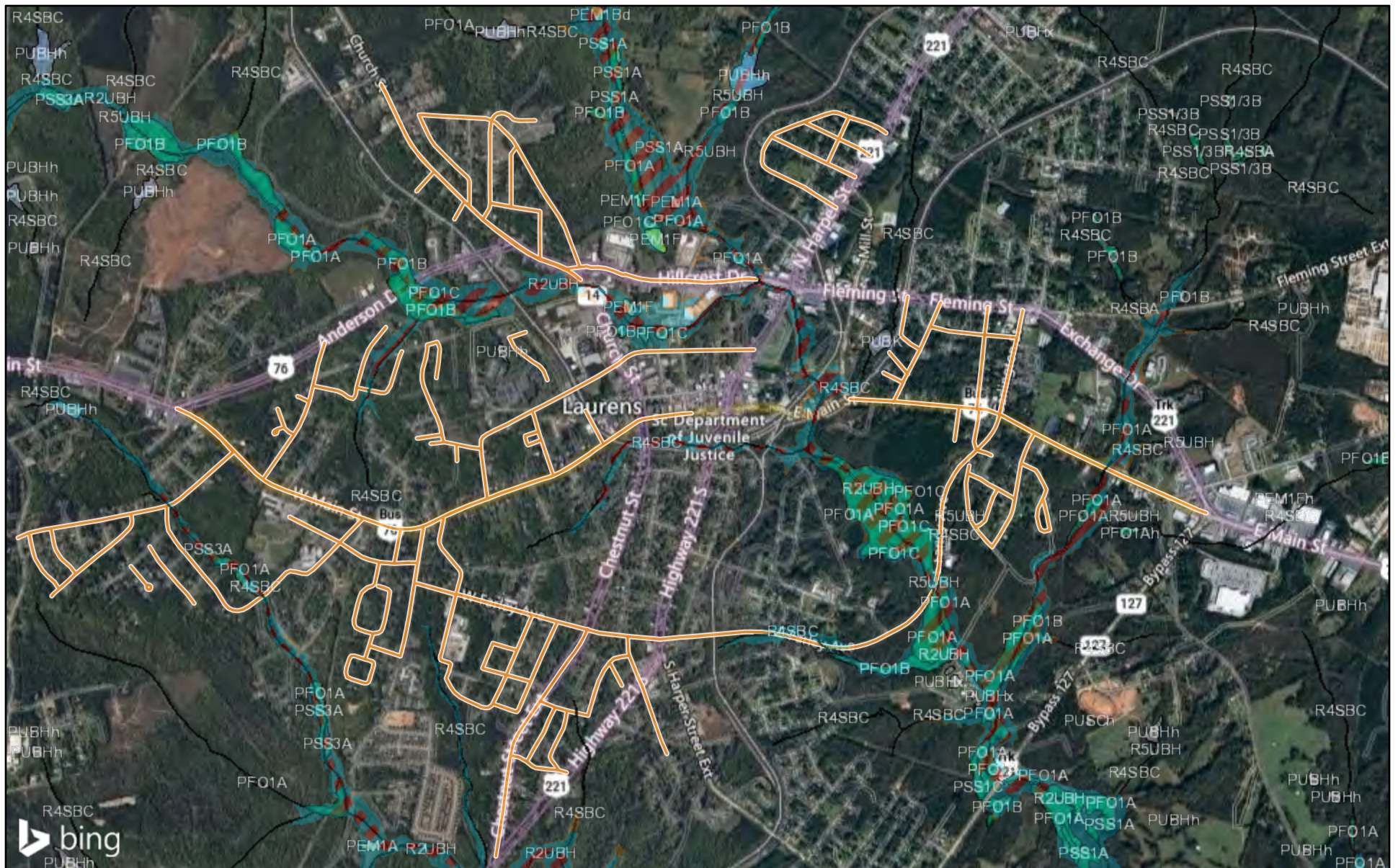
Table 3 Proposed Action Leak Rate

Pipeline Material Type	Average Rate (kg/mile/year)	Miles	New Methane Leak Rate (kg/year)
Plastic	28.8	8	230
Annual Methane Reduction			16748
20-year Methane Reduction			334960

Appendix C

Water Resources


Water Resources



December 1, 2023


Flood Hazard Zones


 1% Annual Chance Flood Hazard


 Regulatory Floodway **Special Floodway**

Area of Undetermined Flood Hazard

0.2% Annual Chance Flood Hazard


 Future Conditions 1% Annual Chance Flood Hazard


 Area with Reduced Risk Due to Levees


 Area With Reduced Risk Due to

Wetlands

 Estuarine and Marine Deepwater

 Estuarine and Marine Wetland

 Freshwater Emergent Wetland

 Freshwater Emergent Wetland

 Freshwater Forested/Shrub Wetland

 Freshwater Pond

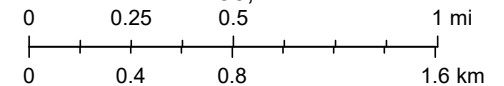
 Lake

☐ EARS
☐ Other

Other

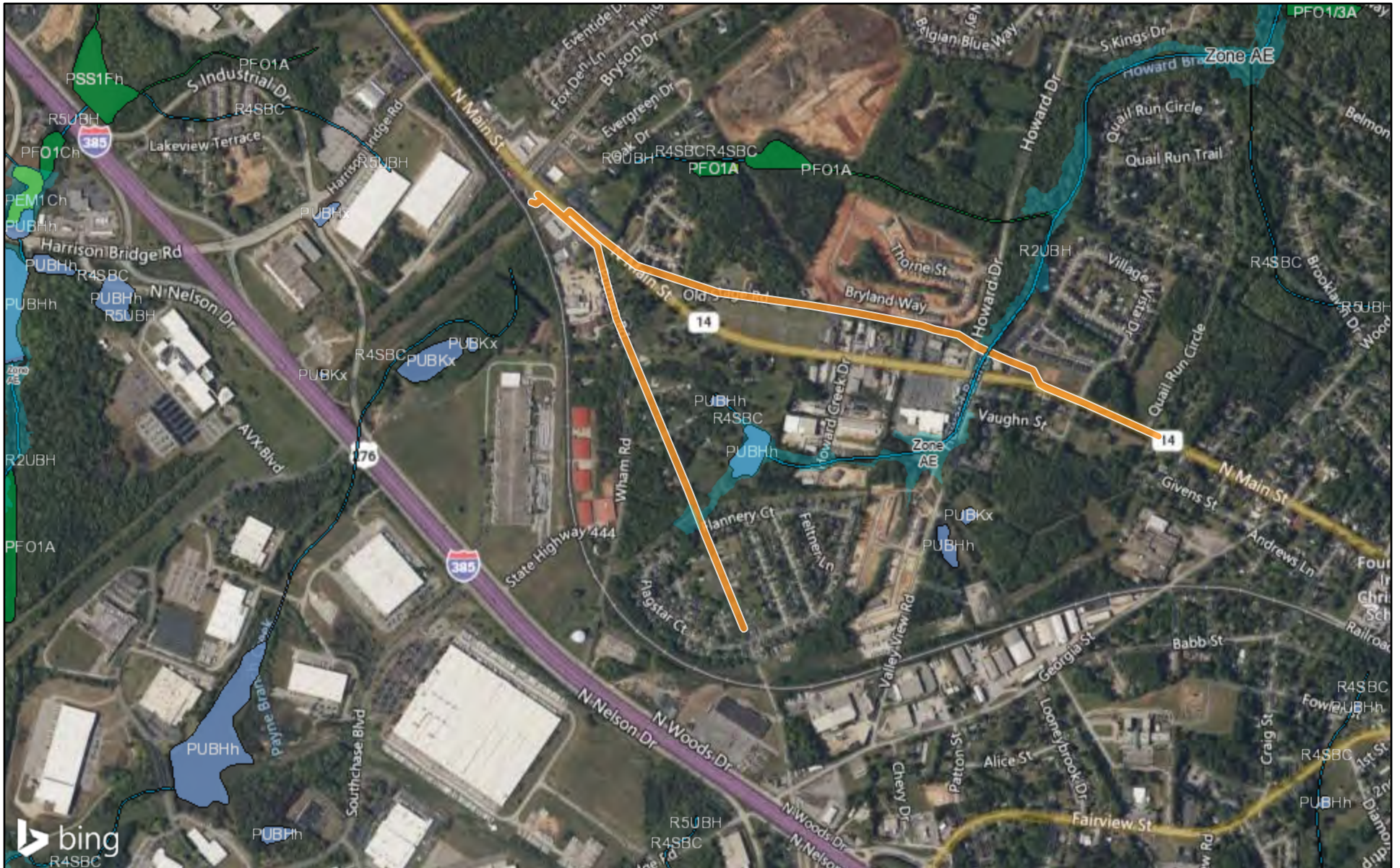
■ Riverine
■ project area

1:36,112



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wetlands_team@fws.gov, © 2023 Microsoft Corporation © 2023 Maxar

Water Resources



December 1, 2023

Flood Hazard Zones

- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazard

■ 0.2% Annual Chance Flood Hazard

- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee
- Area with Risk Due to Levee

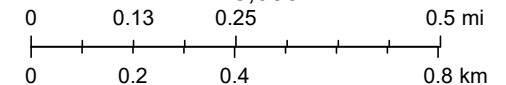
Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland

■ Freshwater Pond

- Lake
- Other
- Riverine
- project area

1:18,056



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Appendix D

Biological Resources



United States Department of the Interior

FISH AND WILDLIFE SERVICE

South Carolina Ecological Services
176 Croghan Spur Road, Suite 200
Charleston, SC 29407-7558
Phone: (843) 727-4707 Fax: (843) 727-4218



In Reply Refer To:
Project Code: 2024-0037613
Project Name: Laurens Pipeline Replacement

January 18, 2024

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed, and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through IPaC by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at: <https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf>

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see [Migratory Bird Permit | What We Do | U.S. Fish & Wildlife Service \(fws.gov\)](#).

