



Hendersonville  
Water  Sewer

# 2021-2026 Strategic Plan

Adopted on Thursday, April 7, 2022

# City of Hendersonville

## Water and Sewer Strategic Plan

### Overview

The City of Hendersonville Water and Sewer Department's Strategic Plan articulates its core identity, strengthens its purpose, and identifies several high-level strategic focus areas for the utility. Utility staff, City leadership, and the Water and Sewer Advisory Council contributed to the creation of this plan. This plan reaffirms our values and guiding principles as a municipal-owned water and sewer utility dedicated to providing high-quality water and wastewater services.

### Our Mission

Our mission is to operate a great utility for our customers.

### Our Vision

We envision a Hendersonville region with trusted, safe, high-quality, affordable utility service and a system that is responsive to the demands of its customers and regional growth.

### Our Values

These values guide our decision-making and ground us in what is most important to us and our customers.

- **Great Customer Service:** We deliver reliable, efficient, and responsive service to our customers. Our service is dependable, uses resources effectively, and adapts quickly to customer needs and changing conditions.
- **Accountability:** We are committed to earning and maintaining public trust every day. We will be open, ensure access, encourage involvement and be accountable to our customers.
- **Affordability:** We utilize rate payers' funds responsibly and effectively to ensure the utility's short- and long-term financial strength. We are committed to affordable rates.
- **Quality and the Environment:** We have the highest standards for the quality of drinking water and wastewater effluent and are committed to protecting our environment. We encourage water conservation.
- **Protecting Infrastructure from Hazards:** We are committed to protecting the water and sewer systems from hazards and are prepared for unexpected incidents. We have sound contingency plans and plan redundant systems.
- **Partnerships and Teamwork:** We will achieve the best results through effective teamwork, regional and community partnerships and customer participation. We share our experience

and practices with others and seek their feedback. Effective partnerships allow us to improve as a utility and can help drive economic development.

- **Planning for the Future**: We are committed to proactive, comprehensive planning, in alignment with neighboring jurisdictions, to guide the future of our utility in response to the needs of our customers and other local governments.
- **Adaptability**: We stay informed about emerging technologies and continually assess how we can adapt new tools to improve our service delivery.
- **Great Place to Work**: We are a safe place to work where all employees are appreciated.



## Focus Areas

To be successful over the next few years, here are eight focus areas the utility should prioritize:

- *Utility Growth and Service Area*
- *Infrastructure*
- *Water Supply and Treatment*
- *Wastewater Treatment*
- *Customer Service*
- *Environmental Stewardship, Conservation, and Outreach*
- *Workforce and Staff*
- *Technology, Data, and Software*

### Focus Area 1: Utility Growth and Service Area

The City of Hendersonville and the surrounding utility service area have experienced notable growth over the past several years, and that trend is expected to continue. To continue our high level of service, the utility needs a clear strategy for how to keep pace with system growth. *Goal: We will ensure that the growth and capacity of our systems are financially sustainable, and that we have a responsible revenue stream required for future needs.*

#### Priorities

##### Revenue and Rates

*Long-term fiscal strength supports the utility's ability to serve our customers.*

- **Explore reinstatement of System Development Charges**, which help cover the costs associated with existing debt service payments and maintaining water and sewer system capacity.
- **Strengthen Capital Improvement Plan efforts** with Finance department to foster a collaborative culture that focuses on how to implement the utility's strategy.
- **Continue with water rate equalization schedule** for inside and outside customers while maintaining adequate revenues for infrastructure replacement, rehabilitation, and growth.
- **Establish long-term rate schedule/model** and revisit to ensure accuracy as project priorities shift over time.

##### Stakeholder Involvement

*The utility prioritizes stakeholder engagement and communication to enable progress toward long-term goals, as well as daily operations.*

- **Increase engagement of the Water and Sewer Advisory Council** to seek direction, cooperation, and recommendations from neighboring communities, as well as the business community within the utility service area.

- **Increase engagement of the Water and Sewer Technical Advisory Committee** to seek input and feedback related to public health and economic development.

