



PLANNING COMMISSION REGULAR MEETING AGENDA

CITY COUNCIL CHAMBERS

April 13, 2026

2:00 PM

I. WELCOME AND CALL TO ORDER

II. ROLL CALL

III. NEW BUSINESS

1. Code amendment request PZ26-00221 filed by the City of Danville to amend Chapter 41 entitled "CODE Danville The Unified Development Code of Danville, Virginia" of the City of Danville, 2025, as amended. Specifically, amend Article 5 "Signs".
2. Code Amendment request PZ26-00229 filed by the City of Danville to amend Chapter 41 entitled "CODE Danville The Unified Development Code of Danville, Virginia" of the City of Danville, 1986 as amended. Specifically, amend Article 3 "Uses and Use Standards, and Article 9 "Glossary" to add "Data Centers".
3. Review and adoption of the City of Danville Flood Resilience Plan.
4. Special Use Permit application PZ26-00223 filed by JLF Innovations, Inc. to allow indoor commercial recreation in accordance with Chapter 41.3.A at Parcel 73158 (145 Holt Garrison Parkway Suite 410).
5. Special Use Permit application PZ26-00244 filed by Jonathan Sharolli to allow adult daycare in accordance with Chapter 41.3.A at Parcel 03430 (405 North Main Street).
6. Special Use Permit application PZ26-00251 filed by BFBDanville LLC to allow a waiver of side yard setback requirements in accordance with Chapter 41.2.I at Parcel 72436 (143 & 153 Crown Drive).

IV. APPROVAL OF MINUTES

V. PLANNING DIRECTOR'S REPORT

VI. ADJOURNMENT

STAFF REPORT

DATE: April 13, 2026
TO: Planning Commission
FROM: Renee Burton, Division Director of Planning
RE: Code Amendment request PZ26-00229 filed by the City of Danville to amend Chapter 41 entitled "CODE Danville The Unified Development Code of Danville, Virginia" of the City of Danville, 1986 as amended. Specifically, amend Article 3 "Uses and Use Standards", and Article 9 "Glossary" to include "Data Centers".

SUMMARY

Tax incentives, strong fiber networks, and reliable energy have attracted a large market for data centers within the Commonwealth. Northern Virginia makes up thirteen percent (13%) of the global operations of data centers and twenty-five percent (25%) of American operations. There are currently no data centers located within the city limits.

In recent months, Staff has received inquiries about locating a data center operation within the City of Danville. At the request of the City Manager, research was completed to gain more insight into the operations of data centers, the land-use policies that regulate them, and a review of the City's Unified Development Code (UDC) and Comprehensive Plan. After presenting the research, at the request of City Council, Staff was tasked with drafting amendments to add data centers as a defined use within the UDC.

Staff recommends the following amendment to Article 9 "Glossary" of Chapter 41 entitled "CODE Danville the Unified Development Code of Danville, Virginia" of the City of Danville, 1986 as amended. Language proposed to be added is in italics.

Data Center. An industrial facility containing one or more large scale computers for the use of electronic data storage, management, transmittance, and/or processing for on- and off-site users. Operations include without limitation, data entry, storage, conversion or analysis, subscription and credit card transaction processing, internet service providers, telephone sales and order collection, mail order and catalog sales, mailing list preparation and Bitcoin operations.

Staff recommends the following amendment to Article 3 "Uses and Use Standards" of Chapter 41 entitled "CODE Danville the Unified Development Code of Danville, Virginia" of the City of Danville, 1986 as amended. Language proposed to be added is in italics.

41.3.B.20
20. Data Center

1. The perimeter of a property used for the operation of a data center may not be within 500 feet of any property that allows residential use by right in accordance with Table 3.A-2.

2. A data center may not operate on a parcel that is less than 150 acres in size.

3. Buffers and setbacks

- - Ground equipment or screening may not be located within the yard setbacks.*
- - A minimum of vegetative buffer of 20 feet*

4. Operations may not be located within an Industrial Park.

5. Screening

- - All equipment used to operate the facility, including generators, shall be fully enclosed. The Planning Director may grant a waiver if determined that an enclosure is not mechanically feasible.*
- - When it is not mechanically feasible, the equipment must be surrounded by opaque screening.*
- - All ground equipment must be surrounded by opaque screening.*

RECOMMENDATION

Planning Staff recommends that the City Planning Commission recommend that City Council amend Chapter 41 entitled "Zoning Ordinance" of the City of Danville, 1986, as amended.

Specifically, amend Article 3 "Uses and Use Standards" and Article 9 "Glossary" to include "Data Centers".

ATTACHMENTS

1. Memorandum



CITY OF DANVILLE

City Manager's Office

Memorandum

To: Mayor Jones and City Council

From: Ken Larking, City Manager

Date: February 17, 2026

Subject: Data Center Evaluation

Introduction

Tax incentives, strong fiber networks, and reliable energy have attracted a large market for data centers within the Commonwealth. Northern Virginia makes up 13 percent of the global operations of data centers and 25 percent of American operations. There are currently no data centers located within the city limits.

In recent months, Staff has received inquiries about locating a data center operation within the city limits. At the request of the City Manager, research was completed to gain more insight into the operations of data centers, land use policies that regulate them, and a review of the City's Unified Development Code (UDC) and Comprehensive Plan.

Benefits of Data Center Development

If carefully planned, data centers can benefit a community for the following reasons:

- Stable and significant tax revenue
- Limited demand for public services, except utility consumption
- Infrastructure upgrades that can improve reliability
- Since Danville owns and operates all four utilities and has broadband, the city has more ability to control the impacts of data center development

Potential Impacts of Data Centers

Energy Use

The City has received several inquiries from large data center operators requiring electric capacity ranging from 10 to 200 megawatts. This level of electric service is only available in limited areas of the City and, in some cases, requires coordination with upstream transmission and generation providers. To address these requests, the City has developed an Energy Services Agreement to govern new large-load interconnections. This agreement is intended to protect the City from stranded infrastructure costs should

DANVILLE, VA

a customer discontinue operations before those costs are recovered through electric rates. The typical capital investment associated with serving a large data center is estimated at \$10 million to \$15 million and come with a timeframe of 18–24-month construction timeframe. These upgrades may include transformers, transmission extensions, and construction of a dedicated substation to meet the customer's load requirements.

Water Use

Water use associated with a data center varies depending on facility size, cooling technology, and operational design. Some data centers rely on water based or evaporative cooling systems, which can result in substantial water demand during peak operating conditions, while others utilize air-cooled or closed loop systems that significantly reduce water consumption. The City's ability to serve a data center is limited due to the capacity of existing water distribution infrastructure. As a result, water availability is highly site specific, and service can only be provided where adequate infrastructure exists or where improvements are funded and constructed. Any proposed data center would require detailed engineering review to evaluate system impacts and determine whether infrastructure upgrades are necessary. Some of the upgrades could take 2-3 years to complete once engineered and funded.

Noise

All industrial uses must adhere to the Noise Ordinance regulations present in City Code §23.1. The audible operation noises from data centers are likely comparable to existing industrial uses in the city. Based on research, the loudest component of a data center is the use of backup diesel generators. These generators are tested monthly to ensure peak operable conditions. Testing takes an average of 30 minutes.

Appearance

The average height of a data center floor is 20'. Data centers may vary from single to multi-level. The maximum height allowed by right for a primary structure within the IM, Innovation and Manufacturing Zone, is 80' and 60' for an accessory structure. Either of these heights may be increased by City with the granting of a Special Use Permit.

There are no architectural controls for property developed within the IM Zone and outside of an Industrial Park. Industrial Parks have architectural controls regulated by a protective covenant.

Data centers also require exterior mechanical equipment. The IM zone does not require screening of exterior mechanical equipment.

Impact Analysis

Previously, Data Centers were allowed by-right within the LED-I, Light Economic Development Industrial Zone. The LED-I zoning classifications were present throughout the city and within the Airside Industrial Park.