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see <https://www.fws.gov/library/collections/threats-birds>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/partner/council-conservation-migratory-birds>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

South Carolina Ecological Services

176 Croghan Spur Road, Suite 200

Charleston, SC 29407-7558

(843) 727-4707

PROJECT SUMMARY

Project Code: 2024-0037613

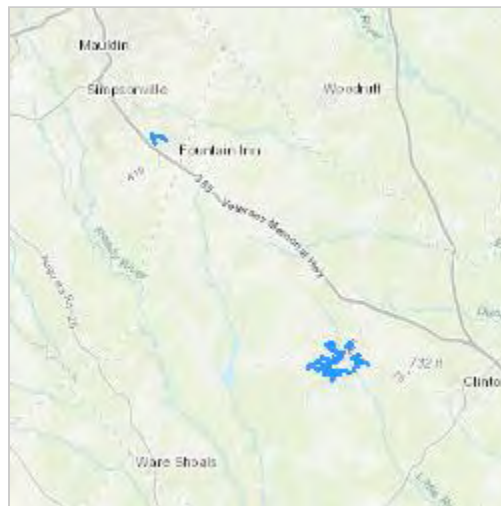
Project Name: Laurens Pipeline Replacement

Project Type: Pipeline - Onshore - Maintenance / Modification - Below Ground

Project Description: The Proposed Action would replace approximately eight miles of pipeline in various locations within Laurens and Fountain Inn South Carolina. The existing mains in the project area, consisting of bare or poorly coated steel, would be replaced with polyethylene (PE) mains. Bare steel service lines and meters would also be replaced throughout the project area that serves residents and businesses. The new pipe would be installed using horizontal directional drilling (HDD) with excavation at entry and exit points. A majority of the new pipeline would be installed within 3 to 5 ft of the existing gas lines at a depth of approximately 36 inches. All work would take place within existing right-of-way (ROW) or easements.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@34.70015935,-82.21139074053389,14z>



Counties: Greenville and Laurens counties, South Carolina

ENDANGERED SPECIES ACT SPECIES

There is a total of 11 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Tricolored Bat <i>Perimyotis subflavus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10515	Proposed Endangered

BIRDS

NAME	STATUS
Red-cockaded Woodpecker <i>Picoides borealis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7614	Endangered

REPTILES

NAME	STATUS
Bog Turtle <i>Glyptemys muhlenbergii</i> Population: U.S.A. (GA, NC, SC, TN, VA) No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6962	Similarity of Appearance (Threatened)

INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

FLOWERING PLANTS

NAME	STATUS
Bunched Arrowhead <i>Sagittaria fasciculata</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1720	Endangered
Dwarf-flowered Heartleaf <i>Hexastylis naniflora</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2458	Threatened
Mountain Sweet Pitcher-plant <i>Sarracenia rubra ssp. jonesii</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4283	Endangered
Small Whorled Pogonia <i>Isotria medeoloides</i> Population: No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1890	Threatened
Swamp Pink <i>Helonias bullata</i> Population: No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4333	Threatened
White Fringeless Orchid <i>Platanthera integrilabia</i> Population: No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1889	Threatened

LICHENS

NAME	STATUS
Rock Gnome Lichen <i>Gymnoderma lineare</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3933	Endangered

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

Agency: Pipeline and Hazardous Materials Safety Administration

Name: Travis Mast

Address: 55 Broadway

City: Cambridge

State: MA

Zip: 01452

Email: travis.mast@dot.gov

Phone: 6174943782

Appendix E

Cultural Resources



State Historic Preservation Office

South Carolina Department of Archives and History
8301 Parklane Road | Columbia, SC | 29223
scdah.sc.gov

SECTION 106 PROJECT REVIEW FORM

Section 106 of the National Historic Preservation Act, and the [implementing regulations at 36 CFR 800](#), requires the South Carolina State Historic Preservation Office (SHPO) to review all projects/undertakings that are federally funded, licensed, permitted, or assisted. The responsibility for preparing review documentation pursuant to 36 CFR 800.11, including the identification of historic properties and the assessment of effects resulting from the undertaking, rests with the federal agency or its delegated authority (including applicants). Consultation with the SHPO is NOT a substitution for consultation with appropriate Native American tribes or other participants who are entitled to comment on the Section 106 process (per 36 CFR 800.2).

For guidance regarding this Form or the Section 106 review process, please visit our [Review and Compliance Program website](#).

STATUS OF PROJECT (check one)

- ☐ Federal Undertaking Anticipated (You are applying for Federal assistance)
- ☐ Federal Undertaking Established (You have received Federal assistance)
- ☐ Due Diligence Project (No anticipated Federal assistance)
- ☐ Additional Information for Previous Project Submission (SHPO Project No. _____)

GENERAL INFORMATION

1. Project Name:

2. City/Town:

3. County:

4. Federal Agency (providing funds, license, permit, or assistance):

5. Agency Contact Name:

Email:

Address:

Phone:

6. Federal Agency Delegated Authority (includes Applicants):

Delegated Authority Contact Name:

Email:

Address:

Phone:

7. Consultant for the Agency/Delegated Authority:

Consultant Contact Name:

Email:

Address:

Phone:

PROJECT DESCRIPTION

1. Indicate the type of project (new construction, rehabilitation, replacement/repair, demolition, relocation, acquisition, infrastructure, other) and provide a detailed description of the proposed project, including related activities (staging areas, temporary roads, excavations, etc.), which will be carried out in conjunction with the project. Attach additional pages if necessary. If a detailed scope of work is not available yet, please explain and include all preliminary information:
2. Describe the length, width, and depth of all proposed ground disturbing activities, as applicable (defined as any construction activity that affects the soil within a project area, including excavating, digging, trenching, drilling, augering, backfilling, clearing, or grading):
3. Will this project involve phases of construction? If so, please describe the work to be conducted under each phase.
4. How many acres are in the project area? For building rehabilitation projects, list the building's approximate square footage.
5. Describe the current land use and conditions within and immediately adjacent to the project area (e.g. farmland, forest, developed, etc.) as well as prior land use and previous disturbances within and immediately adjacent to the project area (e.g. grading, plowing, mining, timbering, housing, commercial, industrial, road or other construction, draining, etc.).

DETERMINING THE AREA OF POTENTIAL EFFECTS (APE)

All projects/undertakings have an APE. The APE is the geographic area or areas within which a project/undertaking may directly or indirectly cause changes in the character or use of historic properties, if such properties exist. These changes can be direct (physical) or indirect (visual, noise, vibration) effects. The APE varies with the project type and should factor in the setting, topography, vegetation, existing and planned development, and orientation of resources to the project. For example, if your project includes:

- Rehabilitation, demolition, or new construction then your APE might be the building or property itself and the surrounding properties with a view of the project.
- Road/Highway construction or improvements, streetscapes, etc., then the APE might be the length of the project corridor and the surrounding properties/setting with a view of the project.
- Above-ground utilities, such as water towers, pump stations, retention ponds, transmission lines, etc., then your APE might be the area of ground disturbance and the surrounding properties/setting with a view of the project.
- Underground utilities, then your APE might be the area of ground disturbance and the setting of the project.

6. Provide a written description of the Area of Potential Effect (APE).

IDENTIFICATION OF HISTORIC PROPERTIES

A historic property is defined as any prehistoric or historic district, site, building, structure, or object listed in or eligible for listing in the National Register of Historic Places (NRHP).

7. Is the project located within or adjacent to a property or historic district listed in or eligible for listing in the NRHP?

☐ YES ☐ NO If yes, provide the name of the property or district:

8. Are there any buildings or structures that are 50 years old or older within the project APE?

☐ YES ☐ NO If yes, provide approximate age:

9. Are any of the buildings or structures in Question 8 listed in or eligible for listing in the NRHP?

☐ YES ☐ NO If yes, identify the properties by name, address, or SHPO site survey number. If no, provide an explanation as to why the properties are not eligible for the NRHP.

10. List all historical societies, local governments, members of the public, Indian tribes, and any other sources consulted in addition to the SHPO to identify known and potential historic properties and note any comments received.

11. Does the landowner know of any archaeological resources found within the APE?

☐ YES ☐ NO ☐ DO NOT KNOW If yes, please describe:

12. Has a cultural resources and/or a historic properties identification survey been conducted in the APE?

☐ YES ☐ NO ☐ DO NOT KNOW If yes, provide the title, author, and date of the report(s):

13. Based on the information contained in questions 7 – 12, please check one finding:

☐ Historic Properties are present in the APE

☐ Historic Properties are not present in the APE

ASSESSMENT OF PROJECT EFFECT

PLEASE CHOOSE ONE DETERMINATION:

☐ No Historic Properties Affected (i.e., none are present or they are present but the project will have no effect upon them)

☐ No Adverse Effect on historic properties (i.e., historic properties are present but will not be adversely effected)

☐ Adverse Effect on historic properties (i.e., historic properties are present and will be adversely effected)

☐ Due Diligence Project (An effect determination does not apply due to no federal involvement)

Please explain the basis for your determination. If No Adverse Effect or Adverse Effect, explain why the Criteria of Adverse Effect (found at [36 CFR 800.5\(a\)\(1\)](#)) were found not applicable, or applicable, including any conditions on the project to avoid or minimize potential adverse effects, or efforts taken to avoid or minimize potential adverse effects.

SUBMITTAL CHECKLIST -- Did you provide the following documentation?

A completed Section 106 Project Review Form:

- The Form must be completed in its entirety, as it is not the SHPO's responsibility to identify historic properties or to make a determination of effect of the undertaking on historic properties.
- The appropriate federal agency information must be indicated on the Form. Contact the federal agency requiring consultation with the SHPO for this information. For US Housing and Urban Development projects under 24 CFR 58, the local government is the federal agency/responsible entity.
- Include email contact information for all parties that are to receive our response via email. We no longer respond via mailed hard copy, unless requested.
- One (1) Project Review Form may be utilized for batching undertakings that are duplicative in scope and within geographic areas no larger than a single county.
- The Form is a fillable PDF, but you may also print and complete by hand. A double-sided print is acceptable.

Map(s) indicating:

- The precise location of the project and extent of the Area of Potential Effect (APE), not too zoomed in or out in scale.
- Include a subscriber or public view SC ArchSite (GIS) map indicating the precise location of the project and extent of the APE. [SC ArchSite](http://www.scarchsite.org/default.aspx) is an online inventory of all known cultural resources in South Carolina. SC ArchSite can be directly accessed at <http://www.scarchsite.org/default.aspx>.
- In urban areas, a detailed city map and/or parcel map.

Current, high resolution color photographs (2 photos max per page) illustrating:

- For all projects, views to and from the overall project location and extent of the Area of Potential Effect (APE), showing the relationship to adjacent buildings, structures, or sites.
- For new construction or projects including ground disturbing activities, ground and/or aerial views documenting previous ground disturbance and existing site conditions.
- For building or structure rehabilitation projects, full views of each side (if possible), views of important architectural details, and views of areas that will be affected by proposed alterations or rehabilitation work to the exterior or interior.
- Photographs must describe or label the views presented, or be keyed to a site map.
- Black and white photocopied, unclear, thumbnail, or obstructed view photographs are not acceptable.

Project plans (if applicable and available) including:

- Scopes of work and/or project narratives
- Site plans or sketches (existing vs proposed)
- Project drawings and specifications for work on a historic building or structure
- Elevations

Our ability to complete a timely project review largely depends on the quality and detail of the documentation submitted. If insufficient documentation is provided we may need to request additional materials, which will prolong the review process. For complex projects, some may find it advantageous to hire a [preservation professional](#) with expertise in history, architectural history and/or archaeology.

NOTE: If the project involves the rehabilitation of a building or structure listed in or eligible for listing in the National Register of Historic Places, please complete and submit the [Historic Building Supplement](#) in addition to this Form.

When planning to submit a project for review, please remember that our office has 30 calendar days per regulations from the date of receipt to review federal projects and 45 days per SHPO policy to review due diligence projects.

Please **DO NOT** send Project Review Forms by email or fax. We recommend that you use certified mail, FedEx, or UPS to determine if your project has been delivered.

