ADMINISTRATOR'S REPORT
Kevin Bronson
Office of the City Administrator
Westminster, South Carolina

March 20, 2026

GENERAL INFORMATION

Quote for Perspective

I have been recently reading some of the work of Friedrich Wilhelm Nietzche and discovered this quote that seems appropriate for this Friday:

"Enemies of truth. Convictions are more dangerous enemies of truth than lies."

Grand Opening and Ribbon Cutting for Westminster Batter's Box –
Friday, March 27, 2026 at 4:00 pm @ 205 Mimosa Road, Westminster

The Westminster Batter's Box will officially open March 27, 2026, providing an indoor batting cage for baseball and softball athletes of all ages. This new facility offers a safe, controlled environment where players can practice hitting year-round, regardless of weather. Consistent practice is key not only to developing athletic skills but also to building focus, discipline, and teamwork—qualities that shape athletes both on and off the field. By honing their abilities in a supportive environment, young players learn the value of hard work, perseverance, and sportsmanship, laying the foundation for success as both athletes and responsible, well-rounded individuals.

The Chattooga Conservancy Watershed Plan for the Chauga River watershed

The Chattooga Conservancy will discuss the development of our Chauga River Watershed Plan in a community outreach event at Chau Ram County Park on Saturday, March 21st, 2026. Chattooga Conservancy staff will give a brief presentation about the Chauga Watershed Plan and solicit input from local residents and stakeholders. This will be a family-friendly event. Admission is free. More information is available here: https://chattoogariver.org/chauga/

Date: Saturday, **March 21st, 2026 @ 1:00 pm**
Chau Ram County Park Recreation Building, 1220 Chau Ram Park Rd, Westminster, SC 29693
Agenda:

1 – 2 PM: Chauga Watershed Plan presentation and discussion
2 – 2:15 PM: Light refreshments
2:15 – 3:15 PM: Guided hike through Chau Ram County Park

Advancing Resilience in South Carolina: Understanding Helene's Effects on Energy and Communications Resilience | March 2026 (a report on the impact of Hurricane Helene)

Attached is the final report from the study on the Power Grid and Broadband Resilience in SC requested by Governor McMaster in February 2025 after Hurricane Helene. The request was made to FEMA as part of their Federal Interagency Recovery Coordinating (IRC) function. The IRC includes the Department of

Energy's (DOE) Office of Cybersecurity, Energy Security, and Emergency Response (CESER) and Pacific Northwest National Lab in partnership with the Savannah River National Lab.

The objectives were to:
1) Analyze the effects of Helene on South Carolina's energy and communications infrastructure.
2) Identify vulnerabilities and gaps in current resilience planning.
3) Develop advanced risk assessment methodologies tailored to South Carolina's needs.
4) Recommend strategies and best practices to improve infrastructure resilience and emergency preparedness.

Palmetto Power Cities (Westminster is a member) participated in the meetings associated with the study and provided requested information as available. Overall, the study was positive and made note of the fact many hazard mitigation plans or efforts were in progress or already complete. PPC noted the top mitigation strategies for PPC members were increased vegetation cutting along lines, increased pole inspections, and adding more tie points (manual or automated).

Assistant to the City Administrator – position posting
This week, the Assistant to the City Administrator position was posted on the city website. This role offers an opportunity to work with our dynamic city team while supporting key projects, community initiatives, and planning coordination for the city. Applications will be reviewed on a rolling basis, and the position will remain open until filled. The position posting is available here: https://westminstersc.org/careers/

The William Bartram Statue Project
Tapping into the network of enthusiasts who appreciate the legacy of William Bartram is an important component—and a compelling reason—for creating a lasting tribute to Bartram in downtown Westminster. For a glimpse of how others are celebrating his contributions while connecting people to the natural environment, consider ***The Blue Ridge Bartram Trail Conservancy*** (https://blueridgebartram.org/) . Notably, while this broader trail network highlights Bartram's influence across multiple states, South Carolina remains underrepresented. This project presents a meaningful opportunity to help fill that gap and more fully connect the state to Bartram's enduring legacy.

Fundraising for WP Anderson Park Playground Equipment continues
Fundraising efforts are underway to bring a fully accessible playground to W.P. Anderson Park—a space where children of all abilities can play, explore, and grow together. This project is centered on inclusion, ensuring that families with mobility, sensory, and developmental challenges have a safe and welcoming place to enjoy alongside the broader community.

We invite you to be a part of making this vision a reality. The planned playground will feature ADA-compliant surfaces, adaptive play equipment, and thoughtfully designed spaces that encourage interaction and shared experiences. Your support—whether through a donation, partnership, or simply sharing this effort—will help create a park environment where every child feels they belong.

A rendering of the playground is attached, and you can contribute by scanning the QR code below to access the project's donation page.

Downtown Streetscape Update
Demolition of Grey Street is complete, and the demolition of Main Street progressed quickly this week. While the portion of Main Street will be closed, the sidewalk for the local businesses along this section will remain open. Attached is a design rendering of the project area along with the construction schedule which was updated today. The construction schedule will be updated every second week.

The streetscape project is paid for with a combination of Community Development Block Grant, Appalachian Regional Commission Grant and Oconee County C-Funds.

This Week in Rec: An Update from Recreation Director Herb Poole

- Spring Break 2026 was this week for our area kids. We have been serving around 50 kids lunches each day this week, compliments of our many donors. This project will continue through Saturday March 21. Lunches are served 11:30 am – 12:30 pm.
- Spring volleyball games start this coming Monday March 23. We invite the community to come and cheer on your favorite teams. Schedules can be found on our Facebook page.
- The Westminster Rec in conjunction with the Tamassee-Salem Rec will host a pre-season baseball & softball tournament. The tournament will be held April 6-10 (possibly through April 11 depending on the number of teams). Details about the tournament will be released in the coming weeks.
- The Westminster Rec will be getting food boxes from the Community Tree 1 this coming Saturday. Families of our community can pick them up from the M D Cleveland Civic Center Saturday evening or Sunday afternoon.
- The Horton Outdoor Recreational Area will be the site to host the South Carolina Athletic Programs Softball All Star Western District Tournaments. The approximate dates will be June 11-16.
- The Horton Outdoor Recreational Area will be the site to host the 10u & 12u baseball all stars this season. The approximate dates will be June 4-9.
- The Atlanta Braves will host one of their baseball & softball clinics on April 11 from 1pm 4 pm. This clinic will be hosted at the Horton Outdoor Recreational Area.

Horton Outdoor Recreational Area
Mammoth Construction workers continued their work on punch list items, nearing completion (same report as the last four weeks).

AMW Construction (the contractor for the concession stand/bathroom) continues to make progress constructing the concession stand this week, as scheduled. The building is roughed-in, the windows are installed, and the electrical contractor is wiring the building.

SCIIP Sewer Improvements Phase II
LW began construction on the Lower section of Line "C" this week. Demolition of old manholes on the Line "A" are still pending. All saw cuts have been made as of 3/17/26. Additional coordination meetings with LW and the City staff are planned as construction enters into the area of the Hwy 24 & Hwy 123 intersection.

Lucky Street, James Street, and Highland Avenue Water Improvements
Notice of Award was sent to J &M Construction on March 11th. Performance Bonds due by March 26th, once received the Notice to Procced may be issued. Construction schedule details 90 days to Substantial Completion, 105 days to Final Completion.

Electric Undergrounding Project
The contractor, UPA, is approximately 30% complete with the project and making good progress.

SCADA Upgrade Project
Notice of Award was sent to ICS Automated on March 12th. Performance Bonds have not been received and are due by March 27th. The Notice to Proceed may be issued after bonds are secured. The project schedule details 150 Days to Substantial Completion, 180 days to Final Completion.

Unity Tank Upgrade
The Unity Tank project is being funded through the South Carolina Rural Infrastructure Authority (SC RIA) and the City's 2025 Combined Utility System Bond. The City Attorney is currently working to complete the land acquisition, while the project engineer is advancing the tank design and site layout. (No change in status since last week.)

The SC250 Anniversary of the American Revolution
Chartered by the South Carolina General Assembly in 2019, the Commission commemorates the 250th anniversary of the American Revolution in South Carolina by promoting the history, people, principles, places and events that contributed to our state's pivotal role in the fight for independence. More information is here: https://southcarolina250.com/

As a part of this nation-wide effort, the ***Oconee County SC250 Committee*** is active in providing information and events in celebration of the effort. More information is available here: https://visitoconeesc.com/oconee-250-anniversary/

Additionally, Visit Oconee and Oconee County SC250, hosted at the Bluebirds Nest on Main Street, will have a trunk exhibition on April 4, 2026, beginning at 8:00 am. Details are provided on the attached flyer.

Innovation and Entrepreneurship (I&E) Team at the South Carolina Department of Commerce
The *Innovation and Entrepreneurship (I&E) Team at the South Carolina Department of Commerce* is committed to fostering an environment where entrepreneurs and innovation-driven companies can thrive. We work to spark research and development, support new business creation, and strengthen technology-led economic growth across the state. We also help increase awareness of resources and activities that fuel business growth, ensuring companies statewide have access to the tools they need. As part of our ongoing efforts to strengthen and connect the region's entrepreneurial ecosystem, we invite you to share your perspective through a brief survey. This survey is designed to capture a clear and comprehensive overview of the region's innovation and entrepreneurship ecosystem. The questions focus on identifying recent trends, emerging opportunities, and challenges, as well as key developments that influence regional momentum. Your input will help provide valuable insights to help strengthen the ecosystem.

Click here to begin the survey.
Please complete by Friday April 3rd, 2026.

To connect with our team and learn more about available resources, programs and funding opportunities, contact the I&E team at **innovation@sccommerce.com**.

Small Business Webinar hosted by Main Street SC's partnership with Main Street America and the ARC
Is your business ready for online growth? Before diving into e-commerce or scaling your digital marketing, it's important to make sure your online presence is working for you, not against you. Join us for "The Digital Tune-up: Prepping Your Business for Online Growth." See attached flyer.

In this F.R.E.E. webinar, digital trainers from the Main Street America Small Business Hub will walk through a practical checklist to help businesses identify and fix common digital issues that can impact credibility and visibility online. Walk away with a clear scorecard of your digital presence and a prioritized list of quick fixes to help position your business for growth.

Topics include:
- Ensuring your business information is consistent across the web
- How your business appears in search results and images

- The power of backlinks and local directories
- Protecting your business by claiming key online profiles

Wednesday, March 25, 2026 @ 12 – 1 p.m. ET Register here: https://bit.ly/4dD6nWi

Westminster Planning Commission

Next meeting is anticipated to be April 27, 2026.

OJRSA

The draft meeting minutes from the March 13, 2026 Ad Hoc Reconstitution Committee Meeting are attached. The Finance & Administration Committee is scheduled to meet March 24, at 9:00 am. Past and future meetings are available on OJRSA's YouTube channel: https://www.youtube.com/@OconeeJRSA

PMPA

The PMPA Board met Thursday, March 19, 2026, at 10:00 am at PMPA; the agenda is attached. The attachment also include a copy of PMPA's FY2025 Annual Financial Report.

PLEASE MARK YOUR CALENDARS

March 24, 2026 at 9:00 am OJRSA Finance & Administration Committee at OJRSA

April 6, 2026 at 4:00 pm OJRSA Board Meeting at OJRSA
April 9, 2026 at 9:00 am OJRSA Ad Hoc Reconstitution Committee at OJRSA
April 14, 2026 at 4:00 pm City Council Budget Workshop #3 of 4
April 14, 2026 at 6:00 pm City Council Meeting at the Westminster Fire Department
April 16, 2026 at 10:00 am PMPA Board Meeting at PMPA
April 16, 2026 at 8:30 am OJRSA Operations & Planning Committee at OJRSA

Special Events Calendar

BellFest 2026 – March 21, 2026 10:00 am – 3:00 pm Devils Fork State Park
BellFest is an annual event hosted by Friends of Jocassee. Friends of Jocassee is a non-profit 501(c)(3) organization with a mission to provide support for Devils Fork State Park, Keowee-Toxaway State Park, SC Department of Natural Resources and the Foothills Trail. Friends of Jocassee's main fundraiser is the annual BellFest which is held at the beginning of the Oconee Bell bloom season. Funds raised by Friends of Jocassee are used to protect Oconee Bells and enhance recreation on and around Lake Jocassee and the Jocassee Gorges.
For more information visit: https://visitoconeesc.com/

The Bluebird Nest Plant Swap - March 21, 2026 @ 11:00 pm
See attached flyer for more information.

Oconee Economic Alliance 2026 Annual Meeting – March 25, 2026 11:00 am – 1:00 pm
The event will be held at Keowee Key, registration is required**.**

Dementia 101 – March 25, 2026
The Dementia 101 program presented by SC Department on Aging staff on Wednesday, March 25th at the Seneca OCPL branch, 300 E. South Second Street. A flyer is attached.

Westminster Batter's Box Grand Opening and Ribbon Cutting – March 27, 2026 @ 4:00 pm
The City will host a grand opening and ribbon cutting ceremony for the Westminster Batter's Box located at 205 Mimosa Road (right behind Westminster City Hall). Tours of the facility will be given and light refreshments served. Everyone is welcome. See attached flyer.

SC250 Exhibition at the Bluebirds Nest – April 4, 2026 @ 8:00 am
The Oconee County SC 250 Committee will have a traveling exhibition celebrating the 250th Anniversary of the American Revolution. More details to come…

Ms. Betty's Annual Easter Egg Hunt at WP Anderson Park – April 4, 2026 @ 3:00 pm
Each year, Ms. Betty's Easter Egg Hunt at W.P. Anderson Park brings families from across the community together for a joyful spring tradition. Through her generosity and dedication, Ms. Betty has created a cherished event that celebrates community spirit, family fun, and the simple joy of Easter in Westminster.

The FARM Center 2026 Sporting Clay Event – April 11, 2026
For more information, please visit https://www.farmoconee.org/sportingclay

Music on Main by the Westminster Music Centre – April 18, 2026 Main Street Westminster
https://www.westminstermusiccentre.org/music-on-main
Car show at 3:00 pm (Depot parking lot), concert 5:00-9:00 pm on Retreat Street, Downtown Westminster.
Chatham Rabbits - https://www.chathamrabbits.com/
Cannon Cohen Band - https://www.youtube.com/@CannonCohenBand

Issaqueena's Last Ride 2026 – April 18, 2026 – Westminster Rotary Club
The Rotary Clubs of Westminster and Walhalla host the annual Issaqueena's Last Ride. Issaquena's Last Ride is a challenging, mountain ride through the beautiful Blue Ridge Mountains and Foothills of South Carolina. The 100 mile ride is highlighted by the climb to Wigington Overlook where it is rewarded with expansive views of Lake Jocassee and the surrounding Carolina Piedmont. The 30 mile and the Metric Century 62.1 mile rides stay in the flatter areas of Salem and Tamassee where the roads are gently rolling with no difficult climbs. All routes feature scenic rural roads with little traffic. A flier for the event is attached. More info here:
https://www.bikesignup.com/Race/SC/Walhalla/IssaqueenasLastRide2026

Lazy Daisy Garden Club Yard Sale – April 25, 2026 Westminster Depot @ 8:00 am
The Lazy Daisy Garden Club will hold its annual yard sale fundraiser.

National Day of Prayer – May 7, 2026 Horton Outdoor Recreation Area @ Noon
The Westminster Senior Outreach will host the National Day of Prayer at the Horton Outdoor Recreation Area, concession stand, at noon. The event is open to everyone.

Inaugural Westminster Police Foundation 5K Fun Run - May 16, 2026 @ 6:00 am
More information to come.

Music on Main by the Westminster Music Centre – May 16, 2026 Main Street Westminster
Car show at 3:00 pm (Depot parking lot), concert 5:00-9:00 pm on Retreat Street, Downtown Westminster.
https://www.westminstermusiccentre.org/music-on-main
Kyle Tuttle Band - https://www.kyletuttle.com/
LC Branch - https://www.lcbranchmusic.com/

ByGone Days Tractor and Engine Show May 16th from 9am-5pm at The FARM Center
The ByGone Days Antique Tractor and Engine Show. This is a stop on the Oconee Farm Crawl - food trucks, vendors

and opportunities for visitors see the facility in action are all planned. In the Arena there will be exhibition events such as roping and barrel racing. For more information visit the FARM Center website here: https://www.farmoconee.org/

The Third Annual Westminster Juneteenth Celebration (a lunch event) – June 19, 2026
More details to come…

South Carolina Apple Festival – September 3-5, 2026 Downtown Westminster
Read more about the festival here: https://visitoconeesc.com/sc-apple-festival/

South Carolina Bigfoot Festival – October 9-10, 2026 Downtown Westminster
For more information: https://www.scbigfootfestival.com/schedule

Veterans Day Parade – November 11, 2026
Time TBD. Main Street, Westminster.

Christmas Parade – December 4, 2026
Time TBD. Main Street, Westminster.

SWING INTO ACTION!

Westminster BATTER'S BOX

GRAND OPENING & RIBBON CUTTING!

FRIDAY, MARCH 27th • 4:00 PM

205 Mimosa Road, Westminster, SC 29693

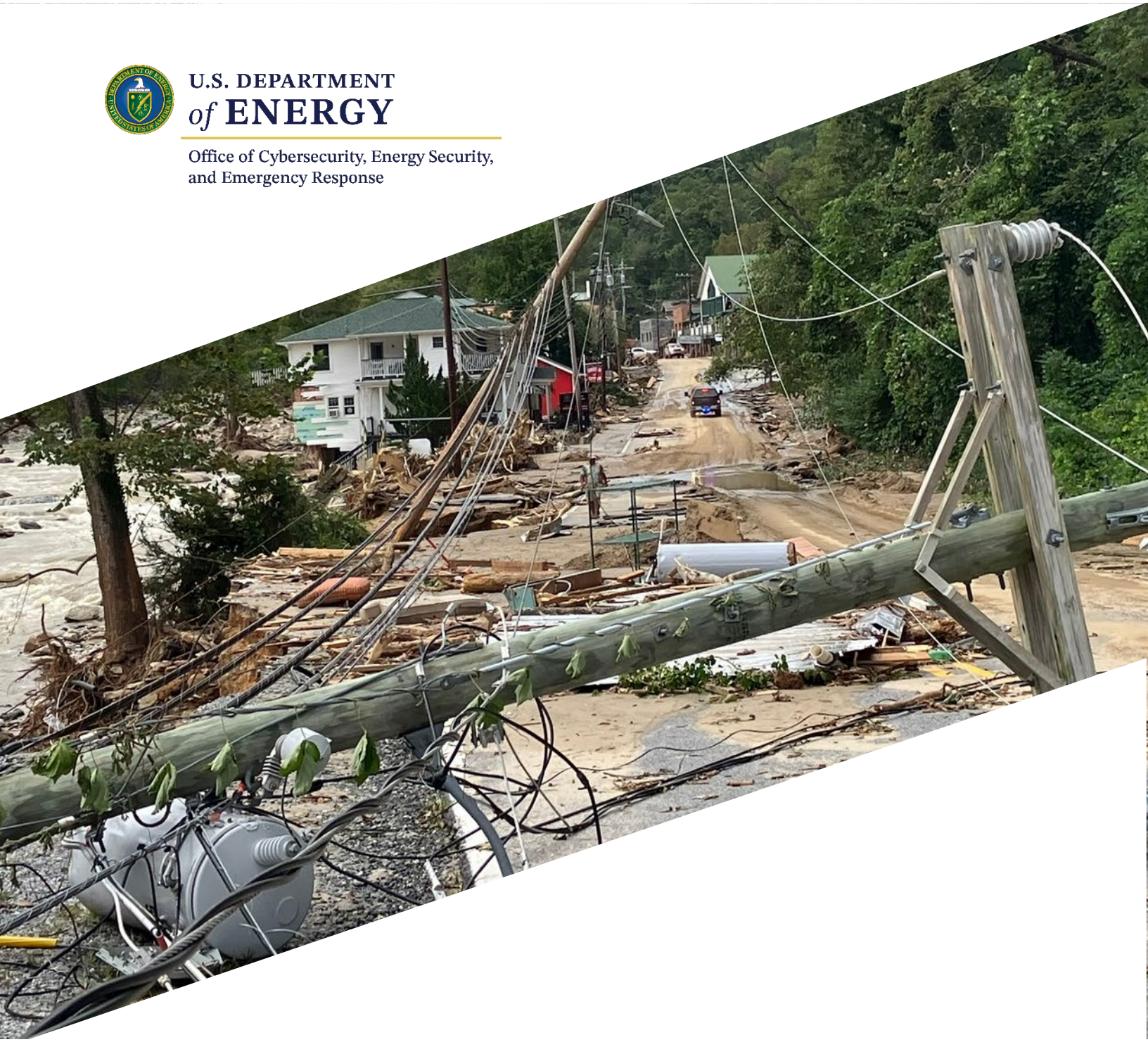
- ✓ Ribbon Cutting Ceremony
- ✓ Facility Tours
- ✓ Refreshments Served!

All Are Welcome!

COME CHECK OUT OUR NEW INDOOR BATTING CAGE!

U.S. DEPARTMENT of ENERGY

Office of Cybersecurity, Energy Security, and Emergency Response



Advancing Resilience in South Carolina: Understanding Helene's Effects on Energy and Communications Resilience

March 2026

Acknowledgments

This report was developed in partnership among the U.S. Department of Energy Office of Cybersecurity, Energy Security, and Emergency Response; Federal Emergency Management Agency; ICF; and the Savannah River National Laboratory. The authors would like to acknowledge the valuable guidance and input provided during the development of this report. The authors are grateful to the following contributors. Their feedback, guidance, and review proved to be invaluable.

The following organizations provided valuable input throughout the stakeholder interview process:

- Carolina Connect
- Catawba Nation
- Dominion Energy
- Duke Energy
- Electric Cooperatives of South Carolina
- Lockhart Power Company
- Mid-Carolina Electric Cooperative
- Palmetto Power Cities
- Santee Cooper
- South Carolina Department of Environmental Services
- South Carolina Emergency Management Division
- South Carolina Office of Regulatory Staff
- South Carolina Office of Resilience
- Spectrum
- Verizon

Additionally, the following entities participated and attended a collaborative meeting on October 21, 2025.

- Ace Energy
- Aiken Electric Cooperative
- AT&T
- Blue Ridge Electric Cooperative
- Buckeye Partners
- Burr Foreman
- Comcast
- Comporium
- Dominion Energy
- Duke Energy
- Electric Cooperatives of South Carolina
- Farmers Telephone Cooperative
- Horry Telephone Cooperative
- Mid-Carolina Electric Cooperative
- Newberry Electric Cooperative
- Orangeburg County
- Palmetto Electric Cooperative
- Palmetto Power Cities
- Sandhill Telephone
- Santee Cooper
- South Carolina Department of Social Services
- South Carolina Department of Transportation
- South Carolina Emergency Management Division
- South Carolina Office of Regulatory Staff
- Spartanburg County Office of Emergency Services
- Spectrum
- Spinx
- Truvista
- Uniti Group Inc.
- Vyve Broadband
- West Carolina

Table of Contents

Executive Summary

This report, as requested by South Carolina Governor Henry McMaster, considers the impacts of Hurricane Helene on the state and provides an integrity and capacity assessment for energy and communications infrastructure as well as recommendations for mitigation actions. Written in conjunction with infrastructure owners across the state, this report provides a quantitative risk assessment and identifies practical mitigation efforts, for both industry and government, designed to increase the resilience of South Carolina's power and communications systems.

Hurricane Helene brought significant rainfall across South Carolina, particularly across the western portions, with areas receiving 5 inches to 21 inches over a four-day period. Saturated soil and flooding conditions were coupled with wind gusts as high as 75 miles per hour (mph) and 21 tornadoes. The high winds downed trees and caused significant damage to power and communication systems across the state. On September 27, 2024, at its peak, roughly 1.4 million customers were without power in South Carolina and it took approximately two weeks to restore power to those customers.

Hurricane Helene's Impacts

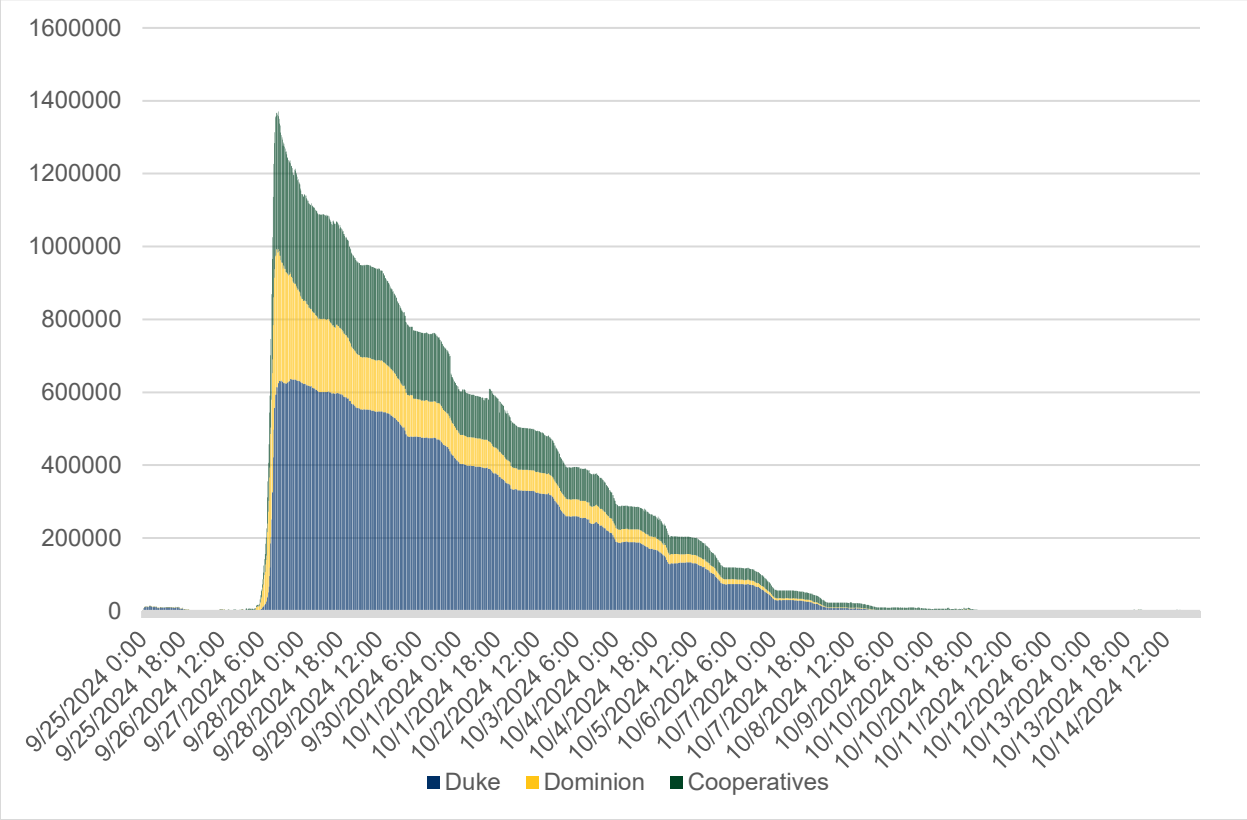
Hurricane Helene caused unprecedented levels of damage across South Carolina's electric and communications infrastructure. At the storm's peak the largest utilities in the state experienced 50% to 75% of customers affected, with some cooperatives experiencing 100% of their customers losing power. Restoration efforts were complicated by the extent of the damage, extensive vegetation debris, blocked access to damaged facilities, sustained transmission-level outages that constrained local distribution recovery, downed communication systems impeded crew and system communications. Within the state, utilities replaced more than 14,000 poles, 6,000 transformers, thousands of power lines, and hundreds of substations had to have repairs completed before they could return to operations. Table 1 and Figure 1 illustrate the extent of the impact across the state.

Table 1. Snapshot of Hurricane Helene's impacts

	Duke Energy	Dominion Energy	Cooperatives, Utilities	Municipal Utilities	Lockhart Power
Peak customer outages	637,000	381,000	380,000	103,000	6,000
Customers out at peak*	76%	49%	43%	52%	95%
Restoration within two weeks	100%	100%	98%	97%	100%

* Values in Table 1 represent peak outages; however, as some customers regained power, others may have lost power, meaning that the total number of customers affected may exceed these totals. Outage data for municipal utilities are excluded from this chart due to the unavailability of data through the EAGLE-I system; however, it reached approximately 100,000 customers without power at its peak.

Figure 1. South Carolina utility outages over time, September 25 through October 14, 2024

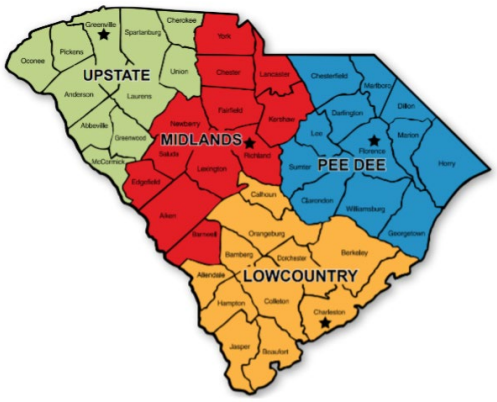


Risk Assessment Results

When evaluating Hurricane Helene compared with other similar events, the study team modeled flooding (coastal and inland), high winds, hurricane winds, extreme heat, wildfires, and landslides against the locations of energy infrastructure. These hazards were all closely associated with the impacts of Hurricane Helene, posing varying degrees of risk to infrastructure across the state. For each energy facility asset, risk scores were calculated by multiplying together the probability of hazard exposure in that location, the level of vulnerability to disruption each asset type has to a specific hazard event, and the consequence of an outage of the asset, following the methodology established in CESER's Risk Assessment Essentials for State Energy Security Plans.[1] These risk scores were designed to be compared within the same sector, allowing petroleum assets to be compared with other petroleum assets, and similarly for natural gas and electricity. Figure 3 generalizes the results of the risk assessment to show pairings of infrastructure types against the various hazards, plotting the impact of loss (a measure that brings together their vulnerability to the hazard and consequence of the offline asset) against the likelihood of experiencing the hazard event.

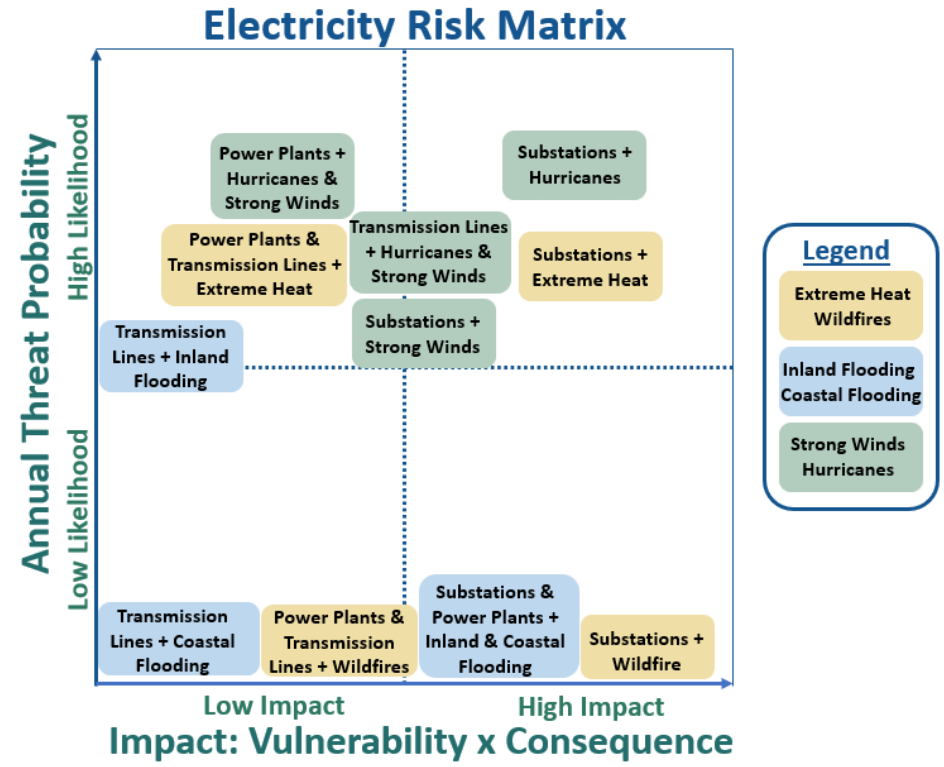
Broadly, the risk assessment results showed:

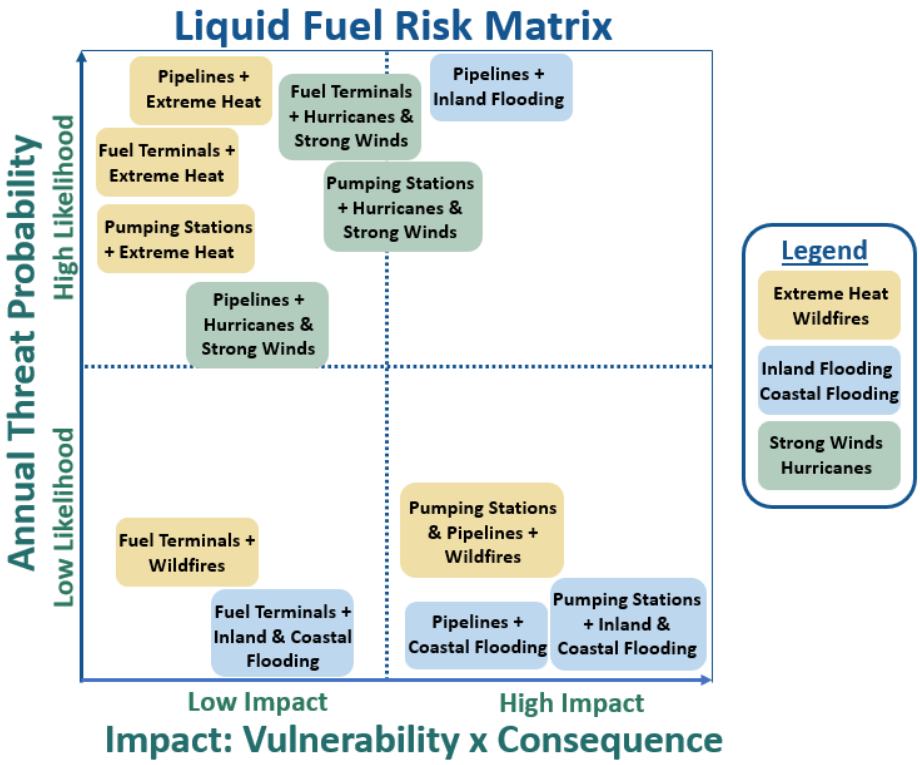
Figure 2. South Carolina regional map

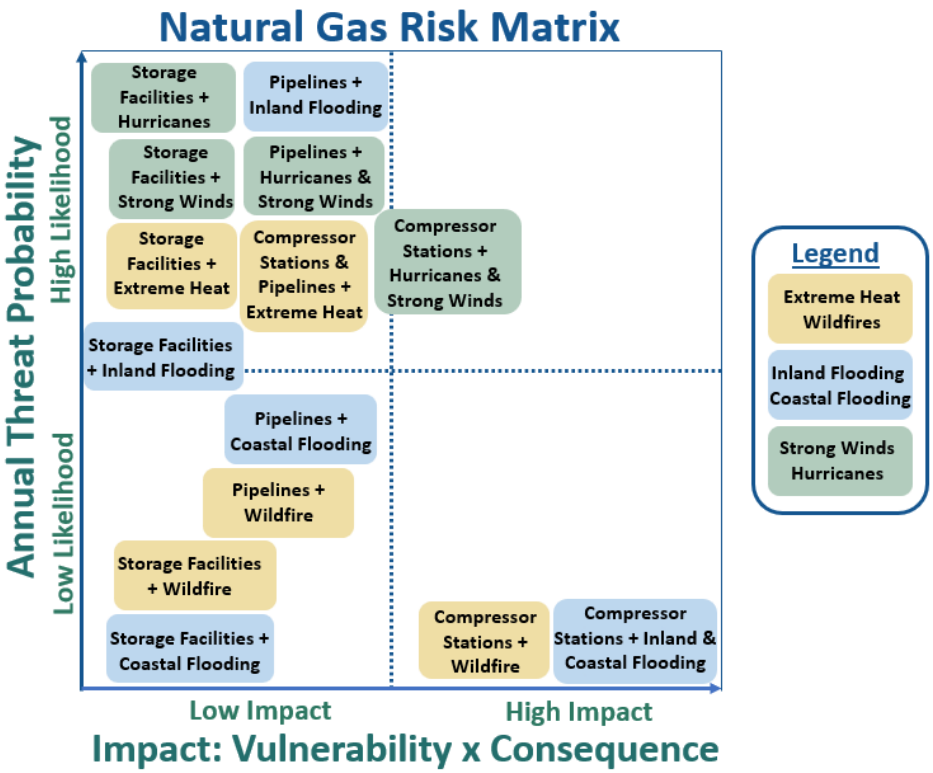


- **Strong Winds:** Most of the transmission lines, which are highly susceptible to experiencing damage from high winds above 58 mph, were within the top 5% of strong wind scores, especially those 115-kilovolt (kV) lines located along the state's coast.
- **Extreme Heat:** Several substations, along with the W.S. Lee Steam Station, in South Carolina's Upstate and Midlands regions, were assessed to have high risk scores for extreme heat, which can reduce transformer capacity, resulting in a marginally higher risk of failure and reduction in transformer life, especially as these events increase in magnitude, duration, and frequency in the future[2].
- **Flooding and Coastal Flooding:** Coastal transmission lines, along with several coastal substations, represent the greatest risk of future coastal flooding with sea level rise. Several key laterals on the Carolina Gas Transmission System have been identified as having the highest risk of inland and coastal flooding as well. Like the natural gas sector, petroleum infrastructure is particularly vulnerable to flooding at water crossings along the Colonial and Products SE Pipe Line Corporation pipelines.
- **Hurricane:** Hurricane Helene demonstrated the vulnerability of South Carolina's energy infrastructure to strong tropical winds. Coastal areas and portions of the Upstate region were found to have the highest likelihood of damaging hurricane-force winds, putting both transmission lines and power plants at elevated risk. Critical power generation facilities along the coast, as well as in the Upstate and Midlands regions, faced the greatest potential for operational disruption. Meanwhile, substations with the highest risk of damage from hurricane winds were primarily concentrated in the Upstate, Midlands, and western parts of the state.
- **Wildfire:** Wildfire currently has a relatively low likelihood of occurrence in South Carolina through 2050 and therefore represents a low overall risk to the energy sector, although this risk is increasing and should be periodically reevaluated as conditions change. Transmission lines at the highest risk are primarily located in the Midlands region, where vegetation and terrain could exacerbate fire impacts.

Figure 3: Energy infrastructure risk matrices







Mitigation

Through stakeholder engagement, dockets, hazard mitigation plans and lessons learned, a number of ongoing and potential mitigation activities were identified. During this process, we learned of many mitigation initiatives already completed and in progress for improving energy security throughout the state. The Existing Risk Mitigation Strategy section covers these activities. These proposed mitigation activities are expected to improve restoration time, improve communications and coordination, streamline processes, and overall reduce the impact from an event such as Hurricane Helene. This study recognizes that some of these solutions come with a trade-off, primarily regarding economics, time, and other constraints; however, each of the items outlined in Figure 4 can help improve the resilience of energy and communications infrastructure in South Carolina.

Figure 4. Additional Proposed Mitigation Solutions

South Carolina Primer

Electricity

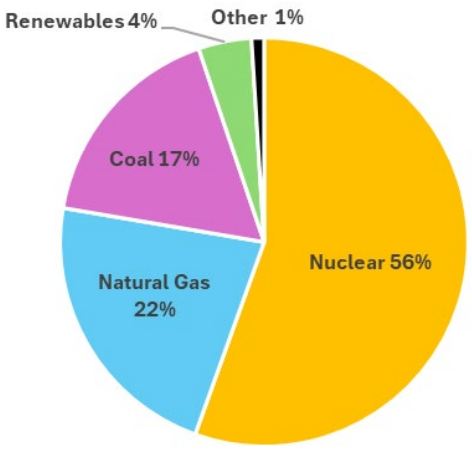
Consumption

South Carolina ranks in the top 20% of states for per capita residential electricity sales, driven by long, hot, and humid summers, with about 95% of homes using electricity for air conditioning and 70% of households using electricity as their primary space-heating source.[3,4,5] The residential sector has the largest share of electricity sales, at roughly 38% of total retail electricity sales, followed by industrial (33%) and commercial (28%) customers.[6,7] Energy-intensive industries, such as chemicals and vehicle manufacturing, make up South Carolina's largest end-use energy sector and, because of their base load characteristics, play a major role in shaping the state's electric load profile.[8]

Generation Mix

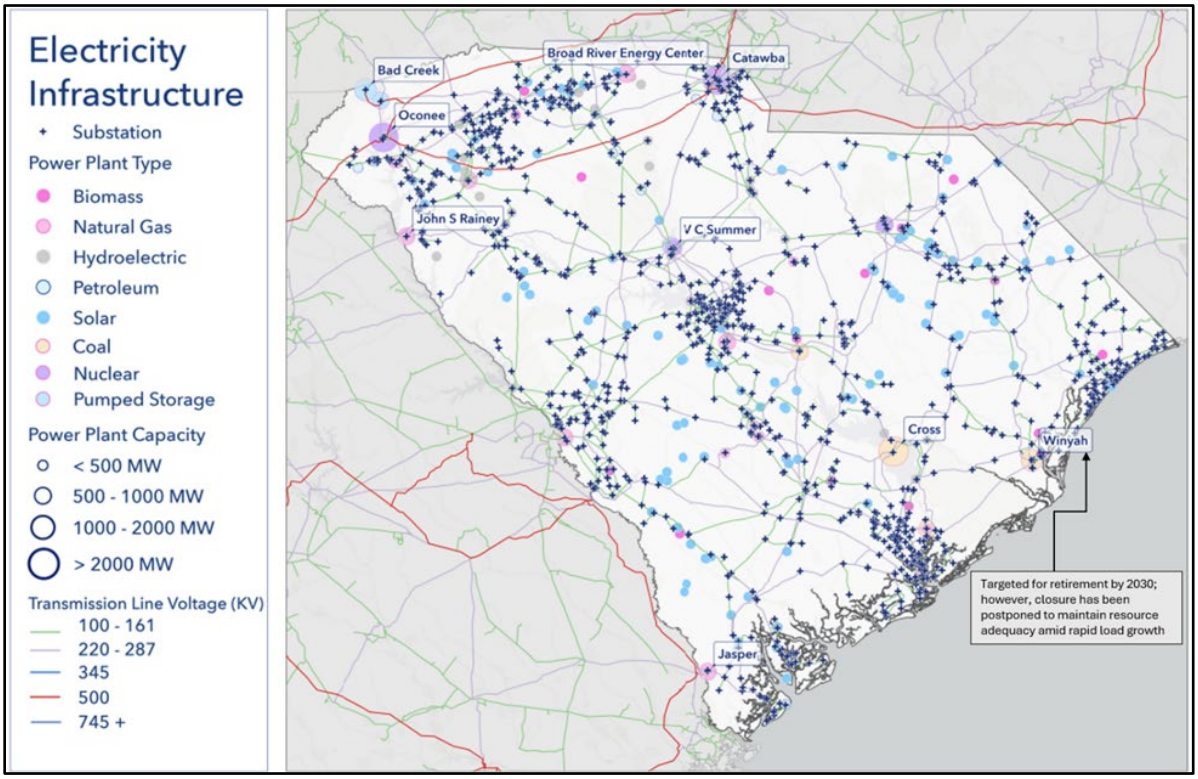
South Carolina generates approximately 16% more electricity than it consumes, about 10 million megawatt-hours (MWh) of surplus electricity in 2024, and is a net exporter on the southeastern regional grid.[9] South Carolina's power supply is anchored by nuclear energy, supported by growing natural gas-fired generation, a shrinking—but still significant—coal fleet, and a modest but expanding portfolio of renewables. *Figure 5. South Carolina's 2024 generation mix (MWh)* depicts the state's generation mix in 2024, according to the South Carolina Energy Office.[10]

Figure 5. South Carolina's 2024 generation mix (MWh)



- Nuclear plants supplied about 56% of total in-state electricity generation in 2024.[11] South Carolina is among the top three states nationally for both nuclear capacity and generation, with seven operating reactors at four plants.[12,13,14]
- Natural gas has become the state's second largest source of electricity.[15] Between 2014 and 2024, natural gas-fired generation grew by nearly 60%. By 2024, gas-fired units produced roughly 22% of total generation.[16,17] Gas plants now account for a significant share of the state's newer capacity.
- Coal-fired generation has been declining over the past decade but remains important to the state's grid. In 2024, coal provided approximately 17% of total generation, roughly half its share in 2014.[18] South Carolina now has four remaining operational coal plants.[19]
- Renewable resources account for approximately 4% of total generation. This category includes utility-scale and distributed solar, conventional hydroelectric, pumped storage, and biomass (such as wood waste and landfill gas).[20]

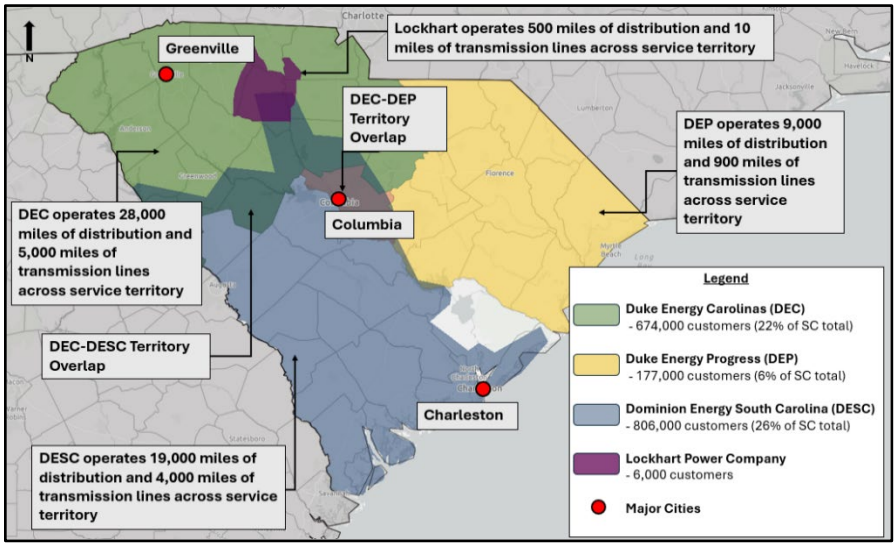
Figure 6. Map of South Carolina bulk electricity infrastructure



Utilities and Electricity Providers

South Carolina's 3 million electricity customers are served by a mix of investor-owned utilities, electric cooperatives, a state-owned utility, and municipal providers.[21] Four investor-owned utilities collectively serve approximately 54% of customers, own a large share of the state's high-voltage network, and supply major metropolitan areas.[22]

Figure 7. Investor-owned utilities' service territories

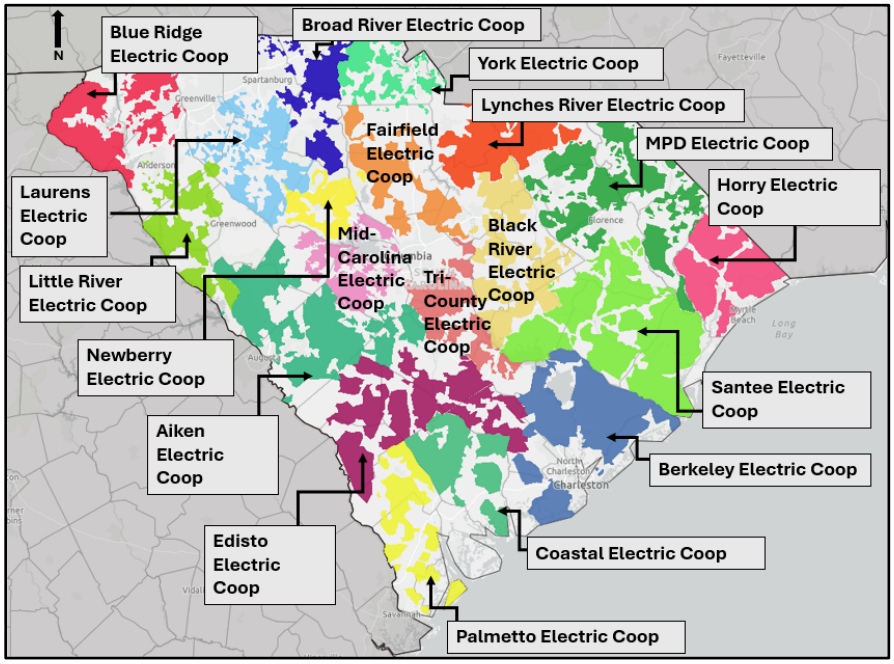


- Dominion Energy South Carolina serves much of the Midlands and Lowcountry regions, including the Columbia and Charleston areas, and owns a mix of nuclear and gas-fired generation.[23,24]

- Duke Energy Carolinas serves the Upstate region, including the Greenville and Spartanburg metropolitan areas, and owns large nuclear and gas assets that are integrated with Duke's broader Carolinas system.[25,26]
- Duke Energy Progress serves the northeastern quarter of the state, including the cities of Florence and Myrtle Beach, and owns large nuclear and gas assets that are integrated with Duke's broader Carolinas system.[27]
- Lockhart Power Company primarily serves Union County in the Upstate region near the border with North Carolina and owns a mix of hydroelectric and landfill gas-fired generation.[28,29]

Nineteen electric cooperatives serve 34% of customers (just over 1 million customers), primarily in rural and exurban areas. Cooperatives maintain the majority of the state's distribution system, reflecting low customer density and long rural line segments relying heavily on wholesale power contracts—primarily with Santee Cooper, Duke, and federal hydropower assets—to meet their loads.[30] These long-term contracts are facilitated by Central Electric Power Cooperative (CEPC), a generation and transmission cooperative with no direct service to retail customers, which is owned by the 19 independent electric distribution cooperatives in the state. CEPC also builds transmission lines that connect individual cooperatives to the state's transmission network.[31] The South Carolina Public Service Authority (Santee Cooper) is the state-owned utility and serves about 7% of customers directly (216,000 customers), while also supplying wholesale power to many cooperatives and municipalities through its transmission network. Additionally, they operate a diverse generation portfolio that includes coal, gas, and renewables.[32,33]

Figure 8. Electric cooperatives' service territories



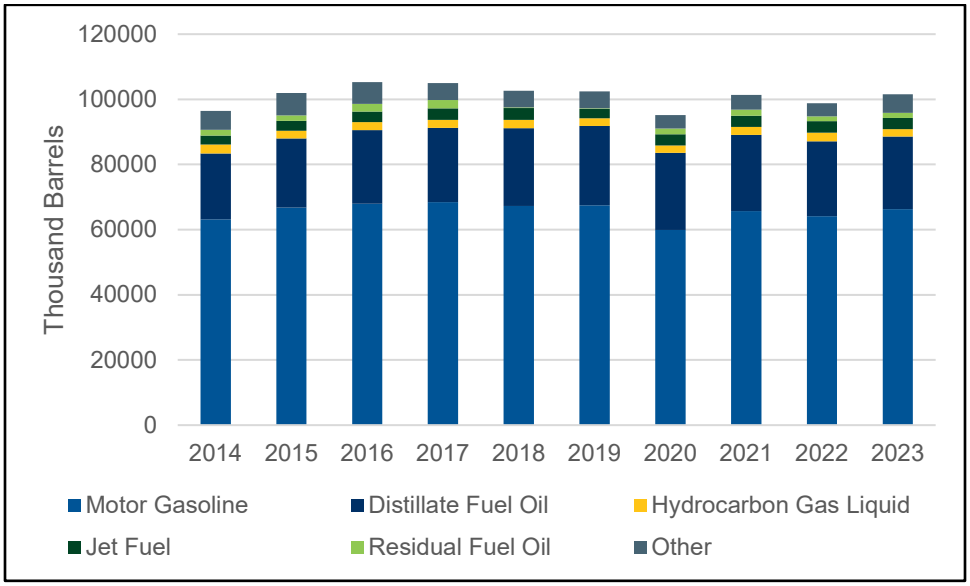
Finally, 20 municipal utilities serve the remaining 5% of customers (200,000 customers).[34,35] These systems generally own and operate local distribution infrastructure but depend on larger entities and joint-action agencies for wholesale power and transmission access.

Petroleum

Consumption

The transportation sector accounts for approximately 90% of petroleum products consumed in the state, most of which are motor gasoline, diesel fuel, and jet fuel.[36,37] The state contains more than 2,400 gasoline fueling stations and is among the top quartile of states in per capita motor gasoline expenditures, despite having the sixth lowest gasoline prices among states in 2024.[38,39] This is due, in part, to the large volume of fuel sales to travelers on the state's major interstate corridors, which link major population centers along the Eastern Seaboard.[40] South Carolina permits the sale of conventional gasoline without ethanol statewide (no reformulated gasoline standard).[41] However, fuel blending and the sale of reformulated gasoline still occur.

Figure 9. South Carolina's petroleum consumption



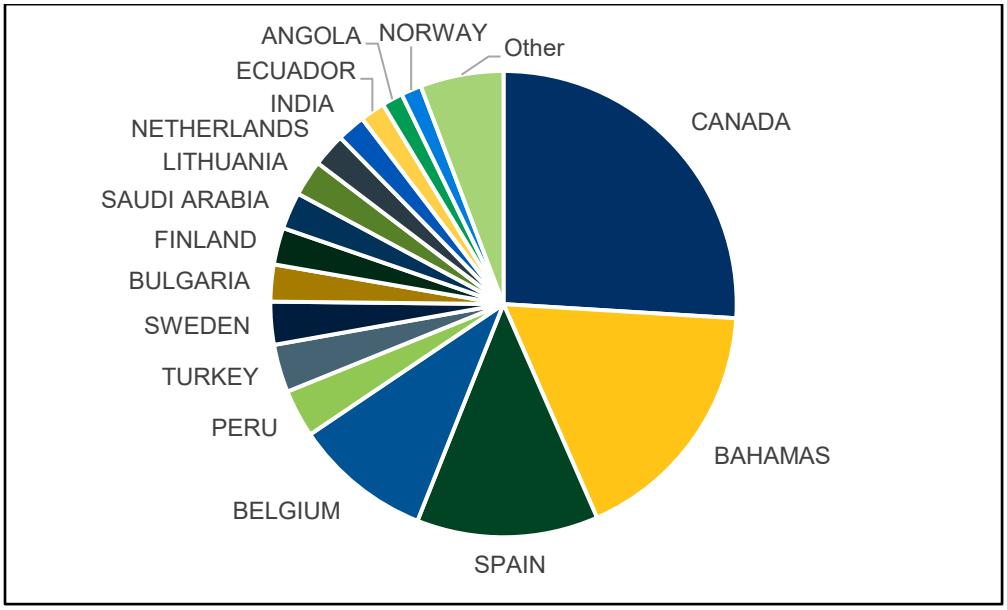
Source: U.S. Energy Information Administration, State Energy Data System.

In 2023, South Carolina's transportation sector consumed more than 18,000 barrels per day (b/d) of fuel ethanol, representing a 9% share of the state's total gasoline-ethanol pool.[42,43] The state also consumed 1,800 b/d of biodiesel in 2024—a fuel that can be blended with petroleum-derived diesel or used as a substitute—equivalent to 1.4% of total biodiesel use across the entire United States.[44,45] Additionally, South Carolina's use of natural gas as a vehicle fuel (compressed or liquefied) has increased by 88% over the past decade to 0.21 million cubic feet per day (MMcf/d), while in 2024 the state's transportation sector consumed approximately 8,400 gallons per day of propane.[46,47] Petroleum-fired electricity generation accounted for 0.1% of in-state electricity production in 2024 (97 MWh) and is primarily utilized when peak loads strain the state's power grid.[48] Only 4% of households in South Carolina utilize petroleum products—such as propane—for home heating.[49]

Supply and Infrastructure

South Carolina relies on overseas or out-of-state deliveries of refined petroleum products because they have no crude oil reserves, production, or any petroleum refineries in the state.[50,51]

Figure 10. Port of Charleston 2023 petroleum product imports

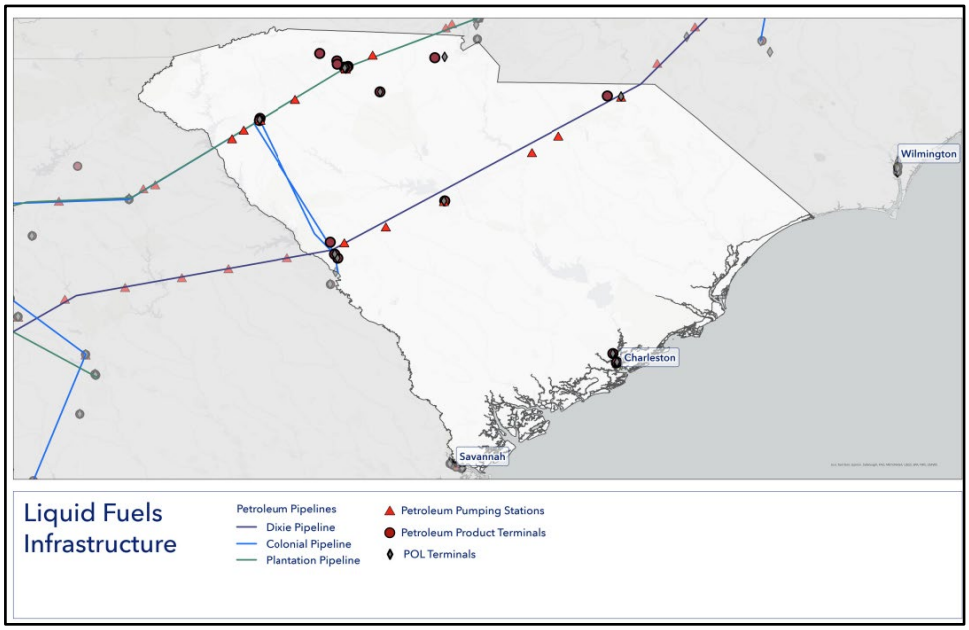


Source: U.S. Energy Information Administration imports.

Overseas and coastwise imports enter South Carolina principally through the Port of Charleston and associated terminal facilities along the Cooper River.[52,53,54] At these locations, operators offload and store petroleum products before distributing them as gasoline, diesel, and other fuels to markets across the state. Ports in neighboring states—most notably the Port of Savannah (GA) and the Port of Wilmington (NC)—also maintain fuel import and storage infrastructure and serve as ancillary points of domestic origin for South Carolina-bound truck deliveries of refined products. Generally, petroleum products received at these port facilities serve in-state markets located east of Interstate 95.

In addition to marine receipts, the major conduits for domestic supplies originating outside of South Carolina are three major refined-product pipelines that originate along the Gulf Coast: the Colonial Pipeline, the Products (SE) Pipe Line Corporation (PPL), and for propane specifically, the Dixie Pipeline. Colonial primarily sources from refining hubs in Texas and Louisiana, while PPL draws from major refining centers in Louisiana and Mississippi.[55,56] Together, both pipelines deliver approximately 87%, with Colonial delivering 63% of state fuel supply and Products (SE) pipeline delivering 24% of state fuel supply. These supplies of gasoline, distillate, and jet fuel are received by terminal clusters in western South Carolina (Upstate and North Augusta regions), which function as key distribution hubs for final in-state delivery. Generally, the demand for petroleum products in South Carolina markets west of Interstate 95 is served by these terminals located in western South Carolina. The Dixie Pipeline, in contrast, functions mainly as a dedicated propane line, carrying product sourced from the fractionation and storage complex at Mont Belvieu on the Texas Gulf Coast to markets across the Southeast, including South Carolina.[57,58] In Tirzah, SC, the Dixie Pipeline is connected to a 57.5 million-gallon underground propane storage cavern that provides valuable storage capacity for East Coast propane movements.[59]

Figure 11. South Carolina's petroleum/liquid fuels infrastructure



South Carolina has no fuel ethanol or biodiesel production plants, so all supplies of both fuels must be imported.[60,61] The vast majority of U.S. ethanol production capacity is located in the Midwest (Petroleum Administration for Defense District [PADD] 2), and most ethanol shipped to East Coast markets moves by rail.[62,63,64] In South Carolina, railroads bring ethanol supplies into rail-served tank farms and terminals in Chester, Belton, Spartanburg, and various other localities, where it is injected into gasoline blendstock and distributed to retail stations.[65,66] Biodiesel is supplied in a similar manner—stocks are typically shipped from midwestern production facilities to terminal operators and distributors in South Carolina by tank truck and railcar.[67,68] Blending typically occurs at terminal facilities in Belton, North Augusta, and Spartanburg before finished biodiesel blends are trucked to retail stations and bulk users across the state.[69] South Carolina's petroleum and liquid fuels infrastructure can be seen above in Figure 11.

Natural Gas

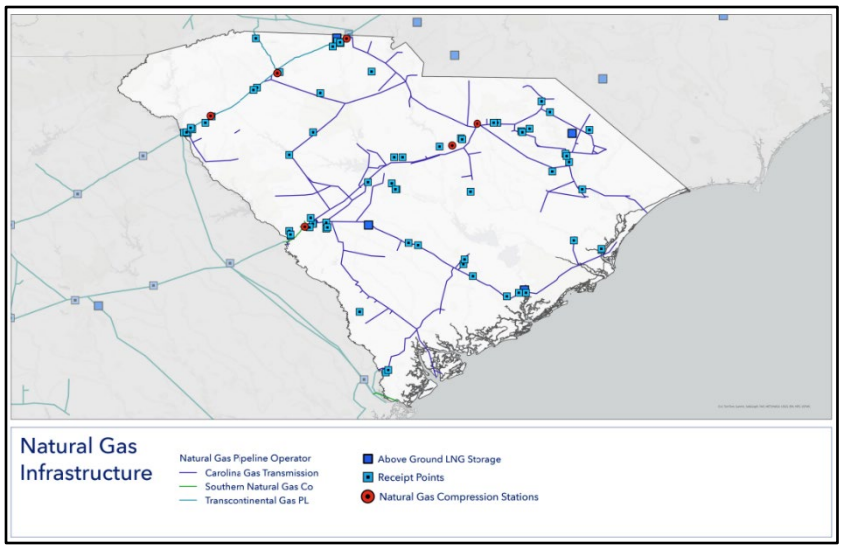
Consumption

South Carolina's per capita natural gas consumption ranks among the lowest in the nation, while its total usage places near the national midpoint among the states.[70] Over the past decade, natural gas use in South Carolina has increased the most in the electric power sector, where natural gas consumption more than doubled from 2014 to 2024.[71,72] South Carolina's electric power sector use of natural gas has exceeded that of any other energy-consuming sector since 2009 and has accounted for 53% of the state's total natural gas consumption in 2024. Industrial sector natural gas demand remained above 250 MMcf/d for the eighth consecutive year and accounted for 29% of the state's total natural gas use.[73] The residential sector accounted for 10% of the state's natural gas consumption, which can be partly attributed to mild winters and relatively low heating demand.[74] Approximately one-quarter of households in the state are heated with natural gas.[75] The commercial sector made up 7% of South Carolina's natural gas use.[76]

Supply and Infrastructure

South Carolina has no economically recoverable natural gas reserves or production.[77,78] All natural gas consumed in the state arrives by interstate pipelines. The two major interstate conduits delivering natural gas are the Transcontinental Gas Pipe Line (Transco) and the Southern Natural Gas (SNG) system. Transco is a roughly 10,000-mile trunkline extending from the Texas and Louisiana Gulf Coast to the Northeast.[79] The segment of the Transco Pipeline running through South Carolina is bidirectional, enabling the state to be supplied either by gas production shipped north from the Gulf Coast or south from the Marcellus Shale region of Pennsylvania.[80] In South Carolina, Transco crosses the state on a southwest-to-northeast alignment with multiple receipt and delivery points along its route. The SNG system comprises 6,900 miles of pipeline stretching from Louisiana to the western border of South Carolina. Supply on the SNG system primarily originates along Gulf Coast gathering lines and via its connection with Kinder Morgan's Elba Express pipeline, which links the Elba Island Liquefied Natural Gas (LNG) terminal to Transco and South Carolina markets.[81]

Figure 12. South Carolina's natural gas infrastructure



The Carolina Gas Transmission (CGT) system is an important interstate pipeline across the entire state, consisting of nearly 1,500 miles of pipeline focused on making deliveries to the end-use consumers.[82] The

Transco and SNG systems are the principal supplier of gas volumes to CGT, which maintains 7 supply interconnects, 6 compressor stations, and routes gas supplies to more than 150 delivery points, including North Augusta, Greenville, and Spartanburg.[83]

These three pipeline systems collectively serve a demand profile in which the electric power sector is the largest consumer of natural gas in South Carolina—accounting for more than 50% of statewide usage in recent years. In the Upstate region of South Carolina, two of the state's major natural gas-fired generating stations—the Rainey Generating Station (4.5 million MWh annually) and the W.S. Lee Steam Station (5.6 million MWh)—are sited along the Transco Pipeline corridor and receive their gas supplies from local distribution companies that receive from that system. In the central part of the state, near Columbia, the Columbia Energy Center (3.3 million MWh) is served by the CGT system, while farther south along the Savannah River, the Jasper Generating Plant (4.6 million MWh) also receives gas deliveries from CGT's interstate pipeline. South Carolina's natural gas infrastructure can be seen in Figure 12.

Broadband Communications

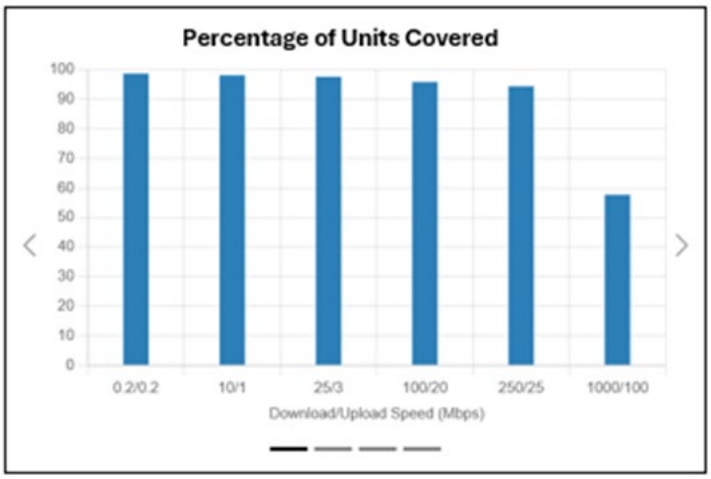
Consumption

The **Federal Communications Commission** (FCC) National Broadband Map[84] tells a compelling story of South Carolina's broadband status and the effects of a focused effort by the Government of South Carolina to improve broadband throughout the state.

FCC data (Figure 13) show that 95.77% of South Carolinians have download/upload speeds, measured in megabits per second (Mbps), that meet the FCC definition of "broadband"—100 Mbps download and 20 Mbps upload. The same data also show that a large percentage of the South Carolina population has download/upload speeds that exceed this broadband definition, with either 250/25 or 1,000/100 Mbps.

A South Carolina success story is reflected in the FCC data (Figure 14) for urban and rural broadband communications coverage. South Carolina has worked diligently since 2021 to reduce the number of unserved/underserved locations from 300,000 to below 30,000 in early 2025. The result is that, on a percentage basis, rural broadband access lags urban broadband access by less than 5% across all depicted download/upload speed categories in Figure 14, including the important 100/20 Mbps category. Note that in the last category on Figure 14, depicting

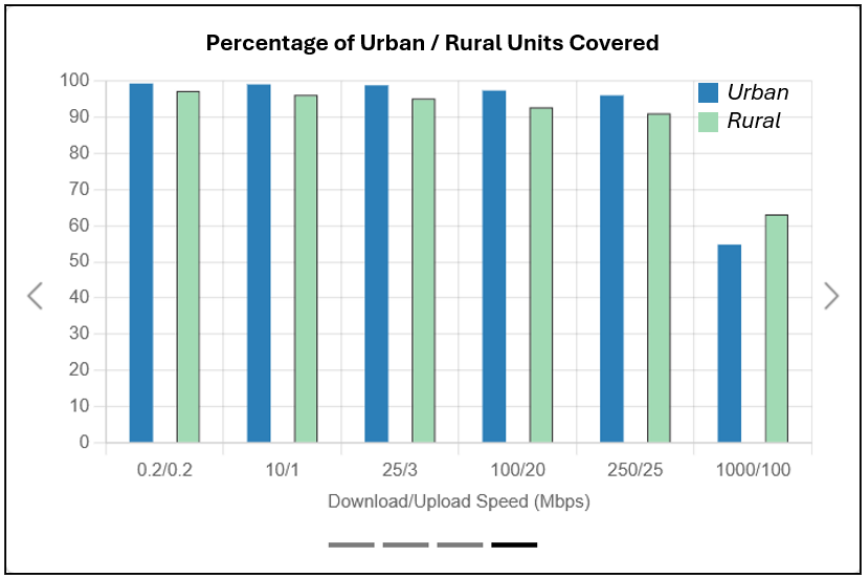
Figure 13. Percentage of units covered (FCC)



1,000/100 Mbps download/upload speeds, rural areas achieve 1 gigabit (1,000 Mbps) by almost 9% over urban areas.

BroadbandNow, a data aggregation company, analyzes broadband access, affordability, performance, and competition across the 50 states and Washington, D.C., to determine which states lead and lag in closing the digital divide. In their August 2025 report, BroadbandNow listed South Carolina as the #20 state in the nation for broadband access and speeds.[85]

Figure 14. Percentage of urban/rural units covered (FCC)



BroadbandNow's data reflected South Carolina's broadband capabilities available to the public:

- Access to wired or fixed wireless broadband: 92.8%
- Access to wired low-price broadband: 86.5%
- Median download speed: 137.3 Mbps
- Median upload speed: 21.8 Mbps
- Median roundtrip time: 25.9 milliseconds
- Internet providers in South Carolina: 43

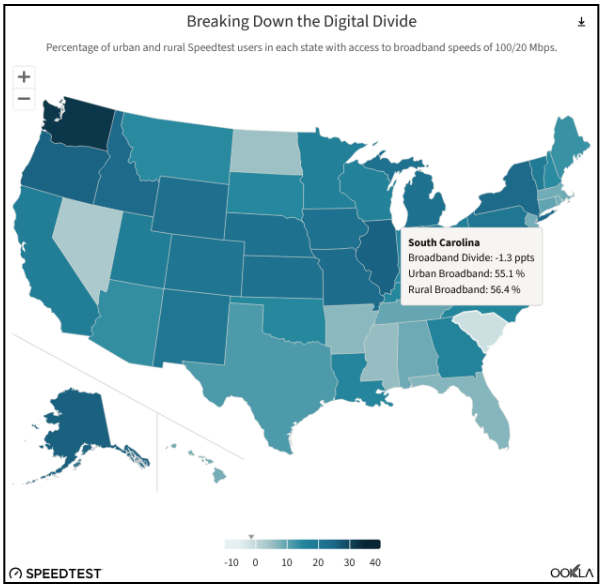
The data demonstrate South Carolina's commitment and investment in broadband access throughout the state. More succinctly, BroadbandNow ranks South Carolina as the #4 state in the nation for median broadband speeds at 137.3 Mbps.

The state's broadband access investment is best measured by the fact that South Carolina is the only state in the nation with a negative digital divide. By way of background, the concept of a "digital divide" emerged in the mid-1990s through efforts such as the **National Telecommunications and Information Administration** report, *Falling Through the Net: A Survey of the "Have Nots" in Rural and Urban America*.[86]

South Carolina has deployed broadband communications throughout the state in urban and rural areas. The success of this program is obvious when looking at **Ookla**, the industry leader in measuring internet connection performance (download speed, upload speed, and latency). Ookla's research report, *Breaking Down the Digital Divide*,[87] shows South Carolina's negative digital divide with broadband speed (100 Mbps download/20 Mbps upload) access availability to 55.1% of the population in urban areas and 56.4%

of the population in rural areas. All other states in the nation and the District of Columbia have higher urban broadband percentages than rural areas by as much as 32.4%. South Carolina's investment in state-wide broadband has well postured the state for internet access that supports education, telehealth, and other internet connection-dependent services, greatly benefiting rural areas.

Figure 15. Breaking down the digital divide (Ookla)



Cellular Communications

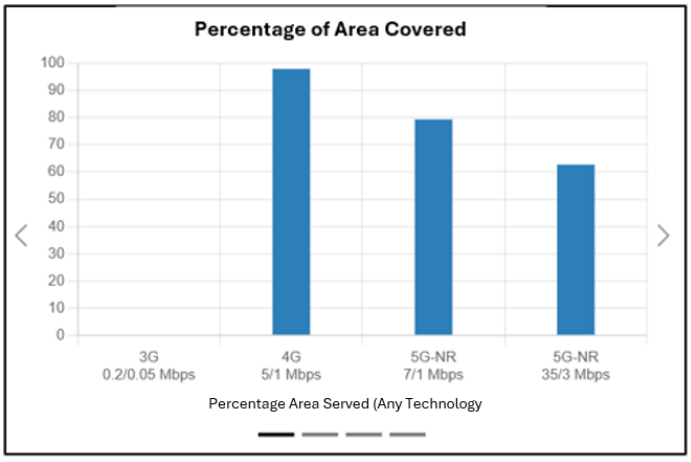
Consumption

South Carolina has a robust cellular infrastructure with solid coverage of the population centers and major highways. Cellular coverage in rural and sparsely populated areas can be spotty.

According to the FCC National Broadband Map, Verizon, AT&T, and T-Mobile are the largest cellular providers in the state.[84] UScellular is also a major component of the South Carolina cellular infrastructure, especially in rural and remote areas. There are also several mobile virtual network operators, including Spectrum (by Charter), US Mobile, Consumer Cellular, and Carolina Connect.

Figure 16 reflects the coverage percentages of FCC Baseline 4G (LTE) 5/1 Mbps at 97.91%, FCC Basic 5G-New Radio (NR) 7/1 Mbps at 79.33%, and FCC Higher 5G-NR 35/3 Mbps at 62%. Of note, the higher service level of 35/3 Mbps is commonly used for more substantial 5G service areas, as well as mapping and promotional purposes.[88]

Figure 16. Cellular percentage of area covered (FCC)



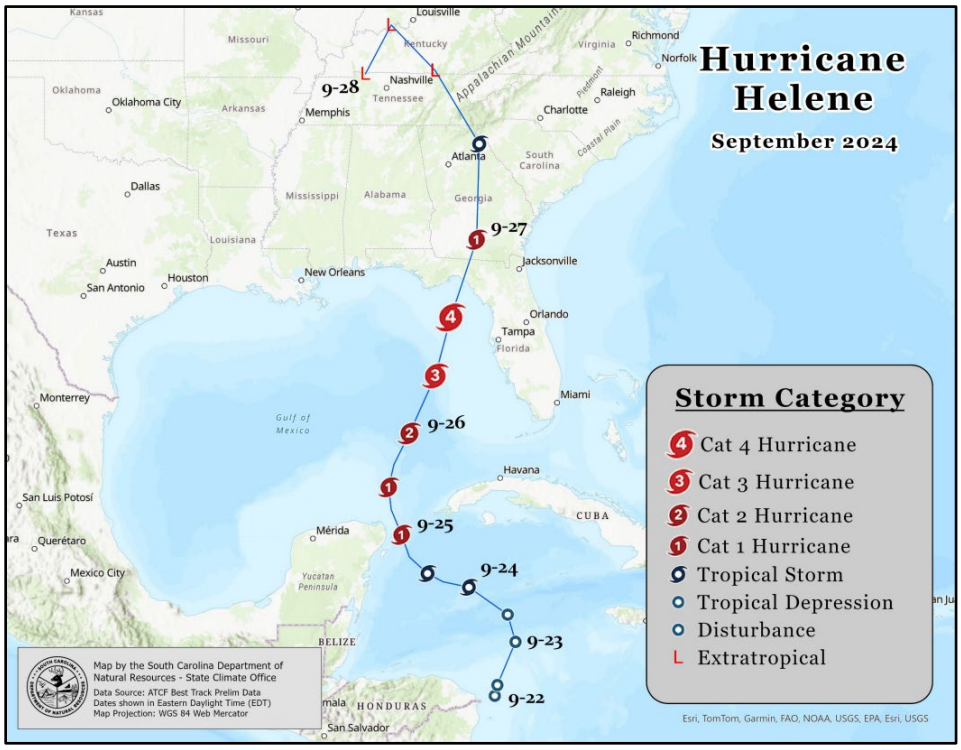
Hurricane Helene

Event Summary – Timeline of Events

Hurricane Helene originated as a broad cyclonic disturbance within the Central American Gyre* on September 20, 2024, gradually organizing as convection consolidated and a low-level circulation formed by September 24. It became a tropical storm that day about 175 nautical miles south of western Cuba with 40-knot winds, then strengthened over the warm, low-shear Gulf of Mexico while accelerating north-northwestward under the influence of a subtropical ridge and an approaching cut-off low over the Tennessee Valley. By early September 25, Helene reached 55 knots east of Cozumel and became a hurricane six hours later near Cancun. National Hurricane Center forecasts highlighted the risk of a major hurricane landfall in Florida's Big Bend and significant inland wind and rainfall impacts across the Southeast, including the Carolinas. As Helene moved through the Gulf, its wind field expanded substantially; tropical storm-force winds extended outward up to 360 nautical miles in the northeast quadrant. Helene's track is shown in Figure 17 below.

At 11:10 p.m. EDT on September 26, 2024, Hurricane Helene made landfall near Perry, Florida (in the Big Bend region), as a Category 4 hurricane with sustained winds estimated at 120 knots and a central pressure of about 939 millibars. Shortly after landfall, the system tracked quickly through southern Georgia and approached the Georgia-South Carolina border

Figure 17. Hurricane Helene's track, September 22–28, 2024

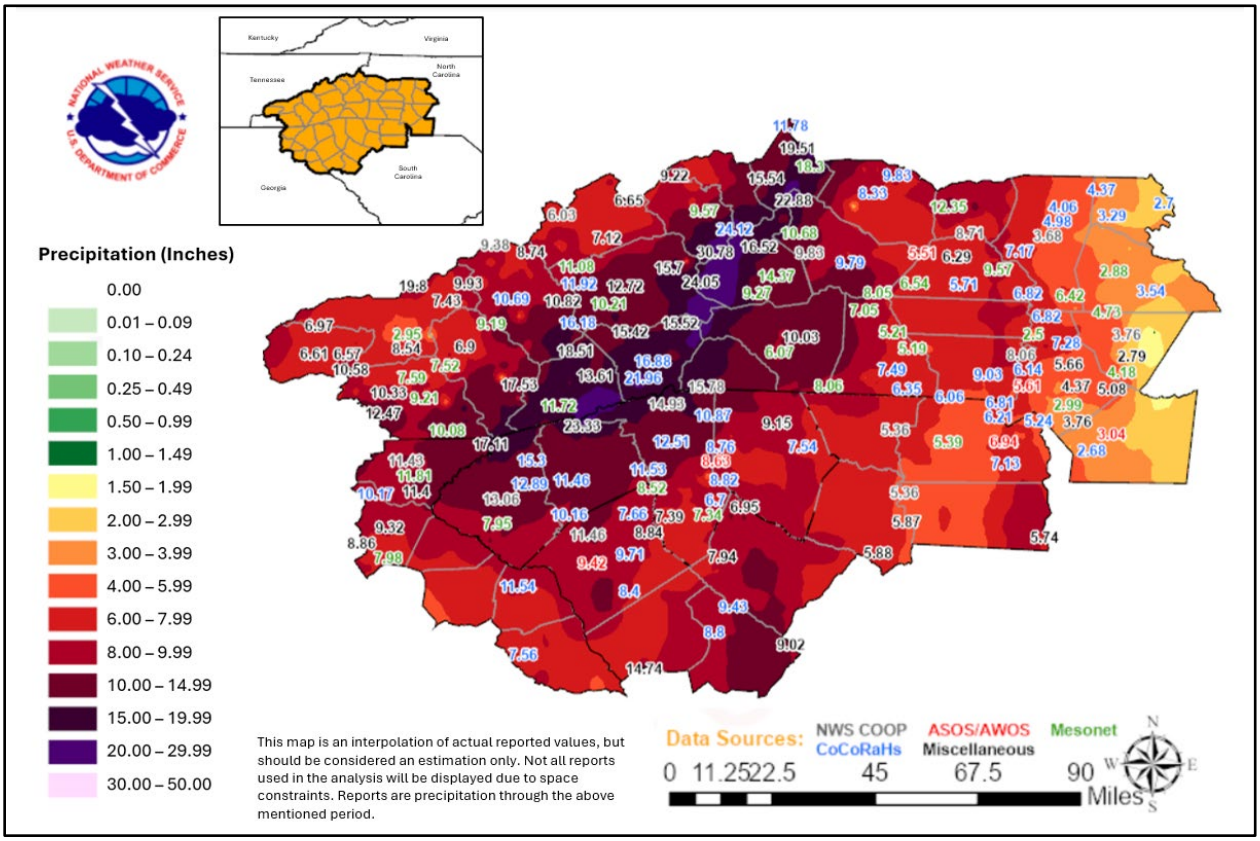


* The Central American Gyre is a large-scale, semi-permanent cyclonic (counterclockwise in the Northern Hemisphere) circulation of air that typically forms over Central America and the adjacent eastern Pacific and western Caribbean during the summer months, usually from June to October.

region by around 8:00 a.m. on September 27. Because of its unusually fast forward speed and large wind field, significant wind gusts and tropical storm to hurricane-force conditions reached far inland, including in South Carolina.

Once Hurricane Helene's outer core entered South Carolina, significant rainfall and gusty winds were observed. In the upstate and western Piedmont of South Carolina, the combination of saturated soils from antecedent rain and strong gusts caused substantial damage. Rainfall totals across the state in the approach phase generally ranged from 5 to 15 inches statewide; Sunfish Mountain in Greenville County recorded the state's peak rainfall at 21.66 inches.[89]

Figure 18. Greenville-Spartanburg, South Carolina, rainfall before and during Hurricane Helene, 8 a.m. 9/24/24 to 8 a.m. 9/28/24



Sustained winds in South Carolina reached up to 48 knots, with a peak gust of 67 knots recorded near Laurens, roughly 15 to 20 nautical miles south of Greenville/Spartanburg. Coastal areas also experienced strong winds, including sustained speeds of 46 to 47 knots in Charleston Harbor and Beaufort County. Inland weather stations measured gusts as high as 63 knots, although many stations in Georgia and South Carolina ceased reporting before the storm's peak. Damage surveys by the National Weather Service indicated gusts likely exceeded 70 knots across a broad area from the Florida Panhandle through eastern Georgia and into central and western South Carolina, with evidence of localized gusts possibly surpassing 90 knots based on tree and structural damage.[90]

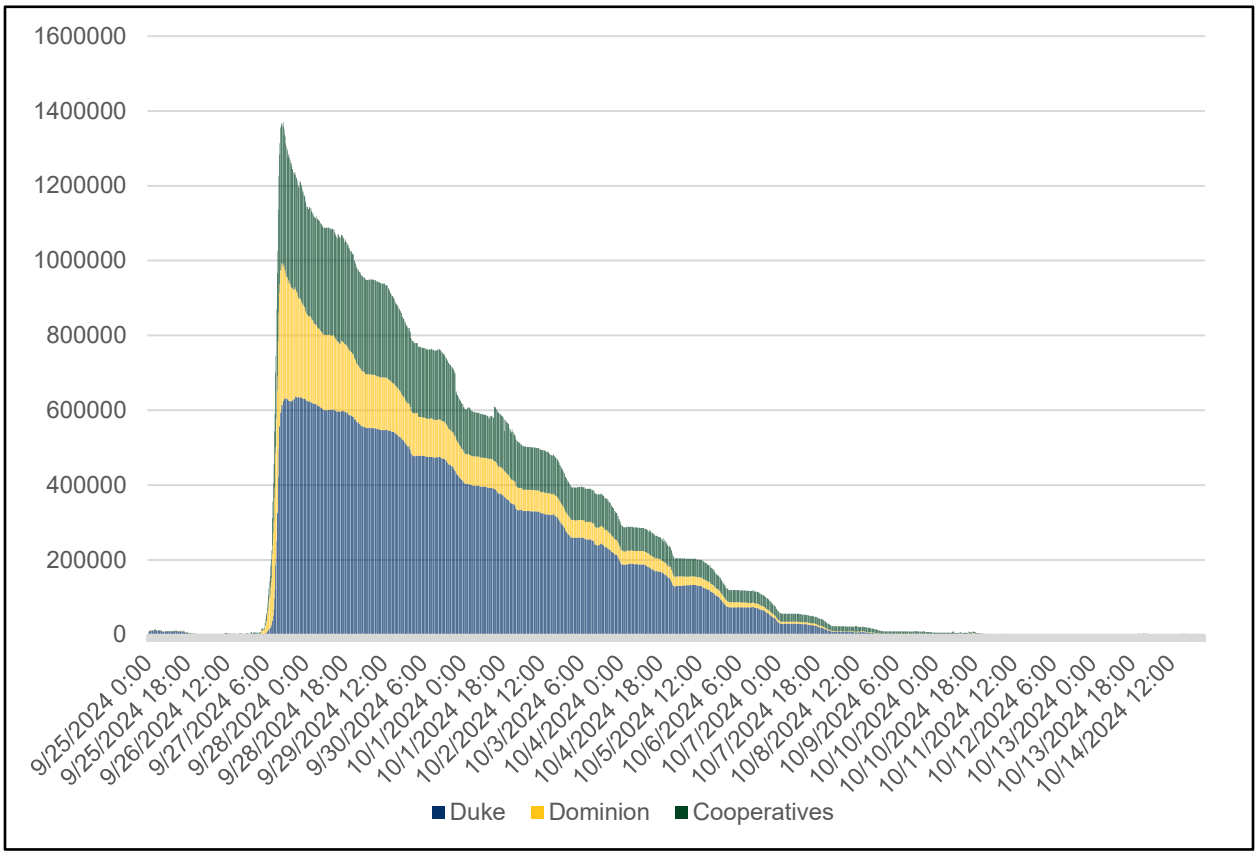
Table 2. Highest measured wind gusts by county[91]

County	Location	Wind Gust (knots)
Laurens	Laurens	67
Beaufort	Beaufort	65
Anderson	Anderson	63
Aiken	Aiken	63
Pickens	Sassafras Mountain	63

Hurricane Helene additionally produced 21 tornadoes in South Carolina, including a notable wide-path Enhanced Fujita (EF)-1 tornado in Cordova (1,100 yards wide) and another long-track EF-1 in Orangeburg/Calhoun (800 yards wide) early on September 27. Meanwhile, the heavy rainfall, especially given the soil saturation and terrain in western/northwestern South Carolina, triggered flash flooding; rivers and streams exceeded record levels in multiple basins, and landslides and road washouts constrained access.

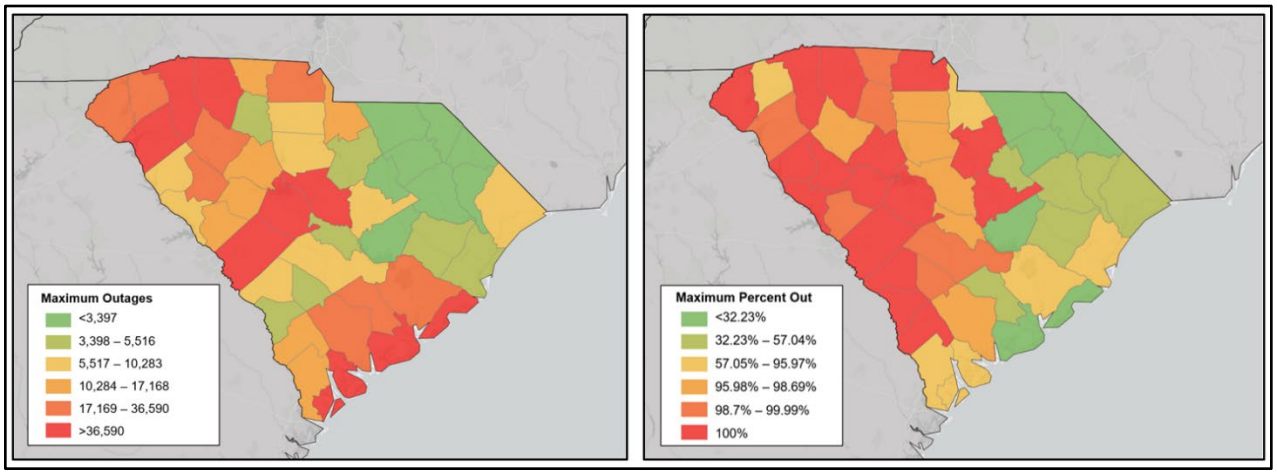
As shown in Figure 19, roughly 1.4 million electric customers in the state were without service at its peak number of outages on September 27. Duke Energy reported roughly 637,000 outages (concentrated in the Upstate region), Dominion Energy SC peaked near 381,000, electric cooperatives together approached 380,000, and Lockhart data were not available.

Figure 19. South Carolina utility outages over time, September 25 through October 14, 2024



Many counties in the Upstate and western portions of the state had the highest maximum number of outages, along with the highest maximum percentage of outages, as displayed in the Figure 20.

Figure 20. Maximum outage count and maximum percentage out by county, September 25 through October 14, 2024



Many of the outages were caused by wind and tree damage in heavily forested transmission and distribution corridors, as well as flooding and impassible roads slowing repair crews. These conditions contributed to prolonged restoration timelines because access constraints ended extensive debris removal and delayed damage assessment and line repair efforts. Timber losses were estimated at about $83 million across 20 counties, primarily in western and northwestern South Carolina.

Energy Supply Impacts

Hurricane Helene caused widespread and prolonged disruption to South Carolina's electric power system, resulting in one of the most significant outage events in the state's history. High winds, heavy precipitation, flooding, and extensive tree damage affected transmission and distribution infrastructure across all provider types, including investor-owned utilities, electric cooperatives, and municipal systems. At peak, well over 1 million customers were without power, with some service territories experiencing near-total service interruption. Restoration efforts were complicated by blocked access to damaged facilities, extensive vegetation debris, and sustained transmission-level outages that constrained local distribution recovery. The following sections present utility-specific assessments of Helene's impacts on electric infrastructure and customers for Duke Energy, Dominion Energy, electric cooperatives, municipal utilities, Santee Cooper, and Lockhart Power Company.