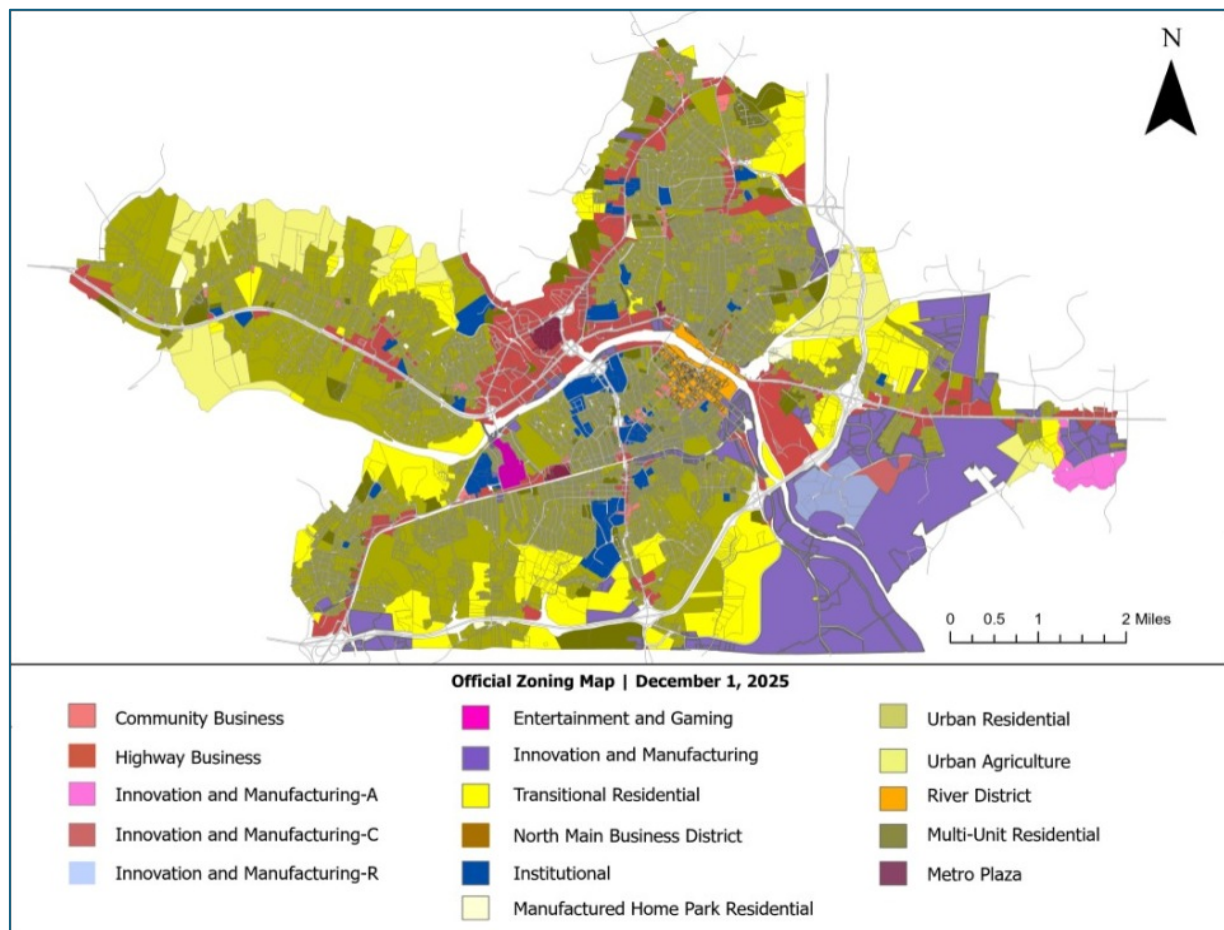
DANVILLE, VA

All uses within the Airside Industrial Park must comply with the regulations set forth in the Protective Covenant. A data center is not a use that is identified within the Protective Covenant as allowed or prohibited. Therefore, additional review by the Development Review Committee for Airside Industrial Park was required before a data center operation could be located in the Industrial Park.

Data Center operations are not within our current Unified Development Code (UDC), previously known as the Zoning Code. The lack of regulation or identified zoned for location and operation prohibits a data center operation within the City limits.

Data Centers are also not identified within our Comprehensive Plan, PLANDanville. Changes that may be proposed for the UDC will not require changes to our Comprehensive Plan.

The average height of a data center floor is 20'. Data centers may vary from single to multi-level. The maximum height allowed by right for a primary structure within the IM, Innovation and Manufacturing Zone, is 80' and 60' for an accessory structure. Either of these heights may be increased by the City with the granting of a Special Use Permit. Industrial uses have a minimum parking requirement of three (3) parking spaces per employee. Data center uses have a minimal number of employees compared to other industrial uses. I believe the current parking regulations are adequate for this use.



Locality Comparisons

In the creation of this document, the Zoning Code of several localities within the Commonwealth of Virginia were researched. A summary of those localities is below. These localities were chosen to include in this document to demonstrate the variety of land use policies that have been employed within the Commonwealth.

Chesterfield County

Chesterfield County allows data centers by-right in three of their zoning districts: General Business District (C-5 District); General Industrial District (I-2 District) and the Heavy Industrial District (I-3 District). They are allowed in three additional districts with conditions: Community Business District (C-3 District), Regional Business District (C-4 District) and the Light Industrial District (I-1 District). Specifically, the conditions limit any outside utility infrastructure to a maximum of one generator, which may not exceed the greater of 200 square feet, or one percent of the gross floor area of the principal use; and the generator must be screened. Finally, data centers are allowed as a conditional use in the Agricultural District (A-1 District). Chesterfield defines data centers as:

- **Data Center:** A facility used primarily for the storage, management, processing, and transmission of digital data, which houses computer and/or network equipment, systems, servers, appliances and other associated components related to digital data operations. A facility may also include air handlers, power generators, water cooling and storage facilities, utility substations, and other associated utility infrastructure to support the operations.
- **Data Services Office:** A facility used primarily for the storage, management, processing, and transmission of digital data which is stored in a cloud and is accessible by a wide range of systems and devices. Such facility does not have outside air handlers, power generators, water cooling, storage facilities, utility substations and other outside utility infrastructure to support the operation.

Fairfax County

Fairfax County allows data centers in some commercial and industrial districts. Certain commercial districts, similar to our business districts, allow them by-right up to 40,000 square feet of gross floor area. Large data centers require the approval of a special exception. The same is true in most of their industrial districts; however, the by-right size limit is higher at 80,000 square feet of gross floor area, except in the most intensive industrial districts, I-5 and I-6, where there is no size limit. Fairfax defines data centers as:

- **Data Center Definition:** A facility containing one or more large-scale computer systems used for data storage and processing for off-site users. Typical supporting equipment includes back-up batteries and power generators, cooling units, fire suppression systems, and enhanced security features.

- Data centers are also subject to certain regulations as follows:
 - Screening
 - Cooling, ventilating and other equipment used to operate the facility, including generators, must be fully enclosed unless the Planning Director determines it is not mechanically feasible.
 - Where not mechanically feasible, this equipment must be screened by a wall or similar barrier.
 - If located on the ground, such equipment must be screened from view from abutting lots and street rights-of-way by a solid wall or building.
 - Distance requirements
 - Data center buildings must be located at least 200 feet from the lot line of any property zoned residential or used for residential purposes.
 - Any equipment located on the ground that is used for cooling, ventilating or otherwise operating the facility, including power generation, must either be located at least 300 feet from the lot line of a residential district or property with a residential use, or separated from such property by the principal data center building.
 - Distance requirements from residential districts and uses may be reduced by special exception. These requests should include items like changes in building height or other design techniques to provide variation in building mass as viewed from the nearby residential district.
 - Noise study
 - A noise study is required to demonstrate the data center will comply with the Fairfax County Noise Ordinance.
 - Architectural features
 - Where allowed by-right, certain architectural features are required, such as changes in building façade materials and the use of doors, windows or faux windows to break up the building expanse.

Loudoun County

Loudoun County recently amended its zoning ordinance to remove data centers as a by-right use, requiring approval of a special exception by the Board of Supervisors. Plans of development for data center development that had been accepted prior to the Board's action were vested or "grandfathered" under the previous provisions of the Loudoun zoning ordinance. This enhanced typical standards, where approved plans of development are considered vested, but where plans that had merely been submitted would not have been. In addition to several design standards, Loudoun County requires a 200-foot setback for data center buildings, with the parking lots serving them to meet a 50-foot setback requirement. Loudoun defines data centers as:

DANVILLE, VA

- **Data Center Definition:** An establishment engaging in the storage, management, processing, and/or transmission of digital data, and housing computer and/or network equipment, systems, servers, appliances, and other associated components related to digital data operations.

Pittsylvania County

Pittsylvania County recently created the Southern Virginia Mega Site District (M-SVMS). This district is to be placed on parcels located within the Southern Virginia Mega Site at Berry Hill. The M-SVMS sets specific standards for data centers.

- **Data Center Definition:** A facility used primarily for the storage, management, processing, and transmission of digital data, which houses computer and/or network equipment, systems, servers, appliances, and other associated components related to digital data operations. Such facility may also include air handlers, power generators, water cooling and storage facilities, utility substations, security booths, and other associated utility infrastructure, security infrastructure, accessory structures, storage areas and ancillary uses that support development of and operations at a Data Center.
 - Height: 150 feet including mechanical equipment.
 - Screening: Exterior mechanical equipment must be screened with a solid screening wall that is architecturally compatible with the primary structure.
 - Principal facade: must incorporate facade articulation
 - Setbacks: guard houses 250 feet from property lines and mechanical equipment 100 feet from property lines.
 - Buffer: 100-foot yard buffer with screening is required

Prince William County

Prince William County has a Data Center Opportunity Zone Overlay District that encompasses several of their office and industrial zoning districts. Within the overlay district, data centers are permitted by right in office and industrial zoning districts. Outside the overlay district, data centers are allowed by special use permit, except for agricultural, residential and certain other districts where they are not permitted.

- **Data Center Definition:** Computer and Network Services shall mean a use involving a building/premise in which a majority of the use is occupied by people and staff engaged in activities related to work that is focused on supporting computers and/or telecommunications and related equipment where information is processed, transferred and/or stored. This includes satellite dish facilities, internet service providers, network operations centers and web teleconferencing facilities, but shall not include a Data Center.

Data Center shall mean a use involving a building/premise in which the majority of the use is occupied by computers and/or telecommunications and related

equipment, including supporting equipment, where information is processed, transferred and/or stored.

Recommendations

Localities within the Commonwealth of Virginia address the operations of data centers with Overlay Districts, Special Use Permits and By-Right uses. Because Data Centers are not currently addressed in the City of Danville's UDC there is no current location within the city limits that an operation of a Data Center may take place. To allow for the operation of a Data Center, the following changes must be made to the UDC:

- Create a definition of a Data Center
- Add Data Center to Table 3.A.2: Comprehensive Use Permissions Table
- Add use standards for the operation of a Data Center in 41.3.B
 - If the proposed use standards require compliance with the Noise Ordinance, update Chapter 23.1 of the City Code.