### **Coordination & Planning**

*Utility staff have clear understanding on which projects to focus on, and what our larger priorities are.*

- **Continue planning efforts and complete identified Capital Improvement Projects.**
- **Expand sewer into areas of public health concern**, e.g., areas containing failing septic systems.
- **Establish policies for incorporation of small private systems**

## **Focus Area 2: Infrastructure**

As our community grows and changes, our infrastructure needs to keep up. We are committed to updating and replacing existing and aging infrastructure. We also aim to establish and follow clear standards and policies for new infrastructure that provides developers with clear direction for new development. *Goal: We will conduct responsible expansion of infrastructure, including new development, expansion of sewer in unserved areas, addressing issues with private systems, and optimization of pump stations.*



### **Priorities**

- **Replace aging and undersized infrastructure** to ensure our system keeps pace with growth and needs of the utility service area.
- **Finalize policies to extend water and sewer** for new development and property owner-driven assessment projects.
- **Finalize engineering and design manual** for new development.

## Focus Area 3: Water Supply and Treatment

Changes affecting our water supply and treatment over the past several years have included expansion of service area and new state and federal regulations. We strive to maintain a reliable, high-quality supply of drinking water for our customers for years to come. *Goal: We will have the capacity to meet future water supply, water quality and wastewater treatment demands.*

### Priorities

- **Expand Water Treatment Facility to 15 MGD** from 12 MGD treatment capacity.
- **Complete French Broad River intake and pumping station project** to provide source water redundancy, drought sustainability and increase treatment capacity.
- **Establish new process to dispose of wastewater treatment biosolids and water treatment residuals in an environmentally sustainable manner.**
- **Complete Ewart Hill Reservoir 2 Rehabilitation and North Fork Dredging Projects.**
- **Create and fill additional positions**, including maintenance support staff, a lab technician, and an administrative assistant.
- **Complete Water Treatment facility master plan** and implement associated recommendations.



## Focus Area 4: Wastewater Treatment

Maintaining a high-quality effluent leads to a good water supply for our downstream neighbors and protects our environment. Hendersonville Water and Sewer is committed to high standards for wastewater treatment.

*Goal: We will have the capacity to maintain efficient and sustainable wastewater operations and a high-quality effluent.*

### Priorities

- **Upgrade UV disinfection system.**
- **Improve and evolve our repair and maintenance plan** for our Wastewater Treatment Facility and other facilities.
- **Create and fill additional positions**, including maintenance support staff, administrative assistant and 3<sup>rd</sup> shift operations staff required when plant is expanded to 6.0-MGD.
- **Finalize our Wastewater Treatment Facility Master Plan** and implement associated recommendations.
- **Continue to discharge high-quality effluent** and meet future effluent limits.



## Focus Area 5: Customer Service

Our mission is to operate a great utility for our customers. We will be equipped with the knowledge and ability to better interact with our customers and meet or exceed their expectations. *Goal: We will provide great customer service.*

### Priorities

- **Improve customer interaction with trained staff who can respond to a wide variety of customer inquiries and issues**, (explore establishing a call center to improve the customer experience and increase efficiency).
- **Develop standard operating procedures and associated training for communicating with affected customers** during construction, repairs, line breaks, etc.
- **Continuously restructure and improve website for better customer navigability and transparency.**
- **Inform customers of available technology and information**, e.g., Aquahawk, RAVE (mass notification system).

- **Engage and communicate with stakeholders** to better understand the specific needs and concerns of each community

## Focus Area 6: Environmental Stewardship, Conservation, and Outreach

Hendersonville Water and Sewer values our environment and seeks to preserve its natural resources. Our community is one of our best assets, and we seek to educate and partner with our customers to encourage water conservation and environmental sustainability. *Goal: We will continue our dedication to the environment and engaging our community.*



### Priorities

- **Identify and coordinate with other public outreach initiatives**, utilizing the City Communications Manager and social media for outreach.
- **Continue facilitating public tours and other outreach programs**, such as Take Back the Tap, Fix a Leak Week, Drinking Water Week, and Imagine a Day Without Water.
- **Review and add to environmental programs** to support conservation efforts.

## Focus Area 7: Workforce and Staff

We would be unable to serve our customers if it were not for the people behind Hendersonville Water and Sewer. We are committed to making sure our utility is a great place to work. Our staff and leadership are engaged and work with a collaborative mindset. *Goal: We will recruit and retain a high-quality workforce that feels valued and is well-equipped to do their jobs.*

### Priorities

- **Reevaluate our compensation package consistently** and promote benefits listed in the City's [Employee Benefits Guide](#) so that we can remain competitive in hiring and retaining talented staff.



- **Expand our recruitment strategies**, including promotion of careers in local government, as well as working with area community colleges and schools.
- **Offer more training and development opportunities** so that our employees can grow with the organization.
- **Expand our physical office space** to keep pace with our growing workforce and to ensure employees have the resources to do their jobs well.