Duke Energy

Figure 21. Duke Energy South Carolina Service Area

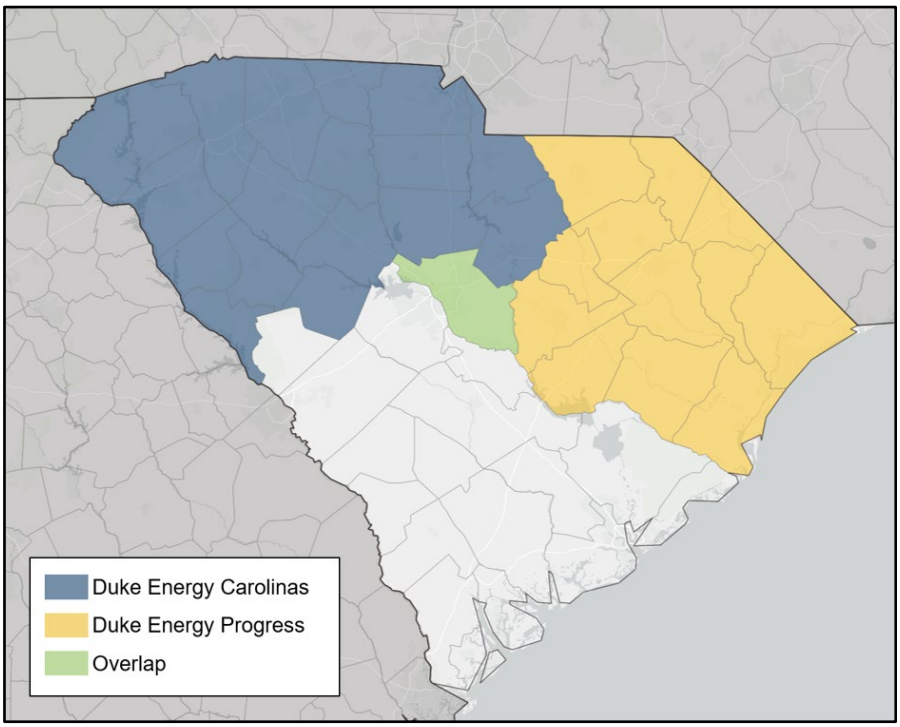


Table 3. Infrastructure Damage[93]

Poles	**5,600**
Transformers	**4,500**
Wire (feet)	**3,600,000**
Crossarms	**12,000**
Retail/Industrial Substations	**220**
Distribution Substations	**108**
Transmission Lines	**155**
Wholesale Points of Delivery	**77**
Industrial Points of Delivery	**118**
Municipal Cooperative Points of Delivery	**86**

Duke Energy Customers in South Carolina: 835,499[92]

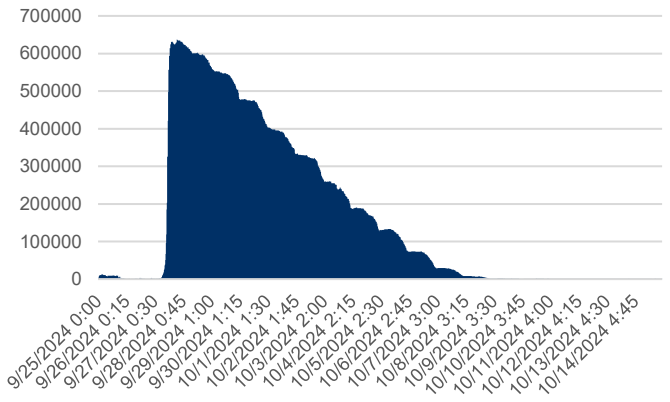
Customer Outages

- About 637,000 Duke Energy customers in South Carolina lost power at the company's peak number of outages on September 27.
- Regional outages across the Carolinas exceeded 1.7 million customers at peak.
- Duke Energy ultimately restored service to more than 2.1 million customers across both states.
- 99% of Upstate customers lost power.

Counties with >90% of customers without power at the county's peak outage:

- Oconee: 100%
- Greenwood: 100%
- Spartanburg: 100%
- Newberry: 100%
- Greenville: 100%
- Laurens: 97%
- Anderson: 94%

Figure 22. Duke South Carolina Outages Over Time



Dominion Energy

Figure 23. Dominion Energy South Carolina Service Area

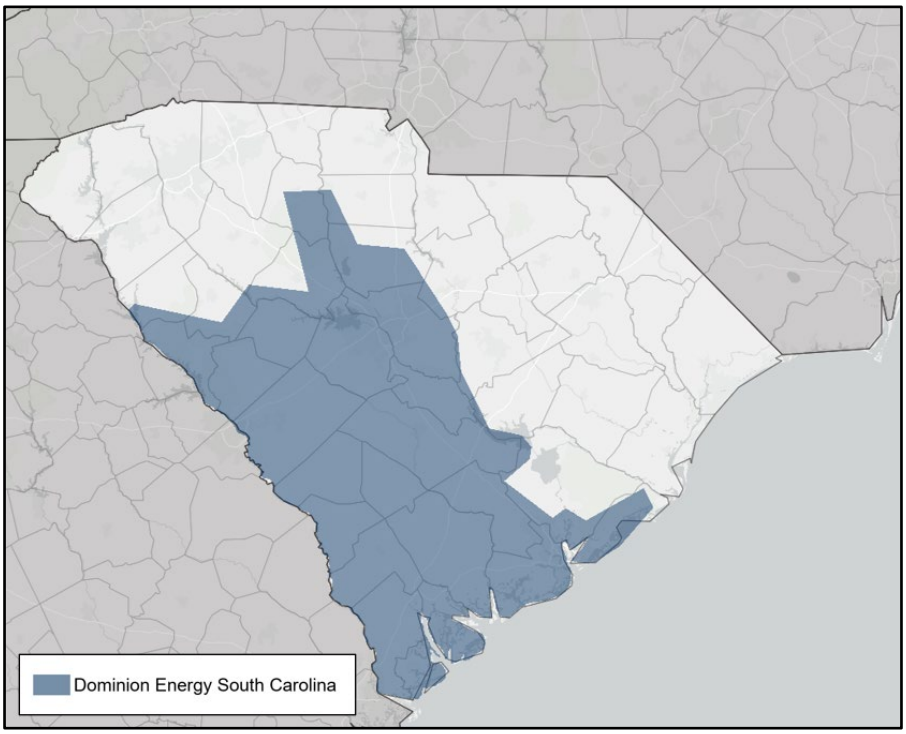


Table 4. Infrastructure Damage[95]

Poles	**3,260**
Transmission Segments	**91**
Substations	**87**
Transformers	**1,404**
Transmission Wire (spans)	**350**
Distribution Wire (spans)	**7,840**

Dominion Customers in South Carolina: 781,613[94]

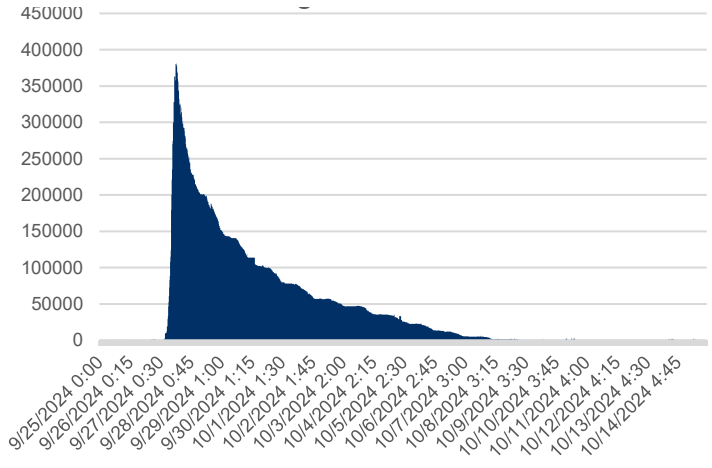
Customer Outages

- About 381,000 Dominion Energy customers in South Carolina lost power at its peak number of outages on September 27.
- 446,710 customers affected by the storm, representing more than 50% of DESC's customer base.
- 23,817 events created.

Counties with >90% of customers without power at the county's peak outage:

- Kershaw: 100%
- McCormick: 100%
- Allendale: 100%
- Abbeville: 100%
- Hampton: 99%
- Union: 99%
- Edgefield: 99%
- Colleton: 99%
- Saluda: 97%
- Newberry: 93%
- Aiken: 91%

Figure 24. Dominion Energy South Carolina Outages Over Time



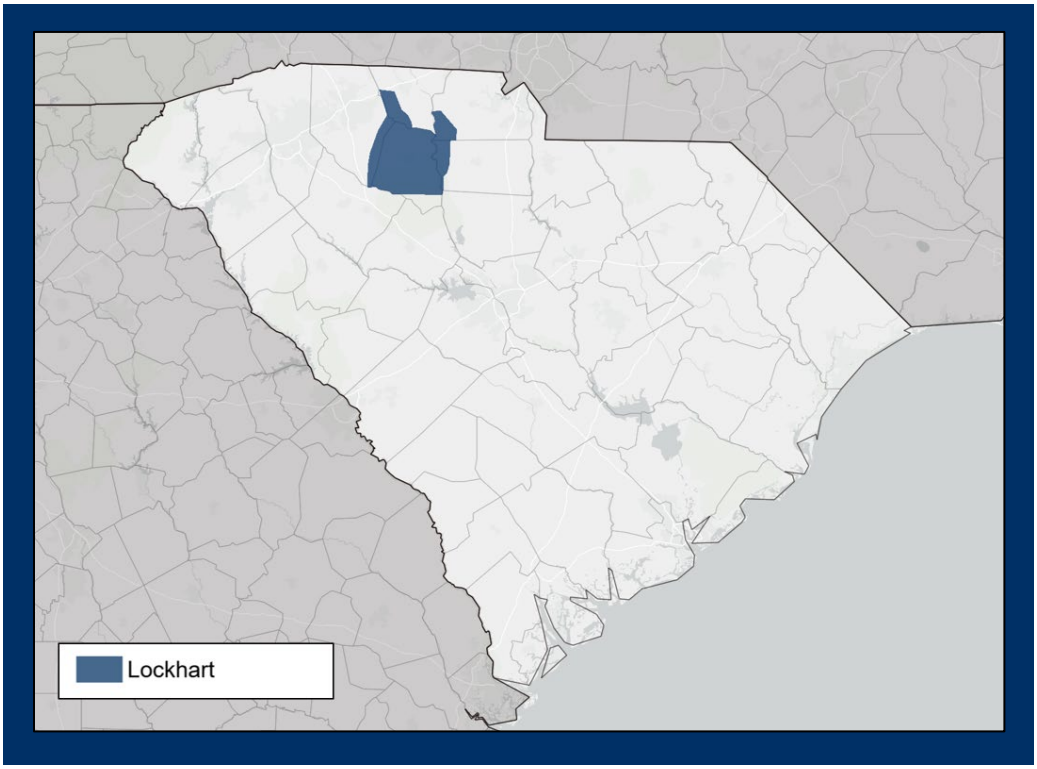
Lockhart

Lockart Customers in South Carolina: 6,300

Infrastructure Damage[96]

- No direct damage to Lockhart's four transmission substations.
    - Severe outages in Duke Energy's transmission system prevented the delivery of electricity to two of Lockhart's four delivery substations for three days until Duke was able to restore transmission.
- Widespread wind damage across Lockhart's rural service area.
    - Numerous trees fell on smaller tap lines, causing extensive outages.
    - Road and off-road access to lines was blocked by fallen trees, slowing restoration.
- Only two instances of tree contact with Lockhart's highest voltage (34-kV) subtransmission lines.
    - Lower voltage main lines had minimal damage.

Figure 25. Lockhart Service Midlands

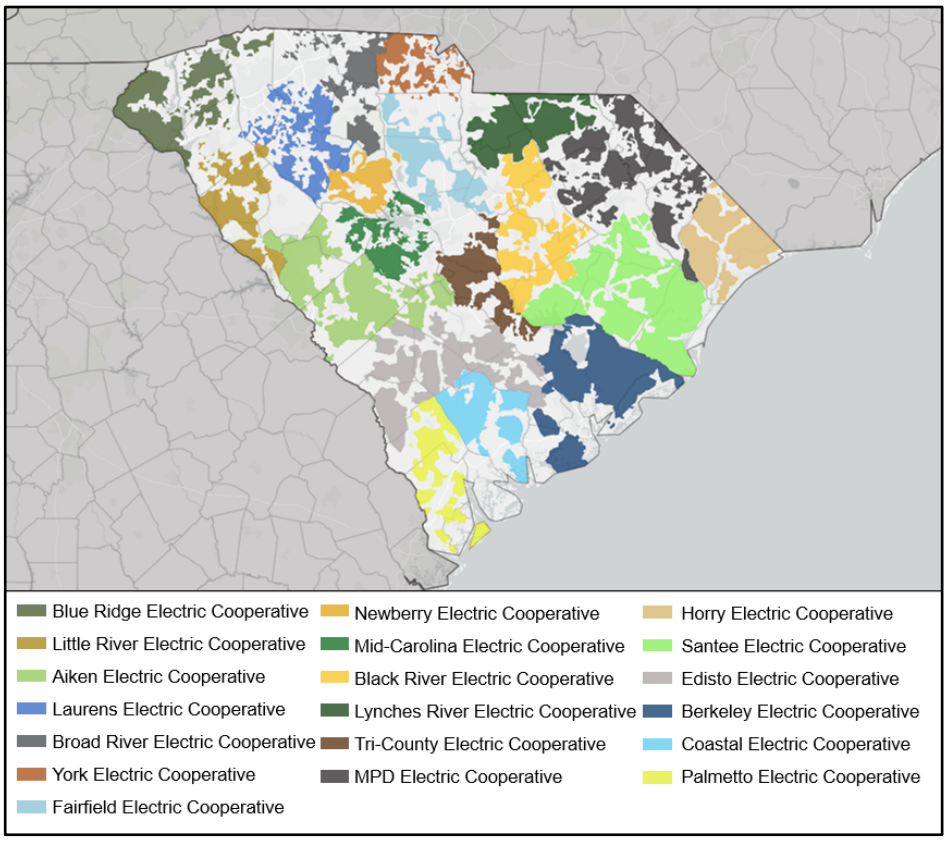


Cooperatives

Infrastructure Damage

- More than 5,000 poles damaged in South Carolina.[97]
- Roughly 80 substations were offline due to transmission outages.

Figure 27. South Carolina Cooperative Service Areas[103]



Cooperative Customers in South Carolina: 890,642[98]

Customer Outages

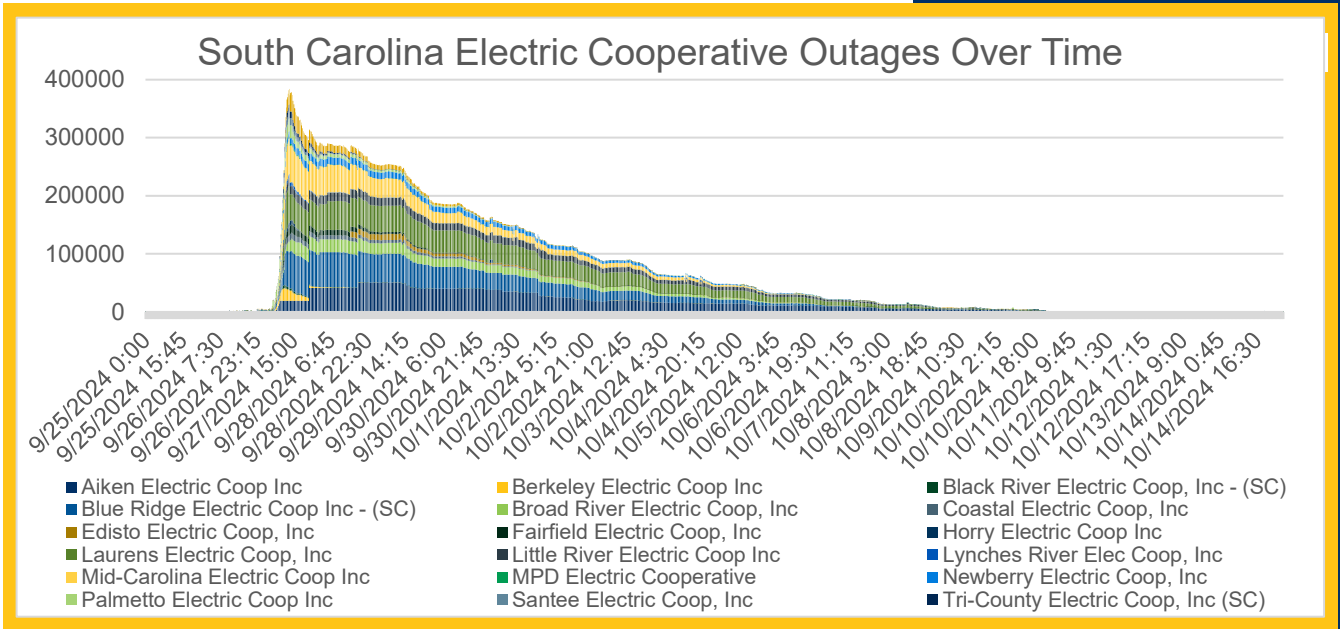
- About 380,000 Cooperative customers in South Carolina lost power at its peak number of outages on September 27.

Cooperatives with >90 % of customers without power at co-op's peak outage:

- Mid-Carolina EC: 100%
- Laurens EC: 99%
- Little River EC: 98%
- Aiken EC: 98%
- Broad River EC: 97%
- Newberry EC: 93%
- Blue Ridge: 92%

Poles Damaged by Co-op

Little River EC[99]	**~400**
Berkeley EC[100]	**20+**
Lynches River EC[101]	**16**
Laurens EC[102]	**200+**

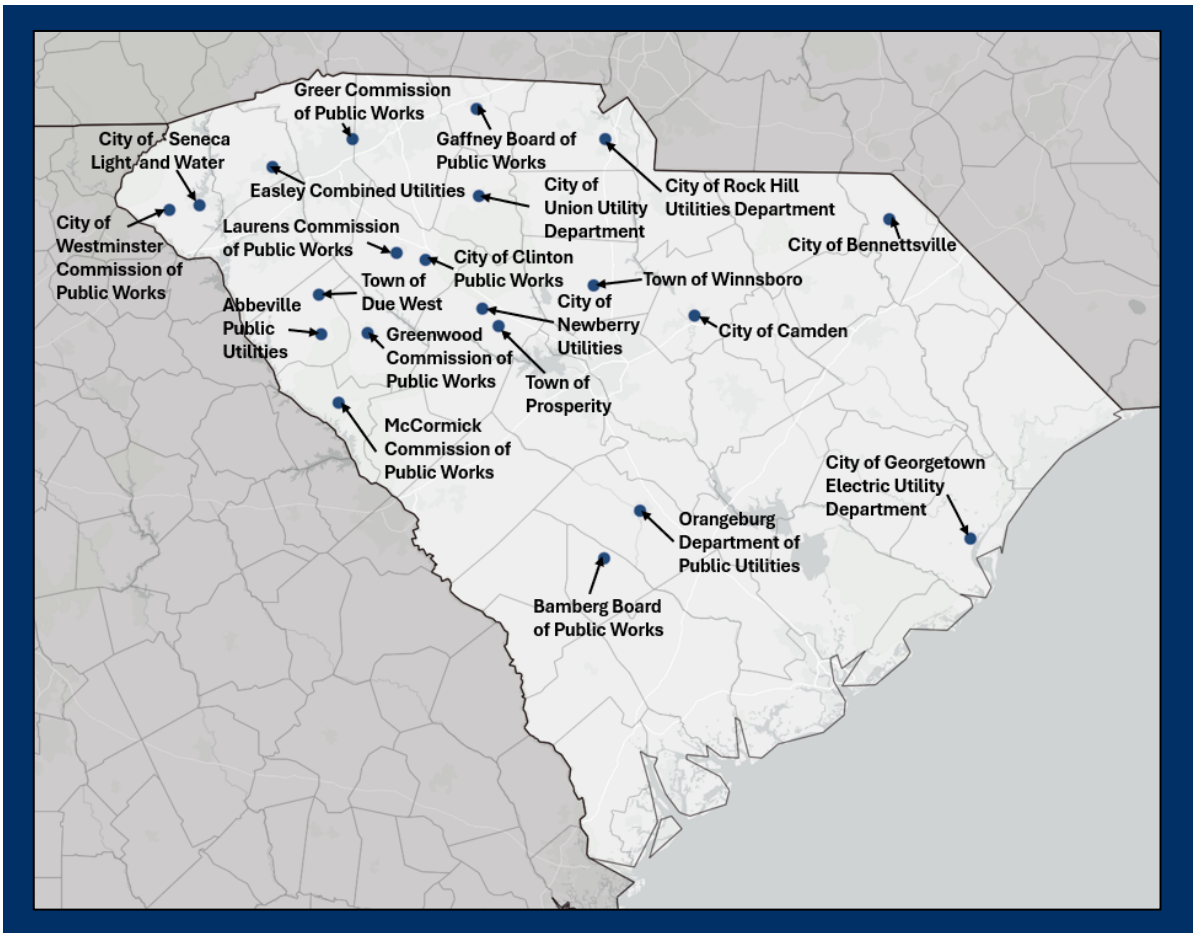


Municipal

Infrastructure Damage[104]

- Approximately 103,000 municipal utility customers were without power
- at peak across affected service territories.
- Outages occurred in all 21 municipal electric utilities.
- 14 out of 21 South Carolina cities with electric utilities requested mutual aid.
- Palmetto Power Cities (formerly known as the South Carolina Association of Municipal Power Systems [SCAMPS]), the statewide municipal power association, and the American Public Power Association (APPA), the recognized state coordinator for municipal mutual aid, were engaged across a majority of municipal utilities due to the breadth of infrastructure disruption and customer outages caused by Hurricane Helene.
- Service was restored to 60% of municipal power customers within three days and to 97% of customers within two weeks.

Figure 28. South Carolina Municipal Utilities



Santee Cooper

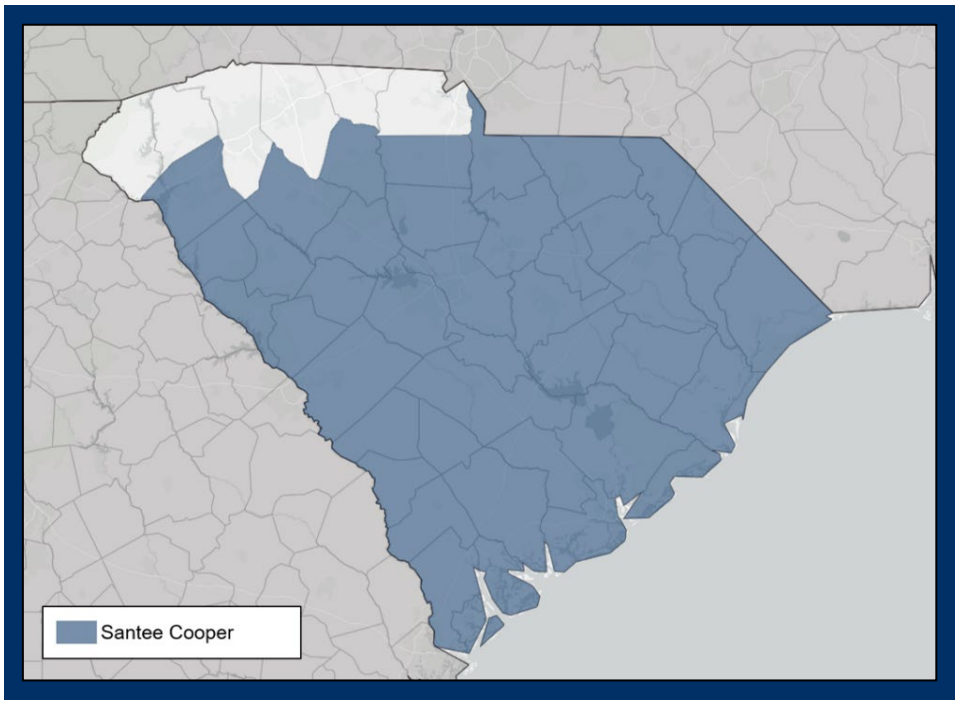
Infrastructure Damage[105]

- Roughly 20% of the transmission lines were affected (based on milage).
- Customer delivery point substations were affected due to sustained outages to transmission service.
    - Affected 12 electric cooperatives, 2 industrial customers, and 1 municipal customer.

Table 5. Infrastructure Damage

Poles	**27**
Trees Fallen on Lines	**250**
Insulators	**20**
Conductors	**1**
Distribution Feeders Locked Out	**14**
Transmission Lines Locked Out	**51**
Line Sections Affected	**121 (of 678)**
Delivery Point Substations	**126**

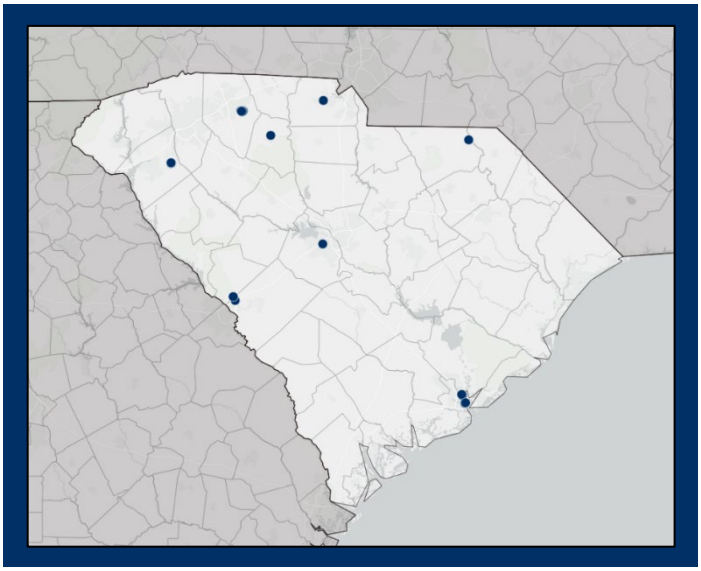
Figure 29. Santee Cooper Service Area



Terminals

Petroleum

Figure 30. South Carolina Petroleum Terminals



-
- Several petroleum terminals lost power during Hurricane Helene, and many lacked permanent backup generators, leaving facilities unable to load or unload product until utility service was restored.
- Road access issues (fallen trees, debris, and blocked routes) further limited the movement of tanker trucks and slowed resupply.
- Logistical impacts:
    - Reduced throughput
    - Delayed fuel deliveries to retailers and critical services
    - Temporary tightness in gasoline and diesel availability in affected regions

Convenience Stores

- Panic buying before landfall drove early fuel shortages, especially along evacuation routes.[106]
    - Price gouging complaints surged after the state of emergency declaration.
        - SC Attorney General's office received more than 300 documented reports, many for fuel, groceries, water, and tree services, with penalties of up to $1,000 per violation.[107]
- Large numbers of gas stations and convenience stores were forced to close due to widespread power outages. Because pumps require electricity, stations without backup generators could not dispense fuel until local distribution circuits were restored.
- Stations that remained open saw long lines, rapid fuel turnover, and intermittent supply shortages.

- Distribution delays from terminals without power further constrained fuel availability at convenience stores in the Upstate and Midlands regions.

Communications Impacts

Hurricane Helene exposed multiple vulnerabilities within South Carolina's communications ecosystem, including the physical resilience of fiber infrastructure, the risks associated with shared utility pole use, and the operational dependence of broadband and cellular networks on electric power. Impacts were observed across aerial and buried fiber deployments, cellular network availability, and restoration operations. This section documents the primary damage mechanisms, infrastructure interdependencies, and operational challenges that affected broadband and wireless communications during and after the storm.

Broadband Providers

The initial impacts from Hurricane Helene were mainly due to trees falling across transmission and distribution lines that also carried fiber. Approximately 24 hours of soaking rain preceded the high winds encountered upon the actual hurricane's arrival in South Carolina the morning of September 27, 2024. The supersaturated ground and high winds combined to uproot trees throughout the region, leading to downed power and communications lines, as well as utility pole breakage.

It is important to note that falling trees and limbs were certainly responsible for damage to aerial-deployed fiber; however, the uprooting of trees also led to serious damage to buried fiber, especially in residential areas. In both cases, aerial deployed or buried, the recovery efforts were challenging due to the need to clear and remove debris from road and electrical rights-of-way, as well as to restore electricity prior to restoring broadband communications.

Issues with the Shared Use of Poles

Shared use of utility poles was a factor in Hurricane Helene because aerial-deployed fiber was often damaged when utility poles gave way when trees or limbs fell on power lines and damaged the lines themselves and very often damaged or broke the poles as well. The aerial-deployed fiber damaged in Helene included fiber in the supply space at the top of the pole and in the communication space below the supply space and worker safety zone. No significant difference was noted in damage to fiber in either utility pole space.

It was noted that all-dielectric self-supporting (ADSS) fiber is preferred over lashed fiber with messenger strand for overall strength and resilience to environmental stress in aerial deployments, including hurricanes.

Broadband Infrastructure and Electric Power/Cellular System Impacts

The interdependencies of electricity and communications were fully displayed during and after Hurricane Helene. Numerous reports of cellular infrastructure being down due to no electricity were noted. No cellular provider noted significant, widespread damage to the cellular infrastructure, such as the towers themselves, the eNodeB (LTE) flat panel antennas, or gNodeB (5G-NR) advanced antenna system hardware. All cellular providers noted the lack of shore power and backup power (batteries and generators) as causes of cell towers being offline, especially in the first 24 to 36 hours after Helene passed through the area. Beyond the 36-hour point, cellular outages tended to be more localized and dependent on electricity to a particular cellular tower.

Functional Impacts to Restoration

The economic impacts of losses due to electricity, broadband communications, and cellular communications after Hurricane Helene were readily apparent. The initial impacts were in the areas of basic services (power and communications) and affected utilities working on the recovery efforts. Some broadband providers mentioned that the lack of cellular communications affected communications with crews working on the recovery efforts. One broadband provider noted their efforts to ensure that recovery crews had a mix of the major cellular providers' phones within the crew to better ensure that cellular communications could be used in the areas to which the crews were deployed. It is worth noting that most providers indicated that their crews were equipped with company-provided cellular phones that used the public cellular services. No provider noted phones on a separate Mission Critical Push to Talk (MCPTT). As most MCPTT in the United States is implemented on the same physical infrastructure as the public cellular network in the Radio Access Network, the result is that lack of power to cell towers would affect the public cellular network as well as MCPTT serving first responders. Several of the utility companies indicated that they were able to use company Private Land Mobile Radio networks during recovery and reconstitution. Some of the smaller providers indicated that their geographic coverage areas were small enough that they relied on driving to areas to assess damage and plan crew efforts.

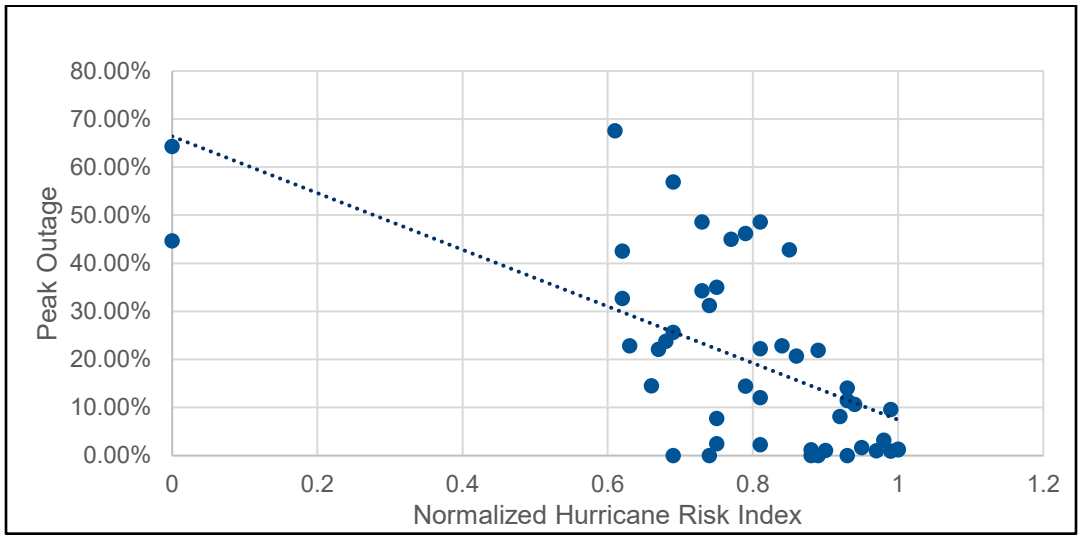
Impacts at the County Level

The effects of Hurricane Helene were felt the most strongly in the western half of the state, from the Central Savannah River Area and along the Savannah River. To identify the counties that were most affected in terms of broadband service interruptions, we used the following databases:

- The FCC released daily reports to track cell service outages. These reports included the number of cellular sites surveyed, the number of cellular sites down, the number of cellular sites up on backup power, and the causes of down sites. Causes were given as power, transport, damage, or unknown.
- Ookla maintains a database of wireless speed tests, fixed speed tests, and wireless network performance scans. These data points were made available to us by Ookla and the South Carolina Broadband Office for the entirety of South Carolina.
- To identify the counties at the greatest risk, we used the University of Michigan's Index of Deep Disadvantage and the Center for Rural Innovation's Broadband Climate Risk Tool.

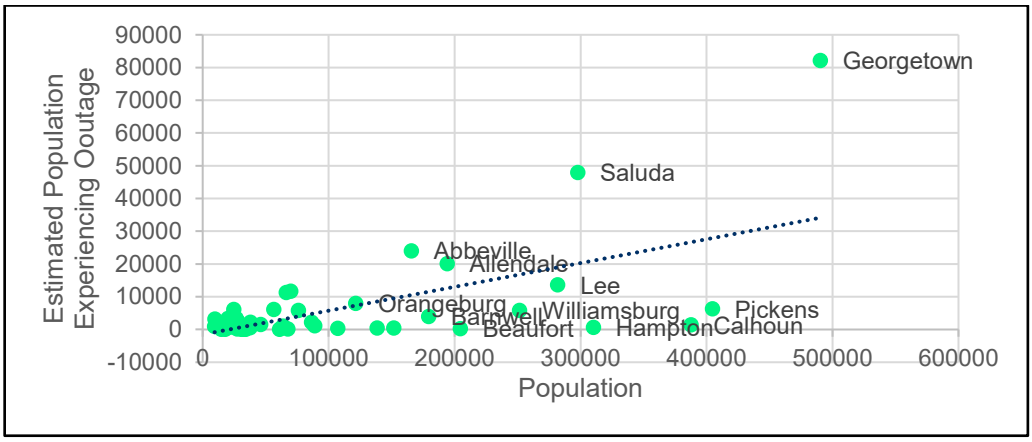
Counties that experienced the highest peak and average cell site outages were also the counties that were least likely to experience a hurricane according to the Broadband Climate Risk Tool. Figure 31 shows this relation.

Figure 31. Peak outages reported by the FCC plotted over the normalized Hurricane Risk Index



While several counties had a large percentage of their cellular sites go down, only a few of them had a large population experience an outage. Several cell sites went down in sparsely populated regions. Figure 32 shows the estimated population experiencing an outage plotted over the total population for each county.

Figure 32. Estimated population without cell service plotted against the total population for each county in South Carolina



Note. Many counties had fewer than 10,000 citizens without cell service across the entirety of Hurricane Helene.

Table 6 gives an overview of the counties we believe were most affected by the hurricane in terms of cell site outages. They recurred across several of the features we observed. We recommend them for assistance in developing cellular resilience to natural disasters.

Table 6. Internet Outages by County

County	Top 25% Peak Outage	Top 25% Average Outage	High Population	5% of Sites Still Out	5% of Sites on Backup Power
Abbeville	X	X	X	X	X
Aiken	X	X			
Allendale	X		X		
Bamberg					X
Barnwell	X	X		X	
Cherokee				X	
Edgefield	X	X			X
Georgetown			X		
Greenville		X			X
Greenwood	X	X			X
Hampton					
Jasper					
Laurens	X	X			X
McCormick	X	X		X	X
Newberry					
Saluda	X	X	X		
Spartanburg	X	X			X

Note: Counties that were in the top 25% peak outages, top 25% highest average outages, highest populations affected, counties experiencing at least 5% of cell sites out, or counties experiencing at least 5% of cell sites on backup power.

From the Ookla dataset, it appears that Hurricane Helene had the greatest impact on cellular communications. Signal strength, download speed, and upload speed were significantly affected for both 5G and 4G in the western half of South Carolina. Table 7 gives an overview of which counties saw an impact on cellular service and fixed internet. Areas that were most significantly affected were along the Savannah River and in the northwest corner of the state—the Upstate area. We believe this may be because of poor weather conditions, power outages, and fueling issues for backup power at cellular sites. Our week-over-week analysis shown in

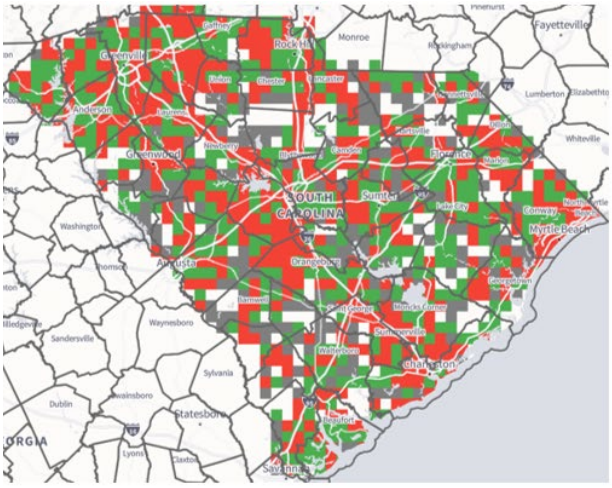
Figure 33 through Figure 36 reveals that many areas began improving their cellular service in the week following Helene. In each of these figures, data were collected for an entire week. If the next week had a lower metric, the area is colored red. If the metric is better in the next week, the color is green. If one of the weeks in question had no data reported, the color is gray.

Table 7. Counties that experienced a degradation in wireless or fixed internet service between 9/16/24 and 10/04/24

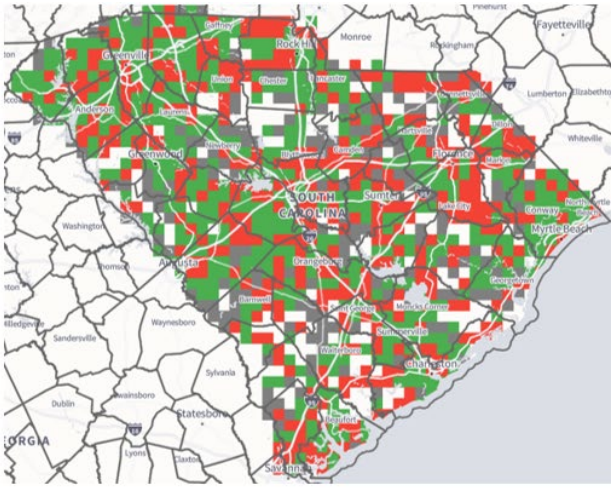
County	Wireless Download	Wireless Upload	Fixed Download	Fixed Upload
Abbeville	X	X	X	X
Aiken	X	X	X	X
Allendale	X	X		X
Anderson	X	X	X	X
Bamberg			X	
Barnwell				X
Beaufort	X	X		
Berkeley	X	X	X	X
Calhoun			X	X
Charleston				X
Cherokee	X	X	X	X
Chester	X	X	X	X
Chesterfield				X
Darlington	X	X	X	
Dillon				X
Dorchester			X	X
Edgefield			X	X
Greenville	X	X		
Greenwood	X	X	X	X
Hampton			X	X
Jasper	X	X		
Kershaw			X	X
Lancaster	X	X	X	X
Laurens	X	X		X
Lee	X	X	X	X
Lexington	X	X		X

Marlboro			X	X
Newberry			X	X
Oconee	X	X		X
Pickens	X	X	X	X
Richland	X	X	X	X
Saluda	X	X	X	X
Spartanburg	X	X	X	X
Union	X	X		
Williamsburg	X	X		X
York	X	X		

Figure 33. Week-over-week change in 5G cellular signal strength in South Carolina

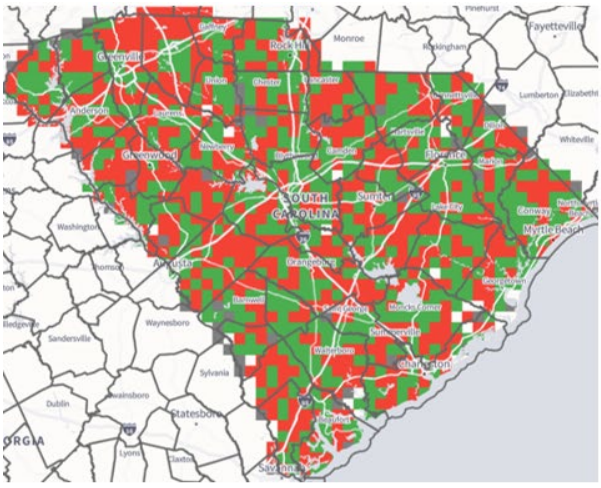


5G Signal Change from the week of 9/20/24 to the week of 9/27/25

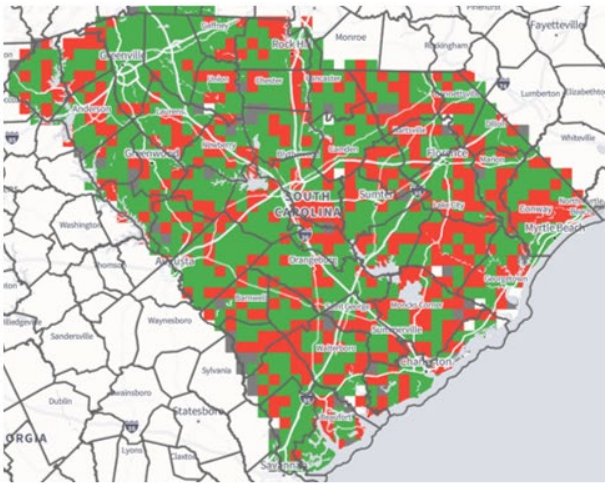


5G Signal Change from the week of 9/27/24 to the week of 10/04/25

Figure 34. Week-over-week change in 4G cellular signal strength in South Carolina

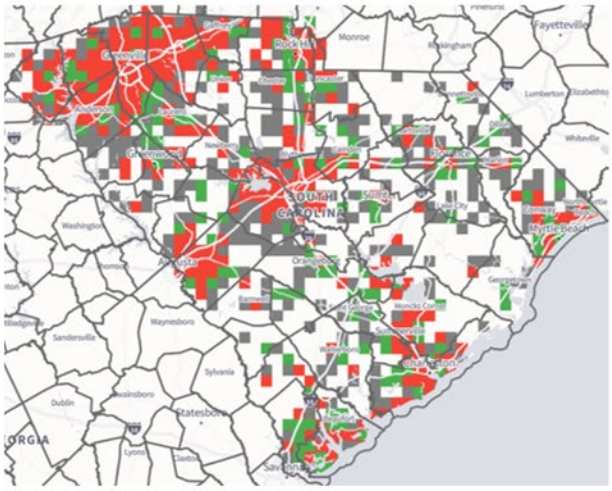


4G Signal Change from the week of 9/20/24 to the week of 9/27/25

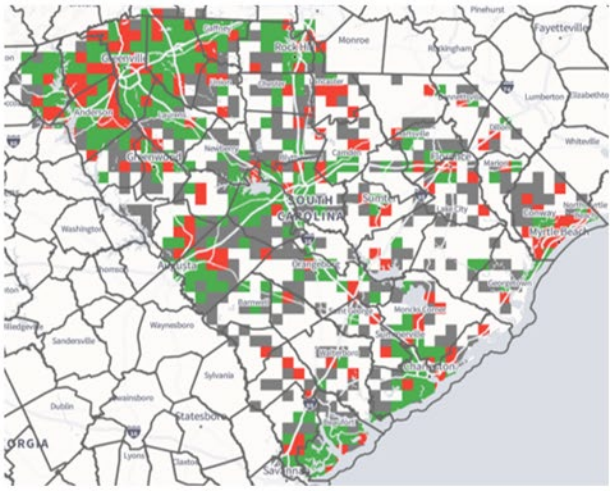


4G Signal Change from the week of 9/27/24 to the week of 10/04/25

Figure 35. Week-over-week change in wireless download speed in South Carolina

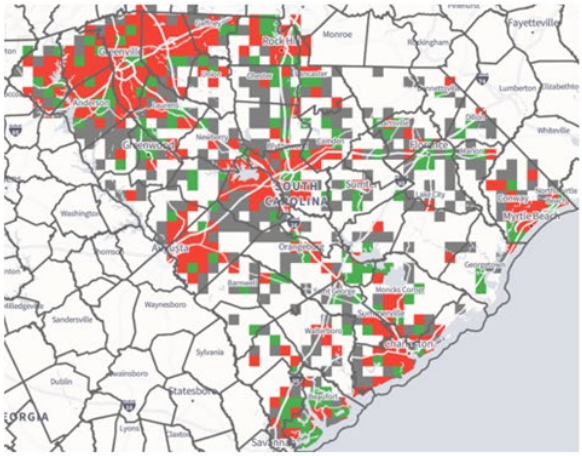


Wireless Download Change from the week 9/20/24 to the week of 9/27/25

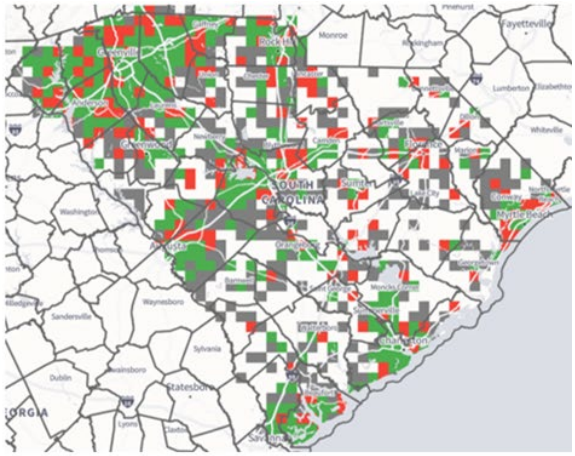


Wireless Download Change from the week 9/27/24 to the week of 10/04/25

Figure 36. Week-over-week change in wireless upload speed in South Carolina



Wireless Upload Change from the week of 9/20/24 to the week of 9/27/25



Wireless Upload Change from the week of 9/27/24 to the week of 10/04/25

Note: Red indicates that service degraded, green indicates that service improved, and gray indicates that data were unavailable for one time period.

Figure 37 and Figure 38 show that the effects of Hurricane Helene on fixed internet speeds were not so clear-cut. Many counties experienced a degradation in service in the week prior to or following Helene. In many cases, these outages lasted for several weeks. This could have been caused by several factors. Some users may have experienced long outages due to utility poles with aerial-deployed fiber falling in rural, hard-to-reach areas that may not have been addressed for some time. Other users may have experienced issues due to damage in other areas of the United States. Data center issues in North Carolina, Georgia, or Florida could contribute to longer outages. They may also account for outages that began earlier than the September 27, 2024 landfall date in South Carolina.

Hurricane Helene's effect on fixed internet service appears to have been less localized. Some of the counties that had degraded fixed internet service did not have losses in cellular service, such as Bamberg, Barnwell, and Calhoun counties. Some of these counties lie along the east coast of the state, such as Charleston and Dorchester counties. These issues may have been caused by greater internet service issues in the United States caused by Helene. They may also have been caused by unrelated factors that are not captured in this dataset.

Figure 37. Week-over-week change in fixed download speed in South Carolina

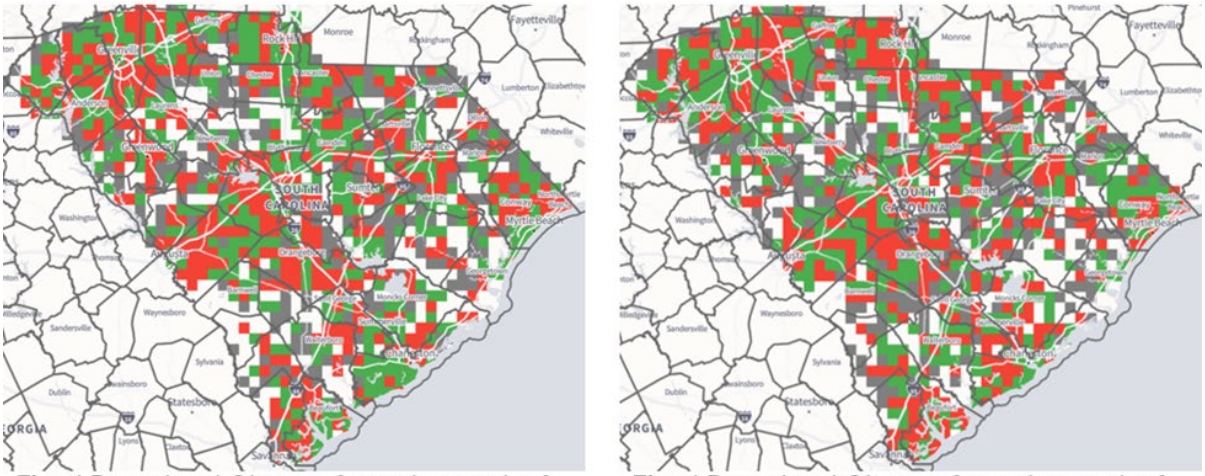
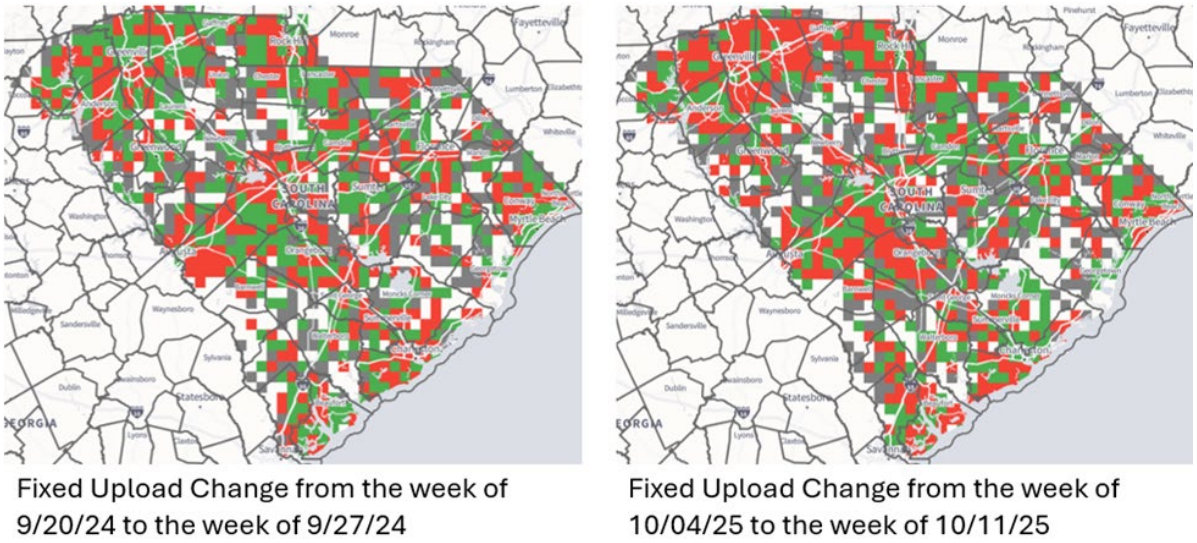


Figure 38. Week-over-week change in fixed upload speed in South Carolina



Note: Red indicates that service degraded, green indicates that service improved, and gray indicates that data were unavailable for one time period.

The data available here indicate that South Carolina's response to Hurricane Helene-related broadband communication effects was very good. Many affected areas saw rapid restoration of service. It is important to note that this assessment is based on aggregate data. Several areas had very poor or no service for several days or weeks

after Helene. Our methodology and further detailed results can be seen in the appendices of this report.

Energy Risk Assessment Results

Seven hazards were identified as the most serious natural hazards related to Hurricane Helene regarding energy infrastructure within the state: hurricane winds, storm surge/coastal flooding, riverine flooding, high winds, extreme heat, wildfire, and landslides. A quantitative assessment methodology was utilized for these hazards because there was high-quality, locationally specific historic or projected data on the frequency of occurrence. Several of these hazards were analyzed across multiple climate scenarios, described in more detail within the subsection Exposure Score in Appendix A.

The quantitative risk assessment evaluated the prioritized threats and hazards against the following key energy infrastructure:

Table 8. Key infrastructure evaluated in the risk assessment

Electricity Infrastructure	Natural Gas Infrastructure	Liquid Fuel Infrastructure
Power Plants Electric Power Transmission Lines Substations	Natural Gas Pipelines Compressor Stations LNG Storage	Liquid Fuel Pipelines Petroleum Terminals Pumping Stations

The risk assessment is built on the following three components, leveraging a similar assessment methodology from CESER's Risk Assessment Essentials for State Energy Security Plans:[108]

- **Exposure Score** (Scale of 0 to 5): The exposure score estimates the annual probability, frequency, or severity of a specific disruptive event occurring at a specific location. This score is determined by overlaying hazard Geographic Information System (GIS) layers and energy infrastructure GIS layers.
- **Vulnerability Score** (Scale of 0 to 5): This factor represents the susceptibility of the energy asset or system to be disrupted by the given hazard and the most likely duration of the disruption.

Table 9. Rating the vulnerabilities system

Rating	Vulnerability/Sensitivity
Low (1–2)	• Asset, operation, or system faces minimal potential adverse impacts from this hazard.
	• Risk of complete failure is extremely unlikely; capacity/efficiency reductions are unlikely to occur or will be relatively minor.
Medium (3-4)	• Asset, operation, or system may be adversely affected by this hazard.
	• Impacts are moderated by one or more factors, such as likely occurring as chronic/controlled rather than sudden/acute (e.g., accelerated degradation rather than catastrophic failure) or only being likely to occur at a high threshold of exposure (e.g., very high temperature or water level).
High (5)	• Asset, operation, or system may be subject to increased risk of major and/or sudden failure in the event of hazard exposure.
	• Asset has limited existing tolerance for exposure to this hazard.

- **Consequence Score** (Scale of 0 to 100): This factor estimates the importance of the asset to the energy supply and customers in the state and therefore the consequences to the state if the asset were to be offline due to a hazard.

Each component of the consequence score was calculated using a comprehensive methodology that is detailed in. For all hazards, the risk score was calculated by multiplying the expected frequency of occurrence (scale of 0 to 5) by the vulnerability score (scale of 0 to 5) by the consequence score (scale of 0 to 100) and then dividing by 25 to normalize risk onto a scale of 0 to 100. The general function is expressed below:

Equation 1

$$Risk_{Asset} = \frac{Threat\ Exposure_{Asset\ Location} \times Vulnerability_{Asset\ Type} \times Consequence_{Asset}}{25}$$

Risk scores incorporate the product of the exposure score, the vulnerability score, and the consequence score. These values will help Appendix A assess the highest risks within a given sector and assign energy assets a high, medium, or low priority for each threat. The risk score for each asset and hazard is then calculated using the equation above with the results being presented in the section below.

Energy infrastructure with the highest risk is primarily driven by a combination of a high likelihood of hazard exposure and a high impact given that it is exposed. In the electric sector, this analysis found that 5 of the 10 power plants with the highest consequence scores were located in the northwestern portion of the state. The power plants Catawba, Oconee, and W.S. Lee, located in the northern portion of the state, are at the greatest risk of extreme heat, hurricane winds, and landslides. An additional power plant located north of Charleston—Cross Generating Station—is at high risk from hurricane winds. Several select substations with high consequence, mostly confined to northwestern South Carolina, were identified as having the highest risk for extreme heat, landslides, and hurricane winds. Transmission lines exhibit the highest risk levels for both strong wind events and hurricane-force winds. Of the 10 power lines with the highest consequence scores, 6 of them are located in the northwestern portion of the state. Because the electric system is essential to the operation of other energy sectors,

damage to high-risk assets can lead to cascading outages and widespread service disruptions during major hazard events.

Overall, the natural gas sector is generally less vulnerable to natural hazards compared with the other energy sectors. However, certain assets within the system present elevated risks. Specifically, the Transco mainline and several key laterals on the Carolina Gas Transmission (CGT) system have been identified as having the highest risk for inland and coastal flooding. These risks stem from potential erosion, debris impact, and structural stress during floodwaters. Additionally, the CGT Southern Compressor Station is considered highly consequential for gas deliveries into the state and is located within an area subject to Category 1 hurricane winds, with a return interval of less than 100 years.

Similar to the natural gas sector, petroleum infrastructure faces notable flood risks at water crossings along the Colonial and PPL pipeline. While disruptions at individual petroleum terminals typically represent a low to moderate risk, a widespread event—such as a hurricane causing power outages across multiple terminal clusters (e.g., Spartanburg or North Augusta)—poses a significant concern for regional supply reliability.

Understanding the spatial distribution and intensity of risks is critical for ensuring the resilience and sustainability of the state's energy sector. This section introduces a series of risk maps that visualize select natural hazards that pose threats to the electric, natural gas, or petroleum sectors.

By overlaying these hazards with critical energy assets, these maps provide a strategic lens for identifying high-risk zones, prioritizing investments, and informing policy decisions. The goal is to support proactive risk management and enhance the sector's adaptive capacity in the face of evolving threats.

Figure 39. Future risk of Category 1 hurricane wind gusts to electricity infrastructure

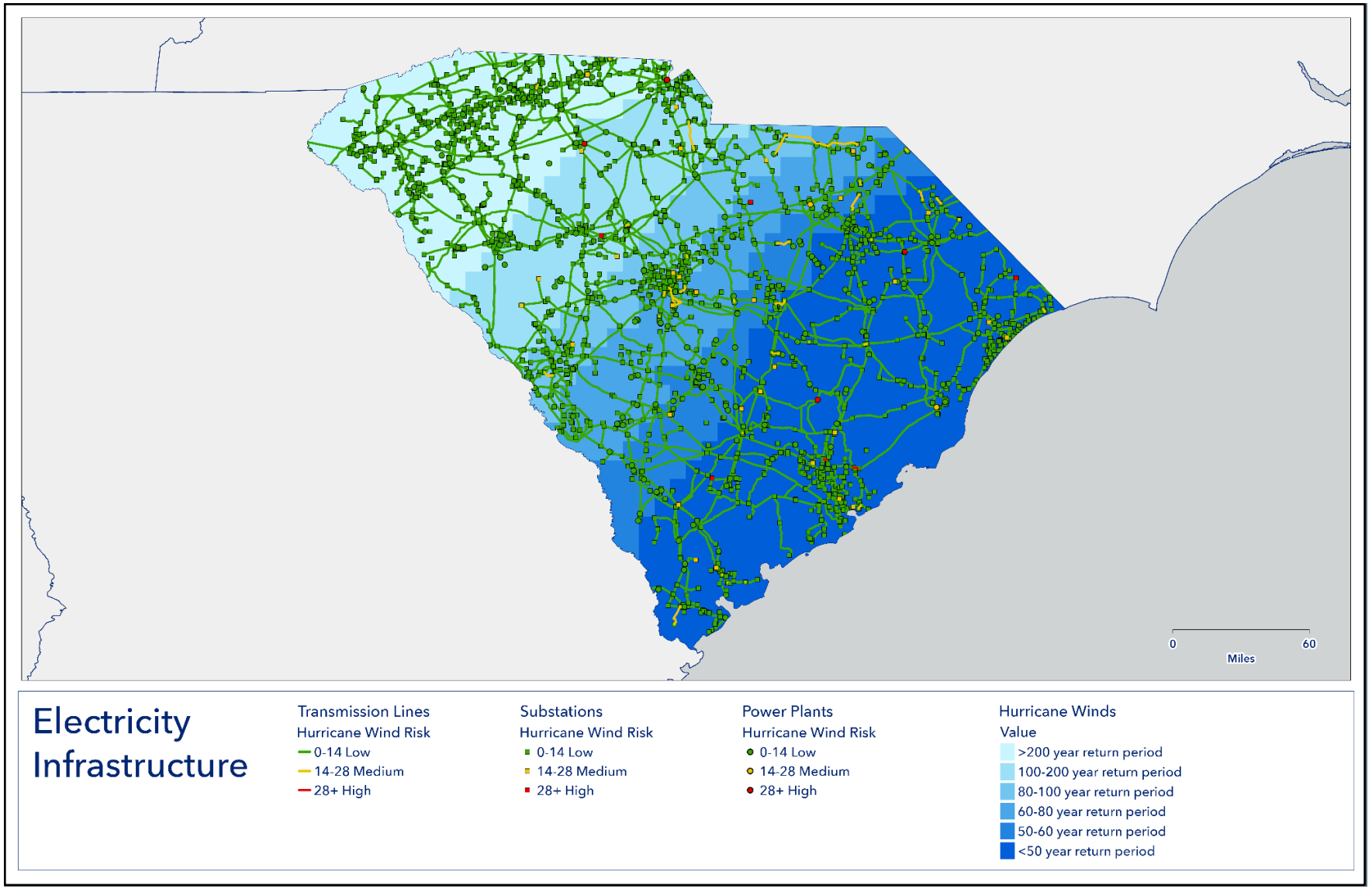


Figure 40. Risk of strong wind to electricity infrastructure

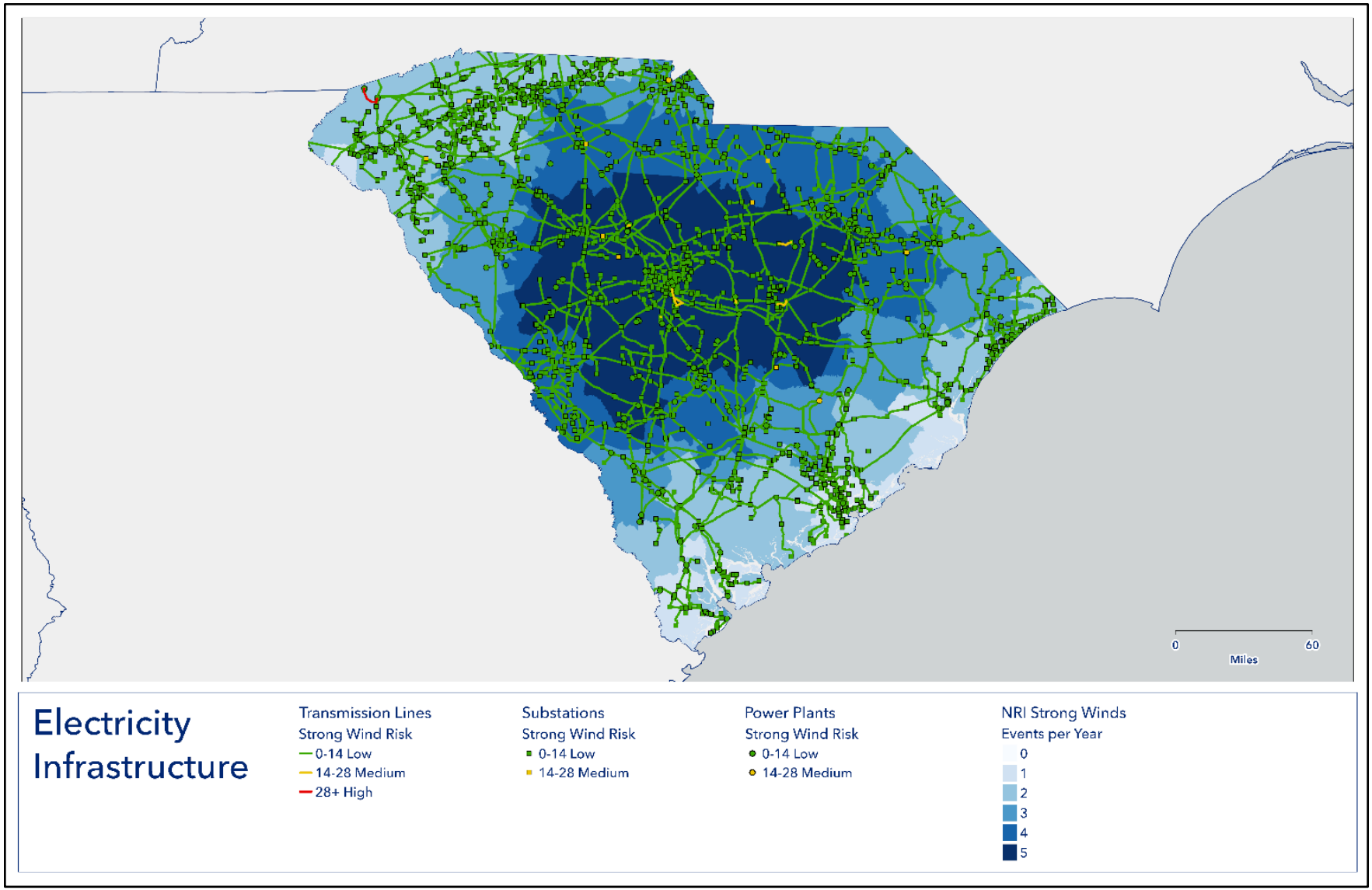


Figure 41. Risk of extreme heat to electricity infrastructure

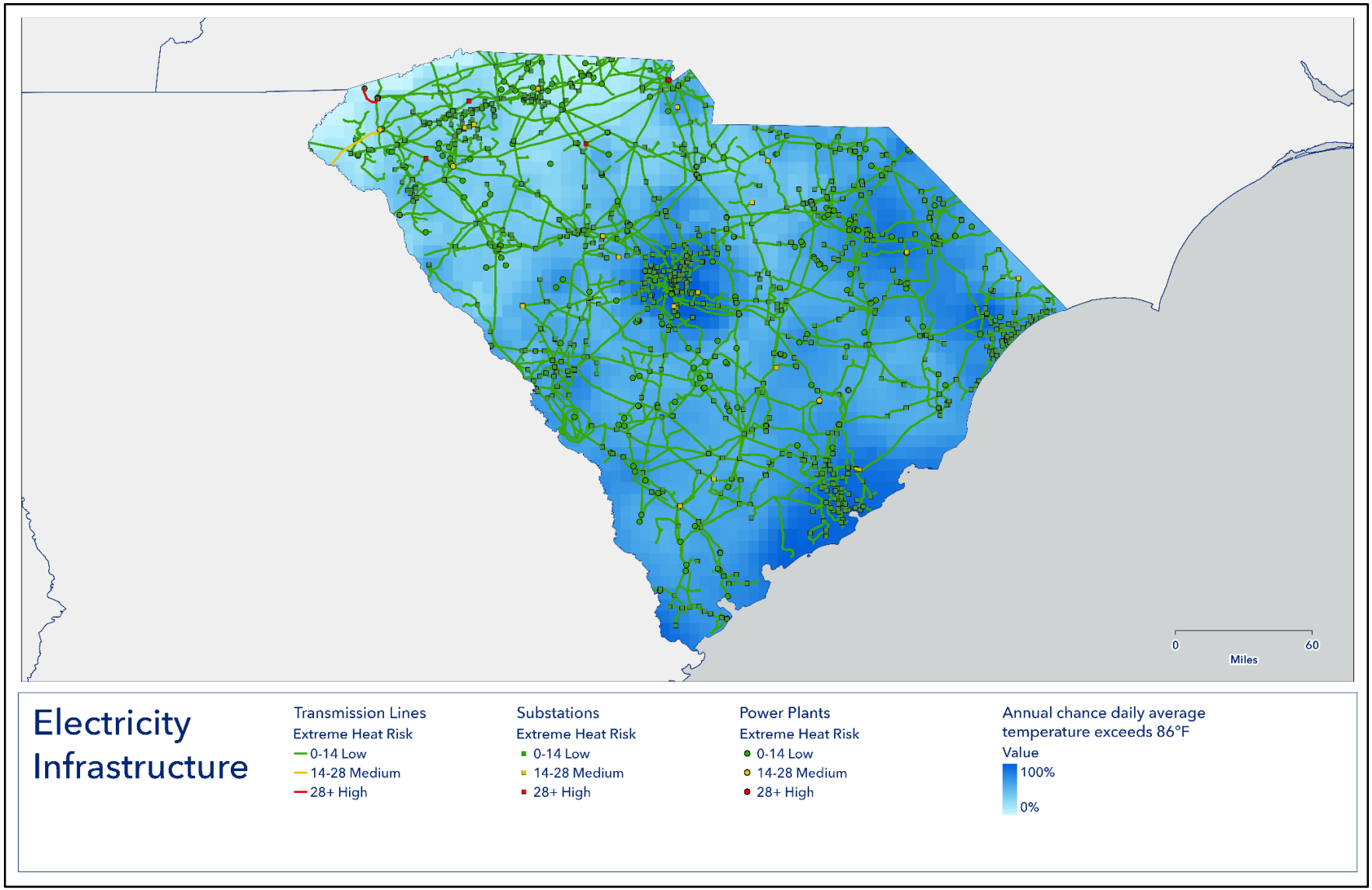


Figure 42. Future risk of Category 1 hurricane wind gusts to natural gas infrastructure

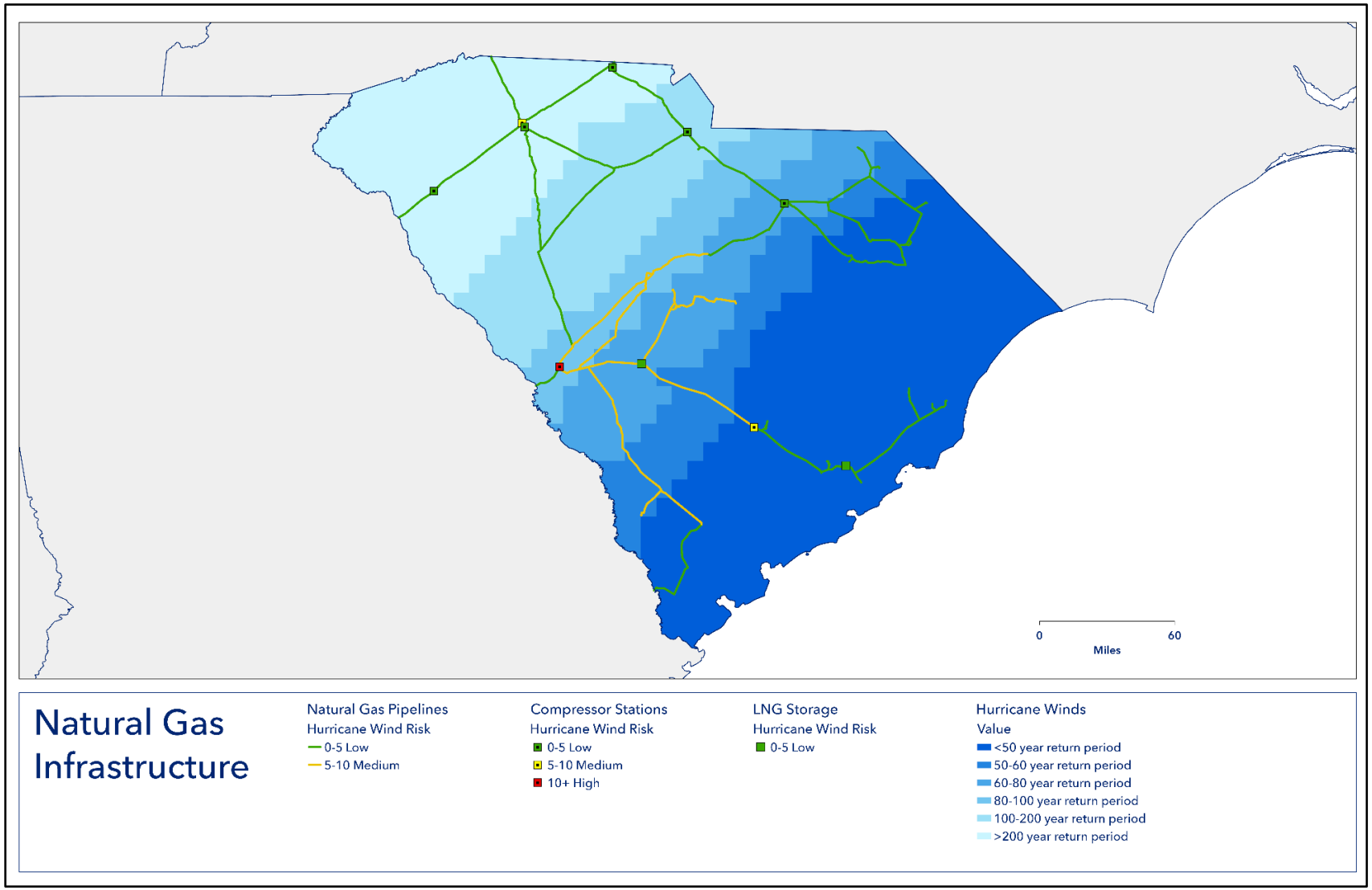


Figure 43. Risk of inland flooding to natural gas infrastructure

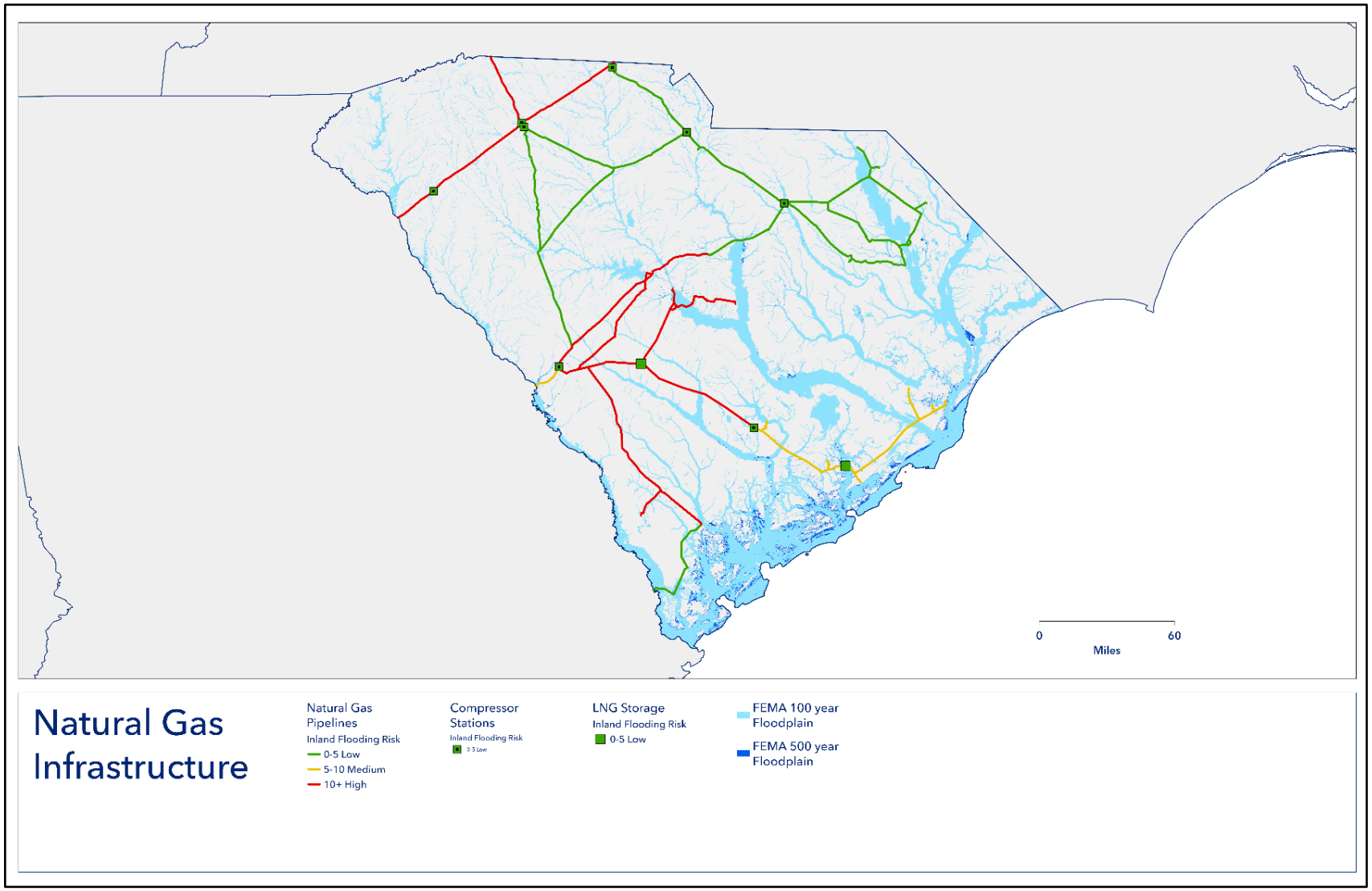


Figure 44. Future risk of Category 1 hurricane wind gusts to petroleum infrastructure

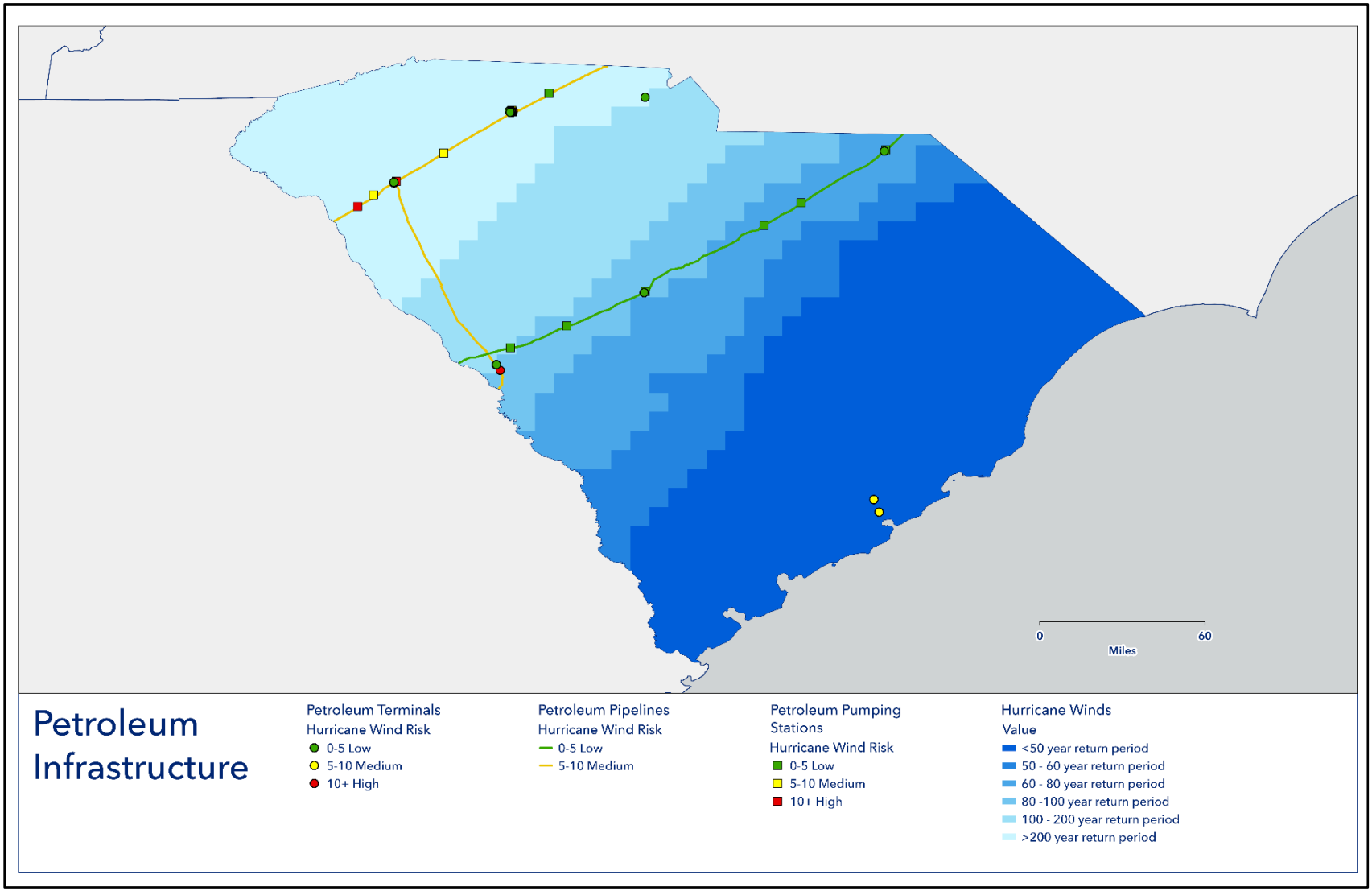


Figure 45. Risk of inland flooding to petroleum infrastructure

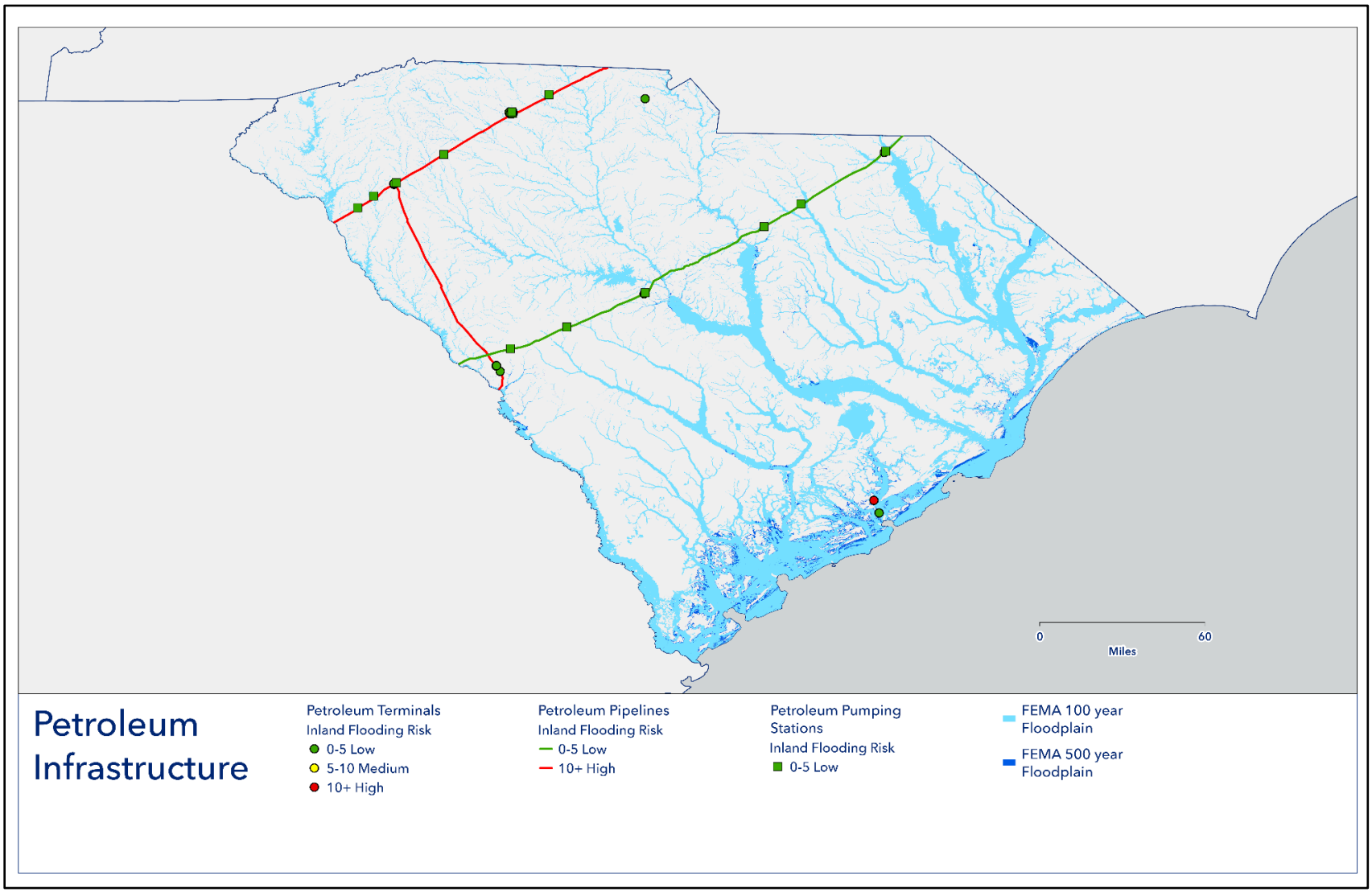
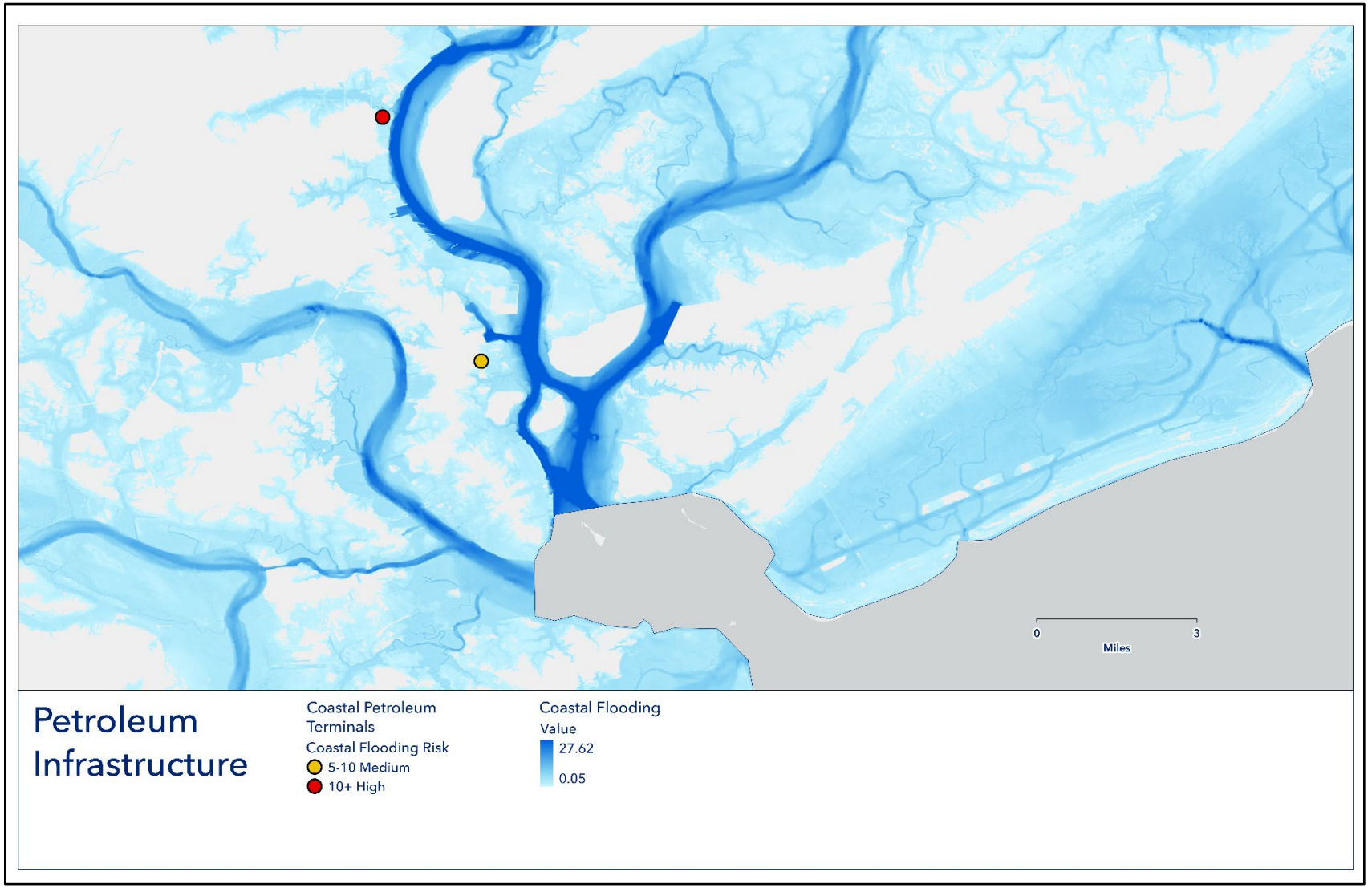


Figure 46. Risk of coastal flooding in 2050 to petroleum infrastructure in the Charleston area



Note: Flooding inundation depth under 100-year return interval storm surge and SSP3-7.0 scenario

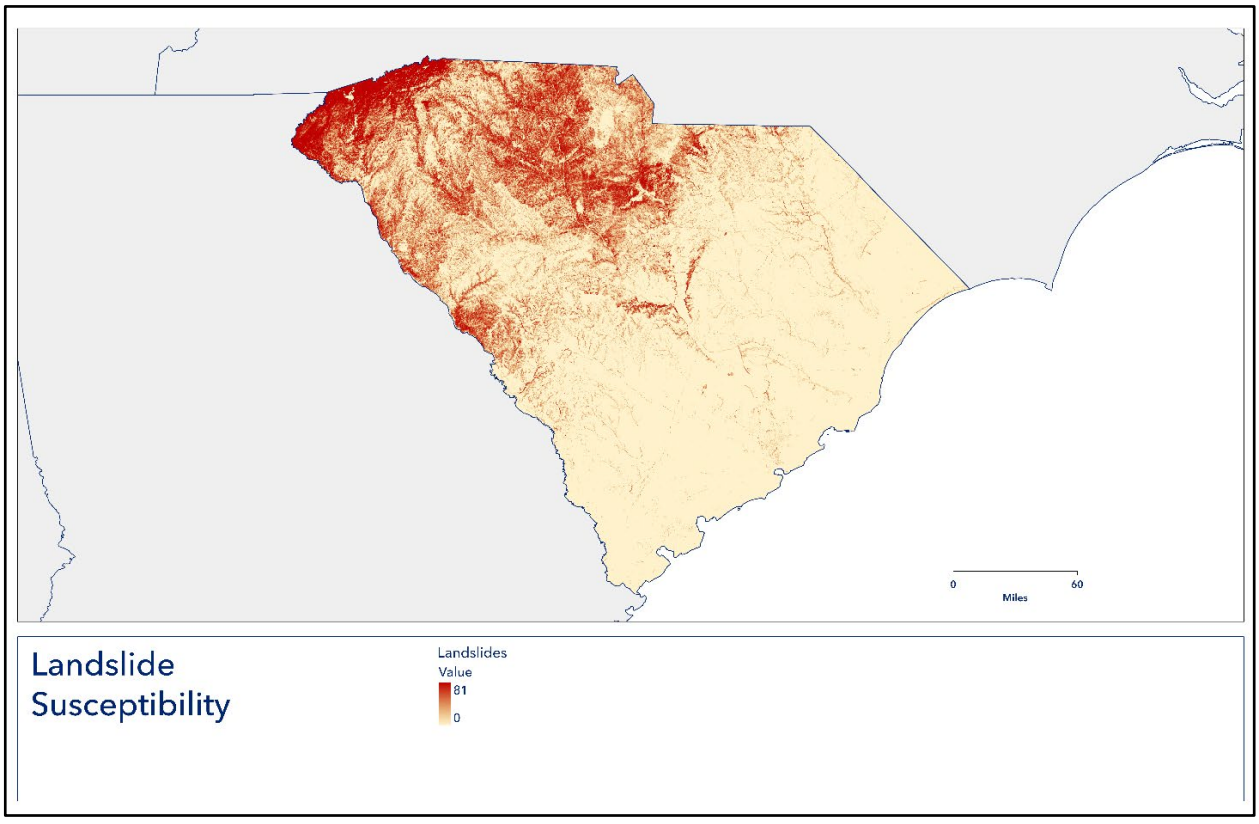
Landslides

Statewide landslide susceptibility is considered low across most areas; however, vulnerabilities increase in mountainous regions, particularly in the northwestern part of the state (the Blue Ridge and Piedmont areas), due to steeper slopes and weaker geological structures (shown in Figure 47). These areas tend to experience localized, episodic landslides, often triggered by heavy rain, rapid snowmelt, or human activities (e.g., development or mining, combined with steep terrain). Although the overall current risk remains low to moderate, climate impacts may amplify landslide threats by altering precipitation intensity, thus affecting soil moisture and slope stability.

The landslide analysis was not fully aligned with the broader quantitative risk assessment because return intervals were not incorporated. Notably, several assets warrant monitoring based on the Landslide Susceptibility Index. These include petroleum and natural gas pipelines—which traverse at least a single area of high susceptibility—and five critical power plants: two conventional hydroelectric facilities, two pumped-storage hydroelectric facilities, and one natural gas plant.