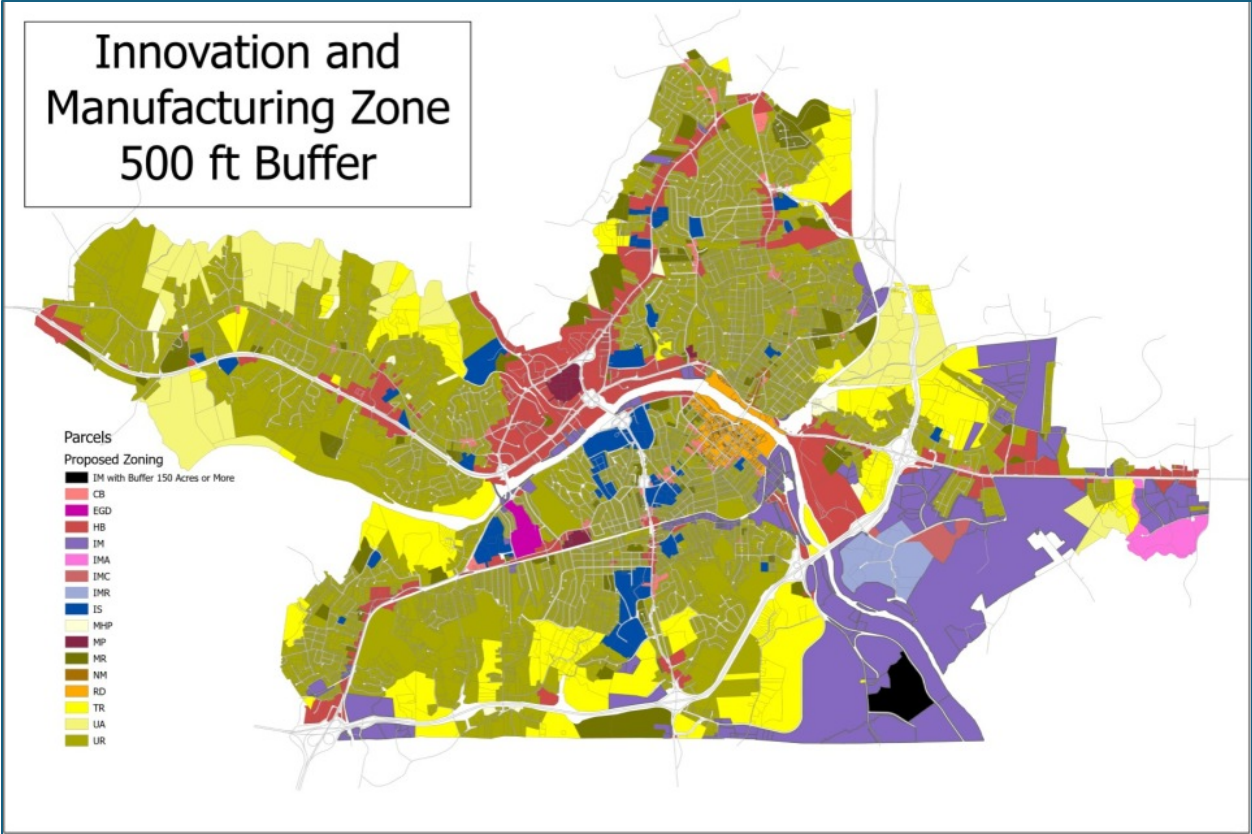
Draft UDC changes

Data Center Definition: An industrial facility containing one or more large scale computers for the use of electronic data storage, management, transmittance, and/or processing for on- and off-site users. Operations include without limitation, data entry, storage, conversion or analysis, subscription and credit card transaction processing, internet service providers, telephone sales and order collection, mail order and catalog sales, mailing list preparation and Bitcoin operations.

41.3.B.20

20. Data Center

1. The perimeter of a property used for the operation of a data center may not be within 500 feet of any property that allows residential use by right.
2. A data center may not operate on a parcel that is less than 150 acres in size.
3. Buffers and setbacks
 - Ground equipment or screening may not be located within the yard setbacks.
 - A minimum of vegetative buffer of 20 feet
4. Operations may not be located within an Industrial Park.
5. Screening
 - All equipment used to operate the facility, including generators, shall be fully enclosed. The Planning Director may grant a waiver if determined that an enclosure is not mechanically feasible.
 - When it is not mechanically feasible, the equipment must be surrounded by opaque screening.
 - All ground equipment must be surrounded by opaque screening.



Recommended Actions and Timeline

It is recommended that changes to the UDC be presented by Planning Staff to the City Planning Commission and City Council for review and consideration.

Since the major advantage of data centers is the tax revenue generated, staff recommends a \$1.25 Data Center Tax Rate, which will be included in the FY 2026-27 Budget recommendation.

Action	Date
Application Deadline	March 16, 2026
Planning Commission	April 13, 2026
City Council	May 5, 2026

STAFF REPORT

DATE: April 13, 2026
TO: Planning Commission
FROM: Renee Burton, Division Director of Planning
RE: Review and adoption of the City of Danville Flood Resilience Plan.

SUMMARY

The City of Danville Flood Preparedness & Resilience Assessment has been created to guide proactive actions to reduce flood risk, protect property, enhance community resilience, and support long-term environmental and economic sustainability. Flooding represents one of the most significant natural hazards affecting Danville, with increasing frequency and severity due to changing precipitation patterns, aging infrastructure, and ongoing development within flood-prone areas. This assessment was developed with feedback from residents, stakeholders, and community partners gathered through the PLANDanville comprehensive planning process, ensuring that community priorities and local knowledge helped shape the plan's goals and recommendations. Development of the Flood Preparedness & Resilience Assessment was financially supported through a grant from the Commonwealth of Virginia's Community Flood Preparedness Fund (CFPF), which enabled the City to conduct a comprehensive evaluation of flood risks and develop actionable, forward-looking strategies to reduce flood impacts, strengthen infrastructure, and improve long-term resilience. The Flood Resilience Plan provides the City with a clear roadmap for how to prepare for floods, reduce damage, and recover more quickly when flooding occurs.

The Flood Resilience Plan evaluates flood risks citywide, including riverine flooding, stormwater runoff, and drainage issues. The analysis draws on past flood events, floodplain mapping, watershed conditions, and projected climate trends to identify areas most at risk.

Based on this research, the plan outlines strategies to reduce flood impacts through improved stormwater management, green infrastructure, floodplain management, and coordination across departments and partner agencies. A key focus of the plan is using both traditional infrastructure and natural solutions. Traditional projects include things like pipes, culverts, and other drainage improvements. Natural solutions include protecting and restoring streams, preserving floodplains, adding green spaces, and using vegetation to absorb water. These nature-based solutions help slow down runoff, reduce flooding, and improve the environment at the same time. Implementation recommendations focus on prioritizing areas with the highest flood risk, maintaining existing drainage systems, and incorporating flood resilience into development review, zoning decisions, and capital improvement planning. The plan also identifies potential state and federal funding opportunities to help support future projects.

The Flood Resilience Plan is consistent with the City of Danville's Comprehensive Plan as well

as community goals related to public safety, environmental stewardship, and infrastructure sustainability. By promoting resilient development, and protecting natural resources and infrastructure, the plan reinforces the City's commitment to responsible growth and risk reduction. The plan also strengthens the City's eligibility for resilience and infrastructure funding programs at the state and federal levels. Adoption of the plan will provide clear direction for flood risk reduction efforts, support informed decision-making across City departments, and position Danville to better withstand and recover from future flood events while protecting residents, businesses, and public assets.

RECOMMENDATION

The Planning Staff recommends that the Planning Commission recommend adoption and approval of the City of Danville Flood Preparedness & Resilience Assessment.

ATTACHMENTS

1. Danville Flood Preparedness & Resilience Assessment

DRAFT APRIL 03, 2026

Danville Flood Preparedness & Resilience Assessment



This project received funding from the Virginia Community Flood Preparedness Fund Grant Program through the Virginia Department of Conservation and Recreation (DCR), via CFPF-22-03-45-S.



Table of Contents

01

Building a Resilient Danville: Purpose & Alignment

- 4 Introduction
- 5 Purpose and Scope
- 6 The Vision
- 7 What is resilience planning?
- 8 Resilience Strategies

04

Socioeconomic Assessment

- 42 Community Engagement and Awareness
- 43 CRCL Indicators
- 44 Economic Landscape
- 45 Summary & Recommendations

07

Policies & Ordinances

- 83 Existing Policy & Regulatory Framework
- 85 Summary & Recommendations

10

Conclusion

- 127 A Resilient Future

02

Understanding the Problem

- 9 Context
- 10 What does this all mean?
- 10 What can be done about it?

05

Infrastructure Assessment

- 53 Existing Infrastructure & Systems
- 59 Utility Management and Emergency Response
- 62 Summary & Recommendations

08

Recommendations

- 95-106 R1 - R6
- 107-114 Continued - Additional Information

11

Appendix

- 129 Key Assessments and Findings
- 131 Glossary

03

Environmental Assessment

- 22 Ecosystem Services
- 25 Environmental Risks & Challenges
- 39 Summary & Recommendations

06

Governance Assessment

- 68 Current Governance Structures
- 73 Intergovernmental Coordination
- 76 Communication and Public Engagement
- 78 Summary & Recommendations

09

Implementation

- 116 Continuous Monitoring & Improvement
- 117 Key Partners
- 121 Financial Strategies for Resilience and City Projects