Please send this completed Form along with supporting documentation to:

Review & Compliance Program, SC Department of Archives & History, 8301 Parklane Road, Columbia, SC 29223



U.S. Department
of Transportation
**Pipeline and Hazardous
Materials Safety
Administration**

1200 New Jersey Avenue, SE
Washington, DC 20590

December 27, 2023

W. Eric Emerson, Ph.D.
Agency Director, State Historic Preservation Officer
South Carolina Historic Preservation Office
8301 Parklane Road
Columbia, SC 29223

Section 106 Consultation: PHMSA Pipeline Replacement Project in Laurens, South Carolina

Grant Recipient: Laurens Commission of Public Works

Project Location: City of Laurens and City of Fountain Inn, South Carolina

Dear Dr. Emerson:

The Pipeline and Hazardous Materials Safety Administration (PHMSA) provides funds authorized under the Natural Gas Distribution Infrastructure Safety and Modernization Grant Program. PHMSA proposes to provide funds to Laurens Commission of Public Works (Grant Recipient) for the replacement of pipeline (Undertaking). PHMSA is initiating consultation for the above referenced Undertaking in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended, and the associated implementing regulations, 36 CFR Part 800 (Section 106).

Project Description/Background

The Undertaking will take place at various locations within the City of Laurens and the City of Fountain Inn in South Carolina. The undertaking will replace 8 miles of bare or poorly coated steel pipe with polyethylene (PE) mains by means horizontal directional drilling (HDD) with excavation at entry and exit points. Bare steel service lines and meters will also be replaced throughout the project area. The only aboveground components of the Undertaking will be installing service risers to existing meters. While service lines will be replaced and these may extend outside the right-of-way (ROW), the entry points for the HDD for service lines will all be within the ROW. The Undertaking does not involve any modification to existing buildings or structures. All work will take place within the South Carolina Department of Transportation ROW or existing utility easements. One section of pipe that crosses Howard Branch stream in Fountain Inn will be removed and both ends capped. The remainder of the existing pipeline will be abandoned in place. Abandonment of the existing pipeline (versus excavation and removal) will minimize ground disturbance.

All natural gas main replacements proposed are within highly to moderately developed urban areas. These areas have a mix of commercial/industrial use. These urban areas have older utility infrastructure (water, sewer, communications, and overhead power lines) that are frequently being repaired or replaced. Replacement gas lines will be located within 3 to 5 feet (ft.) laterally on the opposite side of the existing pipeline, further away from the road. The total depth of excavation is 36 inches (in.) below grade. No trenching is required to install the pipeline, however the trench to set the bore will be a minimum of 2 ft.

by 2 ft. not to exceed 4 ft. by 4ft. and excavations will be entirely under existing pavement, usually under sidewalks.

The staging areas for the project have not been identified. Project location maps are enclosed in **Attachment A**. Photographs showing the overall character of the project areas are included in **Attachment B**.

Area of Potential Effects (APE)

Pursuant to 36 CFR 800.4(a)(1), the Area of Potential Effects (APE) is defined as the geographic area(s) within which the Undertaking may directly or indirectly affect historic resources. Due to the scale and nature of the Undertaking, which is limited to the replacement of pipelines within existing ROW, PHMSA has delineated the APE for this Undertaking to encompass the existing ROW in the areas proposed for replacement, which includes the limits of disturbance. The APE extends to the depth of proposed ground disturbance of up to 36 in. below grade. The APE includes two major sections, one portion in Laurens (Laurens County) and one in Fountain Inn (Greenville County). The Undertaking does not have the potential to cause visual or audible effects after the completion of construction. The existing ROW encompasses various roads, signage, sidewalks, and grassy areas throughout the Cities of Laurens and Fountain Inn. The APE is shown on the maps in **Attachment A**.

Identification and Evaluation

To identify historic properties in the APE, individuals who meet the Secretary of the Interior's (SOI) Professional Qualification Standards reviewed available information on previously identified historic properties in the APE, including the National Register of Historic Places (NRHP) database and data gathered from the South Carolina ArchSite (SC ArchSite) database. SOI-qualified individuals also conducted research to determine if there are any previously unidentified properties within the APE that are 45 years of age or older and may be eligible for the NRHP.

Historic Architecture

Two previously documented historic properties are located within the APE: the Laurens Cotton Mill Historic District, which is eligible for listing in the NRHP, and the Laurens Historic District, which is listed in the NRHP (the boundary extension for the Laurens Historic District is eligible for listing in the NRHP). The location of both districts is shown on the APE map in **Attachment A**.

The Laurens Cotton Mill Historic District is composed of 163 properties: 152 homes, four commercial buildings, and the mill complex. The Laurens Mill complex remains largely intact with the mill building and smokestack, three original mill store buildings and an intact village. The main building is a five-story brick, L-shaped structure, with two brick towers on the west (main) façade and two towers on the east façade. The mill complex retains a high degree of historic integrity and the resources convey the importance of cotton production to the City of Laurens as well as the culture surrounding the mill. It is eligible for listing in the NRHP as a district under Criterion C for architecture and Criterion A for its association with local industry.

The contributing properties within the Laurens Historic District were built between 1880 and 1940. The district includes the public square with the courthouse and surrounding commercial buildings as well as significant residential sections of the City of Laurens. The district is an intact collection of buildings of nineteenth and early twentieth century vernacular architectural design mixed with simple high-style examples. The buildings in the district display architectural styles such as Greek Revival, Gothic Revival, Queen Anne, Colonial Revival, Romanesque Revival, Bungalow, Craftsman, Spanish Colonial Revival, and Neo-Classical. The Laurens Historic District is significant under Criterion C for architecture and Criterion A in the areas of agriculture, transportation, and economics for its ability to convey the residential

development and economic growth following the construction of railroads through the City in the late-nineteenth century.

Due to the scale and nature of the Undertaking, which is limited to the replacement of pipelines within existing ROW, the identification effort for previously unidentified above-ground historic properties focused on identifying properties that could experience diminished integrity as a result of the Undertaking. A review of the APE found no additional above-ground resources that have the potential to be affected by the Undertaking.

Archaeology

South Carolina's archaeological site file database, SC ArchSite, was examined to identify the presence of previously recorded archaeological sites and previously conducted archaeological surveys within the APE. As a result of background research, one previous survey was identified as intersecting parts of the Laurens APE, and one previously recorded archaeological site was identified adjacent to the APE. The survey intersecting the portions of the APE was conducted in 2003 for SCDOT for proposed improvements to Stagecoach Road but no sites were identified within or in close proximity to the APE. Site 38LU0007 is associated with an NRHP-listed historic house site called the Octagon House, which is adjacent to but outside the APE.

According to South Carolina state standards and guidelines, a half-mile search radius was also examined for previously recorded archaeological sites and surveys (Table 1 and 2). Within a half-mile but outside of the APE, nine archaeological surveys have been conducted and 12 previously recorded archaeological sites were identified. Of the 12 sites within a half-mile of the APE, site 38LU0004, the Laurens County Courthouse, is listed in the NRHP and was recorded as an archaeological site the same year. Two other sites are potentially eligible (38LU0208 and 38LU0210), and nine are not eligible (39GR0143, 38GR0144, 38GR0188, 38GR038538LU0209, 38LU0521, 38LU0522, 38LU00523, and 38LU00524).

Table 1. Previously Conducted Archaeological Surveys within a Half-Mile of the APE

Report	Citation	Agency	Distance to APE
Archaeological/ Historical Survey US 221 Relocation City of Laurens	Payne and Hulan 1986	SCDOT	75 m
An Archaeological Survey of I-385 Interchange Improvements in Simpsonville and Fountain Inn	Styer 1991	SCDOT	490 m
Addendum to: An Archaeological Survey of I-385 Interchange Improvements in Simpsonville and Fountain Inn	Styer 1992	SCDOT	450 m
Intensive Archaeological Survey of the US 76/S-53 Intersection Improvement	Roberts 1996	SCDOT	45 m
A Historic Resources Survey of Fountain Inn, SC	Harvey 1999	SCSHPO	85 m
<i>Intensive CR Survey of the Proposed Stagecoach Road (S-114) Improvements</i>	<i>Roberts 2003</i>	<i>SCDOT</i>	<i>Intersecting part of the APE</i>
CR Survey of the Proposed Bridge Replacement on US 221 over Burnt Mill Creek	Sheffield 2004	SCDOT	40 m
Phase I archaeological Survey Proposed Wal-Mart Super Center #1130-01	Andrews 2006	USACE	145 m

Report	Citation	Agency	Distance to APE
Duncan Creek 100kV Transmission Line Archaeological Survey	Trinkley 2014	RUS	640 m
Cultural Resources Survey of Heritage Crossing Development Project	Pope et al. 2019	USACE	520 m

Table 2. Previously Recorded Archaeological Sites within a Half-Mile of the APE

Archaeological Site	Site Type	NRHP Eligibility	Distance from APE
38GR0143	Historic stone terrace	Not Eligible	560 m
38GR0144	Historic ford and foot bridge	Not Eligible	730 m
38GR0188	Precontact lithic scatter	Not Eligible	470 m
38GR0385	Historic artifact scatter	Not Eligible	780 m
38LU0004	Historic Laurens County Courthouse	Listed	78 m
38LU0007	<i>Historic house</i>	<i>Listed</i>	<i>Adjacent to the APE</i>
38LU0208	Historic artifact scatter and tenant house site	Unevaluated	120 m
38LU0209	Historic warehouse	Not Eligible	125 m
38LU0210	Historic factory and lumber mill	Unevaluated	200 m
38LU0521	Precontact lithic scatter	Not Eligible	175 m
38LU0522	Historic artifact scatter	Not Eligible	610 m
38LU0523	Historic artifact scatter	Not Eligible	380 m
38LU0524	Pre-contact lithic scatter	Not Eligible	350 m

An examination of Web Soil Survey data within the APE reveals 12 soil types within the APE. These types, along with their drainage class, slope, and APE percentage are detailed in Table 3. Typically slopes greater than 15 percent are not suitable for human occupation, and soil types within the APE vary from 0 to 40 percent slope. Only four soil types within the APE contain slopes greater than 15 percent, including the Wilkes soils which exceed the 15 percent threshold entirely. The APE is comprised of nearly all well drained soils indicating suitable conditions for human habitation in both the pre-contact and historic periods. Proximity to major waterways generally indicates a suitable environment for both precontact and historic human activity; however, topographic maps reveal that much of the APE is not surrounded by major waterways.