Out-of-State Risks

Figure 47. Landslide Susceptibility Index in South Carolina



Electric Sector

The South Carolina power grid is integrated with other southeastern states as part of the Southeastern Electric Reliability Council (SERC) region. In 2024, South Carolina generated approximately 16% more electricity than it consumed, sending its surplus power across the regional grid to other states.[109,110] Historically, these exports have been routed primarily to North Carolina.[111]

Table 10. Out-of-state risks to the electric supply

Description of Criticality	Vulnerabilities	Mitigating Factors
Transmission Interconnects to Neighboring States		
The following high-voltage transmission paths are the primary interconnections to the greater Eastern Interconnection grid into South Carolina: • 500-kV Richmond Substation (NC) to 500-kV Newport Tie Substation (SC) • 500-kV McGuire Substation (NC) to 500-kV Newport Tie Substation (SC) • 500-kV James Rogers Substation (NC) to 500-kV Jocassee Tie Substation (SC) • 500-kV South Hall Substation (GA) to 500-kV Oconee Substation (SC)	South Carolina operates within the SERC region and is managed by vertically integrated utilities such as Dominion Energy, Duke Energy, and Santee Cooper, which own and operate generation, transmission, and distribution systems. A failure in one part of an interconnected grid from any hazard can trigger a domino effect, causing outages in other areas. Overreliance on electricity imports from neighboring states can create vulnerabilities if those states experience their own power shortages or disruptions.	The Southeast Energy Exchange Market (SEEM) was officially established in 2021 as a voluntary electricity trading platform that matches buyers and sellers in real time, helping to reduce costs, improve grid reliability, and support the integration of renewable energy across the Southeastern United States. Unlike traditional regional transmission organizations or independent system operators, SEEM does not centralize control over transmission or generation. SEEM includes more than 20 utilities across 12 southeastern states, such as Dominion Energy South Carolina, Duke Energy, Southern Company, and Santee Cooper. These entities collectively serve more than 36 million customers and manage more than 180,000 megawatts (MW) of generation capacity.
Nuclear Generation Out-of-State		
Aside from in-state nuclear plants, Georgia's Vogtle Nuclear Power Plant provides significant baseload electricity, collectively contributing 4,664 MW of regional capacity, tied to South Carolina via a 230-kV line. North Carolina's McGuire Nuclear Power Plant collectively contributes 2,315 MW of capacity via a 500-kV line into South Carolina. Brunswick Nuclear Power Plant in North Carolina, contributing 1,870 MW, also	A sudden shutdown, due to reasons such as mechanical failure, natural disaster, or system malfunction, could lead to immediate electricity shortages, especially during peak demand periods. A prolonged outage could strain the regional grid, requiring additional imports from neighboring states or activation of backup plants, while also increasing energy costs for consumers. Beyond the immediate power loss, a nuclear power plant failure	South Carolina's reliance on nuclear generation creates a significant vulnerability in the event of an extended outage; however, the state's integration into the SERC and Eastern Interconnection grids provides a critical mitigating factor. In such a scenario, South Carolina can import electricity from neighboring states through established transmission pathways and regional reserve margins, while activating gas-fired peaker plants within the state and across the region to quickly offset lost baseload capacity. Utilities also maintain interruptible load programs for large industrial and

has a 230-kV transmission line that crosses into South Carolina. This steady power supply is crucial for South Carolina due to its high electricity import needs.	could spark public concern and destabilize energy markets, affecting both South Carolina and the broader region.	commercial customers, enabling rapid demand reduction during emergencies. Additionally, underutilized generation resources—including combined-cycle gas plants and some coal units in South Carolina and nearby states—can be dispatched to restore system balance. These measures, combined with coordinated emergency response protocols through SERC, ensure that nuclear generation loss, while impactful, can be managed through a combination of imports, flexible generation, and demand-side strategies.

Natural Gas Sector

Table 11. Out-of-state risks in the natural gas sector

Description of Criticality	Vulnerabilities	Mitigating Factors
Out-of-State Supply Coming in on Natural Gas Transmission Pipelines		
Two major interstate pipelines deliver natural gas to South Carolina: Transcontinental Gas Pipe Line (Transco) and Southern Natural Gas (SNG). These pipelines transport natural gas from production regions, such as the Gulf Coast and the Appalachian Basin, into the state. Other upstream pipelines, such as Columbia Gas Transmission, also contribute to the state's supply by feeding into the interstate Carolina Gas Transmission (CGT) network.	The pipelines could rupture due to third-party damage, aging, or malfunctioning pipeline infrastructure. Additionally, the pipeline could experience a cyberattack that results in some or all segments temporarily shutting down. Because South Carolina is located downstream on these long-distance pipelines, any disruptions—most commonly hurricanes in the Gulf or winter storm issues in Appalachia—can reduce the amount of gas that reaches the state. This makes South Carolina more vulnerable to shortages if problems occur along the pipeline routes between the state and the supply region.	South Carolina's natural gas supply benefits from a diversified mix delivered via two major interstate pipelines—Transco and Southern Natural Gas—which transport gas from both the Gulf Coast and Appalachian Basin. Approximately 65% to 70% of volumes originate from Gulf Coast production, while 30% to 35% come from Appalachia, providing geographic diversity and reducing reliance on a single source. Both pipelines maintain excess capacity through recent expansions and compression upgrades, with Transco's system capacity exceeding 20 billion cubic feet per day (Bcf/d) and additional projects adding 1.4 Bcf/d to 1.6 Bcf/d by 2027. South Carolina also hosts LNG storage facilities capable of injecting gas into transmission systems during emergencies, offering short-cycle deliverability as a contingency resource.
Trucked LNG		
Trucked LNG plays a supportive but critical role in South Carolina's natural gas supply chain, especially	Trucked LNG, while flexible, faces several logistical and operational challenges. One of the primary concerns is its	To address these risks, utilities and suppliers in South Carolina have implemented several strategies. They optimize delivery routes and maintain

during peak demand periods (e.g., winter cold snaps) or when pipeline capacity is constrained. It provides flexibility by enabling deliveries to areas without direct pipeline access, including remote industrial sites, backup generation facilities, and municipal utilities. Trucked LNG is also used to support system reliability during emergencies or infrastructure outages.	sensitivity to weather conditions—snowstorms, hurricanes, or icy roads can delay deliveries or make certain routes impassable. Additionally, the reliability of trucked LNG depends heavily on the availability and skill of drivers, especially during emergencies or peak demand periods. Traffic congestion, accidents, and mechanical issues can further disrupt delivery schedules. Unlike pipelines, trucks have limited capacity, making it difficult to scale up quickly during large demand surges. Moreover, some delivery sites may lack adequate infrastructure for LNG storage or regasification, which can hinder the effectiveness of trucked supply during critical times.	backup fleets to ensure continuity during disruptions. Mobile regasification units and temporary LNG storage tanks are deployed to enhance flexibility and serve areas without permanent infrastructure. The state is also exploring regulatory pathways to allow LNG transport by rail, which could significantly expand capacity and resilience. Coordination with interstate pipeline operators and regional LNG terminals—such as Elba Island in Georgia—provides additional supply buffers. Investments in local vaporization facilities are being considered to reduce dependence on long-haul trucking and improve overall system reliability.

Petroleum Sector

Table 12. Out-of-state risks in the petroleum sector

Description of Criticality	Vulnerabilities	Mitigating Factors
Colonial Pipeline, PPL, and Gulf Coast Refineries		
Colonial Pipeline and PPL deliver refined products from Gulf Coast refineries directly to distribution terminals in South Carolina, including major cities such as Belton, North Augusta, and Spartanburg. The two pipelines are the primary source of gasoline, diesel, and jet fuel for the state because are no significant refineries between Alabama and Pennsylvania.	Both pipelines are susceptible to disruptions from hurricanes, flooding, cyberattacks, mechanical failures, and power outages anywhere along the lines from the Gulf Coast to Greensboro, NC. The Gulf Coast refineries themselves face significant hazard exposure, particularly from hurricanes and flooding, which can halt production and delay distribution. Any prolonged outage in these systems can lead to fuel shortages, price spikes, and logistical challenges in South Carolina, which lacks substantial ability to move fuel via alternative modes.	Some fuel can be brought into the Port of Charleston, which may mitigate some impacts of a loss of pipeline supply. Additionally, the two different pipelines provide a means of diversity of supply as one may remain operational through certain hazards even if the other is offline. Product can be trucked into the state during emergencies from neighboring states, although a significant issue affecting supply from the Gulf Coast will be similarly disrupting and depleting the supply of fuels in neighboring states.

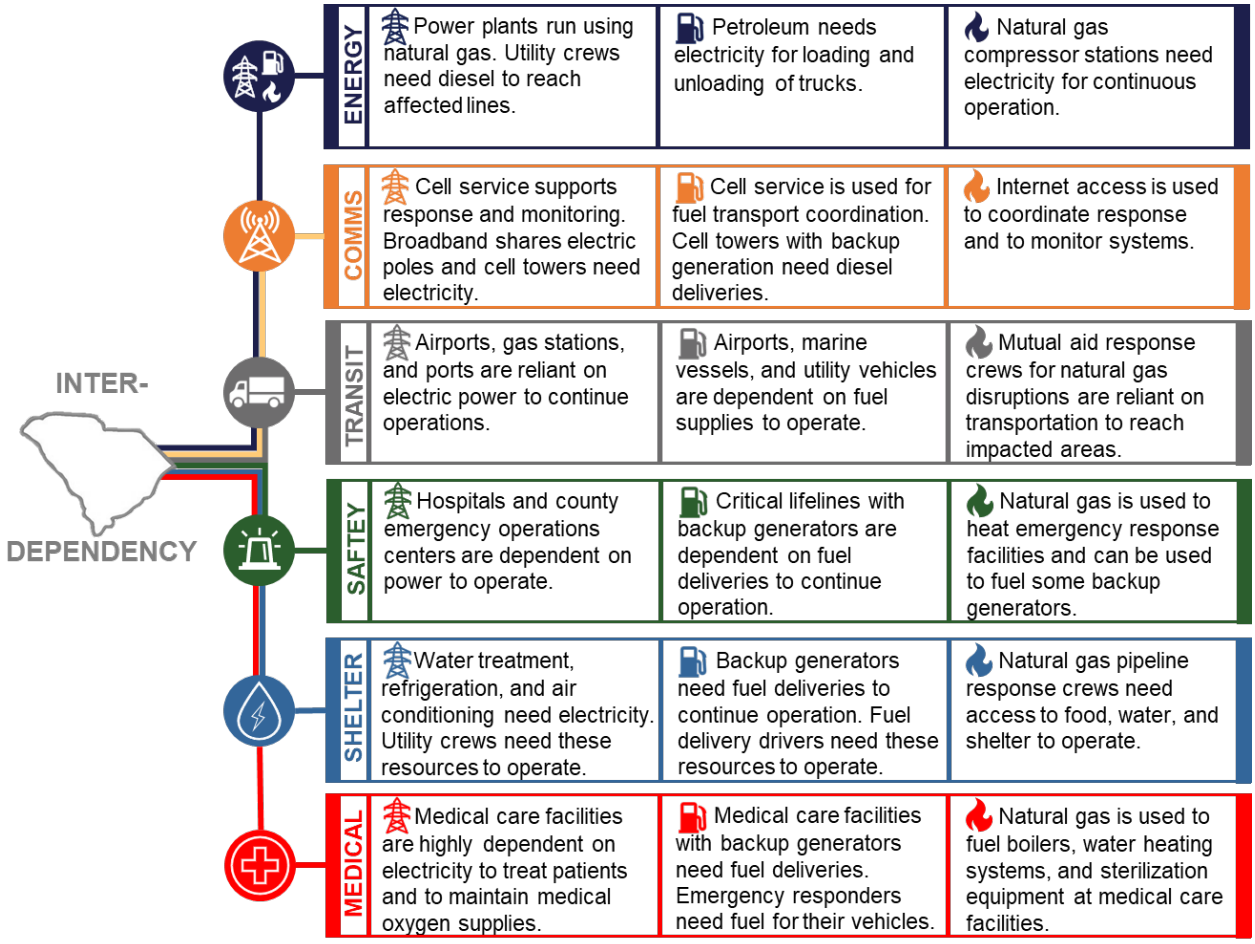
Communications Risk Assessment Results

The greatest broadband communications risk encountered was the combination of long, steady rain saturating the ground, followed by high winds. The uprooting of trees that fell on power lines and aerial-deployed fiber, dug up buried fiber, and broke utility poles resulted in the loss of electricity to cellular and broadband providers, businesses, and the public. This risk was certainly compounded by the very unusual track of Hurricane Helene and the fact that the storm was still a Category 1 strength hurricane upon crossing from Georgia into South Carolina in the Central Savannah River Area (in the vicinity of Augusta, GA and Aiken, SC).

Cross-Sector Interdependencies

South Carolina's critical infrastructure is highly interconnected because electricity, natural gas, and liquid fuels support essential services, economic activity, and emergency response statewide. These energy systems are closely linked with transportation, safety and security, food, water, and shelter lifelines, and the health and medical sector. Disruptions in one sector can quickly cascade across others, compounding the impacts on public safety and system reliability. The following sections describe the key two-way dependencies between South Carolina's energy systems and other critical sectors.

Exhibit 1. Sectoral interdependencies in South Carolina



Energy Interdependencies

The electricity, natural gas, and liquid fuels sectors are heavily interdependent. The electric sector in South Carolina relies on natural gas as fuel for power generation and on liquid fuels to power utility vehicles. Electric power is essential to operate infrastructure in both the natural gas and liquid fuels sectors, whether it is control systems, pipelines/pump stations, terminals, or retail gas stations. Terminals rely on

electric-powered technology to fill and empty fuel from transportation vehicles for shipping. Retail gas stations rely on electricity to run gas pumps and payment systems.

Communications

The extent of the damage to the cellular and broadband communications infrastructures determined how long the overall reconstitution efforts took. For example, our interviews showed that once power was restored to cellular towers, the cellular services were, in large part, immediately restored. This restoration greatly benefited businesses and the public, but also the overall Hurricane Helene reconstitution efforts as the general public, the utility crews, and first responders are heavily reliant on cellular communications.

It is worth noting that the Hurricane Helene experience also reflected communications intrasector dependencies. Power outages affecting broadband communications and fixed network capabilities affected not only standard internet traffic but also Voice over Wi-Fi (VoWiFi) as a means to carry LTE (4G) and 5G voice communications over Wi-Fi and the fixed broadband network. This capability is very helpful for ensuring voice capability where cellular service may not be as available or under certain conditions that make cellular communications challenging, such as inside buildings or in basements where cellular signal strength may be lacking. With the Helene impacts on fixed broadband, meaning little to no broadband and Wi-Fi, devices were "herded" to the cellular system and to Voice over LTE (VoLTE) in particular. VoLTE is the IP Multimedia Subsystem component that handles voice packets over the LTE network, as well as the Non-Standalone Architecture 5G systems that currently dominate the 5G market. The result was a potentially degraded cellular system being challenged by a larger customer base attempting to communicate with family, friends, emergency services, and so forth during the initial aftermath of the hurricane. South Carolina's critical infrastructure is highly interconnected because electricity, natural gas, and liquid fuels support essential services, economic activity, and emergency response statewide. These energy systems are closely linked with transportation, safety and security, food, water, and shelter lifelines, and the health and medical sector. Disruptions in one sector can quickly cascade across others, compounding the impacts on public safety and system reliability. The following sections describe the key two-way dependencies between South Carolina's energy systems and other critical sectors.

Transportation

Electricity: The transportation sector in South Carolina depends heavily on electricity to support airports, seaports, rail systems, electric vehicle (EV) charging stations, and retail fuel stations across the state. Airports such as Charleston International Airport, Columbia Metropolitan Airport, and Greenville-Spartanburg International airport rely on continuous electric power for runway lighting, terminal lighting, heating and cooling systems, navigational aids, security screening, communications systems, and airline scheduling and baggage handling software. Electricity is also critical at the Port of Charleston, which includes the Wando Welch Terminal and North Charleston Terminal, where power supports port administrative operations, as well as ship-to-shore cranes, gantry cranes, forklifts, refrigerated container operations, and cargo handling equipment used to load and unload marine vessels. Statewide EV charging infrastructure and retail

fuel stations also require electricity to dispense fuel, operate payment systems, support lighting and safety systems, and maintain communications connectivity. Meanwhile, trucks and reliable road systems maintained by the South Carolina Department of Transportation are essential for the operation and restoration of electric infrastructure, transporting line crews, utility vehicles, transformers, poles, wire, and other materials needed for system repairs following events such as Hurricane Helene. The Port of Charleston and regional freight rail networks operated by CSX Transportation and Norfolk Southern further support the electric sector by enabling the long-distance transport of heavy equipment, replacement components, and fuel supplies required for grid maintenance and emergency restoration.

Natural Gas: The transportation sector in South Carolina is supported by the natural gas sector, primarily through the use of compressed natural gas (CNG) and liquefied natural gas (LNG) in select fleet vehicles, including transit buses, refuse trucks, and municipal and private delivery fleets. While natural gas is not a dominant transportation fuel statewide, CNG and LNG are used in limited applications where fleet operators seek lower fuel costs and emissions. Natural gas in South Carolina is transported almost entirely by interstate pipeline systems, including the Transcontinental Gas Pipe Line (Transco), Southern Natural Gas pipeline, and Carolina Gas Transmission system, which deliver supply to local distribution companies across the state. South Carolina does not operate a large marine LNG import terminal; however, LNG can be trucked into the state from regional liquefaction and storage facilities in neighboring states to support peak demand or emergency supply needs. Tanker trucks carrying LNG or CNG may be used to supply critical customers during pipeline constraints, maintenance outages, or extreme cold events. More broadly, the natural gas sector in South Carolina is highly reliant on the transportation network. Trucks are essential for daily operations, including pipeline maintenance, meter installation and replacement, regulator station service, emergency leak response, and infrastructure repair.

Liquid Fuels: South Carolina's transportation sector is heavily reliant on liquid fuels to support ground, air, marine, and rail transportation, while the liquid fuels sector depends on the transportation network to operate its supply chain. South Carolina does not have any in-state crude oil production or petroleum refineries and is therefore fully dependent on imported refined petroleum products. The primary entry point for these products is pipeline and the Port of Charleston, where gasoline, diesel, jet fuel, and other petroleum products are delivered by marine vessel and stored at nearby bulk petroleum terminals. From these terminals, fuels are distributed throughout the state, primarily by truck, to retail fuel stations, airports, commercial consumers, and heating oil distributors. Jet fuel is typically stored on-site at airport fuel farms at facilities such as Charleston International Airport, Columbia Metropolitan Airport, and Greenville-Spartanburg International Airport, with supplemental storage at nearby terminals. Propane is transported into the state by pipeline, rail, barge, and truck to bulk propane terminals or distributor storage sites and then delivered to end users by smaller trucks. Ethanol used for gasoline blending is transported mainly by rail and truck to bulk terminals for blending prior to retail distribution.

Safety and Security

Electricity: The safety and security sector in South Carolina relies on electricity to power emergency response facilities such as state and local police stations, fire stations, emergency medical services facilities, county emergency operations centers (EOCs), and the South Carolina Emergency Management Division (SCEMD) State Emergency Operations Center. Continuous electric power is required for dispatch centers, 911 call centers, radio and communications systems, surveillance systems, building lighting, heating and cooling systems, and the data servers that support emergency response coordination. At the same time, the safety and security sector is essential for the protection, operation, and restoration of the electric power system across the state. This includes law enforcement support for securing substations, power plants, and transmission infrastructure, and fire departments responding to electrical fires and utility-related incidents. It also includes urban search and rescue and debris-removal operations that clear roadways to allow utility crews access to damaged infrastructure following big storms. In addition, state and local government agencies, including SCEMD and the South Carolina Law Enforcement Division, support the electric sector through emergency coordination, situational awareness, and information sharing related to physical and cyber threats, and by assisting with response efforts during cyber incidents or coordinated attacks that could disrupt electric grid operations.

Natural Gas: The safety and security sector relies on the natural gas sector to heat many emergency response facilities, including police stations, fire stations, EOCs, and correctional facilities. Natural gas may also be used to fuel some standby generators that provide backup power during electric outages. In turn, the natural gas sector depends on the safety and security sector to protect infrastructure and respond to emergencies. This includes law enforcement protection and investigation related to pipeline and facility security, fire department response to natural gas-related fires or explosions, wildfire suppression to prevent damage to gas infrastructure, and debris clearance to restore access for utility crews. State and local government agencies also support the natural gas sector through emergency coordination and information sharing on physical and cyber threats.

Liquid Fuels: The safety and security sector in South Carolina relies on the liquid fuels sector to fuel emergency response vehicles, such as police cars, fire trucks, ambulances, and utility support vehicles, as well as backup generators at emergency response facilities, including police stations, fire stations, hospitals, shelters, and EOCs. In turn, the liquid fuels sector depends on the safety and security sector to protect infrastructure and respond to hazards affecting fuel supply and distribution. This includes law enforcement protection and investigation related to terminals, pipelines, and retail fuel stations; fire department response to petroleum fires and hazardous materials incidents; and wildfire suppression to prevent damage to fuel storage and distribution infrastructure. Debris removal by state and local agencies is also critical to restoring access for fuel delivery trucks following disruptive events. In addition, state and local government agencies support the liquid fuels sector through emergency coordination, physical security assistance, and information sharing related to cyber and physical threats.

Food, Water, and Shelter

Electricity: The food, water, and shelter lifelines rely on electricity to provide power for homes and businesses, food refrigeration and processing facilities, grocery distribution centers, municipal water and wastewater treatment plants, and pumping stations operated by utilities, including Charleston Water System, Columbia Water, and Greenville Water. Electricity is used in homes and businesses for water heating, cooking, refrigeration, at-home medical equipment, and internet connectivity. Residential space heating and cooling (predominantly electric air conditioning in South Carolina's climate) requires a steady and reliable supply of electricity. Extended power outages during periods of extreme heat can pose significant public health and safety risks, particularly for vulnerable populations. Concurrently, the electric sector depends on food, potable water, and shelter for utility personnel, including line crews, substation technicians, vegetation management teams, and mutual aid workers supporting grid operations and restoration. The water sector also plays an essential role in electric power generation in South Carolina. Nuclear power plants, such as Oconee, Catawba, and V.C. Summer, rely on large volumes of water for steam turbines and cooling processes. Hydroelectric facilities operated by Duke Energy and the South Carolina Public Service Authority (Santee Cooper) depend directly on the availability of water for electricity generation. In addition, solar generating facilities across the state require water for periodic cleaning of photovoltaic panels in order to maintain performance.

Natural Gas: South Carolina's food, water, and shelter sectors rely on natural gas for space heating, cooking, food processing, and operation of backup generators at homes, community shelters, grocery distribution centers, and water and wastewater treatment facilities. Natural gas is also used in the production of fertilizers and other agricultural inputs that support the food supply chain. The natural gas sector depends on the availability of food, potable water, and shelter for utility personnel, including field crews and control room staff. South Carolina is not a major producing state, so water use is not directly tied to fracking activities within the state.

Liquid Fuels: The food, water, and shelter sectors rely on liquid fuels such as diesel, gasoline, heating oil, and propane for space heating, cooking, agricultural production, and backup power generation. Diesel and propane are commonly used to fuel backup generators at homes, community shelters, grocery stores, cold storage facilities, and water and wastewater treatment plants, supporting food refrigeration and essential water services during power disruptions. Liquid fuels are also critical for farm equipment and for the production and application of fertilizers and pesticides, which support the state's agricultural sector. The liquid fuels sector depends on the availability of food, potable water, and shelter for terminal, pipeline, and fuel disruption employees. Water remains important for terminal operations, fire suppression systems, and environmental protection measures at fuel storage and distribution facilities.

Health and Medical

Electricity: South Carolina's health and medical sectors depend on electricity to power lifesaving medical equipment at hospitals, clinics, nursing homes, and mass care facilities; refrigerate vaccines, blood supplies, and temperature-sensitive medications;

and provide critical medical services to vulnerable populations. Major health systems, including Prisma Health, Medical University of South Carolina Health, Lexington Medical Center, and McLeod Health, require continuous electric service to operate emergency departments, intensive care units, surgical suites, diagnostic systems, laboratories, and electronic health record systems. Electricity is also essential for medical oxygen systems, dialysis centers, and long-term care facilities across the state. The electric sector also relies on the health and medical sectors to maintain a healthy and available utility workforce. Public health emergencies, as recently illustrated by the COVID-19 pandemic, can affect electric system operations by reducing staffing levels and constraining field and control room operations.

Natural Gas: The health and medical sectors in South Carolina depend on natural gas to fuel backup generators, boilers, water heating systems, sterilization equipment, and laundry facilities at hospitals, clinics, nursing homes, and mass care facilities. Reliable natural gas service supports patient care, sanitation, and infection control. The natural gas sector also relies on the health and medical sectors to maintain a healthy and available workforce. Widespread illness among utility personnel can hinder operations, emergency response, and system restoration.

Liquid Fuels: South Carolina's health and medical sectors depend on liquid fuels to power backup generators at hospitals, clinics, nursing homes, dialysis centers, and mass care facilities, ensuring continuity of care and services for vulnerable populations during electric outages. Diessel and propane are the primary fuels used for these emergency power systems. Liquid fuels are also essential for ambulances, medical transport vehicles, and mobile medical units throughout the state. Additionally, the liquid fuels sector relies on the health and medical sectors to maintain a healthy and available workforce. Widespread illness among terminal, pipeline, and fuel delivery personnel could hinder fuel transportation and distribution, affecting statewide fuel availability.

Mitigation

South Carolina seeks to enhance energy and communication system reliability and resilience, thereby reducing the potential impacts from disruptions. The mitigation strategy presented here serves as a blueprint for reducing risks, supporting mitigation commitments shared across local communities, and advancing South Carolina's existing resiliency initiatives. South Carolina's mitigation strategy consists of three overarching goals:

1. **Redundancy:** Strengthening energy sector and communication system redundancy.

2. **Robustness:** Securing, to the extent practical, critical energy and communication infrastructure against both natural and human-caused threats and hazards.

3. **Rapid Detection/Recovery:** Increasing the response to and recovery from energy and communication disruptions, thus increasing the resilience of these systems and other critical infrastructure sectors that depend on them.

After the damage from Hurricane Helene, South Carolina has been prioritizing mitigation to reduce the impacts of future storms. These resiliency improvements are particularly important because the reliability and recovery of other critical infrastructure sectors from hazards depend on functioning energy infrastructure. According to the findings of the National Institute of Building Sciences, every $1 spent on mitigation funding can save $6 in future disaster costs. While additional mitigation can further boost resilience, there were a number of successes from Helene and should continue into future events as outlined in Table 13.

Table 13. Examples of success in the hurricane response effort

Success	Description
Mutual Aid	Utilities indicated that they were able to receive significant mutual aid, adding personnel, and allowing them to coordinate faster restoration. Palmetto Power Cities and APPA worked together to coordinate mutual aid assistance for cooperatives from 343 personnel representing 62 utilities from 12 states.
Material Supplies	The supply chain issues faced by utilities across the country post-COVID-19 had started to improve by the time Hurricane Helene hit; however, they were still present. Utilities across South Carolina worked together to share materials and utilized strong pre-existing partnerships with in-state suppliers, such as Line Equipment, Border States, and Wesco, to receive crucial additional materials for recovery as they became available.
Rights-of-Way	Lockhart's subtransmission system infrastructure had limited damage due to their extended right-of-way clearances of 70 feet, which minimized tree impacts, allowing for quicker restoration following upstream transmission fixes.
State Coordination	Utilities noted that communication with the Office of Regulatory Staff, Department of Transportation (DOT), and public safety went well and greatly helped to support their restoration efforts. Coordinating chainsaw crews with electric utility restoration efforts saw the most success.
Radio Systems	Radio systems were the backbone of early response efforts to the hurricane, allowing for coordination with teams in the field and communication around the hardest hit areas.
Starlink	Under widescale communication outages, the Emergency Management Division and several utilities were able to gain access to Starlink to help coordinate efforts within 24 hours of the power going down.

Risk mitigation aims to enhance the reliability of energy and communication infrastructure. The mitigation approach builds on the results from the risk assessment and has been informed by the South Carolina Office of Regulatory Staff, the South Carolina Emergency Management Division, the Department of Energy, and Industry. Meetings with key stakeholders in the energy sector (electricity, delivered fuels, and natural gas) helped to identify risks and mitigation efforts, as well as identify the competing realities of financial and capacity limitations of local governments, emergency responders, small energy asset owners/operators, and ratepayers.

Existing Risk Mitigation Strategies

Energy infrastructure has baselines and, where applicable, has to meet reliability standards set by the North American Electric Reliability Corporation (NERC), Pipeline

and Hazardous Materials Safety Administration, and other federal, state, and industry regulating bodies. To further mitigate the impacts from evolving threats, including climate impacts, states and energy infrastructure operators may consider risk mitigation measures that enhance system resilience beyond the standards set by regulators; however, first, it is important to recognize this and ongoing efforts to understand where we are today.

The following section describes ongoing mitigation measures already taking place in South Carolina to bolster energy reliability. This list is intended to highlight activities beyond the business-as-usual measures already taking place and include the following:

1. Integrated Resource Plans
2. Santee Cooper Grid Resilience Grant Program
3. Duke Carolinas Resilience Study
4. Duke Grid Improvement Plan
5. Resiliency of South Carolina's Electric and Natural Gas Infrastructure Against Extreme Winter Storm Events
6. Statewide Resilience and Risk Reduction Plan

Integrated Resource Plans

Investor-owned utilities are required by South Carolina Code Ann. Section 58-37-40 to submit an Integrated Resource Plan (IRP) to the State Energy Office every three years. In addition to these plans, Central Electric Power Cooperative, Inc. submitted a power purchase agreement for their members. These IRPs serve as blueprints for how utilities will meet future energy demand, retire aging assets, and implement short-term action programs to ensure reliability.

Dominion Energy

In their IRP, Dominion Energy has detailed several projects that they have accomplished to improve energy reliability in South Carolina. In 2024, Dominion invested a total of $222 million in improvements to their transmission system within the state, including nine major transmission projects. In each case involving a rebuild of current lines, wooden structures were replaced with galvanized steel structures. As of 2024, five projects were for line rebuilds, three were new line construction, and the remaining project added a new substation. These projects bring Dominion Energy's transmission system into compliance with NERC criteria.[112]

Duke Energy

In their IRP, Duke Energy has recently advanced the execution of several activities in South Carolina to help support energy resilience. These include increasing the capacity of the Oconee Nuclear Power Station by 46 MW; completing the Bad Creek pumped

storage capacity increase of 80 MW; and progressing the permitting and regulatory process for a 1,365 MW natural gas plant in Anderson County. Duke Energy's IRP also includes plans for new generation including 9,650 MW of natural gas generation by 2033; 4,000 MW of solar by the beginning of 2034; and 5,600 MW of standalone battery storage by the beginning of 2034. The plan includes placing 22 critical transmission system improvement projects into service by 2028, and details Duke Energy's continuous assessment of transmission needs, changes to local transmission planning processes, and the replacement of aging energy infrastructure. [113]

Lockhart Power

There is no integrated resource plan for Lockhart Power due to a power purchase agreement with Duke Energy that fulfills all the requirements of an IRP. [114]

Santee Cooper

In their IRP written in 2023, Santee Cooper has begun several transmission projects aimed at improving grid reliability for their service territory. Key components involve the establishment of alternative transmission paths to reduce dependency on single-corridor infrastructure, such as the Johns Island-Queensboro 115-kV line. Upgrades at the Yemassee Station are designed to alleviate thermal loading and improve operational flexibility under contingency conditions. Substation developments at Wassamassaw, Conway, and Varnville are structured to support increasing demand and future network expansion. These facilities integrate existing transmission lines and are configured for scalability. The Conway 230-kV Switching Station and associated Marion-Conway 230-kV Line provide additional high-voltage sources and redundancy for Horry County.

Planned projects to further reinforce the network include transformer additions at Carolina Forest, new 230-kV lines between Conway and Perry Road, and multiple 230/115-kV double-circuit rebuilds, such as the Kingstree-Hemingway and Marion-Red Bluff lines. Additional circuits between Cross, Wassamassaw, Carnes, and Jefferies are intended to mitigate thermal loading and support rapid regional growth. [115]

Central Electric Power Cooperative, Inc.

Central Electric Power Cooperative, Inc. (CEPCI), a wholesale electric generation and transmission cooperative, which is owned by 20 independent consumer-owned electric cooperatives across South Carolina, filed a combined IRP in 2021. Power is supplied to the cooperative through Santee Cooper, where CEPCI represents 72% of Santee Cooper's firm demands. CEPCI has six quick-start diesel generators capable of providing limited backup generation to the cooperatives. As of this plan, CEPCI has no documented mitigation measures in their IRP. [116]

Municipal IRPs

All municipal utilities are purchasing power from wholesale power suppliers in both South Carolina and North Carolina. The Piedmont Municipal Power Agency, which holds a 25% ownership interest in unit 2 of Duke Energy's Catawba Nuclear Station in North Carolina, is the largest primary provider, serving 11 of the state's 21 municipal

systems. The Southeast Power Administration is a federal power administrator with hydroelectric dams along the Savannah River that provides 19 of the 21 municipal systems with 101.5 MW of low-cost supplemental power.[117]

Table 14. Municipal utility power purchase agreements

Municipal Utility	Piedmont Municipal Power Agency	Carolina Power Partners	Duke Energy	Santee Cooper	Dominion Energy	Lockhart Power	Marlboro Electric Cooperative	Newberry Electric Cooperative
Abbeville	X							
Bamberg Public Works				X				
City of Bennettsville							X	
City of Camden		X						
City of Clinton	X							
Town of Due West			X					
Easley Combined Utilities	X							
Gaffney Public Works	X							
City of Georgetown				X				
City of Greenwood		X						
Greer CPW	X							
Laurens Public Works	X							
McCormick Public Works		X						
City of Newberry	X							
City of Orangeburg			X					
Town of Prosperity								X
City of Rock Hill	X							

Municipal Utility	Piedmont Municipal Power Agency	Carolina Power Partners	Duke Energy	Santee Cooper	Dominion Energy	Lockhart Power	Marlboro Electric Cooperative	Newberry Electric Cooperative
City of Seneca				X				
City of Union	X					X		
City of Westminster	X							
Town of Winnsboro					X			

Santee Cooper Grid Resilience Grant Program

The Grid Resilience and Innovation Partnerships Program (GRIP) is a federally funded program under the Bipartisan Infrastructure Law and was administered by the Grid Deployment Office with the goal of accelerating projects to help ensure the reliability of the power sector's infrastructure.[118] Funding for this program was paused in early 2025, delaying GRIP funds for many 2024 recipients. In South Carolina, Santee Cooper was chosen to serve as the state entity for administering funds to utilities throughout the state. Santee Cooper is a not-for-profit electric utility that provides electricity for approximately 2 million people. In the first round of funding in 2023, 18 projects were awarded to 12 utilities, totaling $10.8 million. In the second round of funding in 2024, 14 projects were awarded across 8 utilities, totaling $6.9 million. [119]

Table 15. 2023 GRIP awards[120]

Awardee	Award	Project
Palmetto Electric Cooperative	$1,946,000	Replace 44 old hydraulic reclosers with new electronically controlled reclosers with remote monitoring and operating capabilities in areas considered to be disadvantaged communities.
York Electric Cooperative	$1,261,955	Five projects that include building a 2.1-mile overhead line to support remote radial lines, deploying a distribution automation system in the Catawba Indian Nation, installing an underground tie line in Hickory Grove to reduce radial mileage, burying overhead lines into Kings Mountain National Military Park and Camp Cherokee, and undergrounding lines within Kings Mountain State Park to improve service and reduce the environmental impact.
Coastal Electric Cooperative	$1,196,000	Improve fault location, isolation, and service restoration abilities and replace aging overhead distribution lines on the back of lots with underground lines on the front of lots to improve reliability and increase access to the lines.
MPD Electric Cooperative	$1,191,604	Install distribution management and automation systems to automatically clear instantaneous and short-duration faults.

Fairfield Electric Cooperative	$1,125,000	Improve system control and rebuild four miles of overhead distribution line serving a wastewater treatment plant in a remote area that has experienced extended outages.
Berkeley Electric Cooperative	$982,228	Implementation of an automated fault location, isolation, and service restoration system in a remote area.
Lockheart Power Company	$833,333	Install enhanced resiliency insulators and storm-hardened metal poles on the Jonesville 34-kV line, which is part of a larger project to replace an aging 18-mile segment of line between two substations.
Horry Electric Cooperative	$779,823	Install self-healing devices on existing poles along major transportation corridors, allowing automated restoration within seconds for outages between these devices.
Laurens Commission of Public Works	$777,917	Replace cutout switches, inspect all poles on the system, and accelerate vegetation management.
Gaffney Board of Public Works	$417,605	Deploy technology to locate, predict, and prevent issues on the electrical grid.
Broad River Electric Cooperative	$183,964	Add remote devices for monitoring and control to two circuits.
City of Rock Hill	$71,470	Add two automated overhead switches and a self-healing device to address circuit-level outages.

Table 16. 2024 GRIP awards[121]

Awardee	Award	Project
Laurens CPW	$1,347,097	Restring the primary and secondary electric distribution lines with new cables and accelerate vegetation management in the disadvantaged communities of the city.
MPD Electric Cooperative	$1,325,192	Three projects that include installing distribution management systems with reclosers, upgrading single-phase lines to V-phase or three-phase in rural areas to improve efficiency, and replacing aging utility poles while modernizing infrastructure to reduce outage durations during both normal and extreme conditions.
York Electric Cooperative	$1,093,365	Change existing Power-Line-Carrier meters to advanced metering infrastructure (AMI) census meters and create a distribution automation system between York Electric's substations.
Greer CPW	$1,047,000	Increase system automation capable of providing real-time data during events, fault ID, fault isolation and service restoration during extreme weather events, and public interference-caused outages.
Orangeburg DPU	$689,721	Implement remote sensing solutions for vegetation; replace transmission conductors and poles, insulators, static lines, and other ancillary material; and replace older electrochemical recloser with a new electronic device.
Fairfield Electric Cooperative	$639,000	Three projects, which include the implementation of a Fault Indicator System, the installation of 7 three-phase electronic reclosers downline from Fairfield's Winnsboro Substation on Circuit 1, and the installation of 11 three-phase electronic reclosers downline from Fairfield's Woodward Substation.

City of Clinton	$445,200	Vegetation management, outage management, and pole inspections.
City of Rock Hill	$397,123	Install new underground electric lines and convert old overhead lines to new underground lines.

Duke Carolinas Resilience Study

In 2021, Duke Energy initiated a Climate Risk and Resiliency Study to assess the long-term risks of a changing climate and the physical impacts on the transmission and distribution system in the Carolinas. The study's ultimate goals were to develop a flexible adaptation framework while providing meaningful opportunities for stakeholder input and engagement on Duke Energy's resiliency planning. Following the interim report on the vulnerabilities published in 2021, a final report was published in September 2023.

Duke Energy followed the same approach as the 2021 study and expanded the scope to assess the vulnerability of generation and transmission and distribution assets to climate hazards across all of the service territories. This enterprise-wide Climate Resilience and Adaptation Study is also included in our adaptive measures being taken to mitigate climate hazard risks and a case study around the historic 2024 hurricanes, especially Helene.

The 2023 Carolinas Resilience Transmission and Distribution Study outlines a strategic approach that includes a range of mitigation measures already underway, such as capacity upgrades across critical energy assets, the deployment of smart grid technologies to improve system responsiveness, and the proactive removal of hazard trees that pose a risk to infrastructure. Duke Energy has also launched a program to replace vulnerable power lines before they fail, helping to prevent outages and reduce restoration times. A key feature of the plan is the reconfiguration of feeder segments to allow for more accessible rerouting during outages, enabling utility crews to respond more efficiently. These measures are designed to ensure that Duke Energy's grid remains reliable, flexible, and capable of adapting to increasingly severe weather conditions across the Carolinas.[122]

The 2024 Duke Energy Climate Resilience and Adaptation Study presents a comprehensive resilience strategy to address the growing risks posed by climate across its six-state service territory. This is done by investing in resilient infrastructure, including self-healing grid technologies that automatically detect and reroute power during outages, significantly reducing downtime, and improving reliability. Other measures include reinforcing generation assets to withstand natural hazards, upgrading cooling systems, and raising equipment above flood levels. In addition, Duke Energy is implementing adaptive actions such as targeted undergrounding of vulnerable lines, modular and permanent flood barriers at substations, and vegetation management to reduce storm-related outages. [123]

Table 17. Planned mitigation measures for Duke Energy

Hazard	Mitigation	2023 Actions	2024 Actions
Flood	Build substation flood walls.	X	X
	Elevate critical substation equipment.	X	X
	Install breakers on raised foundations.		X
	Increase the robustness of transmission structure foundations.	X	
	Evaluate moving existing line structures from areas that expect increased levels of flooding.		X
	Use submersible switchgear in flood-prone areas.		X
Heat	Reconductor transmission line to increase capacity.	X	
	Build a new transmission line.	X	
	Replace transformers with a high-capacity unit and a cooling system.	X	X
	Install an additional transformer in the substation.	X	
	Modify conductor loading design specifications to mitigate the impact of increased heat.		X
Storms	Review line inspection and repair practices to ensure that lightning arrests are functioning for maximum protection.		X
	Ensure that existing lightning protection equipment is operating as designed and is repaired in a timely manner.		X
Wind	Reinforce or replace poles.	X	
	Underground key lines.	X	X
	Modify design standards to meet or exceed new wind speed expectations.		X
	Improve vegetation management programs.	X	X
	Install microgrids to increase the energy supply.	X	
Wildfire	Apply fire-resistant coating on utility poles.	X	

Duke Grid Improvement Plan

Over the last several years, Duke Energy has been executing its Grid Improvement Plan (GIP), which is a comprehensive framework designed to enhance the overall customer experience, modernize infrastructure through advanced enterprise systems and technology, and safeguard the grid against both physical and cybersecurity threats. The initiatives within this framework have focused on automating and strengthening electrical assets while improving grid resilience to ensure rapid power restoration during outages. While the GIP program has formally ended, these strategic initiatives will continue to be deployed across the grid in areas where they provide effective solutions. [124]

Resiliency of South Carolina's Electric and Natural Gas Infrastructure Against Extreme Winter Storm Events

This report, commissioned by South Carolina Governor Henry McMaster and conducted by the Office of Regulatory Staff (ORS), provides a comprehensive review of the state's electric and natural gas infrastructure in response to the devastating February 2021 winter storm in Texas. This initiative was designed to assess South Carolina's preparedness for similar extreme winter weather events and identify mitigation strategies to ensure the reliability and resiliency of utility services.

After analyzing data collected from 65 utility providers, the report indicates that the state's large utilities were adequately prepared for a winter storm event and the smaller utilities posed a much lower overall risk to energy resilience within the state as a whole. Table 18 contains a list of recommendations from the report that would further improve winter storm resiliency. [125]

Table 18. Key electric mitigation recommendations

Recommendation	Large Electric Utility	Small Electric Utility
Assess the feasibility of implementing more comprehensive severe weather damage predictive models to improve emergency processes.	X	X
Investigate integrating mutual assistance crews' information into existing work ticket management systems to reduce manual processing.	X	X
Continue improving on the use of analytical tools and incorporate with risk management processes accordingly.	X	
Implement robust decision-making processes for long-term investments to reduce adverse weather-related risks.	X	
Conduct transmission physical condition assessments on vulnerable lines and equipment that have not had detailed inspections over the past five years.	X	
Each large electric utility should ensure that the minimum design operating temperature (i.e., ambient temperature) is established for each generating unit and this information is communicated to the relevant system operator/system planning organization so that informed decisions can be made.	X	
Review winter freeze preparation procedures that apply to generation assets and compare the plant-specific procedures/processes/ checklists to ensure that there are no gaps between the two.	X	X
For all generation units using natural gas as a primary fuel and fuel oil as a backup fuel, ensure that local freeze protection procedures include operational testing of fuel switching prior to the winter season.	X	
Consider material storage and delivery methods to more quickly get materials to the field for repairs.	X	
Modify planning criteria beyond those outlined in NERC and Southeastern Reliability Corporation (SERC) guidelines to include	X	

more extreme winter weather conditions, with greater variability than those used in current pre-winter and long-term planning studies.		
Conduct studies to test the vulnerability of the power system under extreme ice loading conditions, including loss of lines and equipment that exceed the minimum outage criteria outlined in NERC standards.	X	X
Identify critical assets on the distribution system and develop asset management programs around them, to include cold weather performance, along with the appropriate systems to effectively monitor and manage the data.		X

Statewide Resilience and Risk Reduction Plan

This plan was created in 2023 to address the impacts from disasters affecting the state by the South Carolina Office of Resilience (SCOR). The plan emphasizes the importance of integrating risk reduction into existing systems of hazard mitigation, environmental protection, and economic development.

Energy mitigation plays a critical role in improving statewide resilience, particularly in how communities prepare for and respond to disruptions caused by extreme weather events. The plan outlines the need for resilient energy systems that can withstand flooding and other hazards, especially in vulnerable and underserved areas. This includes promoting distributed energy resources, such as solar and battery storage, which can provide backup power during outages and reduce dependence on centralized grids that may be compromised during disasters. Additionally, the plan encourages energy efficiency upgrades in public buildings and critical infrastructure to reduce overall energy demand and improve operational continuity during emergencies. [126]

Included in this plan are several key recommendations to improve energy resiliency and overall hazard mitigation throughout South Carolina.

Table 19. Selected energy resiliency-related mitigation recommendations

Recommendation	Measure
Improve Data Collection and Coordination	Placement of additional weather stations will provide greater precision in developing weather models, hydrologic models, drought assessments, flood forecasting, and other decision-making processes.
	Establishing a group to evaluate climate information will inform decision makers on how future climate trends will likely affect the state.
	The collection of post-disaster imagery can be used to better assess the damage extent post-event. This can aid SCEMD, Federal Emergency Management Agency (FEMA), and SCOR to identify where to focus response and recovery efforts.
Incorporate Resilience into Infrastructure Design, Construction, and Maintenance	Designing and building critical infrastructure to consider future conditions ensures that infrastructure will be able to withstand the hazards that they are likely to encounter during their design life.
	Identifying funding sources for the maintenance of infrastructure projects prior to construction will ensure that they function properly over the intended life of the project.

	Incorporating resilience into port infrastructure planning will ensure that the port is able to anticipate, absorb, recover, and thrive when presented with environmental change and natural hazards.
Identify and Maximize All Available Funding Sources for Resilience Activities	Developing a resilience funding hub will enable coordination, collaboration, and cooperation among state agencies, local and regional governments, non-profits, special purpose districts, and tribal governments seeking resilience funding.

Communications

A number of communications upgrades and mitigation measures have been put in place by providers since Hurricane Helene in late September 2024. In most cases, these mitigation efforts are not explicitly linked to Helene but are deemed noteworthy and helpful in Helene-like scenarios.

Generators. The most common mitigation measure discussed in our interviews was to enhance the electricity resilience of the cellular infrastructure by increasing the number of dedicated generators for key cellular sites or increase the number of cellular base transceiver stations (cell towers) with generator taps. Some cellular providers already have backup generation installed.

Standoff Distances. Another mitigation strategy that is electricity related is to increase or better police the power system standoff distances. The goal is to increase the distances of the transmission and distribution lines from adjacent vegetation, such as trees. This measure is easier to put in place along the transmission subsystem than the distribution subsystem, which can be notoriously difficult when considering local governmental and landowner equities and interests.

Utility Poles. A mitigation strategy that was mentioned several times was to increase the number and frequency of metal utility poles and crossarms as compared with wood utility poles and crossarms, especially in the distribution subsystem. Although completely replacing wood with metal utility poles is cost-prohibitive and thus best done over time, some providers mentioned implementing a ratio whereby a metal utility pole would be in place after every four or five wooden poles. This measure is seen as helping limit the number of potentially affected poles in a situation, such as Hurricane Helene, where the domino effect of one wooden pole breaking would cause a chain reaction and break several more adjacent poles.

Proposed Mitigation Strategies

Table 20. The source of proposed mitigation measures

Source	
2023 State Hazard Mitigation Plan	
County and Regional Hazard Mitigation Plans	
Lessons learned, best practices, subject matter expertise, or risk assessment outcomes	
Stakeholder feedback	

Table 21. Proposed mitigation measures

No.	Mitigation Measure (Proposed)	Source	Relevant Energy Sector	Participating Organization(s) (Proposed)	State Action(s)	Hazard(s) Addressed	Threat	Vulnerability	Consequence
1. Overhead Line Vulnerabilities									
1.1	Consider incentives for hardening utility services by replacing/burying aboveground distribution utility services and by strengthening utility poles/conductor fixtures, etc.[127]			ORS, SCOR, Utilities	Incentive Programs	Strong Wind, Hurricane		✓	
1.2	Continue to work with power utility companies to make improvements that are more disaster resistant and redundant. Include transmission and distribution line burial where feasible.[128]			PSC, Utilities	Coordination and Convening	All Hazards		✓	
1.3	Support the inspection of power lines and the upgrading of utility infrastructure that is at risk from natural hazards in order to minimize the possible damage.[129]			Utilities	Coordination and Convening	Strong Wind, Hurricane	✓	✓	
1.4	Consider increasing the frequency of routine trimming of branches and vegetation from around power lines/ poles to prevent outages. Accelerate hazard tree identification programs.[130]			Utilities	Grants and Direct Funding	Strong Wind, Hurricane	✓		
1.5	Expand/improve Supervisory Control and Data Acquisition (SCADA) infrastructure and explore			Utilities	Grants and Direct Funding	All Hazards		✓	✓

	other line monitoring processes if there is no AMI metering installed. Maintain backup batteries for these systems.								
1.6	Consider replacing manual switches with automatic reclosures, where prudent, to speed up power restoration for areas where power can be rerouted.			Utilities	Grants and Direct Funding	All Hazards			✓
1.7	Install animal guards on transformers to prevent squirrels from damaging them while trying to escape a storm.			Utilities	Grants and Direct Funding	Hurricane	✓	✓	
2. Hurricane Preparation and Response									
2.1	Identify, centralize, and train additional individuals who know the system prior to an event to better help the dispatching of crews to maximize restoration. Make sure to include these people in the updating of the Emergency Operations Plans.			Utilities	Planning and Studies	All Hazards			✓
2.2	Maintain utility track equipment for hard-to-reach areas.			Utilities	Incentive Programs	Hurricane, High Winds, Inland Flooding	✓	✓	
2.3	Consider using drones for damage assessments in the event of a road washout. This may necessitate training personnel to ensure that enough qualified pilots are available and identifying the processes needed for waivers during the event.			Utilities	Grants and Direct Funding	Hurricane, Inland Flooding			✓

2.4	Streamline the storm response documentation processes before disasters so that utilities can respond more quickly.			PSC	Policy and Governance	Hurricane			✓
2.5	Consider a full functional exercise for a two-week or more power outage event.[131]			SCOR, SCEMD	Planning and Studies	Hurricane			✓
2.6	Prepare a plan/procedure for relocation/restart operations after power loss.[132]			Local Government, SCEMD, Utilities	Planning and Studies	All Hazards			✓
2.7	Explore the development of a real-time storm damage assessment app that allows the local and state Emergency Management Divisions to be informed about utility restoration efforts.			Local Government, SCEMD, Utilities	Coordination and Convening	Hurricane			✓
3. Petroleum Sector Resiliency and Backup Generation									
3.1	Identify critical lifelines that may require backup power, such as fueling stations, food sources, and vulnerable populations, and, to the extent practical, work with nongovernmental organizations (NGOs), counties, tribal entities, and others to create a plan to provide this power in the event of an emergency.[133]			SCEMD, SCOR, and Local Government	Planning and Studies	All Hazards			✓
3.2	Prioritize and communicate the restoration of petroleum terminals so that fuel supplies can reach first responders.			SCEMD	Coordination and Convening	All Hazards			✓

3.3	Establish relationships and contracts with fuel providers prior to an event.			Utilities, SCEMD	Coordination and Convening	All Hazards			✓
3.4	Leverage federal funding to install backup generation at fuel terminals.			SCEMD, Terminal Operators	Grants and Direct Funding	All Hazards		✓	
3.5	Consider expanding the existing first responder fuel plan to include utilities, county EOCs, and the public.			SCEMD, ORS	Planning and Studies	All Hazards			✓
4. Communication Sector Resiliency and Response									
4.1	Encourage the training of electric crews to do no harm to fiber on shared overhead poles during restoration.			Utilities, Fiber Companies	Coordination and Convening	All Hazards		✓	✓
4.2	Explore installing ADSS fiber cables that are more flexible than strand and lash, which may snap electric poles during a storm.			Utilities, Fiber Companies	Grants and Direct Funding	Hurricane, High Winds	✓	✓	
4.3	Explore backup satellite internet services such as Starlink, Amazon Kuiper, Viasat, and Hughesnet.			Utilities, SCEMD, and DOT	Grants and Direct Funding	All Hazards			✓
4.4	Work with fiber companies to identify key nodes where internet restoration should be prioritized.			Utilities, SCEMD	Planning and Studies	All Hazards			✓
5. State and Public Coordination									
5.1	Develop a standardized, integrated database of utility distribution systems, utility facilities, critical facilities, county facilities, roads, streams/rivers, and other data deemed necessary.[134]			SCEMD, DOT, EOCs, Utilities	Planning and Studies	All Hazards			✓

5.2	Encourage County EOCs to establish communication channels with their local utilities prior to an event.			County	Coordination and Convening	All Hazards			✓
5.3	Increase coordination between gas stations and first responders to streamline fuel supplies and aid in evacuation efforts.			SCDPS	Coordination and Convening	Hurricane			✓
5.4	Continue to include utility providers in all planning and drills for mitigation efforts.[135]			SCEMD	Coordination and Convening	All Hazards	✓	✓	✓
5.5	Explore legislation, grants, and education for maintaining rights-of-way to reduce the amount of conflicts surrounding the removal of hazard trees and the planting of new vegetation.			Utilities, SCOR, SCEMD	Policy and Governance	Hurricane, High Winds	✓		
5.6	Increase educational efforts around the panic buying of fuel to ensure longer lasting fuel supplies.			Local Government	Coordination and Convening	Hurricane	✓		✓
5.7	Consider having Office of Resilience involvement earlier during a hazardous event through the issuing of proactive grants.			SCOR	Grants and Direct Funding	All Hazards			✓

5.8	Standardize and make available natural hazard datasets across state agencies.			SCOR	Planning and Studies	All Hazards	✓		
6. Grants and Funding									
6.1	Consider offering technical assistance for cooperatives, municipal utilities, NGOs, tribes, and others looking to apply for grants. Additionally, consider providing a consolidated list of potential grant opportunities.			SCOR, SCEMD	Coordination and Convening	All Hazards			✓
6.2	Explore forest service grants that may help electric cooperatives increase the frequency of routine trimming.			Utilities	Grants and Direct Funding	Strong Wind, Hurricane	✓		
6.3	Conduct trainings on FEMA processes and polices prior to a disaster to streamline funding documentation processes.			SCEMD, SCOR	Grants and Direct Funding	All Hazards			✓
6.4	Streamline documentation and align to FEMA standards to ease reimbursement holdups.			Utilities	Planning and Studies	All Hazards			✓
7. Relocation of Assets									
7.1	Consider stricter siting/building requirements for new energy facilities being constructed within the 100- and 500-year flood zone or located in an area that may become inaccessible during a 100- or 500-year flood event.[136]			SCOR, PSC, Local Government	Policy and Governance	Inland Flooding	✓		

7.2	Consider policy changes that encourage the relocation of damaged assets away from hazards.			PSC	Policy and Governance	Inland Flooding, Coastal Flooding, Storm Surge		✓	
8. Reduction of Flooding Impacts									
8.1	Evaluate the feasibility of flood mitigation measures in energy facilities with flood history or known risk.[137]			Utilities, SCEMD	Grants and Direct Funding	Inland Flooding, Coastal Flooding		✓	
8.2	Continue utility right-of-way permitting, considering utility vehicle access and flood zone-related issues in permitting decisions.[138]			Local Government	Regulation	Inland Flooding			✓

Appendix A: Energy Risk Assessment Methodology

As part of this study, the team evaluated seven Hurricane Helene-related hazards, including hurricane, coastal flooding, inland flooding, high winds, extreme heat, wildfire, and landslide. These hazards were then compared with energy infrastructure and the analysis was bolstered and informed with stakeholder conversations. The risk assessment is the aggregation of the following:

- **Exposure Score:** Assesses the potential frequency that a given hazard will affect a piece of infrastructure by integrating hazard geospatial information with infrastructure locational data.
- **Vulnerability Score:** Assesses the likelihood of an energy impact given the exposure to a specific hazard.
- **Consequence Score:** Assesses the impact of a disruption on a given piece of infrastructure.

Data Collection

This risk assessment utilized key resources to bolster the assessment, including GIS hazard and infrastructure layers, existing state and utility plans, state and local hazard mitigation plans, dockets, Department of Energy (DOE) situation reports, Midcontinent Independent System Operator (MISO) bus locational data for the Eastern Interconnect, state and local after-action reports, studies on infrastructure resilience, DOE Critical Energy Infrastructure reports, industry reports and case studies from similar past events, supplemental environmental data from the state, and other resources. The team conducted a literature review of these resources and aggregated the useful information from these reports for utilization in the risk assessment.

Stakeholder Engagement

The risk assessment engaged key stakeholders, through a collaborative meeting held on October 21st in Columbia, South Carolina and through individual follow-up conversations, to solicit information as it pertains to top risks in the state, the criticality of infrastructure, and mitigation solutions. The information gathered has been used to inform exposure, vulnerability, and consequence assessments.

Quantitative Risk Assessment Methodology

Seven hazards were identified as the most serious natural hazards related to Hurricane Helene regarding energy infrastructure within the state: hurricane magnitude winds, storm surge/coastal flooding, riverine flooding, high winds,

extreme heat, wildfire, and landslides. A quantitative assessment methodology was utilized for these hazards because there was high-quality locationally specific historic or projected data on the frequency of occurrence. Several of these hazards were analyzed across multiple climate scenarios, described in more detail within the Energy Risk Assessment subsection.

The quantitative risk assessment evaluated the prioritized threats and hazards against the following key energy infrastructure:

Table 22. Key infrastructure evaluated in the risk assessment

Electricity Infrastructure	Natural Gas Infrastructure	Liquid Fuel Infrastructure
Power Plants Electric Power Transmission Lines Substations	Natural Gas Pipelines Compressor Stations LNG Storage	Liquid Fuel Pipelines Petroleum Terminals Pumping Stations

This analysis focused exclusively on the bulk system energy assets. The scope of the analysis was delineated at the following critical junctures: where the gas system interfaces with the local distribution network, the 69-kV and higher electric transmission infrastructure, and the bulk liquid fuel system, excluding retail stations and minor on-site storage facilities.

Risk scores are generated for specific assets and threats. For example, a single energy asset will have distinct risk scores for various threats, such as winter weather, wind, and flooding. These risk scores are designed to be compared within the same sector, allowing petroleum assets to be compared with other petroleum assets, and similarly for natural gas and electricity. However, these scores cannot be compared across different sectors due to the focus on primary consequences. Estimating secondary consequences is difficult because of variations in end-use sectors that consume energy, regional differences, seasonal and hourly fluctuations in energy demand, data gaps in linking specific energy assets to specific end-use sectors, and the complexity of converting societal impacts into monetary costs.

The risk assessment is built on the following three components, leveraging a similar assessment methodology from CESER's Risk Assessment Essentials for State Energy Security Plans:[139]

- **Exposure Score** (Scale of 0 to 5): This factor estimates the annual probability, frequency, or severity of a specific disruptive event occurring at a specific location. This score is determined by overlaying hazard Geographic Information System (GIS) layers and energy infrastructure GIS layers.

- **Vulnerability Score** (Scale of 0 to 5): This factor represents the susceptibility of the energy asset or system to disruption by the given hazard and the most likely duration of the disruption.

- **Consequence Score** (Scale of 0 to 100): This factor estimates the importance of the asset to the energy supply and customers in the state and therefore the consequence to the state if the asset were to be offline due to a hazard.

For natural hazards, the risk score was calculated by multiplying the expected frequency of occurrence (scale of 0 to 5) by the vulnerability score (scale of 0 to 5) by the consequence score (scale of 0 to 100) and then dividing by 25 to normalize risk onto a scale of 0 to 100. The general function is expressed below:

Equation 2

$$Risk_{Asset} = \frac{Threat\ Exposure_{Asset\ Location} \times Vulnerability_{Asset\ Type} \times Consequence_{Asset}}{25}$$

Threats that are not natural hazards (e.g., pandemic, cyberattack, equipment malfunction) have not been assessed using this quantitative method. Instead, they are discussed qualitatively, informed by subject matter expertise, as shown in the Energy Risk Assessment subsection section Qualitative Risk Assessment.

Exposure Score

The exposure score represents the likelihood of a natural hazard occurring in the same location as an energy asset. GIS software was leveraged to estimate the exposure likelihood that energy infrastructure is expected to have from natural hazards by overlaying hazard maps based on historical occurrence data or probabilistic modeled data on energy infrastructure maps. The specific layers utilized to achieve this are described in **Error! Reference source not found.**

The GIS layers used in the assessment include GIS open-source data from government agencies, as well as customized atmospheric hazards based on detailed climate models under different future climate emissions scenarios.

The Intergovernmental Panel on Climate Change (IPCC) developed Shared Socioeconomic Pathways (SSPs) to represent different possible climate futures based on varying greenhouse gas emission trajectories and socioeconomic policies. This study developed climate projections under two warming scenarios: SSP2-4.5 ("moderate emissions") and SSP3-7.0 ("high emissions"), where SSP2-4.5 represents significant greenhouse gas mitigation before mid-century and SSP3-7.0 represents a future with less greenhouse gas abatement. The two future emissions scenarios represent a bracket of potential climate futures utilized for this analysis.

Where applicable, the layers were limited to show only the state of South Carolina. Visualizations of these hazard exposure layers mapped against energy assets are shown below.

Figure 48. Future risk of Category 1 hurricane wind gusts to electricity infrastructure

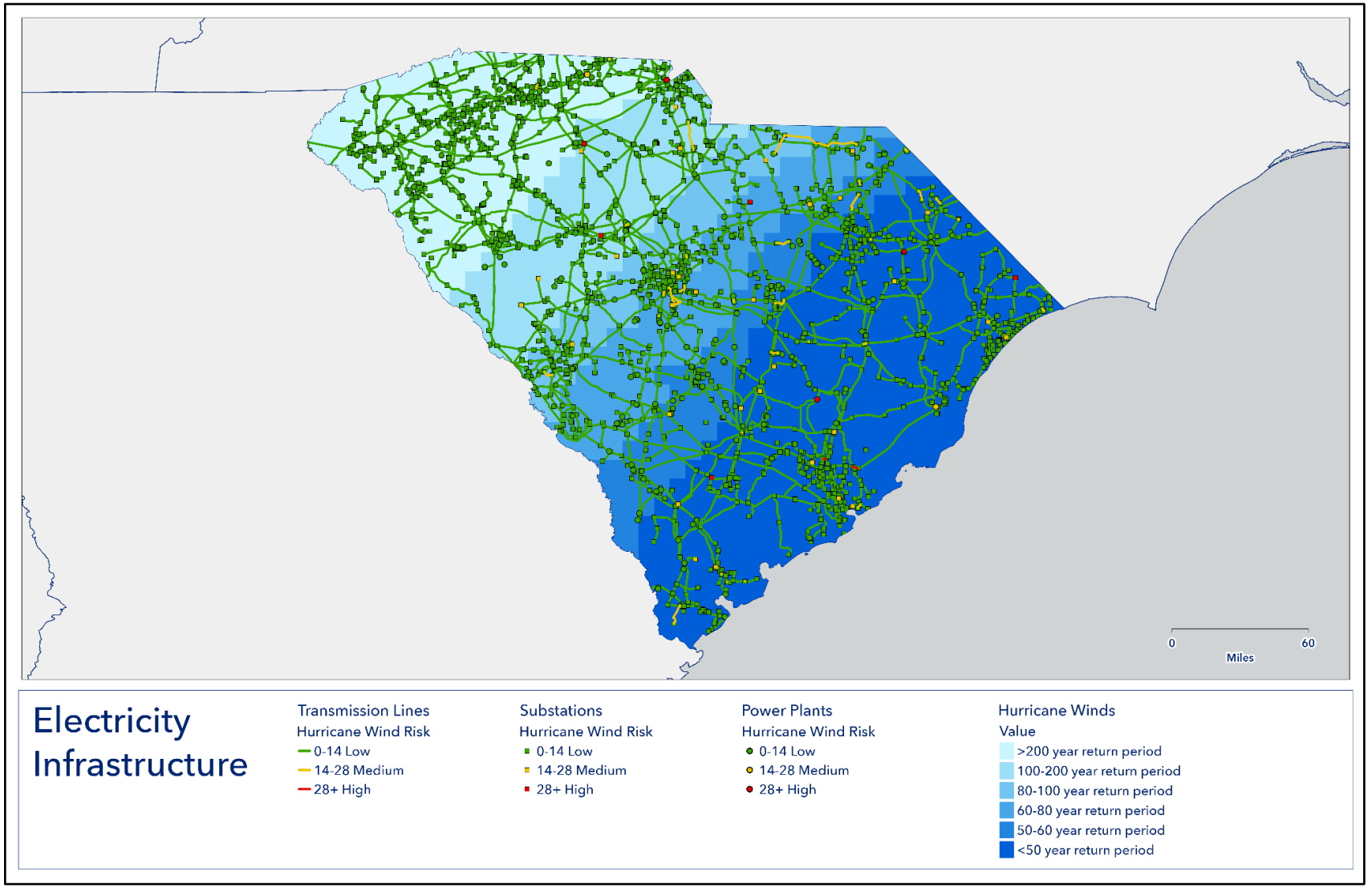


Figure 49. Risk of strong wind to electricity infrastructure

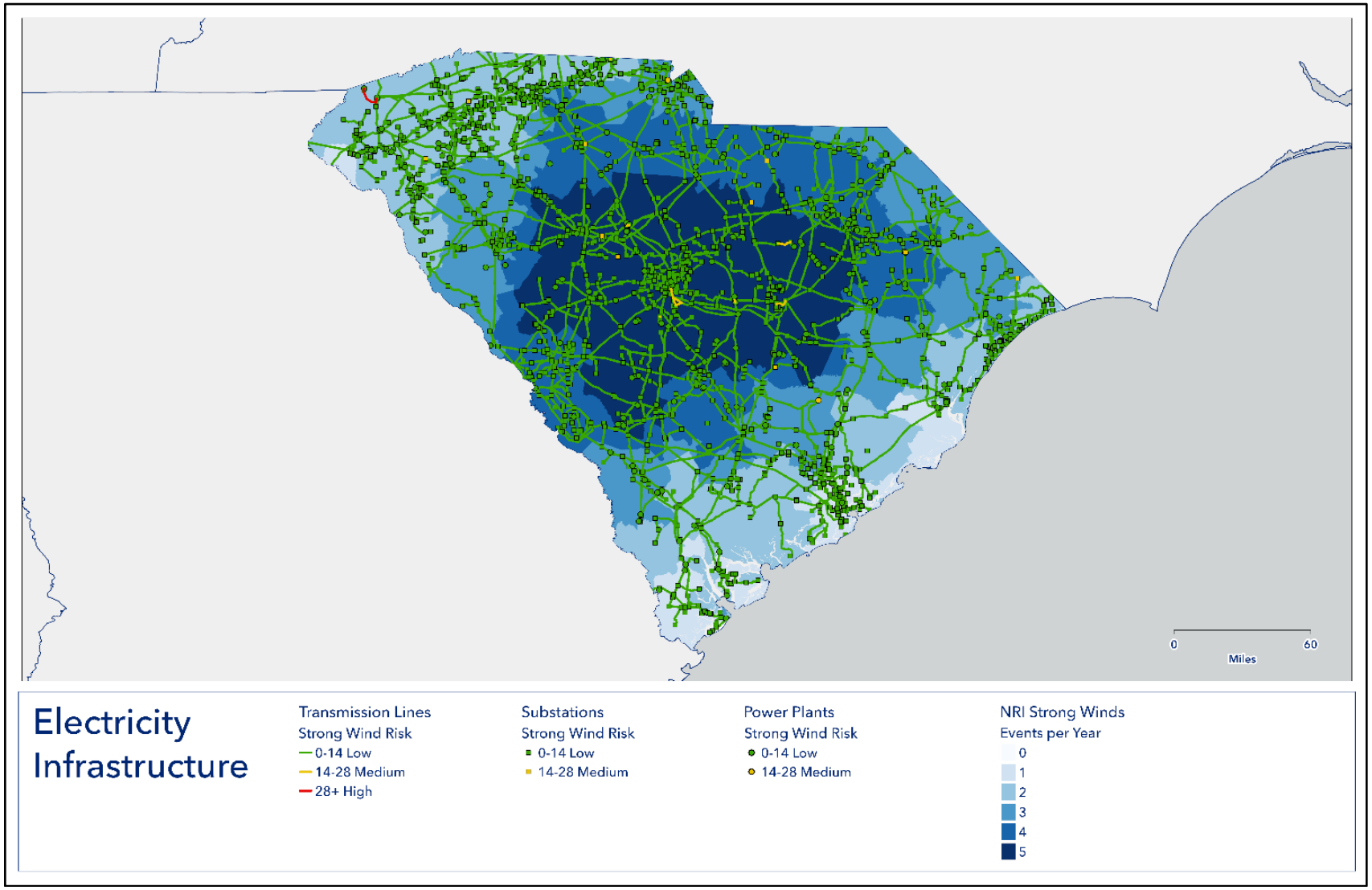


Figure 50. Risk of extreme heat to electricity infrastructure

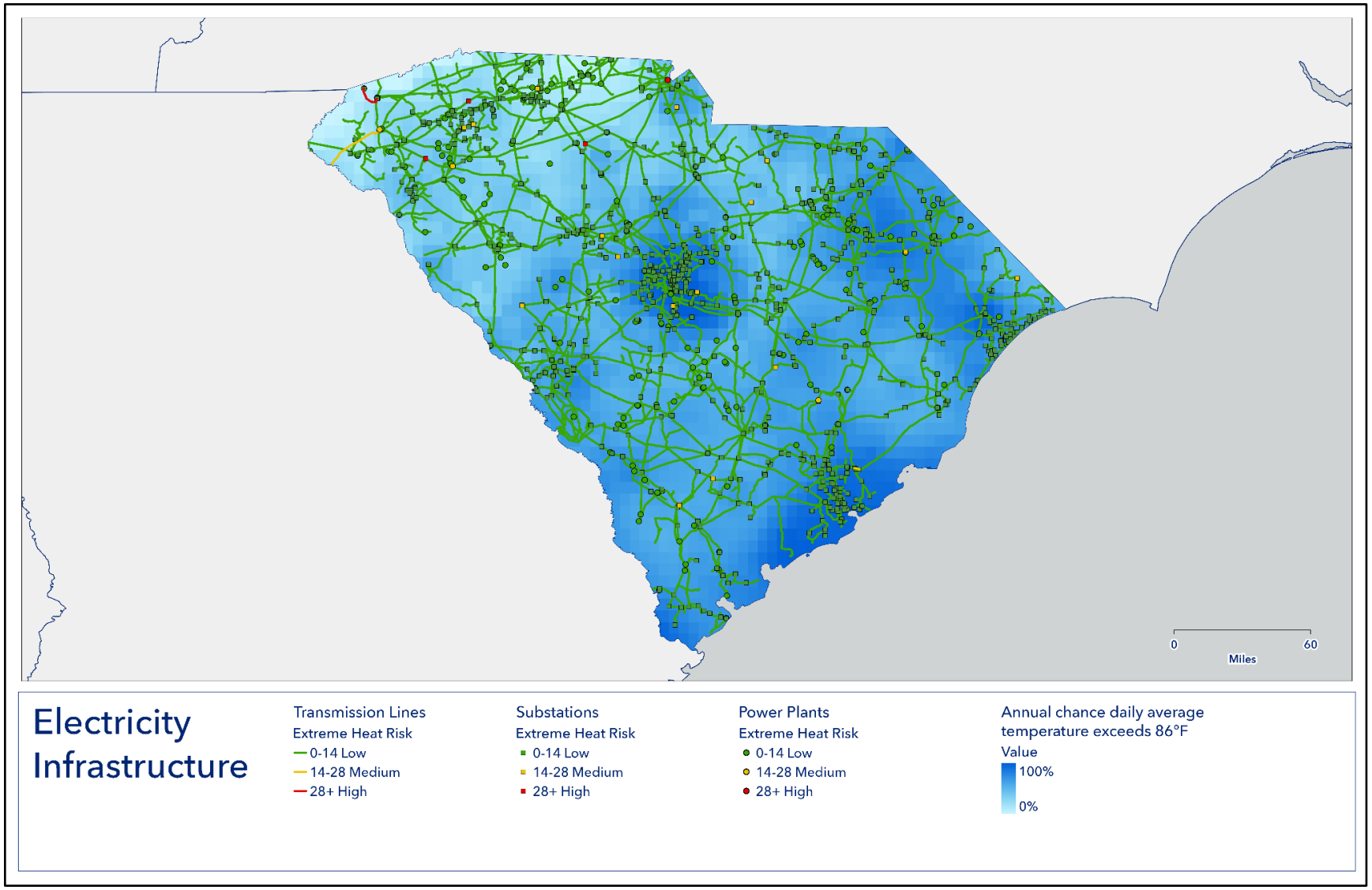


Figure 51. Future risk of Category 1 hurricane wind gusts to natural gas infrastructure

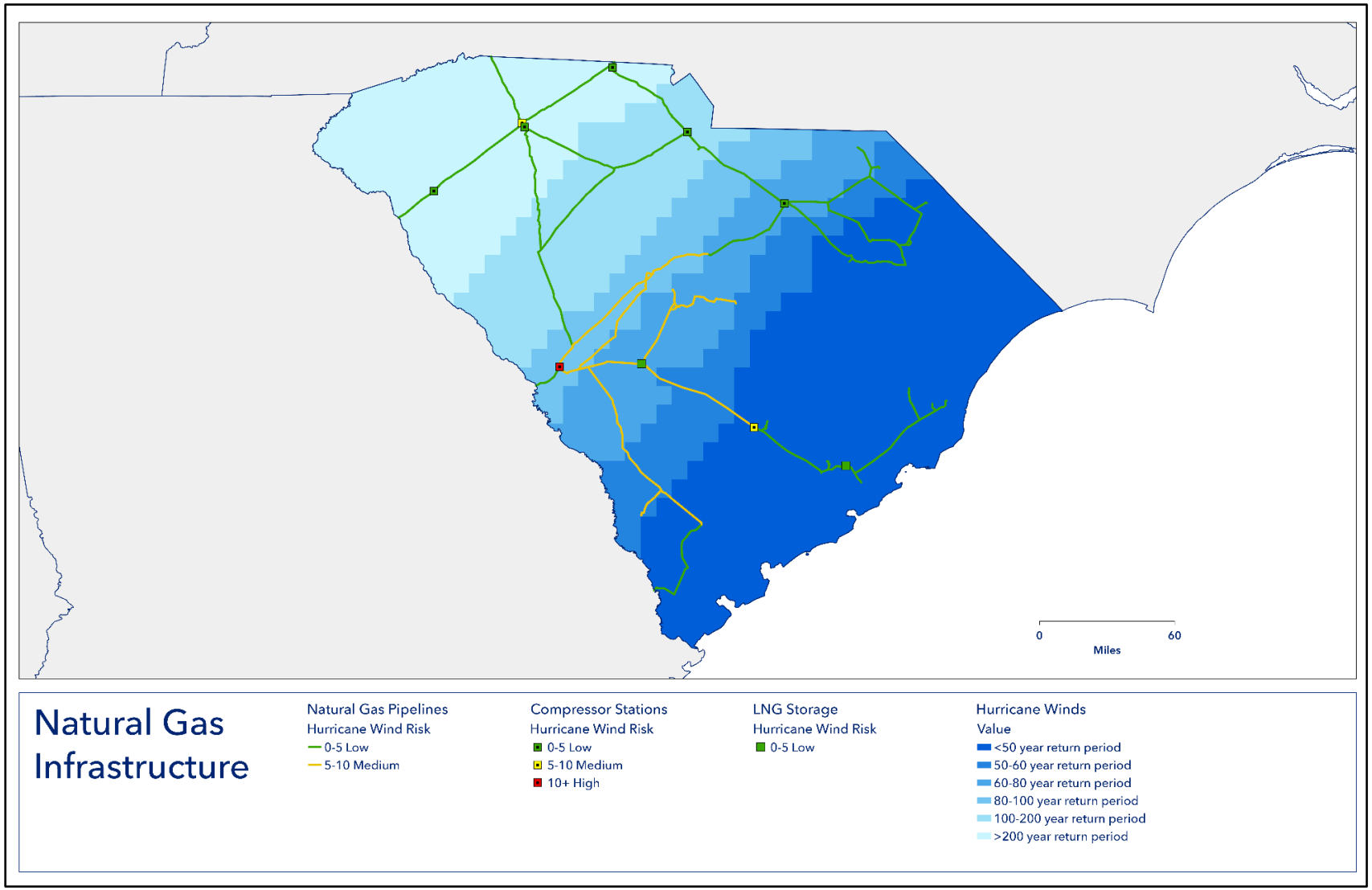


Figure 52. Risk of inland flooding to natural gas infrastructure

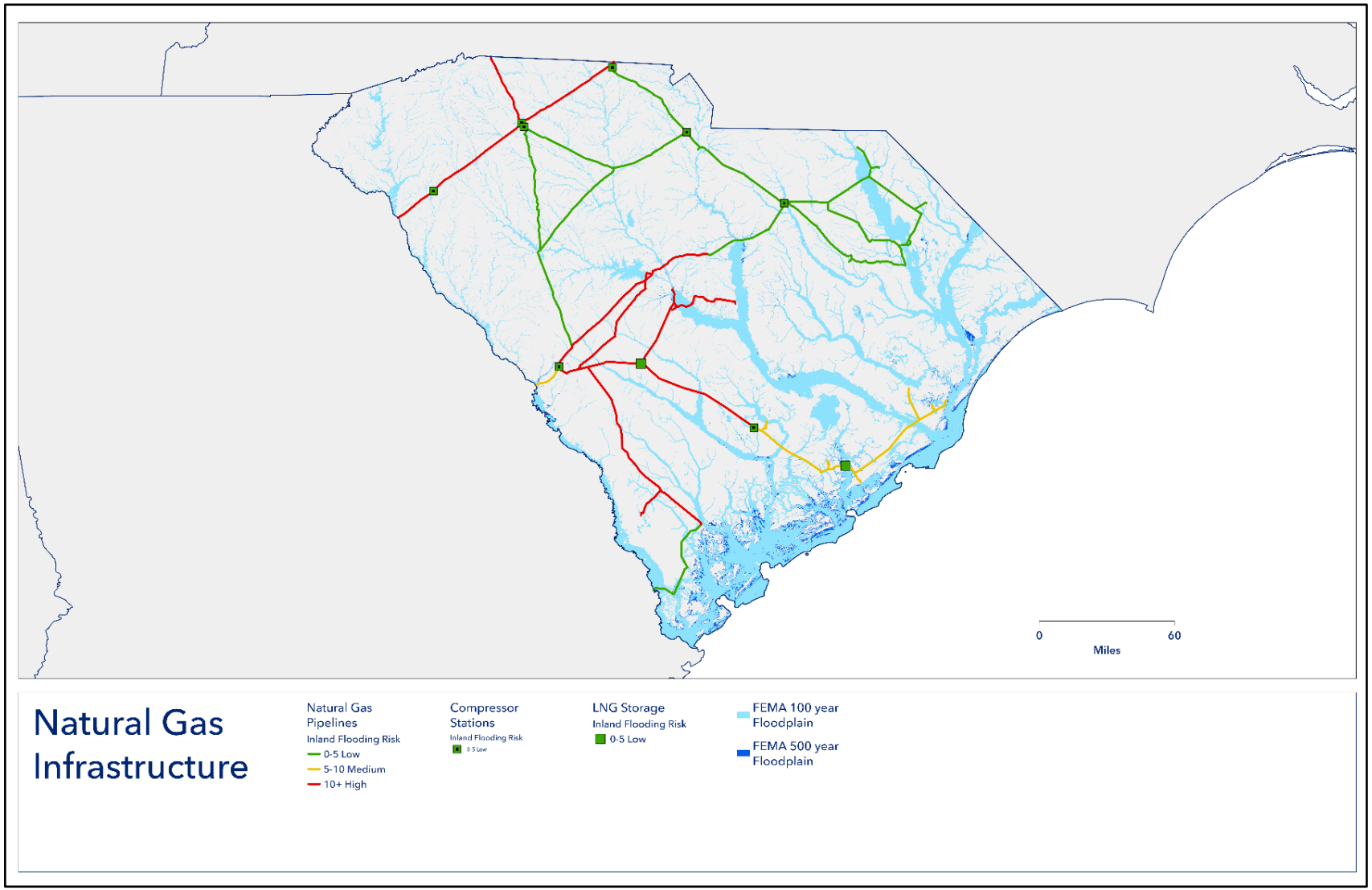


Figure 53. Future risk of Category 1 hurricane wind gusts to petroleum infrastructure

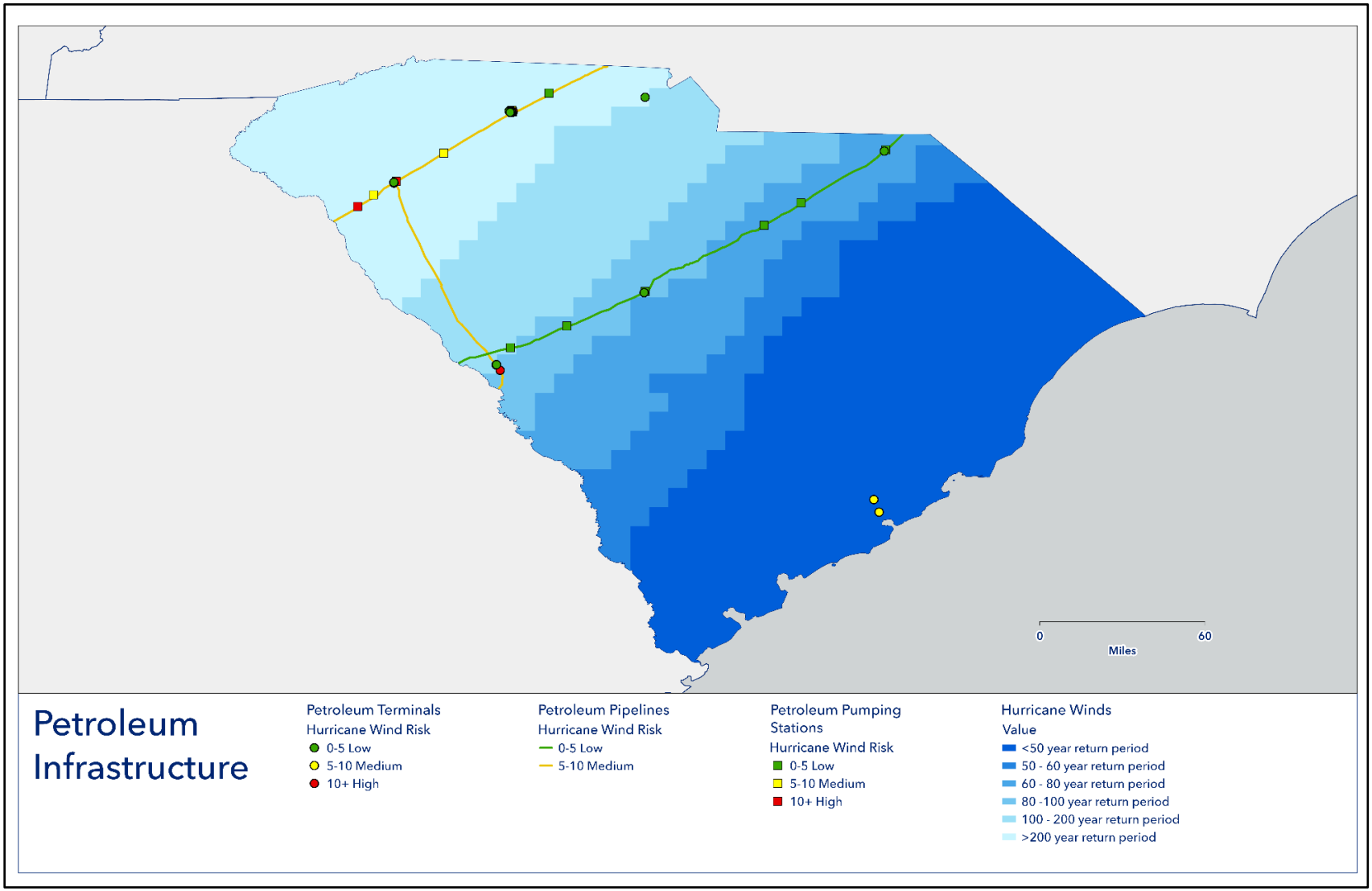


Figure 54. Risk of inland flooding to petroleum infrastructure

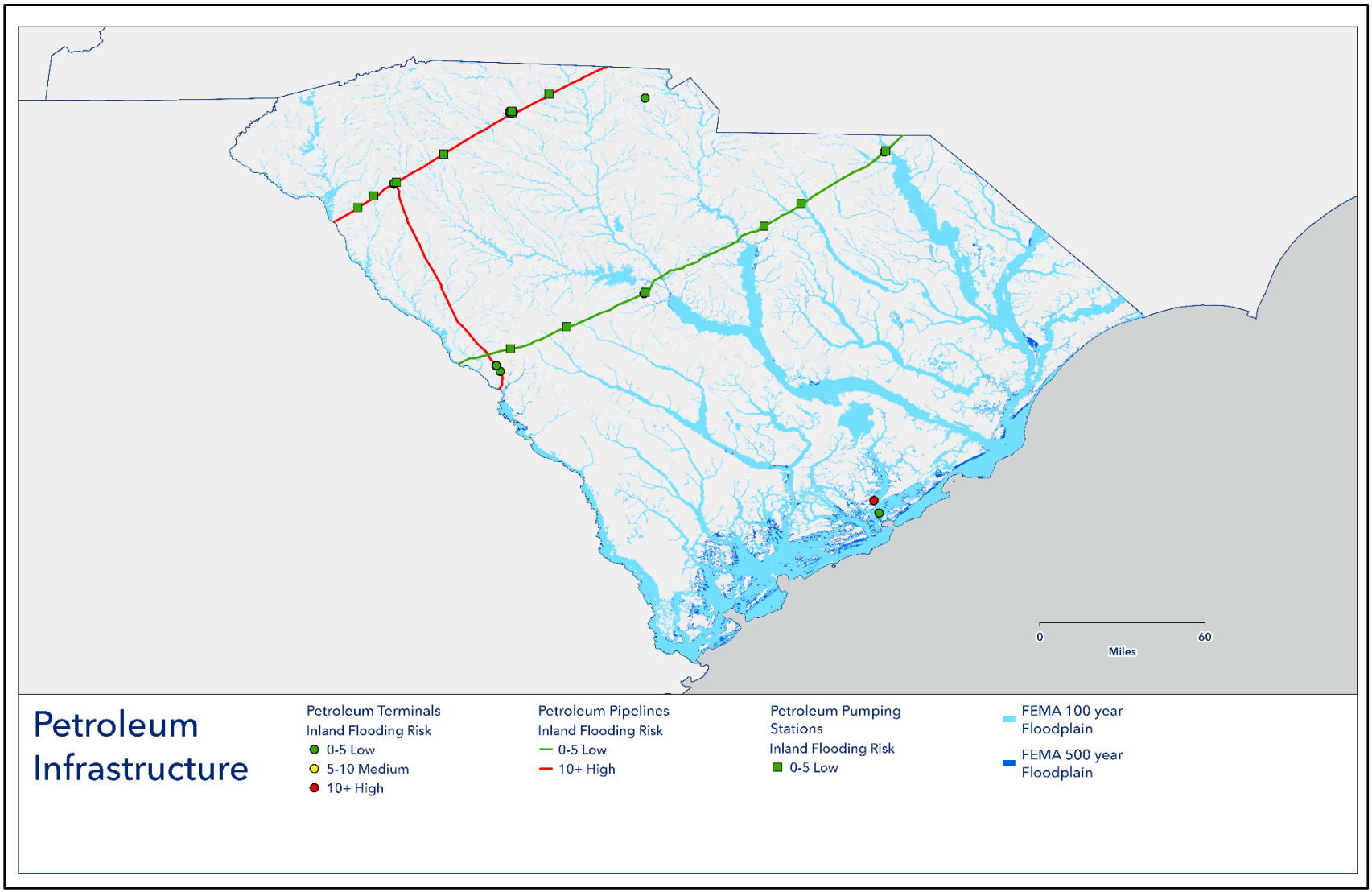
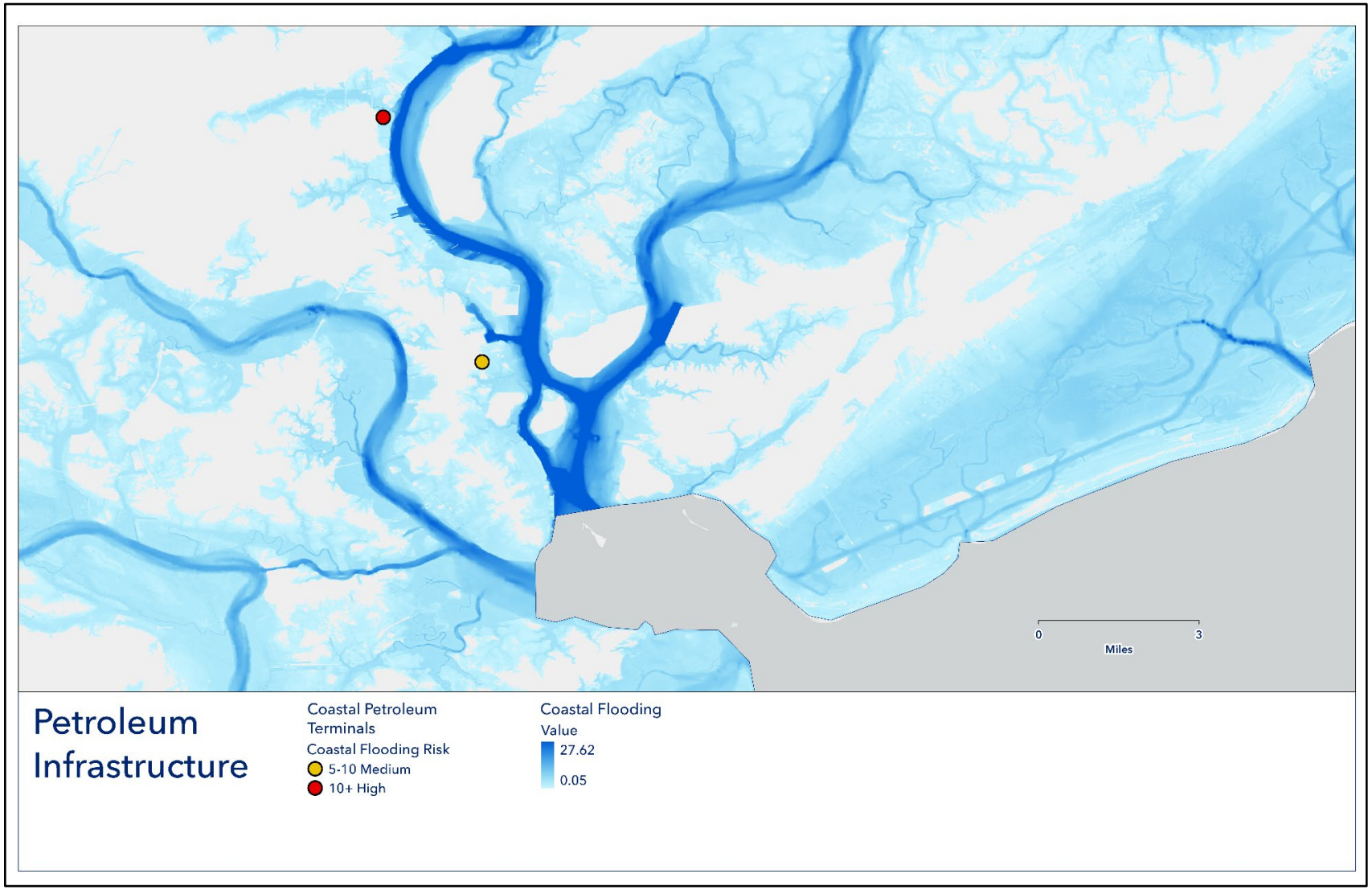


Figure 55. Risk of coastal flooding based on 2050 projections to petroleum infrastructure in the Charleston area



Note: Flooding inundation depth under 100-year return interval storm surge and SSP3-7.0 scenario

A hazard exposure score was assigned to each energy asset by intersecting infrastructure asset locations with spatially distributed hazard data for each of the seven natural hazards considered in this analysis. Scores were assigned based on bucketing or normalized from 0 to 5 as shown in Table 23.