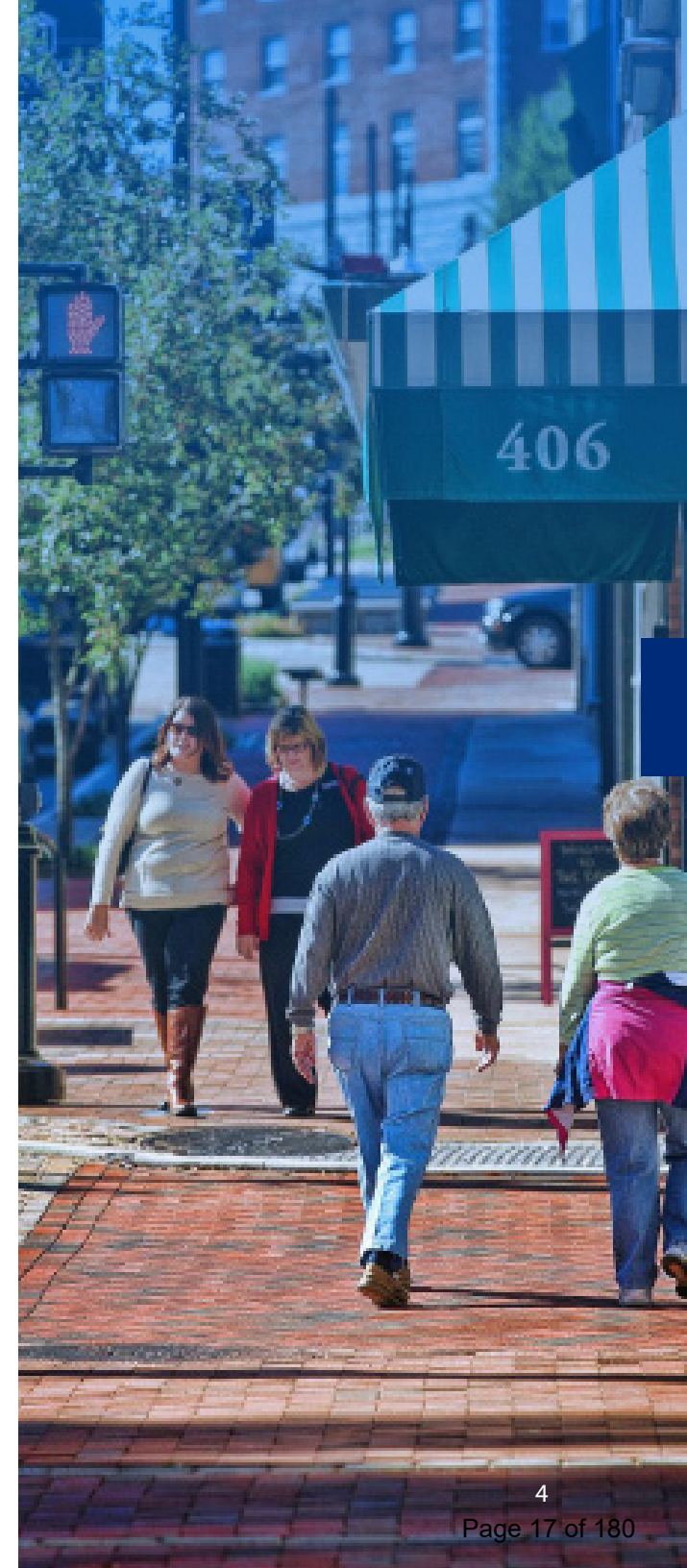


1. Building a Resilient Danville: Purpose & Alignment

1.1 Introduction

Danville, Virginia, is a city with a storied past, deeply rooted in the history of the American South. Danville has long been a city of transformation. From its roots as a thriving center for tobacco and textiles to its current pursuit of revitalization and economic diversification, the city has always adapted to changing times. Today, Danville faces a new era of challenges brought by changing weather patterns and their impact on the community.

Danville is located in the Piedmont region of Virginia, which is characterized by rolling hills and the winding Dan River. The city covers an area of about 43.9 square miles, of which 1.9 percent is water. The Dan River, a major source of water supply and recreational asset, also presents increased risks, particularly from flooding.



1.2 Purpose and Scope of the Resilience Plan

This Flood Preparedness and Resilience Plan was developed to protect Danville's residents, infrastructure, and natural systems from current and future flooding impacts. Through a grant from the Virginia Department of Conservation and Recreation's Community Flood Preparedness Fund, this plan provides a comprehensive framework for understanding and addressing the city's flooding challenges. The grant funds the completion of a vulnerability assessment and development of an action-oriented approach to reducing the impacts of flooding, including flooding driven by climate change.

This plan was written concurrently and is aligned with PLAN Danville, the city's Comprehensive Plan which emphasizes a future-forward vision, reflecting key themes of Equity, Resilience, and Health. This plan is meant as a companion to, and extension of, the action items recommended in the wider Comprehensive Plan; it offers strategies for emergency management, stormwater management and flood mitigation, and strengthening utility infrastructure, while offering further context for decisions made regarding infrastructure, land use management, and policy. Development of this document included review of existing policies as well as local and regional planning efforts.

This alignment ensures that resilience strategies, particularly in flood preparedness, are seamlessly integrated into the city's long-term goals for growth and development. The Comprehensive Plan, crafted through inclusive community engagement and a collaborative structure, lays the foundation for a city that is not only adaptable to environmental challenges but also thriving economically and socially. By embedding resilience planning within this comprehensive framework, Danville positions itself to effectively transition into a dynamic, regional destination while maintaining its unique small-town charm and ensuring equitable service to all residents.



1.3 The Vision

The vision of Danville's Flood Preparedness and Resilience Plan is to create a robust and dynamic community, adept at navigating and thriving amidst the evolving challenges of nature, urbanization, and socio-economic shifts. This vision sees Danville transforming into a city where resilience is interwoven into every aspect of urban life, from infrastructure and environmental stewardship to community well-being and economic vitality.

Central to this vision is the integration of resilience into daily living, where each citizen, policy, and project reflects a commitment to sustainability, adaptability, and proactive risk management. Danville aspires to set a standard for small cities, demonstrating how embracing resilience can lead to a safer, more prosperous, and sustainable future. This forward-thinking approach aims to not only safeguard against immediate threats like flooding or economic downturns but also to cultivate a resilient spirit that empowers the community to flourish in the face of any adversity.



1.4 What is resilience planning?

Resilience planning embodies a strategic commitment to not only fortify a community against the inevitable forces of nature and other disruptions like major storm events and economic downturns, but it also creates opportunity for growth and prosperity. By providing a framework for preparedness and adaptation, Danville can both reduce its immediate vulnerabilities and create new opportunities that prepare the city for everyday life, and those days that come with unanticipated events.

This resilience plan is specifically tailored to enhance Danville's readiness for flood-related challenges. While Danville engages in broader resilience planning for various aspects of city life, this report concentrates on developing and implementing effective strategies to combat the risks and impacts of flooding. It represents a focused effort within the city's overall resilience initiatives, aimed at safeguarding neighborhoods, infrastructure, and the environment from flood hazards.

This resilience plan is specifically tailored to enhance Danville's readiness for flood-related challenges.

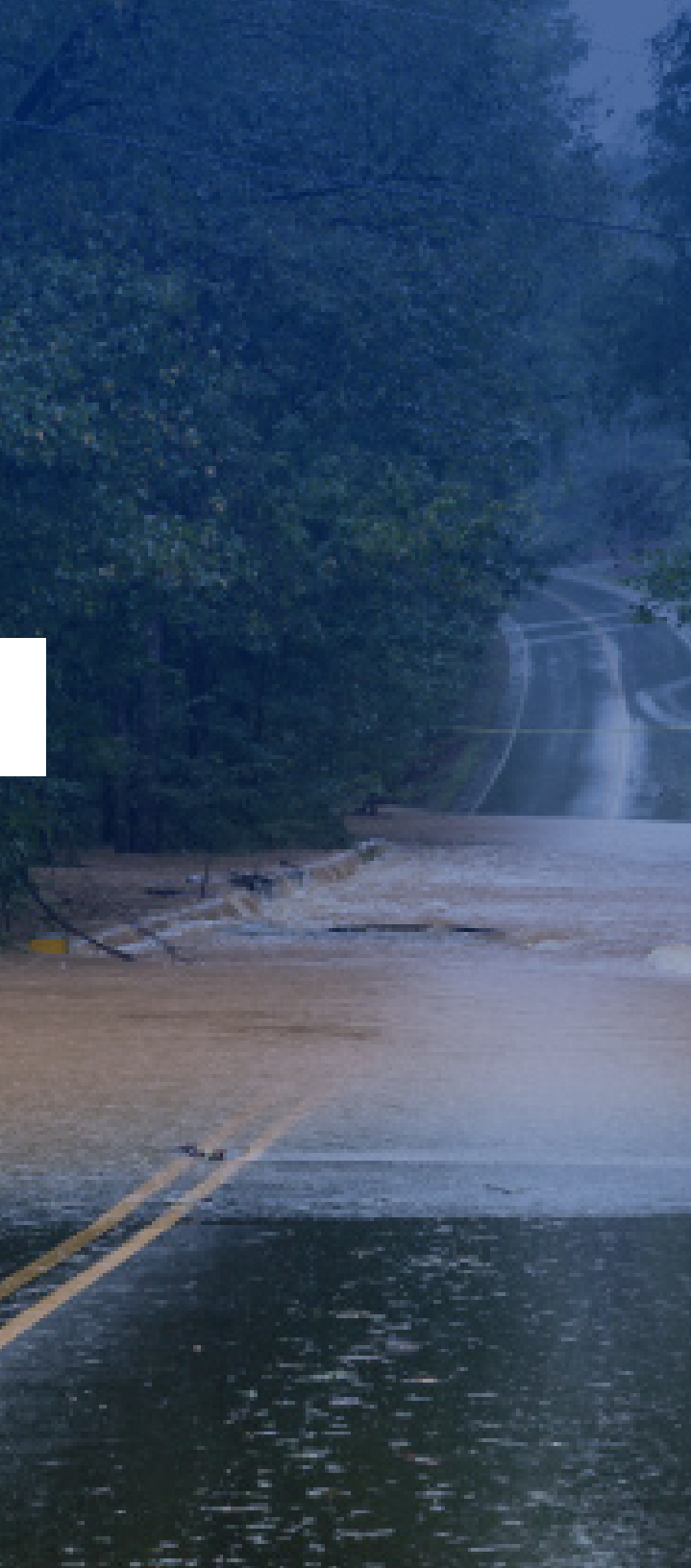


1.5 Resilience Strategies

Resilience planning in Danville is about taking concrete steps to protect the city from natural disasters and unforeseen events that disrupt daily life. It is about practical preparedness, ensuring that Danville can not only withstand these events but also recover quickly and efficiently. The following are an overview of actionable resilience strategies represented in this plan.

Infrastructure Strengthening		Focus on protecting buildings and utilities, regular maintenance of drainage systems, and implementation of green stormwater infrastructure.
Flood Response Systems		Develop clear, actionable plans for responding to flood events, including evacuation practices and emergency services.
Community Readiness		Establish and promote community training programs for emergency preparedness and response.
Flood Defense Measures		Implement physical flood defenses like levees and floodwalls where necessary and maintain them regularly.
Critical Facilities Protection		Ensure that hospitals, fire stations, and schools have the necessary protections against flooding.
Government Capacity & Coordination		Expand Danville's capacity as a local government to prepare for – and respond to – risks and vulnerabilities through planning and coordination with other levels of government.
Policy & Regulation Revisions		Strengthen zoning laws to regulate construction in flood-prone areas and update building codes for flood resilience.
Resilience Retrofitting Programs		Implement retrofitting programs for existing structures and promote green infrastructure for sustainable urban development.





2. Understanding the Problem

The following sections provide a more thorough understanding of Danville's challenges regarding climate as well as how the city's physical location and its social and economic dynamics contribute to the city's larger goal of building a resilient future.