Table 3. Soil Types within the APE

Map Unit Name	Drainage Class	Slope	Percent of APE
<i>GREENVILLE COUNTY</i>			
Appling sandy loam	Well drained	2-6 percent	.90
Cecil sandy loam	Well drained	2-6 percent	3.20
Cecil sandy loam	Well drained	6-10 percent	1.50
Cecil clay loam	Well drained	6-10 percent	.50
Wehadkee soils	Poorly drained		.50
<i>LAURENS COUNTY</i>			
Cartecay-Toccoa complex	Somewhat poorly drained	0-2 percent	0.40

Map Unit Name	Drainage Class	Slope	Percent of APE
Cecil sandy loam	Well drained	2-6 percent	42.9
Cecil sandy loam	Well drained	6-10 percent	22.2
Cecil-Cataula complex	Well drained	10-15 percent	3.60
Cecil sandy clay loam	Well drained	2-6 percent	4.50
Cecil sandy clay loam	Well drained	6-10 percent	8.30
Chewacla and Worsham soils	Somewhat poorly drained	0-2 percent	0.20
Durham sandy loam	Well drained	6-10 percent	1.20
Enon sandy loam	Well drained	6-10 percent	0.00
Enoree silt loam	Poorly drained	0-2 percent	0.40
Gullied land-Pacolet soils complex	Well drained	10-15 percent	0.70
Hiwassee sandy loam	Well drained	2-6 percent	0.00
Madison and Pacolet soils	Well drained	15-40 percent	4.60
Pacolet sandy clay loam	Well drained	10-15 percent	1.90
Wilkes sandy loam	Well drained	6-15 percent	1.20
Wilkes soils	Well drained	15-40 percent	1.40

Historic topographic maps from 1969 and 1971 and historic aerial photographs from 1970 and 1976 were examined for archaeological resource potential within the APE. The presence of structures on historic maps and aerial photography may indicate the likelihood of historic period archaeological deposits associated with the occupation of these structures. The APE is comprised of the historic town center of Laurens and its immediate surroundings. The historic topographic maps and aerial photographs show numerous historic structures and development, such as schools, churches, businesses, and municipal buildings, located adjacent to the APE, which indicate a possibility of historic archaeological deposits associated with these locales. A review of Google Streetview shows that many of these structures are still standing. While archaeological deposits may exist within the APE, the Undertaking is occurring within the ROW, which contains previously installed utilities including water, sewer, and communications lines under the ground surface.

Background research revealed 12 archaeological sites and nine surveys within a half-mile of the APE, one archaeological survey within the APE, and one historic archaeological site adjacent to the APE. Examination of soils within the APE indicates suitable conditions for human habitation. Historic topographic maps and aeriels indicate that historic archaeological deposits may be present in parts of the APE. While these factors may suggest a potential for archaeological deposits, the Undertaking will occur near or within previous road construction and utility installation corridors where soils are likely previously disturbed. Therefore, no archaeological survey is recommended at this time.

Determination of Effect

Based on the aforementioned identification and evaluation, PHMSA has determined that there are two historic properties as defined in 36 CFR 800.16(l) within the APE: Laurens Cotton Mill Historic District, which is eligible for listing in the NRHP and the Laurens Historic District, which is listed in the NRHP with a boundary extension that is eligible for listing in the NRHP.

While the NRHP-eligible and NRHP-listed historic properties are located in the APE, the Undertaking will not alter any of the characteristics or contributing features of these historic properties that qualify them for inclusion in the NRHP in a manner that would diminish their integrity. No character-defining materials or features will be removed or altered as a result of the Undertaking. The Undertaking will not result in lasting

physical, visual, or audible effects to NRHP-listed or eligible historic properties. The Undertaking also does not include land acquisition, nor would it limit access to or change the use of any of the historic properties. Therefore, the Undertaking does not have the potential to adversely affect any of the identified above-ground historic properties.

Project work is limited to the replacement of existing pipelines in areas that demonstrate a low probability for intact significant archaeological resources. All work will avoid site 38LU0007, which is therefore outside the APE. The Octagon House, with which site 38LU0007 is associated with, is serviced by electricity only and does not have natural gas services. A natural gas main runs along East Main Street at the north edge of the sidewalk in the vicinity of the Octagon House; however, the pipeline is located within the ROW and will not be disturbed in the area adjacent to the Octagon House property. The main gas line on Woodrow Street is on the east side of the street, which is the opposite side of the street from the Octagon House. Although the NRHP-listed Laurens Historic District and the NRHP-eligible Laurens Cotton Mill Historic District may be archaeologically sensitive; all work within these areas will be confined to the ROW and HDD reduces the amount of ground disturbance in general.

There are no cemeteries within the APE, however PHMSA will recommend that all cemeteries be avoided, and project plans should ensure no ground disturbance takes place within cemetery boundaries. Any ground-disturbing activities are subject to South Carolina burial laws (South Carolina Code 27-43-10, Removal of Abandoned Cemeteries; 27-43-20, Removal to Plot Agreeable to Governing Body and Relatives; 27-43-30, Supervision of Removal Work; and 16-17-600, Destruction of Graves and Graveyards).

While the exact staging areas for the Undertaking are currently unknown, staging should be confined to paved areas; if staging cannot be confined to paved areas, geotextile fabric or other similar protective measures (such as pressure distributing mats) must be laid in any affected unpaved area to minimize ground disturbance, prevent soil compaction, and protect potential archaeological features and artifacts.

Based on this assessment, in accordance with 36 CFR Part 800.5, PHMSA has determined the Undertaking will have No Adverse Effect on historic properties.

Consulting Party Outreach

PHMSA identified parties that may be interested in the Undertaking and its effects on historic properties. PHMSA invites the individuals/organizations copied on this letter to participate as Section 106 consulting parties. Invited parties should indicate their willingness to participate as a consulting party and provide comments on the enclosed form (**Attachment C**) within 30 calendar days from the date on this letter. Note that a non-response is considered to be a declination to participate; however, interested parties can request to join consultation at any time in the process. If any invited party expresses concern about the Undertaking's potential effects to historic properties, PHMSA will consult with the party to resolve those concerns prior to project implementation.

PHMSA will also invite the following federally recognized tribes to participate in consultation by separate letter:

- Catawba Indian Nation
- Cherokee Nation
- Eastern Band of Cherokee Indians
- Muscogee (Creek) Nation

Request for Section 106 Concurrence

Based on the information presented above, PHMSA has determined that the Undertaking will result in No Adverse Effect to properties that are either in, or eligible for inclusion in, the NRHP. PHMSA is submitting this Undertaking to your office for your review and comment. PHMSA requests your concurrence with this determination of effect within 30 calendar days of the date of this letter. Should you need additional information please contact Kat Giraldo, Section 106 specialist, at PHMSASection106@dot.gov or 857-320-1359.

Sincerely,



Matt Fuller
Senior Environmental Protection Specialist

MF/kg

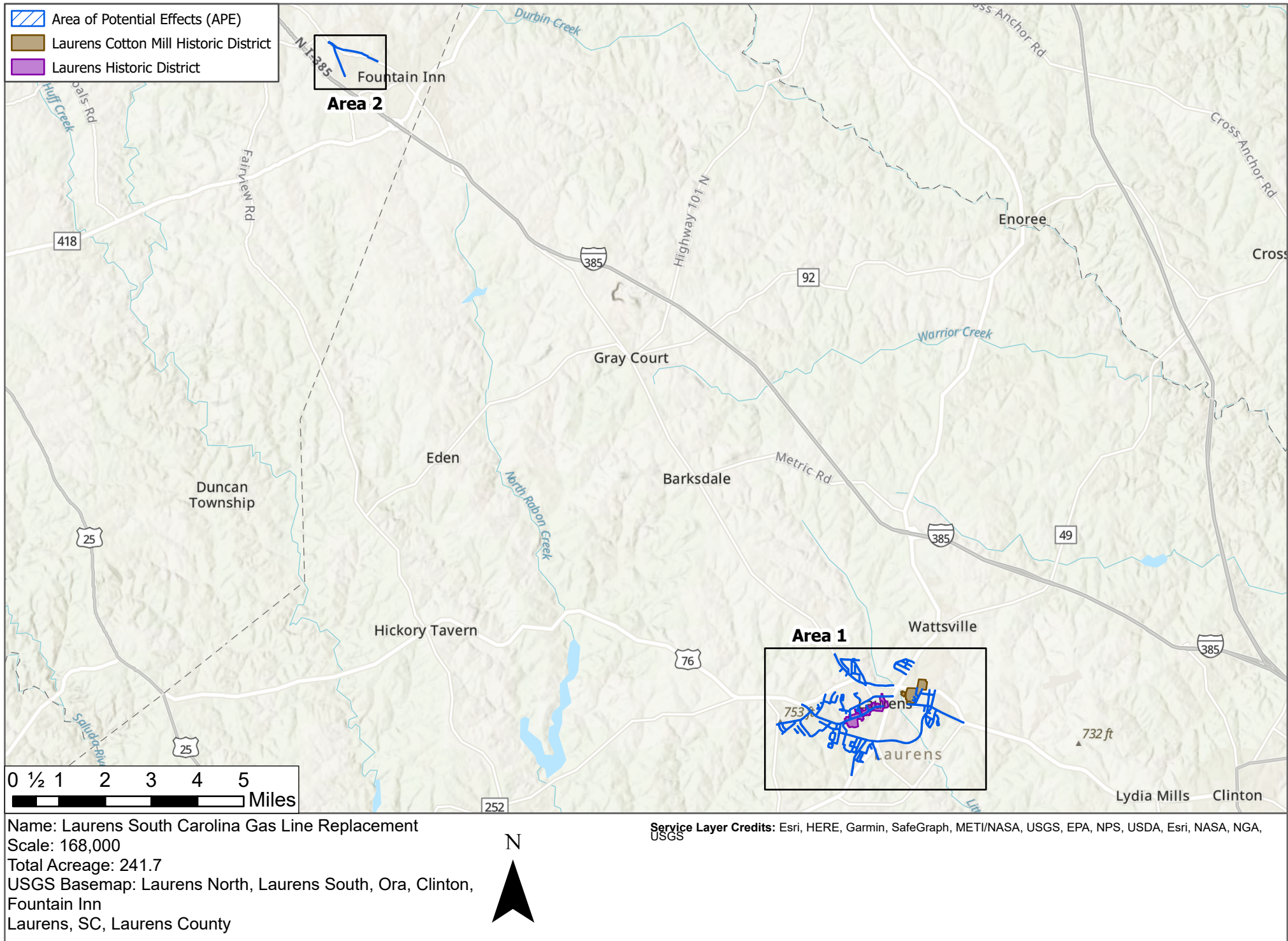
cc: Elizabeth Williams, Environmental Protection Specialist, USDOT Volpe Center
Damond Smith, PHMSA Grant Specialist
Keith Wood, Laurens Commission of Public Works
Laurens Historic Preservation Commission

Enclosures:

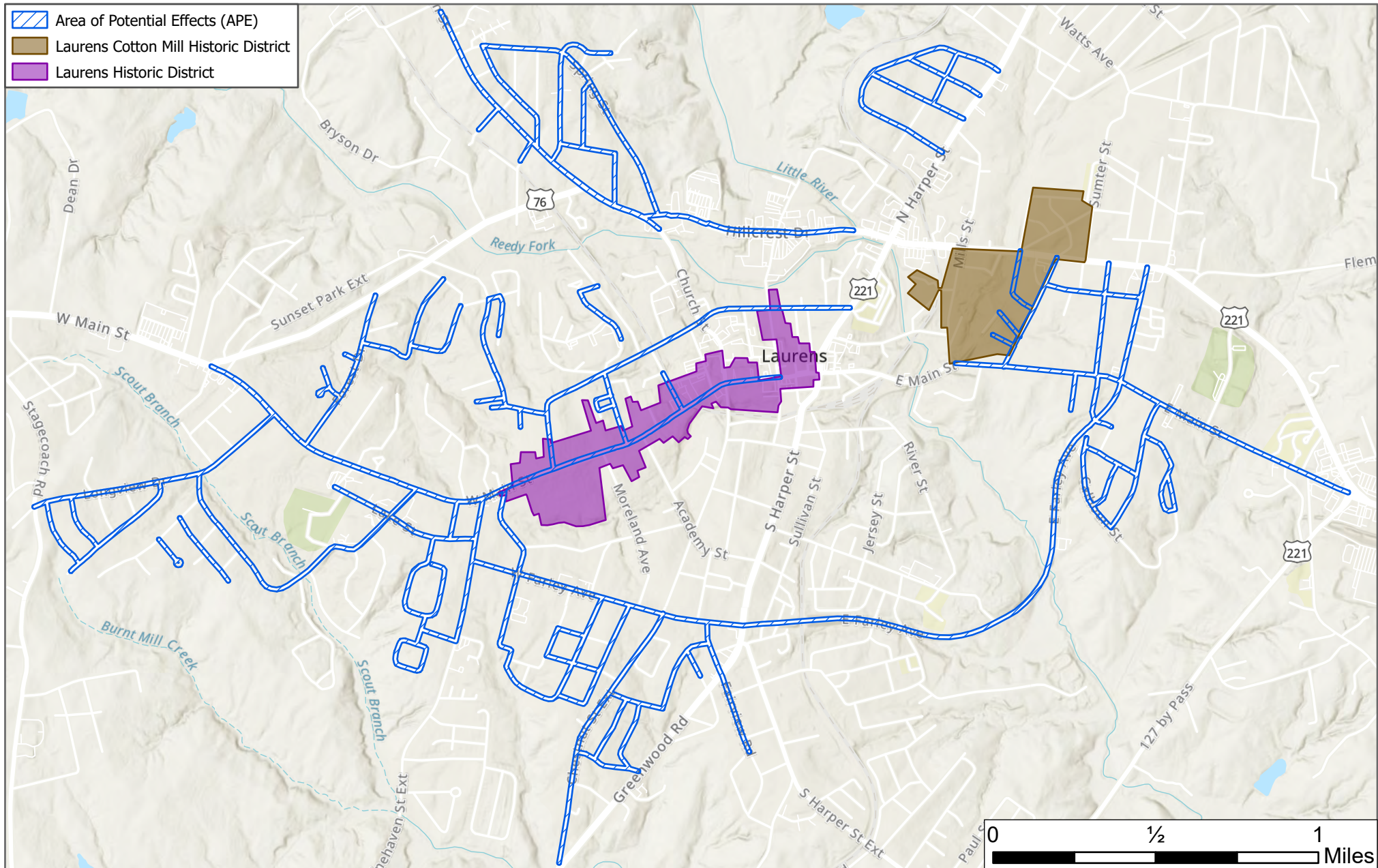
Attachment A: Project Location and APE Maps
Attachment B: Project Area Photographs
Attachment C: Consulting Party Response Form

ATTACHMENT A
Project Location and APE Maps

Area of Potential Effects Map



Area of Potential Effects Map



Name: Laurens South Carolina Gas Line Replacement

Scale: 25,500

Total Acreage: 241.7

USGS Basemap: Laurens North, Laurens South, Ora, Clinton

Laurens, SC, Laurens County

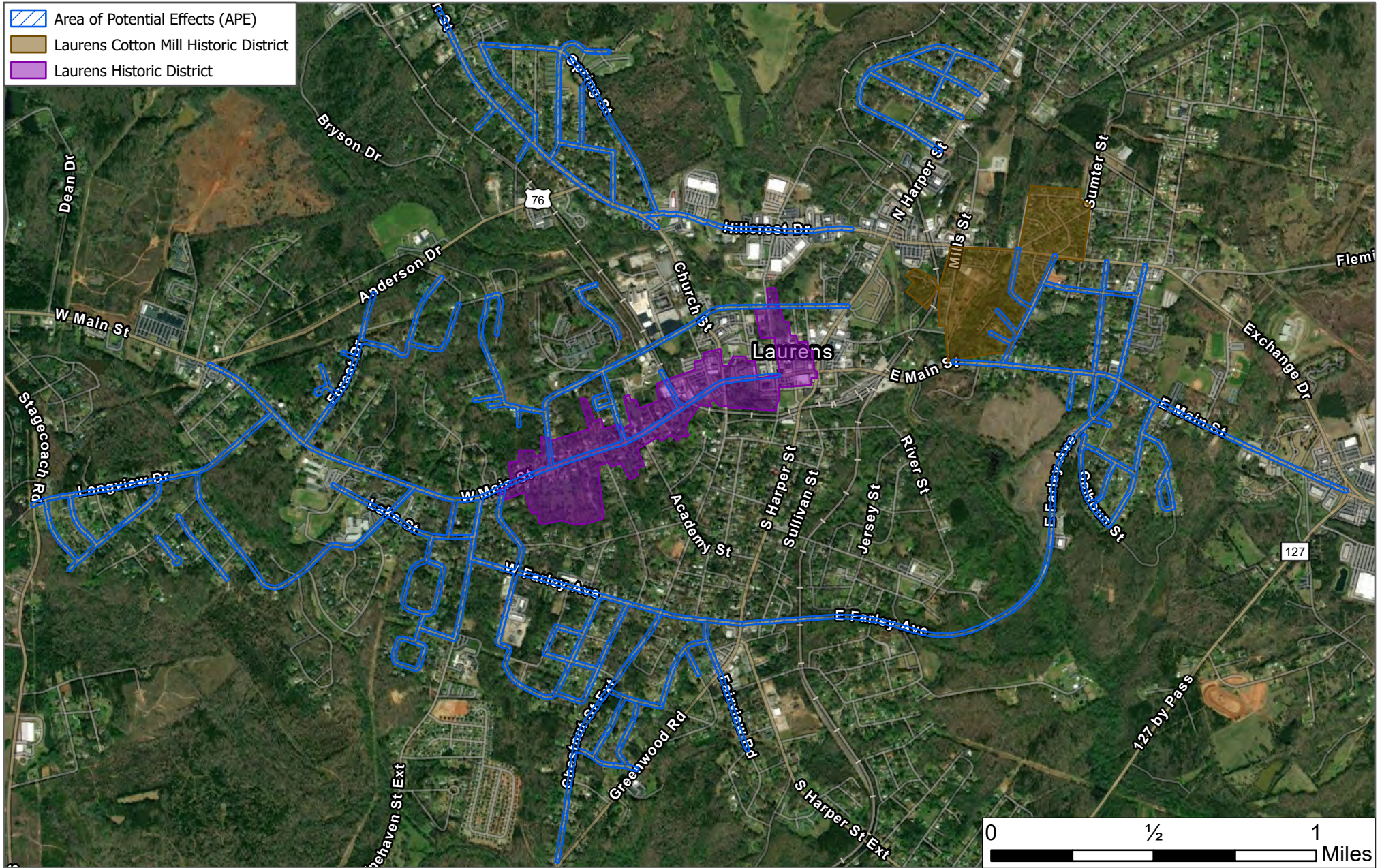
Area 1

Service Layer Credits: Esri, NASA, NGA, USGS, FEMA, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA

Area of Potential Effects Map

REDACTED

Area of Potential Effects Map



Name: Laurens South Carolina Gas Line Replacement

Scale: 25,500

Total Acreage: 241.7

Laurens, SC, Laurens County

Area 1

Service Layer Credits: Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, Maxar



Area of Potential Effects Map

REDACTED

ATTACHMENT B
Project Area Photographs



Fountain Inn: Typical right-of-way for the Fountain Inn pipeline replacement project. It was taken in front of 1218 N. Main Street in Fountain Inn and shows the view towards the west along the pipeline.



Fountain Inn: Typical right-of-way for the Fountain Inn pipeline replacement project, including an existing pipeline crossing. It was taken in front of 100 Bryson Drive in Fountain Inn, facing west along N. Main Street and shows the view towards the west along the pipeline, as well as the location where the directional drill will be set to install the new pipe.



Charles H. Duckett property at 109 Downs Street, Laurens, SC. This property is located on a street included in the service replacement portion of the project. There will be no modification to existing buildings or structures.



John Calvin Ownings House, which is a located at 787 W. Main Street, Laurens, SC. This property is located in the area included in the service replacement portion of the project. There will be no modification to existing buildings or structures.



James Dunklin House, which is located at 544 W. Main Street, Laurens, SC. This property is located in the area included in the service replacement portion of the project. There will be no modification to existing buildings or structures.



Typical right-of-way for the Laurens pipeline replacement project. The proposed pipeline will be installed approximately 5-10 feet from the right side of the street. This photo was taken in front of 217 Sherwood Drive in Laurens, SC facing south along Sherwood Drive.



Typical right-of-way for the Laurens pipeline replacement project. The proposed pipeline will be installed approximately 5-10 feet from the right side of the street. This photo was taken at the corner of Jonella Ave and King Dixon Street in Laurens, SC facing west along King Dixon Street.



Typical right-of-way for the Laurens pipeline replacement project. The proposed pipeline will be installed approximately 5-10 feet from the right side of the street. This photo was taken on Spring Street, facing west towards Oakwood Drive in Laurens, SC.



Typical right-of-way for the Laurens pipeline replacement project along West Main Street (Hwy 76) in Laurens, SC. The proposed pipeline will be installed approximately 5-10 feet from the right side of the street. This photo was provided to show existing sidewalk and powerlines co-located with the existing natural gas pipeline. This photo was taking facing east, showing the southern side of West Main Street. This photo was taken just northwest of the Valero located at 529 Church St in Laurens, SC.

ATTACHMENT C
Consulting Party Response Form

Section 106 Consulting Party Response Form

Pipeline and Hazardous Materials Safety Administration (PHMSA)

Natural Gas Distribution Infrastructure Safety and Modernization Grant Program

Project Name/Location:

Date:

Organization:

Name:

Affiliation:

Address:

Phone Number:

E-mail:

Please check one of the following:

- ☐ **Yes**, I, or my organization, would like to participate in consultation on the project's potential effects to historic properties. I, or my organization, has a legal or economic relation to the project or affected properties or have a concern with the project's effects on historic properties.
- ☐ **No**, I, or my organization, do(es) not wish to participate as a consulting party for the project.

Do you know of any other potential consulting parties that should be contacted? If so, please list the name, email, or other contact information below.