Where an exposure score methodology has more than one metric (e.g. extreme heat), a weighted score approach was used. These weighted scores ranged from 50/50 to 75/25. Some infrastructure assets are single points, such as fuel terminals or electricity substations, while others, such as pipelines, are considered lines. Line assets cover large areas and intersect multiple categories/values for each hazard, so they were assigned the maximum hazard value it intersects.

Climate trend projections were developed using Global Climate Models (GCMs), which simulate Earth's climate and physical processes. GCMs factor in how various levels of greenhouse gases, solar radiation, Earth system sensitivity, and other factors may affect future climate. This study relied on Coupled Model Intercomparison Phase 6 (CMIP6) projection datasets, the most recent climate datasets, and models developed as part of an ongoing international collaboration for the IPCC Sixth Assessment Report.[140] The datasets were evaluated to assess different climate hazards using ICF's in-house ClimateSight tool. Table 23 summarizes the datasets used to assess different climate hazards.

Table 23. Climate projection information developed for the study

Climate Hazard	Data Analyzed	Time Horizon and Emissions Scenario	Spatial Resolution	Scoring
Wildfire	Historical wildfire burn probability data were obtained from the U.S. Department of Agriculture Forest Service's *Wildfire Risk to Communities* national wildfire risk dataset.[141] The burn probability layer represents the modeled annual chance of wildfire ignition and spread, based on large-scale simulations that integrate historical weather records, vegetation and fuel characteristics, observed ignition patterns, and spatially varying suppression response.	Historical	30 m	Historical burn probability normalized.
Inland Flooding	The FEMA National Flood Hazard Layer has identified and mapped areas of flood risk on Flood Insurance Rate Maps, and the zones are called Special Flood Hazard Areas. The 100-year floodplain is considered a high-risk area and is denoted as Zone A. The 500-year floodplain is shown by the notation Zone C or Zone X.	Historical	Varies	100-year flood zone is 5, 500-year flood zone is 1, and outside of either zone is 0.
Coastal Flooding	United States Geological Survey (USGS) projections for combined sea level rise and coastal storm inundation were produced specifically for North Carolina and South Carolina.[142] Sea level rise increments were chosen to match the closest NASA interagency report sea level rise increment for SSP2-4.5 and SSP3-7.0 at the 2050 time horizon. The sea level rise increments are used to determine the appropriate USGS projection depth layers.	Historical and 2050, SSP2-4.5 and SSP3-7.0	10 m	Coastal flooding at 100-year frequency or greater is 5.
Hurricane Wind Speeds	Synthetic Tropical cyclOne geneRation Model (STORM).[143] STORM provides spatially explicit estimates of tropical cyclone wind speed return periods across the United States, based on stochastic simulations of historical and synthetic hurricane tracks.	Historical and 2050, SSP5-8.5	10 km	Return period of Category 1 (74 mph) sustained wind speeds under future conditions under 100 years is 5, normalized over 100 years.
Wind Gusts	Automated Surface Observing System (ASOS) weather station data were summarized to obtain annual maximum wind gusts.[144] Hourly wind gust data were taken from ASOS weather stations across South Carolina. Nearest neighbor polygons were created between weather stations to create spatially complete data across the state.	Historical	Station Data	Event counts for winds greater than 58 mph were normalized.

Landslides	The USGS models were created using the U.S. Landslide Inventory and digital elevation models.[145] Ranges from 0 (no susceptibility) to 81 (extreme susceptibility).	Historical	90 m	Landslide Susceptibility Index was normalized.
Extreme Heat	Extreme heat variables were evaluated using an ensemble of 22 Localized Constructed Analogues version 2 (LOCA2)[146] statistically downscaled CMIP6 GCMs common between SSP2-4.5 and SSP3-7.0.	Historical and 2050, SSP2-4.5 and SSP3-7.0	6 km	Averaged the future annual chance of average temperature above 86°F with the future annual chance of maximum temperatures above 104°F and normalized to 5.

Projections for temperature, precipitation, and wildfire weather were developed for the baseline and 2050 (mid-century) time horizons. Projections for these hazards used averages of the 30-year period centered on the year of interest to minimize interannual climate variability.

- Baseline – Historical (1985–2014)†
- 2050 (2035–2064)

Sea Level Rise

The team used the Interagency Sea Level Rise Scenario Tool to determine sea level rise (SLR) increments at the Charleston tide gauge across all time periods of interest.[147] The data represented in the tool come from the Sea Level Rise and Coastal Flood Hazard Scenarios and Tools Interagency Task Force 2022 technical report, entitled *Global and Regional Sea Level Rise Scenarios for the United States: Updated Mean Projections and Extreme Water Level Probabilities Along U.S. Coastlines*. The Interagency Sea Level Rise Scenario Tool presents median projections for local sea level rise scenarios from 2020 to 2150, relative to a 2000 baseline, across six Global Mean Sea Level scenarios. The team used the intermediate-low and intermediate scenarios at the Charleston tide gauges to represent the range of plausible sea level rise scenarios in the service area, which align with the middle of SSP2-4.5 and the high end of SSP3-7.0, respectively.[148]

The team downloaded corresponding floodplains from the National Oceanic and Atmospheric Administration (NOAA) Sea Level Rise Data Download, which offers data shown in the interactive NOAA Sea Level Rise Viewer. The data convey the extent and depth of potential flooding with present-day topography and infrastructure in mind; notably, they do not account for erosion, subsidence, or future construction. Water levels indicated in the data are relative to Mean Higher High Water (meaning that they exclude wind-driven tides). The data are available for download in 0.5-ft increments; the SLR increments determined using the Interagency SLR Scenario Tool were rounded to the closest half foot.

The SLR increments and their corresponding NOAA SLR layers are reflected in Table 24.

Table 24. Time periods and associated SLR increments for both the intermediate-low and intermediate scenarios taken at the Charleston tide gauge

† For projections developed using the LOCA2 dataset (temperature and precipitation), the historical baseline was developed using the average of the 30 years of 1985–2014 in the Livneh reanalysis dataset, which is the most recent timeframe available during the historical period of the LOCA2 CMIP6 projections. For NEX-GDDP (wind and wildfire weather), the historical baseline was also developed using the 30 years of 1985–2014 to align with the recent timeframe available for the Princeton historical reanalysis dataset.

	Interagency SLR Projections as the Mean of Bar Harbor and Eastport Tide Gauge (meter)		Corresponding Coastal Storm Monitoring System Layer (meter)	
Year	Intermediate-Low	Intermediate	Intermediate-Low	Intermediate
2000	0	0	0	0
2050	0.36	0.4	0.25	0.5

Vulnerability Score

A vulnerability analysis designates the sensitivity of each energy infrastructure category type in South Carolina to each hazard—the degree to which it may be affected—based on its specific characteristics. For example, transmission lines, especially wood poles, may be exposed and sensitive to strong winds during storms and therefore be damaged or unable to operate at normal performance; however, underground assets, such as pipelines, are not likely to be affected by high winds. The sensitivity for each critical energy infrastructure type was informed by information gathered from stakeholder engagement, available literature, and subject matter expertise. When assessing vulnerability, this study considered dependencies and interdependencies. For example, a buried liquid fuel pipeline may not be directly exposed to hurricane winds; however, the pipeline's operations may be affected if pump stations connected to the system are out-of-service due to power outages caused by the hurricane-force winds. Table 25 evaluates electricity, liquid fuel, and natural gas infrastructure categories against the seven hazards evaluated as part of this risk assessment.

Table 25. Vulnerability scoring table

	Hurricane Wind	Coastal Flooding	Inland Flooding	Strong Wind	Extreme Heat	Landslide	Wildfire
Substations	**3**	**2**	**2**	**2**	**3**	**4**	**3**
	Substations are vulnerable to direct infrastructure and flooding damage associated with hurricanes. Flying debris may also cause additional damage.	Substations contain electrical equipment that can be damaged by water. Flooding may affect the transformer control cabinet, radiators, fans, pumps, external wiring connections, and other accessories.	Substations contain electrical equipment that can be damaged by water. Although transformer/regulator tanks are hermetically sealed, making them resistant to flooding may affect the transformer control cabinet,	Substation assets typically have very low sensitivity to high winds or are housed within facilities that limit exposure. In rare cases, wind-driven debris has caused damage to unprotected assets (e.g., the bus system).	Transformers are the most vulnerable units to heat waves within a substation. High temperatures reduce transformer capacity and, combined with increased peak load, can result in a marginally higher risk of failure and	Landslides can damage and even destroy substation equipment and structures.	Electric substations are built with setbacks from vegetative areas, which reduce the risk from wildfires. Substations also have fire suppression systems for some flammable components, such as transformers.

	Hurricane Wind	Coastal Flooding	Inland Flooding	Strong Wind	Extreme Heat	Landslide	Wildfire
		Salt water intrusion can cause corrosive impacts on equipment. Flood waters can also carry potentially damaging debris.	radiators, fans, pumps, external wiring connections, and the other accessories. Flood waters can also carry potentially damaging debris.	Substations are also often located within fences or walls, protecting assets from flying debris.	reduction in transformer life.		Smoke from nearby wildfires may collect on insulators and cause flashovers, which may result in equipment being taken out of service.
Transmission Lines	**5**	**1**	**1**	**4**	**3**	**5**	**3**
	Hurricanes can cause significant damage to overhead transmission systems. High winds can cause direct damage to lines, as well as cause trees to fall onto lines, resulting in damage.	Overhead assets typically have low sensitivity to coastal flooding unless sea water compromises the structural integrity of a tower; structural impacts could be greater from moving water. Transmission lines in marshy swamp areas are more	Overhead assets typically have low sensitivity to flooding unless floodwaters compromise the structural integrity of a tower; structural impacts could be greater from moving water. Transmission lines in marshy swamp areas are more vulnerable to	While transmission towers and conductors are designed to withstand high winds, extremely high winds can result in tower failure. High winds can also cause surrounding vegetation to damage transmission lines.	Extreme heat, coupled with high loads, can increase sag and may increase the risk of line flashover to vegetation.	Landslides can damage transmission infrastructure in their path.	Electric transmission typically runs in close proximity to forested areas and is vulnerable to significant damage from wildfires.

	Hurricane Wind	Coastal Flooding	Inland Flooding	Strong Wind	Extreme Heat	Landslide	Wildfire
		vulnerable to coastal flooding threats as they are already in water-inundated, low-lying areas.	inland flooding threats as they are already in water-inundated, low-lying areas.				
Thermal Power Plants	**3**	**2**	**2**	**3**	**2**	**2**	**3**
	Plants located on bodies of water may experience direct damage due to flooding. They may also experience damage due to high winds. Plants may be taken offline due to loss of interconnection or offsite power due to wind damage to transmission or distribution infrastructure.	Coastal flooding can result in water entry into electrical equipment, with the potential to cause electrical faults or corrosion, resulting in significant damage. Storm surge may also physically displace equipment, causing damage.	Flooding can result in water entry into electrical equipment, with the potential to cause electrical faults or corrosion, resulting in significant damage.	Power plant structures are generally designed to withstand high winds and are unlikely to sustain significant damage. Plants may be taken offline due to loss of interconnection or offsite power due to wind damage to transmission or distribution infrastructure.	Prolonged exposure to higher ambient temperatures can reduce efficiencies in thermoelectric plants. Hotter cooling water temperatures remove less heat from the plants' steam cycle, decreasing the system's cooling efficiency. As a result, plant generation, and thus capacity, may be reduced. Higher	Due to the significant mass and volume of material, landslides have the potential to damage and even destroy power plant equipment and structures. Debris can damage turbines and underlying ground failure can damage overall structural integrity.	Generation plants typically are set back from forests and vegetation, reducing the likelihood that wildfire can directly damage critical infrastructure. However, generation output may be taken offline by wildfire impacts to the local transmission grid.

	Hurricane Wind	Coastal Flooding	Inland Flooding	Strong Wind	Extreme Heat	Landslide	Wildfire
					air temperatures can also increase the temperature of discharge from a plant, which is regulated for the safety of the surrounding ecology and may require capacity reductions.		
Nuclear Plants	**3**	**2**	**2**	**3**	**2**	**2**	**4**
	Plants located on bodies of water may experience direct damage due to flooding. They may also experience damage due to high winds. Plants may be taken offline due to loss of interconnection or offsite power due to wind	Coastal flooding can result in water entry into electrical equipment, with the potential to cause electrical faults or corrosion, resulting in significant damage. Storm surge may also physically displace equipment,	Flooding can result in water entry into electrical equipment, with the potential to cause electrical faults or corrosion, resulting in significant damage.	Power plant structures are generally designed to withstand high winds and are unlikely to sustain significant damage. Plants may be taken offline due to loss of interconnection or offsite power due to wind	Prolonged exposure to higher ambient temperatures can reduce efficiencies in thermoelectric plants. Hotter cooling water temperatures remove less heat from the plants' steam cycle, decreasing the system's cooling	Due to the significant mass and volume of material, landslides have the potential to damage and even destroy power plant equipment and structures in areas prone to ground failure. Debris can damage turbines and	Generation plants typically are set back from forests and vegetation, reducing the likelihood that wildfire can directly damage critical infrastructure. However, generation output may be taken offline by wildfire impacts

	Hurricane Wind	Coastal Flooding	Inland Flooding	Strong Wind	Extreme Heat	Landslide	Wildfire
	damage to transmission or distribution infrastructure.	causing damage.		damage to transmission or distribution infrastructure.	efficiency. As a result, plant generation, and thus capacity, may be reduced. Higher air temperatures can also increase the temperature of discharge from a plant, which is regulated for the safety of the surrounding ecology and may require capacity reductions.	underlying ground failure can damage overall structural integrity.	to the local transmission grid.
Solar Generation	**2**	**4**	**4**	**2**	**1**	**4**	**5**
	Extremely high winds from hurricanes can cause damage to solar panels and, in a worst case, can cause them to disassemble if fasteners loosen and fall	Panels are generally positioned on elevated bases that raise them several feet above ground, so the panels themselves may not be sensitive to shallow	Panels are generally positioned on elevated bases that raise them several feet above ground, so the panels themselves may not be sensitive to shallow	Most commercial photovoltaic (PV) systems are designed to withstand winds of up to 140 mph. Extremely high winds can cause damage to solar panels	PV panels are typically rated for an ambient temperature of up to +85°C. However, ambient temperatures above standard test conditions, typically 25°C,	Due to the significant mass and volume of material, landslides have the potential to damage and even destroy solar generation equipment. Debris can	Solar panels are installed at grade and are vulnerable to significant damage from wildfire. Analysis by the insurance industry has shown that 50% of solar farm

	Hurricane Wind	Coastal Flooding	Inland Flooding	Strong Wind	Extreme Heat	Landslide	Wildfire
	out. Additionally, debris can strike solar panels, causing damage.	flooding. However, solar arrays may experience direct damage to electrical equipment near ground level or from salt water erosion.	flooding. However, solar arrays may experience direct damage to electrical equipment near ground level from floodwaters.	and, in a worst case, can cause them to disassemble if fasteners loosen and fall out. Additionally, debris can strike solar panels, causing damage.	result in reduced output. Output reductions are characterized by the panel temperature coefficient, which for typical panels may be around -0.35% per degree C.	damage panels and underlying ground failure can damage overall structural integrity.	damage claims were associated with wildfire.
Hydroelectric Plants	**2**	**5**	**5**	**3**	**2**	**2**	**4**
	Plants may experience direct damage due to high winds. Plants may be taken offline due to loss of interconnection or offsite power due to wind damage to transmission or distribution infrastructure.	Sea level rise can cause plant walls to be breached and increased flows can cause disruptions to plant activity. Sea level rise can result in water entry into electrical equipment, with the potential to cause electrical faults or corrosion, resulting in significant	Flooding can cause plant walls to be breached and increased flows can cause disruptions to plant activity. Flooding can result in water entry into electrical equipment, with the potential to cause electrical faults or corrosion, resulting in	Plant structures are generally designed to withstand high winds and are unlikely to sustain significant damage. Plants may be taken offline due to loss of interconnection or offsite power due to wind damage to transmission or distribution infrastructure.	Higher air temperatures can result in higher water temperatures and rates of evaporation, causing water sources contained in wide, flat reservoirs to evaporate faster. Snowmelt occurs earlier in the year and leaves less water available	Due to the significant mass and volume of material, landslides have the potential to damage and even destroy power plant equipment and structures. Being built onto embankments, hydroelectric plants are especially susceptible to damage from debris, and	The generation equipment in hydroelectric dams is not in proximity to forests and vegetation, reducing the likelihood that wildfire can directly damage critical infrastructure. However, generation output may be taken offline by wildfire impacts to the local

	Hurricane Wind	Coastal Flooding	Inland Flooding	Strong Wind	Extreme Heat	Landslide	Wildfire
		damage. Storm surge may also physically displace equipment, causing damage.	significant damage.		for power generation during the summer.	underlying ground failure can damage the overall structural integrity of both dams and infrastructure on land.	transmission grid.
Wind Turbines	**2**	**4**	**4**	**2**	**1**	**4**	**5**
	While turbines are generally built to withstand hurricanes, turbines typically "cut out" in winds greater than 55 mph but can sustain critical damage at the extreme wind speeds associated with Category 4 or 5 storms. Offshore turbines are particularly vulnerable to hurricane	Wind turbines are typically designed to withstand high loading and thus have low sensitivity to damage from water movement. Long-term exposure to salt water at the turbine base may cause corrosion over time.	Wind turbines are typically designed to withstand high loading and thus have low sensitivity to damage from floodwater movement. Repeated flooding of the turbine base may cause corrosion over time.	Wind turbines are susceptible to damage from the winds associated with extreme storms. Turbines typically "cut out" in winds greater than 55 mph but can sustain critical damage at the extreme wind speeds associated with Category 4 or 5 storms.	High pressure systems resulting in heat waves suppress wind speeds. This reduces wind energy generation. Also, electrical components and machinery within a turbine are at risk of damage during extreme heat events. International Electrotechnical Commission (IEC) 61400, which sets design	Due to the significant mass and volume of material, landslides have the potential to damage and even destroy power plant equipment and structures. Underlying ground failure can damage overall structural integrity.	Wind turbines are typically set back from forests and vegetation, reducing the likelihood that wildfire can directly damage critical infrastructure. Generation output may, however, be taken offline by wildfire impacts on the local transmission grid.

	Hurricane Wind	Coastal Flooding	Inland Flooding	Strong Wind	Extreme Heat	Landslide	Wildfire
	events due to the high wind speeds.				requirements for wind turbines, specifies a normal ambient temperature of up to 40°C and an extreme ambient temperature of up to 50°C.		
Product Terminals	**1**	**5**	**5**	**3**	**2**	**3**	**3**
	Storage tanks can be subject to collapse and leakage and exterior damage under the high winds, heavy precipitation, and flooding associated with hurricanes. High wind speeds may damage truck racks, and debris from high winds could cause	Coastal flooding can result in water entry into electrical components, which may cause electrical faults and/or displace equipment. External power loss can halt operations. Sea level rise typically restricts truck access and loading. Storage tanks can be subject	Flooding can result in water entry into electrical components, which may cause electrical faults and/or displace equipment. External power loss can halt operations. Flooding typically restricts truck access and loading.	High wind speeds may damage tank exteriors and truck racks, and debris from high winds could cause damage to unprotected equipment, in particular instrumentation. External power loss can halt operations.	Terminals are unlikely to be affected by a heat wave.	Due to the significant mass and volume of material, landslides have the potential to damage terminal structures. Underlying ground failure can damage overall structural integrity.	Petroleum terminals generally contain large amounts of flammable products and sensitive monitoring equipment. This additional fuel, when ignited, could contribute to worsening the wildfire and causing additional damage.

	Hurricane Wind	Coastal Flooding	Inland Flooding	Strong Wind	Extreme Heat	Landslide	Wildfire
	damage to unprotected equipment, in particular instrumentation. External power loss is very likely and can halt operations. Debris from high winds could cause damage to port facilities.	to collapse and leakage with storm surge.					
Product Pipelines	**1**	**2**	**3**	**1**	**1**	**2**	**2**
	Most petroleum pipelines are located underground and are protected from high winds. Power losses from downed transmission lines may affect pipeline operations.	Petroleum pipelines are typically designed to be resilient to flooding or water inundation and thus have low sensitivity to flood-related impacts.	Petroleum pipelines are typically designed to be resilient to flooding or water inundation and thus have low sensitivity to flood-related impacts.	Most petroleum pipelines are located underground and are protected from high winds. In rare occasions, pumping stations can be damaged by debris from high winds.	Because most pipelines are located underground, they are generally protected from extreme heat events. In rare cases, extreme temperature increases may cause metal to warp, leading to pipeline damage.	Being buried, pipelines are protected from the risk of puncture from high-velocity rock and earth. Underlying ground failure could expose the pipeline to other risks.	Pipelines are typically located underground and have vegetation cleared above the pipeline. Wildfire can damage any aboveground piping or cause explosions if there are any leaks along the pipeline.

	Hurricane Wind	Coastal Flooding	Inland Flooding	Strong Wind	Extreme Heat	Landslide	Wildfire
Pumping Stations	**1**	**4**	**5**	**2**	**2**	**3**	**4**
	Hurricane winds and flying debris may damage instrumentation and other unprotected equipment. Most pumping stations are gas-powered, making them resilient to power outages, although electric-powered compressors may be affected.	Flooding may result in water entry into electrical components, which may cause electrical faults and/or displace equipment. Salt water may cause corrosion.	Flooding may result in water entry into electrical components, which may cause electrical faults and/or displace equipment.	Strong winds and flying debris may damage instrumentation and other unprotected equipment. Most pumping stations are gas-powered, making them resilient to power outages, although electric-powered compressors may be affected.	Infrastructure is designed to withstand high temperatures.	Pumping stations are located above ground and may be at risk of disruption due to the mass and volume of moving earth. Underlying ground failure can cause structural damage.	Pipeline compressor stations are located above ground and are key to the movement of product. During wildfires, they are often shut down to prevent damage or loss of product.

	Hurricane Wind	Coastal Flooding	Inland Flooding	Strong Wind	Extreme Heat	Landslide	Wildfire
Gas Pipelines	1	2	2	1	1	2	2
	Pipelines located under waterways can be unearthed during hurricanes, leading to pipe damage.	Coastal flooding can result in water entry into electrical components, which may cause electrical faults and/or displace equipment. External power loss can halt operations. Coastal flooding typically restricts truck access and loading. Storage tanks can be subject to collapse and leakage with storm surge.	Pipelines are typically constructed to withstand water inundation. Some low-pressure distribution piping can have an elevated risk of water intrusion; however, this is less of a concern in the transmission pipelines. Heavy precipitation can cause soil to shift, leading to support issues and pipeline ruptures.	Natural gas pipelines are located underground and are protected from high winds. However, tornadoes and extreme high wind events can possibly expose underground piping and damage operations.	As most pipelines are located underground, they are generally protected from extreme heat events due to the cooling of the earth.	Being buried, pipelines are protected from the risk of puncture from high-velocity rock and earth. Underlying ground failure could expose the pipeline to other risks.	Pipelines are located underground and have vegetation cleared above the pipeline. Wildfires would mainly have an impact on aboveground infrastructure, such as compressor stations, regulating stations, service risers, and at customer meters. Depending on the location, parts of the system may be isolated during these events.
L N	1	5	5	2	3	5	4

	Hurricane Wind	Coastal Flooding	Inland Flooding	Strong Wind	Extreme Heat	Landslide	Wildfire
Gas	Storage tanks can be subject to collapse and leakage under the high winds, heavy precipitation, and flooding associated with hurricanes.	Coastal flooding can result in water entry into electrical components, which may cause electrical faults and/or displace equipment. External power loss can halt operations. Coastal flooding typically restricts truck access and loading. Storage tanks can be subject to collapse and leakage with storm surge.	Flooding can result in water energy into electrical components, which may cause electrical faults and displace equipment. Flooding also restricts truck access and loading.	High wind speeds may damage tank exteriors, and debris from high winds could cause damage to port facilities.	LNG facility infrastructure is designed to withstand high temperatures.	Due to the significant mass and volume of material, landslides have the potential to damage LNG facilities. Underlying ground failure can damage overall structural integrity.	LNG plants are located above ground. During wildfires, they are often shut down to prevent damage or loss of product.
	1	4	5	2	2	3	4

	Hurricane Wind	Coastal Flooding	Inland Flooding	Strong Wind	Extreme Heat	Landslide	Wildfire
	Hurricane winds and flying debris may damage instrumentation and other unprotected equipment. Most compressor stations are gas-powered, making them resilient to power outages, although electric-powered compressors may be affected.	Flooding may result in water entry into electrical components, which may cause electrical faults and/or displace equipment. Salt water may cause corrosion.	Flooding may result in water entry into electrical components, which may cause electrical faults and/or displace equipment.	Strong winds and flying debris may damage instrumentation and other unprotected equipment. Most compressor stations are gas-powered, making them resilient to power outages, although electric-powered compressors may be affected.	Infrastructure is designed to withstand high temperatures.	Compressor stations are located above ground and may be at risk of disruption due to the mass and volume of moving earth. Underlying ground failure can cause structural damage.	Pipeline compressor stations are located above ground and are key to the movement of product. During wildfires, they are often shut down to prevent damage or loss of product.
Pipe	**2**	**2**	**2**	**2**	**2**	**2**	**4**

	Hurricane Wind	Coastal Flooding	Inland Flooding	Strong Wind	Extreme Heat	Landslide	Wildfire
	Hurricane winds and flying debris may damage instrumentation and other unprotected equipment.	Flooding may result in water entry into electrical components, which may cause electrical faults and/or displace equipment. Salt water may cause corrosion	Flooding may result in water entry into electrical components, which may cause electrical faults and/or displace equipment.	Strong winds and flying debris may damage instrumentation and other unprotected equipment. Most compressor stations are gas-powered, making them resilient to power outages, although electric-powered compressors may be affected.	In rare cases, extreme temperature increases may cause metal to warp, leading to damage. This would typically be due to a rapid temperature shift.	Pipeline interconnection points are located above ground and may be at risk of disruption due to the mass and volume of moving earth.	Pipeline receipt points are located above ground. During wildfires, they may be shut down to prevent damage or loss of product.

Consequence Score

The final component of the risk assessment is the consequence score, which captures the importance of a given energy asset for energy delivery in the state. In general, there are two categories of consequences:

- *Primary consequences* are the direct impact on energy supply as measured in industry standard units (e.g., megawatt hours [MWh] of load lost or b/d of fuel supply).
- *Secondary consequences* refer to the downstream impact of the loss of energy supply on the broader society, including human, economic, mission, psychological, and environmental impacts.

Primary consequences are more straightforward to quantify—the loss of a certain quantity of energy supply. Secondary consequences are more difficult to quantify given the diversity of impacts and the fact that those impacts can vary significantly based on the nature of the energy-dependent entities (residential, industrial, or commercial); interdependencies between different parts of the energy sector; the time of year (seasonality); and the time of day, among others. Generally, however, it can be assumed that the loss of energy assets or systems that provide more energy supply and for which there are limited alternatives will result in larger secondary consequences under any given scenario. While it is important to recognize the secondary consequences of energy disruptions when designing response and mitigation measures, this approach focuses on primary consequences.

To identify the highest consequence assets within the state, this risk assessment primarily uses publicly available data and some non-public data that were used to inform the primary consequence analysis. The elements of system assets not captured by the quantitative approach were assessed by subject matter experts—consultants who previously spent many years working in the electricity, natural gas, and petroleum sectors—and based on a review of available utility planning documents and other relevant materials.

Note that energy utilities and system operators regularly assess the ability of their assets to provide energy services under peak-day and peak-hour conditions, as well as under various contingency scenarios. These assessments rely on system-specific data that were not publicly available nor feasible for South Carolina to assess without the deployment of considerable resources. This assessment primarily relied on publicly available data.

Each sector's consequence methodology was created differently with each methodology spelled out in the following subsections. These different methodologies are why consequence and, in turn, impact and risk, cannot be compared across sectors. The actualized scales of consequence, impact, and risk are unique based on these different approaches.

Different types of energy (electricity, petroleum, or natural gas) serve different sectors of society and will have different secondary consequences. This makes it difficult to

directly compare an outage for one energy type with an outage of another energy type, even if the expected energy supply loss is translated into common energy units (e.g., joules, watts, British thermal units). The energy system is highly interdependent, which makes it difficult to capture the cascading impact in another sector of an asset or a system level outage in one sector.

An example is if a major natural gas pipeline that feeds a major natural gas-fired generator went offline, it is very challenging to assess whether there is an impact on electric customers due to a generation shortfall without undertaking a system-wide assessment with many variables. Because electricity is essential for the operation of most lifeline sectors (e.g., healthcare, emergency services, water, home heating and cooling), electricity outages typically have the greatest overall secondary consequences. Widespread electricity outages also typically have cascading impacts on the petroleum and natural gas sectors because pipeline infrastructure (including pumping stations), distribution terminals, and retail fuel stations all rely on electric power for operations. Natural gas furnaces typically cannot provide heating without blower motors that require electric power.

Petroleum outages primarily affect the transportation sector and home heating, although they may also affect electricity generation. Natural gas outages primarily affect home heating, electricity generation, and industrial heating processes.

Outage duration is also an important variable. Because electricity storage is generally not possible at consumer sites (outside of short-term batteries and backup generators at some critical facilities), many impacts from electricity outages are immediate and can cause significant societal impacts over a relatively short period of time (minutes or hours). Meanwhile, short-term natural gas outages can often be offset by the volume of gas in the line at the time of the disruption (called “linepack”) and other system storage resources, or by allocating available supply for essential home heating uses. Petroleum outages may take days or weeks before affecting customers due to significant storage located at several stages of the supply chain, including at customer sites.

Although grid-scale electricity storage is typically limited, the electric grid is generally built with considerable redundancy (e.g., more generation and distribution assets than needed to provide service under most scenarios) so that the grid remains energized despite short-term infrastructure outages. Gas networks similarly have significant flexibility and redundancy in some parts of the country, particularly outside of peak demand winter periods.

In addition to duration, outage locations and the type of population affected by the outage are also important variables. For example, power outages can quickly become a crisis, especially for vulnerable populations such as the elderly. Without electricity, homes can become dangerously hot or cold, and medical devices may stop working. Extended outages can lead to spoiled food, lost wages, and increased repair costs, which disproportionately affect low-income households. These communities often lack the resources to recover quickly from outages, such as insurance or savings to cover emergency expenses.

- ***Electricity Consequence Methodology***

The analysis conducted as part of this risk assessment studied five of MISO's Transmission Expansion Plan (MTEP) power flow cases, summarized in Table 26, selected to represent a range of near-term scenarios in 2026 and 2027. MISO's data were used as it covers the entire Eastern Interconnection's bus locations.

Table 26. MTEP power flow cases selected for this analysis

Case No.	Year	Season	Period
1	2026	Summer	Peak
2	2026	Winter	Peak
3	2027	Summer	Peak
4	2027	Spring	Light Load
5	2027	Winter	Peak

For each of the five cases, the team conducted N-1 and N-1-1 contingency analysis using PowerGEM's TARA software. These analyses simulate the failure of grid components in South Carolina, evaluating whether the system can continue to operate reliably. The N-1 criterion is a reliability standard used in power system planning and operations. It ensures that the system can withstand the loss of any single critical element without causing widespread outages or violating operational limits. In other words, if one component fails, the remaining system should continue to operate within acceptable parameters. The N-1-1 criterion extends this concept by considering two sequential contingencies. It assumes that after the first element fails (N-1), the system is re-dispatched or adjusted, and then a second element fails. This analysis tests the system's resilience to multiple failures occurring in sequence, which is particularly important for high-reliability systems and critical infrastructure planning.

The team analyzed the loss of a bus, the loss of a substation, the loss of a transmission line, the loss of a single generating unit, and the loss of all generating units at a power plant. To measure how contingencies affected the system, the team documented instances of nonconvergence, thermal overloads, and islanded load and generation under N-1 and N-1-1 conditions. To identify which facilities caused the most significant adverse impacts when removed from the system, a scoring system was developed.

For each of the five power flow cases, a facility was assigned points based on the number of issues observed when it was removed from the system. Overall, instances of non-convergence were considered to be the most severe issues and, therefore, worth the greatest point value. Additionally, instances of severe thermal overload (at or above 150%) were assigned three times the value of less severe overload (<150%) and instances of large islanded load or generation (100 MW or greater) were assigned twice the value of smaller islands (<100 MW). Given that N-1 contingencies are significantly more likely to

occur than N-1-1 contingencies, issues observed under N-1 conditions were generally assigned 10 times the score compared with those observed under N-1-1 conditions.

This process was repeated for each of the five power flow cases, yielding five scores for each facility. To capture the likelihood of adverse impacts across various future conditions, the sum of the five scores normalized to be out of 100 was used for each facility's final score.

- ***Natural Gas Consequence Methodology***

For natural gas assets, the primary consequence is the loss of energy supply to consumers, measured in MMcf/d for natural gas. The consequence of the loss of an asset's energy supply is relative to the size of the market served; generally speaking, the larger the market share of a specific asset, the higher the consequence of losing that asset. Generally, larger volume assets will have higher overall consequences because they deliver more energy to more consumers.

Most natural gas supply data were gathered from Federal Energy Regulatory Commission (FERC)-regulated interstate pipeline companies, which are required by FERC to post daily receipts and deliveries of natural gas at specific flow points. These data points are posted daily on Informational Posting websites. The consequence scores of natural gas pipeline laterals were based on deliveries to state consumers on a winter peak day in 2024 and the annual market share of the particular lateral, taking whichever consequence was higher. For example, if a pipeline lateral delivered 12% of the state's demand in 2024 and 14% of the state's demand on the peak 2024 day, the score of 14 was assigned to that lateral. Similarly, the volumes through compressor stations were evaluated in the same manner to create their score. Data were not available for most LNG storage/vaporization sites, so the maximum vaporization of those facilities was used as a proxy.

- ***Petroleum Consequence Methodology***

For petroleum assets as well, the primary consequence is the loss of energy supply to consumers, measured in b/d. The consequence of the loss of an asset's energy supply is relative to the size of the market served; generally speaking, the larger the market share of a specific asset, the higher the consequence of losing that asset.

The consequence scores of petroleum assets were calculated by assessing the monthly throughput volume of refined products moving through each terminal across the state, collected through the South Carolina Department of Revenue. Terminal throughput data, along with their connections to various petroleum pipelines, was analyzed to estimate pipeline deliveries into the state. The consequence scores calculated for each asset are a ratio of the total product supplied by the asset compared with the total volume of that product into the state. For example, if a terminal throughput 16,000 b/d of gasoline and the state total gasoline demand is 160,000 b/d, then it receives a score of 10 for the 10% share.

Mitigation

Working in conjunction with and following the risk assessment, the team engaged stakeholders in the state to help identify mitigation activities to help South Carolina's energy systems. The team has conducted an in-depth literature review of existing plans (e.g., state and local hazard mitigation plans, dockets, state and local after-action reports, studies on infrastructure resilience, critical energy infrastructure effects reports, industry reports, case studies from similar past events) and policies, and conducted stakeholder interviews to better understand ongoing and potential mitigation opportunities. The mitigation section will then be written to include the following:

- **Goals:** This section identifies key goals that are the foundation for the mitigation section, whether it is to strengthen energy reliability or enhance response.

- **Existing Risk Mitigation Strategies:** This section acts as an overview of all programs targeted at mitigation for the energy sector in South Carolina that have already been implemented or are ongoing efforts. These strategies have been pulled from a literature review and stakeholder engagement.

- **Potential Risk Mitigation Strategies:** This section outlines specific recommendations for mitigation measure strategies with a tiered approach based on risk likelihood, potential impact, cost-effectiveness, and feasibility. We will outline for each hazard/problem statement identified from the risk assessment the strategies that can bolstered existing mitigation strategies from state and local hazard mitigation plans and stakeholder interviews. Each mitigation activity will identify the relevant sectors, how it affects the risk, and who might be involved in executing the action. These recommendations may include policy updates, regulatory changes, infrastructure investments, and operational improvements to enhance resilience and minimize service disruptions. If there are best practices that are not widely accepted across the state, we will highlight these strategies as potential strategies to be extended.

Following the development of the strategies, the team circulated them with stakeholders to solicit feedback on the mitigation measures.

Appendix B: Communication Risk Assessment Methodology

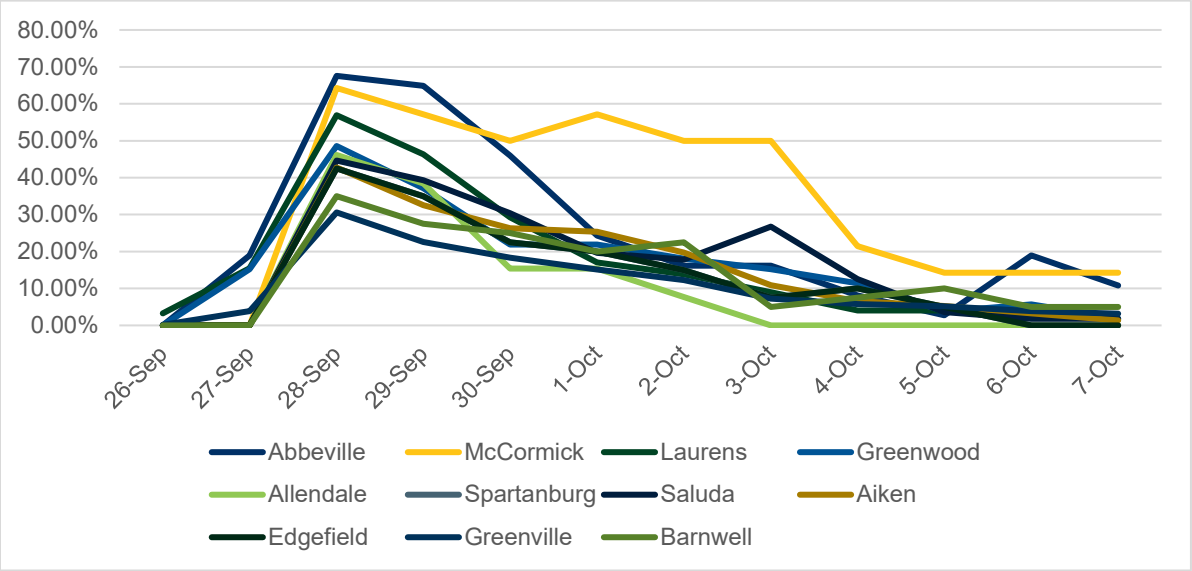
The Broadband Communications team assessed the broadband and cellular communications capabilities of the state of South Carolina before, during, and after Hurricane Helene in late September 2024 using primarily Federal Communications Commission and Ookla data. The data analytics revealed intriguing connections among the storm, communications capabilities, and the affected population.

Data analytics were augmented by interviews with South Carolina's broadband and cellular service providers, as well as participation in this study's interviews with electricity providers.

FCC Data

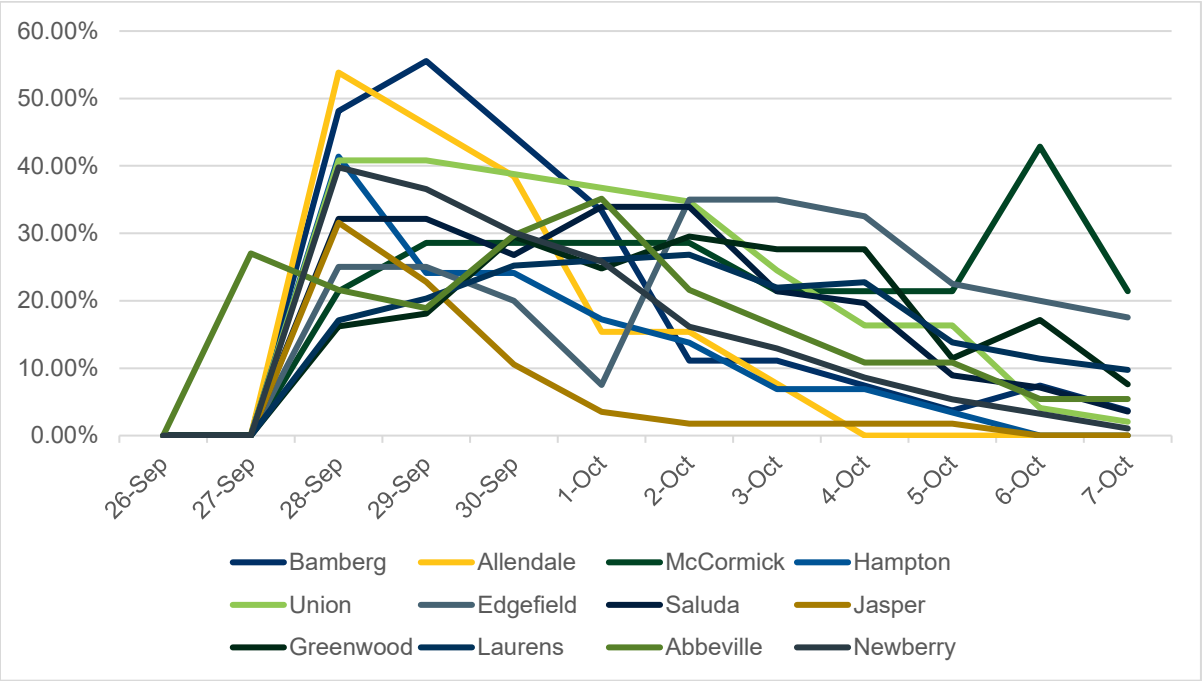
We began our investigation by breaking the FCC dataset into time-series data indexed by each county in South Carolina. We then calculated the percentage of cell sites down and cell sites up on backup power for each day in the time-series. We calculated the maximum and average for each series and generated a list of the 10 highest in each category. Figure 56. Percentage of cellular sites out overtime for the 10 counties with the highest peak outage and the 10 counties with the highest average outage shows the time-series data for the top 10 counties in peak outage and average outage. Figure 57 shows the time-series data for the top 10 counties in peak backup power and average backup power.

Figure 56. Percentage of cellular sites out overtime for the 10 counties with the highest peak outage and the 10 counties with the highest average outage



Note: Nine counties were in both categories. Allendale was only in the top 10 peak outage and Greenville was only in the top 10 average outage.

Figure 57. Percentage of cellular sites on backup power over time



Note: This exhibit is for the 10 counties with the highest peak backup power usage and the 10 counties with the highest average backup power usage. Hampton was only in the peak backup power usage category. Greenwood and Laurens were only in the highest average backup power usage category.

To understand the causes of outages, we calculated the percentage of cell sites down due to power, transport, damage, and unknown. Power represented the greatest issue. Only 11 counties (Barnwell, Beaufort, Florence, Berkely, Dorchester, Calhoun, Clarendon, Dillon, Georgetown, Lee, and Marion) reported less than 50% of their outages were power-related. Of these 11 counties, 4 reported no outages during the measured timeframe. Five counties reported that transport-related issues caused more than half of their cell cite outages, although 25 counties reported more than 10% of their outages were caused by transport issues. Only four counties reported that damage caused more than 10% of their cell site outages and 31 counties reported no damage at all.

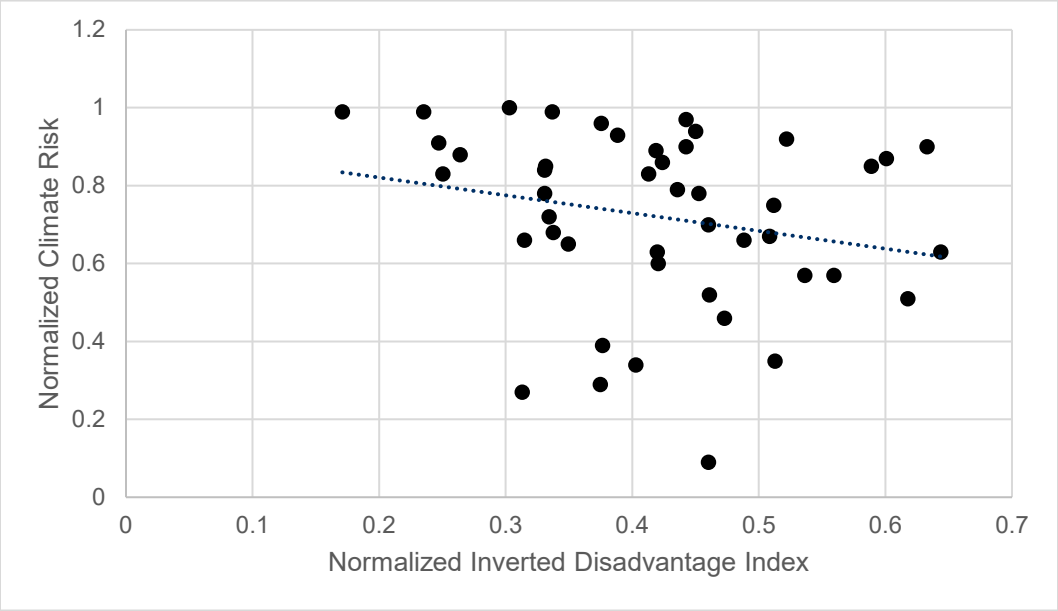
We also identified four counties that had more than 5% of their cellular towers down at the end of the FCC reporting period on October 7, 2024. These counties were Abbeville, Barnwell, Cherokee, and McCormick. Similarly, seven counties reported that they had more than 5% of their cellular towers on backup power by October 7: Abbeville, Edgefield, Greenville, Greenwood, Laurens, McCormick, and Spartanburg.

To paint a more complete picture of Hurricane Helene's impact on South Carolina's broadband communication, we cross-referenced the FCC's data against the Index of Deep Disadvantage and the Broadband Climate Risk Mitigation dataset. To ensure that these factors had a uniform effect on our data, we normalized each of them with the min-max normalization technique. In the Deep Disadvantage Index, we used -8.5 and 3 as the minimum and maximum, respectively. To highlight the effect of the Disadvantage Index, we inverted the values such that a number close to 1 indicates a deep disadvantage and

a number close to 0 indicates an advantage. These values are approximates for the global minimum and maximum reported in the study. For the Broadband Climate Risk Mitigation dataset, we used 0 and 100 for the minimum and maximum because the original values were percentiles. Figure 58 and

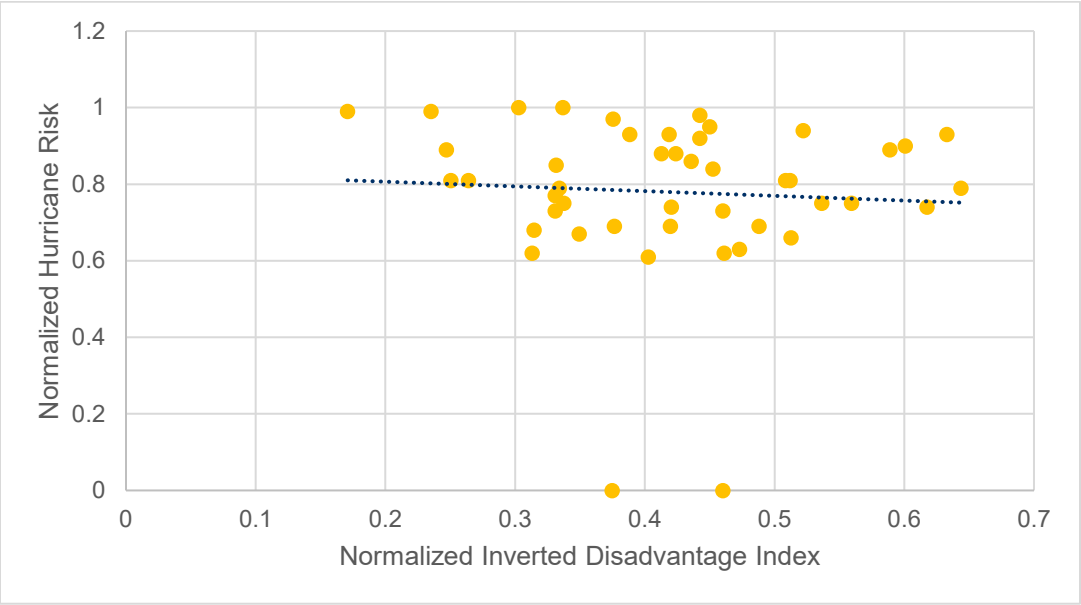
Figure 59 show the interaction between these two datasets.

Figure 58. Climate risk plotted over the Disadvantage Index for each county in South Carolina



Note: There is only a weak negative correlation. This may be explained by higher income communities having more expensive structures, such that natural disasters cause higher dollar values of damage while affecting the state roughly the same.

Figure 59. Hurricane risk plotted over the Deep Disadvantage Index



Note: There is only a weak negative correlation between the two. Note that, aside from two counties, the entire state is likely to receive some hurricane damage.

Figure 60 shows the interaction between the Disadvantage Index and the FCC data. While there is a very weak negative correlation between the two, note that the counties with the highest cell site outages are disproportionately disadvantaged as compared with the rest of the state.

Figure 60. Average percentage of cell sites out during Hurricane Helene over the Deep Disadvantage Index

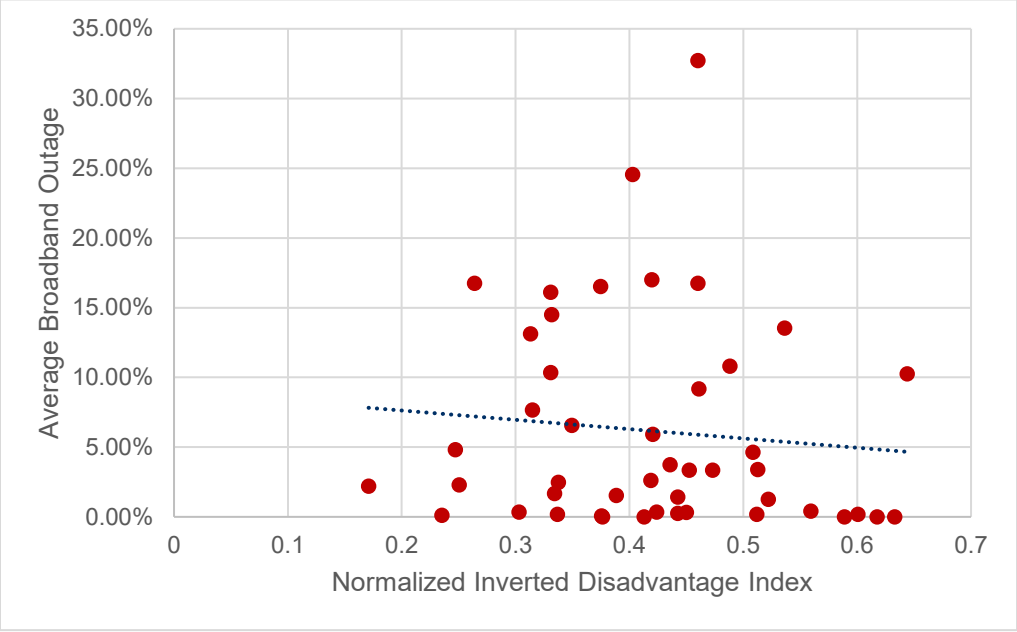
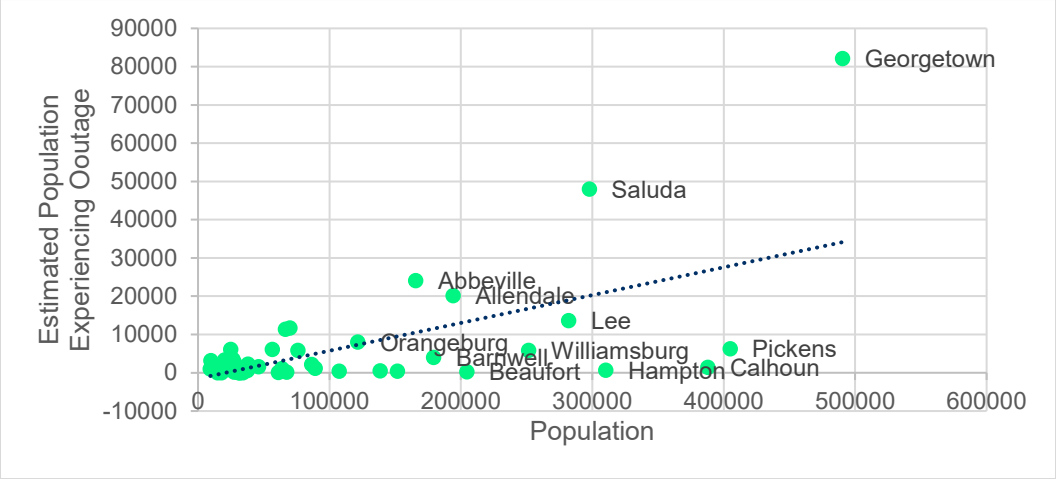


Figure 61 gives an estimate of the population of each county that was without cell service at some point during Hurricane Helene. We calculated this value by multiplying the percentage of cell sites that were down in a county by the population of that county. We believe that this figure is encouraging. While many counties experienced a large percentage of their cellular sites going down, the effect on the overall population was limited in most counties. This figure also helps us identify Georgetown, Saluda, Abbeville, and Allendale counties as being particularly affected.

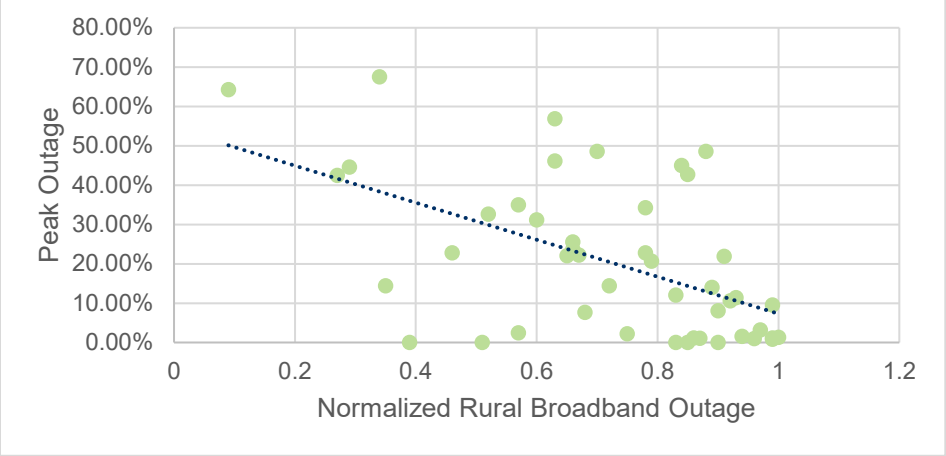
Figure 61. Estimated population without cell service plotted against the total population for each county in South Carolina



Note that many counties had fewer than 10,000 citizens without cell service across the entirety of Hurricane Helene.

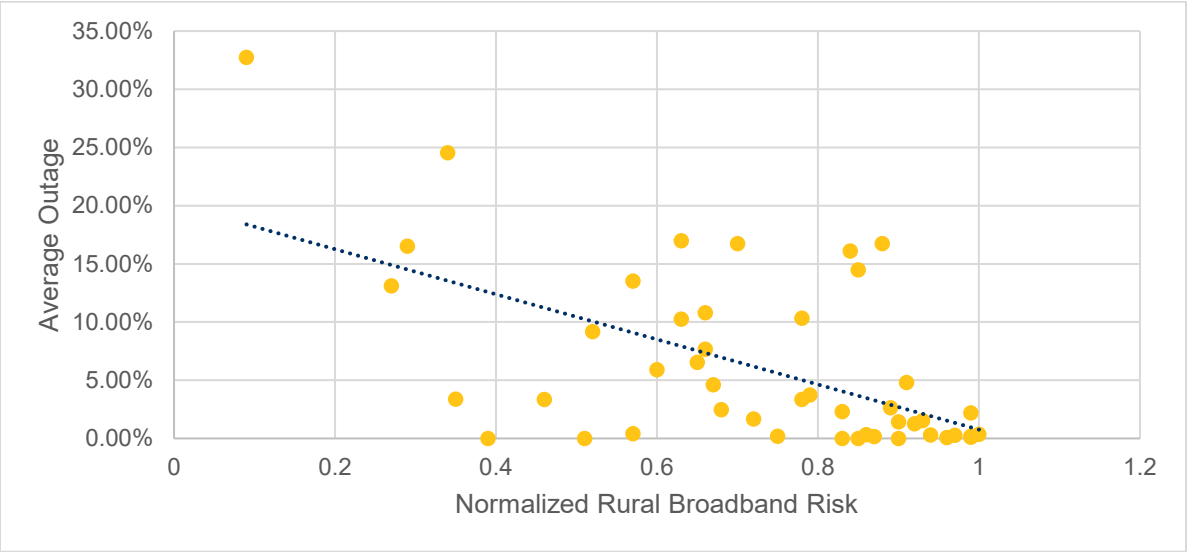
Figure 62 through Figure 64 show the interaction between the FCC dataset and the Broadband Climate Risk Mitigation dataset.

Figure 62. Peak cell site outages plotted over the overall rural Broadband Risk Index



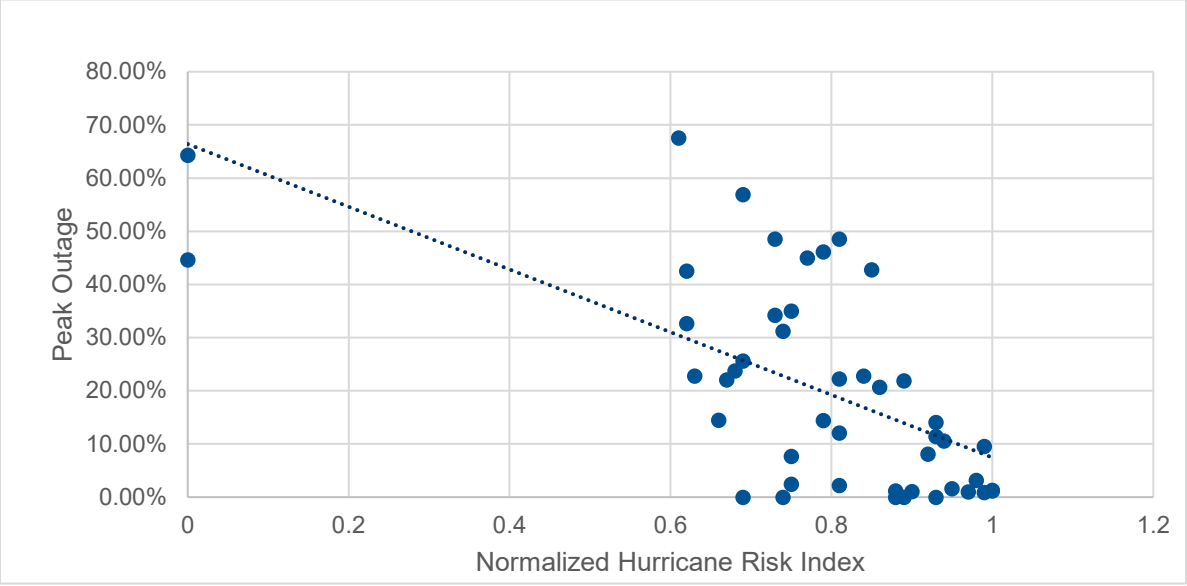
Note: There is a moderate negative correlation between the two, which indicates that counties least likely to experience a natural disaster affecting broadband were more likely to have outages due to Hurricane Helene.

Figure 63. Average cell site outages plotted over the rural Broadband Risk Index



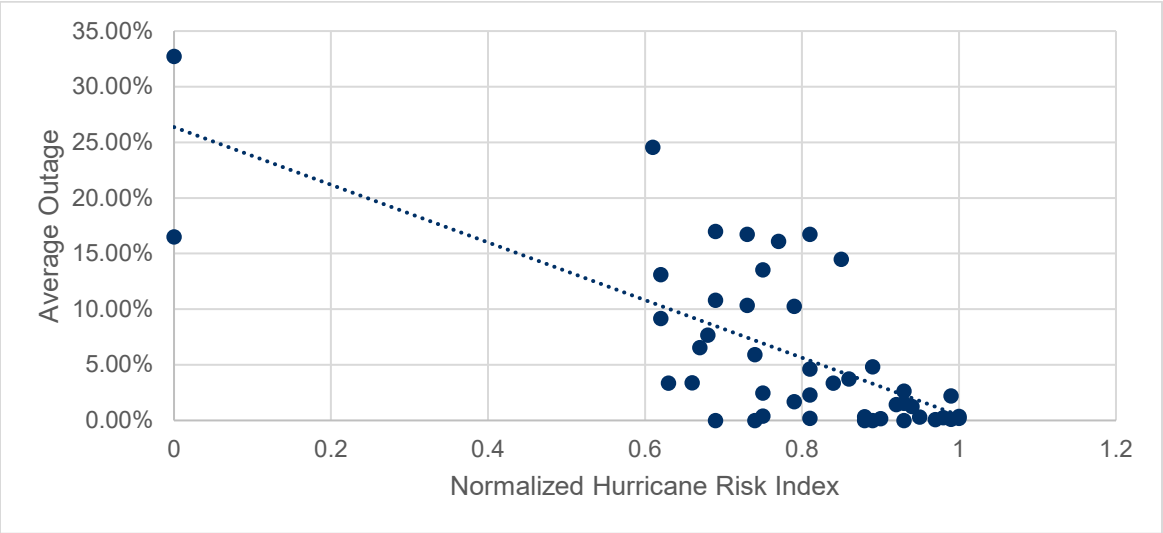
Note: There is a strong correlation between the two, indicating that counties that were less likely to experience a natural disaster sustained greater average outages during Hurricane Helene.

Figure 64. Peak outages plotted over the normalized Hurricane Risk Index



Note: There is a strong correlation between the two. This indicates that counties that were less likely to experience a hurricane sustained greater outages during Hurricane Helene.

Exhibit 2. Average cell site outages plotted over the Hurricane Risk Index



Note: There is a strong correlation between the two, indicating that counties that were less likely to experience a hurricane sustained larger outages during Hurricane Helene.

In all cases, counties that were less likely to experience a natural disaster or a hurricane based on historical data sustained the largest cellular site outages. We believe that this points to two factors: (1) Hurricane Helene hit areas that were substantially less likely to receive a hurricane, and (2) counties that had less experience with hurricanes were less prepared for one.

Table 27 gives an overview of the counties that we believe were most affected by the hurricane. They recurred across several of the features we observed. We recommend them for assistance in developing cellular resilience to natural disasters.

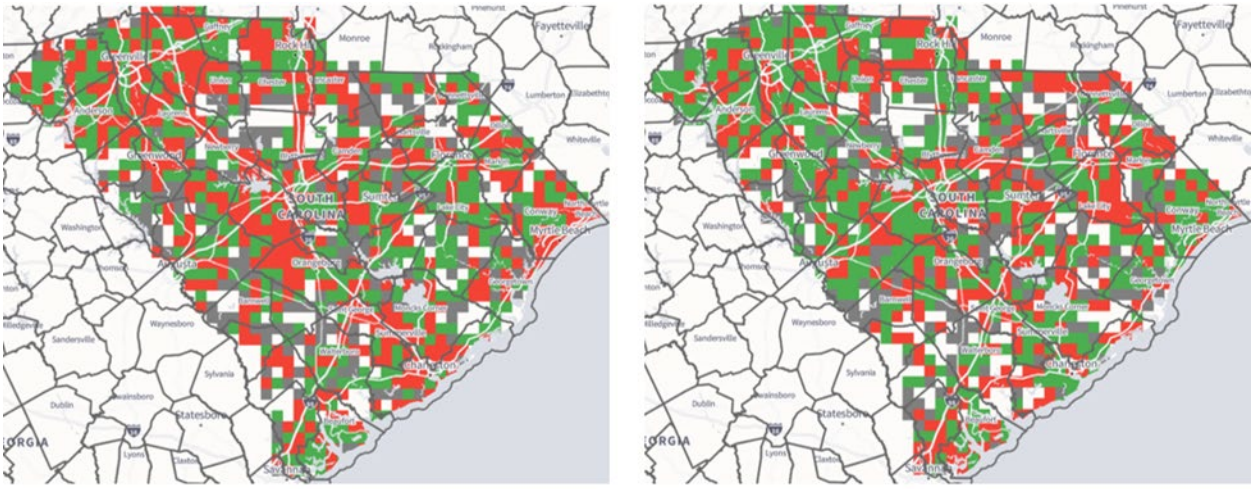
Ookla Data

We began our investigation by analyzing the signal strength, wireless download speed, wireless upload speed, fixed download speed, and fixed upload speed. We believe that these statistics would give us the most insight into the quality of communications during and after the storm. To ensure a reasonable sample size, we took samples at a one-week interval. To illustrate how the network changed, we mapped the difference in each statistic from week to week. Figures 65 through 70 show the week-over-week change in 5G signal strength, 4G signal strength, wireless download speed, wireless upload speed, fixed download speed, and fixed upload speed, respectively. In all cases, an improvement in the network is indicated in green, a deterioration is indicated in red, and gray indicates that data were missing for one of the weeks.

While the results of the holistic view are not clear-cut, we can derive a few trends: First, the signal strength for both 4G and 5G decreased during Hurricane Helene and improved in the week after. This corroborates the FCC reporting on cellular towers going down and operating on backup power in many affected counties. Secondly, fixed

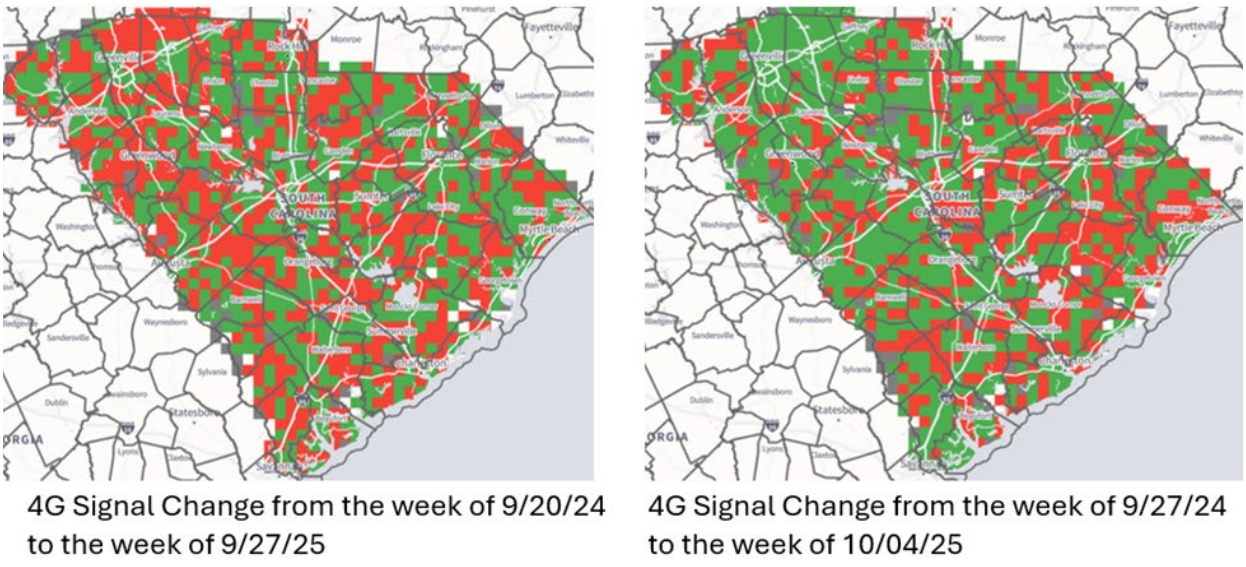
internet download and upload speeds dropped during the week of Helene and then improved sharply in the following week. In both cases, the most affected areas appear to be in the western half of the state, with the most dramatic effects along the Savannah River and in the northwestern corner of the state. Finally, fixed download and upload speeds appear to be less affected.

Figure 65. Week-over-week change in 5G cellular signal strength in South Carolina



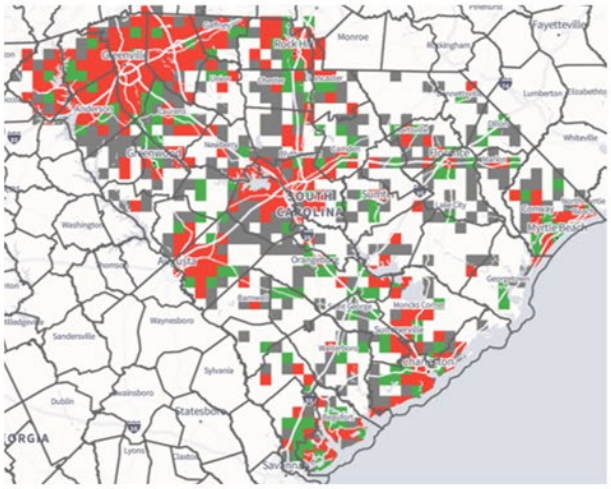
Note: Red indicates that service degraded, green indicates that service improved, and gray indicates that data were unavailable for one time period.

Figure 66. Week-over-week change in 4G cellular signal strength in South Carolina.

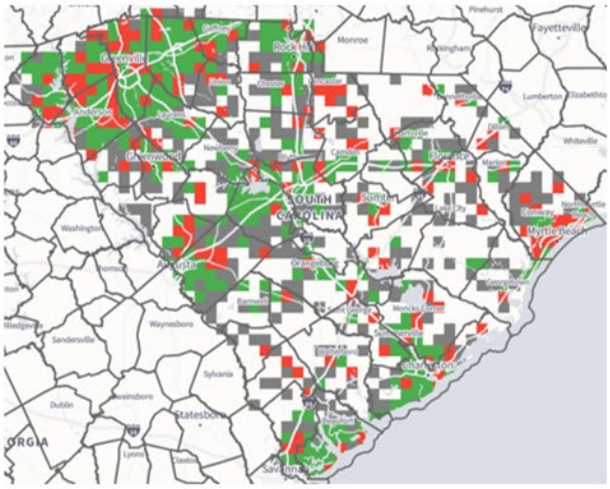


Note: Red indicates that service degraded, green indicates that service improved, and gray indicates that data were unavailable for one time period.

Figure 67. Week-over-week change in wireless download speed in South Carolina



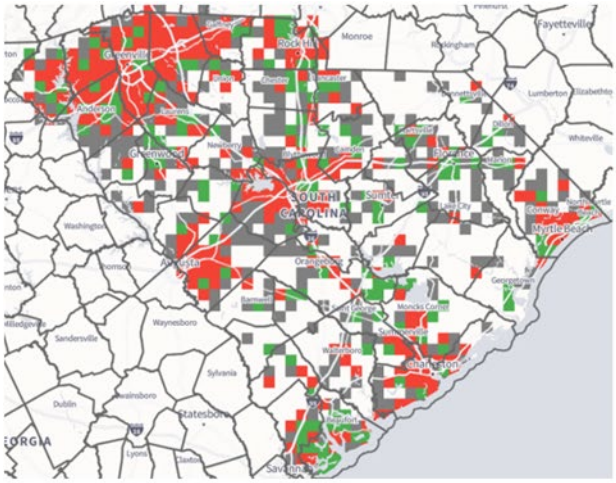
Wireless Download Change from the week 9/20/24 to the week of 9/27/25



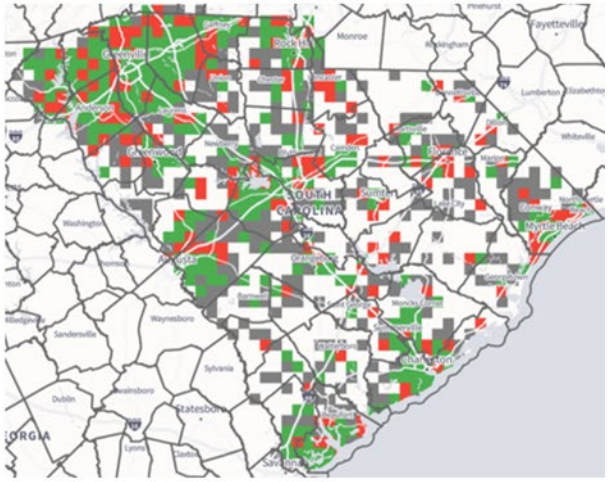
Wireless Download Change from the week 9/27/24 to the week of 10/04/25

Note: Red indicates that service degraded, green indicates that service improved, and gray indicates that data were unavailable for one time period.

Figure 68. Week-over-week change in wireless upload speed in South Carolina



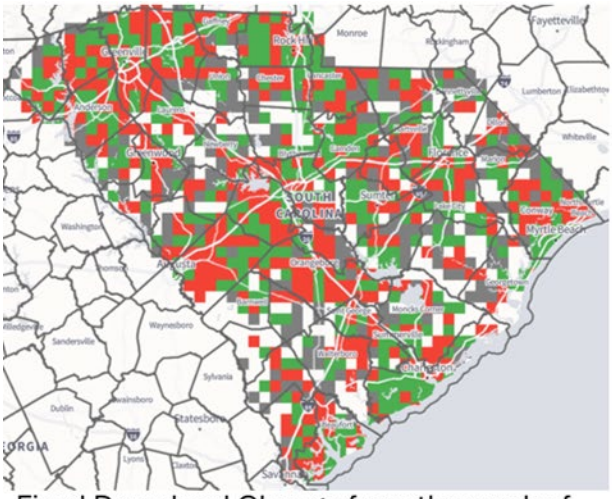
Wireless Upload Change from the week of 9/20/24 to the week of 9/27/25

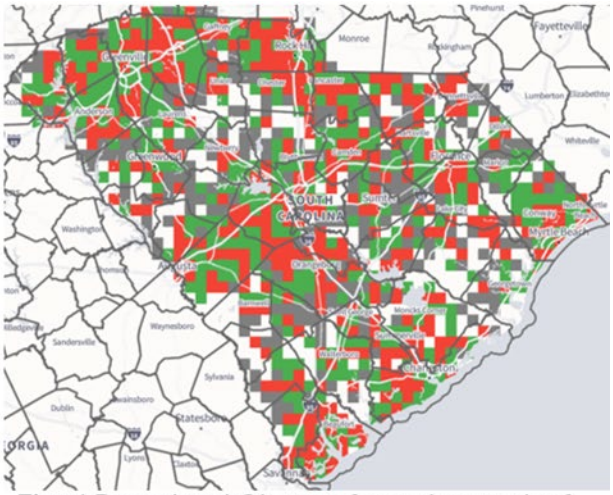


Wireless Upload Change from the week of 9/27/24 to the week of 10/04/25

Note: Red indicates that service degraded, green indicates that service improved, and gray indicates that data were unavailable for one time period.

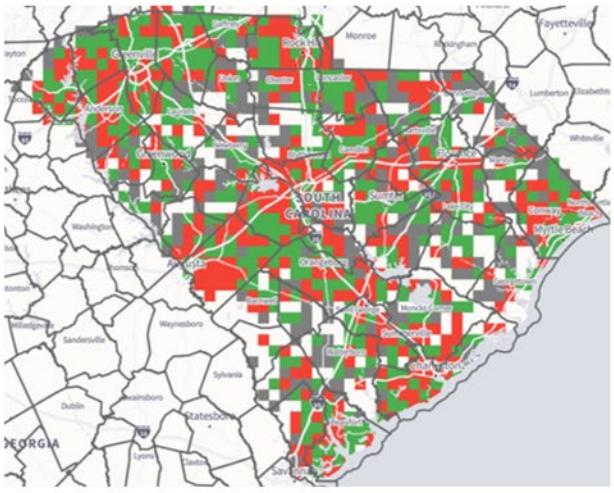
Figure 69. Week-over-week change in fixed download speed in South Carolina

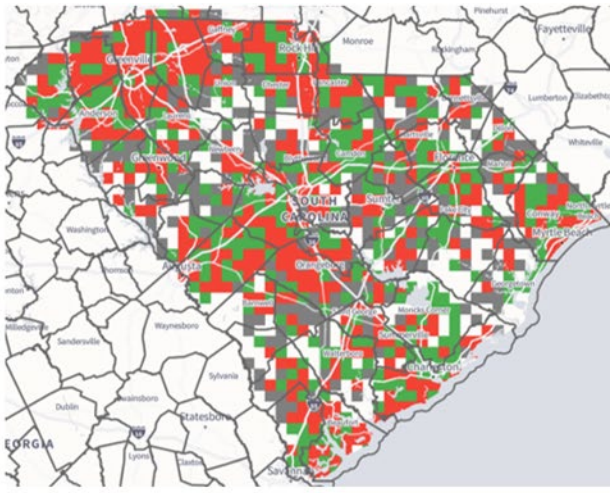




Note: Red indicates that service degraded, green indicates that service improved, and gray indicates that data were unavailable for one time period.

Figure 70. Week-over-week change in fixed upload speed in South Carolina





Note: Red indicates that service degraded, green indicates that service improved, and gray indicates that data were unavailable for one time period.

To further investigate these trends, we analyzed the wired and wireless download and upload speeds of each county in South Carolina. Figure 71 through Figure 94 show the 24 counties that had a significant downturn in wireless download and upload speeds between September 23, 2024 and October 4, 2024. It is important to note that these graphs aggregate data into weeks starting on Sunday. Since Hurricane Helene made landfall in the state on a Friday, the full effect may be spread across the September 23 and September 30 data points. It is also important to note that some data points may be

missing for certain graphs because no speed tests were performed in that area during the week.

Some trends appear across these graphs. For example, many of the counties in the western half of the state saw a significant depreciation in internet speeds in the week of September 23, 2024. While fluctuations are normal, we can see that many counties did not restore to pre-storm values until weeks after the storm. In some cases, upload speeds were approaching zero, which would limit the users' ability to send messages to emergency services or loved ones in the weeks after the storm.

Figure 95 through Figure 127 show the fixed download and upload speed of the 28 counties that experienced a decrease in service in the time between September 23 and October 4. Interestingly, the fixed internet connections seem to be less affected in the week that Hurricane Helene made landfall in South Carolina. However, upload speed appears to be more affected than download speed. Furthermore, it appears that the effects of Helene may have been less direct for the fixed internet speeds. Many counties experienced depreciation in speed in the week before or the week after the storm. In some cases, the impact lasts for several weeks.

From the Ookla dataset, it appears that Hurricane Helene had the greatest impact on cellular communications. Signal strength, download speed, and upload speed were significantly affected for both 5G and 4G in the western half of South Carolina. Table 27. Counties that experienced a degradation in wireless or fixed internet service between 9/16/24 and 10/04/24gives an overview of which counties saw an impact on cellular service and fixed internet. Areas that were most significantly affected were along the Savannah River and in the northwest corner of the state. We believe that this may be because of poor weather conditions, power outages, and fueling issues for backup power at cellular sites. Our week-over-week analysis reveals that many areas began improving their cellular service in the week following Helene.

The effects of Hurricane Helene on fixed internet speeds were not so clear-cut. Many counties experienced a degradation in service in the week prior to or following Helene. In many cases, these outages lasted for several weeks. This could be caused by several factors. Some users may have experienced long outages due to utility poles falling in rural, hard-to-reach areas that may not have been addressed for some time. Other users may have experienced issues due to damage in other areas of the United States. Data centers in North Carolina, Georgia, or Florida could contribute to longer outages. They may also account for outages that began earlier than the September 27, 2024 landfall date in South Carolina.

Hurricane Helene's effect on fixed internet appears to have been less localized. Some of the counties that had degraded fixed internet service did not have losses in cellular service, such as Bamberg, Barnwell, and Calhoun counties. Some of these counties lie along the east coast of the state, such as Charleston and Dorchester counties. These issues may have been caused by larger internet service issues in the United States caused by Helene. They may also have been caused by unrelated factors that are not captured in this dataset.

Table 27. Counties that experienced a degradation in wireless or fixed internet service between 9/16/24 and 10/04/24

County	Wireless Download	Wireless Upload	Fixed Download	Fixed Upload
Abbeville	X	X	X	X
Aiken	X	X	X	X
Allendale	X	X		X
Anderson	X	X	X	X
Bamberg			X	
Barnwell				X
Beaufort	X	X		
Berkeley	X	X	X	X
Calhoun			X	X
Charleston				X
Cherokee	X	X	X	X
Chester	X	X	X	X
Chesterfield				X
Darlington	X	X	X	
Dillon				X
Dorchester			X	X
Edgefield			X	X
Greenville	X	X		
Greenwood	X	X	X	X
Hampton			X	X
Jasper	X	X		
Kershaw			X	X
Lancaster	X	X	X	X
Laurens	X	X		X
Lee	X	X	X	X
Lexington	X	X		X
Marlboro			X	X
Newberry			X	X
Oconee	X	X		X
Pickens	X	X	X	X
Richland	X	X	X	X
Saluda	X	X	X	X
Spartanburg	X	X	X	X
Union	X	X		
Williamsburg	X	X		X
York	X	X		

The data available here indicate that South Carolina's response to Hurricane Helene was very good. Many areas saw rapid restoration of service. It is important to note, however, that this assessment is based on aggregate data. Several areas had very poor or no service for several days or weeks after Helene.