2.1 Context

Danville's Climate and Environmental Challenges

Danville faces a range of interconnected climate and environmental challenges, including -

Weather-related impacts:

- flash flooding causing erosion and the redistribution of sediment along the river
- increased likelihood of extreme weather events
- lack of water due to drought¹ and extreme heat²
- air pollution from wildfire smoke³ (indirectly weather-related)

Related environmental issues:

- contamination of waterways via runoff
- degradation of soil quality from lack of nutrients
- poor pollination of plants
- increased disease due to lengthened seasons

Ecosystems respond to the conditions to which they are exposed; limiting human contributions to the degradation of the environment can help to reduce these impacts and ensure continued access to the services the ecosystem provides. It is important to support natural systems in order to have a strong food supply, clean drinking water, fresh air to breathe, and natural spaces to enjoy.

1 [Drought.gov](https://drought.gov)

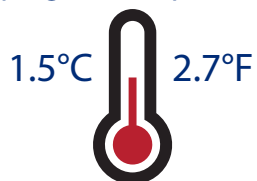
2 [Climate Explorer](https://climateexplorer.com)

3 Virginia Department of Health, "[Spring Wildfires Reduce Air Quality in Virginia](#)," March 25, 2024.

Scientific consensus is that surpassing global temperatures of 1.5 degrees Celsius above pre-industrial levels will trigger a series of tipping points¹ which will put greater stress on resources and create increasingly difficult conditions for plant and animal life (including humans!). These changes are already happening, as is evident in increased intensity of storms, uncontrolled wildfires, changing growing seasons, increased presence of pests and vector borne diseases, and freshwater shortages.

To put this into perspective, 50% of days were above the 1.5°C tipping point in 2023. To slow this trend, dramatic shifts toward low carbon operations, like using renewable energy and balancing development with nature, are important.

Tipping Point Equivalency



1 OECD iLibrary [Climate Tipping Points: Insights for Effective Policy Action](#)

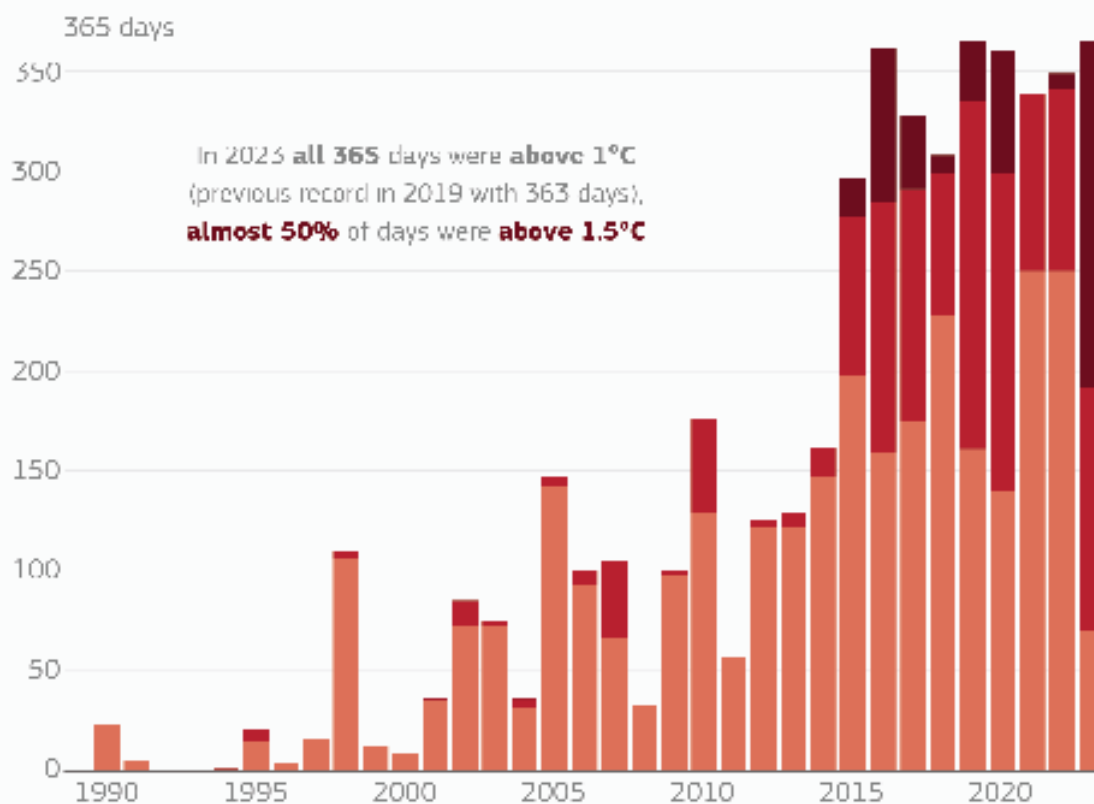


Global Climate Highlights

RECORD NUMBER OF DAYS ABOVE 1.5°C IN 2023

Number of days with temperature increase above pre-industrial level (1850-1900) within the following ranges:

1 to 1.25°C 1.25 to 1.5°C 1.5°C or more



Data: ERA5 • Credit: C3S/ECMWF

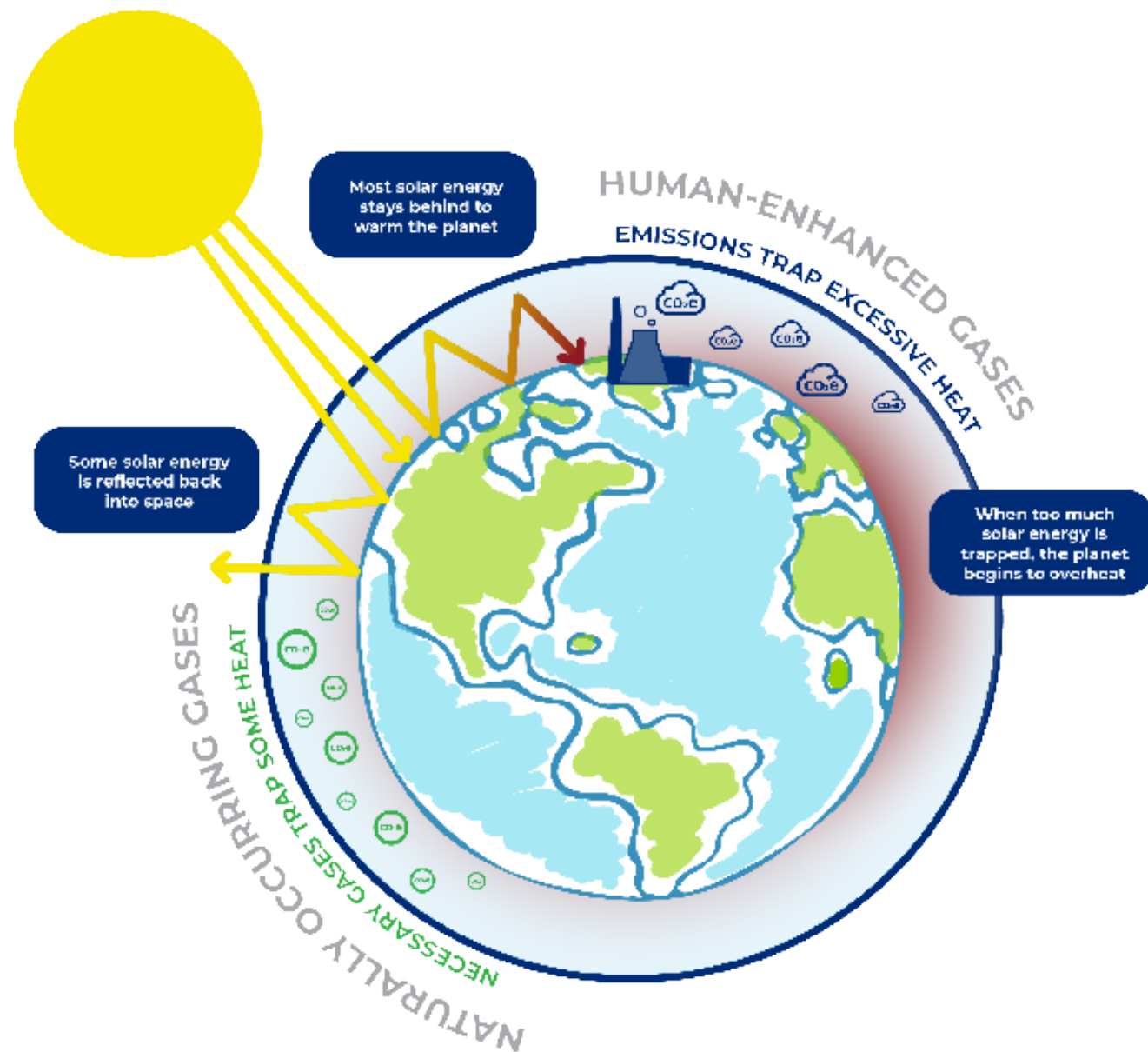


PROGRAMME OF
THE EUROPEAN UNION



How the Built Environment Impacts the Earth's Climate

Greenhouses work by trapping heat, similar to how Earth's atmosphere functions. The atmosphere, composed of various gases including carbon dioxide (CO₂), acts as a protective layer. It allows sunlight in and prevents some heat from escaping, keeping the planet warm enough for life. However, too much CO₂ in the atmosphere leads to excess warming, causing unstable and threatening weather patterns. These heat-trapping gases are called greenhouse gases (GHGs) and are crucial to regulate for maintaining a livable climate on Earth.



George Mason University and the City of Danville prepared a GHG inventory for Danville which measured the city's energy consumption and GHG emissions. It was found that across all sectors, Danville produced over 650K metric tons of CO2 equivalent in 2022. The full report can be found in the City of Danville Environmental Stewardship Plan.¹

¹ [City of Danville, Virginia Energy Action Plan](#), George Mason University. April, 2024.

Did you know... ?

It would take 10 million trees to absorb the amount of carbon Danville emits in a single year. At 250 trees per acre in a forested area, this would equal around 40K acres! For reference, the City of Danville is a bit less than 28k acres.