Comments:

Please return by:

Please return to: Katheryn Giraldo
USDOT Volpe Center
220 Binney Street, Cambridge, MA
E-mail: PHMSASection106@dot.gov

Appendix F

Environmental Justice



Laurens, SC

Area in square miles: 9.84



Speak Spanish	100%
Speak Other Indo-European Languages	0%
Speak Asian-Pacific Island Languages	0%
Speak Other Languages	0%

 $\frac{1}{4}$

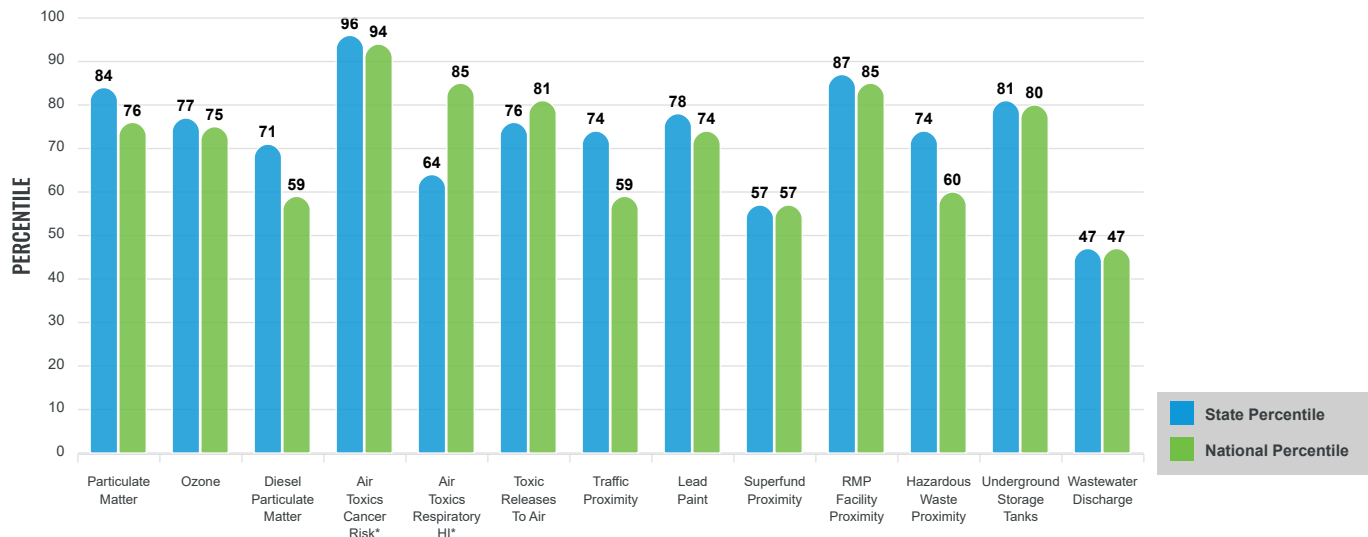
Environmental Justice & Supplemental Indexes

The environmental justice and supplemental indexes are a combination of environmental and socioeconomic information. There are thirteen EJ indexes and supplemental indexes in EJScreen reflecting the 13 environmental indicators. The indexes for a selected area are compared to those for all other locations in the state or nation. For more information and calculation details on the EJ and supplemental indexes, please visit the [EJScreen website](#).

EJ INDEXES

The EJ indexes help users screen for potential EJ concerns. To do this, the EJ index combines data on low income and people of color populations with a single environmental indicator.

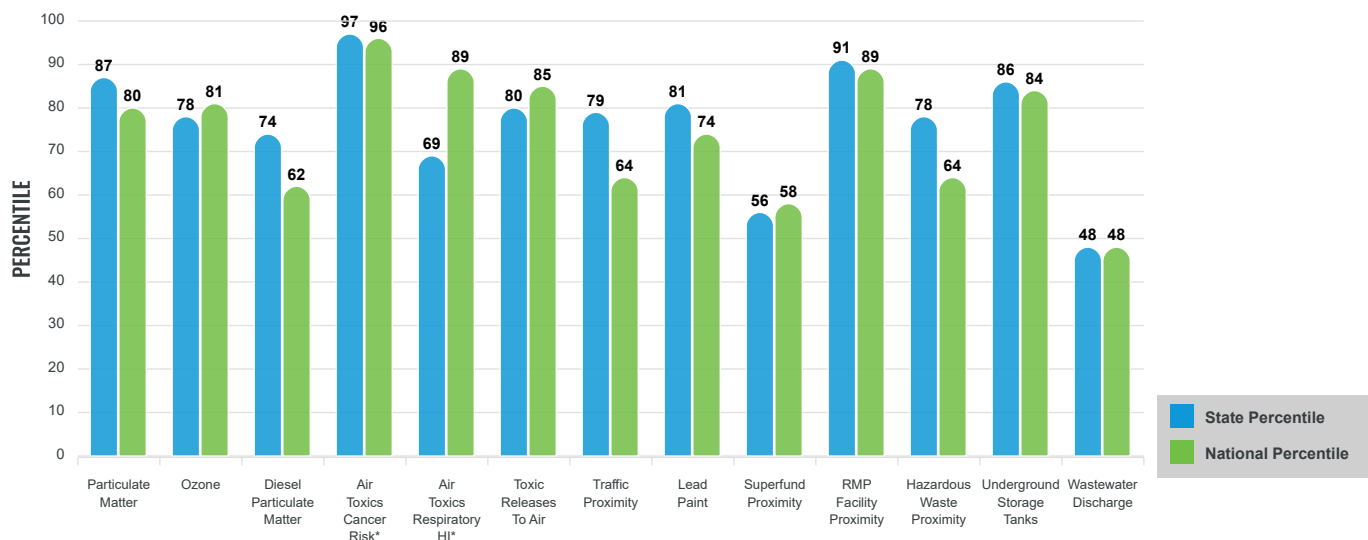
EJ INDEXES FOR THE SELECTED LOCATION



SUPPLEMENTAL INDEXES

The supplemental indexes offer a different perspective on community-level vulnerability. They combine data on percent low-income, percent linguistically isolated, percent less than high school education, percent unemployed, and low life expectancy with a single environmental indicator.

SUPPLEMENTAL INDEXES FOR THE SELECTED LOCATION



These percentiles provide perspective on how the selected block group or buffer area compares to the entire state or nation.

Report for City: Laurens

EJScreen Environmental and Socioeconomic Indicators Data

SELECTED VARIABLES	VALUE	STATE AVERAGE	PERCENTILE IN STATE	USA AVERAGE	PERCENTILE IN USA
POLLUTION AND SOURCES					
Particulate Matter ($\mu\text{g}/\text{m}^3$)	8.59	8.07	74	8.08	61
Ozone (ppb)	62.6	62.6	57	61.6	60
Diesel Particulate Matter ($\mu\text{g}/\text{m}^3$)	0.167	0.188	53	0.261	36
Air Toxics Cancer Risk* (lifetime risk per million)	40	30	9	25	52
Air Toxics Respiratory HI*	0.4	0.41	18	0.31	70
Toxic Releases to Air	1,800	3,000	60	4,600	70
Traffic Proximity (daily traffic count/distance to road)	51	63	65	210	40
Lead Paint (% Pre-1960 Housing)	0.3	0.16	81	0.3	58
Superfund Proximity (site count/km distance)	0.035	0.091	36	0.13	32
RMP Facility Proximity (facility count/km distance)	1.2	0.3	94	0.43	91
Hazardous Waste Proximity (facility count/km distance)	0.31	0.42	67	1.9	43
Underground Storage Tanks (count/km ²)	5	2.9	81	3.9	77
Wastewater Discharge (toxicity-weighted concentration/m distance)	0.0018	1	65	22	53
SOCIOECONOMIC INDICATORS					
Demographic Index	46%	37%	66	35%	70
Supplemental Demographic Index	19%	15%	73	14%	77
People of Color	47%	38%	65	39%	64
Low Income	45%	36%	66	31%	75
Unemployment Rate	6%	6%	65	6%	65
Limited English Speaking Households	0%	1%	0	5%	0
Less Than High School Education	22%	13%	82	12%	84
Under Age 5	7%	5%	69	6%	68
Over Age 64	23%	19%	70	17%	75
Low Life Expectancy	26%	21%	87	20%	92

*Diesel particulate matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: <https://www.epa.gov/haps/air-toxics-data-update>.

Sites reporting to EPA within defined area:

Superfund	0
Hazardous Waste, Treatment, Storage, and Disposal Facilities	0
Water Dischargers	11
Air Pollution	8
Brownfields	6
Toxic Release Inventory	6

Other community features within defined area:

Schools	4
Hospitals	1
Places of Worship	19

Other environmental data:

Air Non-attainment	No
Impaired Waters	No

Selected location contains American Indian Reservation Lands*	No
Selected location contains a "Justice40 (CEJST)" disadvantaged community	Yes
Selected location contains an EPA IRA disadvantaged community	Yes

Report for City: Laurens

EJScreen Environmental and Socioeconomic Indicators Data

HEALTH INDICATORS					
INDICATOR	HEALTH VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Low Life Expectancy	26%	21%	87	20%	92
Heart Disease	8.4	6.8	84	6.1	88
Asthma	10.8	10.4	62	10	73
Cancer	7.4	6.4	82	6.1	76
Persons with Disabilities	21.6%	15%	87	13.4%	90

CLIMATE INDICATORS					
INDICATOR	HEALTH VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Flood Risk	5%	12%	37	12%	44
Wildfire Risk	0%	19%	0	14%	0

CRITICAL SERVICE GAPS					
INDICATOR	HEALTH VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Broadband Internet	23%	19%	67	14%	80
Lack of Health Insurance	12%	11%	62	9%	75
Housing Burden	No	N/A	N/A	N/A	N/A
Transportation Access	Yes	N/A	N/A	N/A	N/A
Food Desert	Yes	N/A	N/A	N/A	N/A

Footnotes

Report for City: Laurens



EJScreen Community Report

This report provides environmental and socioeconomic information for user-defined areas, and combines that data into environmental justice and supplemental indexes.

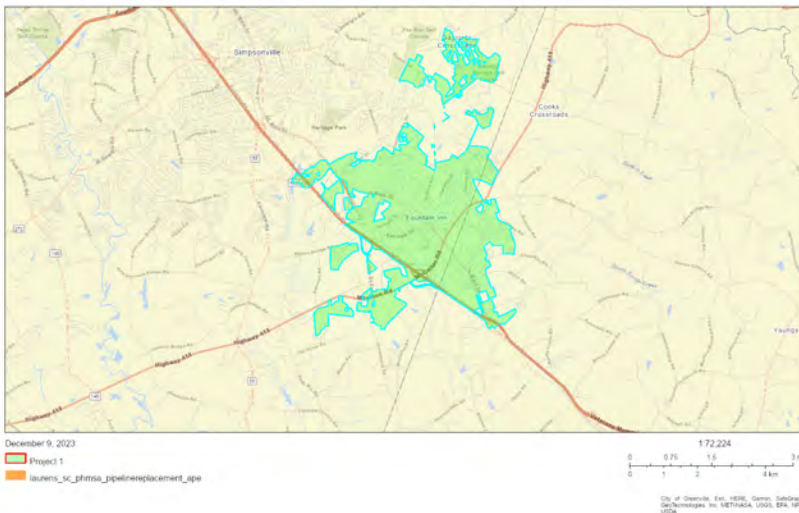
Fountain Inn, SC

City: Fountain Inn

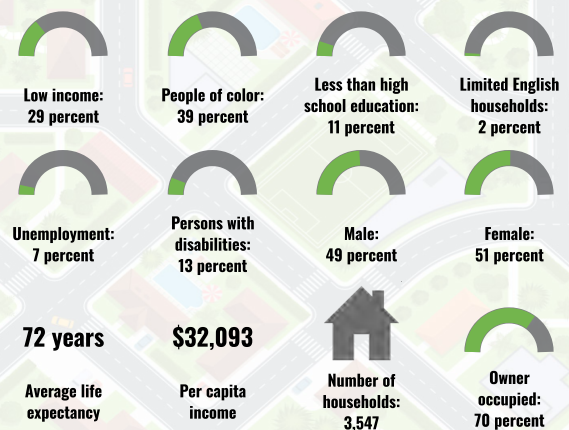
Population: 9,442

Area in square miles: 8.27

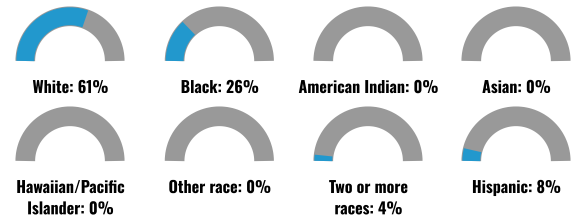
A3 Landscape



COMMUNITY INFORMATION



BREAKDOWN BY RACE



BREAKDOWN BY AGE



LIMITED ENGLISH SPEAKING BREAKDOWN



Notes: Numbers may not sum to totals due to rounding. Hispanic population can be of any race. Source: U.S. Census Bureau, American Community Survey (ACS) 2017-2021. Life expectancy data comes from the Centers for Disease Control.