Wireless Speeds

Figure 71. Abbeville wireless download and upload speeds over time

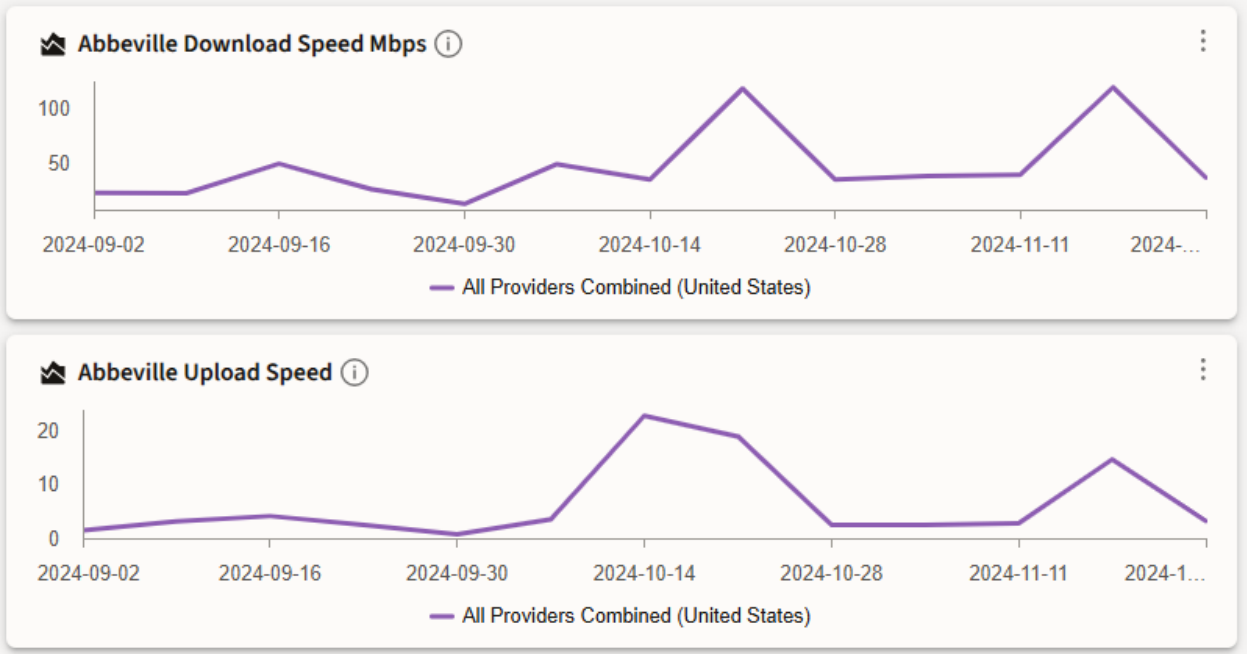


Figure 72. Aiken wireless download and upload speeds over time

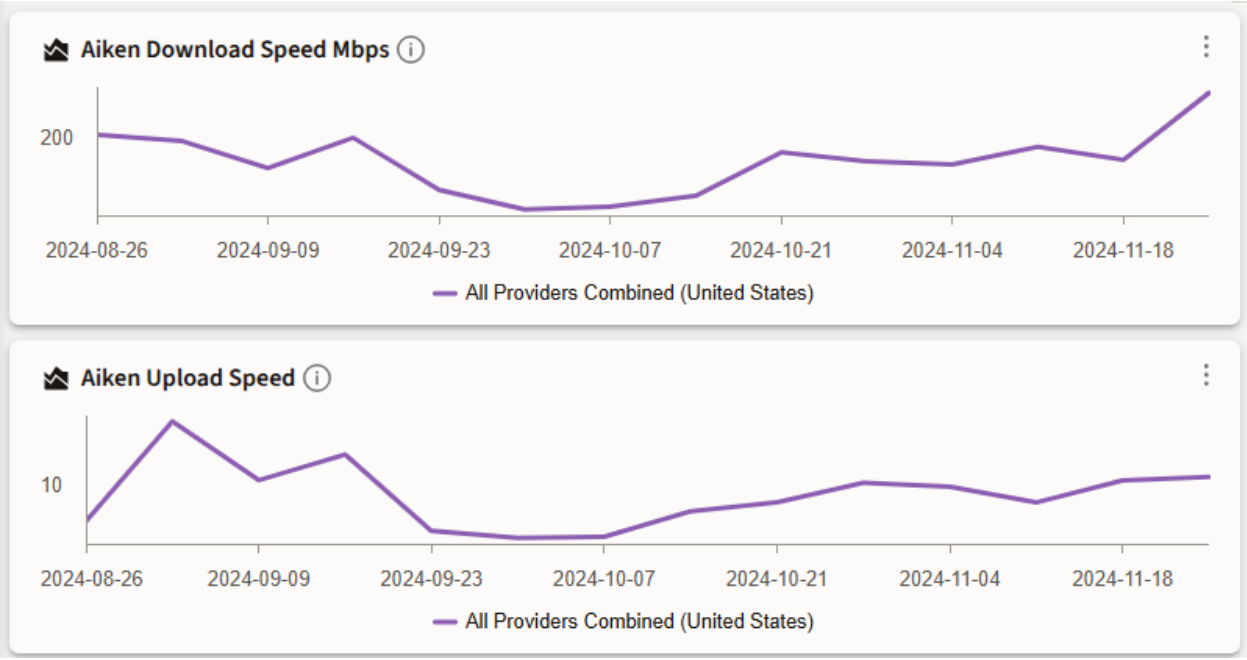


Figure 73. Allendale wireless download and upload speeds over time

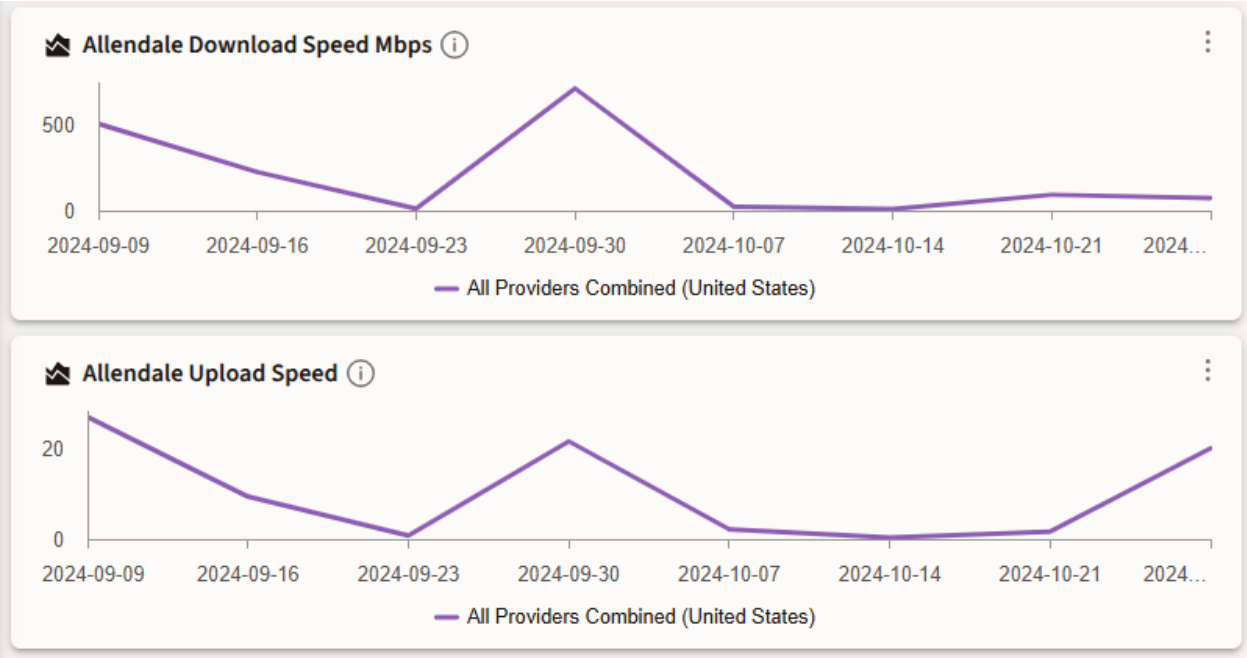


Figure 74. Anderson wireless download and upload speeds over time

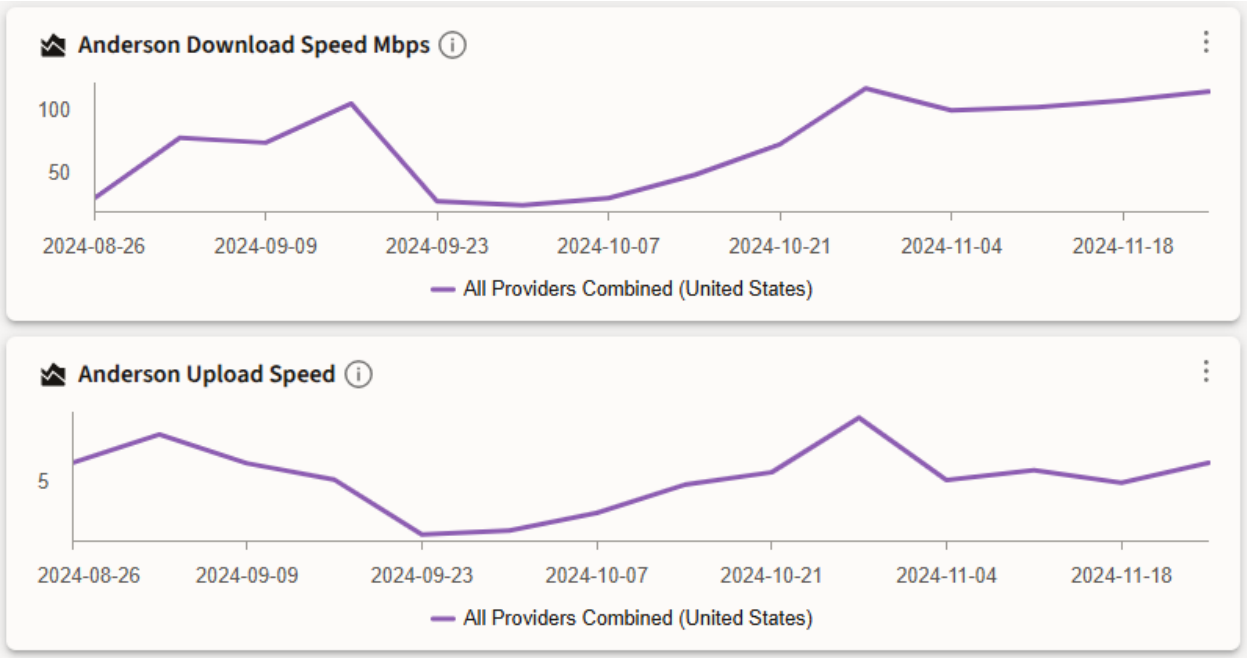


Figure 75. Beaufort wireless download and upload speeds over time

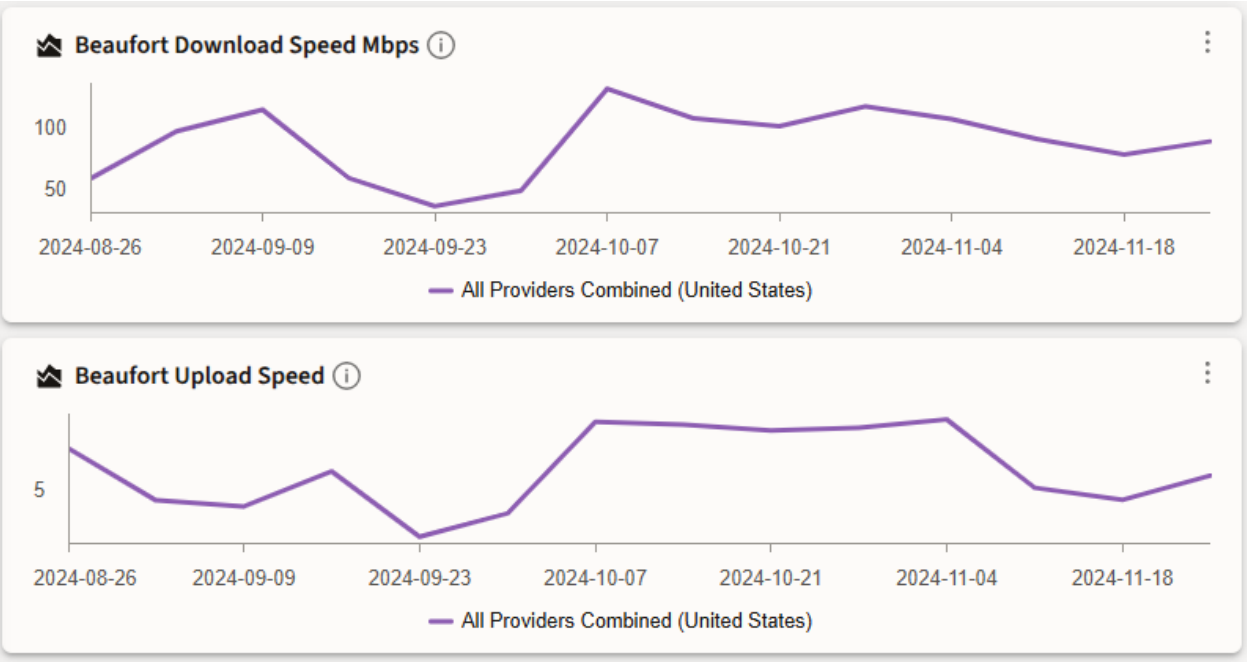


Figure 76. Berkeley wireless download and upload speeds over time

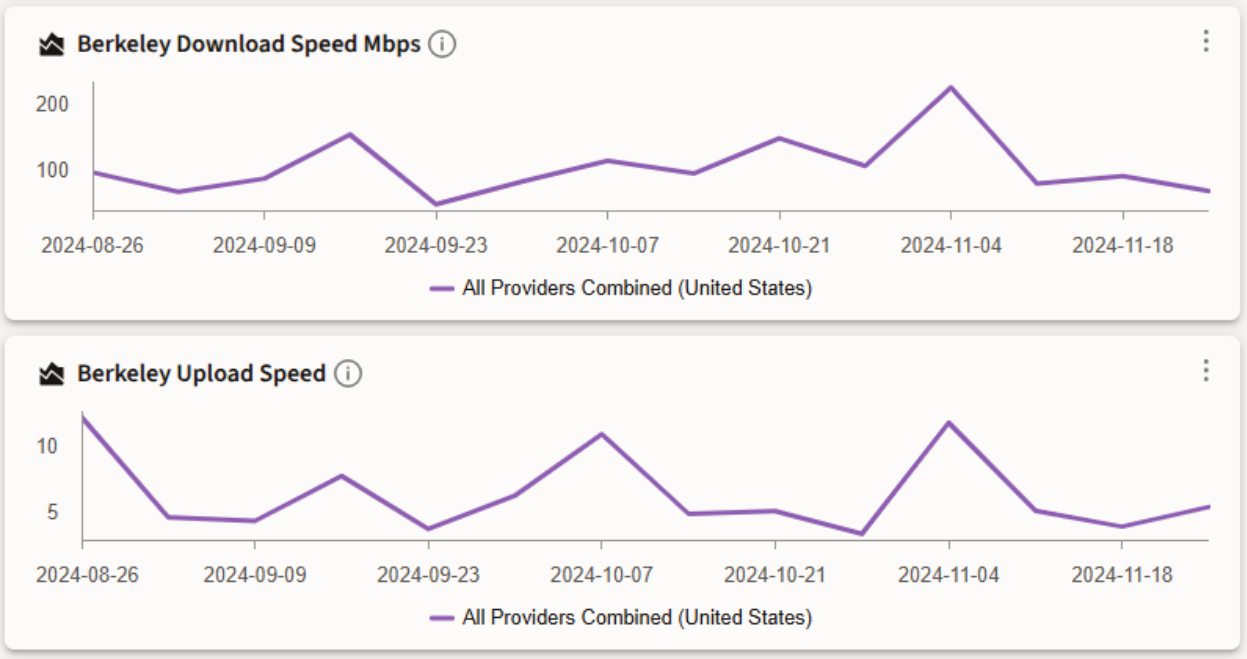


Figure 77. Cherokee wireless download and upload speeds over time

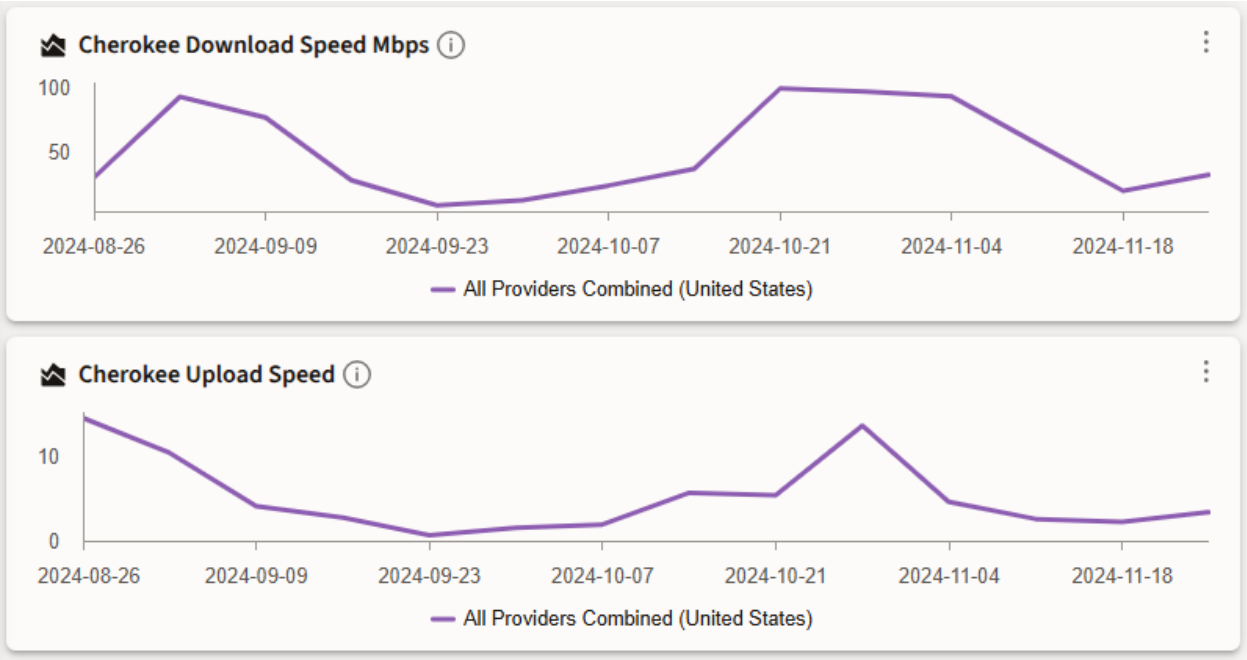


Figure 78. Chester wireless download and upload speeds over time

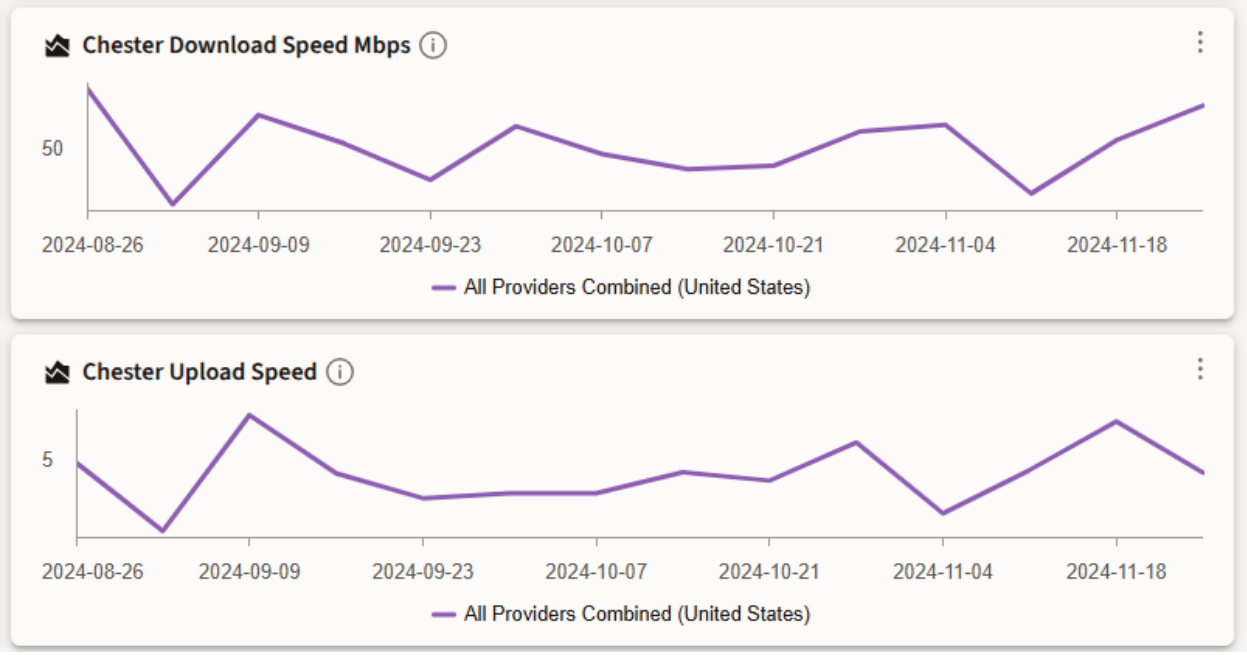


Figure 79. Darlington wireless download and upload speeds over time

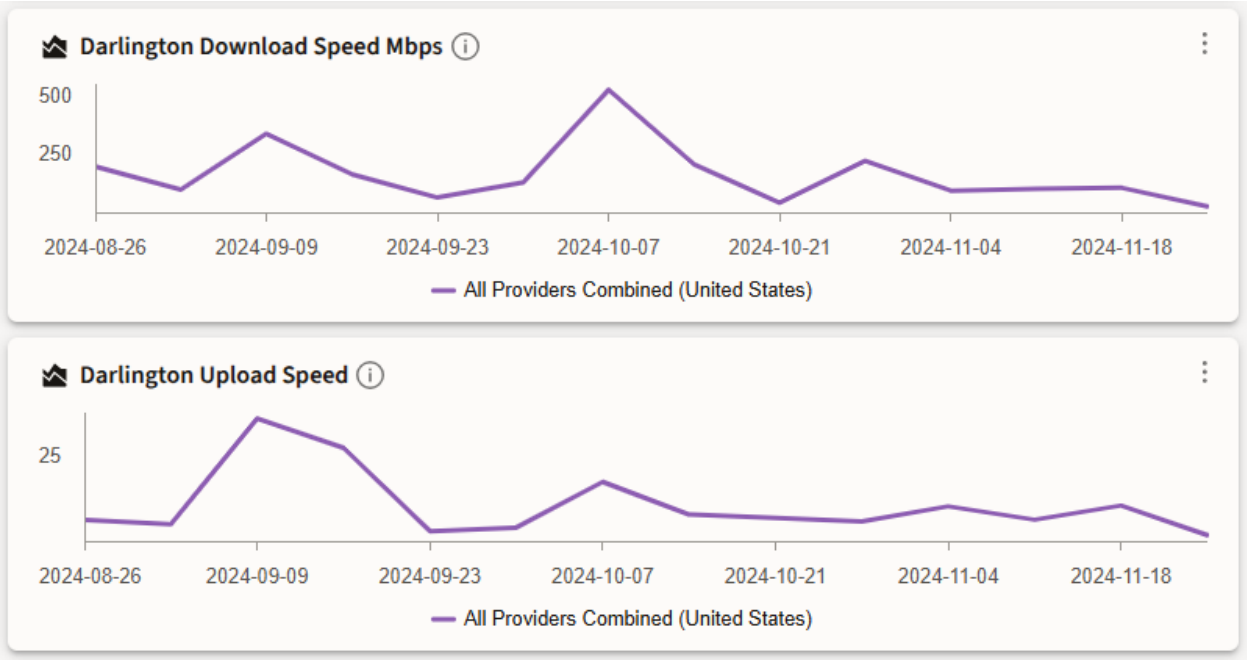


Figure 80. Greenville wireless download and upload speeds over time

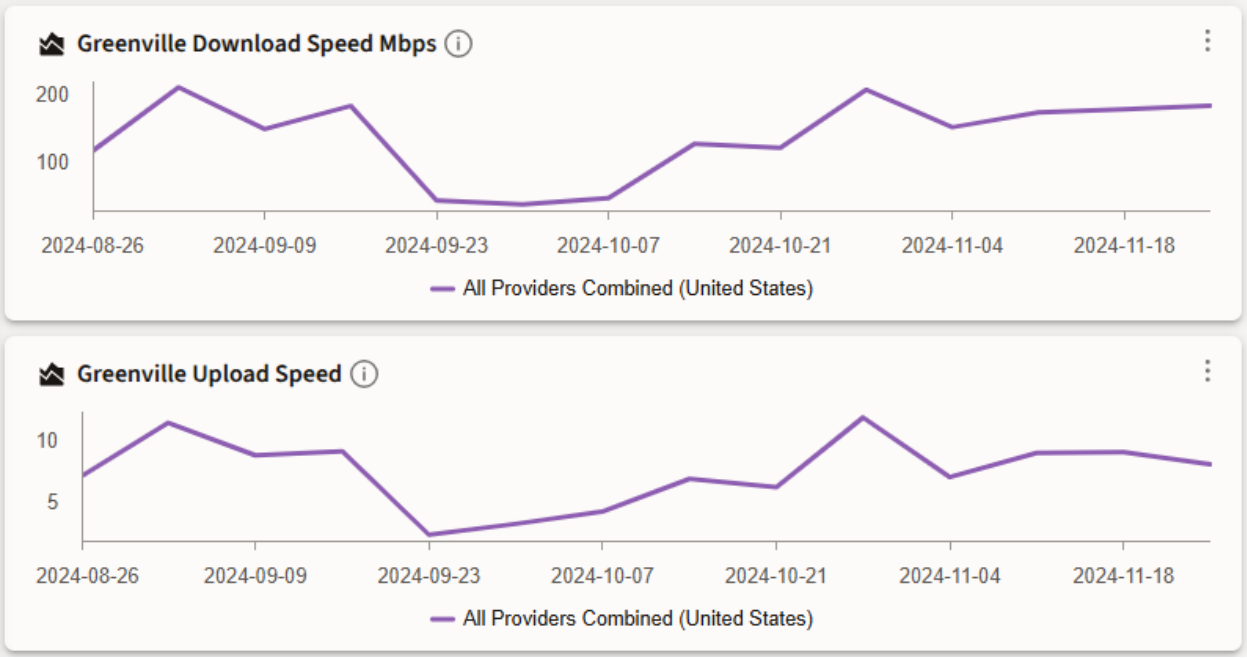


Figure 81. Greenwood wireless download and upload speeds over time

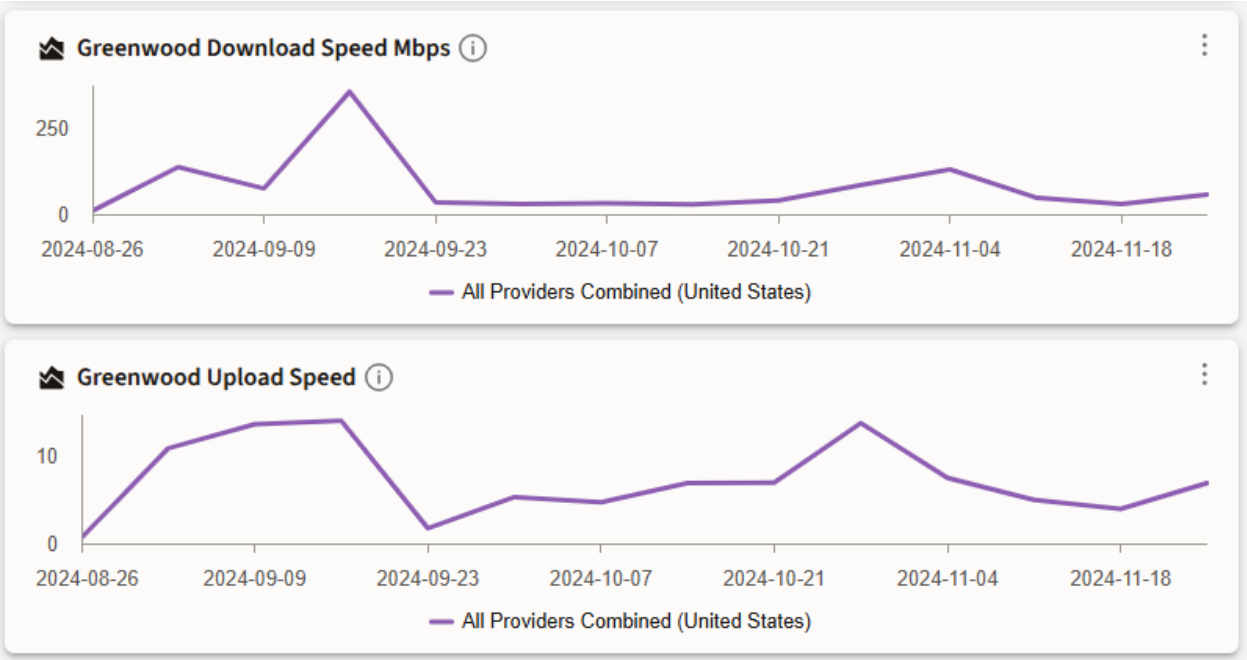


Figure 82. Jasper wireless download and upload speeds over time

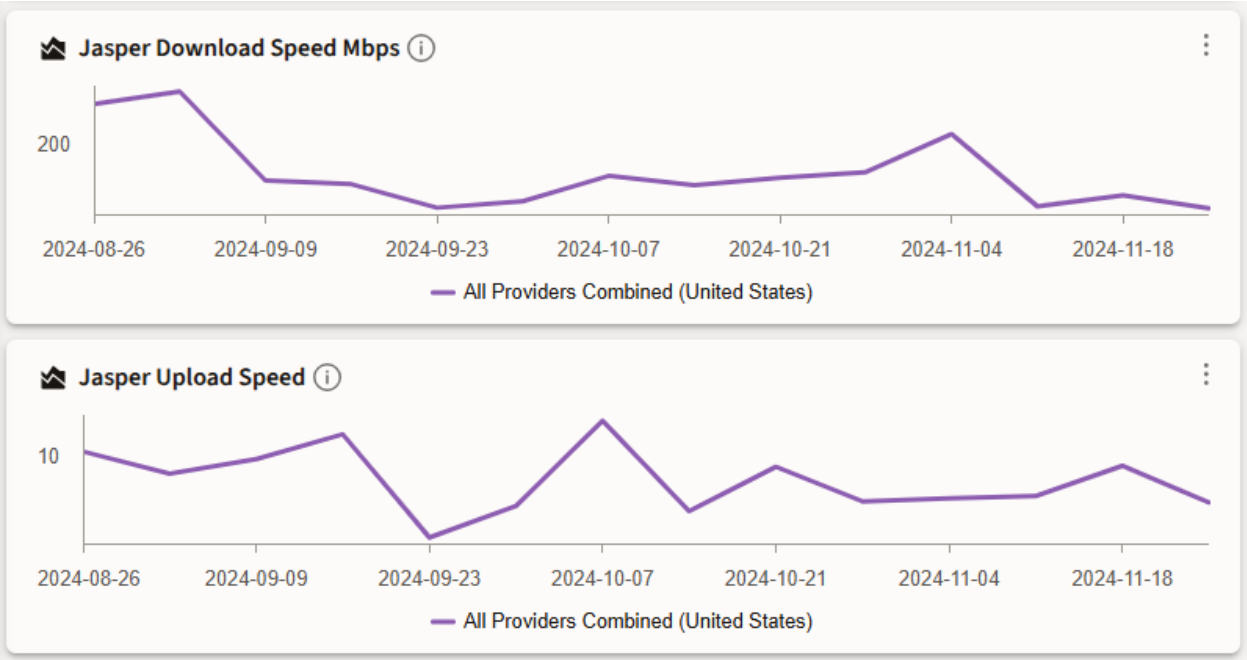


Figure 83. Lancaster wireless download and upload speeds over time

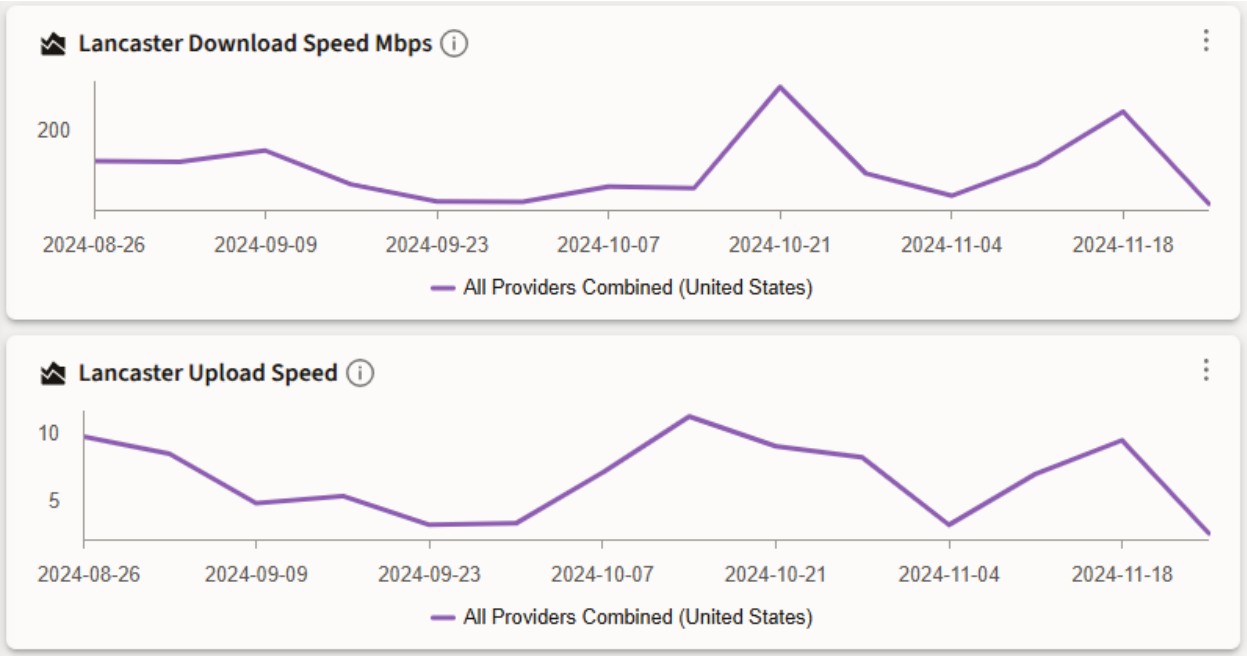


Figure 84. Laurens wireless download and upload speeds over time

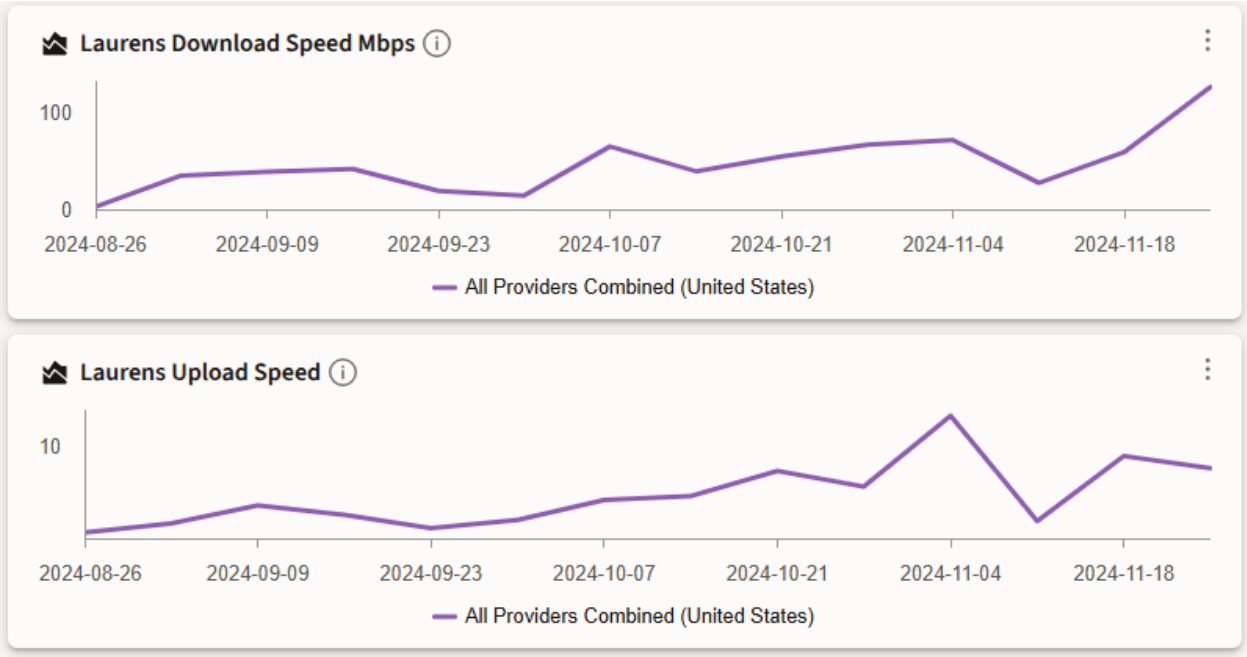


Figure 85. Lee wireless download and upload speeds over time

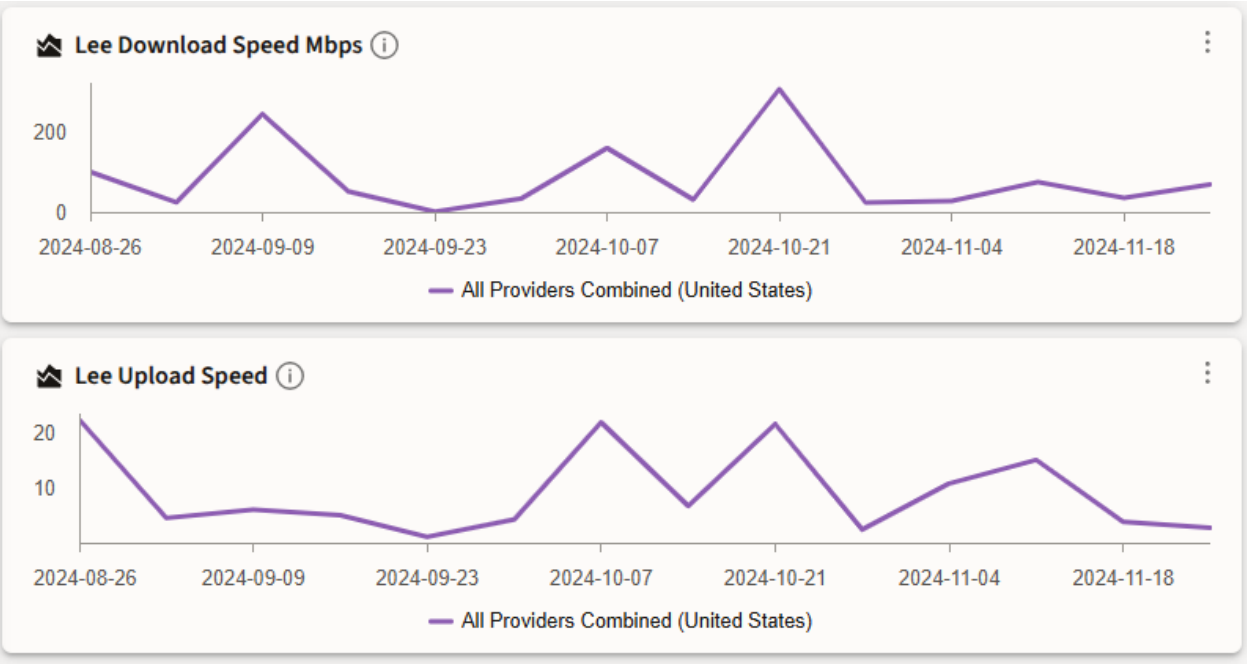


Figure 86. Lexington wireless download and upload speeds over time

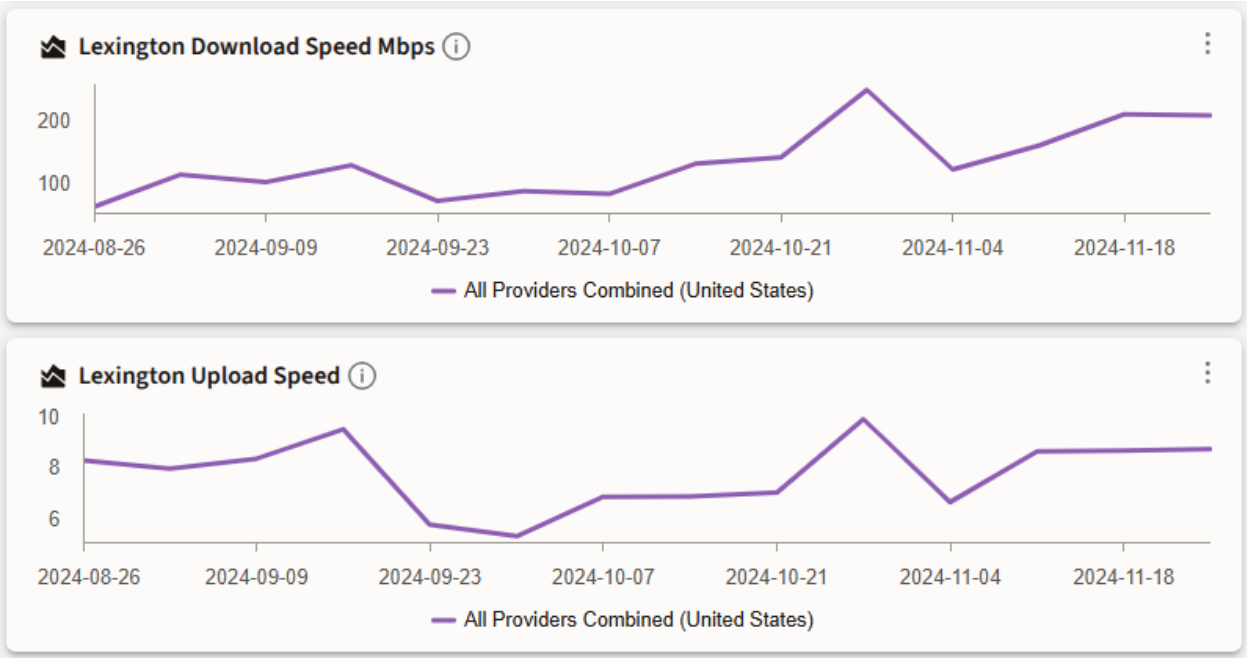


Figure 87. Oconee wireless download and upload speeds over time

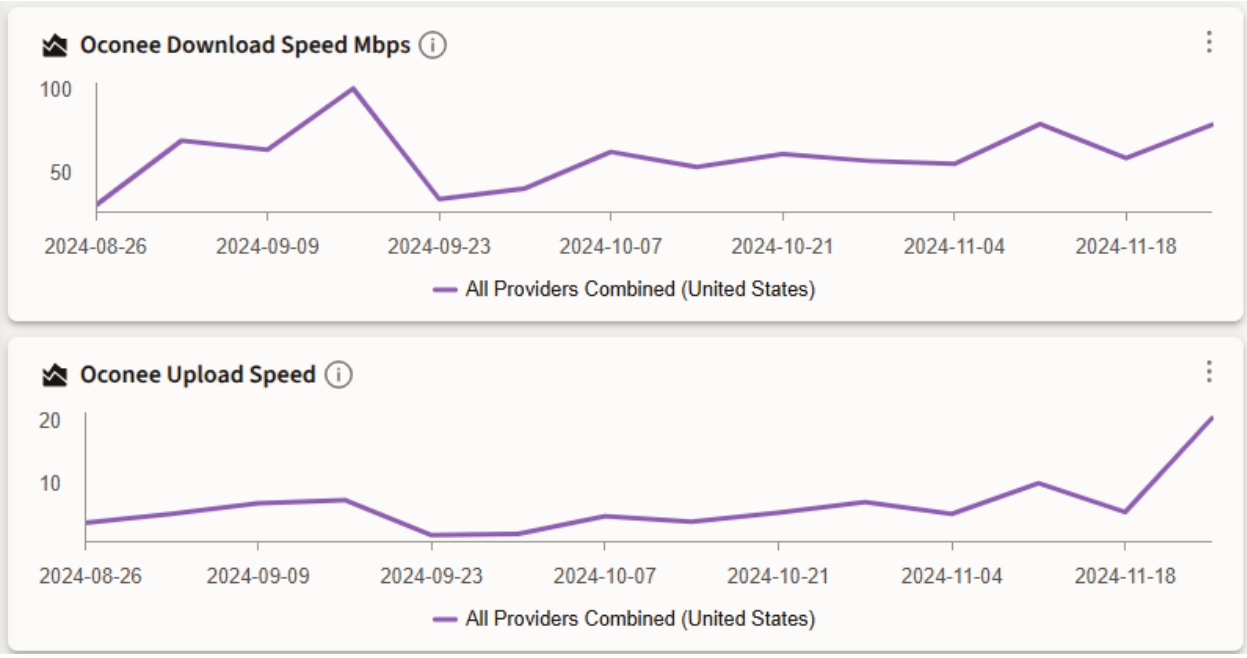


Figure 88. Pickens wireless download and upload speeds over time

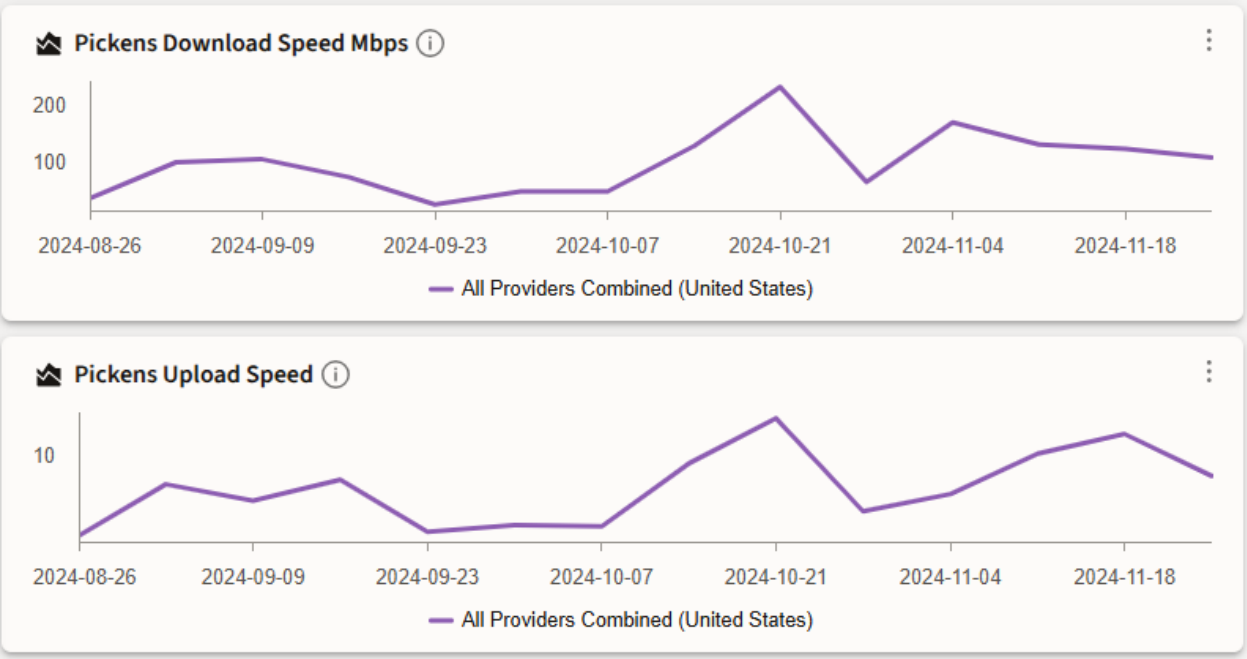


Figure 89. Richland wireless download and upload speeds over time

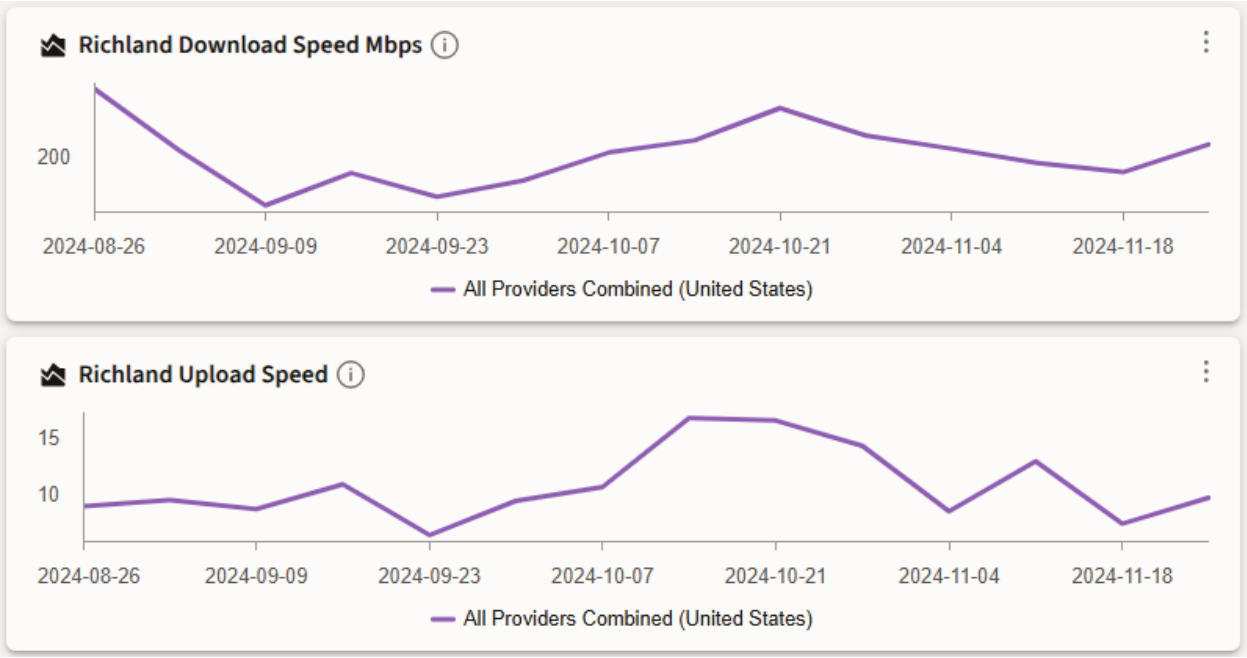


Figure 90. Saluda wireless download and upload speeds over time

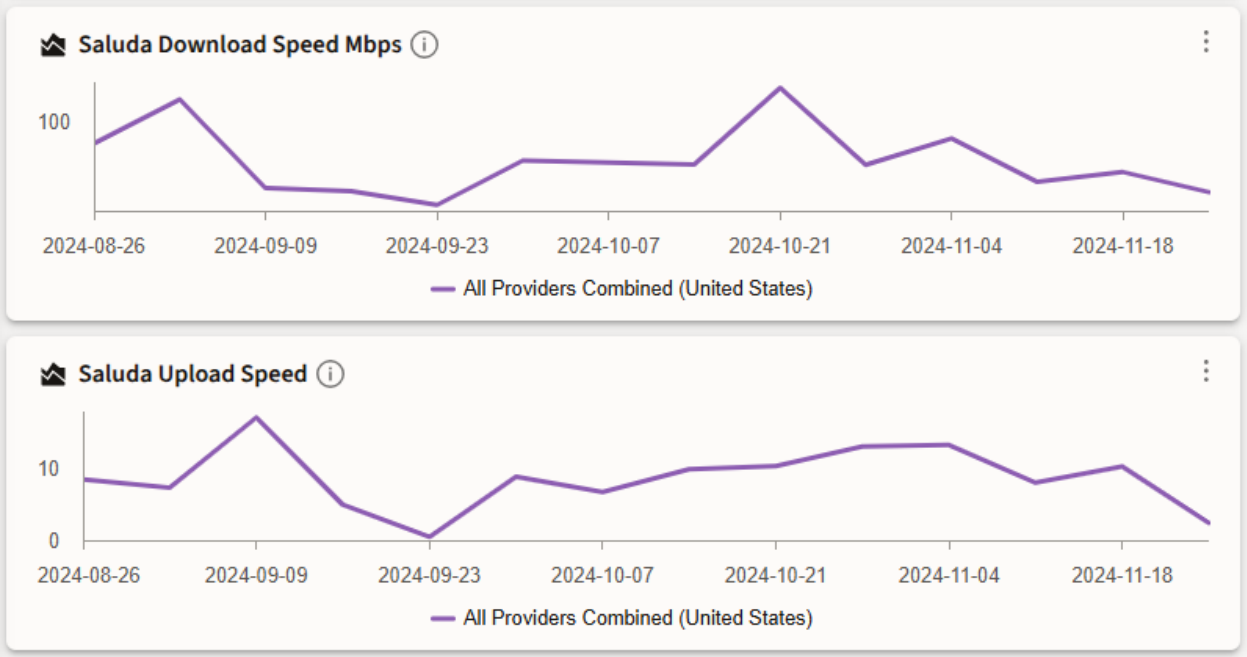


Figure 91. Spartanburg wireless download and upload speeds over time

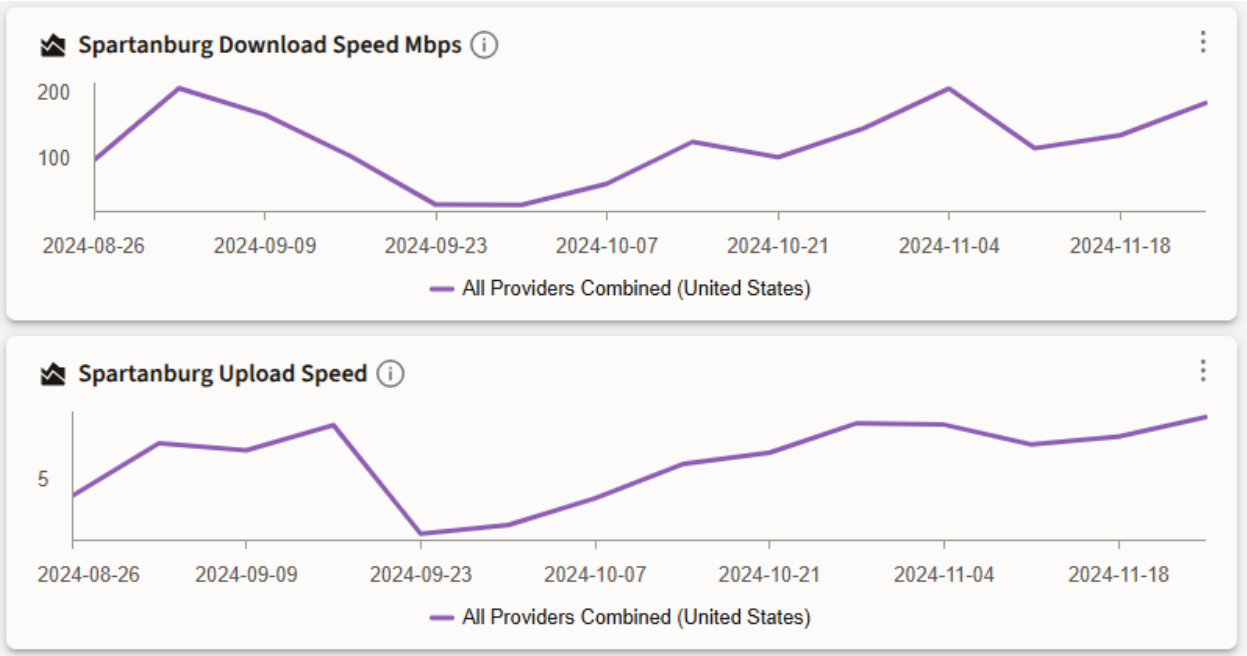


Figure 92. Union wireless download and upload speeds over time

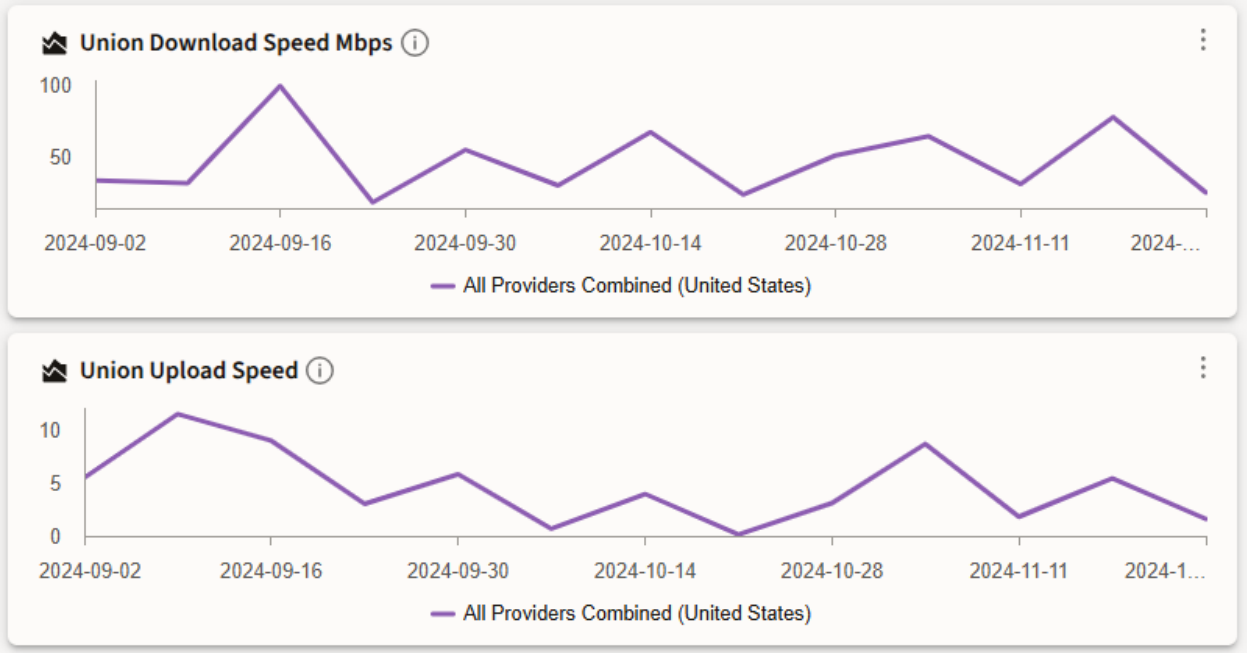


Figure 93. Williamsburg wireless download and upload speeds over time

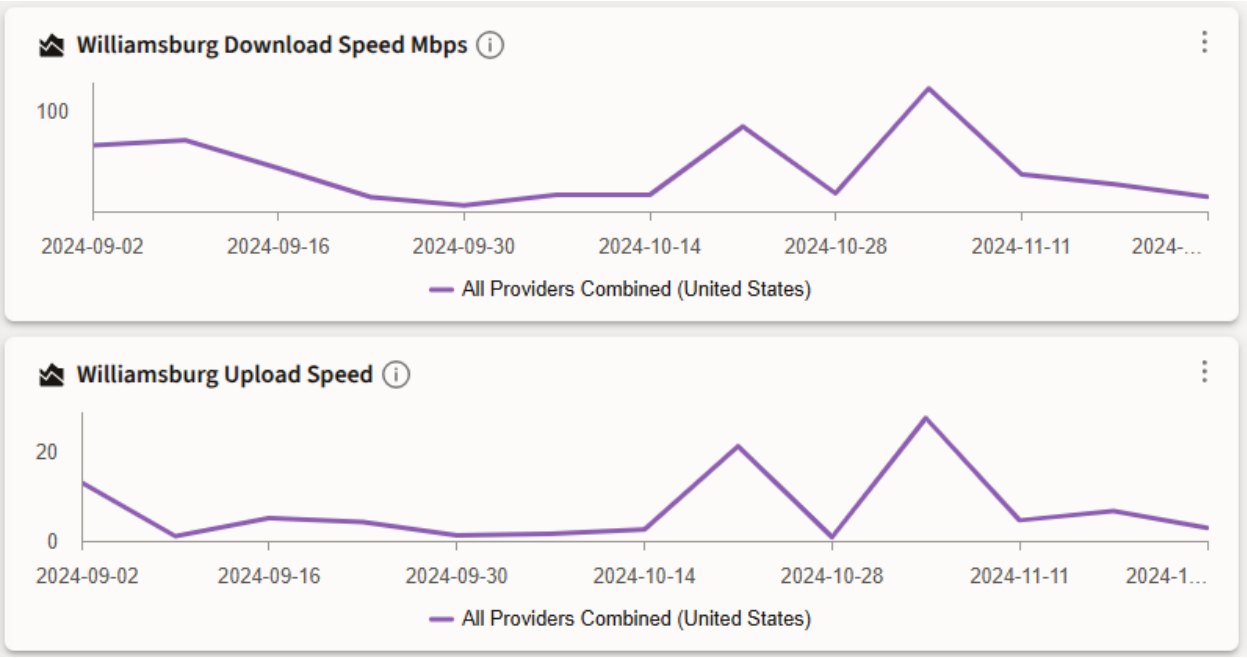
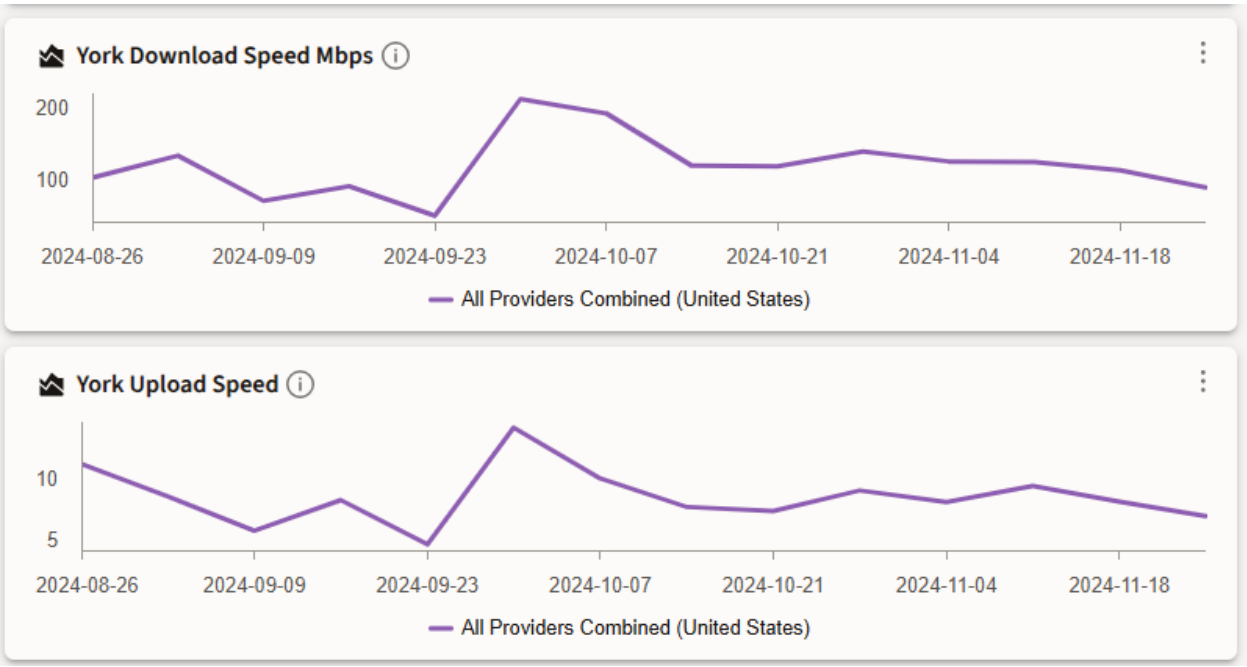