Historical



43.2 IN
AVERAGE
(1976-2005)



42.2 DAYS
OVER 90F
(1976-2005)

Projected



46.2 IN
AVERAGE
(BY MID-CENTURY)

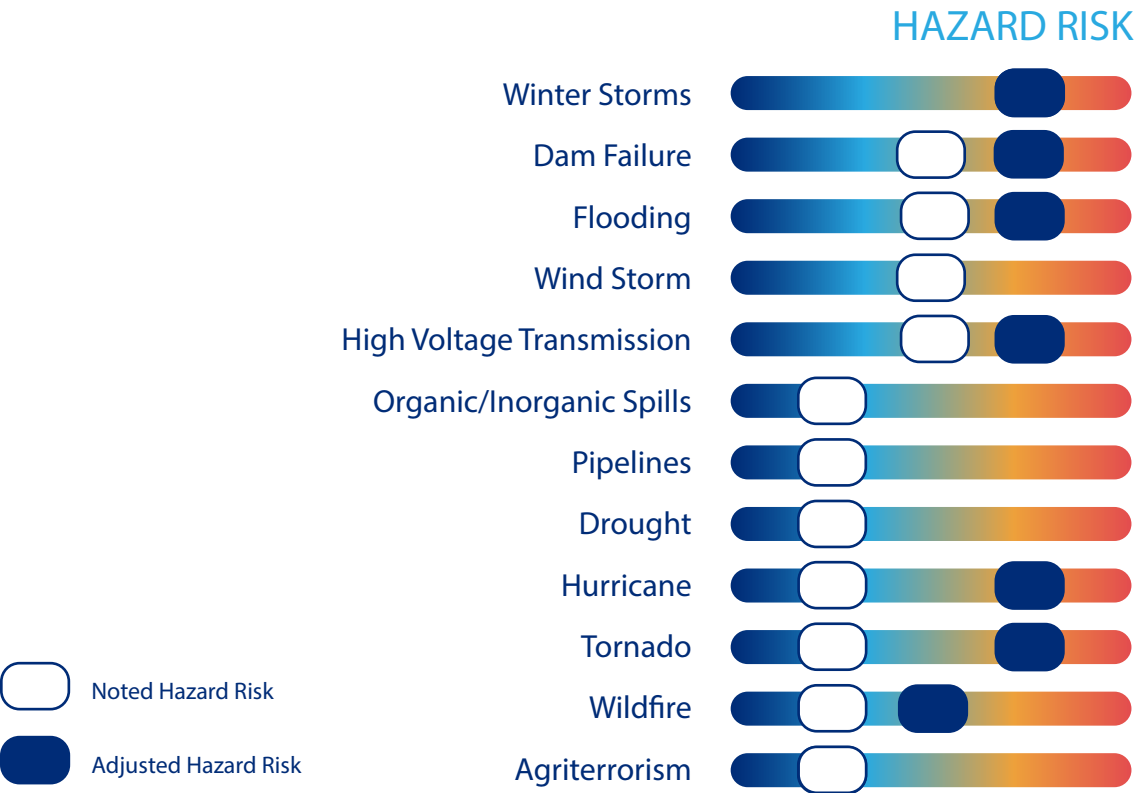


89 DAYS
OVER 90F
(BY MID-CENTURY)

Hazards in Danville

Knowing which hazard risks Danville faces can help the city understand how to respond. The 2019 Danville Emergency Operations Plan (EOP)¹ gives the following ratings to various hazards and risks in the city of Danville.

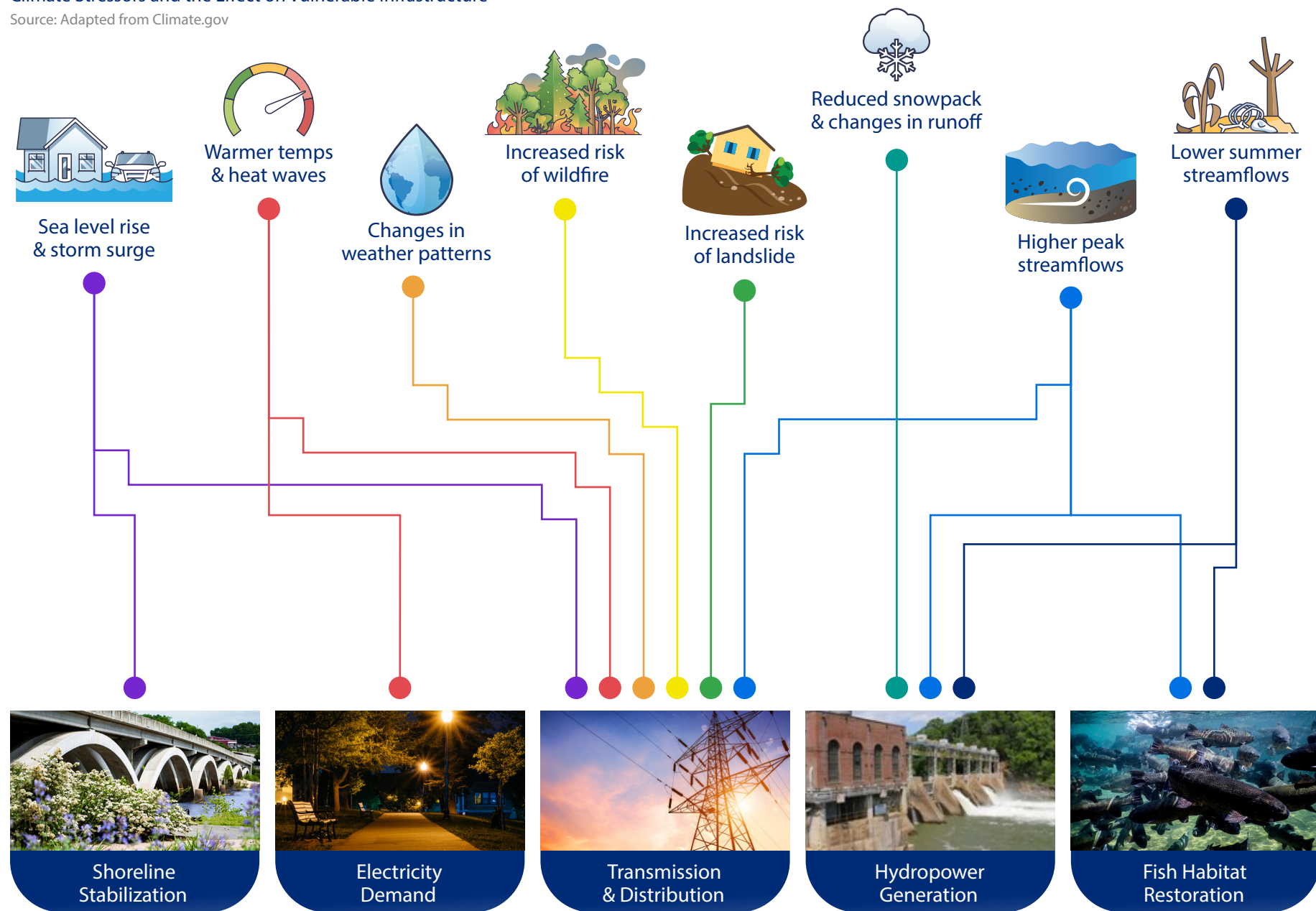
Through discussions with local residents during the Comprehensive Plan process and review of historical records, it became clear that the 2019 EOP hazard ratings didn't fully capture Danville's actual experience with these risks. This community input and historical data analysis led to the adjusted hazard risk ratings shown above, providing a more accurate picture of Danville's vulnerabilities.



1 [2019 Danville EOP](#)

Climate Stressors and the Effect on Vulnerable Infrastructure

Source: Adapted from Climate.gov



Further, potential hazards not included in the list provided in Danville's Emerge that may have a future effect on Danville are heat exposure, hail, and landslides. As such, this study seeks to more intricately analyze the confluence of conditions that contribute to hazards and analyze what the future resilience of Danville needs to encompass, specifically when taking into account climate change and weather variability.

When comparing the adjusted hazards to the noted hazards, the following risks were identified in greater substantiation through review of recent events, community feedback, and other risk assessment tools.

Hurricanes

While Danville is inland, the remnants of hurricanes passing through can bring heavy rains and winds.

Riverine Flooding

The Dan River, an iconic feature of Danville is both a source of beauty and a potential risk. Its rising waters during heavy rains can inundate floodplains, impact drinking water supply and challenge the city's infrastructure.

Tornadoes

The suddenness of a tornado, with its ferocious winds, can transform neighborhoods within moments.

Strong Winds

Not just from tornadoes or hurricanes, but strong wind events can damage power lines, disrupt services, and pose risks to unsecured property.





In response to these challenges, this resilience plan is designed to incorporate historical data and local knowledge to develop robust actions and strategies.

Hail

Though Danville does not encounter hailstorms frequently, hail can accompany severe storms, damaging homes, cars, and crops, and causing economic strain.

Winter Weather

Danville's winters can bring a mix of sleet, snow, and freezing rain.

Landslides

Though less common, Danville is at a relatively high risk for landslides due to its steeper terrain. Periods of intense or prolonged rainfall can threaten structures and roadways when not properly supported through appropriate stabilization methods.

Heat

As temperatures continue to climb and high-heat days increase in frequency, the City of Danville should be prepared for potential impacts to community, operations, and infrastructure that extreme heat can bring.





2.2 What does this all mean?

As this rate of warming increases, intense weather events will continue to challenge communities like Danville. Over the last several years, Danville has already seen devastating loss from major flooding and high winds. Damage to infrastructure, homes and businesses, and property is expensive. When a place sees repeated losses, it can affect the ability to invest back into the community; it can also create problems for individual home and business owners, making it impossible to provide for their families, save for retirement, and create generational wealth.

2.3 What can be done about it?

By preparing for potential shocks and stressors now, the city will be able to bounce back more rapidly following an event. The Flood Preparedness and Resilience Plan is the first step in ensuring Danville has a resilient future.

Building a resilient Danville requires a comprehensive approach that addresses various aspects of city life, from individual homes to citywide infrastructure and natural resources. The following goals and strategies have been developed to create a holistic framework for enhancing Danville's resilience. Each goal is designed to contribute to the overall vision of a thriving, adaptable community that can withstand and recover from potential challenges. These goals are interconnected, reflecting the complex nature of urban resilience and the need for coordinated efforts across different sectors of Danville.