LANGUAGES SPOKEN AT HOME

LANGUAGE	PERCENT
English	90%
Spanish	9%
Total Non-English	10%

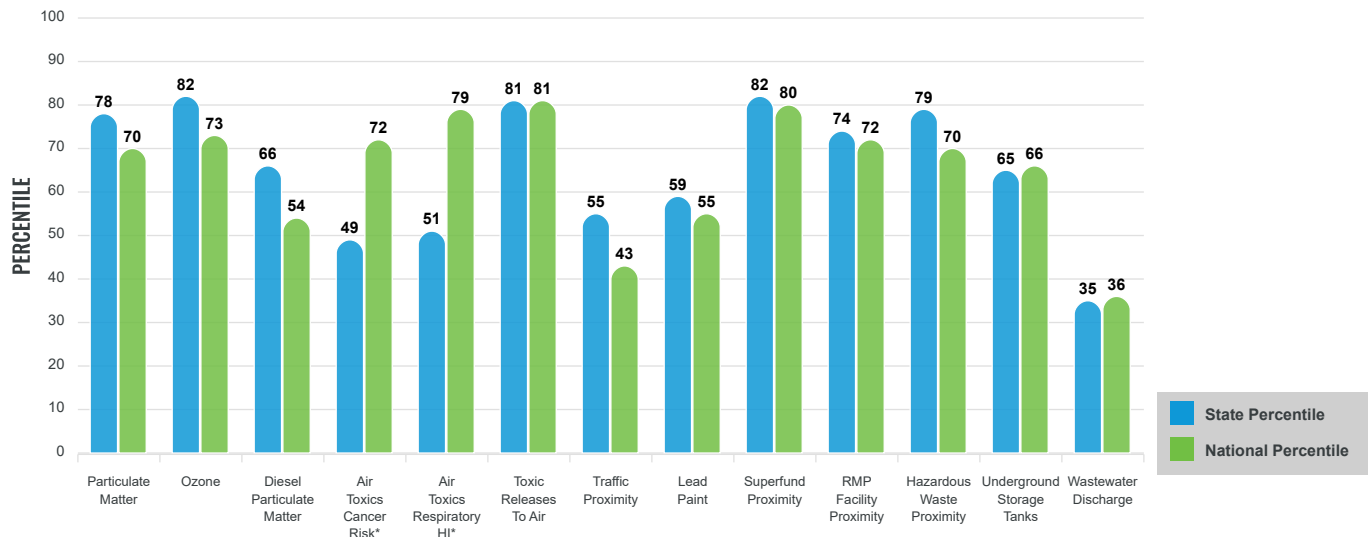
Environmental Justice & Supplemental Indexes

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EJ INDEXES

The EJ indexes help users screen for potential EJ concerns. To do this, the EJ index combines data on low income and people of color populations with a single environmental indicator.

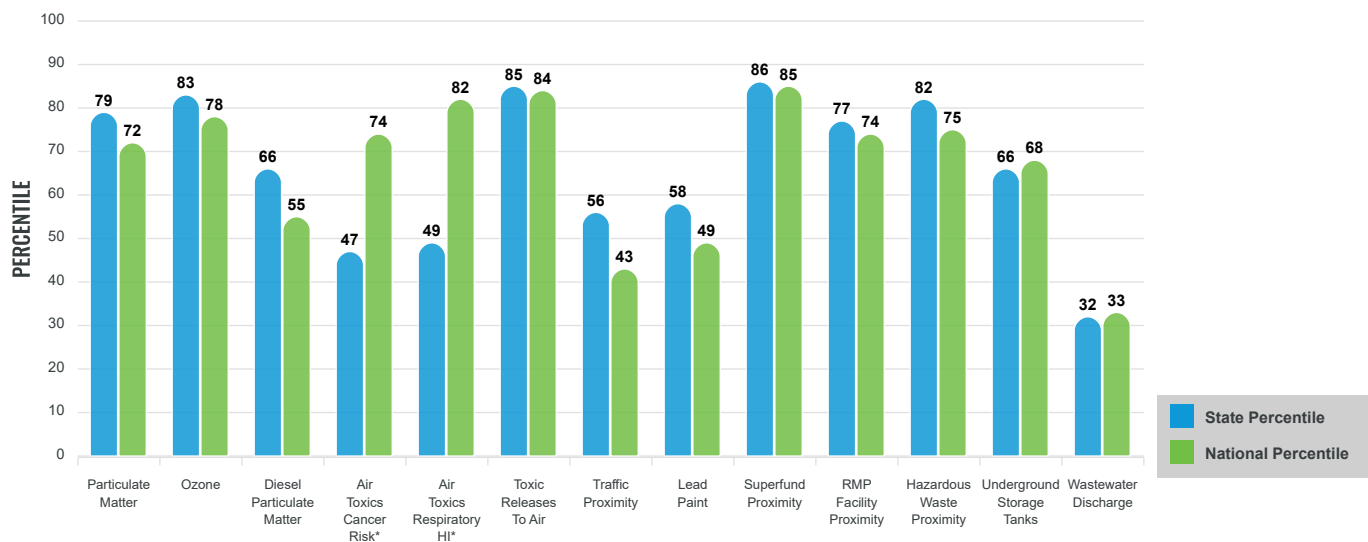
EJ INDEXES FOR THE SELECTED LOCATION



SUPPLEMENTAL INDEXES

The supplemental indexes offer a different perspective on community-level vulnerability. They combine data on percent low-income, percent linguistically isolated, percent less than high school education, percent unemployed, and low life expectancy with a single environmental indicator.

SUPPLEMENTAL INDEXES FOR THE SELECTED LOCATION



These percentiles provide perspective on how the selected block group or buffer area compares to the entire state or nation.

Report for City: Fountain Inn

EJScreen Environmental and Socioeconomic Indicators Data

SELECTED VARIABLES	VALUE	STATE AVERAGE	PERCENTILE IN STATE	USA AVERAGE	PERCENTILE IN USA
POLLUTION AND SOURCES					
Particulate Matter ($\mu\text{g}/\text{m}^3$)	8.8	8.07	86	8.08	68
Ozone (ppb)	64.9	62.6	89	61.6	74
Diesel Particulate Matter ($\mu\text{g}/\text{m}^3$)	0.189	0.188	59	0.261	42
Air Toxics Cancer Risk* (lifetime risk per million)	30	30	9	25	52
Air Toxics Respiratory HI*	0.4	0.41	18	0.31	70
Toxic Releases to Air	9,600	3,000	93	4,600	92
Traffic Proximity (daily traffic count/distance to road)	36	63	55	210	33
Lead Paint (% Pre-1960 Housing)	0.14	0.16	59	0.3	40
Superfund Proximity (site count/km distance)	0.84	0.091	99	0.13	97
RMP Facility Proximity (facility count/km distance)	0.48	0.3	82	0.43	76
Hazardous Waste Proximity (facility count/km distance)	2.3	0.42	97	1.9	76
Underground Storage Tanks (count/km ²)	3.4	2.9	73	3.9	69
Wastewater Discharge (toxicity-weighted concentration/m distance)	0.00024	1	44	22	37
SOCIOECONOMIC INDICATORS					
Demographic Index	34%	37%	49	35%	56
Supplemental Demographic Index	14%	15%	47	14%	57
People of Color	39%	38%	56	39%	58
Low Income	29%	36%	39	31%	52
Unemployment Rate	7%	6%	69	6%	69
Limited English Speaking Households	2%	1%	84	5%	65
Less Than High School Education	11%	13%	51	12%	60
Under Age 5	8%	5%	75	6%	74
Over Age 64	11%	19%	23	17%	31
Low Life Expectancy	23%	21%	60	20%	79

*Diesel particulate matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: <https://www.epa.gov/haps/air-toxics-data-update>.

Sites reporting to EPA within defined area:

Superfund	0
Hazardous Waste, Treatment, Storage, and Disposal Facilities	2
Water Dischargers	7
Air Pollution	15
Brownfields	0
Toxic Release Inventory	12

Other community features within defined area:

Schools	2
Hospitals	0
Places of Worship	1

Other environmental data:

Air Non-attainment	No
Impaired Waters	No

Selected location contains American Indian Reservation Lands*	No
Selected location contains a "Justice40 (CEJST)" disadvantaged community	Yes
Selected location contains an EPA IRA disadvantaged community	Yes

Report for City: Fountain Inn

EJScreen Environmental and Socioeconomic Indicators Data

HEALTH INDICATORS					
INDICATOR	HEALTH VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Low Life Expectancy	23%	21%	60	20%	79
Heart Disease	6.1	6.8	33	6.1	52
Asthma	10.4	10.4	52	10	66
Cancer	6.1	6.4	36	6.1	45
Persons with Disabilities	12.2%	15%	32	13.4%	47

CLIMATE INDICATORS					
INDICATOR	HEALTH VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Flood Risk	3%	12%	17	12%	32
Wildfire Risk	0%	19%	0	14%	0

CRITICAL SERVICE GAPS					
INDICATOR	HEALTH VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Broadband Internet	17%	19%	52	14%	67
Lack of Health Insurance	14%	11%	73	9%	81
Housing Burden	No	N/A	N/A	N/A	N/A
Transportation Access	Yes	N/A	N/A	N/A	N/A
Food Desert	No	N/A	N/A	N/A	N/A