Figure 94. York wireless download and upload speeds over time



Fixed Download Speeds

Figure 95. Abbeville fixed internet speeds over time

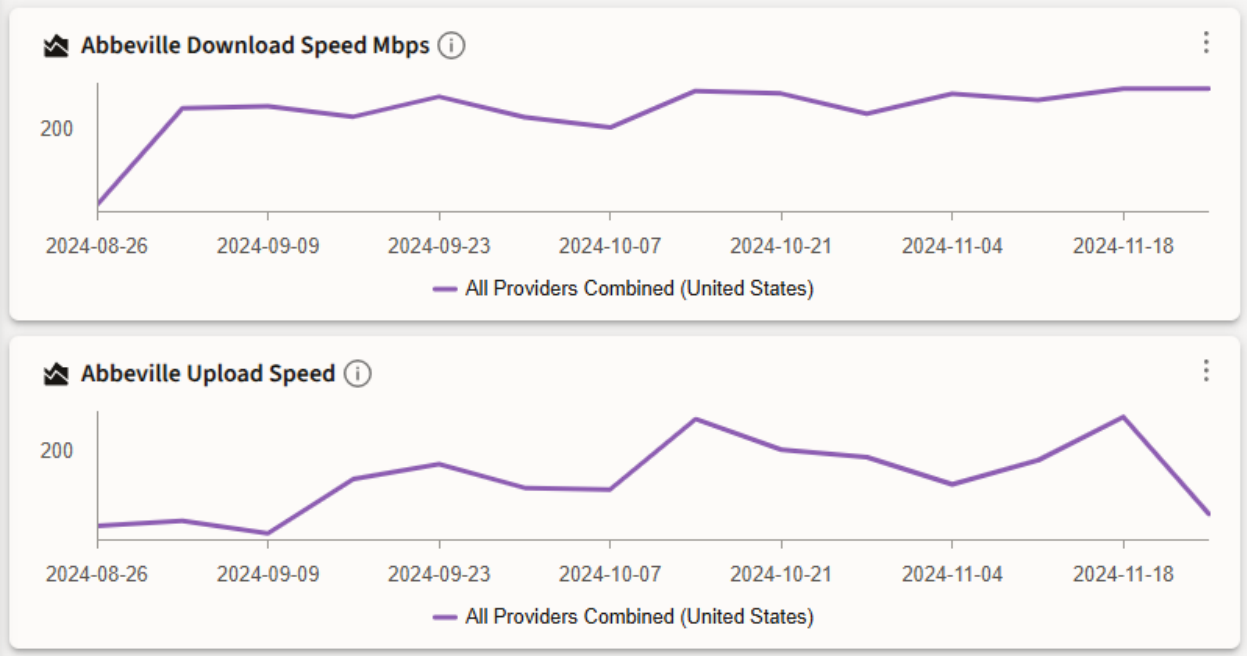


Figure 96. Aiken fixed internet speeds over time

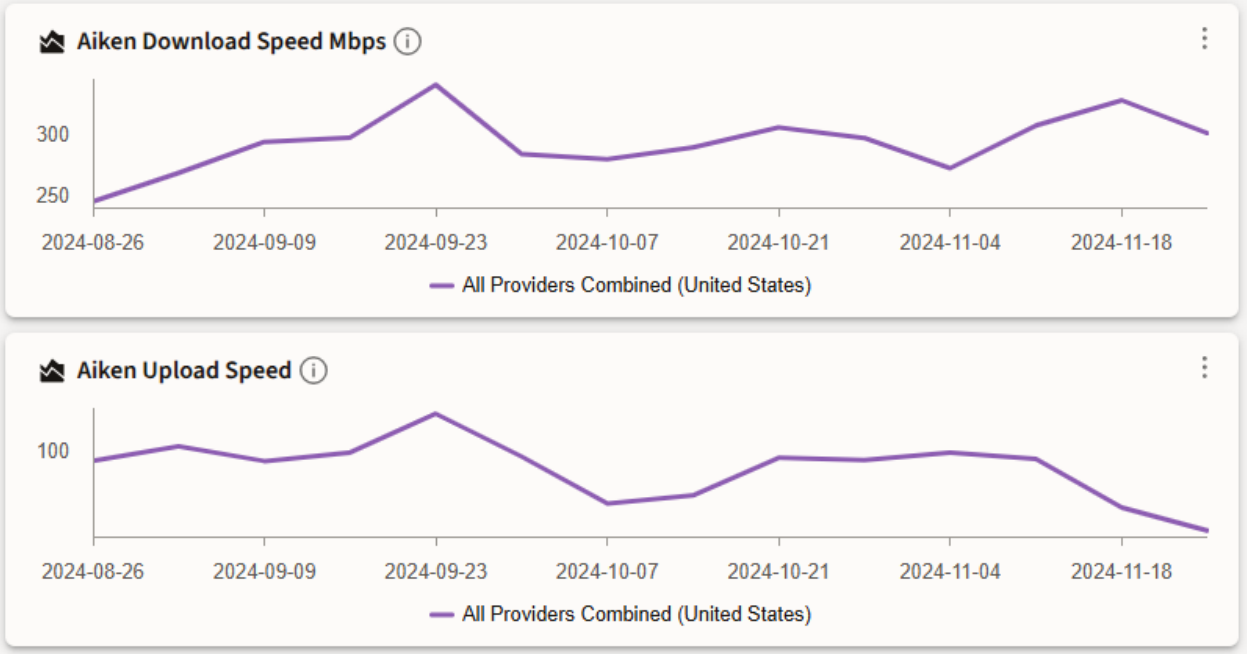


Figure 97. Allendale fixed internet speeds over time

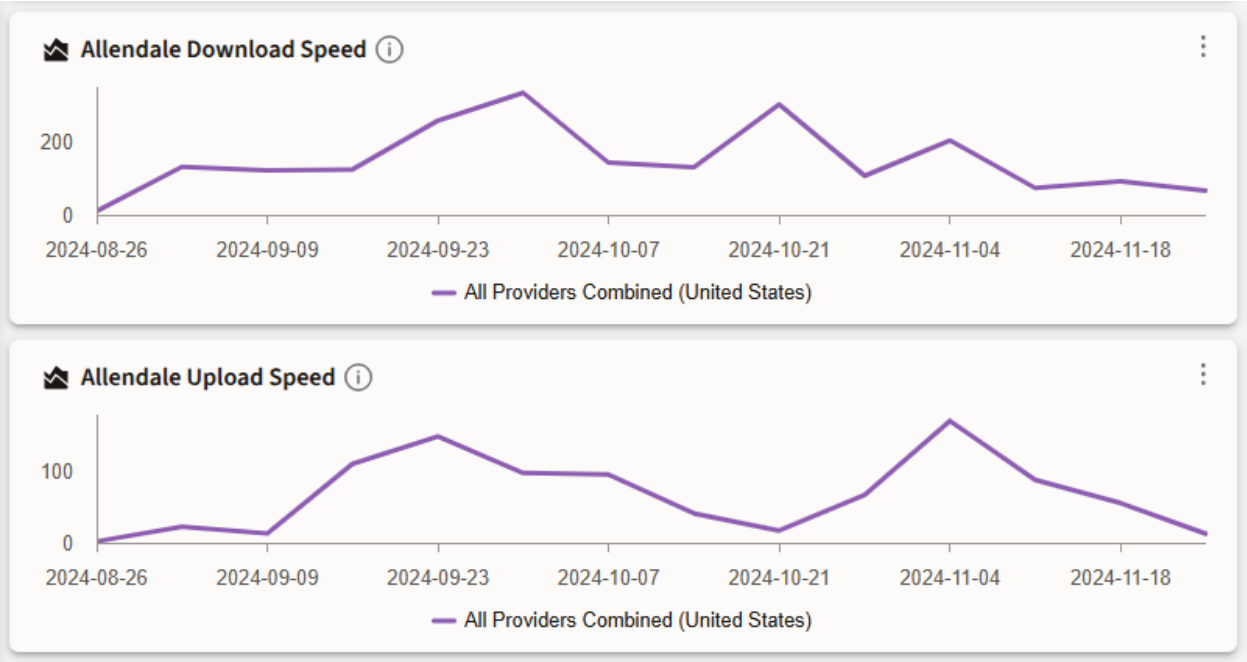


Figure 98. Anderson fixed internet speeds over time

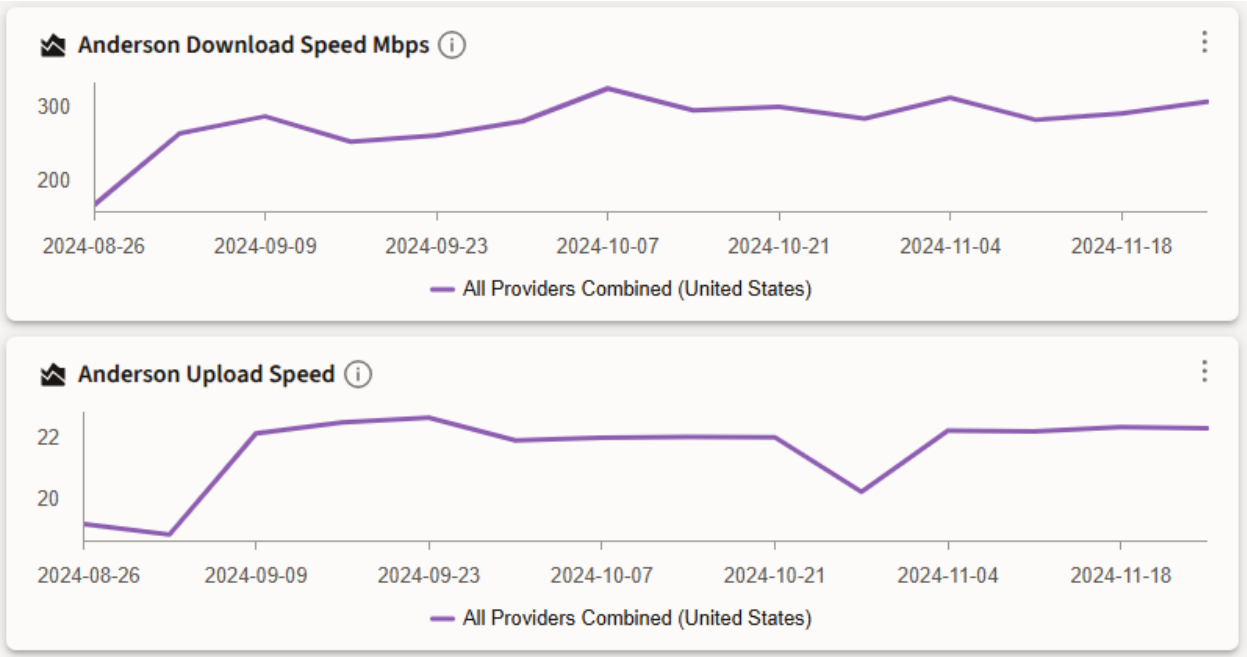


Figure 99. Bamberg fixed internet speeds over time

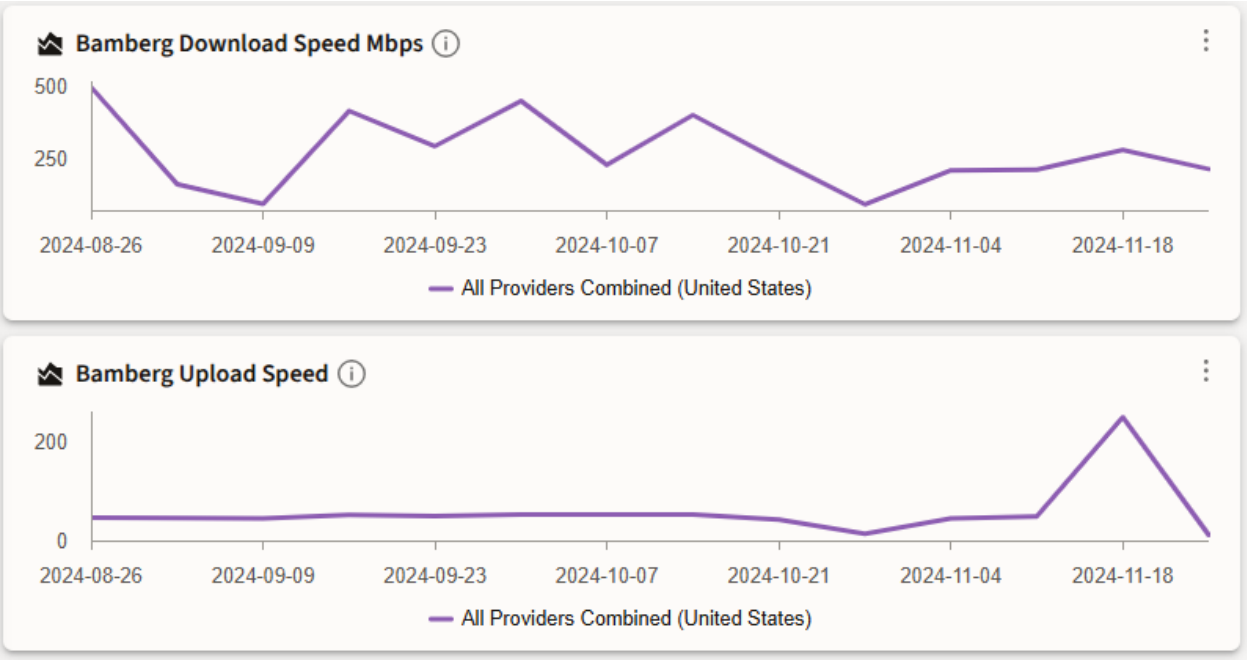


Figure 100. Barnwell fixed internet speeds over time

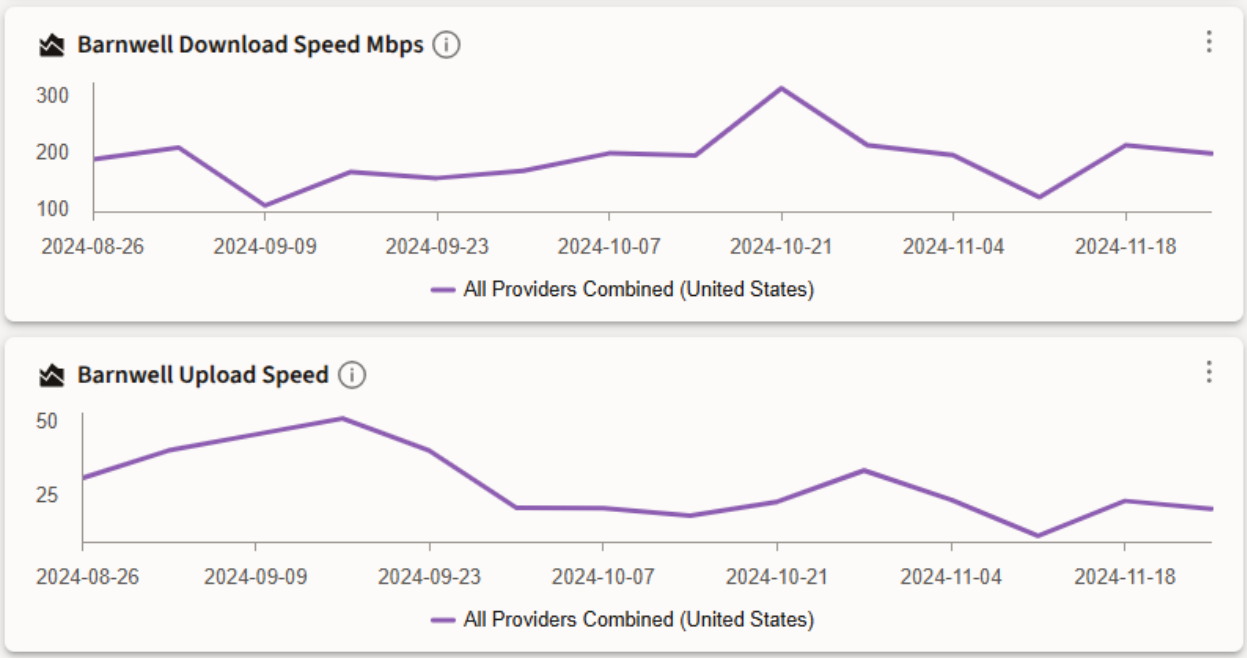


Figure 101. Berkeley fixed internet speeds over time

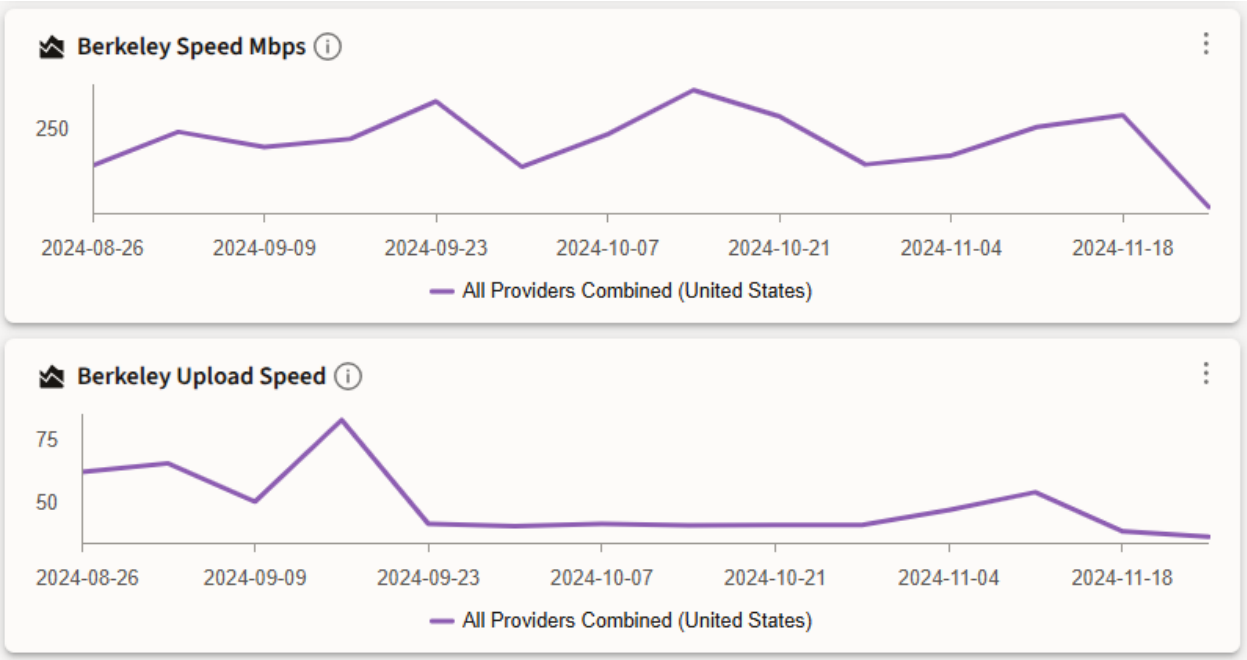


Figure 102. Calhoun fixed internet speeds over time

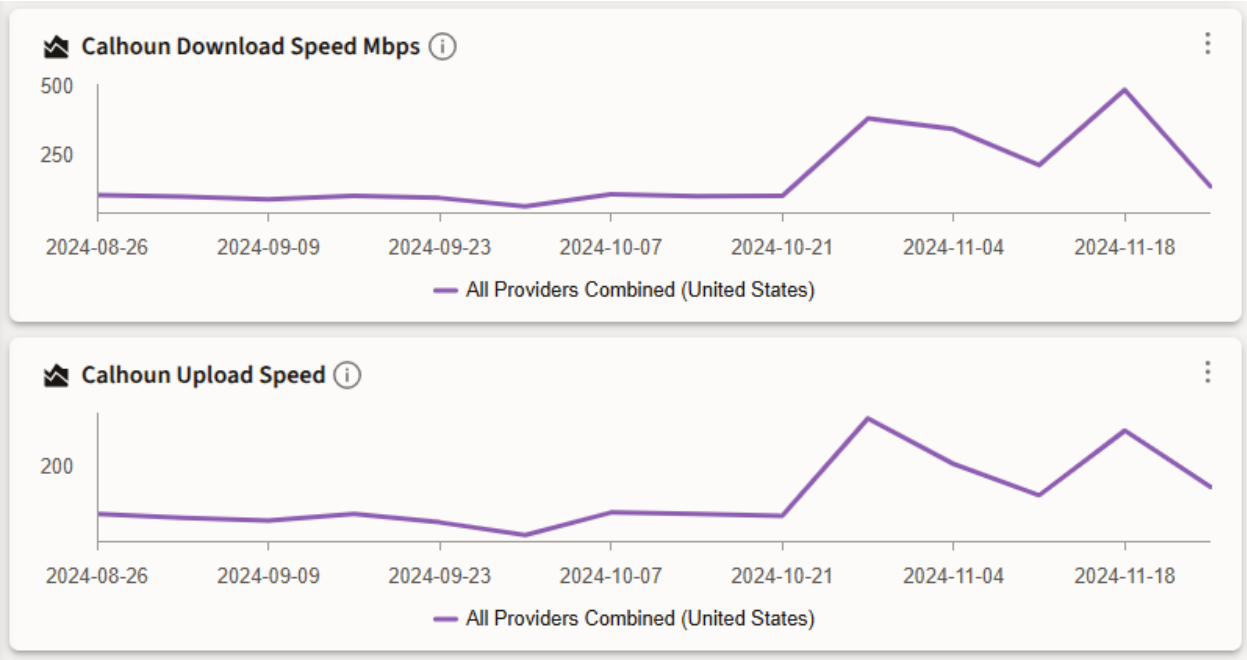


Figure 103. Charleston fixed internet speeds over time

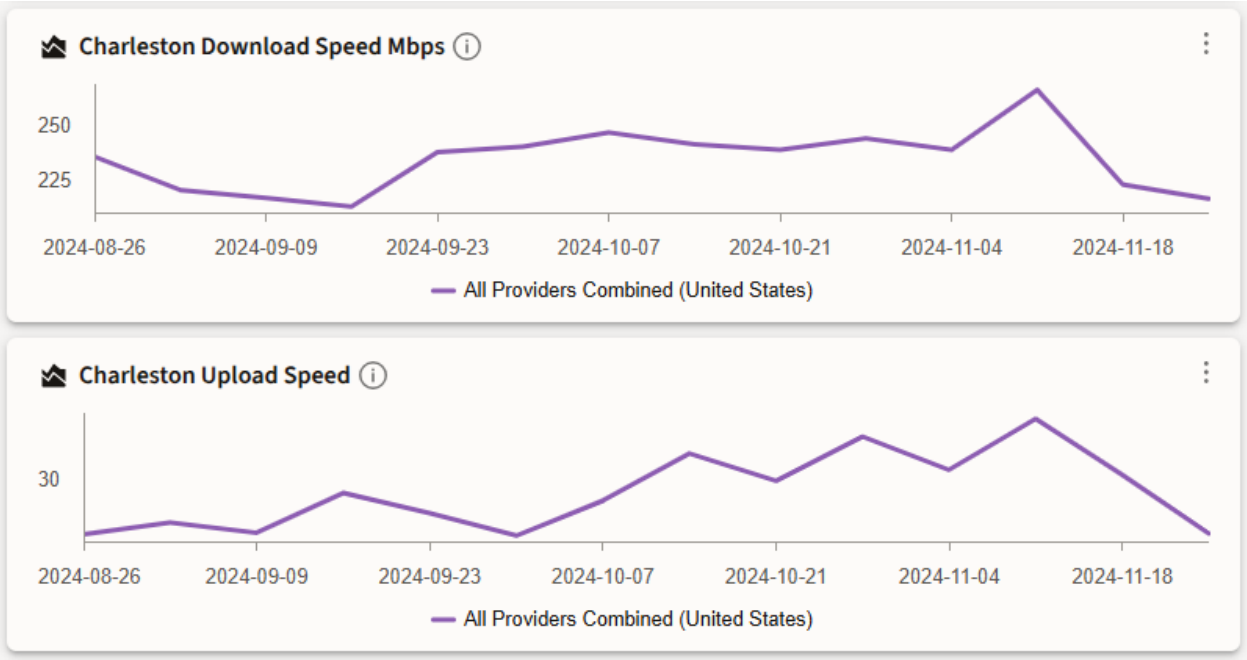


Figure 104. Cherokee fixed internet speeds over time

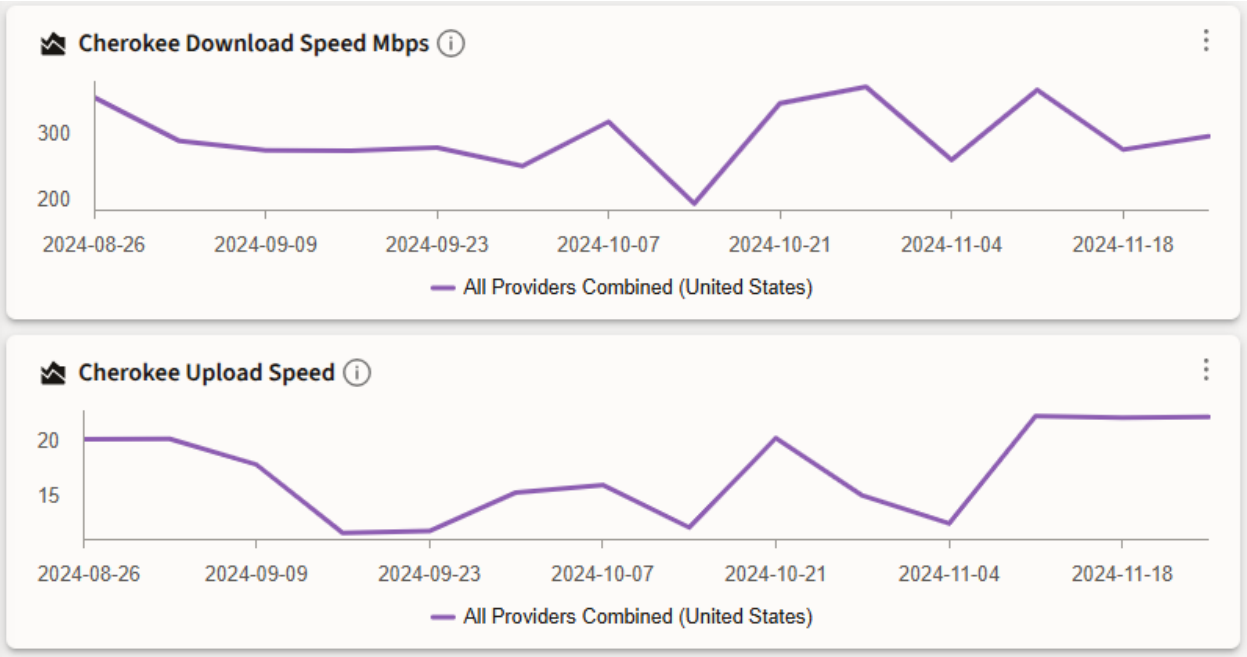


Figure 105. Chester fixed internet speeds over time

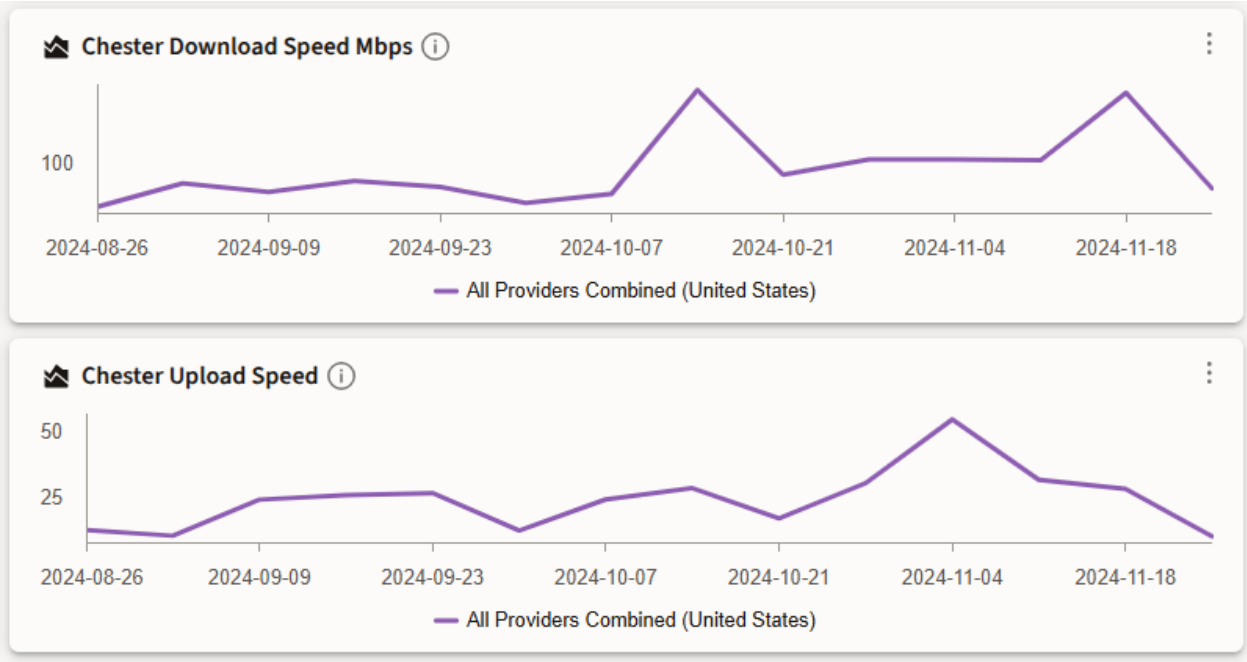


Figure 106. Chesterfield fixed internet speeds over time

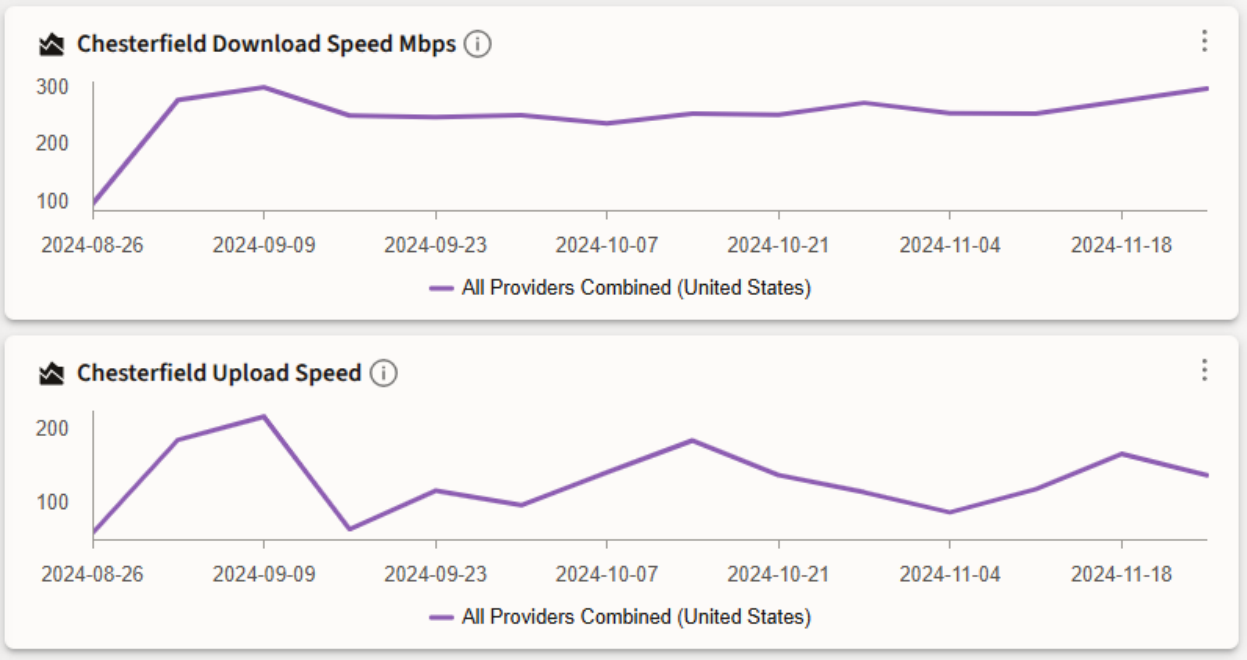


Figure 107. Darlington fixed internet speeds over time

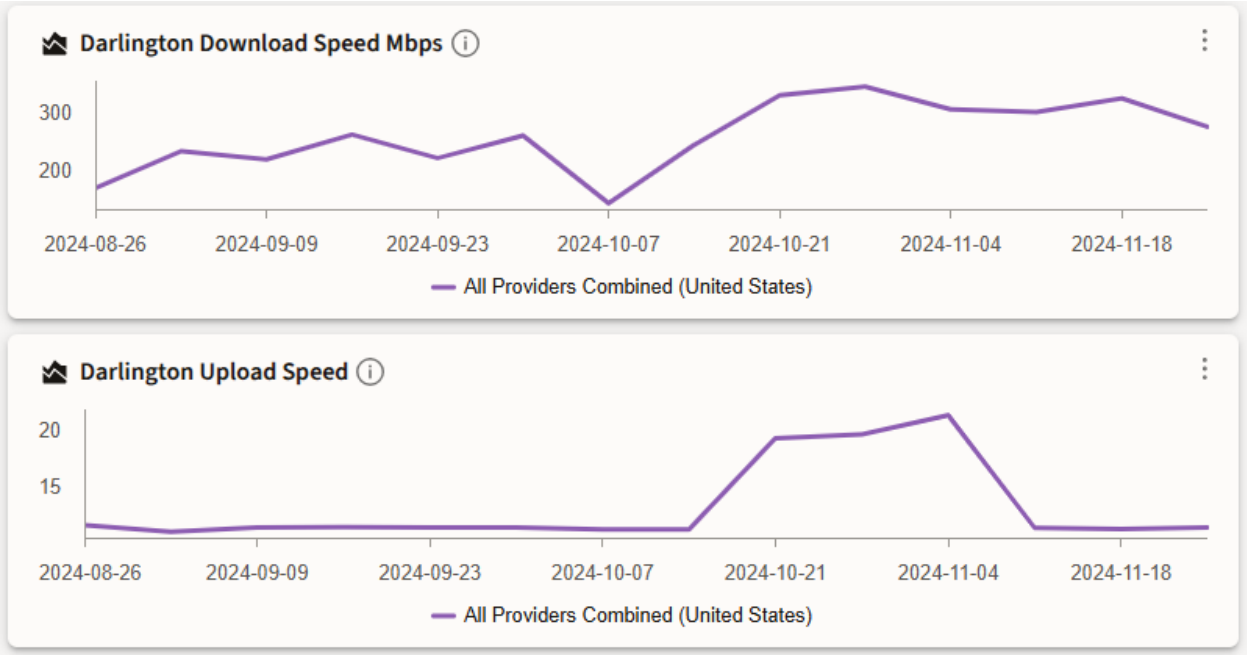


Figure 108. Dillon fixed internet speeds over time

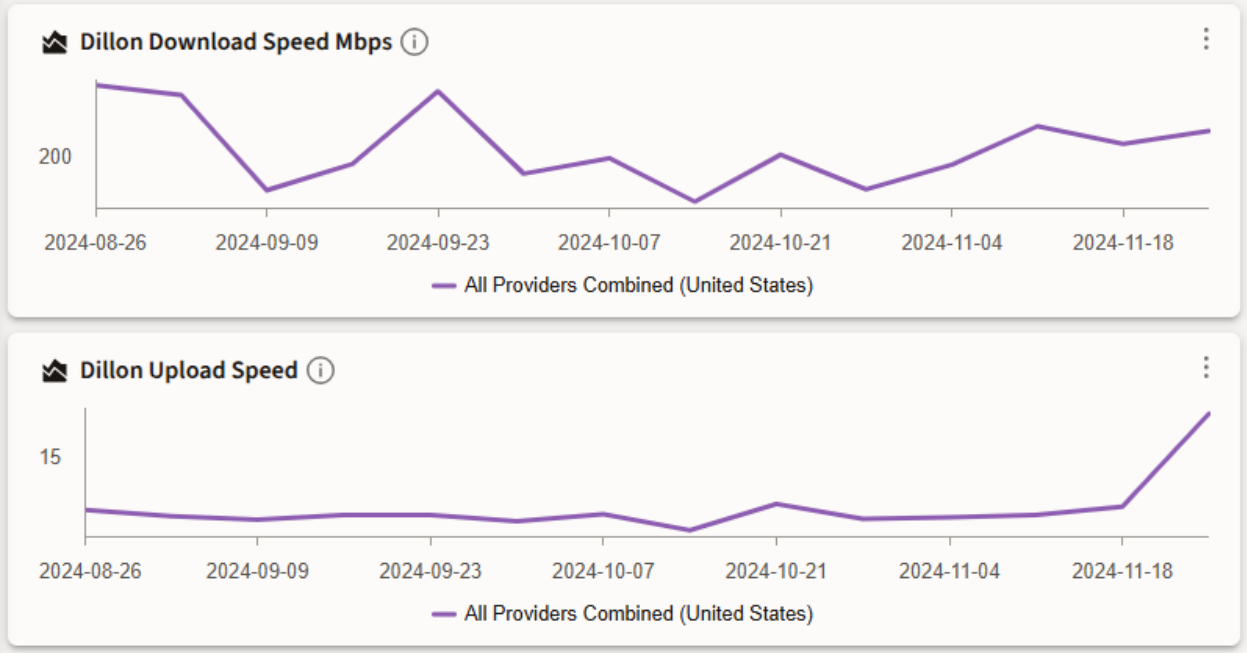


Figure 109. Dorchester fixed internet speeds over time

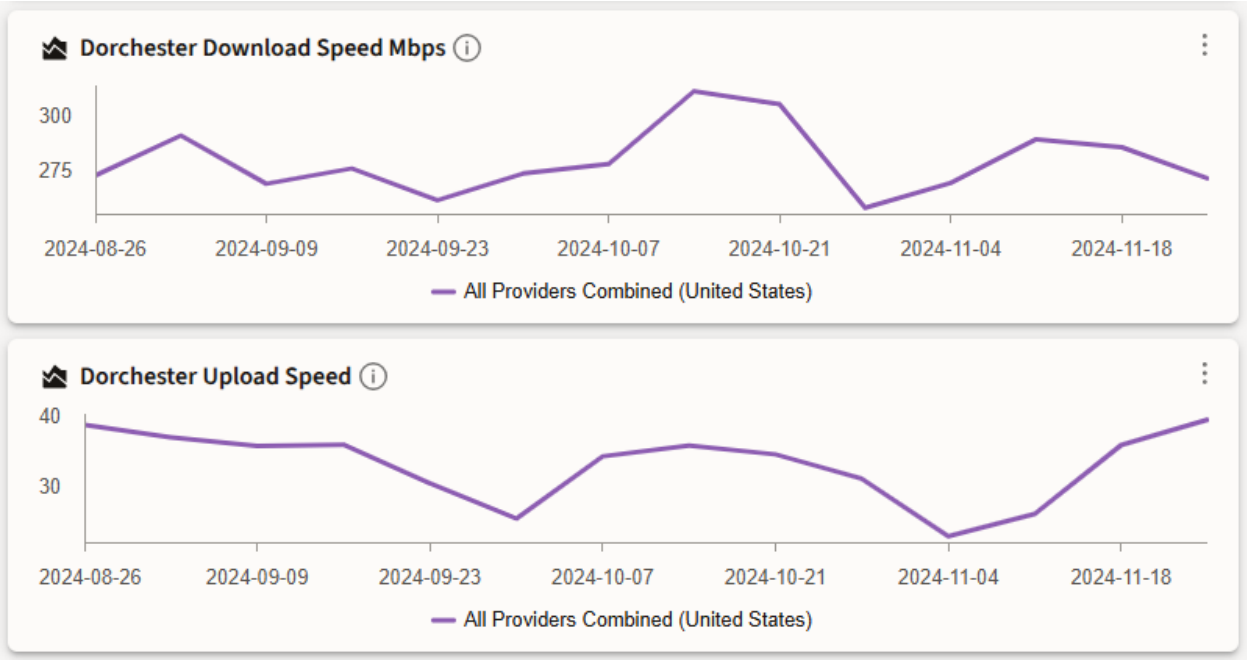


Figure 110. Edgefield fixed internet speeds over time

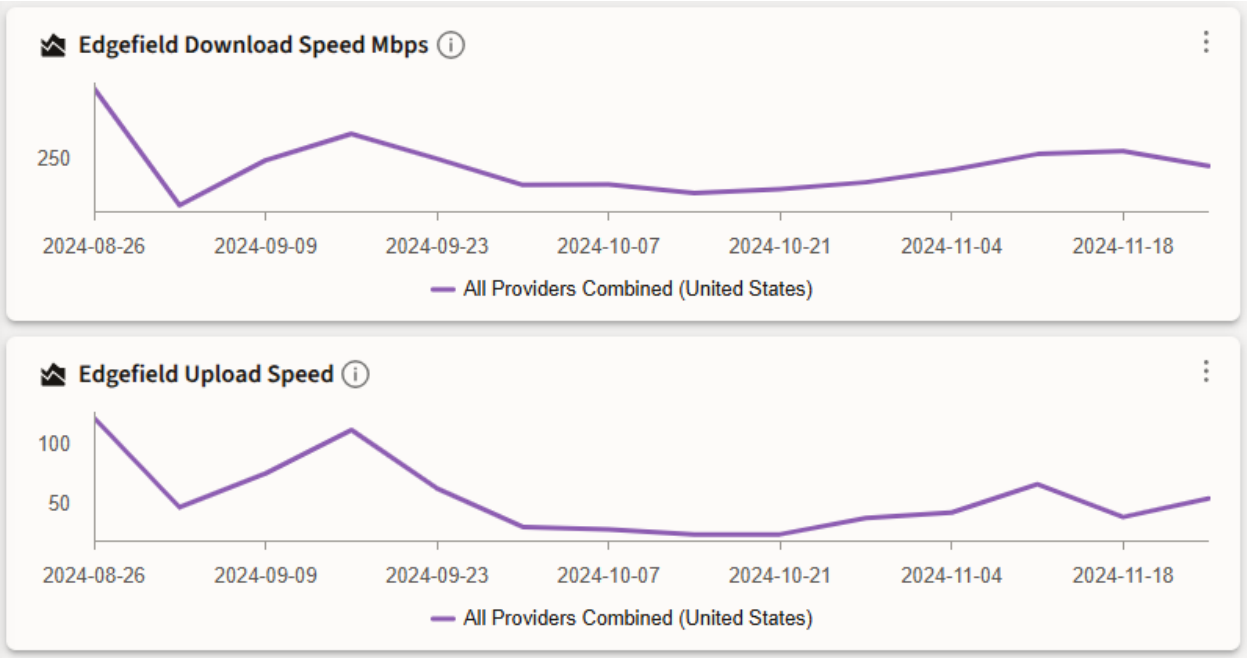


Figure 111. Greenwood fixed internet speeds over time

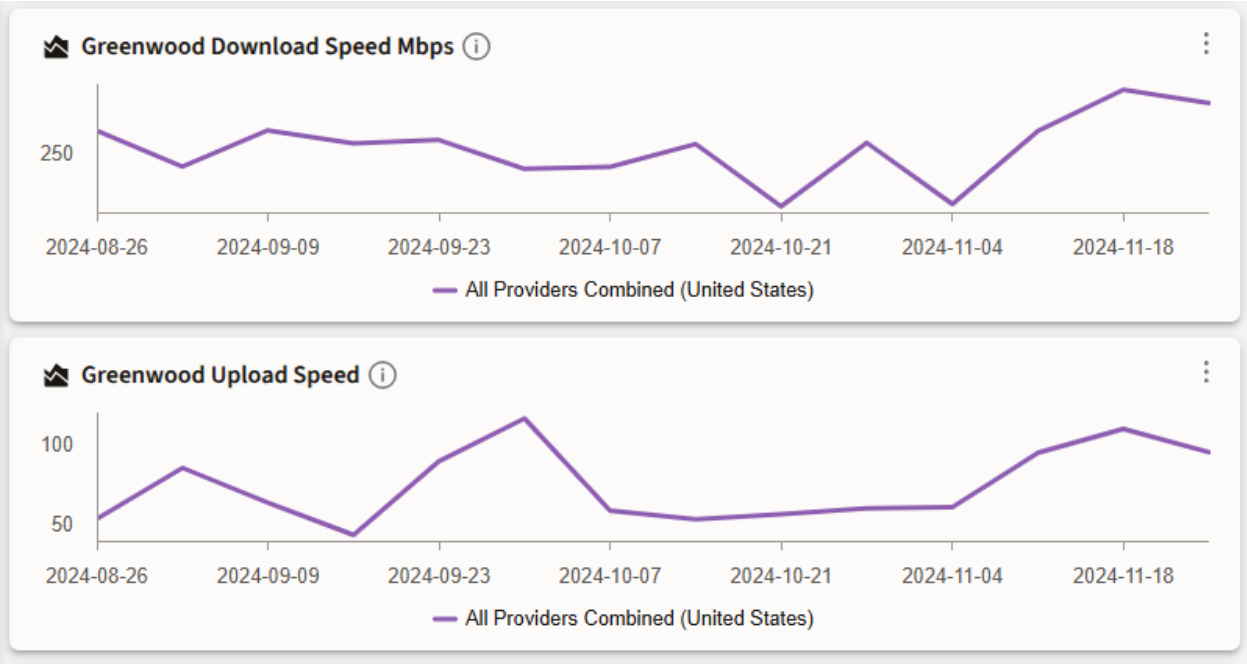


Figure 112. Hampton fixed internet speeds over time

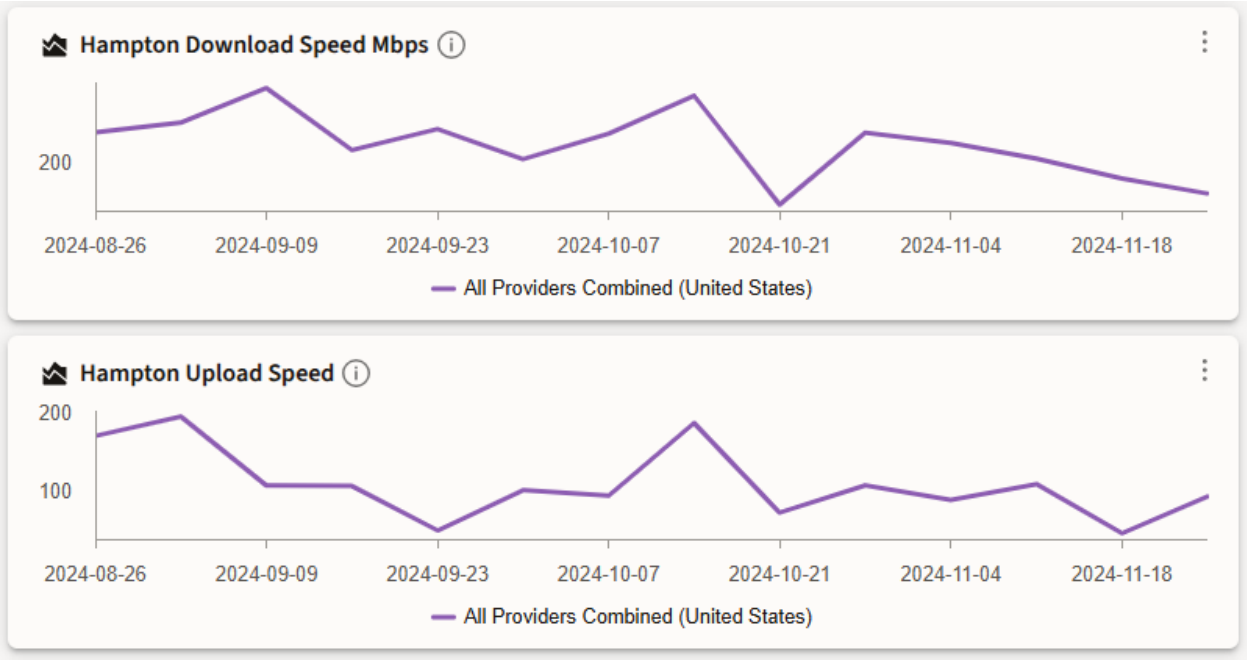


Figure 1133. Horry fixed internet speeds over time

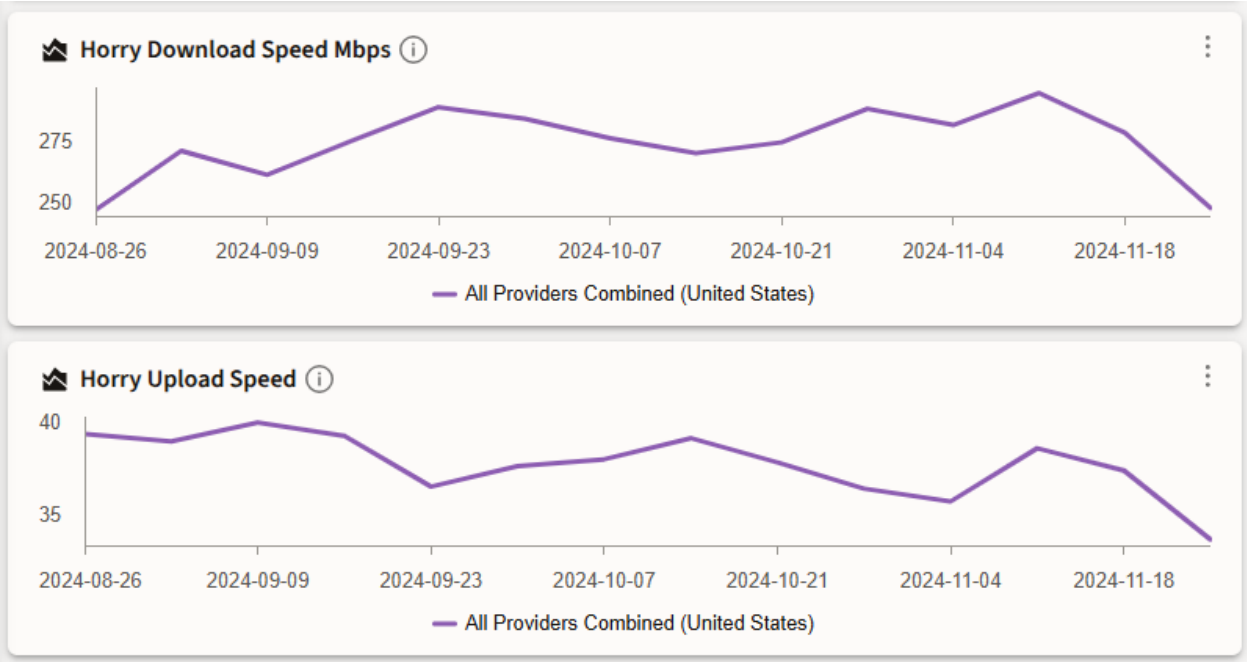


Figure 114. Kershaw fixed internet speeds over time

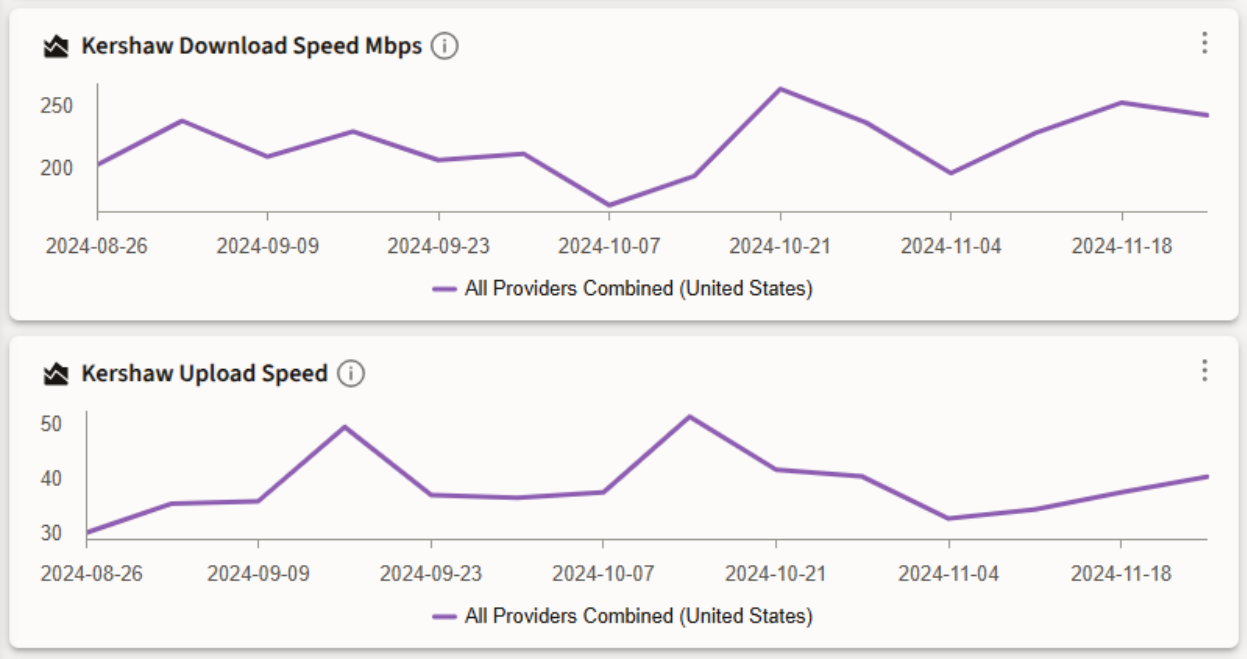


Figure 115. Lancaster fixed internet speeds over time

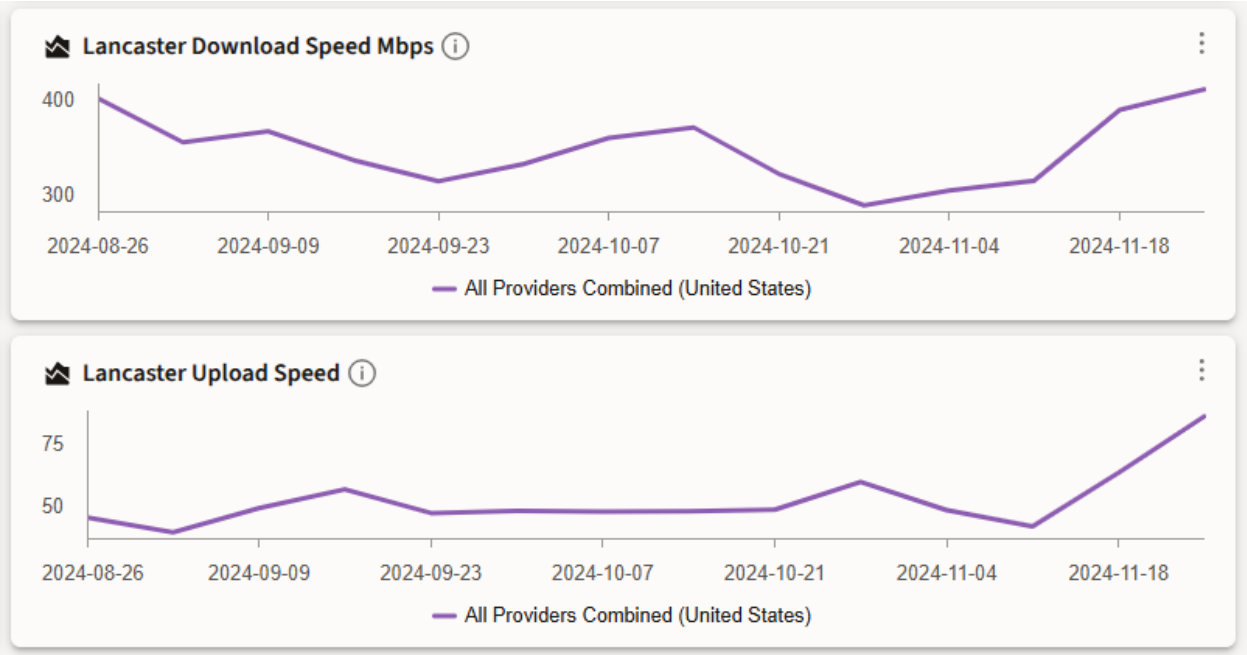


Figure 116. Laurens fixed internet speeds over time

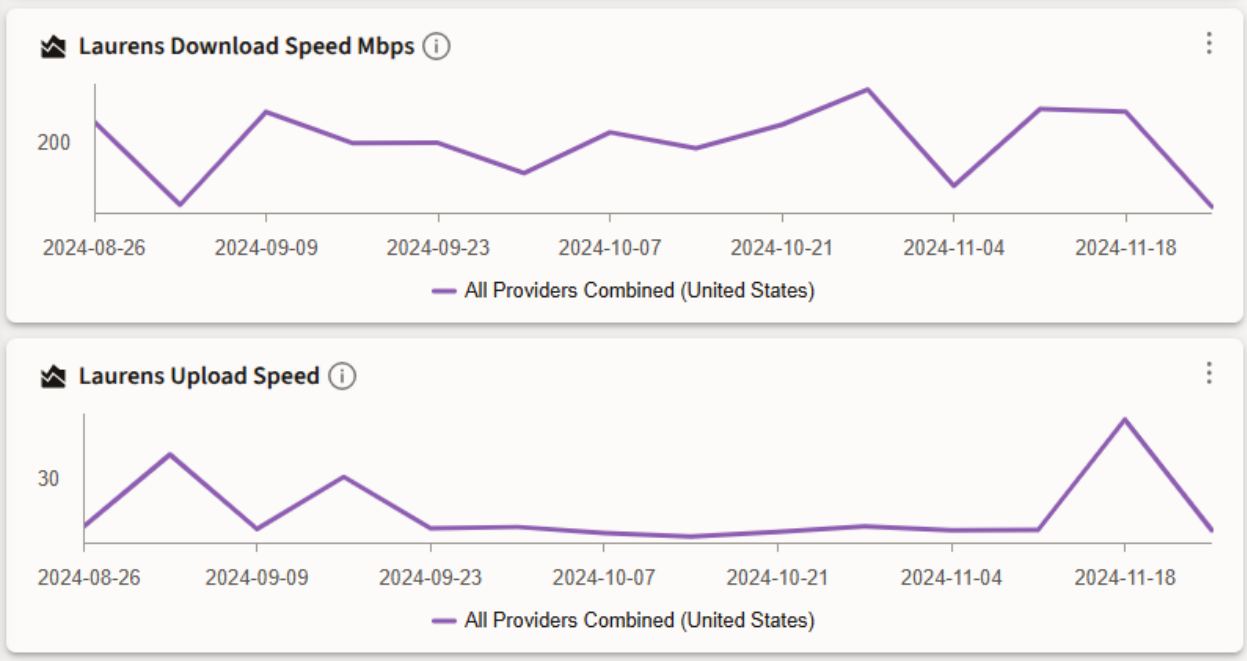


Figure 117. Lee fixed internet speeds over time

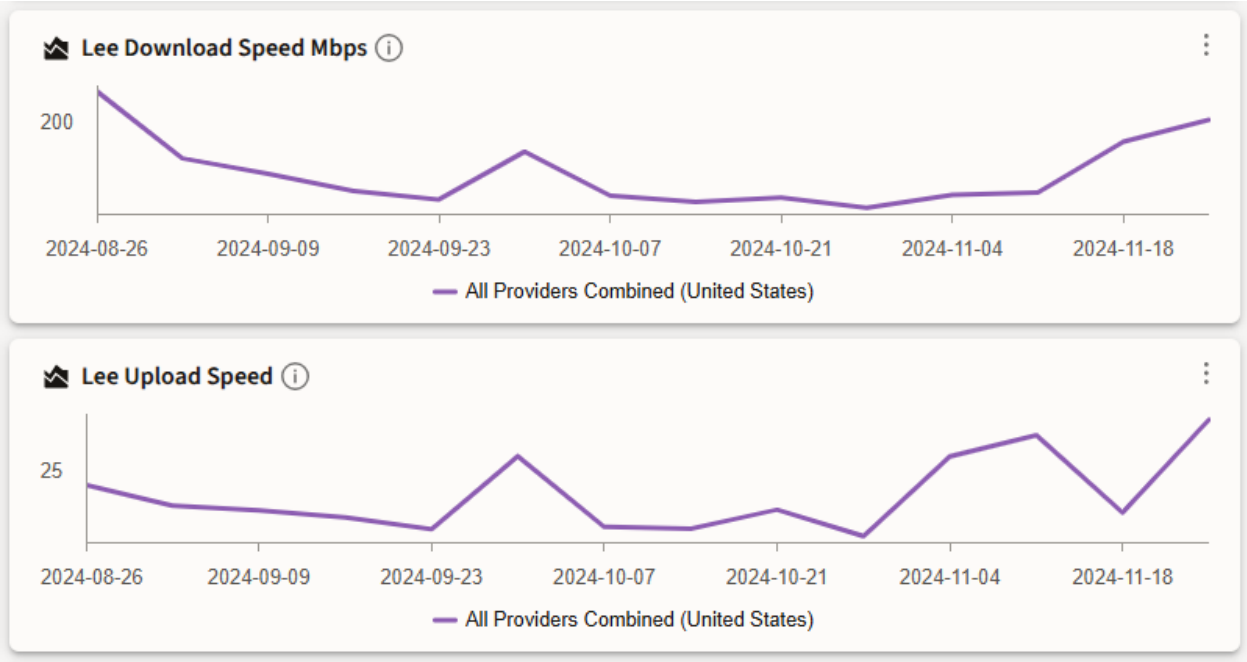


Figure 118. Lexington fixed internet speeds over time

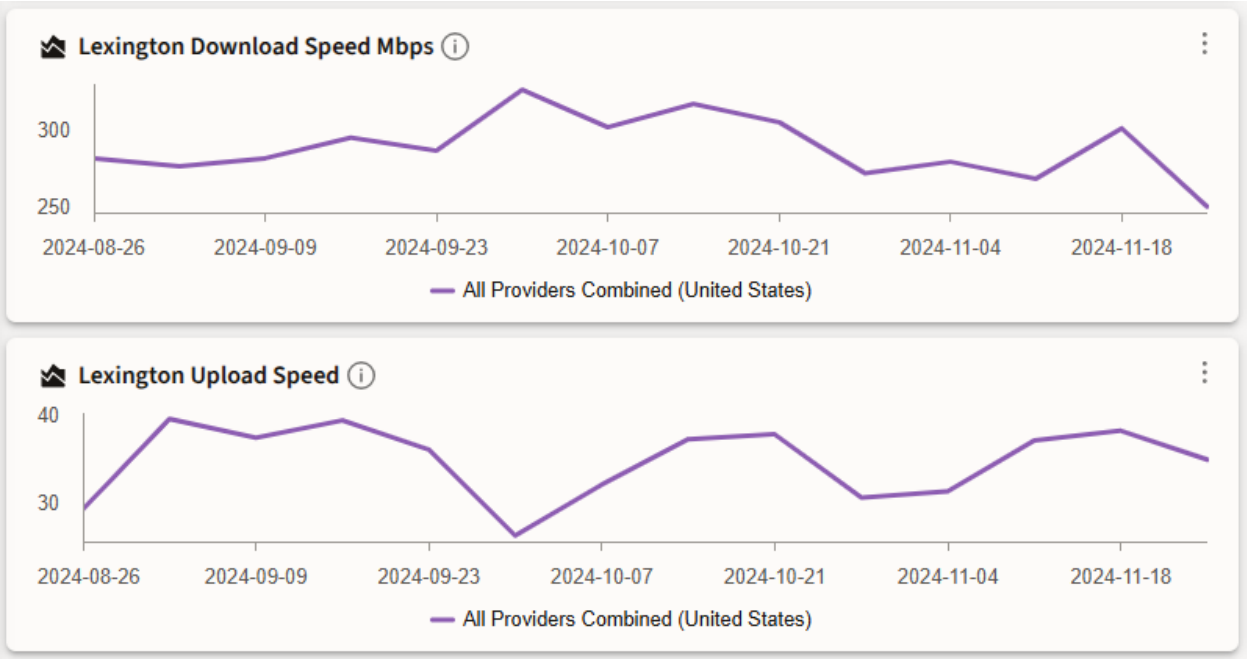


Figure 119. Marlboro fixed internet speeds over time

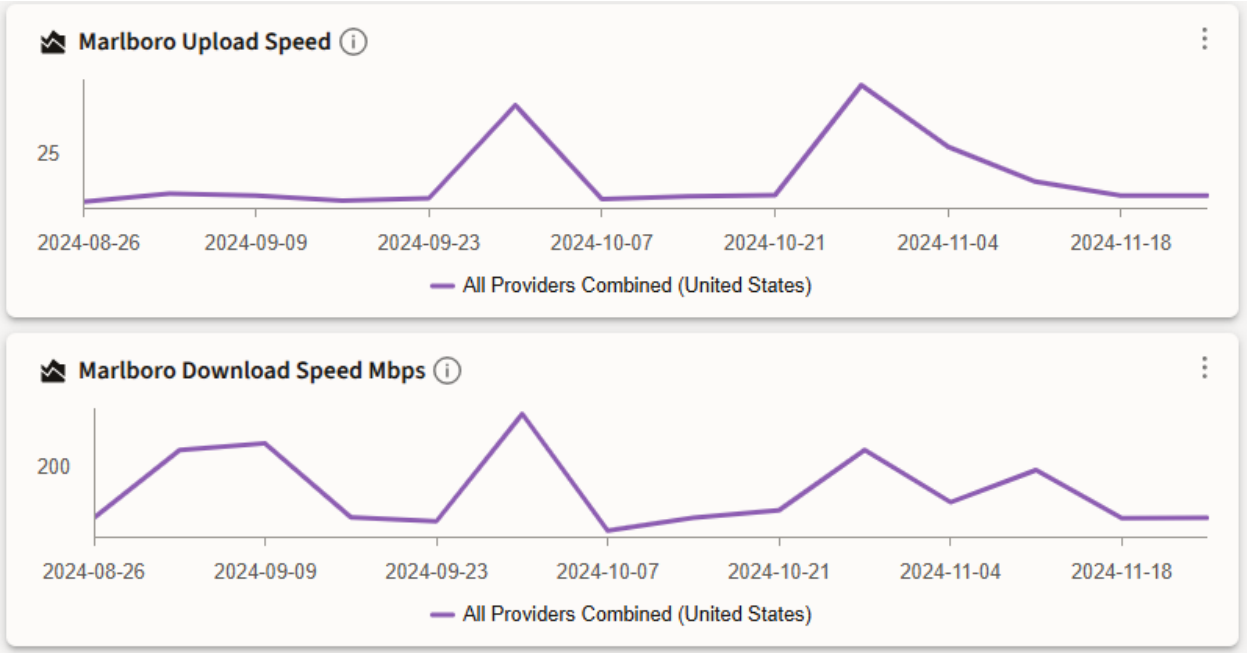


Figure 120. Newberry fixed internet speeds over time

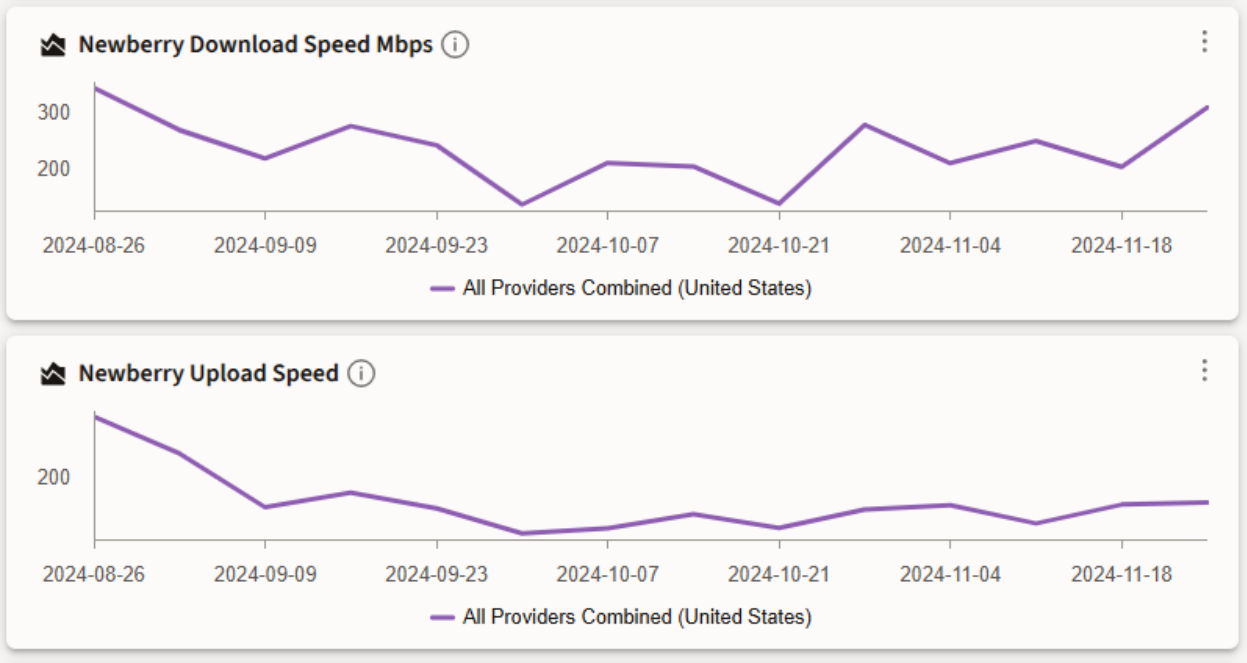


Figure 121. Oconee fixed internet speeds over time

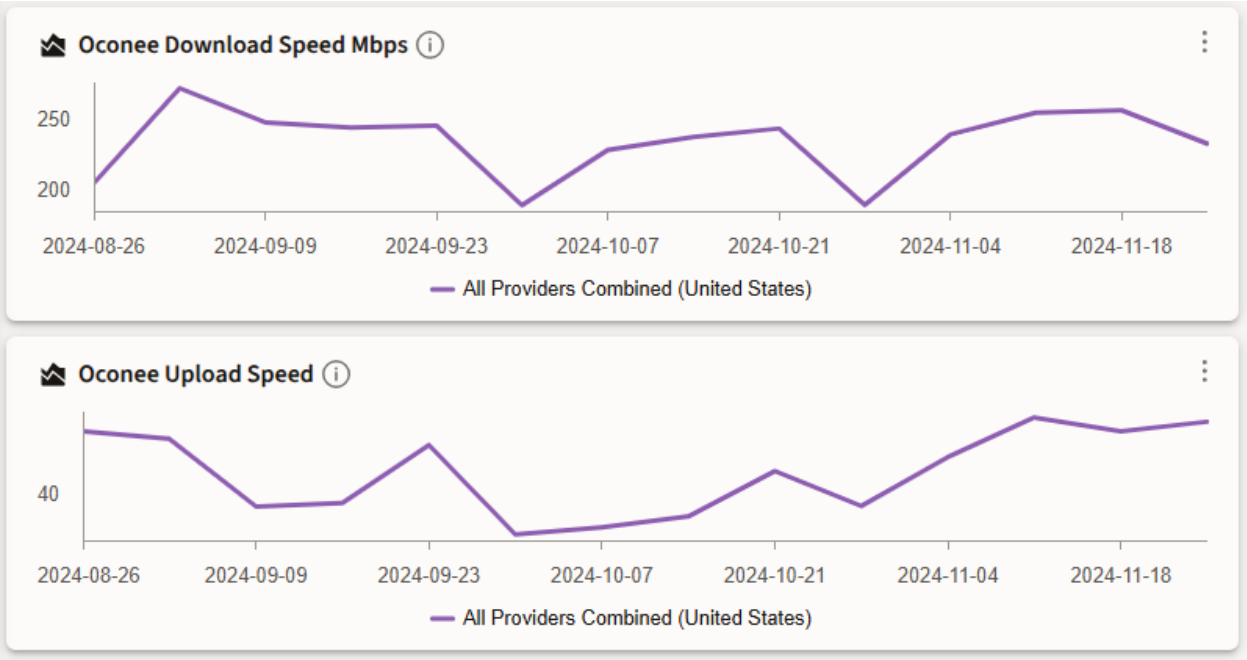


Figure 122. Pickens fixed internet speeds over time

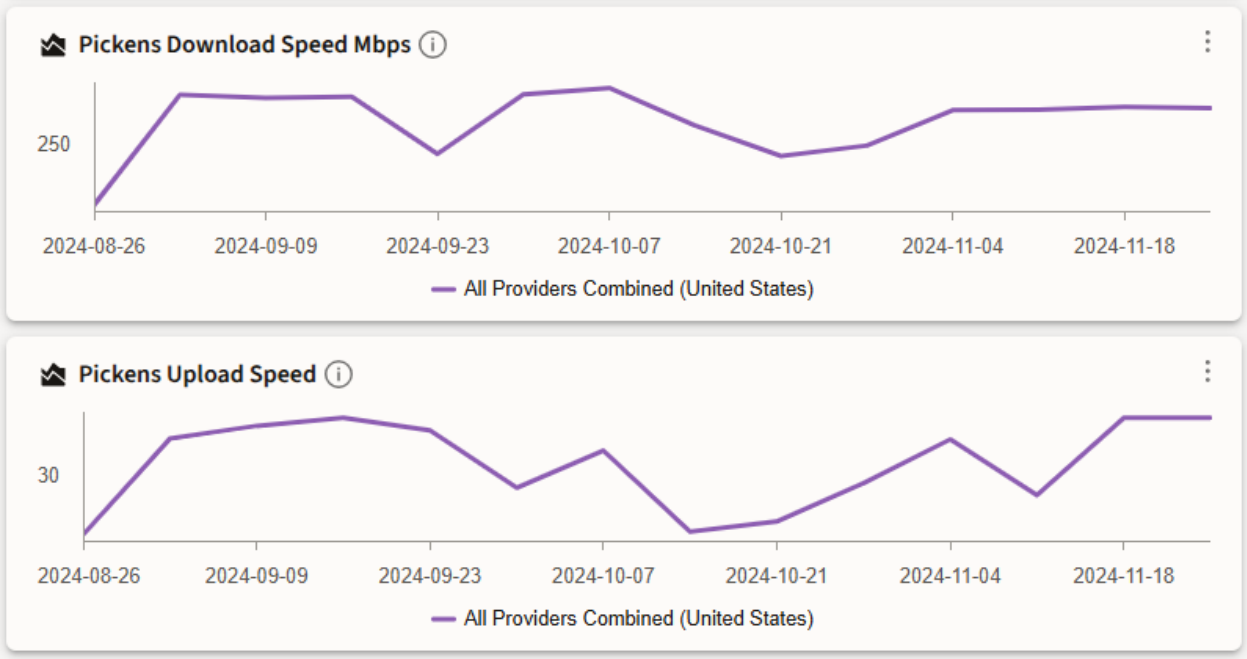


Figure 123. Richland fixed internet speeds over time

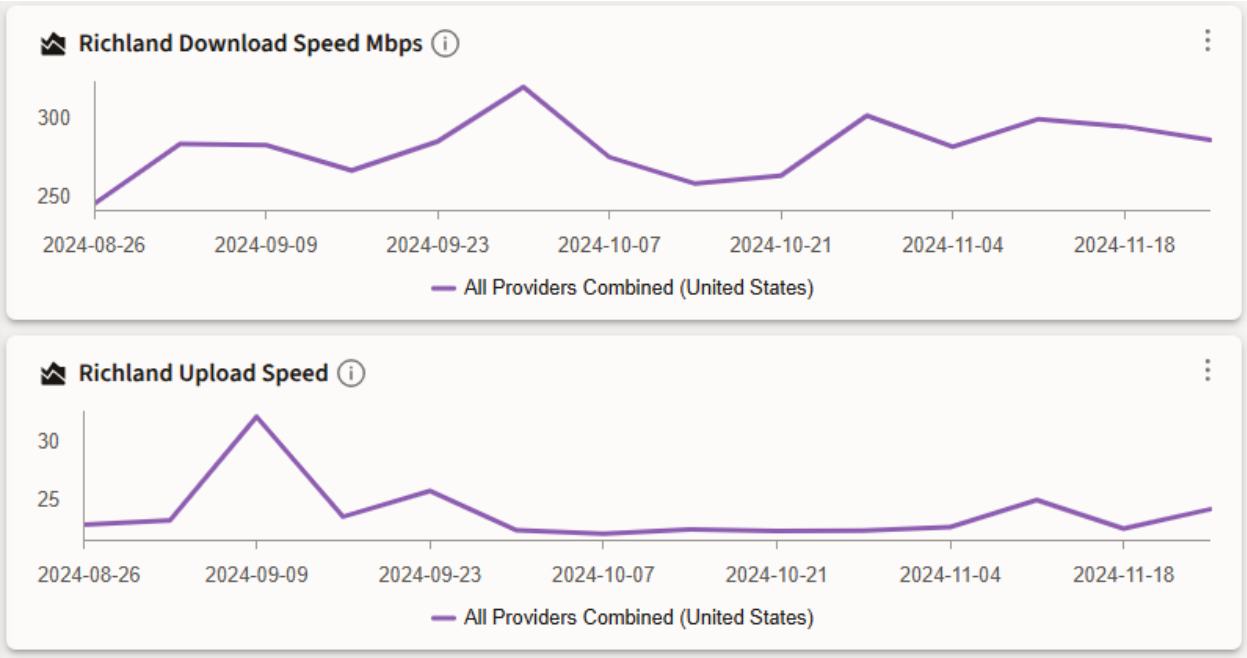


Figure 124. Saluda fixed internet speeds over time

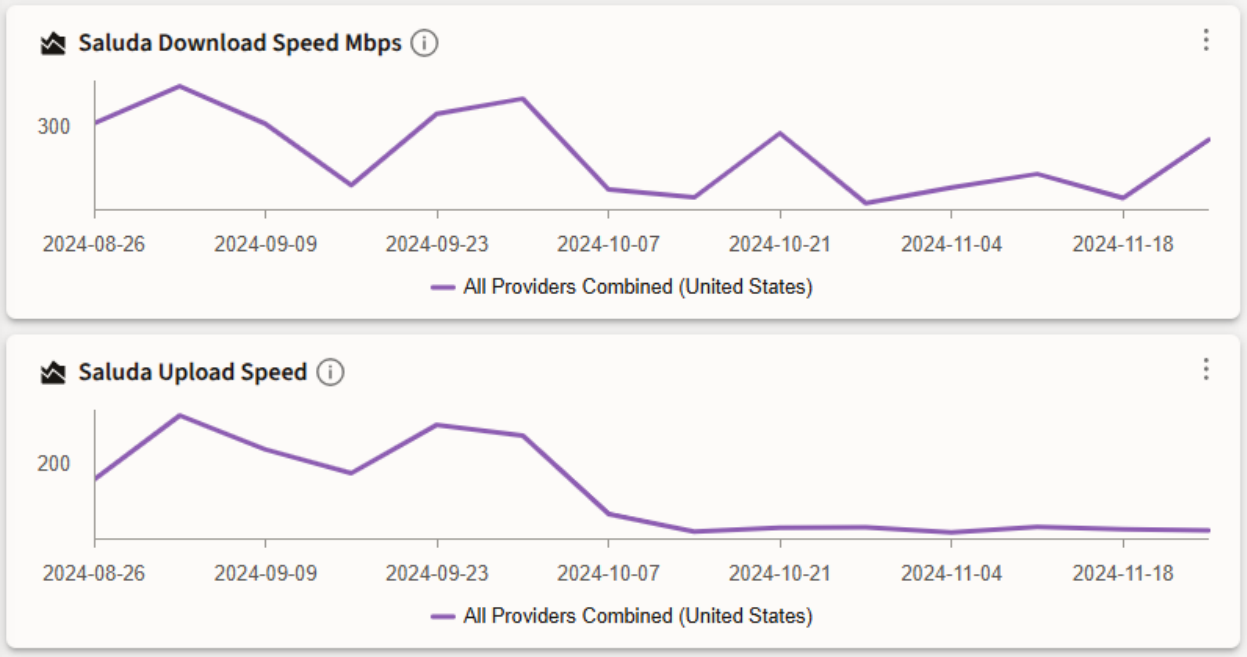


Figure 125. Spartanburg fixed internet speeds over time

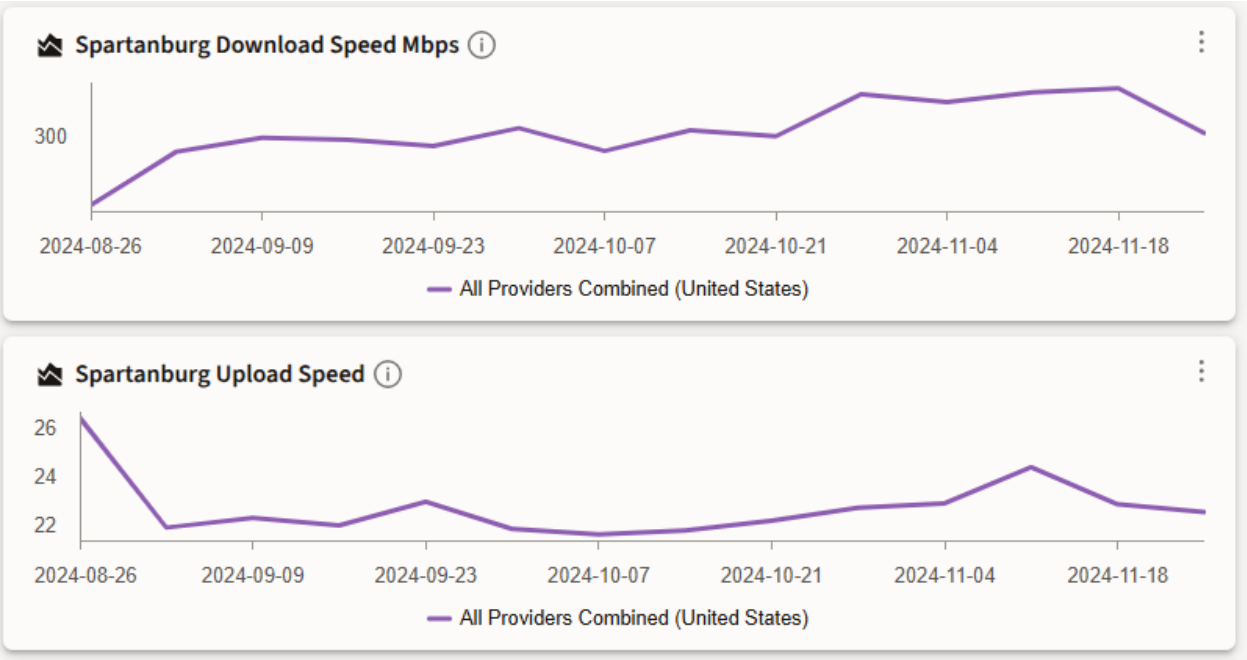


Figure 126. Union fixed internet speeds over time

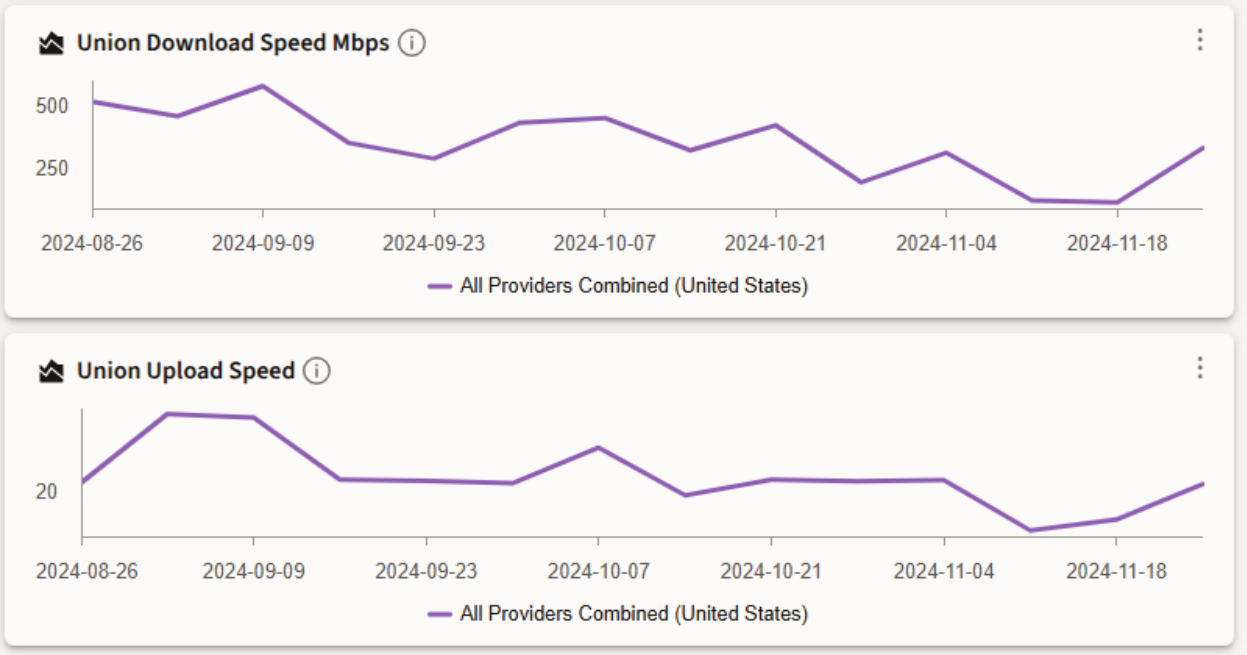
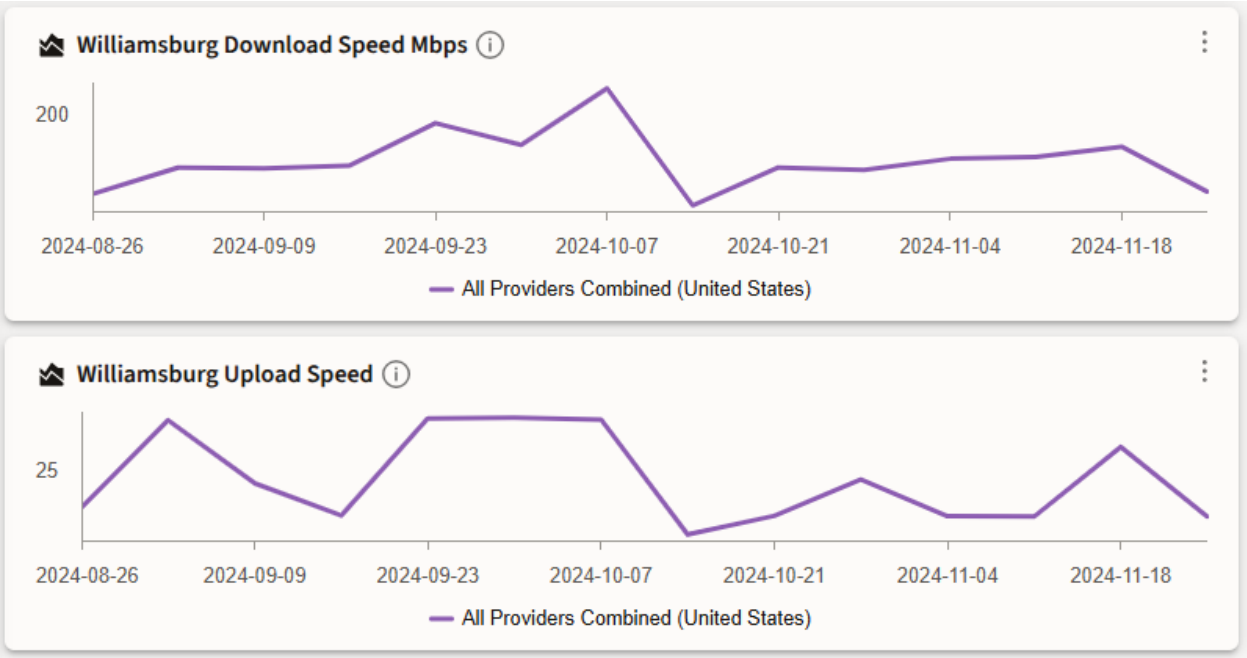


Figure 127. Williamsburg fixed internet speeds over time



Acronyms

ADSS	All-dielectric self-supporting
AMI	Advanced metering infrastructure
APPA	American Public Power Association
ASOS	Automated Surface Observing System
b/d	Barrels per day
Bcf/d	Billion cubic feet per day
CAE	Columbia Metropolitan Airport
CEPC	Central Electric Power Cooperative
CGT	Carolina Gas Transmission System
CHS	Charleston International Airport
CMIP6	Coupled Model Intercomparison Phase 6
CNG	Compressed natural gas
CPW	Commission of Public Works
DESC	Dominion Energy South Carolina
DOE	Department of Energy
DOT	Department of Transportation
DPU	Department of Public Utilities
EC	Electric Cooperative
EDT	Eastern Daylight Time
EF	Enhanced Fujita Scale
EOC	Emergency Operations Center
EV	Electric vehicle
FCC	Federal Communications Commission
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
GA	Georgia
GCM	Global Climate Model
GIS	Geographic Information System
GRIP	Grid Resilience and Innovation Partnerships Program
GSP	Greenville-Spartanburg International Airport
IPCC	Intergovernmental Panel on Climate Change

IRP	Integrated resource plan
kV	Kilovolt
LNG	Liquefied Natural Gas
LOCA2	Localized Constructed Analogues version 2
Mbps	Megabits per second
MISO	Midcontinent Independent System Operator
MMcf/d	Million cubic feet per day
mph	Miles per hour
MW	Megawatt
MWh	Megawatt-hour
NC	North Carolina
NERC	North American Electric Reliability Corporation
NGO	Nongovernmental organization
NOAA	National Oceanic and Atmospheric Administration
ORS	Office of Regulatory Staff
PADD	Petroleum Administration for Defense District
PPL	Products (SE) Pipe Line Corporation
PSC	Public Service Commission
PV	Photovoltaic
SC	South Carolina
SCADA	Supervisory Control and Data Acquisition
SCAMPS	South Carolina Association of Municipal Power Systems
SCDPS	South Carolina Department of Public Safety
SCEMD	South Carolina Emergency Management Division
SCOR	South Carolina Office of Resilience
SEEM	Southeast Energy Exchange Market
SERC	Southeastern Electric Reliability Council
SNG	Southern Natural Gas system
SSP	Shared Socioeconomic Pathway
Transco	Transcontinental Gas Pipe Line
USGS	United States Geological Survey

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WP Anderson Park - $350,000

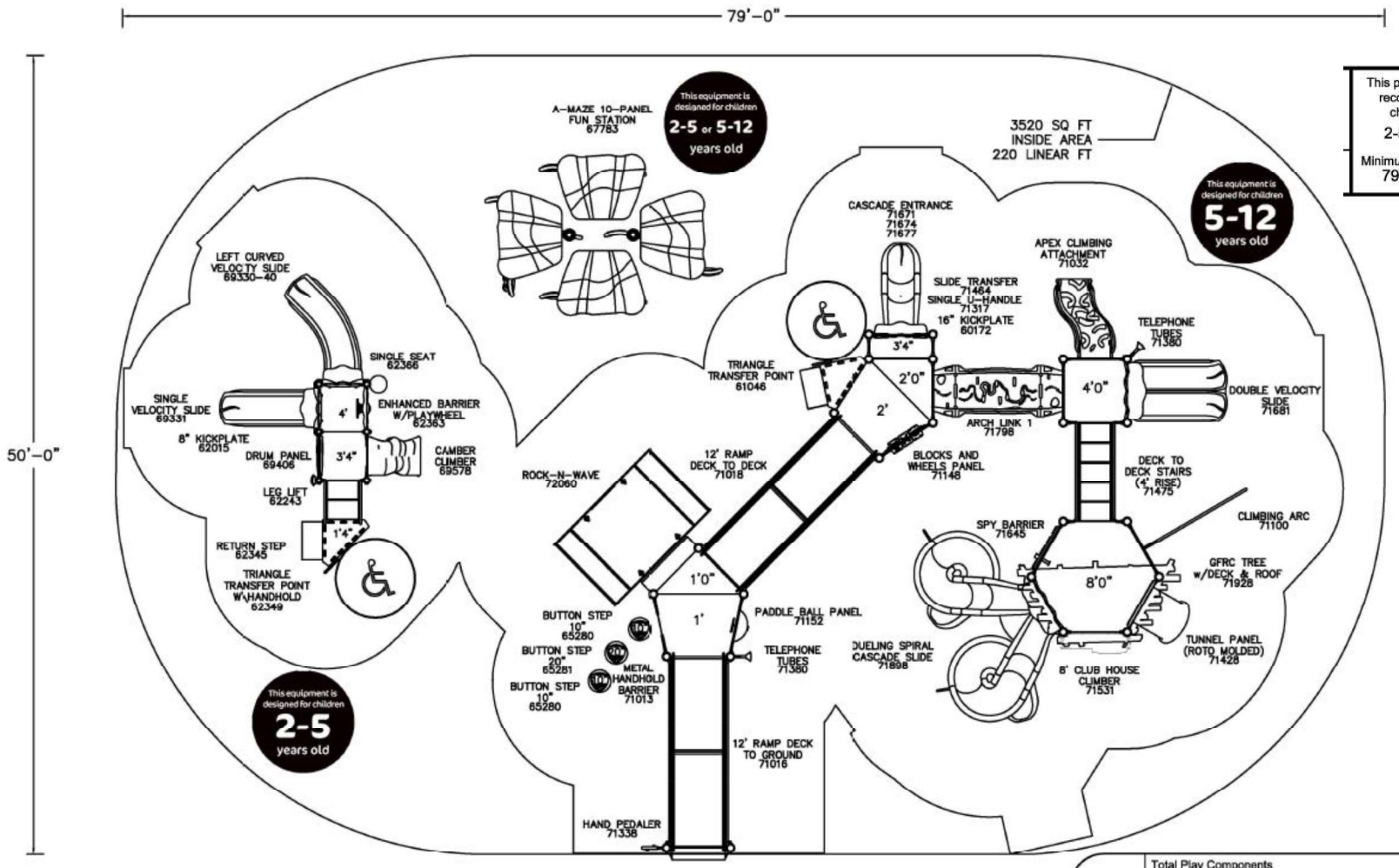
Westminster lacks a fully accessible playground. The playground described in this attachment costs $350,000.

Will you help us raise the funds to construct this playground at the WP Anderson Park?

Use the QR code to make tax deductible contributions for the project through the Community Foundation of Greater Clemson.

Westminster

TOGETHER WE GROW



This play equipment is recommended for children ages: 2-5 and 5-12	Scale: 1/8" = 1'-0" This drawing can be scaled only when in an 11" x 17" format
Minimum Area Required: 79'-0" x 50'-0"	

User Capacity
75-120
Critical Fall Height
8'-0"

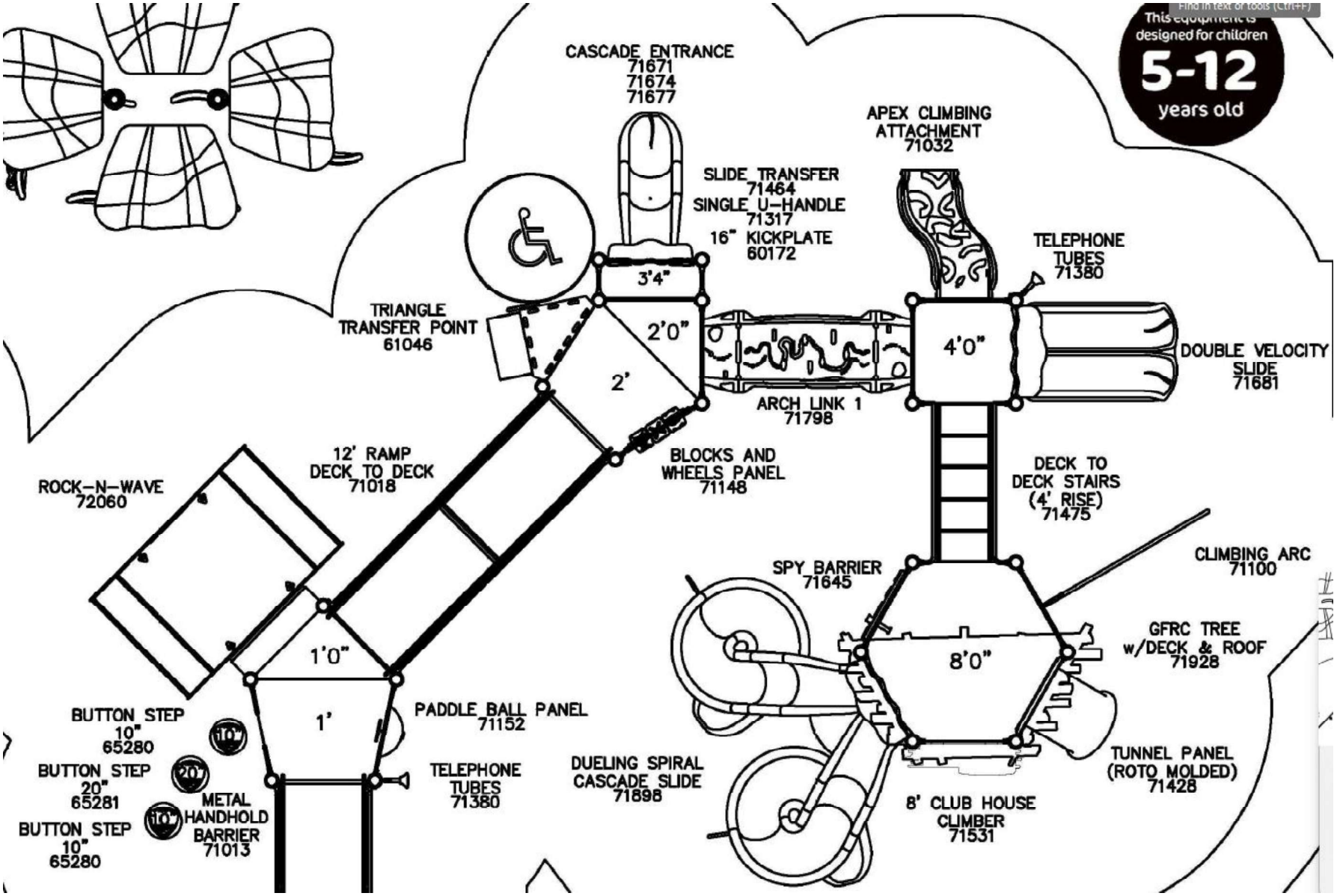
Total Play Components	7			
Elevated Play Components	5			
Elevated Play Components Accessible by Ramp	0	Req.	0	
Elevated Components Accessible by Transfer	5	Req.	3	
Accessible Ground Level Components Shown	2	Req.	2	
Different Types of Ground Level Components	2	Req.	2	

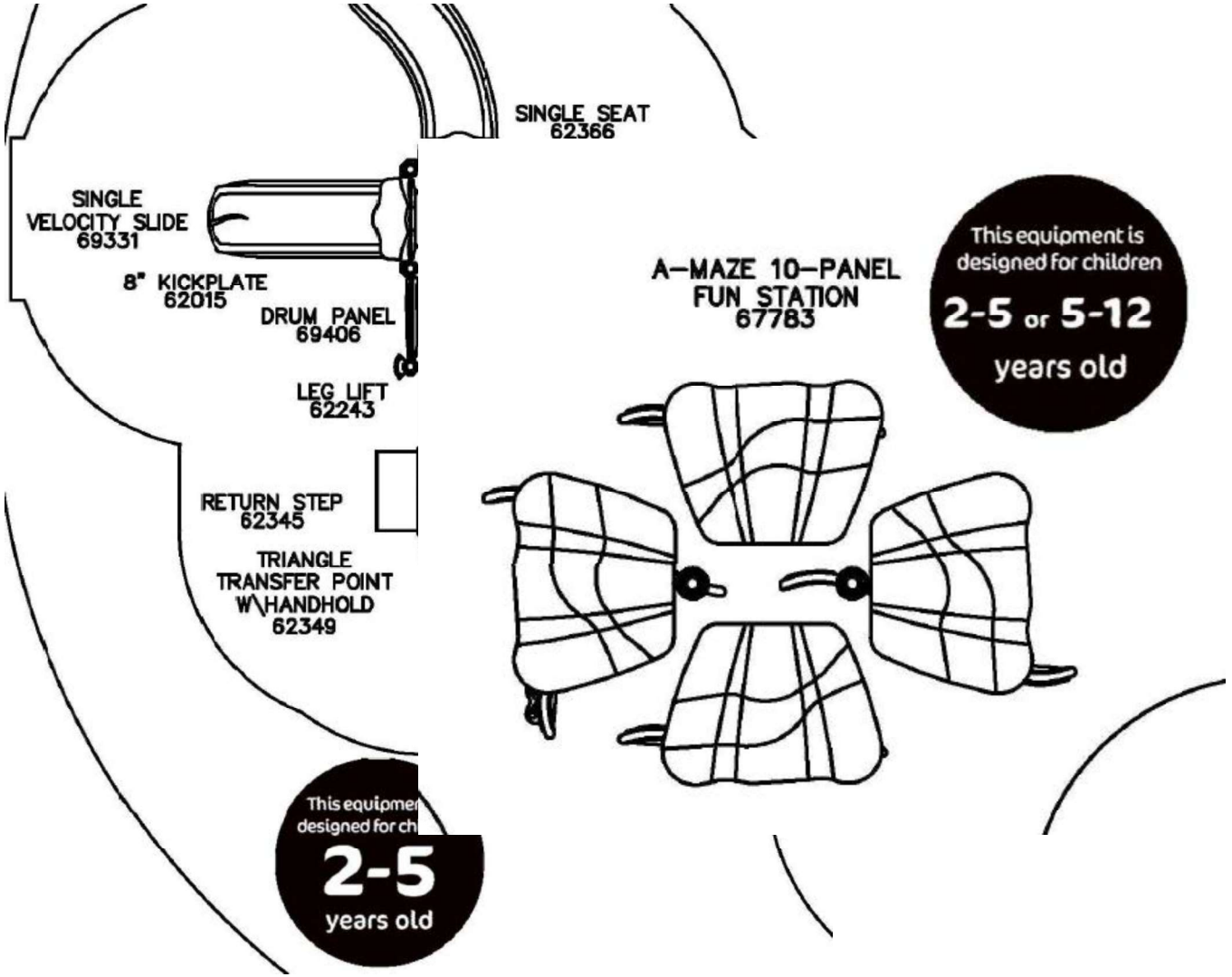
User Capacity
15-25
Critical Fall Height
4'-0"

Total Play Components	17			
Elevated Play Components	13			
Elevated Play Components Accessible by Ramp	5	Req.	0	
Elevated Components Accessible by Transfer	13	Req.	7	
Accessible Ground Level Components Shown	4	Req.	4	
Different Types of Ground Level Components	3	Req.	3	

User Capacity
65-75
Critical Fall Height
8'-0"

0 5 10


This equipment is designed for children
5-12
years old
CASCADE ENTRANCE
71671
71674
71677
APEX CLIMBING ATTACHMENT
71032
SLIDE TRANSFER
71464
SINGLE U-HANDLE
71317
16" KICKPLATE
60172
TELEPHONE TUBES
71380
3'4"
TRIANGLE TRANSFER POINT
61046
2'0"
2'
4'0"
DOUBLE VELOCITY SLIDE
71681
ARCH LINK 1
71798
12' RAMP DECK TO DECK
71018
BLOCKS AND WHEELS PANEL
71148
ROCK-N-WAVE
72060
DECK TO DECK STAIRS (4' RISE)
71475
CLIMBING ARC
71100
SPY BARRIER
71645
GFRC TREE w/DECK & ROOF
71928
8'0"
1'0"
1'
PADDLE BALL PANEL
71152
BUTTON STEP
10"
65280
BUTTON STEP
20"
65281
BUTTON STEP
10"
65280
METAL HANDHOLD BARRIER
71013
TELEPHONE TUBES
71380
DUELING SPIRAL CASCADE SLIDE
71698
TUNNEL PANEL (ROTO MOLDED)
71428
8' CLUB HOUSE CLIMBER
71531

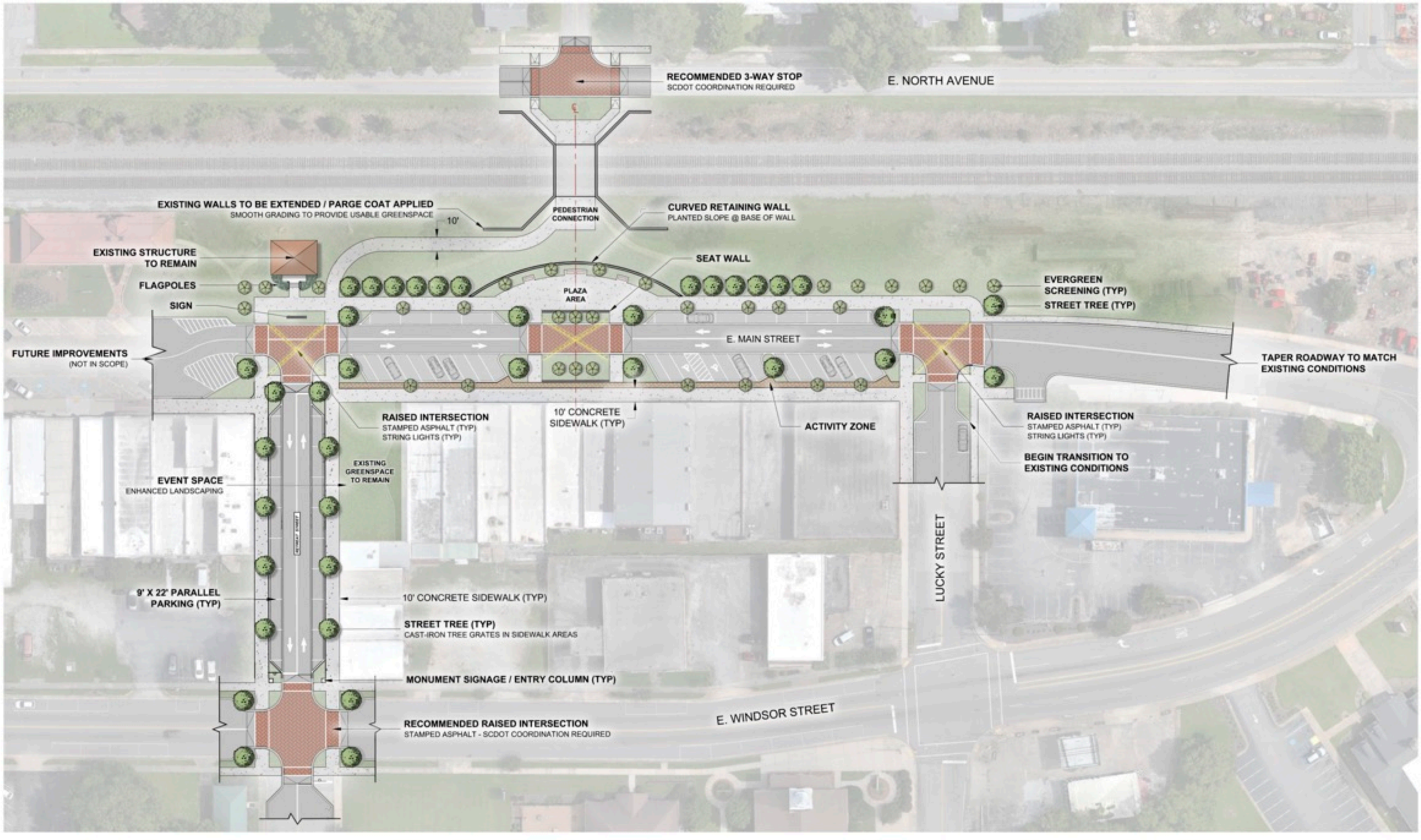

SINGLE SEAT
62366
SINGLE
VELOCITY SLIDE
69331
8" KICKPLATE
62015
DRUM PANEL
69406
LEG LIFT
62243
RETURN STEP
62345
TRIANGLE
TRANSFER POINT
W\HANDHOLD
62349
This equipmer
designed for ch
2-5
years old
A-MAZE 10-PANEL
FUN STATION
67783
This equipment is
designed for children
2-5 or 5-12
years old

landscape structures

WP Anderson City Park

CAROLINA PARKS & PLAY

1183258-01-01-01 • 02.23.2024



0' 60' 120'

NOTE: THIS PLAN IS CONCEPTUAL IN NATURE AND SUBJECT TO CHANGE.

Westminster SOUTH CAROLINA
Together We Grow

SEAMONWHITESIDE

DOWNTOWN IMPROVEMENTS

CITY OF WESTMINSTER CONCEPTUAL PLAN

WESTMINSTER, SOUTH CAROLINA
PROJECT #: 10624 | 07-23-2024

Westminster Streetcape Schedule

rev 3.13.26

Phase	Work Item	Day count	8	15	22	29	36	43	50	57	64	71	78	85	92	99	106	113	120	127	134	141	148	155	162	169	176	183	190	197	204	211
		Week of	23-Feb	2-Mar	9-Mar	16-Mar	23-Mar	30-Mar	6-Apr	13-Apr	20-Apr	27-Apr	4-May	11-May	18-May	25-May	1-Jun	8-Jun	15-Jun	22-Jun	29-Jun	6-Jul	13-Jul	20-Jul	27-Jul	3-Aug	10-Aug	17-Aug	24-Aug	31-Aug	7-Sep	14-Sep
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1	Close Grey St																															
1	Mobilization		X																													
1	Demo Grey St (asphalt)		X	X																												
1	Storm Drain Grey St			X		X	X	X																								
1	NS Stop Work					?																										
2	Demo E Main Street					X	X	X																								
2	Storm Drain E Main Street						X	X	X																							
1	Fill & Grade @ Grey St									X	X	X																				
2	Close Main St Phase																					Possible reopening										
2	Grade E Main Street									X	X	X	X																			
2	Curb & Gutter												X	X																		
2	Concrete Pavement												X	X	X																	
2	Asphalt														X	X																
2	Ribbon Curb, Seat Walls & Sidewalks														X	X	X	X	X	X												
3	Close Retreat St																					Possible reopening										
3	Demo Retreat St														X	X																
3	Grade Retreat St																X	X														
3	C&G Retreat St																		X	X												
3	Concrete Retreat St																			X	X											
3	Asphalt Retreat St																					X										
3	Ribbon Curb & Sidewalks @ Retreat St																					X	X	X								
4	Landscaping - Entire Project																					X	X	X	X	X						
4	Fixtures																							X	X	X	X					
4	Striping																									X	X	X	X			
4	Contingency & Punch List																												X	X	X	X

Scheduled Update March 13, 2026, next revision will be March 27, 2026.

SC 250 ANNIVERSARY

American Revolution

OCONEE COUNTY 1770 1783 250 ANNIVERSARY AMERICAN REVOLUTION

Step back in time at the South Carolina 250 Celebration Booth and experience a fun, interactive way to celebrate Oconee County's rich history. Guests are invited to dress the part with a selection of authentic, period-inspired costumes that bring the past to life.

Strike a pose in front of the Revolutionary War backdrop and have your photo taken as a keepsake from this special celebration. Whether you're channeling a Revolutionary-era patriot or simply enjoying the moment, the booth offers a memorable way to connect with our heritage.

Join us in honoring Oconee County and be part of the South Carolina 250 celebration—where history comes to life, one photo at a time.

April 4, 2026 @ 8:00 am Bluebirds Nest

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OCONEE JOINT REGIONAL SEWER AUTHORITY

Ad-Hoc Reconstitution Committee and Executive Committee
March 12, 2026

The Ad-Hoc Reconstitution Committee and Executive Committee meeting was held at the Coneross Creek Wastewater Treatment Plant.

Commissioners/Committee Members that were present:

- Katherine Amidon (Environmental Planner, Bolton & Menk)
- Chip Bentley (Appalachian Council of Gov'ts.)
- Kevin Bronson (City of Westminster) – Committee Chair
- Chris Eleazer (Oconee Joint Regional Sewer Authority)
- Lawrence Flynn (Pope Flynn - OJRSA Attorney) – *via Microsoft Teams*
- Glenn Hart, Oconee County Councilman
- Joel Jones (Consultant, JonesWater)
- Angie Mettlen, (Vice President, Ardurra)
- Scott Moulder (City of Seneca)
- Celia Myers (City of Walhalla)

Committee Members that were not present:

- None.

OJRSA appointments and staff present were:

- Lynn Stephens, Secretary/Treasurer to the Board and Office Manager

Others present were:

- Mr. Stewart Jones, Oconee Co. Administrator
- Mayor Linda Oliver, Town of West Union – *via Microsoft Teams (arrived at 9:09 a.m.)*
- Mr. Matt Durham, Oconee Co. Council
- Mr. Cam Spencer, Goodwyn, Mills, & Cawood
- Tony Adams, Oconee Co. Citizen

A. Call to Order – Mr. Bronson called the meeting to order at 9:00 a.m.

B. Approval of Minutes

- **Ad Hoc Reconstitution Committee and Executive Committee Meeting of February 12, 2026**

Mr. Hart made a motion, seconded by Mr. Moulder, to approve the February 12, 2026 meeting minutes as presented. The motion carried.

C. Committee Discussion and Action Items

1. **Update on South Carolina Senate Bill 829 (Joint System Governance) –** Mr. Flynn reported that he testified in a subcommittee hearing two (2) weeks ago. The bill was sent to Senator Alexander and queued up for the full committee. Mr. Flynn said he received an update that it went through and has moved to the full Senate floor. Mr. Flynn added that the Senate only has nine (9) weeks remaining in this legislative session, but he feels good steps have been made. If anyone has any

issues, it will usually happen during the second reading on the floor. There are no reasons for issues, and the OJRSA is in pretty good shape.

Ms. Mettlen stated that Mr. Flynn and Mr. Eleazer had discussions with other joint sewer and water authorities, and she felt the conversations were beneficial in talking about questions that came up. Mr. Flynn replied that it was intentional to reach out to the ones that the OJRSA jointly represents and those that the OJRSA had contacts with. Mr. Flynn said time was spent talking through the issues they had and headway is making in the process. He said he feels good where it stands right now. Mr. Bronson asked if there were any amendments to this bill. Mr. Flynn replied there were none.

2. **Update on Raftelis and First Tryon Financial Studies –** Ms. Mettlen reported she passed on the commitment letters passed by the OJRSA board to the firms, and they are ready to start. Raftelis plans to start in early April with completion around August/ September. First Tryon will begin after Raftelis is finished. Both firms have done similar studies together, so Ms. Mettlen feels good about it.
   Ms. Mettlen said the firms had been able to see a list that Ms. Amidon drafted regarding the data that was obtained, but Ms. Mettlen said she did not want to give them full access until they were contracted to do the work; the firms have been provided with access now. Ms. Mettlen added that the Member Cities, Town of West Union, and Oconee County may need to provide some billing data and audit information.
   Mr. Hart took a moment to request that the visitors at today's meeting be recognized. Mr. Bronson introduced Mr. Matt Durham, Oconee County Councilman, and Mr. Stewart Jones, Oconee County Administrator. Mr. Eleazer stated that Mayor Oliver of the Town of West Union just joined the meeting through Microsoft Teams as well. Mr. Cam Spenser of Goodwyn, Mills, & Cawood introduced himself, and Mr. Bronson introduced Oconee County resident, Mr. Tony Adams.
3. **Recap and Update on One-On-One Meetings –** Ms. Mettlen reported that all entities have had the one-on-one meeting except for Oconee County (which will be scheduled soon). The entities have been positive, and everyone agrees that something needs to be done and must change. She said each entity has its own concerns, and issues will need to be flushed out before there is a last-minute major problem. She said she appreciated everyone's conversations and that this helps make things as transparent as possible. Ms. Mettlen said she also plans to have a one-on-one meeting with Mr. Eleazer. Ms. Mettlen added that issues will most likely bubble up, so there will be continued conversations to deal with them. The goal is to get everyone in agreement.
   Mr. Bronson asked if Ms. Mettlen learned anything earth shattering. Ms. Mettlen replied that there is still work to be done on the makeup of the new board and that the legislation is part of that process. This will need to be massaged and worked through.
   Mr. Bronson asked if anything was heard that wasn't heard before. Mr. Jones said he heard statements he had not heard before; however, he didn't learn anything new. There was nothing shocking.
   Ms. Mettlen said that everyone agreed that the public messaging needs to be consistent across the board with each entity. Ms. Amidon spoke briefly about the communications memos and stated she would talk through the memos, the options, and other action items later in the meeting.
   Mr. Jones said the entities provided honest conversations and spoke about the obstacles to get through. Ms. Mettlen added that none of the obstacles were new. Mr. Jones added that where the OJRSA is today took years with a broken system, and it will not be fixed in a day. Ms. Amidon asked if anyone wanted to share any new information with the group. Mayor Oliver said she was enjoying just listening to the conversation, but no one else had any comments.
   Mr. Jones added that the consultants don't represent anyone in particular; they represent the path forward. He stated that they want honest feedback/criticism on how they are doing if need be. Mr. Bronson thanked the consultation team for their hard work.

Mr. Hart asked if they were going to receive the estimates for buying the suppliers today. Ms. Mettlen replied that this is part of the financial studies that Raftelis and First Tryon are undertaking. She said it is recognized that the financial elements are critical (what the rates will look like and the valuation components). This is part of the process. She added that the information that will be provided will be beneficial to everyone.

Ms. Amidon presented the committee with the options for consolidation and requested that this not be given to the public until it is finalized *(but included with these minutes)*. Ms. Amidon stated that the Sewer Use Agreements are dated and have contradictions; they need to be resurfaced and rewritten. In the meetings, everyone agreed with that. Everyone was also excited about changing the board membership; although, there was no unanimous agreement on how the new board is comprised. She added the board change can happen regardless if the legislation passes or not, so board membership can be reduced from the current nine (9) people.

Ms. Amidon defined a full and partial consolidation with full meaning all collection systems are under the reconstituted OJRSA (one unit) and partial meaning some systems will be under the reconstitution and others not (who will then become wholesale customers). She stated there is an additional option of bringing Oconee County to the table. She said Oconee County had a seat on the board years ago but currently doesn't now, and they want a seat again. Ms. Amidon stated there are more options out there, but the options sheet only shows the six (6) main options. She asked for feedback or questions from the committee.

Oconee Administrator, Mr. Stewart Jones, asked who the blue box on the options sheet represented. Ms. Metten replied it wasn't a who, but rather a what: the OJRSA board, and Ms. Amidon stated it is the reconstituted OJRSA board as a whole. Mr. Stewart Jones added that he thought each option was from an individual entity's feedback.

Mr. Eleazer asked if the top three (3) options were without Oconee County having a seat, and the bottom three (3) options were the same options but with Oconee County having a seat; Ms. Mettlen confirmed this. Mr. Joel Jones asked if this is what came out of the original Ad Hoc Committee; Ms. Amidon said the last option with Oconee County having a seat came out of the committee.

Ms. Amidon asked if the sheet gave some clarity. Mr. Bronson stated he thought the same as Mr. Stewart Jones that each option was based on an individual entity's feedback from the meetings, but he understands now. Mr. Moulder asked if this is an accumulation of all the feedback into six (6) different options. Ms. Mettlen said it didn't necessarily come from feedback but is based on what can happen. Mr. Moulder asked if these were purely restructuring options and were not weighted in any way; Ms. Mettlen confirmed this.

Ms. Amidon asked if the committee wanted a cleaned-up version of this in memo format to go out to everyone's councils. Mr. Moulder stated this page will create a lot of confusion. Mr. Bronson and Mr. Moulder both thought it would be easier in narrative form.

4. **Communications with Elected Officials and Leadership: Feedback and Future Memo Requests -** Ms. Amidon asked for feedback on memo ideas and presented the committee with a draft list of memo topics *(made a part of these minutes)*.
   - #1 is about "Land Use Control," and she stated that this can happen at any time. She explained how no sewer entity, that is not a municipality or a county, has land use control. That control, which gives zoning power, the ability to choose ordinance laws, and protection of agricultural land, is held solely by the municipality or county. She stated the public and councilmembers get confused about this. She asked about drafting a memo on this.

     Mr. Moulder replied that sewer can impact land use for growth and development and a causation explanation is needed. Mr. Eleazer stated that there is no mechanism to deny sewer in agricultural areas between the plant and the interstate other than land use, and the people down in that area didn't want sewer or development. Mr. Moulder stated that the municipalities and county can control land use, but if a developer wants to pay for a force main and lift stations,

they can with land use; he added that a sewer line means growth and development. Mr. Eleazer spoke about where there are two (2) force mains in parallel between the Golden Corner Commerce Park and the wastewater plant, you cannot tap into them; however, if you cut the pipes in half, send the flow into a wet well, and put a pump station in, then the area could be served.

Ms. Amidon asked if it would be helpful to explain the roles of the OJRSA, the municipalities, and the planning commission, and then explain how that works. Mr. Moulder said that would work. Mr. Bronson agreed with Mr. Moulder that a causation explanation is needed and should be explained in simple terms. Mr. Hart suggested to look at Exit 1 on the interstate in Georgia as an example and explained how there are ten (10) industries there, and it's beginning to look like New York City with high-rise buildings.

Mr. Moulder asked how the OJRSA impacts economic growth and how is growth controlled when it doesn't control sewer expansion. Ms. Mettlen said she heard this throughout the conversations and wants to get to the root of the concerns. Mr. Jones stated everyone needs to understand how projects are funded and how it works.

Mr. Flynn stated annexation control is a condition for service. Mr. Moulder replied that it is usually tied to water; no community uses sewer. Mr. Flynn added that annexation control is a condition of service. Mr. Moulder replied that these conditions are generally tied to water and doesn't know of any entity that uses sewer; Mr. Flynn replied he has a couple of clients who use sewer. Mr. Bronson said it must be tied to water; Ms. Myers spoke about the City of Central using sewer but customers are on Easley water. Mr. Bentley stated that sewer providers are on the edges; Greer CPW won't provide sewer without annexation in the city. Ms. Mettlen said there will be other control-related things that pop up, but it would be beneficial to show what may happen and what will not happen and where control lies.

Mr. Moulder spoke about needing a three-party annexation agreement, because it would be the municipality who doesn't control the sewer, so the OJRSA would have to agree. Mr. Flynn said the requirement would be an obligation as a service commitment for membership to the OJRSA to not provide sewer service unless a petition is filed with the affected municipality as a condition of future service. The city would not be party to it, but there may be other ways to structure it.

- #2 is for a "Timeline." Ms. Amidon said it was about nine (9) months ago (last June) since a timeline came out, and there was a request for an updated timeline based on any changes. She asked if this should be done before or after the legislative decision. Mr. Moulder said the timeline should be incorporated into another memo like the elevator speech. Mr. Bentley suggested it be updated in every memo.

  Ms. Mettlen said this timeline is a target, but she doesn't want to force the process and wants to keep everyone as comfortable as possible. Mr. Flynn spoke about how the timeline should be viable based on the approved act.
- #3 is for "Elevator Speech," and Ms. Amidon said this was a request out of the one-on-one meetings regarding when council members are approached with questions from the public. Ms. Mettlen added that the messaging needs to be consistent. She said that when anyone receives any questions, just let her and Ms. Amidon know.
- Ms. Amidon stated that answers cannot be given at this time for items #4 ("Order of Operations/Responsible Party") and #5 ("Rate Memo") as they will be based on the Raftelis and First Tryon studies. The answers will be provided later. She said the rates are diverse and it needs to be explained what they are and how they are calculated. Ms. Mettlen added that it also should provide what went into the calculation. Mr. Jones replied that it's key to keep rates down, but the cheapest rate isn't always better.

Mr. Moulder asked to have this modified into a narrative. He then asked if it should be sent to the councils. He said they will have loads of questions that this committee is not ready to answer

and wasn't sure it was a good thing to do. Ms. Amidon asked if Mr. Moulder felt it needed to be released to the councils. After thinking about it for a moment, Mr. Moulder said the councils will have questions no matter what, so, yes, send the narrative out. He added that questions might be best for now. Ms. Myers suggested having an update on the timeline to show what the upcoming topics would be.

Ms. Amidon said she will draft two (2) memos. She said she was challenged to keep them at two (2) pages or less. Each memo will have reminders for every meeting.

5. **Discussion of Wholesale Agreement Considerations** – Mr. Jones spoke about this (which was item #6 on Ms. Amidon's list). He provided a draft list of considerations to the committee *(made a part of these minutes)* and gave a brief overview for each. Mr. Flynn said that this highlights what it will look like. Mr. Moulder said this was a great summary.

D. Committee Member Discussion – None.

E. Adjourn – The meeting was adjourned at 10:11 a.m.

Upcoming Meetings

1. **Operations & Planning Committee –** Thursday, March 19, 2026 at 8:30 a.m.
2. **Finance & Administration Committee –** Tuesday, March 24, 2026 at 9:00 a.m.
3. **Board of Commissioners –** Monday, April 6, 2026 at 4:00 p.m.
4. **Reconstitution Committee & Executive Committee –** Thursday, April 9, 2026 at 9:00 a.m.

Approved By: _____ Date Approved: _____

Kevin Bronson
Committee Chair

Approved By: _____

Lynn M. Stephens
OJRSA Secretary/Treasurer

Notification of the meeting was distributed on March 6, 2026 to *Upstate Today*, *Anderson Independent-Mail*, *Westminster News*, *Keowee Courier*, WGOG Radio, WSNW Radio, City of Seneca Council, City of Walhalla Council, City of Westminster Council, Oconee County Council, SCDES, www.ojrsa.org, and posted at the OJRSA Administration Building.

Ad Hoc Reconstitution Committee and Executive Committee

OJRSA Operations & Administration Building
Lamar Bailes Board Room
March 12, 2026 at 9:00 AM

This advisory committee was established by the OJRSA Board of Commissioners at its August 4,2025 meeting to consider the reorganization recommendations as identified in the Ad Hoc Sewer Feasibility Implementation Committee Final Recommendations report. This committee can neither create policy nor make decisions on behalf of the OJRSA or other wastewater service providers within the area. The recommendations are available at www.ojrsa.org/info.

OJRSA commission and committee meetings may be attended in person at the address listed above. The OJRSA will also broadcast meetings live on its YouTube channel at www.youtube.com/@OconeeJRSA (if there is a technical issue preventing the livestreaming of the meeting, then a recording will be published on the channel as soon as possible). For those not able to attend in person, then the OJRSA Board or Committee Chair will accept public comments by mail (623 Return Church Rd, Seneca, SC 29678) or at info@ojrsa.org. Comments must comply with the public session instructions as stated on the meeting agenda and will be received up until one hour prior to the scheduled meeting. If there is not a public session scheduled for a meeting, then comments shall not be accepted.

Agenda

A. Call to Order – Kevin Bronson, Committee Chair

B. Approval of Minutes
- Ad Hoc Reconstitution Committee and Executive Committee Meeting of February 12, 2026

C. Committee Discussion and Action Items
1. Update on South Carolina Senate Bill 829 (Joint System Governance) – Lawrence Flynn, OJRSA Counsel
2. Update on Raftelis and First Tryon financial studies – Angie Mettlen, Facilitator
3. Recap and update on one-on-one meetings – Angie Mettlen, Katherine Amidon, and Joel Jones; Facilitators
4. Communications with elected officials and leadership: feedback and future memo requests – Katherine Amidon, Facilitator
5. Discussion of wholesale agreement considerations – Joel Jones, Facilitator

D. Committee Member Discussion – Led by Kevin Bronson, Committee Chair
Discussion can be related to matters addressed in this meeting or for future consideration by the Board or Committee. Voting is not permitted during this session.

E. Adjourn

Upcoming Meetings

All meetings to be held in the Lamar Bailes Board Room unless noted otherwise.