The Resilience Plan for Danville is designed to align with the vision of a thriving city where community strength is built on preparedness, adaptability, and sustainable practices. The following provides an overview of goals and recommended actions that would contribute to Danville's resilience.



Guiding Principles

Danville's resilience is rooted in these Guiding Principles, setting the foundation for engagement with the community, management of resources, and planning for the future. These principles draw from a deep understanding of the interplay between human activities and the environment, emphasizing a proactive and collaborative approach to urban living.

Community Empowerment & Education: Equip residents with knowledge and resources to face environmental challenges.

Flood Resilience & Preparedness: Ensure all residents understand flood risks, insurance options, and evacuation procedures.

Sustainable Development & Policy: Integrate resilience goals into city growth plans and encourage green infrastructure.

Infrastructure Investment & Upgrades: Prioritize maintenance and strategic upgrades to strengthen critical systems.

Recreational & Ecological River Management: Preserve waterways as both recreational assets and vital ecosystems.

Comprehensive Flood Risk Management: Conduct regular assessments and develop proactive mitigation strategies.

Resilience-Specific Investment: Secure and allocate funds for infrastructure upgrades and emergency preparedness.

Institutional Strength & Coordination: Build local capacity to manage emergencies efficiently and collaboratively.

Reliable Utilities & Services: Ensure critical services can quickly recover and adapt after disasters.

Regional Approach to Challenges: Extend resilience efforts beyond city limits for broader impact.

These Guiding Principles are seen throughout the Flood Preparedness and Resilience Plan, ensuring they are not only espoused but enacted in every initiative undertaken for a resilient Danville. They serve as the blueprint for action, guiding Danville toward a future focused on thriving rather than surviving.



Goals and Vision Alignment

R-1: Advocate for Efficient and Resilient Homes: This goal suggests advocating for efficient homes through two main strategies. A public education campaign could be launched, providing resources for home weatherization, creating a 'Weatherization Web Hub', and connecting residents with local vendors to enhance home longevity and energy efficiency. Additionally, educational programming on native plants and green infrastructure could be developed, focusing on rain gardens and permeable solutions to mitigate stormwater runoff.

R-2: Prepare Residents for Flooding Events: To enhance preparedness for flooding events, this plan recommends a multi-pronged approach. An annual digital awareness drive could promote the adoption of flood insurance, particularly in vulnerable zones, supported by educational campaigns and resources that inform residents about flood risk reduction measures and safe flooding protocols, including evacuation practices.

R-3: Expand Resilient and Sustainable Development Policies and Regulations: Expanding resilient and sustainable development policies could involve institutionalizing sustainable development regulations, requiring developer contributions to public amenities, and integrating strategic economic incentives. Encouraging the integration of sustainable and resilient design principles into city planning and development processes could also be beneficial.

R-4: Reduce Stress on Infrastructure through Maintenance and Upgrades: To reduce stress on infrastructure, maintenance and strategic upgrades are recommended. Actions could include inspecting trees near power poles and lines and replacing overhead utilities with underground lines in areas historically susceptible to outages, prioritizing critical infrastructure areas.

R-5: Enhance Resilience within the Built and Natural Environments: Enhancing resilience in both built and natural environments could include collaborative efforts with state agencies to manage and improve rivers and waterways for recreational and ecological resilience. Other actions might involve enhancing recreational programming on the Dan River, assessing and upgrading city infrastructure for climate resilience, and establishing buffer zones along water bodies.

R-6: Conduct Flood Risk Assessment and Develop Approach to Stormwater Management: For effective flood risk management, it is suggested to appoint a Resilience Coordinator, join FEMA's Community Rating System, and improve identified flood problem areas. Establishing a floodplain monitoring system, implementing an advanced rain gauge network, updating municipal codes, phasing out development in flood-prone areas, and adopting a robust process for National Incident Management System compliance can also assist in the accomplishment of this goal.



3. Environmental Assessment

Environmental resilience is crucial for Danville's long-term health, prosperity, and quality of life. This section examines the city's natural systems, focusing on the Dan River and surrounding ecosystems, and their role in providing essential services to the community. It explores current environmental challenges, particularly flooding, and proposes strategies to enhance Danville's ability to withstand and recover from these pressures. By understanding and strengthening the connections between the built and natural environments, this chapter aims to contribute to creating a more sustainable and resilient future for Danville

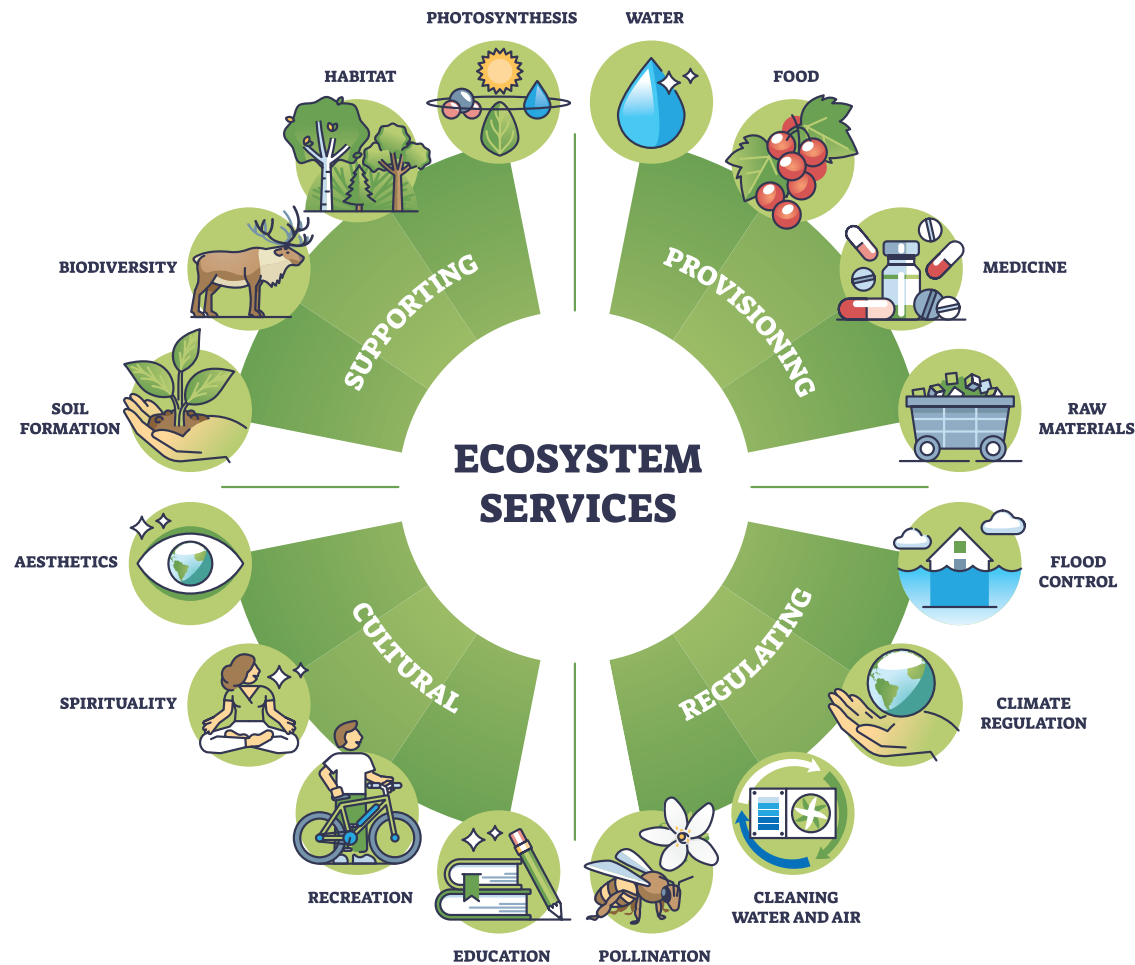
Did you know... ?

These services have been recognized as socially beneficial as early as 400BC by the Greek philosopher, Plato. Conservationists throughout the 19th and 20th centuries expanded on the concept and determined that humans depended on these services. In 1981, they were defined more specifically by Paul and Anne Ehrlich to be acknowledged as critically important to human existence in their book, *Extinction: The Causes and Consequences of the Disappearance of Species*.



3.1 Ecosystem Services

Understanding that the natural environment is necessary for health, happiness, and economic stability allows deeper connections with the reasoning behind protecting green spaces and waterways. Without healthy and balanced ecosystems, the risk of running short of the resources needed to thrive increases. The natural world provides plants, animals, and humans with an abundance of direct and indirect life-supporting benefits called ecosystem services. By supporting each of the four ecosystem services, a resilient and sustainable future for Danville can be secured.



Provisioning Services



Provisioning services are the natural resources needed to sustain life, including produce to eat, fresh drinking water, raw materials for construction and manufacturing, and fuel that powers homes and businesses. These provisioning services are essential for maintaining a resilient and self-sufficient place to live.

As the Dan River is the main source of Danville's drinking water, protecting this resource is vital to the health and well-being of not only plants and animals, but to the city's residents as well. Though the river provides a surface water source that is processed through Danville's water treatment facility for drinking water, rainwater can be an excellent source for irrigation and other purposes that do not require potable water. Rainwater harvesting makes use of this free and natural resource and can be implemented on both a small residential scale as well as on commercial sites.

Water is just one provisioning service to care for; fruits and vegetables, renewable energy resources (like wind, sun, and biomass), and materials are also invaluable. Local sourcing of these can help reduce the amount of vehicle miles needed to transport goods into the city, support local businesses and jobs, provide grid stability, and ensure that much-needed resources are available during and following an emergency.

Regulating Services



Regulating services help maintain the quality of our environment. In Danville, there is a need for erosion control for slopes and flood management practices along riparian zones. The Dan River is an important water resource that needs protection from runoff and other sources of contamination. Extreme weather poses a threat to ecosystems by transporting pollutants and litter from roads into waterways, the displacement of wildlife, and through events such as landslides and flooding. There are many natural methods that can help to address some of the challenges brought about by extreme weather.