## Focus Area 8: Technology, Data, and Software

The City of Hendersonville has recently conducted and approved its IT Strategic Plan, which outlines a coordinated approach across all departments on how to best leverage technology to improve internal systems as well as service delivery. The Water and Sewer Department will align its efforts with this IT Strategic Plan. Additionally, the utility will specifically focus



on the following priority areas, as listed below. *Goal: We will leverage the technology tools, resources, and data we have available to increase our ability to better serve our customers and will build secure and resilient IT infrastructure to mitigate risks posed by malevolent attacks.*

### Priorities

- **Establish plan to ensure existing data is utilized and integrated** to the fullest extent possible.
- **Improve data availability and accuracy**, and communicate how we can be more proactive in data utilization and analysis.
- **Increase accessibility of existing technology** by conducting in-depth cross-training, adjusting access and permissions, and increasing communication between departments.
- **Identify technology deficiencies and redundancies**, in alignment with the City's IT Strategic Plan.

## Key Performance Indicators

The following metrics will be reported to City leadership, circulated among departmental staff, and shared with the public as indicators of progress toward the strategic plan. We are constantly improving our ability to assess these metrics.

- *# of sanitary sewer overflows per 100 miles of pipe.*
- *Non-revenue water (%).*
- *Annual water production, in MGD.*
- *Annual wastewater treatment, in MGD.*
- *Debt service coverage ratio.*
- *Operating ratio (revenue/expenses).*
- *Affordability (as measured by the Environmental Finance Center, NC Water and Wastewater Rates dashboard).*
- *# of maintenance field operations personnel per 100 miles of pipe (water and sewer).*

## Implementation Plan

The work plan for implementing this strategic plan will be developed by Hendersonville Water and Sewer leadership and staff as they take the focus areas and create an annual implementation plan. In addition to existing KPIs, targets and success indicators will be used to track the progress and effort of shared support across the organization for each strategic focus area.



# Appendix

## Background and Context

Over the past several years, Hendersonville has experienced high growth in various parts of its utility service areas, where infrastructure expansion has dominated the activities of our department and those of the City's Engineering department. In addition to infrastructure expansion, operations and maintenance of existing, aging infrastructure has continued to require significant resources. In November 2018, Hendersonville Water and Sewer leadership and staff conducted a self-assessment, which included a discussion of current vulnerabilities.

## Accomplishments Since 2018

Since 2018, the following items, previously identified as vulnerabilities, have improved:

- Over the past seven months, the City has conducted an **IT Strategic Plan**. One of the City's top strategic focus areas is cyber safety and resiliency. This will include increased awareness and training on security and mitigating the City's risk in the event of a crisis by developing and testing a disaster recovery/business continuity plan.
- The utility has **completed, or will soon complete, several high-priority projects**, including the Etowah Water Improvements, Northside Water Improvements, Water Treatment Facility high-service pump station upgrade, Wastewater Treatment Facility filter upgrade and 1500-kW back-up power supply system and the Multi-area Streambank Restoration Project, which was nominated for an EPA PISCES Award for its innovative approach to sewer infrastructure protection thus reducing potential environmental impacts.
- The utility has **created and filled additional positions**, who have provided support in various areas such as automated metering infrastructure (AMI) data analysis/utilization, billing, internal efficiencies, maintenance, and rights-of-way.
- **Governance** and relationships with stakeholders, including other municipalities in the County, have improved. This has been done through various methods, including the Water and Sewer Advisory Council, Water and Sewer Technical Advisory Committee and a robust annual report for our customers.
- Additional staff have been able to more actively replace and maintain **aging valves and hydrants**.
- **Water line flushing programs** have been reinstated to ensure high levels of water quality and service.
- **Extension and petition/assessment policies** have been developed for new and existing developments to join Hendersonville's public water and sewer systems.
- The utility has increased staffing to leverage **GIS** data in order to increase operations efficiency.
- The utility has increased staffing to utilize the valuable data its **Advanced Metering Infrastructure (AMI)** technologies provide, correcting many billing deficiencies.
- The utility has improved **redundancy**, including more backup generators at pump stations and treatment facilities in the event of a power failure or other emergencies. The utility is

closer to construction of an additional water supply source with the French Broad River Raw Water Intake and Pump Station Project.

- The utility has lowered rates for **Laurel Park** customers through the merger of Laurel Park's water system into the City of Hendersonville's system.
- The **Ewart Hill Reservoir 2 Rehabilitation** project has been funded and is scheduled to rehabilitate an existing 5-million gallon reservoir to provide additional finished water storage and improve operations.