- Operations & Planning Committee – March 19, 2026 at 8:30 AM
- Finance & Administration Committee – March 24, 2026 at 9:00 AM
- Board of Commissioners – April 6, 2026 at 4:00 PM
- Reconstitution Committee and Executive Committee – April 9, 2026 at 9:00 AM

OJRSA

Ad-hoc Reconstitution **Meeting Sign-in Sheet**

Date: 3/12/26 **Time:** 9am **Location:** WWTP Board Room

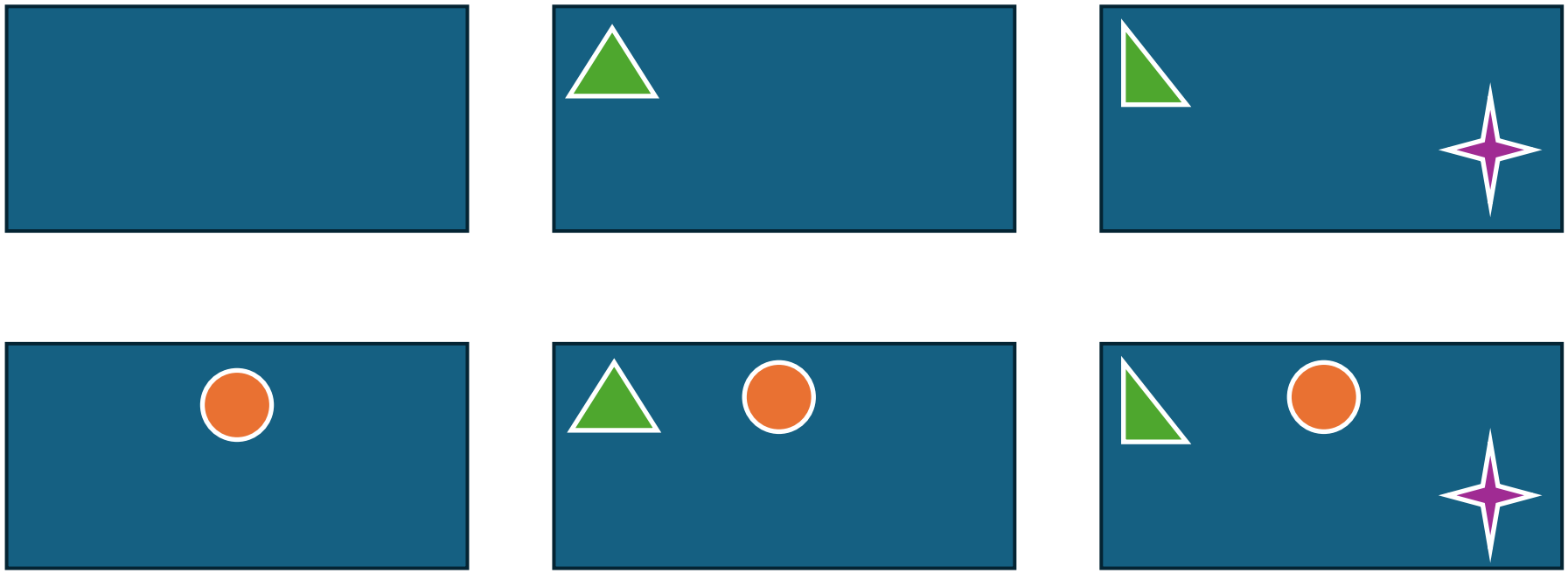
NAME (Print)	POSITION/TITLE	ORGANIZATION
Angie Mefflen	Director / Ardurra	Ardurra
Matt Durham	County Council	Oconee County
Joel Jones	Cons. 1	Jones Water
Glenn Hart		Oconee County
Stewart Jones	Administrator	Oconee County
Tony Adams	citizen	
Kevin Brown		
Katherine Amdur	Planner	Burns & McDonnell
Cam Spencer	PD	Gaffney
Celia Myers	admin	Walhalla
Scott Moulton	Admin	Seneca
Chip Bentley	Deputy Dir	ACOG

Reconstitution: Unanimous support for this – update sewer use agreements, change board membership*

Full Consolidation: All collections systems and treatment under one entity – the reconstituted OJRSA

Partial Consolidation: Some collection systems and treatment under one entity, others wholesale customers

Oconee County included in the reconstituted OJRSA



* Board membership change can occur regardless of legislation passing

DRAFT

OJRSA

REGIONAL SEWER FEASIBILITY STUDY

Future Memo Ideas - DRAFT

Ad-hoc meeting: March 12, 2026

1) **Land Use Control:** Reiterate the power that jurisdictions maintain with land use control and remind how sewer expansion works and the tools available.
2) **Timeline:** An update to the implementation timeline – *note timing of that is hugely based on the decision at the senate
3) **Elevator Speech:** Consider a memo with the elevator speech for council members for when they run into constituents
    a. Reminder water has nothing to do with this conversation
4) **Order of Operations/Responsible Party:** What happens when ___Fill in the blank____. This may yield multiple memos and timing will be based on decisions that have yet to be made. Here are some examples:
    a. Sewer backs up? Who's fixing it?
    b. Determining Rates? Who has a say?
5) **Rate Memo:** Standalone about rates that could also be formatted for public consumption to explain how we got here with rates and what the new rates reflect
6) **Wholesale Agreement:** Explain what a wholesale agreement is and what the implications of being a wholesale customer would be

Considerations for Wholesale Agreement

Joel Jones, Facilitator

Potential Items for Wholesale Agreement - DRAFT

Legal/Administrative

- Basis and purpose of agreement to include explicit treatment as wholesale entity
- Delineation of infrastructure, operational, and customer ownership
- Geographical/customer boundaries and who has future rights to serve
- Basis, structure and adjustments of rates and fees - including fixed, volume, capacity fees, and surcharges.
- Capacity ownership buy-in - amount of system capacity used, available, and reserved
- Terms, conditions, and duration of agreement and/or component of the agreement - reopener clauses
- Severability conditions and administrative due process to protect both parties

Operations

- Rules of engagement - how the parties will work together at all levels to provide contracted services
- Delineation of operational responsibilities and mutual aid agreements
- Capacity planning and assurance processes - how new connections will be planned, approved, designed, and constructed
- Monitoring, inspection, and billing processes/mechanisms
- CMOM requirements, reporting, inspection, and review

Regulatory

- Establishment of regulatory authority - wholesale customer treated as a user
- Establishment and/or delineation of regulatory responsibility - residential, commercial, and industrial
- Permitting and reporting requirements - collection system, FOG, pretreatment, capacity assurance
- Compliance schedule(s) for current non-compliance and system improvements
- Enforcement response protocol including fines, cost recovery, and due process

Finance & Administration Committee Meeting

OJRSA Operations & Administration Building
Lamar Bailes Board Room
March 24, 2026 at 9:00 AM

OJRSA commission and committee meetings may be attended in person at the address listed above. The OJRSA will also broadcast meetings live on its YouTube channel at www.youtube.com/@OconeeJRSA (if there is a technical issue preventing the livestreaming of the meeting, then a recording will be published on the channel as soon as possible). For those not able to attend in person, then the OJRSA Board or Committee Chair will accept public comments by mail (623 Return Church Rd, Seneca, SC 29678) or at info@ojrsa.org. Comments must comply with the public session instructions as stated on the meeting agenda and will be received up until one hour prior to the scheduled meeting. If there is not a public session scheduled for a meeting, then comments shall not be accepted.

Agenda

A. **Call to Order** – Celia Myers, Committee Chair

B. **Public Session** – Receive comments relating to topics on this agenda. Session is limited to a maximum of 30 minutes with no more than 5 minutes per speaker.

C. **Presentation and Discussion Items** *[May include vote and/or action on matters brought up for discussion]*
- Update on current projects (Exhibit A) – Chris Eleazer, Director

D. **Committee Action Items**
- Review February and Year-to-Date Financial Reports (Exhibit B) – Chris Eleazer, Director and Lynn Stephens, Secretary/Treasurer and Office Manager

E. **Action Items to Recommend to the Board for Consideration**
- Consider Supplemental Budget #3 (Exhibit C) – Chris Eleazer, Director

F. **Executive Director's Discussion and Compliance Matters** – Chris Eleazer, Director
1. Operation agreement with Oconee County
2. Miscellaneous *(if any)*

G. **Committee Members' Discussion** – Led by Celia Myers, Committee Chair
Discussion can be related to matters addressed in this meeting or for future consideration by the Board or Committee. Voting is not permitted during this session.

H. **Adjourn**

Upcoming Meetings

All meetings to be held in the Lamar Bailes Board Room unless noted otherwise.

- Board of Commissioners – April 6, 2026 at 4:00 PM
- Reconstitution Committee and Executive Committee – April 9, 2026 at 9:00 AM
- Operations & Planning Committee – April 16, 2026 at 8:30 AM
- Finance & Administration Committee – April 28, 2026 at 9:00 AM

FY2026 O&M FUND PROJECTS

CONSENT ORDER ENGINEERING AND OPERATIONS AND MAINTENANCE TASKS

3/20/2026 09:41

					O&M PROJECT MILESTONES							
Row #	**FY 2026 O&M Project (Project # (if applicable); PM) CANNOT CARRY OVER TO NEXT FISCAL YEAR WITHOUT BUDGET APPROVAL**	**Approx % Complete**	**Anticipated Completion**	**PO/Contract Amount ($)**	**Bids/RFQ/etc. Issue/Advertised**	**Req/Contract Signed**	**Started Work**	**Completed**	**Obligated/ Spent ($)**	**Budget Remaining ($)**	**GL Code** *(XXXXX = get from Office Mgr)*	**Comp. Performing (and Project Mgr)**
1	**Consent Order 21-025-W Project: Biannual Compliance Report** *(CE)*	100%	11/8/2025	N/A or TBD	Internal Project	Internal Project	N/A	11/7/2025	0	0	N/A	OJRSA Chris Eleazer
2	**Agency Reconstitution (Sewer Feasibility Implementation)** *(Board, Others)*	N/A	TBD	N/A or TBD	N/A	N/A	7/15/2025		0	0	N/A	Board of Commissioners
3	**Completion of Development Guide** *(AM)*	12%	6/30/2026	N/A or TBD	Internal Project	Internal Project	9/10/2024		0	0	N/A	OJRSA Chris Eleazer
4	**Development Policy Revision** *(CE)*	75%	10/6/2025	N/A or TBD	Internal Project	Internal Project	9/24/2024		0	0	N/A	OJRSA Chris Eleazer
5	**Indefinite Delivery Contract for Engineering Services** *(CE)*	100%	10/6/2025	N/A or TBD	10/10/2025	1/20/2026	1/12/2026	1/20/2026	0	0	N/A. Projects to be assigned to depts.	OJRSA Chris Eleazer
6	**Arc Flash 70E Assessment of WRF, PSs, and Other Facilities** *(AM)*	100%	10/31/2025	12,650	Prof Svcs	8/12/2025	9/22/2025	12/3/2025	12,650	0	Admin: Safety 501-02370	Life & Safety TBD
7	**CMMS & Financial Software System Upgrade** *(CE)*	33%	6/30/2026	197,518	7/3/2025	12/1/2025	1/9/2026		96,918	100,601	Admin Services 501-02420	KCI Heidi Hummel
8	**Comprehensive Sewer Management Plan *Project #2026-04*** *(KL)*	30%	5/31/2026	49,999	Proj #2026-04 Prof Svcs	10/2/2025	12/17/2025		14,034	35,966	Con Sys: Prof Svcs 601-02430	Ardurra Priya Verravalli
9	**Evaluate Perkins PS & Coneross PS Pumps to Determine Repair vs. Replace** *(KL, EP)*	N/A	2/28/2026	N/A or TBD	Prof Svcs	N/A			0	0	Con Sys: Prof Svcs 601-02430	KCI Steve Barbian
10	**Field Data Collection for Hydraulic Model Verification** *(KL)*	100%	12/31/2025	N/A or TBD	Prof Svcs	Internal Project	11/19/2025	3/18/2026	0	0	Con Sys: Prof Svcs 601-02430	GMC Hannah Ribelin
11	**Coneross PS Rotating Assembly for Pumps #4 & #5** *(EP)*	TBD	TBD	N/A or TBD					0	0	Con Sys: R&M COS-PS 601-05030	TBD
12	**Martin PS Motor Base Restraint System (#2 of 3)** *(EP)*	10%	12/30/2025	35,753	Sole Source 8/4/2025	8/11/2025			35,393	360	Conv Sys R&M: MAS2-PS 601-05100	Meco Keith Hall
13	**Martin PS Aeration Motor Install (crane needed)** *(EP)*	0%	11/30/2025	N/A or TBD	11/3/2025	12/1/2025			5,670	0	Conv Sys: Equip Rent 601-02540	TBD
14	**NPDES Permit Renewal, Including PAA Installation and Operation** *(JM, KL)*	100%	10/31/2025	3,500	Prof Svcs	NPDES: 8/22/22 PAA: 8/1/22	NPDES: 7/1/22 PAA: 8/2/22	NPDES: 10/31/25 PAA: 10/28/25	0	3,500	WRF: Prof Svcs 701-02430	Goldie Assoc Paul Lewis
	Aluminum and Mercury Sampling Plan Development and Implementation for new NPDES Permit *(KL, JM)*	33%	Plan: 11/21/25 Impl: 5/31/26	8,855	Prof Svcs	Plan: 10/9/25 Impl: 12/15/25	Plan: 10/24/25 Impl: 12/15/25	Plan : 11/22/25 Impl: _____	0	8,855	Lab: Prof Svcs 901-02430	Goldie Assoc S Harrison & A Anderson
15	**CIP PRIORITY 1A: Portable Generator Connection for WRF (includes engineering)** *(JM, KL)* ***Project #2025-07***	25%	3/31/2026	14,000	ENG: 8/27/2025	ENG: 8/27/2025	ENG: 9/15/2025		8,000	6,000	WRF: R&M 701-03000	Howard Engineering Amy Howard
16	**Headworks Flow Pulse and Flow Channel Sensor Install** *(JM)*	100%	~~8/30/2025~~ 9/25/2025	4,950	8/4/2025	8/12/2025	9/11/2025	12/8/2025	4,950	0	WRF: R&M 701-03000	Davis Power Paul Davis
17	~~**Project #2026-02 General Water Reclamation Facility Installation Projects**~~ *(JM, KL)* **CANCELED**	CANCELED	5/31/2026	N/A or TBD	8/13/2025	CANCELED 9/26/2025			0	0	WRF: R&M 701-03000	TBD
18	**EMERGENCY REPAIR Final Clarifier #3** *(KL, JM)* ***Project #2025-08***	0%	6/30/2026	470,462	Equip: 11/7/2025 Install: ___	Equip: 12/1/2025 Install: ___			124,672	345,790	WRF: R&M 701-03000	TBD
19	**Pretreatment Program Update (following NPDES permit issuance)** *(AM)*	30%	4/29/2026	24,500	Prof Svcs	6/4/2025	7/1/2025		3,000	21,500	Pretreat: 801-02430 501-02440	Goldie Assoc Sonya Harrison
20	**Seneca Creek FM Replacement Construction Administration / Inspect** *(#2023-05; CE)*	97%	SUB: 1/29/26 FIN: 2/28/26	140,000	RFB #2023-05	4/29/2024	2/3/2025		105,000	35,000	O&M CIP: Con Sys 1401-06071	GMC Daniel Mosher
21	**Coneross & Perkins PS Resiliency Study (address flooding issues for possible FEMA assistance)** *(CE, JW)*	85%	2/28/2026	45,500	Prof Svcs	10/29/2025	11/19/2025		39,003	6,497	Con Sys: Prof Svcs 601-02430	KCI Steve Barbian
22	**Employee Engagement Survey, Staff Development, and Compensation/Benefits Study** *(CE)*	50%	5/1/2026	8,795	Prof Svcs	8/27/2025	9/16/2025		0	8,795	Admin Services 501-02420	FGP Carrie Cavanaugh
23	**Bypass Plan Development for Gate Replacement** *(KL)*	100%	12/12/2025	6,350	Prof Svcs	10/27/2025	11/10/2025	12/29/2025	0	6,350	WRF: Prof Svcs 701-02430	Goldie Assoc Paul Lewis
24	**Standard Operating Procedures for Duck Pond PS per SCDES Requirements** *(KL, MM)*	100%	1/14/2026	2,650	Prof Svcs	10/21/2025	11/12/2025	12/19/2026	2,639	11	Con Sys: Prof Svcs 601-02430	Goldie Assoc Paul Lewis
			TOTAL AWARDED	1,025,482			TOTAL FUNDS OBLIGATED/ACTUAL TO DATE:		**451,929**	**579,224**	REMAINING	

FY2026 O&M FUND PROJECTS **CONSENT ORDER ENGINEERING AND OPERATIONS AND MAINTENANCE TASKS** **3/20/2026 09:41**

Row #	FY 2026 O&M Project (Project # (if applicable); PM) CANNOT CARRY OVER TO NEXT FISCAL YEAR WITHOUT BUDGET APPROVAL	Notes
1	**Consent Order 21-025-W Project: Biannual Compliance Report** *(CE)*	**DUE TO SCDES EVERY SIX MONTHS.** Reports submitted: 11/14/21, 5/9/22, 11/10/22, 5/9/23, 11/9/23, 5/10/24, 11/8/24, 5/9/24. 11/7: Submitted to SCDES via ePermitting portal. **COMPLETE**. **Next report due 5/10/2026.**
2	**Agency Reconstitution (Sewer Feasibility Implementation)** *(Board, Others)*	See "Agency Reconstitution" sheet to track progress.
3	**Completion of Development Guide** *(AM)*	8/5: A McCullough reviewing approx 15 dates. 8/13: Have received 22 draft documents from AM for consideration. 2/17/2025: Provided documents to K Amidon. 3/13: J Boyd providing updates. A McCullough now to review.
4	**Development Policy Revision** *(CE)*	1/12/2026: Meeting with J Gillespie to work on document this week. 1/18: Had to postpone. Rescheduled for later in month. 2/5: Met with J Gillespie. Update sent to AM. 2/10: AM sent draft back, then it was forwarded to J Gillespie for indepth review.
5	**Indefinite Delivery Contract for Engineering Services** *(CE)*	12/18: On O&P agenda for consideration. 1/5/2026: Board approved negotiation with Weston & Sampson and Ardurra. 1/12: Provided final signed copies to consultants. 1/20: Incorporated minor changes approved by OJRSA counsel. Received executed copy from Ardurra and Weston & Sampson. **COMPLETE**.
6	**Arc Flash 70E Assessment of WRF, PSs, and Other Facilities** *(AM)*	8/5: L&S setting up date to visit and will then provide pricing. 8/12: Scheduled to be performed in September. 9/1: Date set for last part of September. 9/24: Completed onsite assessment. 10/30: Engineer will update in next 2 weeks and L&S to return for labeling and training. 12/3: Labeling complete, all that remains is training. **COMPLETE**
7	**CMMS & Financial Software System Upgrade** *(CE)*	11/18: Executed Trimble portion of agreement. 12/1: Received approval from B Kelley. Signed agreement with KCI. 12/16: Kickoff meeting held. 1/9/2026: Onsite workshop held. 2/10: Dept meetings held. 2/16: Sent draft Financial System RFP to L Flynn for consideration. 2/17: Received approval from A Lindsay. Advertised. Proposals due 3/27. 3/17: CMMS progressing smoothly.
8	**Comprehensive Sewer Management Plan *Project #2026-04*** *(KL)*	10/29: Reviewing available info and will schedule a kickoff meeting soon. 12/17: Kickoff meeting held. Requested info provided to Rebecca Turner and others via email from CE and KL. 1/7/2026: Items provided to engr for review. 1/20: Reviewing Corrective Action Plans and related info. 3/3: Received draft gap analysis report for review. 3/9: CE provided comments to draft report.
9	**Evaluate Perkins PS & Coneross PS Pumps to Determine Repair vs. Replace** *(KL, EP)*	1/6/2025: Will be able to use KCI's data from **Coneross & Perkins PS Resiliency Study (address flooding issues for possible FEMA assistance)** project listed below. **Will not complete this as a standalone project**.
10	**Field Data Collection for Hydraulic Model Verification** *(KL)*	1/6/2026: KL thinks they have about 30 MH left for Ardurra info. GMC items have been completed and submitted. CE said this is priority to complete for RIA grant. 1/27: H Ribelin believes she has all data and has team working on it. Will work on verifying info soon. 3/18: H Ribelin confirmed the data addressed items needed for map and model. **COMPLETE**.
11	**Coneross PS Rotating Assembly for Pumps #4 & #5** *(EP)*	This is to be determined by the evaluation of Perkins PS & Coneross PS pumps to determine repair vs. replacement. 10/21: Cove Utility inspected. Check valves are inoperable. Estimate cost to replace valves and check valves is $40,000. **THIS WILL REQUIRE COMPLETION OF CONEROSS & PERKINS PS RESILIENCEY STUDY TO DETERMINE REPAIR VS. REPLACE**. Probably will not occur during FY 2026.
12	**Martin PS Motor Base Restraint System (#2 of 3)** *(EP)*	7/14: KL has ordered this so it can be built. 10/21: Still being built. 12/16: E Partain checked on completion and it will probably be after first of year. 1/6/2026: Shipping mid-January. 1/27: Still waiting on delivery. 2/17: Should arrive this week. 2/25: Arrived.
13	**Martin PS Aeration Motor Install (crane needed)** *(EP)*	9/15: Crane company did not show for appointment. Everything else is ready. 10/21: Will meet with Campbell Crane soon. 11/4: Quote #1 for wire came in above $5,000, so now need 3 quotes. 12/1: Approved 3 quotes. 12/16: Everything has been purchased. Need to rent crane and scissor lift. 1/6/2026: Hoping to complete by end of January. 1/27: Waiting to schedule. 2/17: Discovered two other motors are bad.
14	**NPDES Permit Renewal, Including PAA Installation and Operation** *(JM, KL)* ***Aluminum and Mercury Sampling Plan Development and Implementation for new NPDES Permit*** *(KL, JM)*	10/28: Received Permit to Operate. **NPDES COMPLETE**. Sampling Plan $3,200 and Implementation $5,655. 12/17: AM will request dental office inventory from SCDES after holidays and obtain the One Time Compliance Report (DHEC Form 4049) to assist. Inspections of locations will begin following inventory of locations. 12/18: Had to order more chlorine, waiting on SCDES Lab Certification. 1/6/2026: First aluminum samples collected today. Goldie to collect samples for mercury. 1/27: S Harrison receiving and evaluating sampling results during the +/- 6 month sampling period. SCDES Lab Cert hopefully coming next week. 2/13: D Justice has delivered all letters to dental offices regarding low level mercury. 3/11: Switched to PAA from chlorine gas. 3/17: Obtaining sample results.
15	**CIP PRIORITY 1A: Portable Generator Connection for WRF (includes engineering)** *(JM, KL)* ***Project #2025-07***	10/29: A Howard onsite to evaluate. 90% plans will be available w/in next 2 weeks. 12/12: Received 90% drawings to review. 1/5/2026: Final drawings received with scope of work to use in RFB (sent draft to KL for him to write specs for). 1/26: KL provided draft RFB for review. 1/28: Sent RFB to L Flynn to review before advertising. 2/11: Advertised on SCBO. Bids due on 3/31.
16	**Headworks Flow Pulse and Flow Channel Sensor Install** *(JM)*	7/14: KL coordinating with Paul Davis. Items have been purchased. 8/5: Received quotes. 9/1: Paul Davis is scheduling work. 9/11: Installation complete. Now need to connect to SCADA. 10/21: Controller was bad. Waiting on new controller. 12/8: **COMPLETE**.
17	~~**Project #2026-02 General Water Reclamation Facility Installation Projects**~~ *(JM, KL)* **CANCELED**	8/7: Sent draft RFB to B Kelley for legal review as required by procurement code. 8/12: Received copy from BK. 8/13: Advertised RFB. Bids due 10/1. **9/26: CANCELED BID DUE TO EMERGENCY REPAIR NEEDED ON FINAL CLARIFIER #3.**
18	**EMERGENCY REPAIR Final Clarifier #3** *(KL, JM)* ***Project #2025-08***	11/20: O&P Comm approved for equipment purchase agreement to go to board for consideration. 12/1: Board approved equipment purchase ($470,462 + 5% contingency) 1/6/2026: Evoqua to do laser level of clarifier. KL to put together RFB for construction. 1/22: Sent final draft of RFB for install services to L Flynn for review per procurement code. 2/11: Advertised on SCBO. Bids due 3/24. 3/18: Est. arrival of equip
19	**Pretreatment Program Update (following NPDES permit issuance)** *(AM)*	10/27/2025: We have 180 days from first date of permit (11/1/2025) to get this to SCDES. It is currently being worked on by consultant. 1/27/2026: S Harrison reviewing and revising definitions in the Sewer Use Regulation to comply with federal and state law changes, particularly with PFAS and quintenary ammonia chemicals.
20	**Seneca Creek FM Replacement Construction Administration / Inspect** *(#2023-05; CE)*	$80,000 carryforward from FY2025. Obligated/Spent column includes FY2025 costs. Reimbursable by Fountain Res Prop LLC per agreement. 2/17: OJRSA confirmed sag in gravity sewer, need assessed by contractor. 2/24: Sent maintenance bond form to C White. 3/19: C White said all they are waiting on is B Little to sign transfer of assets deed. Received most docs from GMC, sent GIS to D Gant and as-builts to J
21	**Coneross & Perkins PS Resiliency Study (address flooding issues for possible FEMA assistance)** *(CE, JW)*	1/9/2026: Completed technical memo outline and identified alternatives for each station. There were some discrepancies identified b/t drawdown data and influent mag meter in SCADA. 1/23: Modeling will be performed and alternatives/costs to be developed. Tech memo next milestone. 2/3: Received draft memo. 2/4: CE provided comments and into to KCI team. KL still needs to review and comment.
22	**Employee Engagement Survey, Staff Development, and Compensation/Benefits Study** *(CE)*	1/5/2026: Received draft information from Shellie Haroski and C Cavanaugh. Will schedule in person meeting soon. 1/21: Met with S Haroski and C Cavanaugh to go over survey results and develop plan for addressing survey findings. 2/12: Received first batch of draft job descriptions to review. 2/16: Received second batch of job descriptions to review.
23	**Bypass Plan Development for Gate Replacement** *(KL)*	12/16: All data collected, now putting together plan. 12/19: Info sent to Goldie. 12/29: KL received final plans. Approved as submitted. **COMPLETE**.
24	**Standard Operating Procedures for Duck Pond PS per SCDES Requirements** *(KL, MM)*	Will be invoiced for this and the two I-85 PSs together. To determine how much each will be for coding, use this formula for Duck Pond: Invoice Amount x 33.54%. 11/12: Began work. 12/12: Received SOPs, will begin review and provide feedback to engineer. 12/19: **COMPLETE**.

FY2026 RECONSTITUTION TASKS **TASKS MAY CARRY ACROSS BUDGET YEARS** **3/20/202609:43**

Row #	Agency Reconstitution Tasks as Stated in the OJRSA Reorganization Recommendations Accepted by OJRSA Board on July 15, 2025	Target Date^ (Time Following Acceptance)	Approx % Complete	Task Manager	Started	Completed	PO/Contract Amount ($)
1	**Current Board will dissolve the current Ad Hoc Committee and establish the Implementation Committee ("Reconstitution Committee") for further implementation oversight.**	8/29/2025 (45 days)	**100%**	OJRSA Board	7/15/2025	8/4/2025	N/A
2	**Adopt the timeline and accept the dates are targets that the committee will try to maintain progress towards, acknowledging that things may come up and require adjustments.**	N/A	**100%**	Committee	8/14/2025	8/14/2025	N/A
3	**Legislative revisions to the Joint Authority Water and Sewer Systems Act ("Act") will be finalized and provided to the Oconee County Delegation. Consultation shall be made with the Delegation on whether lobbyist support will be needed.**	8/29/2025 (45 days)	**100%**	Committee	9/22/2025	1/20/2026	N/A
4	**Reconstitution Committee will provide quarterly updates to the SCRIA, the current Board, and Oconee County on the progress of the implementation of the initial recommendations.**	9/30/2025 (quarterly)	**100%**	OJRSA Staff Member per 8/14/2025 vote	10/9/2025	Report #2: 1/23/2026	N/A
5	**Resolutions of support for consolidation/OJRSA reorganization will be provided to and adopted by each governing body affected by the recommendation, including: OJRSA, Seneca, Walhalla, Westminster, West Union, & Oconee County.**	10/13/2025 (90 days)	**100%**	Officials of OJRSA, Cities/Town, & County	8/21/2025	3/3/2026	N/A
6	**Consultants shall be engaged and the process of a collection system technical evaluation and financial valuation will be initiated, including the identification of potential funding for effort and immediate rehabilitation projects that may be identified or current CIP. Additionally, a rate consultant will be engaged.**	11/12/2025 (120 days)	**100%**	OJRSA, Cities/Town, & County	11/13/2025	3/2/2026	124,605
7	**Communication plan to be developed under the guidance of the Reconstitution Committee and provided to all entities involved.**	11/12/2025 (120 days)	**10%**	Facilitators	12/11/2025		TBD
8	**List of recommendations for the initial commissioners for the New Commission will be provided to Delegation.** *(Within 60 days of approved changes to the Act*)*	Estimate 8/31/2026 (as noted)	**0%**				TBD
9	**Complete the technical evaluation and financial valuation of the collection systems.**	2/27/2027 (15 months)	**0%**				TBD
10	**Unified, equitable rate structure timeline will be provided as part of initial terms for collection system consolidation.**	5/12/2027 (18 months)	**0%**				TBD
11	**Legal documents to transfer collection system assets to OJRSA to be executed, as well as all necessary reconstitution documents.**	7/15/2027 (24 months)	**0%**				TBD
12	**If the legislative amendments have not be approved, plans for consolidation under the amended Act will be abandoned. Thereupon, the OJRSA will proceed to consolidate the member system and implement the reconstitution under the existing Act, with such process to be finalized by no later than 36 months. Additionally, all members shall be issued permits in compliance with the OJRSA Sewer Use Regulation and added as co-permittees under the NPDES permit, if consolidation for any member does not occur.**	8/16/2027 (25 months)	**0%**				
13	**Finalize consolidation and associated activities**	7/17/2028 (36 months)	**0%**				
							124,605

^ As noted in Exhibit A of the "OJRSA Reorganization Recommendations," the implementation schedule is to began when the OJRSA Board of Commissioners accepted the report its July 15, 2025 called meeting.

* Estimated to be July/August 2026.

FY2026 RECONSTITUTION TASKS **TASKS MAY CARRY ACROSS BUDGET YEARS** **3/20/202609:43**

Row #	Agency Reconstitution Tasks as Stated in the OJRSA Reorganization Recommendations Accepted by OJRSA Board on July 15, 2025	Notes
1	**Current Board will dissolve the current Ad Hoc Committee and establish the Implementation Committee ("Reconstitution Committee") for further implementation oversight.**	7/15/2025: Current committee dissolved during called board meeting. 8/4: New Committee established. Includes: A Brock (County), K Bronson (Westminster), C Eleazer (OJRSA), S Moulder (Seneca), C Myers (Walhalla), C Bentley (ACOG), A Mettlen, K Amidon, J Jones, L Flynn. **COMPLETE**.
2	**Adopt the timeline and accept the dates are targets that the committee will try to maintain progress towards, acknowledging that things may come up and require adjustments.**	8/14/2025: The acceptance of timeline was a committee-led decision. **COMPLETE**.
3	**Legislative revisions to the Joint Authority Water and Sewer Systems Act ("Act") will be finalized and provided to the Oconee County Delegation. Consultation shall be made with the Delegation on whether lobbyist support will be needed.**	9/16: Decided to meet with delegation members individually. 9/22: Met with Sen. Alexander and provided him with draft version of JAWSS amendments. 11/3: Sent Sen. Alexander follow up email to see if he had an update on filing the legislation or to see if he had questions. 11/6: Spoke w/ Sen. Alexander. He has others reviewing the proposed Act. 1/13/2026: L Flynn working with staff attorney at SC Senate on language. 1/20: Bill introduced by Sen. Alexander. Bill number is S829. 3/10: Approved by full Judiciary Committee. 3/19: Unanimous approval by full
4	**Reconstitution Committee will provide quarterly updates to the SCRIA, the current Board, and Oconee County on the progress of the implementation of the initial recommendations.**	**DUE TO SCRIA EVERY THREE MONTHS.** Reports submitted: 10/13/2025, 1/23/2026. **Next report due 4/14/2026.**
5	**Resolutions of support for consolidation/OJRSA reorganization will be provided to and adopted by each governing body affected by the recommendation, including: OJRSA, Seneca, Walhalla, Westminster, West Union, & Oconee County.**	8/26: Seneca council approved. 9/8: OJRSA Board approved. 9/9: Westminster council approved. 9/8: West Union considered but decided they need more info. 9/11: C Myers mentioned Walhalla to consider next week and A Brock stated Oconee County to consider in October. 9/16: Walhalla approved. County and West Union still remaining. 10/6: A Brock said it will be on 10/21 agenda. Wanted to keep 10/7 agenda a little lighter since both she and Council Chair Durham were both off that day. 12/11: Mayor Oliver stated she has signed and will deliver soon. 1/16/2025: Received signed copy from West Union. 2/12: G Hart said it will be on county agenda for next week's meeting. 3/3:
6	**Consultants shall be engaged and the process of a collection system technical evaluation and financial valuation will be initiated, including the identification of potential funding for effort and immediate rehabilitation projects that may be identified or current CIP. Additionally, a rate consultant will be engaged.**	9/17/2025: Corrective Action Plan submittals and CIPs for each system returned to cities requesting updates, if any, by 9/24. 10/9: No updates submitted to facilitators. Additional request to send A Mettlen updates by next meeting (11/13). 11/13: Considered scopes and how to pay for studies during meeting. 12/11: Facilitators presented draft considerations. 2/12/2026: Scope and task oerders for Raftelis and First Tryon presented to committee. Approved to send to OJRSA Board. 3/2: OJRSA Board approved execution and funding mechanism using base percentage plus pro
7	**Communication plan to be developed under the guidance of the Reconstitution Committee and provided to all entities involved.**	12/11/2025: K Amidon Presented Communication Memo #1 to committee. 1/9: Memo #1 disseminated to stakeholders. 1/19: Memo #2 disseminated to stakeholders.
8	**List of recommendations for the initial commissioners for the New Commission will be provided to Delegation.** *(Within 60 days of approved changes to the Act*)*	
9	**Complete the technical evaluation and financial valuation of the collection systems.**	
10	**Unified, equitable rate structure timeline will be provided as part of initial terms for collection system consolidation.**	
11	**Legal documents to transfer collection system assets to OJRSA to be executed, as well as all necessary reconstitution documents.**	
12	**If the legislative amendments have not be approved, plans for consolidation under the amended Act will be abandoned. Thereupon, the OJRSA will proceed to consolidate the member system and implement the reconstitution under the existing Act, with such process to be finalized by no later than 36 months. Additionally, all members shall be issued permits in compliance with the OJRSA Sewer Use Regulation and added as co-permittees under the NPDES permit, if consolidation for any member does not occur.**	
13	**Finalize consolidation and associated activities**	

^ As noted in Exhibit A of the "OJRSA Reorganization Recommendations," the implementation schedule is to began wher
meeting.
* Estimated to be July/August 2026.

FY2026 RESTRICTED FUND PROJECTS **PROJECTS MAY CARRY ACROSS BUDGET YEARS** **3/20/2026 09:44**

Row #	Restricted Fund Projects *(Project Manager)*	OJRSA Project #	Approx % Complete	Anticipated Completion	OJRSA Funding Amount ($)	Max Funding by Others ($)	PO/Contract Amount ($)	RESTRICTED FUND PROJECT MILESTONES: Bids/RFQ/etc. Issue/Advertised	PO/Contract Signed	Started Work	Completed	Obligated/ Spent Curr + Prev Years ($)	Budget Remaining ($)	GL Code *(XXXXX = get from Office Mgr)*	Comp. Performing (and Project Mgr)
A	**I-85 Corridor Phase II** *See below (CE)*		96%	See below	*N/A*	*N/A*	*N/A*	See below	See below	See below		See below	See below	RO&M: CIP 1401-06050	*Varies. See Below*
	Engineering and Inspection Services COUNTY FUNDED	**2019-XX and 2023-06**	*100%*	10/31/2024	0	480,850	1,042,220	Inherited from Oconee Co	5/4/2023	5/4/2023		450,787	591,433	RO&M: Prof Svcs 1301-02430	Davis & Floyd Travis Dupree
	Construction EDA/RIA/COUNTY FUNDED		*100%*	10/31/2024	0	12,311,447	11,687,329	9/27/2022	3/23/2023	6/1/2023	2/4/2025	11,687,329	(0)	RO&M: CIP 1401-06050	Moorhead Construct Kevin Moorhead
	Engineering for Creek Stabilization & Welcome Center Waterline		*10%*	TBD	0	78,650	78,650	EJCDC Contract Amend #3	2/20/2025			0	78,650	RO&M: CIP 1401-06050	Davis & Floyd Travis Dupree
B	**Exit 4/Oconee Manufacturing Park ("Sewer South Phase III") PS/Sewer ENGINEERING** *(CE)*	**CY 2022**	100%	11/1/2024	*N/A*	*N/A*	N/A OCONEE CO PROJ	N/A OCONEE CO PROJ	N/A OCONEE CO PROJ	Sometime in 2022	8/29/2025	0	0	TBD	Thomas & Hutton Lee Brackett
C	**Dewatering Equipment Replacement at WRF** *See velow (JM, KL)*		41%	See below	*N/A*	*N/A*	*N/A*	See below	See below	See below		See below	See below	PROJ & CONT 1501-09011	*Varies. See Below*
	Design, Construction Admin, and Inspection SCIIP MATCH	**2024-06**	*75%*	Sub: 9/23/2026 Final: 10/13/2026	440,300	0	440,300	9/15/2023	12/19/2023	1/11/2024		335,881	104,419	PROJ & CONT 1501-09011	KCI Technologies Tom Vollmar
	Construction SCIIP GRANT		*7%*	Sub: 9/23/2026 Final: 10/13/2026	0	4,216,749	4,215,373	3/22/2024	7/30/2024	7/26/2024		333,330	3,882,043	PROJ & CONT 1501-09011	Harper GC Justin Jones
D	**Consent Order Gravity Sewer Rehab Project (SSES/Inspection: 2023)** *See below (CE, KL)*		81%	See below	*N/A*	*N/A*	*N/A*	See below	See below	See below		See below	See below	PROJ & CONT 1501-09009	*Varies. See Below*
	Engineering SCIIP MATCH		*80%*	9/29/2025	584,500	0	584,500	N/A	9/15/2023	10/3/2023		513,569	70,931	PROJ & CONT 1501-09009	Ardurra Priya Verravalli
	Manhole Resiliency Plan: Project 1c SCIIP MATCH	**2024-08**	*80%*	9/30/2025	87,500	0	TBD	N/A	4/21/2025	4/21/2025		24,075	0	PROJ & CONT 1501-09009	Ardurra Priya Verravalli
	Construction/Rehabilitation PHASE 1 SCIIP GRANT		*96%*	SC: 9/18/2025 FC: 10/23/2025	0	4,061,570	3,370,834	8/14/2024	11/20/2024	1/27/2025		215,142	3,155,693	PROJ & CONT 1501-09009	Bio-Nomic Services Buck Stevenson
	Construction/Rehabilitation PHASE 2 SCIIP GRANT		*TBD*	TBD	0	TBD	TBD	1/13/2026				0	0	PROJ & CONT 1501-09009	TBD
E	**Martin Creek PS Basin Trunk Sewer CCTV Engineer Review and Flow Study Report** *(CE)*	**2025-03**	100%	3/31/2025	141,000	0	141,000	Consent Order Prof Svcs	9/30/2024			141,000	0	PROJ & CONT 1501-09012	Ardurra Priya Verravalli
F	**CONSENT ORDER ITEM Evaluation of Gravity Sewer CCTV/Smoketesting from 1A (WRF) to MH29** *(KL)*	**2026-05**	100%	11/15/2025	31,500	0	31,500	Prof Svcs	8/12/2025	8/15/2025	12/16/2025	31,500	0	PROJ & CONT 1501-09014	Ardurra Priya Verravalli
G	**CONSENT ORDER ITEM Speeds Creek FM Replacement Engineering Design & Easements Only**	**2025-TBD**	1%	Prelim: 5/15/2026	TBD	0	69,000	IDC Engineer	PRELIM: 2/24/2026			0	69,000	PROJ & CONT 1501-09015	Weston & Sampson Jason Gillespie
H	**Standard Operating Procedures for Welcome Center PS, Broomway PS per SCDES Requirements** *(KL,*	**N/A**	100%	1/14/2026	0	5,250	5,250	Prof Svcs	10/21/2025	11/12/2025	12/19/2025	5,261	(11)	RO&M: Prof Svcs 1301-02430	Goldie Assoc Paul Lewis
					1,284,800	8,283,569	8,857,757	TOTAL RESTRICTED FUNDS OBLIGATED/ACTUAL TO DATE:				**1,599,757**	**7,282,075**	REMAINING	

FY2026 RESTRICTED FUND PROJECTS **PROJECTS MAY CARRY ACROSS BUDGET YEARS** **3/20/2026 09:44**

Row #	Restricted Fund Projects *(Project Manager)*	Notes
A	**I-85 Corridor Phase II** *See below (CE)*	12/8: Sent email to Greg Shelton to schedule discussion about culvert v. bridge option. 12/11: T Dupree emailed saying they will update the record drawings to include service to Yoders. 12/16: J Wilson and M McClain confirmed lateral from Yoders connects to grav sewer via in-line wye. T Dupree will get revised plans to OJRSA soon but it will likely be after holidays. Also forwarded him the email from J Reynolds on 8/6 about grassing and other warranty-related questions. Also sent L Flynn email about contacting Greg Shelton/David Whipple about culvert v. bridge option at Broomway. Have not heard back from Shelton on email sent 2 weeks ago. 12/17: Forwarded P Shirley email regarding waterline at Welcome Center and the Broomway bridge/culvert option. Asked KL for update on locating/GPSing cleanout at 501 E Fairplay Blvd. and get rim and grade elevations. Received revised record drawings from D&F. Received update from T Dupree about stabilization. There are some needs (he included in email). Asked him to contact Moorhead b/c warranty period ends 12/19/26. 12/19: L Flynn received response from D Whipple stating they are considering bridge option and asked for more info. 12/30: Info from T Dupree forwarded to L Flynn to share with D Whipple. 1/5/2025: T Dupree and Joe Laws with SCDOT communicating about gate access. 1/7: OJRSA informed D&F of approval of gate plan that was received earlier in day. Completed SCDOT permit. 1/8: Sent letter to B Dean (DOT) saying OJRSA would maintain gate. 2/20: Received SCDOT Encroachment Permit to install gate at controlled access location at Exit 2. KL to get quotes from qualified SCDOT contractors. 3/9: T Dupree confirmed SCDOT Encroachment Permit was submitted for water line at Welcome Center last week.
	Engineering and Inspection Services COUNTY FUNDED	
	Construction EDA/RIA/COUNTY FUNDED	
	Engineering for Creek Stabilization & Welcome Center Waterline	
B	**Exit 4/Oconee Manufacturing Park ("Sewer South Phase III") PS/Sewer ENGINEERING** *(CE)*	1/13: B Dean sent reminder email about the 1/6 item. No response yet from T&H. 2/3: Received draft letter from L Brackett. CE approved, Stewart Jones to also review/approve. 2/5: Received signed letter from L Brackett. Forwarded to B Dean. 3/11: Rec email from B Dean asking us to sign Enc Permit and for copy of COI. Forwarded to L Brackett. He responded saying he's requested both from county.
C	**Dewatering Equipment Replacement at WRF** *See velow (JM, KL)*	1/6/2025: Received 90% plans, Jackson Electric visited site to assess. 1/22: Received SCDES construction permit application payment request of $550. 2/4: Board approved contracts. Signed, submitted stormwater permit application. 3/10: Received feedback from SCRIA on contract. KCI will need to oversee a few items and respond. 3/28: Received final contract as approved by RIA for signature. Barbian asked Harper to sign then forward for OJRSA signature. 4/17: Signed contract. 7/25: Looking at November mobilization. Looking at substantial completion in mid-July 2026. 9/15: Continuing to work on electrical. 10/2: Harper will apply for building permits soon. 12/18: Mobilization is now likely to occur in March once equipment arrives. Project is still on schedule for completion in accordance with SCIIP requirements. 1/9/2026: Shop drawings have been submitted and plans for conveyor updated. 1/23: Shop drawings may impact project schedule soon. Engr to work with contractor to develop plan. Trying to schedule demo of dryer solids silo soon. 3/4: Executed CO #2 and Notice to Proceed. CO #2 within limit of prior board approval. Mobilization to begin next week. 3/9: Executed CO #3 to add 28 days to substantial compl. 3/16: Equipment beginning to arrive.
	Design, Construction Admin, and Inspection SCIIP MATCH	
	Construction SCIIP GRANT	
D	**Consent Order Gravity Sewer Rehab Project (SSES/Inspection: 2023)** *See below (CE, KL)*	PO/Contract Amount includes $700,000 owner contingency 12/17: Discussed procurement of contractor and materials. KL to get additional quotes for watertight lids--"nonresponsive bidder" not acceptable for SCIIP, so must go to other vendors. Ardurra to provide a statement from them or RIA to us before we will order. Sent J Lyons RFB info in Word format for editing. 12/19: KL waiting for final approval by Nate/RIA on Procurement of Materials in Advance for SCIIP Grant form. Once that is approved, then KL will oversee obtaining at least 3 qualifying quotes for 65 watertight manhole rings/covers. 1/5/2026: Completed 1 of relines and sprayed manhole that was replaced. Crew preparing for 2nd reline under SC11. Post-CCTV work ongoing. R/W rehab on hold until mats come out and site restoration will happen then. Pay app submitted to engr for review. 1/7: Sent manhole vent detail to J Lyon. 1/13: Advertised for Phase II of SCIIP Project. Pre-bid meeting scheduled for 2/2. 1/30: Created second Phase II pre-bid meeting for 2/9 due to forecasted winter weather. 2/2: Continuing restoration. There is some more small work to do with the manholes and there has been a punchlist developed. Waiting for things to dry out. Final test results and CCTV delivered by Buck Stevenson to Ardurra last Wednesday and they are being reviewed. 2/16: Will be looking at seeding and strawing soon. Bio-Nomic will allow for OJRSA to review and approve easement conditions prior to seeding/strawing. Will schedule final manhole inspections once KL returns tomorrow. Pay App that was submitted in December is on hold becasue engr missing 15 CCTV videos and 3 test results. This info was sent by email last week. Discussion about accessing manholes because one seems too small for a person to access. 2/17: Received one bid for Phase 2. Uncertified bids were $957,540 base, $699,900 Alternate, $1,657,440 total.
	Engineering SCIIP MATCH	
	Manhole Resiliency Plan: Project 1c SCIIP MATCH	
	Construction/Rehabilitation PHASE 1 SCIIP GRANT	
	Construction/Rehabilitation PHASE 2 SCIIP GRANT	
E	**Martin Creek PS Basin Trunk Sewer CCTV Engineer Review and Flow Study Report** *(CE)*	5/5: Received draft report to review. 6/2: Provided comments to Priya. 7/24: Received final report. **COMPLETE**.
F	**CONSENT ORDER ITEM Evaluation of Gravity Sewer CCTV/Smoketesting from 1A (WRF) to MH29** *(KL)*	Review CCTV for 9,525 LF of 30" and 36" RCP and 29 manhole inspections to develop list of defects for design of sewer rehab.12/5: Received final report, however, OJRSA staff still have questions. Scheduled meeting with eng for 12/8. 12/16: J Lyon needs to speak with Rebecca Turner on final comments. 12/16: Received final report. **COMPLETE**.
G	**CONSENT ORDER ITEM Speeds Creek FM Replacement Engineering Design & Easements Only**	CONSENT ORDER ITEM 7/15/2024: As identified in the 20 Year Master Plan, this force main should be replaced with similar sized pipe. 1/27: Meeting scheduled for early Feb with J Gillespie to begin first phase. 2/5: Met with J Gillespie to discuss prelim engineering for this. 2/24: Executed TO #1 for prelim engineering. (~10 week proj) 3/12: Letters sent out to property owners along route letting them know about
H	**Standard Operating Procedures for Welcome Center PS, Broomway PS per SCDES Requirements** *(KL,*	Will be invoiced for this and the Duck Pond PS together. To determine how much each will be for coding, use this formula for Duck Pond: Invoice Amount x 66.46% 11/12: Began work. 12/12: Received SOPs, will begin review and provide feedback to engineer. 12/19: **COMPLETE**.

010 OJRSA FUND
004 REVENUE
00401 REVENUE

Revenue Report

Level 4 Summary for February 2026

Oconee Joint Rsa
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Accounts	Budget Appropriation	Supplemental Appropriation	Adjusted Budget	Current Pd Revenue	Curr Pct	Year To Date Revenue	YTD Pct	Budget Balance
010 OJRSA FUND								
004 REVENUE								
00401 REVENUE								
01790 UNRESTRICTED INTEREST	$25,000.00	$0.00	$25,000.00	$1,631.38	7	$74,036.54	296	($49,036.54)
01830 HAULED WASTE SVCES	$213,502.00	$0.00	$213,502.00	$21,328.84	10	$159,026.34	74	$54,475.66
01840 OTHER REVENUE	$41,269.00	$0.00	$41,269.00	$2,639.10	6	$282,428.41	684	($241,159.41)
01880 CAPACITY FEES	$0.00	$0.00	$0.00	$0.00	0	$0.00	0	$0.00
01910 USER FEES	$6,128,172.00	$0.00	$6,128,172.00	$416,336.48	7	$3,893,000.52	64	$2,235,171.48
Total Revenue	**$6,407,943.00**	**$0.00**	**$6,407,943.00**	**$441,935.80**	**7**	**$4,408,491.81**	**69**	**$1,999,451.19**
00801 PRETREATMENT								
01850 INDUSTRIES	$190,278.00	$0.00	$190,278.00	$48,999.96	26	$157,046.26	83	$33,231.74
Total Pretreatment	**$190,278.00**	**$0.00**	**$190,278.00**	**$48,999.96**	**26**	**$157,046.26**	**83**	**$33,231.74**
01001 RETAIL IMPACT FEE FUND								
01880 CAPACITY FEES	$5,000.00	$0.00	$5,000.00	$0.00	0	$0.00	0	$5,000.00
Total Retail Impact Fee Fund	**$5,000.00**	**$0.00**	**$5,000.00**	**$0.00**	**0**	**$0.00**	**0**	**$5,000.00**
01101 WHOLESALE IMPACT FEE FUND								
01780 RESTRICTED INTEREST	$100,000.00	$0.00	$100,000.00	$18,374.98	18	$143,399.80	143	($43,399.80)
01880 CAPACITY FEES	$800,000.00	$0.00	$800,000.00	$36,528.99	5	$1,221,515.31	153	($421,515.31)
01930 UNUSED CAPACITY FEES	$76,000.00	$0.00	$76,000.00	$31,530.87	41	$87,916.50	116	($11,916.50)
Total Wholesale Impact Fee Fund	**$976,000.00**	**$0.00**	**$976,000.00**	**$86,434.84**	**9**	**$1,452,831.61**	**149**	**($476,831.61)**
01201 CONTRACT OPERATIONS								
01900 INTERGOV. REIMBURSEMENT	$50,491.00	$0.00	$50,491.00	$7,530.50	15	$76,015.35	151	($25,524.35)
Total Contract Operations	**$50,491.00**	**$0.00**	**$50,491.00**	**$7,530.50**	**15**	**$76,015.35**	**151**	**($25,524.35)**
01301 RETAIL SERVICES								
01780 RESTRICTED INTEREST	$0.00	$0.00	$0.00	$0.00	0	$5,892.42	0	($5,892.42)
01900 INTERGOV. REIMBURSEMENT	$105,534.00	$0.00	$105,534.00	$0.00	0	$11,601.58	11	$93,932.42
01910 USER FEES	$269.00	$0.00	$269.00	$0.00	0	$15,190.82	5647	($14,921.82)
Total Retail Services	**$105,803.00**	**$0.00**	**$105,803.00**	**$0.00**	**0**	**$32,684.82**	**31**	**$73,118.18**
01501 CONTINGENCY FUND								
01840 OTHER REVENUE	$7,773,098.00	$0.00	$7,773,098.00	$0.00	0	$121,316.67	2	$7,651,781.33
Total Contingency Fund	**$7,773,098.00**	**$0.00**	**$7,773,098.00**	**$0.00**	**0**	**$121,316.67**	**2**	**$7,651,781.33**
Total REVENUE	**$15,508,613.00**	**$0.00**	**$15,508,613.00**	**$584,901.10**	**4**	**$6,248,386.52**	**40**	**$9,260,226.48**
Total OJRSA FUND	**$15,508,613.00**	**$0.00**	**$15,508,613.00**	**$584,901.10**	**4**	**$6,248,386.52**	**40**	**$9,260,226.48**
TOTAL ALL FUNDS	**$15,508,613.00**	**$0.00**	**$15,508,613.00**	**$584,901.10**	**4**	**$6,248,386.52**	**40**	**$9,260,226.48**

010 OJRSA FUND
005 EXPENSES
00501 ADMINISTRATION

Expenditure Report

Level 4 Summary for February 2026

Oconee Joint Rsa
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Accounts	Budget Appropriation	Supplemental Appropriation	Adjusted Budget	Curr Pct	Year To Date Expenditures	YTD Pct	Encumbered Balance	Unencumbered Balance	Une Pct
010 OJRSA FUND									
005 EXPENSES									
00501 ADMINISTRATION									
01140 100% DEPRECIATION EXPENSE	$1,238,863.00	$0.00	$1,238,863.00	8	$825,908.64	67	$0.00	$412,954.36	33
01300 PAYROLL: SALARIES	$1,331,852.00	$0.00	$1,331,852.00	7	$844,796.41	63	$0.00	$487,055.59	37
01310 OVERTIME	$35,892.00	$0.00	$35,892.00	19	$27,688.64	77	$0.00	$8,203.36	23
01350 PAYROLL: FICA/MEDICARE WH	$110,941.00	$0.00	$110,941.00	7	$67,309.15	61	$0.00	$43,631.85	39
01380 PAYROLL: RETIREMENT	$253,853.00	$0.00	$253,853.00	11	$150,654.55	59	$0.00	$103,198.45	41
02200 COMMISSIONER EXPENSES	$13,140.00	$0.00	$13,140.00	15	$9,960.00	76	$0.00	$3,180.00	24
02220 GROUP INSURANCE	$264,245.00	$0.00	$264,245.00	9	$174,675.94	66	$0.00	$89,569.06	34
02250 INSURANCE-PROPERTY/GENERAL	$109,186.00	$0.00	$109,186.00	5	$127,023.21	116	$0.00	($17,837.21)	(16)
02260 EMPLOYEE WELLNESS	$34,987.00	$0.00	$34,987.00	5	$15,555.40	44	$0.00	$19,431.60	56
02300 LICENSES/CERTIFS/MEMBERSHIPS	$47,668.00	$0.00	$47,668.00	4	$25,624.43	54	$0.00	$22,043.57	46
02320 EVENTS & MEETING EXPENSES	$4,400.00	$0.00	$4,400.00	2	$2,814.03	64	$0.00	$1,585.97	36
02370 SAFETY	$50,355.00	$0.00	$50,355.00	0	$36,791.30	73	$0.00	$13,563.70	27
02380 OFFICE SUPPLIES	$298,788.00	$0.00	$298,788.00	11	$139,164.34	47	$0.00	$159,623.66	53
02410 TECHNOLOGY: PHONES/INTERNET/TV	$16,500.00	$0.00	$16,500.00	4	$8,847.21	54	$0.00	$7,652.79	46
02420 ADMINISTRATION SERVICES	$280,413.00	$0.00	$280,413.00	17	$310,745.97	111	$0.00	($30,332.97)	(11)
02440 O&M CONTINGENCY	$250,000.00	$0.00	$250,000.00	0	$0.00	0	$0.00	$250,000.00	100
02530 R&M: VEHICLES/TRAILERS/EQUIP	$116,000.00	$0.00	$116,000.00	11	$54,174.66	47	$121.34	$61,704.00	53
02560 FEES & PENALTIES	$4,339.00	$0.00	$4,339.00	5	$4,015.55	93	$0.00	$323.45	7
02590 ROLLING STOCK & EQUIPMENT	$84,000.00	$0.00	$84,000.00	0	$80,607.00	96	$0.00	$3,393.00	4
Total Administration	**$4,545,422.00**	**$0.00**	**$4,545,422.00**	**8**	**$2,906,356.43**	**64**	**$121.34**	**$1,638,944.23**	**36**
00601 CONVEYANCE SYSTEM									
02400 SUPPLIES/TOOLS	$57,342.00	$0.00	$57,342.00	2	$51,794.18	90	($607.50)	$6,155.32	11
02411 TECHNOLOGY: SCADA	$22,043.00	$0.00	$22,043.00	0	$16,088.40	73	$0.00	$5,954.60	27
02430 SERVICES: PROFESSIONAL/CONSULT	$142,556.00	$0.00	$142,556.00	5	$118,224.67	83	$0.00	$24,331.33	17
02450 CHEMICALS: SODIUM HYPOCHLORITE	$26,061.00	$0.00	$26,061.00	0	$19,891.96	76	$0.00	$6,169.04	24
02455 CHEMICALS: HERBICIDE/PESTICIDE	$2,000.00	$0.00	$2,000.00	0	$781.62	39	$0.00	$1,218.38	61
02490 ELECTRICITY	$279,840.00	$0.00	$279,840.00	9	$175,896.34	63	$0.00	$103,943.66	37
02500 WATER	$11,130.00	$0.00	$11,130.00	9	$8,008.27	72	$0.00	$3,121.73	28
02540 EQUIPMENT RENTALS	$15,000.00	$0.00	$15,000.00	5	$7,646.33	51	$0.00	$7,353.67	49
02550 BUILDINGS & GROUNDS	$6,000.00	$0.00	$6,000.00	0	$5,801.44	97	$0.00	$198.56	3
02590 ROLLING STOCK & EQUIPMENT	$32,025.00	$0.00	$32,025.00	0	$31,621.09	99	$0.00	$403.91	1
04030 FLOW MONITOR STAS: RICHLAND	$0.00	$0.00	$0.00	0	$10,645.14	0	$0.00	($10,645.14)	0
05000 PUMP STATIONS	$225,410.00	$0.00	$225,410.00	1	$53,712.67	24	$0.00	$171,697.33	76
05010 PUMP STATIONS: CANE PS	$0.00	$0.00	$0.00	0	$9,942.66	0	$0.00	($9,942.66)	0
05020 PUMP STATIONS: CHOESTOEA PS	$0.00	$0.00	$0.00	0	$510.78	0	$0.00	($510.78)	0
05030 PUMP STATIONS: CONEROSS PS	$0.00	$0.00	$0.00	0	$0.00	0	$69.75	($69.75)	0
05040 PUMP STATIONS: CRYOVAC PS	$0.00	$0.00	$0.00	0	$317.85	0	$0.00	($317.85)	0
05080 PUMP STATIONS: HALFWAY BR PS	$0.00	$0.00	$0.00	0	$1,025.00	0	$0.00	($1,025.00)	0
05090 PUMP STATIONS: ISS PS	$0.00	$0.00	$0.00	0	$4,791.34	0	$0.00	($4,791.34)	0

010 OJRSA FUND
005 EXPENSES
00601 CONVEYANCE SYSTEM

Oconee Joint Rsa
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Accounts	Budget Appropriation	Supplemental Appropriation	Adjusted Budget	Curr Pct	Year To Date Expenditures	YTD Pct	Encumbered Balance	Unencumbered Balance	Une Pct
05100 PUMP STATIONS: MARTIN CREEK PS	$0.00	$0.00	$0.00	0	$41,403.31	0	$150.44	($41,553.75)	0
05110 PUMP STATIONS: MILLBROOK PS	$0.00	$0.00	$0.00	0	$152.54	0	$0.00	($152.54)	0
05130 PUMP STATIONS: PERKINS PS	$0.00	$0.00	$0.00	0	$2,802.13	0	$0.00	($2,802.13)	0
05140 PUMP STATIONS: SENECA PS	$0.00	$0.00	$0.00	0	$131.35	0	$7.63	($138.98)	0
05150 PUMP STATIONS: SPEEDS PS	$0.00	$0.00	$0.00	0	$434.59	0	$0.00	($434.59)	0
05160 PUMP STATIONS: WEXFORD PS	$0.00	$0.00	$0.00	0	$302.69	0	$12.37	($315.06)	0
05210 DUCK POND ROAD PS	$0.00	$0.00	$0.00	0	$17,050.10	0	$0.00	($17,050.10)	0
05230 GRAVITY SEWER & FORCE MAINS	$145,000.00	$0.00	$145,000.00	22	$118,010.91	81	$4,990.96	$21,998.13	15
Total Conveyance System	**$964,407.00**	**$0.00**	**$964,407.00**	**13**	**$696,987.36**	**72**	**$4,623.65**	**$262,795.99**	**27**
00701 WRF OPERATIONS									
02400 SUPPLIES/TOOLS	$6,500.00	$0.00	$6,500.00	1	$3,906.12	60	$2,238.74	$355.14	5
02411 TECHNOLOGY: SCADA	$6,511.00	$0.00	$6,511.00	0	$2,757.60	42	$0.00	$3,753.40	58
02430 SERVICES: PROFESSIONAL/CONSULT	$15,750.00	$0.00	$15,750.00	0	$13,305.69	84	$0.00	$2,444.31	16
02451 CHEMICALS: CHLORINE	$74,160.00	$0.00	$74,160.00	17	$59,015.05	80	$0.00	$15,144.95	20
02452 CHEMICALS: POLYMER	$66,000.00	$0.00	$66,000.00	5	$27,810.31	42	$0.00	$38,189.69	58
02454 CHEMICALS: SODIUM BISULFITE	$25,000.00	$0.00	$25,000.00	0	$14,670.19	59	$0.00	$10,329.81	41
02457 CHEMICALS: OTHER	$6,800.00	$0.00	$6,800.00	(13)	$693.27	10	$0.00	$6,106.73	90
02470 GARBAGE	$396.00	$0.00	$396.00	7	$222.00	56	$0.00	$174.00	44
02480 NATURAL GAS	$1,590.00	$0.00	$1,590.00	47	$1,456.24	92	$0.00	$133.76	8
02490 ELECTRICITY	$337,080.00	$0.00	$337,080.00	9	$232,353.00	69	$0.00	$104,727.00	31
02500 WATER	$5,300.00	$0.00	$5,300.00	33	$11,193.98	211	$0.00	($5,893.98)	(111)
02510 SLUDGE DISPOSAL	$185,389.00	$0.00	$185,389.00	15	$148,993.10	80	$0.00	$36,395.90	20
02540 EQUIPMENT RENTALS	$5,000.00	$0.00	$5,000.00	0	$962.48	19	$0.00	$4,037.52	81
02550 BUILDINGS & GROUNDS	$17,900.00	$0.00	$17,900.00	17	$5,951.35	33	$0.00	$11,948.65	67
02590 ROLLING STOCK & EQUIPMENT	$29,000.00	$0.00	$29,000.00	0	$18,810.42	65	$0.00	$10,189.58	35
03000 WATER RECLAMATION FACILITY	$919,919.00	$0.00	$919,919.00	0	$191,212.24	21	$3,664.78	$725,041.98	79
Total Wrf Operations	**$1,702,295.00**	**$0.00**	**$1,702,295.00**	**5**	**$733,313.04**	**43**	**$5,903.52**	**$963,078.44**	**57**
00801 PRETREATMENT									
01300 PAYROLL: SALARIES	$82,469.00	$0.00	$82,469.00	8	$57,194.45	69	$0.00	$25,274.55	31
01380 PAYROLL: RETIREMENT	$15,306.00	$0.00	$15,306.00	12	$10,532.04	69	$0.00	$4,773.96	31
02220 GROUP INSURANCE	$8,347.00	$0.00	$8,347.00	8	$5,472.57	66	$0.00	$2,874.43	34
02300 LICENSES/CERTIFS/MEMBERSHIPS	$4,110.00	$0.00	$4,110.00	5	$1,654.99	40	$0.00	$2,455.01	60
02380 OFFICE SUPPLIES	$4,500.00	$0.00	$4,500.00	0	$6,647.76	148	$0.00	($2,147.76)	(48)
02410 TECHNOLOGY: PHONES/INTERNET/TV	$1,335.00	$0.00	$1,335.00	3	$371.09	28	$0.00	$963.91	72
02430 SERVICES: PROFESSIONAL/CONSULT	$42,498.00	$0.00	$42,498.00	2	$29,463.00	69	$0.00	$13,035.00	31
Total Pretreatment	**$158,565.00**	**$0.00**	**$158,565.00**	**6**	**$111,335.90**	**70**	**$0.00**	**$47,229.10**	**30**
00901 LABORATORY									
02400 SUPPLIES/TOOLS	$6,200.00	$0.00	$6,200.00	0	$11,038.08	178	$1,639.43	($6,477.51)	(104)
02430 SERVICES: PROFESSIONAL/CONSULT	$47,230.00	$0.00	$47,230.00	11	$27,658.22	59	$412.50	$19,159.28	41
02456 CHEMICALS: LABORATORY	$5,400.00	$0.00	$5,400.00	87	$9,844.59	182	$0.00	($4,444.59)	(82)
Total Laboratory	**$58,830.00**	**$0.00**	**$58,830.00**	**16**	**$48,540.89**	**83**	**$2,051.93**	**$8,237.18**	**14**

010 OJRSA FUND
005 EXPENSES
01201 CONTRACT OPERATIONS

Oconee Joint Rsa
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Accounts	Budget Appropriation	Supplemental Appropriation	Adjusted Budget	Curr Pct	Year To Date Expenditures	YTD Pct	Encumbered Balance	Unencumbered Balance	Une Pct
01201 CONTRACT OPERATIONS									
02411 TECHNOLOGY: SCADA	$2,202.00	$0.00	$2,202.00	0	$707.40	32	$0.00	$1,494.60	68
02430 SERVICES: PROFESSIONAL/CONSULT	$5,100.00	$0.00	$5,100.00	0	$100.00	2	$0.00	$5,000.00	98
02490 ELECTRICITY	$0.00	$0.00	$0.00	0	$0.00	0	$0.00	$0.00	0
02500 WATER	$630.00	$0.00	$630.00	10	$335.87	53	$0.00	$294.13	47
02521 FUEL: GENERATORS	$500.00	$0.00	$500.00	0	$0.00	0	$0.00	$500.00	100
02550 BUILDINGS & GROUNDS	$500.00	$0.00	$500.00	0	$0.00	0	$0.00	$500.00	100
05170 PUMP STATIONS: GCCP-PS	$10,500.00	$0.00	$10,500.00	0	$107.14	1	$0.00	$10,392.86	99
Total Contract Operations	**$19,432.00**	**$0.00**	**$19,432.00**	**0**	**$1,250.41**	**6**	**$0.00**	**$18,181.59**	**94**
01301 RETAIL SERVICES									
02400 SUPPLIES/TOOLS	$500.00	$0.00	$500.00	0	$0.00	0	$0.00	$500.00	100
02411 TECHNOLOGY: SCADA	$1,370.00	$0.00	$1,370.00	0	$0.00	0	$0.00	$1,370.00	100
02430 SERVICES: PROFESSIONAL/CONSULT	$93,337.00	$0.00	$93,337.00	1	$30,213.67	32	$0.00	$63,123.33	68
02490 ELECTRICITY	$8,820.00	$0.00	$8,820.00	0	$5,309.46	60	$0.00	$3,510.54	40
02500 WATER	$1,050.00	$0.00	$1,050.00	0	$0.00	0	$0.00	$1,050.00	100
05000 PUMP STATIONS	$725.00	$0.00	$725.00	0	$0.00	0	$0.00	$725.00	100
05180 PUMP STATIONS: WELCOME CTR	$0.00	$0.00	$0.00	0	$717.81	0	$0.00	($717.81)	0
Total Retail Services	**$105,802.00**	**$0.00**	**$105,802.00**	**1**	**$36,240.94**	**34**	**$0.00**	**$69,561.06**	**66**
01401 CAPITAL PROJECTS									
06050 SEWER SOUTH PHASE II	$0.00	($1,982,040.00)	($1,982,040.00)	0	$1,976,561.95	(100)	$0.00	($3,958,601.95)	200
06071 SENECA PS & FM UPGRADE/SPEEDS	$80,000.00	$0.00	$80,000.00	6	$115,000.00	144	$0.00	($35,000.00)	(44)
Total Capital Projects	**$80,000.00**	**($1,982,040.00)**	**($1,902,040.00)**	**0**	**$2,091,561.95**	**0**	**$0.00**	**($3,993,601.95)**	**0**
01501 CONTINGENCY FUND									
00002 CONTINGENCY EXPENSES	$8,556,158.00	$0.00	$8,556,158.00	0	$0.00	0	$0.00	$8,556,158.00	100
09009 COLLECTION SYSTEM REHAB	$0.00	($159,000.00)	($159,000.00)	0	$248,235.98	(156)	$0.00	($407,235.98)	256
09011 DEWATERING EQUIP REPLACEMENT	$0.00	$0.00	$0.00	0	$380,289.30	0	$0.00	($380,289.30)	0
09014 MH1A-MH29 GRAVITY SEWER REHAB	$0.00	$0.00	$0.00	0	$31,500.00	0	$0.00	($31,500.00)	0
Total Contingency Fund	**$8,556,158.00**	**($159,000.00)**	**$8,397,158.00**	**0**	**$660,025.28**	**8**	**$0.00**	**$7,737,132.72**	**92**
Total EXPENSES	**$16,190,911.00**	**($2,141,040.00)**	**$14,049,871.00**	**4**	**$7,285,612.20**	**52**	**$12,700.44**	**$6,751,558.36**	**48**
Total OJRSA FUND	**$16,190,911.00**	**($2,141,040.00)**	**$14,049,871.00**	**4**	**$7,285,612.20**	**52**	**$12,700.44**	**$6,751,558.36**	**48**
	$16,190,911.00	**($2,141,040.00)**	**$14,049,871.00**	**4**	**$7,285,612.20**	**52**	**$12,700.44**	**$6,751,558.36**	**48**

OJRSA

Fiscal Year 2026 Supplemental Budget #3 **April 6, 2026 Board Meeting**

OPERATIONS & MAINTENANCE FUND		Current ($)	Incr/ Decr ($)	Amended ($)	Note
O&M FUND REVENUES	Dept Total	**6,759,426**	**0**	**NO CHANGE**	
401/501/801/1201 Departments					
O&M FUND EXPENSES		**6,759,426**	**0**	**NO CHANGE**	
101/201/501 Administration *(not including depreciation)*	Dept Total	*3,775,898*	*(469,338)*	*3,306,560*	
(No GL Code) Fund Transfer to Capital Projects Fund (Projects & Conting Fund)			*(469,338)*		*[A]*
601 Conveyance System	Dept Total	*964,406*	*0*	*NO CHANGE*	
701 WRF Operations	Dept Total	*1,702,295*	*0*	*NO CHANGE*	
801 Pretreatment	Dept Total	*158,565*	*0*	*NO CHANGE*	
901 Laboratory	Dept Total	*58,830*	*0*	*NO CHANGE*	
1201 Contract Operations (I-85 Sewer)	Dept Total	*19,432*	*0*	*NO CHANGE*	
1401 O&M Capital Improvement Projects	Dept Total	*80,000*	*469,338*	*549,338*	
(No GL Code) Fund Transfer to Capital Projects Fund (Projects & Conting Fund)			*469,338*		*[A]*

RESTRICTED AND OTHER FUNDS	Current ($)	Incr/ Decr ($)	Amended ($)	Note
FUND REVENUES				
1001 RETAIL IMPACT FUND *(RESTRICTED USE)*	5,000	0	NO CHANGE	
1101 WHOLESALE IMPACT FUND *(RESTRICTED USE)*	976,000	0	NO CHANGE	
1301/1401 RETAIL OPERATIONS & MAINTENANCE FUND *(UNRESTRICTED USE)*	105,802	0	NO CHANGE	
1501 PROJECTS & CONTINGENCY FUND *(RESTRICTED USE)*	8,715,158	0	NO CHANGE	
FUND EXPENSES				
1001 RETAIL IMPACT FUND *(RESTRICTED USE)*	0	0	NO CHANGE	
1101 WHOLESALE IMPACT FUND *(RESTRICTED USE)*	0	0	NO CHANGE	
1301/1401 RETAIL OPERATIONS & MAINTENANCE FUND *(UNRESTRICTED USE)*	1,889,178	0	NO CHANGE	
1501 PROJECTS & CONTINGENCY FUND *(RESTRICTED USE)*	8,715,158	0	NO CHANGE	

NOTES

[A] Administrative change made to reflect the funds derived from user fees and other annual budgetrevenue sources are used for larger-scale and related projects. For FY 2026, these transfers were to be used for the following purposes: (1) Assessment and Rehab Design of Gravity Sewer Sections MH1A-MH29, (2) Engineering for Manhole Resilience Plan to Address Flooding Issues, and (3) Speeds Creek Force Main Replacement Preliminary Design and Easement Acquisition.

Piedmont Municipal Power Agency

BOARD PACK

for

PMPA Board Meeting

Thursday, March 19, 2026

10:00 AM (EDT)

Held at:

PMPA Office

121 Village Drive, Greer, SC 29651

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AGENDA

PMPA BOARD MEETING

Name:	Piedmont Municipal Power Agency
Date:	Thursday, March 19, 2026
Time:	10:00 AM to 2:00 PM (EDT)
Location:	PMPA Office, 121 Village Drive, Greer, SC 29651 https://pmpa.zoom.us/j/88630950725?pwd=EUeNPdisRVC2FeD4nTLV3anTU9ZqUG.1
Board Members:	Andy Sevic (Chair), Blake Stone, Mayor Brian Ramey, David Dorman, David Vehaun, Eric Goodwin, Mayor Foster Senn, Jason Taylor, Jimmy Bagley, Joe Nichols, Joey Meadors, John Young, Keith Wood, Kevin Bronson, Lance Davis, Marc Regier, Mike Richard, Mike Clary, Mayor Randy Randall, Steve Bratton
Attendees:	Angie Hoover, Brandon Audet, Cindy Frierson, Dedra Howell, Dennis Cameron, Gary Brunault, Joel Ledbetter, JulieAnne London, Kenny Bradley, Lynn Price, Mike Frazier, Rion Foley, Robby Townsend, Tom Gressette, Tracy Quinn, Will Blanton

1. Call to Order

1.1 Identify Virtual Attendees

1.2 Declaration of Quorum

1.3 Invocation

2. Approval of Minutes

2.1 Confirm Minutes

Supporting Documents:

2.1.a	Minutes : PMPA Board Meeting - 19 Feb 2026	6

2.2 Approval February 19, 2026 Board Meeting Minutes

3. Acceptance of Financial Report

3.1 February 2026 Finance Report

Supporting Documents:

3.1.a	February 2026 Financial Board Mailing.pdf	9

4. Reports

4.1 Finance

4.2 Engineering

Supporting Documents:

4.2.a	2026_02_LSG Report.pdf	17
4.2.b	2026_02_Demand Response Report.pdf	18
4.2.c	2026_02_Energy Report.pdf	19

4.3 Catawba

Supporting Documents:

4.3.a	Catawba Report March 12 2026.pdf	20

4.4 Management

5. Executive Session

5.1 Vote to enter into Executive Session

For Decision

5.2 Discussion of matters pertaining to contractual negotiations

5.3 Discussion of matters involving attorney/client privilege

5.4 Vote to return to Regular Session

For Decision

6. Action Items

6.1 Presentation and acceptance of PMPA 2025 Financial Audit

For Decision

Supporting Documents:

6.1.a	2025 PMPA Financial Statements -Board Mailing Version.pdf	21

6.2 Disposition of PMPA Transmission Assets upon termination of SPSA

For Decision

6.3 Consider recommendation of Finance Committee for G&A allocation

For Decision

7. Participant Discussion

8. Adjourn

8.1 Adjourn

Next meeting: PMPA Board Meeting (Virtual) - Mar 25, 2026, 10:00 AM

MINUTES (in Review)

PMPA BOARD MEETING

Name:	Piedmont Municipal Power Agency
Date:	Thursday, February 19, 2026
Time:	10:00 AM to 11:39 AM (EST)
Location:	PMPA Office, 121 Village Drive, Greer, SC 29651
Board Members:	Andy Sevic (Chair), Blake Stone, Mayor Randy Randall, Joey Meadors, David Dorman, Steve Bratton, Mike Richard, Marc Regier, Keith Wood, Mayor Foster Senn, Jason Taylor, Jimmy Bagley, David Vehaun, Joe Nichols, Lance Davis, Kevin Bronson, Mayor Brian Ramey
Attendees:	Joel Ledbetter, JulieAnne London, Mike Frazier, Dennis Cameron, Tracy Quinn, Lynn Price, Will Blanton, Kenny Bradley, Robby Townsend, Gary Brunault, Rion Foley
Apologies:	Mike Clary, Eric Goodwin, John Young, Angie Hoover, Brandon Audet, Cindy Frierson, Dedra Howell, Tom Gressette
Guests:	Tim Baker, Mark White, Mike Colo, Bill Musser, and Andrea Kelley
Notes:	Virtual Attendees: Blake Stone, Gary Brunault, Mike Colo, Bill Musser, and Andrea Kelley

1. Call to Order

1.1 Identify Virtual Attendees

1.2 Declaration of Quorum

Chairman Sevic declared that a quorum is present and the Board can conduct business.

1.3 Invocation

Mr. Ledbetter gave the invocation.

2. Approval of Minutes

2.1 Confirm Minutes

PMPA Board Meeting Jan 21, 2026, the minutes were confirmed as presented.

2.2 Approval January 21, 2026 Board Meeting Minutes

Approval January 21, 2026 Board Meeting Minutes

10 Supported
0 Opposed
0 Abstained

Decision Date: Feb 19, 2026

Mover:	Kevin Bronson
Seconder:	Keith Wood
Outcome:	Approved

3. Acceptance of Financial Report

3.1 January 2026 Finance Report

January 2026 Finance Report

10 Supported
0 Opposed
0 Abstained

Decision Date:	Feb 19, 2026
Mover:	David Dorman
Seconder:	Mayor Foster Senn
Outcome:	Approved

4. Reports

4.1 Finance

Mr. Ledbetter made presentation on the expected variability of future supplemental power cost for the 7 Participants that will receive supplemental power from PMPA beginning in 2029.

4.2 Engineering

Mr. Frazier reviewed the standard engineering reports for January that were included in the Board Pack.

4.3 Catawba

Mr. Cameron reviewed the Catawba and McGuire report that was included in the Board Pack and provided updates since that report.

4.4 Management

Mr. Ledbetter advised the Board that the draft minutes of the February 9, 2026, Executive Committee were included in the Board Pack for information. He also stated that a virtual Finance Committee meeting has been scheduled for March 2, 2026, at 2:00 pm, and a Transmission Committee meeting is being scheduled.

Mr. Ledbetter also advised the Board that staff have reserved several rooms for the APPA National Conference scheduled for June 28 - July 1, 2026, in Boston, MA.

Mr. Ledbetter requested that if the Board had any topics it would like to hear a presentation on at the 2026 Power Conference to let him know.

Mr. Ledbetter reminded the Board that legislative information continues to be posted on BoardPro. Additionally, Mr. Ledbetter presented the issues it would be advocating for at the APPA Legislative Rally in Washington, DC, next week .

5. Executive Session

5.1 Vote to enter into Executive Session

Vote to enter into Executive Session

10 Supported
0 Opposed
0 Abstained

Decision Date:	Feb 19, 2026
Mover:	Jimmy Bagley
Seconder:	David Dorman
Outcome:	Approved

5.2 Discussion of matters pertaining to Contract Negotiation

5.3 Vote to return to Regular Session

Vote to return to Regular Session

10 Supported
0 Opposed
0 Abstained

Decision Date:	Feb 19, 2026
Mover:	Joe Nichols
Seconder:	Jimmy Bagley
Outcome:	Approved

6. Participant Discussion

6.1 FY 2026 Funding Memo

7. Adjourn

7.1 Adjourn

Next meeting: PMPA Board Meeting - Mar 19, 2026, 10:00 AM
A motion was made by Mr. Bronson, with a second by Mr. Nichols, to adjourn the meeting.

Signature:_____ **Date:**_____

PIEDMONT MUNICIPAL POWER AGENCY
COMPARATIVE STATEMENT OF NET POSITION
AS OF FEBRUARY 28, 2026
(DOLLARS IN THOUSANDS)

	LAST MONTH	INCREASE	DECREASE	THIS MONTH
ASSETS				
CURRENT UNRESTRICTED ASSETS:				
Cash And Markable Debt Securities (W/C)	$73,734	$1,714	$0	$75,448
Revenue Fund Valuation	(1)	0	0	(1)
Participants Accounts Receivable (W/C)	18,679	0	1,109	17,570
Other Accounts Receivable (W/C)	733	105	0	838
Materials & Supplies	20,839	7	0	20,846
TOTAL CURRENT UNRESTRICTED ASSETS	**113,984**	**717**	**0**	**114,700**
CURRENT RESTRICTED ASSETS:				
Debt Service	7,427	7,226	0	14,653
Debt Service Reserve	37,847	0	0	37,847
Reserve and Contingency	1,672	911	0	2,583
Fuel	0	1,966	0	1,966
Fuel Fund Valuation	0	0	0	0
Decommissioning	147,341	612	0	147,953
Supplemental Power Reserve	1,600	0	0	1,600
Restricted Funds Valuation	1,569	0	0	1,569
TOTAL CURRENT ASSETS	**311,440**	**11,432**	**0**	**322,872**
CAPITAL ASSETS, NET:				
Generation	351,655	0	808	350,848
Transmission	3,962	0	11	3,950
Operational Technology	610	30	0	640
IT/General	441	0	9	432
Nuclear Fuel - In Stock And Progress	29,602	0	844	28,758
Nuclear Fuel - In Reactor	22,424	0	1,123	21,302
Construction In Progress	39,570	1,210	0	40,780
TOTAL CAPITAL ASSETS, NET	**448,264**	**0**	**1,555**	**446,709**
OTHER NON CURRENT ASSETS:				
Net Costs Recoverable From Future Participants Billings	177,621	0	5,101	172,520
Participant Settlement Receivable	45,400	0	0	45,400
TOTAL NON CURRENT ASSETS	**671,285**	**0**	**6,656**	**664,629**
TOTAL ASSETS	**$982,726**	**$4,776**	**$0**	**$987,501**
DEFERRED OUTFLOWS:				
Asset Retirement Obligation	$35,869	$0	$79	$35,790
Redemption Losses, Net	3,522	0	54	3,468
Losses On Advanced Refunding Of Debt, Net	3,661	0	72	3,589
TOTAL DEFERRED OUTFLOWS	**$43,051**	**$0**	**$204**	**$42,847**

PIEDMONT MUNICIPAL POWER AGENCY
COMPARATIVE STATEMENT OF NET POSITION
AS OF FEBRUARY 28, 2026
(DOLLARS IN THOUSANDS)

	LAST MONTH	INCREASE	DECREASE	THIS MONTH
LIABILITIES				
CURRENT LIABILITIES:				
Accounts Payable - General (WC)	$30	$0	$27	$2
Accounts Payable - Duke (WC)	833	203	0	1,036
Accounts Payable - Other (WC)	3,104	0	1,709	1,395
Accrued Expenses - Payroll (W/C)	0	0	0	0
Accrued Expenses - Vacation (W/C)	93	0	0	93
Accrued Expenses - Sick (W/C)	220	0	0	220
Accrued Expenses - Property Taxes (W/C)	833	834	0	1,667
TOTAL CURRENT LIABILITIES	**5,113**	**0**	**700**	**4,413**
CURRENT LIABILITIES PAYABLE FROM RESTRICTED ASSETS:				
Accrued Interest Payable	151,751	2,534	0	154,286
TOTAL CURRENT LIABILITIES	**156,864**	**1,834**	**0**	**158,698**
LONG-TERM LIABILITIES:				
Bonds - Including Current Installment	330,480	0	0	330,480
Bonds - Settlement	48,330	0	0	48,330
Bond Discounts	(26)	0	0	(25)
Bond Premium	29,944	0	535	29,409
CAB	62,800	0	0	62,800
Asset Retirement Obligation	189,115	511	0	189,626
Participant Interest Payable (W/C)	201	8	0	208
Other Postemployment Benefits	2,018	0	0	2,018
TOTAL LONG-TERM LIABILITIES	**662,862**	**0**	**17**	**662,846**
TOTAL LIABILITIES	**$819,726**	**$1,818**	**$0**	**$821,544**
DEFERRED INFLOWS:				
Postemployment Benefits	$68	$0	$0	$68
NET POSITION				
Net Investments In Capital Assets	$32,248	$0	$1,145	$31,103
Restricted For Other	1,600	0	0	1,600
Unrestricted	172,134	3,899	0	176,033
TOTAL NET POSITION	**$205,982**	**$2,754**	**$0**	**$208,736**
INFORMATIONAL PURPOSES:				
Working Capital	$87,832	$1,402	$0	$89,235

PIEDMONT MUNICIPAL POWER AGENCY

FINANCIAL SUMMARY
AS OF FEBRUARY 28, 2026

MAJOR DEVIATIONS FROM THE BUDGET WERE:

	FEBRUARY VARIANCES		
(In Millions)	$	%	Comments
Working Capital	$1.24	744.3%	
Participant Power Sales	$0.05	0.3%	
Surplus Sales	$0.41	65.4%	Sold 25% more energy than budgeted at a price 20% higher than budgeted
Miscellaneous Income/Expense	$0.19	27.6%	Primarily Duke fee adjustment related to O&M from November 25, plus interest on the adjustment
Interest Income	($0.04)	-5.3%	Lower than budgeted yields on the Revenue and DSR funds
Catawba Project Costs	$0.84	14.6%	November 2025 adjustments primarily in O&M maintenance and miscellaneous
Supplemental Power Costs	($0.64)	-16.2%	Higher than budgeted energy needs (34%) and pricing than budgeted (226%)
Catawba Capital Additions	$0.71	36.9%	Lower than budgeted expenses due to timing of expenses
PMPA Capital Additions	$0.35	89.7%	Timing of Laurens Transmission line project
Other	($0.63)	-9.3%	Primarily higher R&C transfer due to timing of Capital Additions

	YEAR-TO-DATE VARIANCES		
(In Millions)	$	%	Comments
Working Capital	$0.61	22.2%	
Participant Power Sales	$0.82	2.2%	
Surplus Sales	$0.56	45.1%	Primarily higher pricing received for sales than budgeted
Miscellaneous Income/Expense	$0.11	7.5%	Primarily Duke fee adjustment related to O&M from November 25, plus interest on the adjustment
Interest Income	($0.06)	-3.5%	
Catawba Project Costs	$0.92	7.3%	Primarily November 2025 adjustments in O&M maintenance and miscellaneous
Supplemental Power Costs	($2.63)	-32.8%	Higher than budgeted energy needs (104%) and pricing than budgeted (272%)
Catawba Capital Additions	$0.71	11.5%	Lower than budgeted expenses due to timing of expenses
PMPA Capital Additions	$0.75	91.5%	Timing of Laurens Transmission line project
Other	($0.57)	-4.1%	

Favorable >5%
Near Budget +/- 5%
Unfavorable < 5%

PIEDMONT MUNICIPAL POWER AGENCY

STATEMENT OF REVENUE & EXPENSE PER THE BOND RESOLUTION

AS Of FEBRUARY 28, 2026

(DOLLARS IN THOUSANDS)

	CURRENT MONTH			YEAR TO DATE			
	ACTUAL	BUDGET	OVER(UNDER)	ACTUAL	BUDGET	OVER(UNDER)	%
CATAWBA PROJECT:							
CATAWBA POWER SALES							
Participant	$13,845	$14,056	($211)	$27,382	$28,374	($992)	(3.5%)
Duke-Exchange Energy	969	967	2	2,042	2,026	16	0.8%
Other-Surplus	1,037	627	410	1,815	1,251	564	45.1%
TOTAL	15,851	15,650	201	31,239	31,651	(412)	(1.3%)
CATAWBA POWER COSTS							
Operations & Maintenance	791	1,629	(838)	2,733	3,870	(1,137)	(29.4%)
Fuel Amort (Fuel Acct Deposit)	1,123	1,111	12	2,355	2,341	14	0.6%
Purch Power-Duke-McGuire Cap	19	19	0	40	40	0	(1.2%)
-McGuire Energy	991	953	38	2,010	2,026	(16)	(0.8%)
Customer Acct and G&A-Duke	722	747	(25)	1,764	1,494	270	18.1%
Customer Acct and G&A-Agency	369	388	(19)	811	899	(88)	(9.7%)
Property Tax Equivalent	826	826	0	1,650	1,651	(1)	0.0%
Tax Other-Duke	101	112	(11)	262	224	38	16.8%
TOTAL	4,941	5,785	(844)	11,626	12,545	(919)	(7.3%)
FUNDS AVAILABLE FROM OPERATIONS	10,910	9,865	1,045	19,613	19,106	507	2.7%
INTEREST INCOME	771	814	(43)	1,595	1,653	(58)	(3.5%)
MISCELLANEOUS INCOME(EXPENSE)	(509)	(702)	193	(1,297)	(1,402)	105	(7.5%)
FUNDS AVAILABLE FOR CAPITAL NEEDS	11,172	9,977	1,195	19,911	19,357	554	2.9%
OTHER AVAILABLE FUNDS							
Debt Service-Principal	0	0	0	27,064	27,064	0	0.0%
-Interest	0	0	0	49,980	49,973	7	0.0%
Reserve & Contingency - Capital Additions	1,216	1,926	(710)	5,456	6,166	(710)	(11.5%)
Fuel	(844)	(822)	(22)	3,102	3,124	(22)	(0.7%)
DEPOSITS							
Debt Service-Principal	3,116	3,116	0	6,233	6,232	1	0.0%
-Interest	3,908	3,907	1	7,815	7,815	0	0.0%
Reserve & Contingency	2,127	2,127	0	4,254	4,254	0	0.0%
Fuel - Additional Required Deposits	0	0	0	2,713	2,716	(3)	(0.1%)
Decommissioning	612	621	(9)	1,259	1,280	(21)	(1.6%)
PAYMENTS							
Debt Service-Principal	0	0	0	27,064	27,064	0	0.0%
-Interest	0	0	0	49,980	49,973	7	0.0%
Capital Additions	1,216	1,926	(710)	5,456	6,166	(710)	(11.5%)
Fuel	(844)	(822)	(22)	3,102	3,124	(22)	(0.7%)
Inventory	7	40	(33)	(222)	(189)	(33)	17.7%
TRANSFERS (TO) FROM							
Reserve & Contingency	0	0	0	0	0	0	0.0%
DSR Release/Special Transfers	0	0	0	0	0	0	0.0%
Catawba Working Capital	1,402	166	1,236	(2,140)	(2,751)	611	(22.2%)
Supplemental Working Capital	0	0	0	0	0	0	0.0%
WORKING CAP INCREASE(DECREASE)	$1,402	$166	$1,236	($2,140)	($2,751)	$611	(22.2%)

PIEDMONT MUNICIPAL POWER AGENCY

STATEMENT OF REVENUE & EXPENSE PER THE BOND RESOLUTION

AS Of FEBRUARY 28, 2026

(DOLLARS IN THOUSANDS)

	CURRENT MONTH			YEAR TO DATE			
	ACTUAL	BUDGET	OVER(UNDER)	ACTUAL	BUDGET	OVER(UNDER)	%
SUPPLEMENTAL:							
SUPPLEMENTAL POWER SALES							
Participants-Supplemental Power	4,487	4,229	258	10,418	8,602	1,816	21.1%
-Leased Facilities	26	26	0	53	52	1	1.4%
-Other	136	101	35	272	201	71	35.4%
TOTAL	4,650	4,356	294	10,743	8,855	1,888	21.3%
SUPPLEMENTAL POWER COSTS							
Purch Power-Supp Capacity	1,043	1,062	(19)	2,086	2,124	(38)	(1.8%)
-Supp Energy	879	214	665	3,187	449	2,738	609.7%
Purch Power-Participants	1,132	1,186	(54)	2,301	2,399	(98)	(4.1%)
Purch Power-Other	363	326	37	680	563	117	20.8%
Transmission	1,021	1,015	6	2,073	2,037	36	1.8%
Transmission-Agency	0	4	(4)	0	8	(8)	(100.0%)
Leased Facilities-Duke	37	37	0	74	73	1	1.6%
Meter-Agency	20	1	19	20	107	(87)	(81.0%)
Customer Acct and G&A-Duke	0	0	0	0	0	0	0.0%
Customer Acct and G&A-Agency	104	111	(7)	229	257	(28)	(10.9%)
Property Tax Equivalent	8	8	0	17	16	1	4.0%
TOTAL	4,607	3,964	643	10,667	8,033	2,634	32.8%
FUNDS AVAILABLE FROM OPERATIONS	43	392	(349)	76	822	(746)	(90.7%)
MISCELLANEOUS INCOME(EXPENSE)	199	198	1	396	396	0	0.0%
FUNDS AVAILABLE FOR CAPITAL NEEDS	242	590	(348)	472	1,218	(746)	(61.2%)
PAYMENTS							
Debt Service-Interest	202	202	0	404	404	0	(0.1%)
Capital Additions-Transmission	40	386	(346)	40	771	(731)	(94.8%)
-Operational Technology	0	0	0	29	40	(11)	(28.6%)
-IT/General	0	2	(2)	0	3	(3)	(100.0%)
WORKING CAP INCREASE(DECREASE)	$0	$0	$0	$0	$0	$0	0.0%

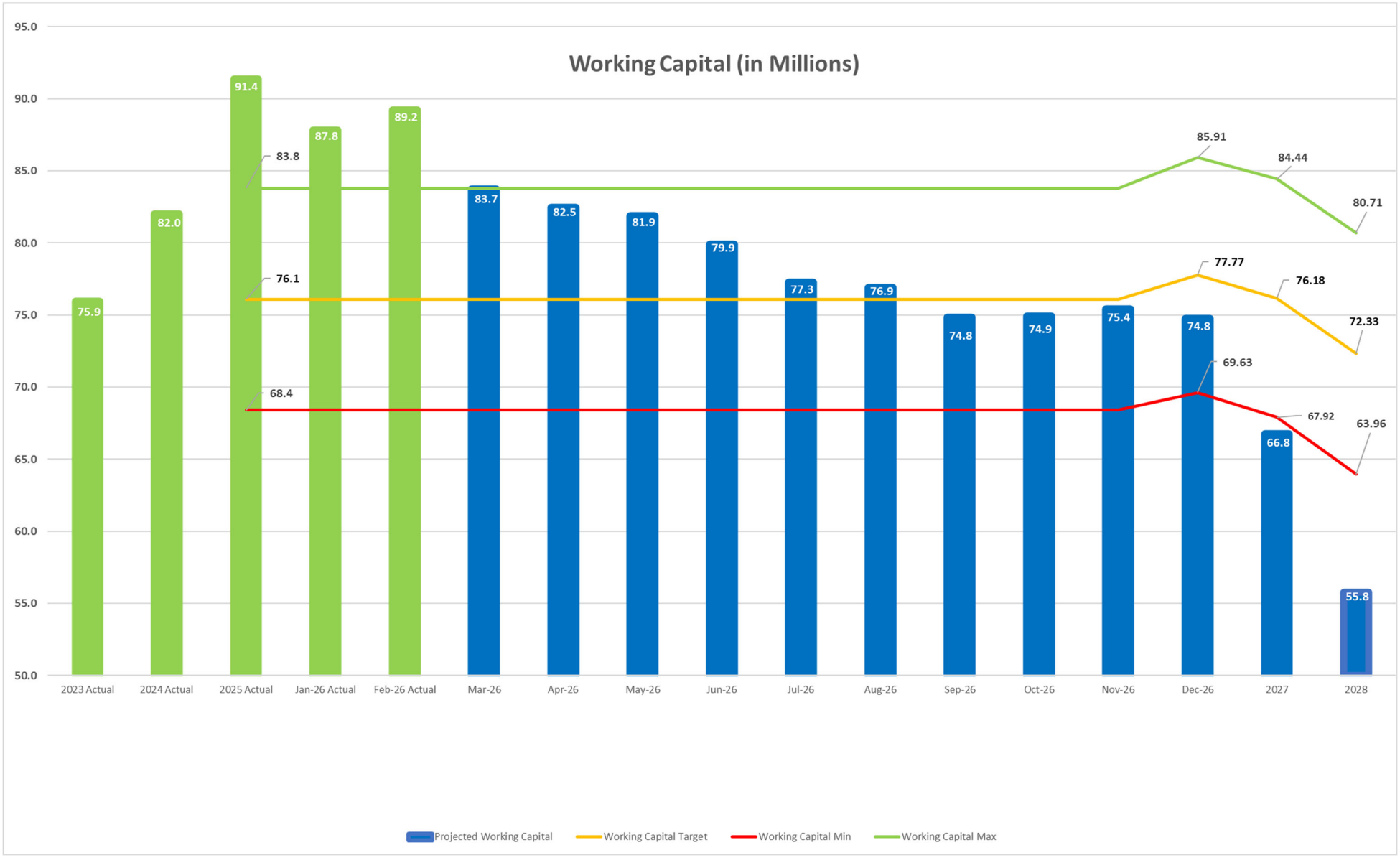
PIEDMONT MUNICIPAL POWER AGENCY
STATEMENT OF G&A EXPENSE
AS OF FEBRUARY 28, 2026

CURRENT MONTH					YEAR TO DATE				% ANNUAL
ACTUAL	BUDGET	OVER(UNDER)	%		ACTUAL	BUDGET	OVER(UNDER)	%	BUDGET
				G&A-OFFICE EXPENSE					
$139,021	$148,600	($9,579)	(6.4)	Payroll	$269,447	$295,600	($26,153)	(8.8)	14.0
10,398	10,800	(402)	(3.7)	Employer's FICA	25,829	27,000	(1,171)	(4.3)	21.7
20,407	20,200	207	1.0	Medical/Life Insurance	39,476	40,400	(924)	(2.3)	16.3
13,257	13,100	157	1.2	401A Plan	33,109	32,800	309	0.9	18.7
29,936	29,100	836	2.9	Dues & Subscriptions	81,479	81,500	(21)	0.0	46.4
2,282	2,100	182	8.7	Utilities	4,217	4,200	17	0.4	16.9
1,328	1,600	(272)	(17.0)	Telephone	2,092	3,200	(1,108)	(34.6)	11.2
1,169	1,200	(31)	(2.6)	Office Supplies	1,503	2,400	(897)	(37.4)	10.6
1,042	3,900	(2,858)	(73.3)	Board & Staff Expenses	1,739	5,300	(3,561)	(67.2)	3.1
1,769	2,800	(1,031)	(36.8)	Maintenance-Building	4,066	5,600	(1,534)	(27.4)	8.3
25,672	0	25,672	0.0	Insurance	25,672	0	25,672	0.0	20.1
6,142	14,900	(8,758)	(58.8)	Travel and Training	11,687	22,500	(10,813)	(48.1)	7.4
0	200	(200)	(100.0)	Economic Development	0	500	(500)	(100.0)	0.0
224	100	124	124.0	Bank & Rating Agency Fees	(626)	200	(826)	(413.0)	(0.6)
15,571	19,800	(4,229)	(21.4)	IT Computer Hardware/Software	35,589	37,600	(2,011)	(5.3)	11.8
416	400	16	4.0	FIN Computer Hardware/Software	673	800	(127)	(15.9)	1.6
62,297	1,000	61,297	6,129.7	OT Computer Hardware/Software	62,297	2,000	60,297	3,014.9	65.8
14,422	9,200	5,222	56.8	Telecommunications	26,155	18,400	7,755	42.1	23.6
345,353	**279,000**	**66,353**	**23.8**	**TOTAL G&A OFFICE EXPENSE**	**624,404**	**580,000**	**44,404**	**7.7**	**15.8**
				G&A-OUTSIDE SERVICES					
71,037	68,100	2,937	4.3	Outside Services- Legal	95,113	136,200	(41,087)	(30.2)	11.6
4,136	43,300	(39,164)	(90.4)	Outside Services- Enginerring	6,997	71,600	(64,603)	(90.2)	2.0
18,500	29,400	(10,900)	(37.1)	Outside Services- Finance	52,842	48,800	4,042	8.3	14.1
0	0	0	0.0	Outside Services- Administrative	0	0	0	0.0	0.0
600	2,400	(1,800)	(75.0)	Outside Services- Technology	600	4,800	(4,200)	(87.5)	2.1
94,273	**143,200**	**(48,927)**	**(34.2)**	**TOTAL G&A OUTSIDE SERVICES**	**155,552**	**261,400**	**(105,848)**	**(40.5)**	**9.9**
				G&A-BOARD REIMBURSEMENTS					
1,240	400	840	210.0	Dues & Subscriptions	188,512	186,700	1,812	1.0	89.8
9,816	36,700	(26,884)	(73.3)	Travel and Training	9,816	48,400	(38,584)	(79.7)	4.7
22,000	40,000	(18,000)	(45.0)	Economic Development	62,000	80,000	(18,000)	(22.5)	22.1
33,056	**77,100**	**(44,044)**	**(57.1)**	**TOTAL G&A BOARD REIMBURSEMENTS**	**260,328**	**315,100**	**(54,772)**	**(17.4)**	**37.2**
$472,682	**$499,300**	**($26,618)**	**(5.3)**	**TOTAL OPERATING EXPENSE**	**$1,040,284**	**$1,156,500**	**($116,216)**	**(10.0)**	**16.7**
				TRANSMISSION/ENERGY EFFICIENCY					
$0	$4,000	($4,000)	(100.0)	Transmission Line Maintenance	$0	$8,000	($8,000)	(100.0)	0.0
20,365	1,000	19,365	1,936.5	Energy Efficiency/DSM	20,365	107,000	(86,635)	(81.0)	11.5
$20,365	**$5,000**	**$15,365**	**307.3**	**TOTAL XMSN EXPENSE**	**$20,365**	**$115,000**	**($94,635)**	**(82.3)**	**9.0**

PIEDMONT MUNICIPAL POWER AGENCY

AS OF FEBRUARY 28, 2026

After this month's operations, PMPA had $89.2 million in working capital, which was $0.6 million more than the YTD budget.