Footnotes

Report for City: Fountain Inn



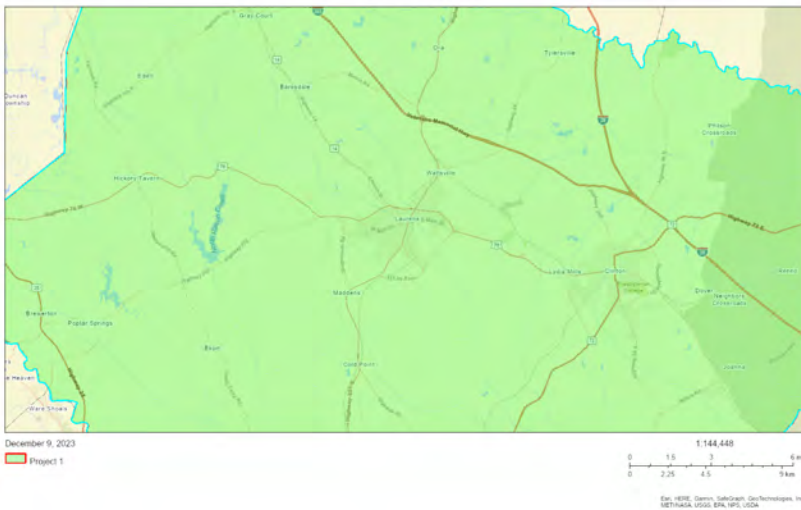
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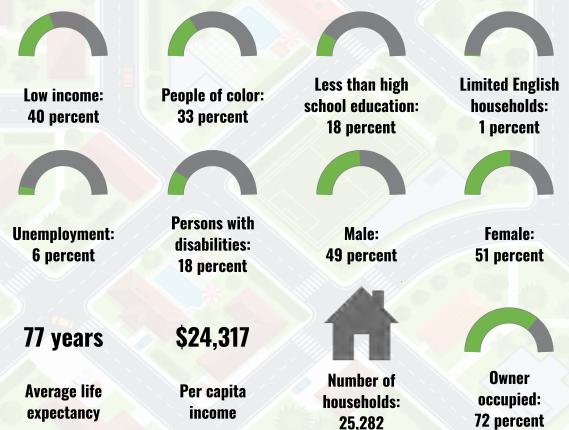
Laurens County, SC

County: Laurens
Population: 67,148
Area in square miles: 722.93

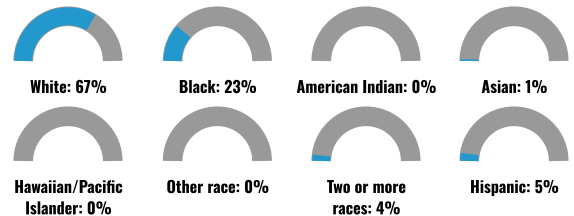
A3 Landscape



COMMUNITY INFORMATION



BREAKDOWN BY RACE



BREAKDOWN BY AGE



LIMITED ENGLISH SPEAKING BREAKDOWN



Notes: Numbers may not sum to totals due to rounding. Hispanic population can be of any race. Source: U.S. Census Bureau, American Community Survey (ACS) 2017-2021. Life expectancy data comes from the Centers for Disease Control.

LANGUAGES SPOKEN AT HOME

LANGUAGE	PERCENT
English	95%
Spanish	4%
Total Non-English	5%

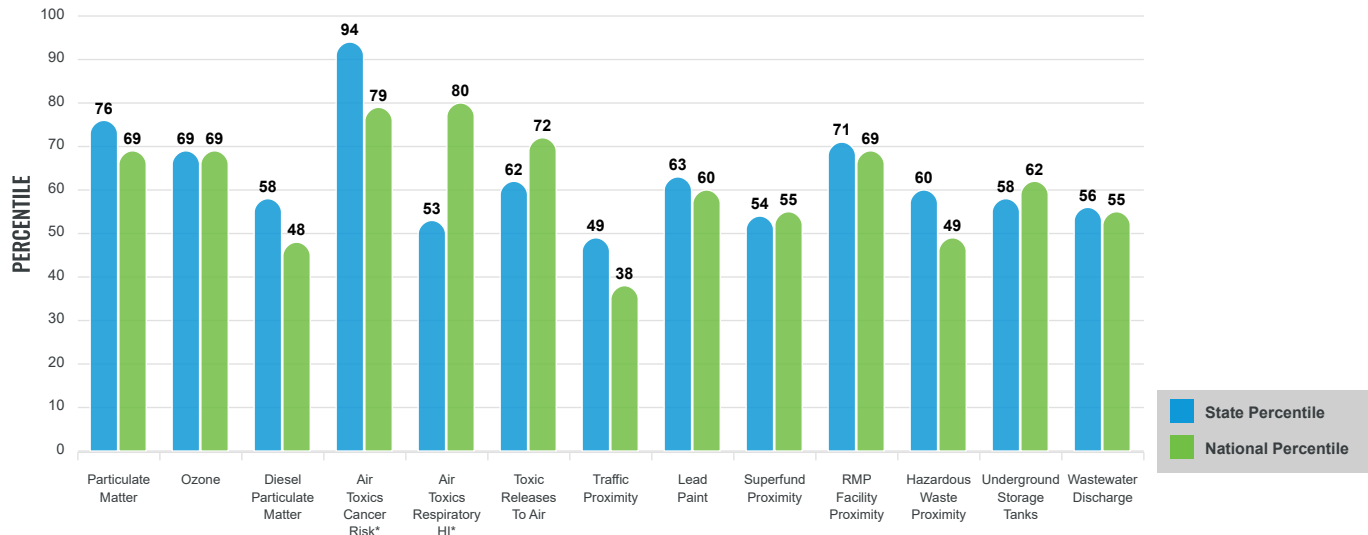
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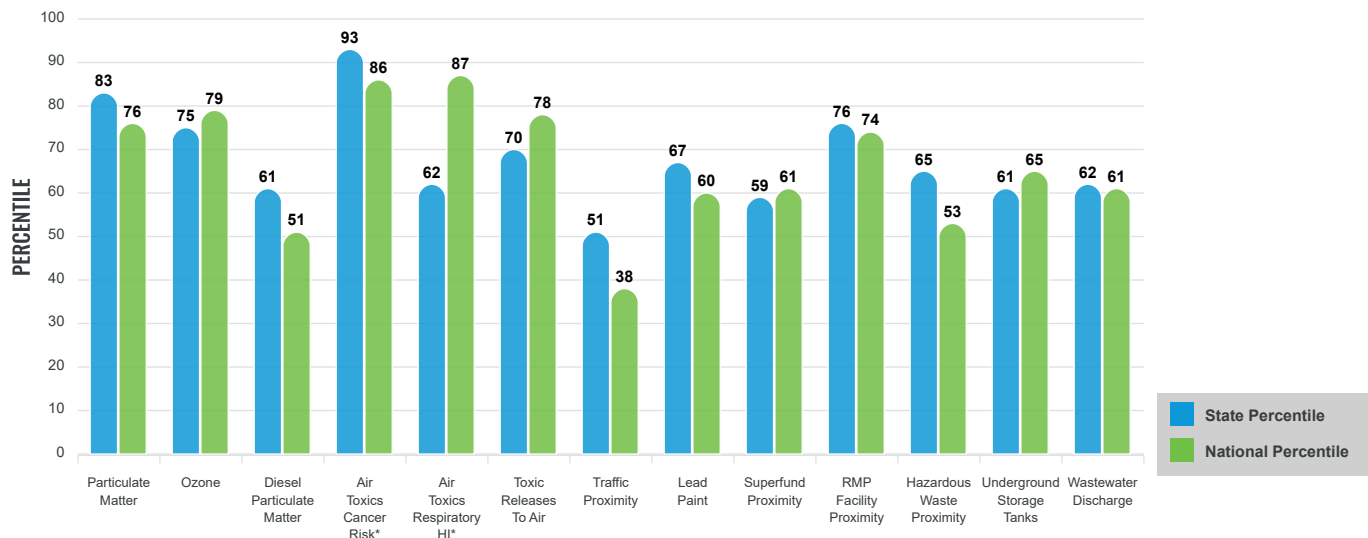
EJ INDEXES FOR THE SELECTED LOCATION



SUPPLEMENTAL INDEXES

The supplemental indexes offer a different perspective on community-level vulnerability. They combine data on percent low-income, percent linguistically isolated, percent less than high school education, percent unemployed, and low life expectancy with a single environmental indicator.

SUPPLEMENTAL INDEXES FOR THE SELECTED LOCATION



These percentiles provide perspective on how the selected block group or buffer area compares to the entire state or nation.

Report for County: Laurens

EJScreen Environmental and Socioeconomic Indicators Data

SELECTED VARIABLES	VALUE	STATE AVERAGE	PERCENTILE IN STATE	USA AVERAGE	PERCENTILE IN USA
POLLUTION AND SOURCES					
Particulate Matter ($\mu\text{g}/\text{m}^3$)	8.6	8.07	75	8.08	61
Ozone (ppb)	62.8	62.6	62	61.6	62
Diesel Particulate Matter ($\mu\text{g}/\text{m}^3$)	0.146	0.188	44	0.261	30
Air Toxics Cancer Risk* (lifetime risk per million)	32	30	9	25	52
Air Toxics Respiratory HI*	0.4	0.41	18	0.31	70
Toxic Releases to Air	2,400	3,000	67	4,600	75
Traffic Proximity (daily traffic count/distance to road)	21	63	41	210	25
Lead Paint (% Pre-1960 Housing)	0.18	0.16	68	0.3	46
Superfund Proximity (site count/km distance)	0.061	0.091	58	0.13	50
RMP Facility Proximity (facility count/km distance)	0.48	0.3	82	0.43	75
Hazardous Waste Proximity (facility count/km distance)	0.28	0.42	65	1.9	41
Underground Storage Tanks (count/km ²)	2.2	2.9	65	3.9	61
Wastewater Discharge (toxicity-weighted concentration/m distance)	0.0085	1	78	22	66
SOCIOECONOMIC INDICATORS					
Demographic Index	36%	37%	52	35%	60
Supplemental Demographic Index	17%	15%	64	14%	71
People of Color	33%	38%	48	39%	52
Low Income	40%	36%	58	31%	69
Unemployment Rate	6%	6%	67	6%	67
Limited English Speaking Households	1%	1%	79	5%	60
Less Than High School Education	18%	13%	73	12%	77
Under Age 5	6%	5%	61	6%	58
Over Age 64	18%	19%	54	17%	61
Low Life Expectancy	21%	21%	49	20%	68

* Diesel particulate matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: <https://www.epa.gov/haps/air-toxics-data-update>.

Sites reporting to EPA within defined area:

Superfund	0
Hazardous Waste, Treatment, Storage, and Disposal Facilities	5
Water Dischargers	83
Air Pollution	72
Brownfields	7
Toxic Release Inventory	30

Other community features within defined area:

Schools	18
Hospitals	6
Places of Worship	175

Other environmental data:

Air Non-attainment	No
Impaired Waters	Yes

Selected location contains American Indian Reservation Lands*	No
Selected location contains a "Justice40 (CEJST)" disadvantaged community	Yes
Selected location contains an EPA IRA disadvantaged community	Yes

Report for County: Laurens

EJScreen Environmental and Socioeconomic Indicators Data

HEALTH INDICATORS					
INDICATOR	HEALTH VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Low Life Expectancy	21%	21%	49	20%	68
Heart Disease	7.8	6.8	68	6.1	80
Asthma	10.7	10.4	59	10	71
Cancer	6.7	6.4	65	6.1	62
Persons with Disabilities	17.6%	15%	69	13.4%	77

CLIMATE INDICATORS					
INDICATOR	HEALTH VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Flood Risk	6%	12%	39	12%	46
Wildfire Risk	0%	19%	0	14%	0

CRITICAL SERVICE GAPS					
INDICATOR	HEALTH VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Broadband Internet	20%	19%	60	14%	74
Lack of Health Insurance	14%	11%	73	9%	80
Housing Burden	No	N/A	N/A	N/A	N/A
Transportation Access	Yes	N/A	N/A	N/A	N/A
Food Desert	Yes	N/A	N/A	N/A	N/A

Footnotes

Report for County: Laurens