## Vulnerabilities

The following were identified as either new or existing vulnerabilities of high concern:

- **Engineering and administrative staff are overwhelmed** by project load.
- **Operations staff are overwhelmed** by new development (taps) and maintenance of aging infrastructure.
- **Regulatory mandates** change often at both the state and federal level, and it can be challenging for the utility to meet these requirements, especially when they are unfunded mandates.
- **Aging infrastructure** is in need of repair or replacement.
- **Disposal and beneficial reuse of biosolids** remains critical and is an indicator of system sustainability.
- **Limited office space** for employees leads to crowding and little room for growth.
- The **UV disinfection system** at the Wastewater Treatment Facility is important for wastewater treatment and is in need of an upgrade.
- The utility needs to be **prepared for system growth**.
  - For example, what would happen if a large industry with significant water and sewer demands were to come into Hendersonville?
  - Capacity for industrial/sewer growth depends on **where** in the system a new large customer would be located.
- **Extreme weather events** impact water and wastewater operations.
- **Construction market and material costs, availability and volatility**, as well as **lack of in-house construction crews for line replacement** create challenges for maintenance and capital improvement construction projects.
- Having a strong **revenue stream to invest** in the utility system will ensure financial sustainability.
- **Utilizing and leveraging available data** will help the utility improve performance.
- **Recruiting and retaining staff** and documenting **institutional knowledge** is critical to the organization.

## City of Hendersonville Core Values and Beliefs

*\*Indicates direct area of alignment with utility values.*

The City of Hendersonville believes municipal government should be non-partisan.

- Political affiliations are not productive to solving problems of local communities.
- City leaders and staff must lead by example and meet regularly with people who have different points of view.
- City leaders and staff must maintain an awareness of local, state and national political trends but must lead the City in a manner that serves all community members.

The City of Hendersonville values open, transparent communication and trust with the community and each other.\*

- The City will openly communicate with the public and each other to ensure information about services, policies and programs are available to all.
- The City will build trust through ethical and transparent leadership.
- The City will share information and solicit feedback prior to the implementation of new programs and policies.
- The City will be open to concerns and comments from all stakeholders and will ensure the community can easily speak to leaders without fear of retribution/embarrassment.

The City of Hendersonville believes community members expect services to be delivered at a high level.\*

- The City will deliver services at a high level to make people feel their taxes and fees are being used effectively and to encourage others to live in our community.
- The City will deliver services in a manner that ensures the safety of the community.
- The City will deliver services in a manner that limits the disruption of our community members' daily lives to the greatest extent possible.

The City of Hendersonville values all community members through promoting diversity, equity, and inclusion.

- The City must evaluate all laws, policies, and rules to ensure that they can be implemented and enforced in a fair and equitable manner.
- The City must evaluate all current and future programs, projects, or initiatives to ensure they build a culture where differences are valued.
- The City must ensure that leaders and staff consistently work to build trust and positive relationships throughout our entire community.\*

The City of Hendersonville believes environmental sustainability is critical to preserving the community for future generations.\*

- The City will evaluate the environmental sustainability of all projects and programs while maintaining a solid relationship with residential and business development.

- The City believes that it is our responsibility to protect all our natural resources and the environment through the implementation of sustainable and responsible projects.
- The City must lead by example by evaluating all city operations to ensure they protect or repair the natural environment and are environmentally sustainable.

The City of Hendersonville values its employees and must support them to ensure the provision of high-quality services to its residents.\*

- The City must provide growth opportunities to employees and educational tools to allow them to grow in their roles and responsibilities.
- The City must respect and pay employees fairly and competitively.
- The City must support employees by providing a safe and hazard free workplace.

The City of Hendersonville believes that it must pursue and provide opportunity for responsible growth.\*

- The City will establish and maintain policies and programs that encourage economic opportunity and help grow small business and entrepreneurship.
- The City will work with our community to provide educational opportunities about growth and its impact on economic vitality and quality of life.
- The City will encourage responsible growth that provides opportunities for success to all segments of our community.
- The City will make efforts to generate affordable housing options and reduce the impacts of the high cost of living within our community.

The City of Hendersonville values the lives of all community members and must protect them through collective action.

- Our goal is to make the lives of all residents better through collective action.
- The City recognizes the sanctity of each person's life.
- The City must be open to change priorities and policies as circumstances change in the world around us.