Note: Assumes no rate increases from 2026 to 2028.

PMPA
CASH AND MARKETABLE DEBT SECURITIES ROLLFORWARD
FROM 2/1/2026 TO 2/28/2026

	Operating Account	Revenue Fund	Total
Beginning Balance	19,555.62	73,714,695.16	73,734,250.78
Cash Receipts/Payments			
Cash Receipts			
From Participants	6,699,145.72	11,979,937.87	
From Other	120.99	4,445.00	
Vendor payments	(750,831.54)	-	
Duke Operating Statement		(2,160,078.93)	
Duke Uprate		(338,724.40)	
Duke Instantaneous		259,056.83	
Duke Transmission		(832,689.58)	
Duke Interconnect		53,465.28	
Santee Cooper		(3,053,566.21)	
TEA		(24,585.85)	
York Property Taxes		-	
Payroll	(159,996.56)	-	
US Bank Credit Card Payment	(16,773.41)	-	
Account Transfers			
Operating Account Funding	1,000,000.00	(1,000,000.00)	
R&C Account Funding - 1/12 of Annual Capital Budget		(2,126,916.67)	
Revenue Account Funding - From R&C For Capital Purchases		1,216,027.04	
Fuel Account Funding - Fuel Amortization		(1,122,659.18)	
Fuel Account Funding - Additional Required Deposits		-	
Revenue Account Funding - From Fuel For Purchases		(843,616.98)	
Debt Service Funding		(7,225,777.76)	
DCOM Funding		(172,836.00)	
Interest/Investment Activity	(224.29)	331,350.57	
Ending Balance	6,790,996.53	68,657,526.19	75,448,522.72

PMPA Load-Side Generation Report

To: Board of Directors and Alternates
From: Mike Frazier MTF
Date: March 11, 2026

Santee Cooper called upon PMPA to run the Load-Side Generators on three days in February due to system conditions.

Load-Side Generation Operation during the month of February:

1 Feb – 12:00 a.m. to 10:00 a.m. – 10.00 hrs.
2 Feb – 12:00 a.m. to 10:00 a.m. – 10.00 hrs.
6 Feb – 7:15 a.m. to 8:15 a.m. – 1.00 hr.

TOTAL – 21.00 Hrs.

TOTAL YTD – 24.00 Hrs.

Load-side generation is called for during times of energy deficiency, adverse system conditions, or high economic energy prices.

Current Load-Side Generators are owned by the City of Clinton, Easley Combined Utilities, Gaffney Board of Public Works, Greer Commission of Public Works, and the City of Rock Hill.

PMPA
Demand Response System Report

To: Board of Directors and Alternates
From: Mike Frazier MTF
Date: March 11, 2026

PMPA did not call for any Demand Response events during February.

PMPA Monthly Peak[1]: 441.3 MW @ Hour Ending 9:00 a.m. on Feb. 2nd

- Does NOT coincide with the Duke Energy Transmission Peak on Feb. 2nd @ Hour Ending 8:00 a.m.
- Monthly Minimum GSP Airport Temperature – 15° F on Feb. 1st

PMPA Total Participant Load [2]: 476.3 MW @ Hour Ending 9:00 a.m. on Feb. 2nd

PMPA Ratchet Quantity: 527.9 MW – based on Jun. 25, 2025 @ HE 5:00 p.m.

The first part of February continued January's cold snap. By the tenth of the month, high temperatures reached up into the seventies with one day later in the month reaching 81° F. The month overall was warmer than normal. On the day of the peak, it was the first weekday after snow blanketed the upstate. As in January, with schools closed and businesses slow to open, PMPA set its peak at 9:00 a.m. on the second coldest day of the month.

All loads are reflected at the transmission level, which includes 1.96% losses as of Jun. 1, 2025.

[1] PMPA Monthly Peak – Used by Santee Cooper to determine PMPA's capacity charge. This peak includes the load served by nine Participants (does not include Union) and generation (added back to the load) produced by the load-side generators. It also does not include Greer CPW's load served from the leased Laurens EMC delivery points.

[2] PMPA Total Participant Load – includes load served by all ten Participants including the Greer CPW's load served from leased Laurens EMC delivery points and generation produced by the load-side generators.

Month	HDD	% of Normal
Feb 2025	513	96
Normal	536	
Feb 2024	451	84

ENERGY REPORT *

Piedmont Municipal Power Agency

FEBRUARY, 2026

The Energy Authority (Surplus Energy Sold and Gross Revenue)

6,619	**MWh**	**160,058**	**$**	**24.18**	**$ / MWh**
11,505	MWh - YTD	259,383	$ - YTD	22.55	$ / MWh - YTD

Duke Energy (Surplus Energy Sold and Gross Revenue)

7,514	**MWh**	**294,321**	**$**	**39.17**	**$ / MWh**
12,451	MWh-YTD	558,378	$-YTD	44.85	$ / MWh - YTD

Santee Cooper (Surplus Energy Sold and Gross Revenue)

10,545	**MWh**	**506,809**	**$**	**48.06**	**$ / MWh**
16,121	MWh-YTD	775,130	$-YTD	48.08	$ / MWh - YTD

Total Surplus Sales Revenue

961,188	**$**	39.75	$/ MWh-YTD
1,592,891	$ - YTD	40,077.00	MWh-YTD

Generation Imbalance Charge ……

(219,163)	$
(142,061)	$ - YTD

Deviation Band 1 - +/- 1.5%	Deviation Band 2 - Between +/-1.5% & 7.5%	Deviation Band 3 - Greater than +/- 7.5%
($81,287)	($63,347)	($74,529)

Energy Imbalance Charge ……

(13,820)	$
(64,246)	$ - YTD

Deviation Band 1 - +/- 1.5%	Deviation Band 2 - Between +/-1.5% & 7.5%	Deviation Band 3 - Greater than +/- 7.5%
($13,820)	$0	$0

Supplemental Energy Purchased ……..……..……

Santee Cooper	TEA Backstand &	Total	
5,921	0	**5,921**	**MWh**
19,394	2,421	21,815	MWh - YTD
896,216	0	**896,216**	**$**
3,284,042	108,606	3,392,648	$ - YTD
151.37	---	**151.37**	**$ / MWh**
169.34	44.86	155.52	$ / MWh - YTD

* All MWh are measured at the bus bar (generation level)

& Includes energy and transmission costs

Catawba and McGuire Report – March 12, 2026

Since the last Board meeting, Catawba Unit 1, Catawba Unit 2, McGuire Unit 1, and McGuire Unit 2 have operated continuously without any concerns.

February 2026	Capacity Factor	Generation (MWhs)	PMPA's Entitlement (MWhs)
Catawba 1	102.73%	800,806	50,050
Catawba 2	102.13%	789,238	49,327
McGuire 1	102.83%	800,198	48,532
McGuire 2	101.85%	792,583	48,070

McGuire Unit 2 is currently in a coast down as it prepares to begin a 28-day refueling outage on March 21, 2026. The unit will be decreasing approximately 0.3% in power daily and is expected to be operating at 96% power on March 20 when Duke brings the unit offline.

2026 Planned Refueling Outages

Unit	Outage Start Date	Budgeted Duration
McGuire 2	March 21, 2026	28 Days
Catawba 1	April 18, 2026	25 Days
McGuire 1	September 5, 2026	28 Days

Nuclear Regulatory Commission

Catawba's NRC Regulatory Performance Indicators are Green with no regulatory issues.

DRAFT

PIEDMONT MUNICIPAL POWER AGENCY

Financial Statements and Supplementary Information

December 31, 2025 and 2024

(With Report of Independent Auditor Thereon)

PIEDMONT MUNICIPAL POWER AGENCY

Table of Contents

PIEDMONT MUNICIPAL POWER AGENCY

Management's Discussion and Analysis

December 31, 2025 and 2024

Overview of the Financial Statements

This section of Piedmont Municipal Power Agency's ("PMPA") annual financial statements presents our analysis of PMPA's financial performance during the fiscal years ended December 31, 2025 and 2024. Please read this discussion and analysis in conjunction with the financial statements that follow this section.

Financial Highlights

Year Ended December 31, 2025:

- PMPA's wholesale rates to Participants remain unchanged in 2025.
- In 2025, net cash generated from operating and investing activities was $122.8 million and $9.5 million, respectively, offsetting cash used in financing activities of $132.2 million.

Year Ended December 31, 2024:

- PMPA's wholesale rates to Participants remain unchanged in 2024.
- On April 30, 2024, on behalf of eight Participants, PMPA issued the $48.3 million 2024A Electric Revenue Bond associated with the settlement of the 2019 lawsuit naming PMPA a defendant by Greer and Rock Hill with respect to the allocation of costs amongst all Participants. The bond is excluded from PMPA's wholesale rates and net costs recoverable from future Participant billings, and will be paid by the eight Participants during the life of the bond. Refer to Note 16 for additional settlement information.
- In 2024, net cash generated from operating and investing activities was $123.4 million and $9.5 million, respectively, offsetting cash used in financing activities of $132.2 million.

PIEDMONT MUNICIPAL POWER AGENCY

Management's Discussion and Analysis

December 31, 2025 and 2024

Overview of the Financial Activities

The following is an overview of the financial activities of PMPA for the years ended December 31, 2025 and 2024.

PMPA's financial statements, which include the statements of net position, the statements of revenues, expenses and changes in net position, and the statements of cash flows, are presented to display information about the reporting entity as a whole. The statements are prepared using the economic resources measurement focus and the accrual basis of accounting.

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PIEDMONT MUNICIPAL POWER AGENCY

Management's Discussion and Analysis

December 31, 2025 and 2024

Financial Information

The following summarizes the activities of PMPA for the years ended December 31, 2025, 2024, and 2023:

	2025	2024	2023
		(In thousands)	
Revenues:			
Sales of electricity to Participants	$ 224,990	$ 223,172	$ 220,132
Sales of electricity to other utilities and other operating revenues	22,613	18,314	18,833
Total operating revenues	247,603	241,486	238,965
Interest income	10,448	9,413	7,230
Net change in fair market value of investments	4,504	1,717	5,202
Total Revenues	262,555	252,616	251,397
Expenses:			
Operation, maintenance, and nuclear fuel amortization	40,963	36,741	37,539
Purchased power, transmission, and power delivery	61,922	59,394	54,443
Administrative, general, and payments in lieu of property taxes	25,646	24,370	25,554
Net decrease in net costs recoverable from future Participant billings	48,395	48,777	46,721
Depreciation	9,810	9,022	8,779
Interest and bond amortization expense	27,898	29,533	30,448
Postemployment benefits	146	-	132
Other	14,621	13,302	23,214
Total Expenses	229,401	221,139	226,830
Increase in net position	33,154	31,477	24,567
Net position at beginning of year	172,519	141,042	116,475
Net position at end of year	$ 205,673	$ 172,519	$ 141,042

PIEDMONT MUNICIPAL POWER AGENCY

Management's Discussion and Analysis

December 31, 2025 and 2024

Results of Operations

Revenues

- Sales of electricity to Participants, PMPA's primary source of revenue, increased in 2025 by 0.8%, or approximately $1.8 million. This increase was driven by an increase in energy sold to Participants. Sales of electricity to Participants increased in 2024 by 1.4%, or approximately $3.0 million. This increase was driven by an increase in energy sold to Participants.

- Sales of electricity to other utilities and other operating revenues increased by 23.5%, or approximately $4.3 million, in 2025 due to an increase in surplus energy rates coupled with an increase in energy available to sell in the market. Sales of electricity to other utilities and other operating revenues decreased by 2.8%, or approximately $0.5 million, in 2024 due to a decrease in surplus energy rates, partially offset by an increase in energy available to sell in the market. PMPA's surplus energy was contractually sold to Santee Cooper and The Energy Authority as part of supplemental purchased power agreements and Duke Energy Carolinas, LLC.

Expenses

- Operation, maintenance and nuclear fuel amortization expenses increased by 11.5%, or approximately $4.2 million, in 2025 due to the timing of refueling outage costs associated with the Catawba Nuclear plant.

- Purchased power, transmission and power delivery expenses increased by 4.3%, or approximately $2.5 million, in 2025 due to an increase in transmission costs associated with the recovery of Hurricane Helene related costs. Additionally, supplemental energy purchases as well as the associated prices increased during 2025. Purchased power, transmission and power delivery expenses increased by 9.1%, or approximately $5.0 million, in 2024 due to an increase in supplemental energy purchased, partially offset by a decrease in purchase prices during 2024.

PIEDMONT MUNICIPAL POWER AGENCY

Management's Discussion and Analysis

December 31, 2025 and 2024

Net Position

The following summarizes the net position of PMPA for the years ended December 31, 2025, 2024, and 2023:

	2025	2024	2023
		(In thousands)	
Assets:			
Current unrestricted assets	$ 115,784	$ 110,700	$ 123,023
Current restricted assets	268,741	267,004	252,035
Capital assets, net	442,127	427,290	403,863
Noncurrent assets	228,122	276,517	279,921
Total Assets	$ 1,054,774	$ 1,081,511	$ 1,058,842
Deferred outflows:	$ 43,255	$ 45,824	$ 19,299
Liabilities:			
Current liabilities	$ 229,410	$ 264,339	$ 258,012
Long-term liabilities	662,878	690,261	678,899
Total Liabilities	$ 892,288	$ 954,600	$ 936,911
Deferred inflows:	$ 68	$ 216	$ 188
Net position:			
Net investment in capital assets	$ (1,363)	$ (87,772)	$ (168,303)
Restricted for other	1,600	1,600	1,600
Unrestricted	205,436	258,691	307,745
Total Net Position	$ 205,673	$ 172,519	$ 141,042

Current unrestricted assets fluctuate with the changes in marketable debt securities held in PMPA's revenue fund. Revenue fund fluctuations result from the timing of Participant cash receipts, payments made to third parties and deposits into restricted funds.

Current restricted assets primarily include investments restricted for decommissioning and debt service. Investments restricted for decommissioning increase each year due to PMPA's regular deposits into the decommissioning fund and the reinvestment of associated interest income. Investments restricted for debt service fluctuate each year depending on PMPA's debt service obligation on January 1 of the following year. As such, PMPA's investments restricted for debt service decreased on December 31, 2025 when compared to December 31, 2024 and increased on December 31, 2024 when compared to December 31, 2023. Additionally, PMPA was able to release $9.2 million from the reserves included within investments restricted for debt service in 2025 due to the maturity of the associated bonds on January 1, 2025.

PIEDMONT MUNICIPAL POWER AGENCY

Management's Discussion and Analysis

December 31, 2025 and 2024

Noncurrent assets include net costs recoverable from future Participant billings and a Participant settlement receivable. Net costs recoverable from future Participant billings associated with interest expense on capital appreciation bonds accrued, but not yet paid, were $149.2 million, $175.0 million and $160.9 million as of December 31, 2025, 2024 and 2023, respectively. The fluctuations in these balances are driven by the timing of interest payments compared to the annual interest expense accrued. The remaining net costs recoverable from future Participant billings were $33.5 million, $56.1 million and $119.0 million as of December 31, 2025, 2024 and 2023, respectively. The decreases in these balances were driven by required deposits for bonds payable due January, 1 2026 and 2025 of $27.1 million and $66.6 million, respectively, partially offset by additional deferrals relating to debt issuance expenses, amortization of bond discounts and premiums, defeasance losses, redemption losses and depreciation. The Participant settlement receivable of $45.4 million was established in April of 2024 resulting from the settlement of the 2019 lawsuit. Refer to Note 16 for additional settlement information.

Deferred outflows primarily consist of the asset retirement obligation, redemption losses and losses on advance refundings of debt. In 2024, deferred outflows increased $26.5 million primarily related to changes in assumptions related to the asset retirement obligation, refer to Note 11 for further information on the asset retirement obligation.

Long-term liabilities primarily include bonds payable, net and an asset retirement obligation. Long-term bonds payable, net decreased by $33.7 million and $26.0 million in 2025 and 2024, respectively, due to bond payments and the amortization of bond premiums, partially offset in 2024 by the $48.3 million 2024A Electric Revenue Bond issuance. The asset retirement obligation, related to the decommissioning of Catawba, increased by $5.9 million and $37.2 million in 2025 and 2024, respectively, due to continued accretion to the total decommissioning requirement. Additionally, in 2024, changes in the underlying assumptions resulted in a $29.6 million increase.

Current liabilities primarily reflect PMPA's debt service requirement on January 1 of the following year. As such, current liabilities decreased by $34.9 million and increased $6.3 million in 2025 and 2024, respectively.

PMPA calculates net investment in capital assets as the difference between capital assets and bonds payable, including losses on advance refunding of debt. Capital assets includes accumulated depreciation and amortization, causing the net investment in capital assets to reflect a negative balance.

PIEDMONT MUNICIPAL POWER AGENCY

Management's Discussion and Analysis

December 31, 2025 and 2024

Capital Assets

Capital assets include structures and improvements, reactor plant equipment, turbo generator units, other equipment, and nuclear fuel. Such amounts are detailed as follows:

	2025	2024	2023
		(In thousands)	
Structures and improvements	$ 176,880	$ 176,702	$ 176,047
Reactor plant equipment	299,599	299,383	297,657
Turbo generator units	89,061	89,136	83,259
Other equipment	119,099	118,141	116,280
Nuclear fuel	86,598	77,547	79,063
Other	51,304	28,237	25,114
Construction work-in-progress	35,301	39,056	34,083
Total	857,842	828,202	811,503
Less accumulated depreciation and amortization	(415,715)	(400,912)	(407,640)
Total, net	$ 442,127	$ 427,290	$ 403,863

PMPA's investment in capital assets on December 31, 2025 totaled $442.1 million (net of accumulated depreciation and amortization), a $14.8 million increase from 2024. Significant capital transactions during 2025 included $14.7 million in nuclear fuel purchases and $23.6 million of capital additions, partially offset by depreciation and amortization expense of $23.4 million.

PMPA's investment in capital assets on December 31, 2024 totaled $427.3 million (net of accumulated depreciation and amortization), a $23.4 million increase from 2023. Significant capital transactions during 2024 included $22.0 million in nuclear fuel purchases and $23.3 million of capital additions, partially offset by depreciation and amortization expense of $21.8 million.

Bonds Payable

Net bonds payable, including current installments, were $499.1 million and $572.3 million at December 31, 2025 and 2024, respectively. With the exception of the 2024A Electric Revenue Bond, all principal payments are due on January 1 and are required to be deposited during the prior year. The 2024A Electric Revenue Bond principal payment is due on April 30, 2035. Principal payments of $66.6 million and $52.1 million were made on January 1, 2025 and 2024 respectively. PMPA's next principal payment of $27.1 million is due on January 1, 2026. Refer to Note 9 for additional information regarding PMPA's bonds payable.

Economic Factors and Next Year's Rates

Because the retail customers of PMPA Participants are primarily residential and small commercial accounts, PMPA is much less affected by economic downturns than a utility with larger commercial and industrial retail customers. The 2026 budget does not include an increase in PMPA's wholesale rates to the Participants.

PIEDMONT MUNICIPAL POWER AGENCY

Management's Discussion and Analysis

December 31, 2025 and 2024

Request for Information

This financial report is provided as an overview of PMPA's finances. Questions concerning any of the information in this report or requests for additional information should be directed to the Office of the Finance Director, Piedmont Municipal Power Agency, 121 Village Drive, Greer, South Carolina 29651.

PIEDMONT MUNICIPAL POWER AGENCY

Statements of Net Position

December 31, 2025 and 2024

(Dollars in thousands)

Assets	2025	2024
Current Unrestricted Assets:		
Cash	$ 882	$ 739
Marketable debt securities	74,885	71,179
Participant accounts receivable	18,119	17,640
Other accounts receivable	830	390
Materials and supplies	21,068	20,752
Total Current Unrestricted Assets	115,784	110,700
Current Restricted Assets (Note 7):		
Restricted investments for debt service	119,236	127,694
Restricted investments for decommissioning	147,905	137,710
Restricted investments for other	1,600	1,600
Total Current Restricted Assets	268,741	267,004
Total Current Assets	384,525	377,704
Noncurrent Assets:		
Depreciable capital assets, net (Note 5)	406,290	387,698
Non-depreciable capital assets (Note 5)	35,837	39,592
Net costs recoverable from future Participant billings (Note 8)	182,722	231,117
Participant settlement receivable (Note 16)	45,400	45,400
Total Noncurrent Assets	670,249	703,807
Total Assets	$ 1,054,774	$ 1,081,511
Deferred Outflows:		
Asset retirement obligation (Note 11)	$ 35,947	$ 36,893
Redemption losses, net	3,576	4,225
Losses on advance refundings of debt, net	3,732	4,706
Total Deferred Outflows	$ 43,255	$ 45,824

See accompanying notes to financial statements.

PIEDMONT MUNICIPAL POWER AGENCY

Statements of Net Position (continued)

December 31, 2025 and 2024

(Dollars in thousands)

Liabilities	**2025**	**2024**
Current Liabilities:		
Accounts payable and other accrued liabilities	$ 3,149	$ 11,841
Total Current Liabilities	3,149	11,841
Current Liabilities Payable from Restricted Assets:		
Accrued interest payable	199,197	185,933
Current installments of bonds payable	27,064	66,565
Total Current Liabilities Payable from Restricted Assets	226,261	252,498
Total Current Liabilities	229,410	264,339
Long-Term Liabilities:		
Bonds payable, net (Notes 9 and 10)	472,064	505,758
Asset retirement obligation (Note 11)	188,604	182,667
Participant interest payable	192	112
Total other postemployment benefits (Note 13)	2,018	1,724
Total Long-Term Liabilities	662,878	690,261
Total Liabilities	$ 892,288	$ 954,600
Deferred Inflows:		
Postemployment benefits (Note 13)	$ 68	$ 216
Net Position		
Net investment in capital assets	$ (1,363)	$ (87,772)
Restricted for other	1,600	1,600
Unrestricted	205,436	258,691
Total Net Position	$ 205,673	$ 172,519

See accompanying notes to financial statements.

PIEDMONT MUNICIPAL POWER AGENCY

Statements of Revenues, Expenses and Changes in Net Position

Years Ended December 31, 2025 and 2024

(Dollars in thousands)

	2025	2024
Operating Revenues:		
Sales of electricity to Participants	$ 224,990	$ 223,172
Sales of electricity to other utilities	20,912	16,707
Other	1,701	1,607
Total Operating Revenues	247,603	241,486
Operating Expenses:		
Operation and maintenance	27,355	23,966
Nuclear fuel amortization	13,608	12,775
Purchased power	49,889	48,892
Transmission	11,445	9,921
Power delivery	588	581
Administrative and general	16,122	14,734
Depreciation	9,810	9,022
Asset retirement obligation accretion and amortization	6,883	7,893
Payments in lieu of property taxes	9,524	9,636
Total Operating Expenses	145,224	137,420
Net Operating Income	102,379	104,066
Other Nonoperating Revenues and (Expenses):		
Net decrease in net costs recoverable from future Participant billings	(48,395)	(48,777)
Interest income	10,448	9,413
Net change in fair market value of investments	4,504	1,717
Interest expense	(33,877)	(35,575)
Bond amortization	5,979	6,042
Postemployment benefits	(146)	-
Other	(7,738)	(5,409)
Total Other Nonoperating Revenues and Expenses, net	(69,225)	(72,589)
Increase in net position	33,154	31,477
Net position at beginning of year	172,519	141,042
Net position at end of year	$ 205,673	$ 172,519

See accompanying notes to financial statements.

PIEDMONT MUNICIPAL POWER AGENCY

Statements of Cash Flows

Years Ended December 31, 2025 and 2024

(Dollars in thousands)

	2025	2024
Cash flows from operating activities:		
Receipts from customers	$ 246,684	$ 241,900
Payments for operations and maintenance	(27,671)	(24,702)
Payments for purchased power, transmission, and power delivery	(71,446)	(69,030)
Payments for administrative and general	(24,814)	(24,782)
Net cash from operating activities	122,753	123,386
Cash flows from investing activities:		
Purchase of investment securities	(478,784)	(470,026)
Proceeds from sales and maturities of investments	477,299	468,815
Interest received on investments	10,994	10,709
Net cash from investing activities	9,509	9,498
Cash flows used in capital and related financing activities:		
Payment of bond principal	(66,565)	(52,086)
Proceeds from bond issuance	-	48,330
Participant settlement payment (Note 16)	-	(45,400)
Interest received on settlement debt	2,421	1,614
Interest payment on bonds	(19,639)	(32,656)
Expenditures for utility plant in service	(23,553)	(23,257)
Expenditures for nuclear fuel	(14,702)	(21,967)
Payment to Duke Energy for other charges	(9,981)	(6,794)
Other	(100)	24
Net cash used in capital and related financing activities	(132,119)	(132,192)
Net change in cash	143	692
Cash, beginning of year	739	47
Cash, end of year	$ 882	$ 739
Noncash investing and financing activities:		
Loss on sale of investment	$ (754)	$ (1,274)
Amortization expense on discounts and premiums	$ 6,630	$ 7,757
Amortization of net redemption loss	$ (1,623)	$ (2,739)
Net change in fair market value of investments	$ 4,504	$ 1,717
Change in decommissioning liabilty due to change in assumptions	$ -	$ (29,646)

See accompanying notes to financial statements.

PIEDMONT MUNICIPAL POWER AGENCY

Statements of Cash Flows (continued)

Years Ended December 31, 2025 and 2024

(Dollars in thousands)

	2025	2024
Reconciliation of net operating income to net cash from operating activities:		
Net operating income	$ 102,379	$ 104,066
Adjustments to reconcile net operating income to net cash from operating activities:		
Depreciation	9,810	9,022
Nuclear fuel amortization	13,608	12,775
Asset retirement obligation accretion and amortization	6,883	7,893
(Increase) decrease in:		
Participant accounts receivable	(479)	(152)
Other accounts receivable	(440)	566
Materials and supplies	(316)	(736)
Decrease in:		
Accounts payable and other accrued liabilities	(8,692)	(10,048)
Net cash from operating activities	$ 122,753	$ 123,386

See accompanying notes to financial statements.

PIEDMONT MUNICIPAL POWER AGENCY

Notes to Financial Statements

December 31, 2025 and 2024

(Dollars in thousands)

(1) Description of the Entity, Industry Restructuring Developments, and Related Uncertainties

(a) Description of the Entity

Piedmont Municipal Power Agency ("PMPA") was incorporated in 1979 under the South Carolina Joint Municipal Electric Power and Energy Act (the "Act"). The Act, adopted in April 1978, enabled the formation, by South Carolina municipalities and municipal commissions of public works, of a joint agency to plan, finance, develop, own, and operate electric generation and transmission facilities. Ten municipal utility systems ("Participants") comprise PMPA's membership. The Participants, located in northwestern South Carolina, are the cities of Abbeville, Clinton, Easley, Gaffney, Greer, Laurens, Newberry, Rock Hill, Union, and Westminster. PMPA is not a component unit of any other governmental entity.

PMPA has a 25% undivided ownership interest in Unit 2 of the Catawba Nuclear Station ("Catawba"). Pursuant to the Operating and Fuel Agreement between PMPA and Duke Energy Carolinas, LLC ("Duke"), Duke operates both Units 1 and 2 at Catawba. PMPA's power output entitlements (approximately 285 MW) come from both Catawba Units. PMPA pays 12.5% of the costs and receives 12.5% of the power output associated with each of these 1,145 MW units. The current operating licenses for Catawba Unit 1 and Unit 2 expire on December 5, 2043.

Duke is seeking a 20-year license extension for both Catawba units allowing both units to operate through 2063. The United States Nuclear Regulatory Commission ("NRC") directs the subsequent license renewal process. Although the renewal process cannot be formally completed with the NRC until the current license is closer to expiration, PMPA deems it probable the 20-year extension will be approved. This determination was based on, among other things, Catawba's outstanding operating performance and the information available surrounding the subsequent license renewals approved by the NRC for current reactors that have completed the NRC renewal process.

The terms of the McGuire Reliability Exchange Agreement ("MREA") allow transfers of energy between PMPA's entitlements from the Catawba Units and Duke's two nuclear units at the McGuire Nuclear Station ("McGuire"). The result spreads PMPA's entitlements across four similar nuclear units. The operating license for McGuire Unit 1 expires on June 12, 2041 and the operating license for McGuire Unit 2 expires on March 3, 2043. Duke is also seeking a 20-year license extension for both McGuire units.

PIEDMONT MUNICIPAL POWER AGENCY

Notes to Financial Statements

December 31, 2025 and 2024

(Dollars in thousands)

(2) Summary of Significant Accounting Policies

(a) Basis of Accounting

PMPA's accounting records are maintained on an accrual basis in conformity with accounting principles generally accepted in the United States of America ("U.S. GAAP") and substantially in conformity with the Federal Energy Regulatory Commission's Uniform System of Accounts.

PMPA follows the accounting practices set forth in U.S. GAAP, which allows PMPA to capitalize or defer certain costs or revenues based on PMPA's ongoing assessment that it is probable that such items will be recovered through future revenues based on the rate-making authority of PMPA's Board of Directors. The criteria require consideration of anticipated changes in levels of demand or competition during the recovery period for any capitalized cost.

PMPA's General Bond Resolution requires that its rate structure be designed to produce revenues sufficient to pay operating, debt service, and other specified costs. PMPA's Board of Directors, which is comprised of representatives of the Participants, is responsible for reviewing and approving the rate structure. The application of a given rate structure to a given period's electricity sales may produce revenues not intended to pay that period's costs, and conversely, that period's costs may not be intended to be recovered in period revenues. The affected revenues and/or costs are, in such cases, deferred for future recognition. The ultimate recognition of deferred items is correlated with specific future events, primarily payment of debt principal.

PMPA maintains a single enterprise fund to record its activities, which consists of a self-balancing set of accounts. Enterprise funds are used to account for activities similar to those found in the private sector, where the determination of net income is necessary or useful for sound financial administration.

PIEDMONT MUNICIPAL POWER AGENCY

Notes to Financial Statements

December 31, 2025 and 2024

(Dollars in thousands)

(2) Summary of Significant Accounting Policies – Continued

(b) Losses on Advanced Refundings of Debt and Redemption Losses, net

Losses on advanced refundings of debt and redemption losses, net at December 31, 2025 and 2024 of $7,308 and $8,931, respectively, have been deferred in accordance with U.S. GAAP and are being recognized over the term of the debt issued. The remaining costs on advanced refundings will be amortized over the next 8 years (2026 through 2033) based on the shorter of the original debt maturity dates or the maturity dates of the new debt.

(c) Discounts on Bonds Payable

The discounts on bonds payable at December 31, 2025 and 2024 of $26 and $30, respectively, (net of accumulated amortization of $42 and $1,058, respectively) are being amortized using the straight-line method, which approximates the effective interest method.

(d) Premiums on Bonds Payable

The premiums on bonds payable at December 31, 2025 and 2024 of $30,479 and $37,113, respectively, (net of accumulated amortization of $32,822 and $39,263, respectively) are being amortized using the straight-line method, which approximates the effective interest method.

(e) Income Taxes

PMPA is recognized as a public utility for federal income tax purposes. As such, the gross income of PMPA is excluded from federal income taxes under Internal Revenue Code ("IRC") Section 115.

(f) Marketable Debt Securities

As authorized by the General Bond Resolution, investment securities at December 31, 2025 and 2024 consist only of direct obligations of the United States government and obligations of United States government agencies. These investments are uninsured and unregistered and are held by PMPA's trustee in PMPA's name.

Marketable debt securities are recorded at fair value based on market prices. Unrealized holding gains and losses on marketable debt securities are included in income. Interest income is recognized when earned.

PIEDMONT MUNICIPAL POWER AGENCY

Notes to Financial Statements

December 31, 2025 and 2024

(Dollars in thousands)

(2) Summary of Significant Accounting Policies – Continued

(g) Capital Assets, net

Utility plant assets are stated at cost and are depreciated on a straight-line basis at rates calculated to depreciate the composite assets over their respective estimated useful lives. Depreciation begins when assets are placed into service. PMPA's annual provision for depreciation expressed as a percentage of the average balance of depreciable utility plant assets was 1.2% in both 2025 and 2024.

Utility plant assets are depreciated over the estimated useful life of Catawba, which is 38 years. Nuclear fuel is amortized over its estimated useful life, which is approximately 4.5 years.

(h) Materials and Supplies

Materials and supplies inventories are stated at the lower of cost or net realizable value using the average cost method.

(i) Asset Retirement Obligation

PMPA has recorded an asset retirement obligation related to the decommissioning of Catawba. Subsequent to the initial measurement of the asset retirement obligation, the obligation is adjusted to reflect the passage of time and changes in estimated future cash flows underlying the obligation. Any such adjustments are capitalized and amortized over the remaining life of the asset.

PIEDMONT MUNICIPAL POWER AGENCY

Notes to Financial Statements

December 31, 2025 and 2024

(Dollars in thousands)

(2) Summary of Significant Accounting Policies – Continued

(j) Net Position

Net position is displayed in three components:

- *Net Investment in Capital Assets* – consists of capital assets, net of accumulated depreciation and amortization and reduced by the outstanding balances of any bonds, notes, or other borrowings that are attributable to the acquisition, construction, or improvement of those assets.
- *Restricted for Other* – consists of net position with constraints placed on the use either by (1) external groups such as creditors, grantors, contributors, or laws or regulations of other governments or (2) law through constitutional provision or enabling legislation.
- *Unrestricted* – all other net position that does not meet the definition of "restricted for other" or "net investment in capital assets."

(k) Revenue Recognition

PMPA recognizes revenue on sales when the electricity is delivered to the Participants and other utilities. See Note 8 for additional information related to revenue and future costs to be recovered.

(l) Operating and Nonoperating Revenues and Expenses

PMPA distinguishes operating revenues and expenses from nonoperating items. Nonoperating items include revenues and expenses related to financing, the disposal of capital assets and investment income and expenses. All other revenues and expenses not meeting this definition are reported as operating revenues and expenses. The principal operating revenues of PMPA are charges to Participants and other utilities for sales and services. Operating expenses for PMPA include the costs of sales and services, general and administrative services and depreciation of capital assets.

PIEDMONT MUNICIPAL POWER AGENCY

Notes to Financial Statements

December 31, 2025 and 2024

(Dollars in thousands)

(2) Summary of Significant Accounting Policies – Continued

(m) Recent Pronouncements

In December 2023, the GASB issued Statement No. 102, *Certain Risk Disclosures*. The objective of this Statement is to provide users of government financial statements with information about risks related to a government's vulnerabilities due to certain concentrations or constraints that is essential to their analyses for making decisions or assessing accountability. PMPA adopted this statement effective January 1, 2025. There was no material impact on PMPA's financial statements as a result of the adoption.

In April 2024, the GASB issued Statement No. 103, *Financial Reporting Model Improvements*. The objective of this Statement is to improve key components of the financial reporting model to enhance its effectiveness in providing information that is essential for decision making and assessing a government's accountability. The requirements of this Statement are effective for fiscal years beginning after June 15, 2025. PMPA is assessing the impact of this Statement on the financial statements.

In September 2024, the GASB issued Statement No. 104, *Disclosure of Certain Capital Assets*. The objective of this Statement is to provide users of government financial statements with essential information about certain types of capital assets. The requirements of this Statement are effective for fiscal years beginning after June 15, 2025. This Statement is not expected to have a material impact on PMPA.

In December 2025, the GASB issued Statement No. 105, *Subsequent Events*. The objective of this Statement is to improve the financial reporting requirements for subsequent events, thereby enhancing consistency in their application and better meeting the information needs of financial statement users. The requirements of this Statement are effective for fiscal years beginning after June 15, 2026. This Statement is not expected to have a material impact on PMPA.

PIEDMONT MUNICIPAL POWER AGENCY

Notes to Financial Statements

December 31, 2025 and 2024

(Dollars in thousands)

(3) Power Sales Agreements

(a) Catawba Project Power Sales Agreements

PMPA and each Participant are parties to Catawba Project Power Sales Agreements ("Power Sales Agreements"). These Power Sales Agreements obligate PMPA to provide each Participant a share of the undivided 25% interest in Unit 2 of Catawba power output. In turn, each Participant must pay its share of the Catawba costs. Participants make their payments on a "take-or-pay" basis whether or not Catawba is operable or operating. Such payments are not subject to reduction or offset and are not conditioned upon performance by PMPA or any given Participant.

The Power Sales Agreements between PMPA and 3 of its Participants (Greer, Rock Hill and Union) are in effect until the earlier of August 1, 2035 or the completion of payments on the bonds and satisfaction of obligations under the Project Agreements. In 2025, the Power Sales Agreements between PMPA and remaining seven Participants were extended and will remain in effect until the earlier of August 1, 2085 or the satisfaction of the all of following criteria: (1) the entire Catawba Nuclear Station (both Unit 1 and 2) has ceased operations and is retired from service, (2) the principal of and premium, if any, and interest on all of the Bonds have been paid in full or funds are set aside for the payment or retirement thereof in accordance with the Bond Resolution; (3) all other obligations and liabilities hereunder have been paid or provided for; and (4) all obligations and liabilities of PMPA under the Project Agreements have been performed and paid or provided for.

Under the Power Sales Agreements effective through August 1, 2035, each Participant is entitled to the following percentages of PMPA's Catawba output:

Abbeville	2.68
Clinton	7.84
Easley	13.24
Gaffney	10.05
Greer	9.34
Laurens	6.49
Newberry	10.47
Rock Hill	28.04
Union	10.01
Westminster	1.84
	100.00

PIEDMONT MUNICIPAL POWER AGENCY

Notes to Financial Statements

December 31, 2025 and 2024

(Dollars in thousands)

(3) Power Sales Agreements – Continued

(b) Supplemental Power Sales Agreements

PMPA and each Participant are also parties to Supplemental Power Sales Agreements ("Supplemental Agreements") under which each Participant has agreed to pay, in exchange for All Requirements Bulk Power Supply, its share of All Requirements Bulk Power Supply costs. A Participant may terminate its Supplemental Agreement with ten years advance notice. On December 31, 2018 the Participants Greer, Rock Hill and Westminster turned in the ten-year written notice to terminate their Supplemental Agreements with PMPA. The effective date of termination will be December 31, 2028. In December 2019, the remaining seven Participants turned in the ten-year written notice to terminate their Supplemental Agreements with PMPA. The effective date of termination will be December 31, 2029.

(4) Project and Other Agreements

Project Agreements between PMPA and Duke consist of the Purchase, Construction, and Ownership Agreement ("Sales Agreement"), the Operating and Fuel Agreement (the "Operating Agreement"), the Joint Ownership Support Agreement, (the "JOSA"), and the MREA.

(a) Sales Agreement

The Sales Agreement generally provides for (i) the purchase of Catawba by PMPA; (ii) PMPA's contract with Duke to act as engineer contractor for PMPA for completion of construction, initial fueling, and placing Catawba into commercial operation; (iii) PMPA's payment to Duke for construction completed to the date of closing on Catawba and for construction thereafter; and (iv) PMPA's payment to Duke of certain profits and fees.

(b) Operating Agreement

The Operating Agreement generally provides that PMPA employs Duke, as operator of Catawba, to be responsible for the (i) operation, maintenance, and fueling of Catawba; (ii) making of renewals, replacements, and capital additions to Catawba; and (iii) ultimate decommissioning of Catawba at the end of its useful life.

(c) JOSA

The JOSA generally provides for certain joint ownership rights and obligations, including the Catawba Reliability Exchange. This agreement became effective on January 1, 2006.

PIEDMONT MUNICIPAL POWER AGENCY

Notes to Financial Statements

December 31, 2025 and 2024

(Dollars in thousands)

(4) Project and Other Agreements – Continued

(d) MREA

The MREA generally provides for the continued exchange of energy from PMPA's entitlements to the Catawba units for energy from Duke's McGuire Nuclear Station units. This agreement became effective January 1, 2006, and can be terminated by either party by giving a three-year written notice.

Other Agreements

(a) Requirements Service Agreement

On December 13, 2010, PMPA entered into a Power Sales Agreement with the South Carolina Public Service Authority ("Santee Cooper"). This agreement became effective on January 1, 2014. The contract requires that PMPA purchase power from Santee Cooper to meet all of its load demand beyond the amounts served by Catawba, the Participants' share of electricity, excluding backstand services, from SEPA ("Southeastern Power Administration") hydroelectric facilities, and load requirements met by individual generating resources owned by certain Participants. On January 28, 2020, PMPA provided the required ten-year notice of termination to Santee Cooper for the Requirements Service Agreement. This cancellation is a result of all Participants providing notice to cancel their Supplemental Agreements, as discussed in Note 3.

(b) Transmission Services

PMPA entered into a service agreement with Duke to begin taking transmission service under Duke's Open Access Transmission Tariff ("OATT") on January 1, 2006.

(c) The Energy Authority Resource ("TEA") Management Agreement

PMPA entered into a Resource Management Agreement with TEA effective January 1, 2021, renewing annually. The Resource Management Agreement generally provides for PMPA to obtain backstand services for PMPA's entitlement to capacity and energy from the Catawba and McGuire Nuclear Stations.

PIEDMONT MUNICIPAL POWER AGENCY

Notes to Financial Statements

December 31, 2025 and 2024

(Dollars in thousands)

(5) Capital Assets

The following is a summary of capital asset activity for the years ended December 31, 2025 and 2024:

	December 31, 2025			
	Beginning Balance	Increase	Decrease	Ending Balance
Utility plant being depreciated:				
Structures and improvements	$ 176,702	$ 624	$ (446)	$ 176,880
Reactor plant equipment	299,383	458	(242)	299,599
Turbo generator units	89,136	82	(157)	89,061
Accessory electric equipment	68,120	850	(98)	68,872
Miscellaneous plant equipment	38,339	477	(614)	38,202
Station equipment	5,499	581	(238)	5,842
Transmission equipment	6,183	-	-	6,183
Other	27,701	25,559	(2,492)	50,768
Nuclear fuel	77,547	14,702	(5,651)	86,598
Total utility plant assets being depreciated	788,610	43,333	(9,938)	822,005
Accumulated depreciation and amortization:				
Utility plant asset depreciation	(371,584)	(9,810)	2,964	(378,430)
Nuclear fuel amortization	(29,328)	(13,608)	5,651	(37,285)
Total utility plant assets being depreciated, net	387,698	19,915	(1,323)	406,290
Utility plant assets not being depreciated:				
Land	536	-	-	536
Construction work-in-progress	39,056	23,553	(27,308)	35,301
Total utility plant assets not being depreciated	39,592	23,553	(27,308)	35,837
Total capital assets, net	$ 427,290	$ 43,468	$ (28,631)	$ 442,127

PIEDMONT MUNICIPAL POWER AGENCY

Notes to Financial Statements

December 31, 2025 and 2024

(Dollars in thousands)

(5) Capital Assets – Continued

	December 31, 2024			
	Beginning Balance	Increase	Decrease	Ending Balance
Utility plant being depreciated:				
Structures and improvements	$ 176,047	$ 1,255	$ (600)	$ 176,702
Reactor plant equipment	297,657	2,229	(503)	299,383
Turbo generator units	83,259	7,509	(1,632)	89,136
Accessory electric equipment	67,317	985	(182)	68,120
Miscellaneous plant equipment	37,026	1,316	(3)	38,339
Station equipment	5,754	8	(263)	5,499
Transmission equipment	6,183	-	-	6,183
Other	24,578	17,001	(13,878)	27,701
Nuclear fuel	79,063	21,967	(23,483)	77,547
Total utility plant assets being depreciated	776,884	52,270	(40,544)	788,610
Accumulated depreciation and amortization:				
Utility plant asset depreciation	(367,603)	(9,022)	5,041	(371,584)
Nuclear fuel amortization	(40,037)	(12,775)	23,484	(29,328)
Total utility plant assets being depreciated, net	369,244	30,473	(12,019)	387,698
Utility plant assets not being depreciated:				
Land	536	-	-	536
Construction work-in-progress	34,083	23,257	(18,284)	39,056
Total utility plant assets not being depreciated	34,619	23,257	(18,284)	39,592
Total capital assets, net	$ 403,863	$ 53,730	$ (30,303)	$ 427,290

Nuclear fuel represents costs associated with acquiring and processing reload fuel assemblies as well as the cost of nuclear fuel in the reactor. Nuclear fuel is amortized based on burn rates using a unit of production basis. PMPA regularly removes fully amortized nuclear fuel costs when fuel batches are replaced during core refueling operations. Fully amortized fuel costs of $5,651 and $23,483 were removed during 2025 and 2024, respectively.

PIEDMONT MUNICIPAL POWER AGENCY

Notes to Financial Statements

December 31, 2025 and 2024

(Dollars in thousands)

(6) Cash and Investments

On December 31, 2025, the carrying value of deposits included in cash was $882. Insured and collateralized bank deposits were $904 on December 31, 2025.

As of December 31, 2025, PMPA held the following investments (all are listed at fair value):

	Time Segmented Distribution					
Investment Type	Under 1 Year	1-2 Years	2-3 Years	3-4 Years	>4 Years	Total
Cash/Money Market	$ 159,507	$ -	$ -	$ -	$ -	$ 159,507
Government Treasury	7,048	59,531	42,187	42,468	31,631	182,865
Mortgage Backed Securities	-	-	-	-	183	183
Total fair value	$ 166,555	$ 59,531	$ 42,187	$ 42,468	$ 31,814	$ 342,555

On December 31, 2024, the carrying value of deposits included in cash was $739. Insured and collateralized bank deposits were $805 on December 31, 2024.

As of December 31, 2024, PMPA held the following investments (all are listed at fair value):

	Time Segmented Distribution					
Investment Type	Under 1 Year	1-2 Years	2-3 Years	3-4 Years	>4 Years	Total
Cash/Money Market	$ 157,270	$ -	$ -	$ -	$ -	$ 157,270
Government Treasury	4,891	57,328	45,287	36,562	35,766	179,834
Mortgage Backed Securities	-	-	-	-	216	216
Total fair value	$ 162,161	$ 57,328	$ 45,287	$ 36,562	$ 35,982	$ 337,320

Refer to Note 14 for additional fair value disclosures.

PIEDMONT MUNICIPAL POWER AGENCY

Notes to Financial Statements

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(6) Cash and Investments – Continued

A reconciliation of investments on December 31, 2025 and 2024 shown in the Statements of Net Position is as follows:

	2025	2024
Investments	$ 342,555	$ 337,320
Accrued interest receivable	1,071	863
Total	$ 343,626	$ 338,183
Statements of Net Position:		
Marketable debt securities	$ 74,885	$ 71,179
Restricted investments for debt service	119,236	127,694
Restricted investments for decommissioning	147,905	137,710
Restricted investments for other	1,600	1,600
Total investments, including accrued interest receivable	$ 343,626	$ 338,183

The following represents the fair value of securities in an unrealized loss position and the associated unrealized loss as of December 31, 2025 and 2024:

	Less than 12 months		12 months or more		Total	
	Fair Value of Securities	Unrealized Loss	Fair Value of Securities	Unrealized Loss	Fair Value of Securities	Unrealized Loss
As of December 31, 2025	$ 5,322	$ (13)	$ 26,661	$ (219)	$ 31,983	$ (232)
As of December 31, 2024	$ 12,379	$ (188)	$ 55,063	$ (2,177)	$ 67,442	$ (2,365)

Credit Risk

PMPA's investment policy for managing credit risk is in accordance with the statutes of the State of South Carolina. The policy allows for the investment of money in the following investments:

a) Direct obligations of, or obligations for, which the principal and interest are unconditionally guaranteed by the United States or its Agencies.

b) Direct and general obligations, to the payment of which the full faith and credit of the issuer is pledged, of the State of South Carolina or any political subdivision thereof that at the time of investment are assigned a rating of at least "A."

c) Certificates of deposit issued by any bank, trust company, or national banking association whose principal place of business is in the State of South Carolina or that is a member of the Federal Reserve System and authorized to do business in any state of the United States.

PIEDMONT MUNICIPAL POWER AGENCY

Notes to Financial Statements

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(Dollars in thousands)

(6) Cash and Investments – Continued

d) Bills of exchange or time drafts drawn on and accepted by a domestic or foreign bank, otherwise known as Bankers' Acceptances, which are eligible for purchase by the Federal Reserve, the short-term commercial paper of which is rated in the highest category.

e) Investments in repurchase agreements and reverse repurchase agreements with any bank, savings and loan association, credit union, or trust company organized under the laws of any state of the United States or any national banking association or government bond dealer reporting to, trading with and recognized as a primary dealer by the Federal Reserve Bank of New York, which are collateralized by securities as set forth in (a) and (b).

PMPA's investments in U.S. Agencies and U.S. Government Sponsored Enterprises, including Federal Home Loan Bank System, Federal National Mortgage Association, and Federal Home Loan Mortgage Corporation, are rated AA+ by Standard and Poor's and Aaa by Moody's Investors Service. U.S. Treasury and Agency Mortgage-Backed Securities are unrated but are considered equivalent to an AAA rating.

Concentration of Credit Risk

The investment policy of PMPA permits a maximum portfolio percentage of 100% for U.S. Treasuries, Federal Agencies and U.S. Government-sponsored enterprises and permits a maximum portfolio percentage of 50% in any one federal agency or government-sponsored enterprise.

Custodial Credit Risk

PMPA's policy for managing custodial risk requires all securities owned by PMPA to be held in safekeeping by a third party custodian bank in PMPA's name under a custody agreement. For an investment, custodial credit risk is the risk that in the event of the failure of the counterparty, PMPA will not be able to recover the value of its investments or collateral that is in the possession of an outside party.

Interest Rate Risk

Interest rate risk is the risk that rising interest rates will adversely affect the fair value of PMPA's investments. As outlined in PMPA's investment policy, investment maturities shall be less than 20 years and maturities shall be staggered in a way that avoids undue concentration in a specific maturity sector and provides for stability of income and reasonable liquidity.

PIEDMONT MUNICIPAL POWER AGENCY

Notes to Financial Statements

December 31, 2025 and 2024

(Dollars in thousands)

(7) Restricted Assets

The General Bond Resolution and Project agreements restrict the use of bond proceeds, PMPA revenues, and PMPA funds on hand. Certain restrictions define the order in which available funds may be used to pay costs; other restrictions require minimum balances or accumulation of balances for specific purposes. On December 31, 2025 and 2024, management believes PMPA was in compliance with all such restrictions and held the following restricted assets:

	2025		2024	
	Fair Value	Amortized Cost	Fair Value	Amortized Cost
Debt service - bond principal	$ 67,897	$ 67,897	$ 66,732	$ 66,732
Debt service - bond fixed rate interest	9,349	9,349	10,987	10,987
Debt service reserve	38,205	37,847	45,356	46,187
Reserve and contingency	3,785	3,785	4,619	4,619
Decommissioning	147,905	146,694	137,710	139,810
Special reserve	1,600	1,600	1,600	1,600
	$ 268,741	$ 267,172	$ 267,004	$ 269,935
Funds are comprised of:				
Marketable debt securities	$ 267,670	$ 266,101	$ 266,141	$ 269,072
Accrued interest receivable	1,071	1,071	863	863
	$ 268,741	$ 267,172	$ 267,004	$ 269,935

PIEDMONT MUNICIPAL POWER AGENCY

Notes to Financial Statements

December 31, 2025 and 2024

(Dollars in thousands)

(8) Net Costs Recoverable from Future Participant Billings

As described in Notes 1 and 2, rates charged to Participants are structured to systematically provide for debt requirements and operating costs of PMPA. The expenses and revenues excluded from rates are capitalized and expensed in such periods as they are intended to be included in rates.

PMPA will recognize the following expenses in future periods when rates charged to Participants produce revenues sufficient to retire the debt that funded those costs:

- Interest expense on PMPA's bonds and variable rate demand obligations along with an associated letter of credit, banking, and remarketing fees (except interest and fees related to capital appreciation bonds) paid from bond proceeds during a defined "Construction Period" (net of income earned on the temporary investment of those bond proceeds);
- Interest expense on capital appreciation bonds accrued but not paid until maturity;
- Debt issuance expenses, amortization of bond discounts and premiums, defeasance losses, redemption losses, and organization costs paid from or included in bond proceeds;
- Depreciation on utility plant constructed with bond proceeds and amortization of nuclear fuel acquired with bond proceeds; and
- Certain other project costs paid from bond proceeds.

Additionally, PMPA's General Bond Resolution requires Participant revenues to be established at levels sufficient to provide specified deposits into a Reserve and Contingency fund. Monies in that fund can be used to construct or acquire utility plant assets. The recognition of such revenues is considered unearned until the depreciation is recorded on the assets constructed or acquired with those monies.

Interest expense on capital appreciation bonds accrued, but not yet paid, decreased from $174,987 on December 31, 2024 to $149,224 on December 31, 2025. The remaining Net Costs Recoverable from Future Participant Billings decreased from $56,130 on December 31, 2024 to $33,498 on December 31, 2025 as a result of required bond principal payment deposits of the $27,064 due January 1, 2026, partially offset by additional deferrals relating to debt issuance expenses, amortization of bond discounts and premiums, defeasance losses, redemption losses and depreciation.

PIEDMONT MUNICIPAL POWER AGENCY

Notes to Financial Statements

December 31, 2025 and 2024

(Dollars in thousands)

(9) Bonds Payable

Bonds payable, net on December 31, 2025 consist of the following:

	2024	Additions	Reductions	2025	Due within one year
1993 Refunding Series Electric Revenue Bonds	$ 31,310	$ -	$ 31,310	$ -	$ -
2004A Capital Appreciation Electric Revenue Bonds, payable annually from 2026 to 2032 and 2034 with interest ranging from 5.69% to 5.80%	80,330	-	-	80,330	17,529
2009B Electric Revenue Bonds (Build America Bonds), payable 2031 to 2034 with interest at 7.036% (35% interest federally refunded yielding net interest at 4.57%)	26,490	-	-	26,490	-
2015A Series Electric Revenue Bonds, payable annually from 2026 to 2034 with interest ranging from 3.50% to 5.00%	39,870	-	5,695	34,175	6,025
2017A Series Electric Revenue Bonds	1,810	-	1,810	-	-
2017B Series Electric Revenue Bonds	3,490	-	3,490	-	-
2021A Refunding Series Electric Revenue Bonds	17,025	-	17,025	-	-

PIEDMONT MUNICIPAL POWER AGENCY

Notes to Financial Statements

December 31, 2025 and 2024

(Dollars in thousands)

(9) Bonds Payable – Continued

	2024	Additions	Reductions	2025	Due within one year
2021B Refunding Series Electric Revenue Bonds, payable annually from 2027 to 2034 with interest ranging from 4.00% to 5.00%	$ 97,420	$ -	$ -	$ 97,420	$ -
2021C Refunding Series Electric Revenue Bonds, payable annually from 2027 to 2034 with interest at 5.00%	90,520	-	-	90,520	-
2021D Refunding Series Electric Revenue Bonds, payable annually from 2026 to 2034 with interest at 4.00%	91,410	-	-	91,410	3,510
2021E Refunding Series Electric Revenue Bonds	7,235	-	7,235	-	-
2024A Electric Revenue Bond payable 2035 with interest at 5.01%	48,330	-	-	48,330	-
Total bonds payable	535,240	-	66,565	468,675	27,064
Less unamortized discounts	(30)	-	(4)	(26)	-
Plus unamortized premiums	37,113	-	6,634	30,479	-
Bonds payable, net	$ 572,323	$ -	$ 73,195	$ 499,128	$ 27,064

PIEDMONT MUNICIPAL POWER AGENCY

Notes to Financial Statements

December 31, 2025 and 2024

(Dollars in thousands)

(9) Bonds Payable – Continued

Bonds payable, net on December 31, 2024 consist of the following:

	2023	Additions	Reductions	2024	Due within one year
1993 Refunding Series Electric Revenue Bonds, payable from 2024 to 2025 with interest at 5.38%	$ 31,760	$ -	$ 450	$ 31,310	$ 31,310
2004A Capital Appreciation Electric Revenue Bonds, payable annually from 2024, 2026 to 2032 and 2034 with interest ranging from 5.54% to 5.80%	86,861	-	6,531	80,330	-
2009B Electric Revenue Bonds (Build America Bonds), payable 2031 to 2034 with interest at 7.036% (35% interest federally refunded yielding net interest at 4.57%)	26,490	-	-	26,490	-
2015A Series Electric Revenue Bonds, payable annually from 2025 to 2034 with interest ranging from 3.50% to 5.00%	45,295	-	5,425	39,870	5,695
2017A Series Electric Revenue Bonds, payable 2025 with interest at 5.00%	9,565	-	7,755	1,810	1,810
2017B Series Electric Revenue Bonds, payable 2025 with interest at 5.00%	22,625	-	19,135	3,490	3,490

PIEDMONT MUNICIPAL POWER AGENCY

Notes to Financial Statements

December 31, 2025 and 2024

(Dollars in thousands)

(9) Bonds Payable – Continued

	2023	Additions	Reductions	2024	Due within one year
2021A Refunding Series Electric Revenue Bonds, payable 2025 with interest at 4.00%	$ 27,895	$ -	$ 10,870	$ 17,025	$ 17,025
2021B Refunding Series Electric Revenue Bonds, payable annually from 2027 to 2034 with interest ranging from 4.00% to 5.00%	97,420	-	-	97,420	-
2021C Refunding Series Electric Revenue Bonds, payable annually from 2027 to 2034 with interest at 5.00%	90,520	-	-	90,520	-
2021D Refunding Series Electric Revenue Bonds, payable annually from 2026 to 2034 with interest at 4.00%	91,410	-	-	91,410	-
2021E Refunding Series Electric Revenue Bonds, payable 2025 with interest at 5.00%	9,155	-	1,920	7,235	7,235
2024A Electric Revenue Bond payable 2035 with interest at 5.01%	-	48,330	-	48,330	-
Total bonds payable	538,996	48,330	52,086	535,240	66,565
Less unamortized discounts	(81)	-	(51)	(30)	-
Plus unamortized premiums	44,921	-	7,808	37,113	-
Bonds payable, net	$ 583,836	$ 48,330	$ 59,843	$ 572,323	$ 66,565

PIEDMONT MUNICIPAL POWER AGENCY

Notes to Financial Statements

December 31, 2025 and 2024

(Dollars in thousands)

(9) Bonds Payable – Continued

The bonds, with the exception of the 2024A Electric Revenue Bond, are special obligations of PMPA and are secured by future revenue and pledged monies and securities as provided by the Bond Resolution. Proceeds from these bonds provided financing for the initial construction and continued capital additions of Catawba. The bonds are payable solely from electrical net revenues and are payable through 2034. Refer to Note 16 for additional information on the issuance of the 2024A Electric Revenue Bond.

PMPA has advanced refunded certain bond issues as described in Note 10. PMPA is in compliance with its covenants under the Bond Resolution.

The following is a summary of bonds outstanding as of December 31, 2025. With the exception of the 2024A Electric Revenue Bond, all principal payments are due on January 1 and are required to be deposited during the year prior. The 2024A Electric Revenue Bond payment is due on April 30, 2035.

Payment Due 1/1	Principal	Interest	Total
2026	$ 27,064	$ 58,666	$ 85,730
2027	37,397	48,697	86,094
2028	37,863	48,228	86,091
2029	38,507	47,590	86,097
2030	39,207	46,885	86,092
2031-2035	288,637	107,129	395,766
	$ 468,675	$ 357,195	$ 825,870

PIEDMONT MUNICIPAL POWER AGENCY

Notes to Financial Statements

December 31, 2025 and 2024

(Dollars in thousands)

(10) Refunding and Defeasance of Debt

In prior years, PMPA defeased in-substance certain Electric Revenue Bonds by placing the proceeds of new bonds in an irrevocable trust fund to provide for future debt service payments on the old debt. Accordingly, the trust account asset and the liability for the defeased bonds are not included in the accompanying financial statements. As of December 31, 2024, $24,345 of the bonds were considered defeased in-substance. As of December 31, 2025, debt service on the defeased in-substance bonds was complete.

(11) Asset Retirement Obligation

As a co-owner of Catawba, PMPA has an obligation to decommission the station after its operating licenses expire. Management believes PMPA complies with the Nuclear Regulatory Commission requirements for funding future decommissioning costs. Since 1985, PMPA has been making regular deposits to segregated decommissioning accounts. Deposits pertaining to contaminated portions of the Project are held by a trustee. As of December 31, 2025 and 2024, the fair value of PMPA's assets that are legally restricted for settling the decommissioning obligation is $147,905 and $137,710, respectively.

Planned deposits into the decommissioning fund, together with interest earnings, are expected to be sufficient to pay PMPA's share of the projected cost of decommissioning the entire Catawba Station.

PMPA receives updated decommissioning studies every five years, with the most recent study completed in December 2023. The latest study included two scenarios (1) decommissioning occurs as soon as possible following the expiration of its current operating license in 2043 and (2) decommissioning occurs as soon as possible after the expiration of the operating license renewal in 2063. In 2023 dollars, the decommissioning costs are estimated to be $1,846,942 and $1,765,923 following the expiration of the operating license in 2043 and 2063, respectively. At December 31, 2024, PMPA determined the operating license renewal extending life to 2063 was both probable and estimable. As such, the PMPA updated its underlying asset retirement obligation to reflect the change in assumption. Refer to Note 1 for additional information on the operating license renewal.

PIEDMONT MUNICIPAL POWER AGENCY

Notes to Financial Statements

December 31, 2025 and 2024

(Dollars in thousands)

(11) Asset Retirement Obligation – Continued

PMPA used the following assumptions in determining its asset retirement obligation:

	2025	2024
Period in which decommissioning liability was incurred	1985	1985
Agency's share of decommissioning costs per study (in 2023 dollars)	$220,740	$220,740
Estimation of inflation	2.75%	2.75%
Credit adjusted risk-free interest rate	3.25%	3.25%
Estimated remaining life of corresponding asset	38 years	39 years

The following is a roll forward of the asset retirement obligation for the years ended December 31, 2025 and 2024.

	2025	2024
Asset retirement obligation at January 1	$ 182,667	$ 145,510
Accretion	5,937	7,511
Change in asset retirement obligation due to updated assumptions	-	29,646
Asset retirement obligation at December 31	$ 188,604	$ 182,667

PMPA has a deferred outflow related to the asset retirement obligation of $35,947 and $36,893 as of December 31, 2025 and 2024, respectively.

(12) Employee Benefit Plans

PMPA maintains a defined contribution money purchase plan in compliance with Section 401(a) of the IRC. On behalf of all full-time employees, PMPA contributes 10% of the base salary to the money purchase plan. PMPA contributions totaled $164 and $154 in 2025 and 2024, respectively. Employee contributions may also be made to the Plan, providing combined employer and employee annual contributions do not exceed 25% of eligible employee compensation, or $30, whichever is less.

PMPA also maintains a deferred compensation plan under Section 457 of the IRC. In the past, on behalf of selected employees, PMPA has contributed to the deferred compensation plan; however, no such contribution was made in 2025 or 2024. Employee contributions may also be made to the deferred compensation plan providing combined employer and employee annual contributions do not exceed certain limitations.

Assets of the money purchase and deferred compensation plans are held by Empower Retirement, administrator, and trustee for PMPA, for the exclusive benefit of the employees.

PIEDMONT MUNICIPAL POWER AGENCY

Notes to Financial Statements

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(Dollars in thousands)

(13) Total Other Postemployment Benefits ("OPEB")

PMPA's, single-employer, Postemployment Benefit Plan (the "Plan") provides other retiree medical benefits to qualified retirees. To qualify, a retiree must be 59 ½ years of age, have ten or more years of service and qualify for retiree health insurance through PMPA's current health insurance provider. Medical benefits to qualified retirees are as follows: PMPA will maintain and pay up to 100% of premiums for group medical, dental and vision insurance for each eligible retiree and up to 60% of premiums for the retiree's dependent spouse and children for the retiree's lifetime. After qualifying for Medicare, the covered individual will be covered under a supplemental insurance plan secondary to Medicare.

Membership in the healthcare benefit plan consisted of the following on December 31:

	2025	2024
Retirees	5	5
Active Employees	12	12
Total	17	17

Funding Policy

The required contribution is based on pay-as-you-go financing requirements.

Actuarial Assumptions and Other Inputs

The following actuarial assumptions and other inputs were used in calculating the OPEB liability for the years ended December 31, 2025 and 2024:

	2025	2024
Valuation date	December 31, 2025	December 31, 2023
Actuarial cost method	Entry age normal, level percentage of pay	Entry age normal
Discount rate	4.43% per annum	4.0% per annum
Salary increases	2.5% per annum	2.5% per annum
Mortality rates	1994 Group Annuity Mortality Static Table	1994 Group Annuity Mortality Static Table
Healthcare trend rates (Medical)	8% grading to 5.75% over 3 years and following the Getzen model thereafter to an ultimate rate of 4.04% by 2075	7% grading to 5.6% over 3 years and following the Getzen model thereafter to an ultimate rate of 4.04% by 2075
Healthcare trend rates (Vision)	5% per annum	5% per annum
Participation rates	100% of active participants are assumed to elect coverage in retirement 50% of active participants are assumed to cover a spouse in retirement	100% of active participants are assumed to elect coverage in retirement 50% of active participants are assumed to cover a spouse in retirement

PIEDMONT MUNICIPAL POWER AGENCY

Notes to Financial Statements

December 31, 2025 and 2024

(Dollars in thousands)

(13) Total Other Postemployment Benefits ("OPEB") – Continued

The following is a schedule of changes in the OPEB liability for the years ended December 31, 2025 and 2024:

	2025	2024
OPEB liability at January 1	$ 1,724	$ 1,639
Service cost	52	50
Interest	70	66
Experience gains	231	-
Changes of assumptions	(26)	-
Benefit paids	(33)	(31)
OPEB liability at December 31	$ 2,018	$ 1,724

The following table represents the net OPEB liability calculated using the stated medical trend assumption, as well as what the net OPEB liability would be if it were calculated using a medical trend rate that is one percentage point lower or one percentage point higher than the assumed medical trend rate.

	Medical Trend Rate		
	1% Decrease	Current	1% Increase
December 31, 2025	$1,688	$2,018	$2,436
December 31, 2024	$1,421	$1,724	$2,113

The following table represents the net OPEB liability calculated using the stated discount rate, as well as what the net OPEB liability would be if it were calculated using a discount rate that is one percentage point lower or one percentage higher than the current rate.

	Discount Rate		
	1% Decrease	Current	1% Increase
December 31, 2025	$2,405	$2,018	$1,708
December 31, 2024	$2,066	$1,724	$1,451

PIEDMONT MUNICIPAL POWER AGENCY

Notes to Financial Statements

December 31, 2025 and 2024

(Dollars in thousands)

(13) Total Other Postemployment Benefits ("OPEB") – Continued

OPEB Expense and Deferred Outflows of Resources Related to OPEB

Experience gains or losses as well as changes in actuarial assumptions are recognized over the average working lifetime of all participants, which is 7.0 and 7.4 years for the years ended December 31, 2025 and 2024, respectively. The following table summarizes OPEB expense for the years ended December 31, 2025 and 2024:

	2025	2024
Service cost	$ 52	$ 50
Interest	70	66
Experience gains	33	-
Changes of assumptions	(4)	-
Amortization of deferrals	28	28
Total OPEB expense	$ 179	$ 144

The deferred inflows of resources related to OPEB was $68 and $216 on December 31, 2025 and 2024, respectively. The deferred inflows of resources related to OPEB will be recognized in pension expense as follows:

Year ending December 31,	
2026	$ 5
2027	(25)
2028	(25)
2029	(52)
2030	(1)
Thereafter	30
	$ (68)

PIEDMONT MUNICIPAL POWER AGENCY

Notes to Financial Statements

December 31, 2025 and 2024

(Dollars in thousands)

(14) Disclosures Regarding Fair Value of Financial Instruments

U.S. GAAP requires disclosure of fair value information about financial instruments, whether or not recognized in the Statements of Net Position, for which it is practicable to estimate fair value. Fair value estimates are made as of a specific point in time based on the characteristics of the financial instruments and the relevant market information. Where available, quoted market prices are used. In other cases, fair values are based on estimates using present value or other valuation techniques. These techniques involve uncertainties and are significantly affected by the assumptions used and the judgments made regarding risk characteristics of various financial instruments, discount rates, prepayments, estimates of future cash flows, future expected loss experience and other factors. Changes in assumptions could significantly affect these estimates. Derived fair value estimates cannot be substantiated by comparison to independent markets and, in many cases, may or may not be realized in an immediate sale of the instrument.

Under U.S. GAAP, fair value estimates are based on existing financial instruments without attempting to estimate the value of anticipated future business and the value of the assets and liabilities that are not financial instruments. Accordingly, the aggregate fair value amounts presented do not represent the underlying value of PMPA.

The following describes the methods and assumptions used by PMPA in determining carrying value and estimated fair value of financial instruments:

(a) Cash

Carrying value equals estimated fair value.

(b) Marketable Debt Securities

Marketable debt securities are reported at fair value and categorized within the fair value hierarchy established under U.S. GAAP. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs. Gains or losses that result from market fluctuation are reported in the current period. As of December 31, 2025 and 2024, PMPA's investments included money market investments of $159,507 and $157,270, respectively, which were valued at amortized cost approximating fair value, and marketable debt securities of $183,048 and $180,050, respectively, which were valued at fair value using significant other observable inputs (Level 2 inputs).

(c) Participant Accounts Receivable and Other Accounts Receivable

Carrying amount approximates fair value due to the short-term nature of these instruments.

PIEDMONT MUNICIPAL POWER AGENCY

Notes to Financial Statements

December 31, 2025 and 2024

(Dollars in thousands)

(14) Disclosures Regarding Fair Value of Financial Instruments – Continued

(d) Long-Term Debt

Carrying value of long-term debt coupon securities includes par, less unaccreted discounts, plus unamortized premiums, plus accrued interest payable. Carrying value also includes capital appreciation term bonds valued at the original price plus accrued interest payable.

The estimated fair value of long-term debt securities is derived from quoted market prices and includes accrued interest.

The estimated fair values of PMPA's long-term debt with carrying amounts on December 31, 2025 and 2024 are as follows:

	2025		2024	
	Carrying Amount	Estimated Fair Value	Carrying Amount	Estimated Fair Value
1993 Electric Revenue Refunding Bonds	$ -	$ -	$ 32,152	$ 32,152
2004A-2 Electric Revenue Refunding Bonds	270,219	287,434	255,317	273,524
2009B Build America Bonds	27,422	30,227	27,422	29,753
2015A Electric Revenue Refunding Bonds	35,614	35,008	41,806	40,828
2017A Electric Revenue Refunding Bonds	-	-	1,855	1,855
2017B Electric Revenue Refunding Bonds	-	-	3,577	3,577
2021A Electric Revenue Refunding Bonds	-	-	17,366	17,366
2021B Electric Revenue Refunding Bonds	111,337	105,051	113,946	104,191
2021C Electric Revenue Refunding Bonds	101,763	94,724	103,722	95,968
2021D Electric Revenue Refunding Bonds	102,429	96,118	104,136	94,516
2021E Electric Revenue Refunding Bonds	-	-	7,416	7,416
2024A Electric Revenue Bond	49,541	51,373	49,541	50,278
	$ 698,325	$ 699,935	$ 758,256	$ 751,424

PIEDMONT MUNICIPAL POWER AGENCY

Notes to Financial Statements

December 31, 2025 and 2024

(Dollars in thousands)

(15) Nuclear Insurance and Other Risk Management

As part of the Operating Agreement, Duke is responsible for the maintenance of insurance policies as it relates to Catawba. PMPA reimburses Duke for their ownership percentage of these costs.

Nuclear Liability Coverage. The Price-Anderson Act requires owners of nuclear reactors to provide for public nuclear liability protection per nuclear incident up to a maximum total financial protection liability. The maximum total financial protection liability, which is approximately $16,300,000, is subject to change every five years for inflation and for the number of licensed reactors. Total nuclear liability coverage consists of a combination of private primary nuclear liability insurance coverage and a mandatory industry risk-sharing program to provide for excess nuclear liability coverage above the maximum reasonably available private primary coverage. The U.S. Congress could impose revenue-raising measures on the nuclear industry to pay claims.

Primary Liability Insurance. Duke has purchased the maximum reasonably available private primary nuclear liability insurance as required by law, which currently is $500,000 per station.

Excess Liability Program. This program provides $15,800,000 coverage per incident through the Price-Anderson Act's mandatory industrywide excess secondary financial protection program of risk pooling. This amount is the product of potential cumulative retrospective premium assessments of $166,000 times the current 95 licensed commercial nuclear reactors in the U.S. Under this program, operating unit licensees could be assessed retrospective premiums to compensate for public nuclear liability damages in the event of a nuclear incident at any licensed facility in the U.S. Retrospective premiums may be assessed at a rate not to exceed $24,700 per year per licensed reactor for each incident. The assessment may be subject to state premium taxes.

Nuclear Property and Accidental Outage Coverage. Duke is a member of Nuclear Electric Insurance Limited ("NEIL"), an industry mutual insurance company, which provides property damage, nuclear accident decontamination and premature decommissioning insurance for each station for losses resulting from damage to its nuclear plants, either due to accidents or acts of terrorism. Additionally, NEIL provides accidental outage coverage for losses in the event of a major accidental outage at an insured nuclear station.

Pursuant to regulations of the NRC, each company's property damage insurance policies provide that all proceeds from such insurance be applied, first, to place the plant in a safe and stable condition after a qualifying accident and second, to decontaminate the plant before any proceeds can be used for decommissioning, plant repair or restoration.

PIEDMONT MUNICIPAL POWER AGENCY

Notes to Financial Statements

December 31, 2025 and 2024

(Dollars in thousands)

(15) Nuclear Insurance and Other Risk Management – Continued

Losses resulting from acts of terrorism are covered as common occurrences, such that if terrorist acts occur against one or more commercial nuclear power plants insured by NEIL within a 12-month period, they would be treated as one event and the owners of the plants where the act occurred would share one full limit of liability. The full limit of liability is currently $3,200,000. NEIL sublimits the total aggregate for all of their policies for non-nuclear terrorist events to approximately $1,800,000.

Catawba has accident property damage, nuclear accident decontamination and premature decommissioning liability insurance from NEIL with limits of $1,500,000. Catawba has a dedicated $1,250,000 of additional nuclear accident insurance limit above its dedicated underlying limit. Catawba also has an additional $750,000 of non-nuclear accident property damage limit. All coverages are subject to coverage terms, conditions, sublimits and significant deductibles.

NEIL's Accidental Outage policy provides some coverage, similar to business interruption, for losses in the event of a major accident property damage outage of a nuclear unit. Coverage is provided on a weekly limit basis after a significant waiting period deductible and at 100% of the applicable weekly limits for 52 weeks and 80% of the applicable weekly limits for nuclear accidents and 60% of the remaining applicable weekly limits for non-nuclear accident property damage. Coverage is provided until these applicable weekly periods are met, where the accidental outage policy limit will not exceed $490,000 for Catawba. NEIL sublimits the accidental outage recovery up to the first 104 weeks of coverage not to exceed $291,000 from non-nuclear accidental property damage. Coverage amounts decrease in the event more than one unit at a station is out of service due to a common accident. All coverages are subject to coverage terms, conditions, sublimits and significant deductibles.

Potential Retroactive Premium Assessments. In the event of NEIL losses, NEIL's board of directors may assess member companies' retroactive premiums of amounts up to 10 times their annual premiums for up to six years after a loss. NEIL has never exercised this assessment. The maximum aggregate annual retrospective premium obligations for Duke Energy Carolinas are $170,000. Duke Energy Carolinas' maximum assessment amount includes 100% of potential obligations to NEIL for jointly owned reactors. Duke Energy Carolinas would seek reimbursement from the joint owners for their portion of these assessment amounts.

PMPA also carries building and personal property insurance for the administrative offices, health insurance for all active employees, and workers' compensation insurance in accordance with statutory requirements. The policy limit for the building and personal property insurance is $7,098.

PIEDMONT MUNICIPAL POWER AGENCY

Notes to Financial Statements

December 31, 2025 and 2024

(Dollars in thousands)

(16) Commitments and Contingencies

PMPA is subject to lawsuits, claims, investigations, and proceedings, which arise in the ordinary course of business. If management believes that a loss arising from these matters is probable and can be reasonably estimated, a loss is recorded. As additional information becomes available, these matters are assessed and the estimates are revised, if necessary. Based on the currently available information, management believes the ultimate outcome of these matters, individually and in the aggregate, will not have a material, adverse effect on PMPA's business, financial condition, or results of operation.

In 2019, PMPA was named a defendant in a lawsuit by Greer and Rock Hill with respect to the allocation of costs amongst all Participants. In January 2024, the lawsuit was settled with Greer and Rock Hill receiving a combined cash payment of $55 million, of which $10 million was paid by PMPA out of working capital funds and $45 million was paid by the remaining eight Participants. In April of 2024, PMPA issued the 2024A Electric Revenue Bond on behalf of the remaining eight Participants with principal due April 30, 2035 and interest payable twice a year. The eight Participants reimburse PMPA for the current interest costs each month as part of their monthly power invoices. The Statements of Net Position includes a long-term Participant settlement receivable representing the principal amount due to PMPA by the eight Participant's at the bond's maturity. The financing associated with the $45 million cash payment is excluded from PMPA's wholesale rates and net costs recoverable from future Participant billings as it will be paid by the remaining eight Participants during the life of the bond.

SUPPLEMENTARY INFORMATION

PIEDMONT MUNICIPAL POWER AGENCY

Schedule of Revenues and Expenses Actual and Budget

Per the Bond Resolution and Other Agreements

Year Ended December 31, 2025

(Dollars in thousands)

	Actual Revenues and Expenses	Budgeted Revenues and Expenses	Actual Over (Under) Budget
Revenues:			
Sales of electricity to Participants	$ 224,990	$ 222,784	$ 2,206
Sales of electricity to Duke	11,486	11,286	200
Sales of electricity to Others	9,426	6,931	2,495
Interest income	10,448	10,329	119
Other	1,701	1,609	92
Total Revenues	$ 258,051	$ 252,939	$ 5,112
Expenses:			
Catawba operating expenses:			
Operation and maintenance	$ 27,355	$ 30,573	$ (3,218)
Nuclear fuel deposits	18,708	13,913	4,795
Purchased power-Duke	12,033	12,225	(192)
Payments in lieu of taxes	9,524	10,119	(595)
Purchased power:			
Supplemental Suppliers	22,294	20,800	1,494
Participants	12,020	13,074	(1,054)
Other	3,542	2,967	575
Transmission services	11,445	9,623	1,822
Power delivery	588	589	(1)
Administrative and general:			
Agency	5,629	6,158	(529)
Duke	10,493	10,365	128
Other	7,656	7,013	643
Special fund deposits(withdrawals):			
Bond fund:			
Deposits from revenues	85,730	85,730	-
Decommissioning fund:			
Deposits from revenue	2,175	2,180	(5)
Interest income(1)	4,709	4,695	14
Revenue fund:			
Working capital	9,769	5,863	3,906
Net change in fair market value	3	-	3
Fuel	(14,702)	(23,611)	8,909
Debt service reserve release	(9,175)	(9,175)	-
Plant additions:			
Generation	22,579	23,281	(702)
General	390	421	(31)
Transmission equipment	584	2,525	(1,941)
Fuel acquisitions	14,702	23,611	(8,909)
Total Expenses	$ 258,051	$ 252,939	$ 5,112

(1) Included in "Revenue: Interest Income."

PIEDMONT MUNICIPAL POWER AGENCY

Schedule of Revenues and Expenses

Per the Bond Resolution and Other Agreements

Year Ended December 31, 2025

(Dollars in thousands)

		FUNDS						
		Revenue	Operating	Bond		Reserve Contingency	Decommission	Supplemental Power
		Working Capital	Fuel Account	Principal Interest Retirement	Reserve			
Balances at beginning of year:								
Assets		$ 114,706	$ -	$ 77,719	$ 45,356	$ 4,619	$ 137,710	$ 1,600
Liabilities		(11,841)	(4,006)	-	-	-	-	-
Net		102,865	(4,006)	77,719	45,356	4,619	137,710	1,600
Project revenues:								
Participants-Electric	(1)	224,990						
-Facilities rent	(1)	316						
-Other	(1)	1,385						
Duke-Electric	(1)	11,486						
Other Surplus-Electric	(1)	9,426						
Interest income	(1)	5,739					4,709	
Project costs:								
Operations and maintenance	(2)	(27,355)						
Nuclear fuel deposits	(3)	(18,708)	18,708					
Purchased power-Duke	(2)	(12,033)						
Asset retirement obligation	(3)	(2,175)					2,175	
Administrative and general	(2)	(14,884)						
Payments in lieu of taxes	(2)	(9,429)						
Other	(2)	(10,178)						
Debt service	(3)	(74,134)		83,925	(8,341)	(834)		
Supplemental power costs:								
Purchased power:								
-Supplemental Suppliers	(2)	(22,294)						
-Participants	(2)	(12,020)						
-Other	(2)	(3,542)						
Transmission services	(2)	(11,445)						
Power delivery	(2)	(588)						
Administrative and general	(2)	(1,238)						
Payments in lieu of taxes	(2)	(95)						
Other	(2)	2,440						
Debt service	(3)	(2,421)		2,421				
Other fund changes:								
Net change in fair market value		3			1,190		3,311	
Payments:								
Debt service	(2)	76		(86,819)				
Capital additions	(2)	(23,553)	(14,702)					
Balances at December 31, 2025		$ 112,634	$ -	$ 77,246	$ 38,205	$ 3,785	$ 147,905	$ 1,600
Assets		115,783						
Liabilities		(3,149)						
		$ 112,634						

(1) Deposited in appropriate fund
(2) Paid to third parties
(3) Transfers between funds

THE BLUEBIRD NEST

PLANT SWAP

SATURDAY, MARCH 21ST AT 11 AM

JOIN US FOR SOME PLANT LOVING FUN AT OUR PLANT SWAP.
DROP A PLANT OFF, PICK A PLANT UP.
GET A COUPON FOR A DISCOUNTED COFFEE
AND BE ENTERED TO WIN A GIFT BASKET FROM THE BLUEBIRD NEST!

WHERE?

THE BLUEBIRD NEST IN DOWNTOWN WESTMISNTER NEXT TO MOON'S DRUG STORE.

WHAT IS IT?

PLANT SWAPS ARE A FUN WAY TO GET RIDE OF ANY EXTRA PLANTS YOU MAY HAVE BY TRADING WITH OTHER GARDENERS. (PERENNIAL DIVISIONS, EXTRA SEEDLINGS, PACK ANNUALS, UNWANTED HOUSEPLANTS, ETC)

TIPS FOR FIRST TIME SWAPPERS:

- PLANTS SHOULD BE IN A CONTAINER.
- LABEL PLANTS AS WELL AS POSSIBLE (ANNUAL/PERENNIAL, SIZE, SUN/SHADE, BLOOM COLOR, ETC.)
- PLANTS SHOULD BE WELL WATERED, PEST AND DISEASE FREE.
- DIG PLANTS A FEW DAYS IN ADVANCE SO THEY CAN RECOVER, AND WATER WELL!

FREE EVENT

3PM - CRUISE-IN

5PM - CONCERT

2026 MUSIC ON MAIN

PRESENTED BY Westminster MUSIC CENTRE

THANK YOU TO OUR SPONSORS

CHATHAM RABBITS

CANNON COHEN BAND

APR 18TH

KYLE TUTTLE BAND

LC BRANCH

MAY 16TH

Food Trucks + Classic Car Cruise-in + Arts & Crafts Vendors + VIP Experience + Guitar Raffle

Downtown Westminster on East Main St

For more info: **westminstermusiccentre.org**