Just as they benefit other ecosystem services, native trees and vegetation with deep roots can help provide soil stability and slow down the rate at which water travels over hard surfaces like roads. Creating riparian buffers with native Virginia plants can also reduce sedimentation and filter pollutants before they reach rivers and streams, helping to maintain water quality for humans and wildlife. Encouraging the use of green infrastructure like permeable pavement, bioswales, and green roofs can further maintain water quality and reduce runoff, improving infiltration by managing rain where it falls.



Cultural Services



Cultural services which include things like ecotourism and recreation have been previously mentioned. Supporting the health of the river and awareness of its benefits can help to grow these economic opportunities.

As the river has done since Danville's inception, creating cultural connections to the water can help continue to nurture a sense of place for all those who live and work in the city. Volunteer efforts for collecting litter and planting seedlings can help people form these connections. A clean Dan River can inspire a greater love of the outdoors, encouraging those who visit to spend more time in nature.

Nature walks and outdoor classes can be used as a way to educate about the river and the plants and animals that call it home. The more people who understand the ecosystem services that are provided by nature, the better supported the natural systems in Danville can be.

Supporting Services



Supporting services relate to habitat; they are the foundation for the other three services. These services include natural water movement patterns that transport nutrients and shape river habitats, along with healthy soils and other natural spaces that help support a widely biodiverse environment. By nurturing these supportive services for plant and animal life, the built environment in which Danville's residents live is also supported.

Native species of plants help feed and protect the insects and animals that are also native to the area. By supporting the beneficial insect population (like pollinators) with plant species that are adapted to Danville's hardiness zone, food systems become more stable, and wildlife is provided with the correct type of home. This also helps prevent unwanted insects and animals from invading the built environment.

Further, implementing cover crops can help improve soil health and prevent erosion and compaction, especially during extensive rain. Other benefits include water filtration and carbon sequestration.



3.2 Environmental Risks & Challenges

Hydrography & Watersheds

The hydrographic profile of Danville is dominated by the presence of the Dan River, a vital tributary to the Roanoke River. Stretching over 214 miles before emptying into the Kerr Reservoir, also known as Buggs Island Lake, the river is a critical water source and a recreational asset to the community. Fed by five main tributaries—the Smith, Mayo, Sandy, Hyco, and Banister rivers—the river system plays a significant role in the city's ecology, economy, and hydrological challenges, particularly in managing riverine flooding.

The Dan River Watershed, extending over 3,300 square miles, is a vital ecological and recreational asset in the Danville region. Originating in the Blue Ridge Mountains, it traverses diverse landscapes before joining the Kerr Reservoir, part of the Roanoke River Basin. This largely rural watershed is a haven for biodiversity, supporting rare species like the James spiny mussel and the Roanoke logperch.

Despite its ecological richness, the Dan River Watershed faces significant challenges, particularly in water quality, affected by agricultural and industrial activities. The basin's cross-state location, straddling Virginia and North Carolina, adds complexity to its management. Organizations like the Dan River Basin Association (DRBA) and the Piedmont Land Conservancy lead efforts in conservation, education, and sustainable development. These initiatives are crucial for water quality restoration and habitat protection. Collaborative efforts between state agencies and local entities are essential in addressing the unique challenges posed by the watershed's geographical spread, ensuring its long-term ecological and cultural preservation.

Climate Impacts on Dan River Water Quality

The Earth's climate impacts the natural environment in many ways. One significant impact is changes in rainfall patterns leading to more intense storms and increased runoff. Stormwater runoff often carries dangerous pollutants, such as fertilizers, into waterways like the Dan River; nitrogen and phosphorus from these pollutants can then fuel algal growth. Since algae thrives in warmer water, longer warm seasons could lead to Danville experiencing more frequent and intense algal blooms which could impact the city's primary source of drinking water and recreational activities.



Map of Dan River Watershed

Source: Dan River Basin [Map of Watershed](#)



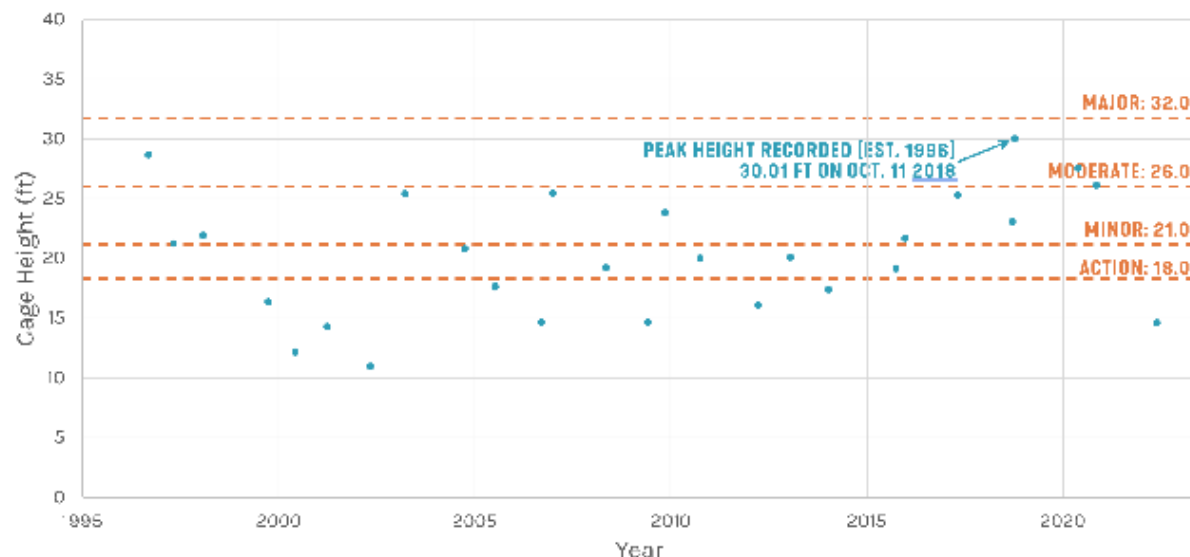
Flooding of the Dan River

While the Dan River offers many advantages, it also poses a risk to the community during storms. The river has experienced several large floods in recent years, most notably in 2018 when river levels reached 30 ft at the Dan River monitoring station. The City now maintains six flood monitoring stations across Danville to track water levels, with data integrated into Virginia's Flood Monitoring System Dashboard. Flooding adjacent to the river has caused significant damage to businesses and other infrastructure and threatened human health and safety.

Flooding in the region often results from heavy rainfall during intense storms in Danville or upstream of the Dan River, causing runoff that raises water levels and flows. Some of these impacts can be seen miles from the location of a storm event. The peak flow of the Dan River in the recent severe floods in 2018 was at 50,300 cubic feet per second (cfs). The worst flood recorded on the Dan River occurred on August 15, 1940, and resulted in peak flows of 75,000 cfs. It is important for existing structures within the 100-year floodplain to be protected to withstand a 100-year flood as a minimum and where feasible upgraded to protect for much more severe storm events. As much as possible, it is best to avoid new construction in the 100-year floodplain and where this is not an option, designs must include considerations of Base Flood Elevation (BFE), 100-year and 500-year flood levels.

Documented Flooding Events on the Dan River

Source: Data provided by USGS and FEMA



Riverine Flooding, illustrated in the graph to the left, occurs when the Dan River overflows its banks following prolonged heavy rainfall.

The flood categorizations for the Dan River at Danville are as follows:

- Action Stage: 18 feet
- Flood Stage: 21 feet
- Moderate Flood Stage: 26 feet
- Major Flood Stage: 32 feet

These levels indicate the severity of flooding and guide necessary response measures.



Types of Flooding in Danville

Flooding in Danville can manifest in various forms, often involving overlapping patterns of flash, riverine, creek, and urban flooding. Each type contributes to the city’s overall flood risk profile, creating a need for a comprehensive understanding and approach to managing these challenges effectively.

Riverine Flooding: Occurs when rivers like the Dan River overflow their banks following prolonged heavy rainfall or snowmelt. Between 2012 and 2022, the Dan River exceeded the Flood Stage on nine occasions, underscoring local flood management challenges, particularly regarding infrastructure’s capacity to handle high water levels.

Basement Flooding: A complex issue in Danville, often due to power outages, sump pump failures, or inadequate stormwater management systems. Comprehensive solutions are needed, including infrastructure improvements and community education on preventative measures.

Flash Flooding: Characterized by rapid inundation of low-lying areas within a short period, often due to intense rainfall. Flash floods are particularly dangerous due to their sudden onset and fast-flowing waters.

Danville has experienced instances where people were trapped or lost their lives in vehicles during flash floods, pointing to the need for heightened public awareness and emergency response strategies.

Creek Flooding: Smaller tributaries to the Dan River, like Fall Creek and Jackson Branch, are prone to flash flooding during intense local rainstorms. This form of flooding, although localized, can be severe enough to damage properties and pose risks to human life, including the destruction of residential structures in extreme cases.

Urban Flooding: Common in areas with extensive impervious surfaces, leading to water accumulation during heavy rains. This type of flooding often affects streets, parking lots, and basements.

Frequently affected roads identified by the engagement process

Gardner Street	Timberlake Drive	Trade Street	Goodyear Boulevard
Colquhoun Street	Riverwalk Trail	South Boston Road	Memorial Drive
Water Street	Riverside Drive	Commerce Street	River Street
Parker Road	Audubon Drive	Abreu Grogan Park	Anglers Park





Topographical Influences

At an elevation of approximately 531 feet above sea level, Danville's topography is characterized by rolling hills and substantial cliffsides that provide both a picturesque landscape and a set of challenges for development and infrastructure. With 182 feet of grade change between the city's lowest and highest points, Danville's varied elevation contributes to diverse microclimates and influences local water flow patterns, making certain areas particularly prone to the effects of heavy rainfall and potential flooding.

How Does Danville's Topography Contribute to Flooding

Danville's hilly terrain, sloping towards the river, exacerbates flash flooding risks, especially during heavy rainfall. This geographical feature, combined with changing climate patterns that potentially increase the frequency of severe weather events, contributes to the overflow of the Dan River and its tributaries, inundating low-lying areas. Runoff from impervious surfaces, poor drainage in dips or basins along roads, and areas along the river are particularly vulnerable to flooding. Additionally, debris accumulation at bridge structures, particularly aging infrastructure like the Norfolk Southern railway bridge, can obstruct water flow and increase upstream flooding risks.

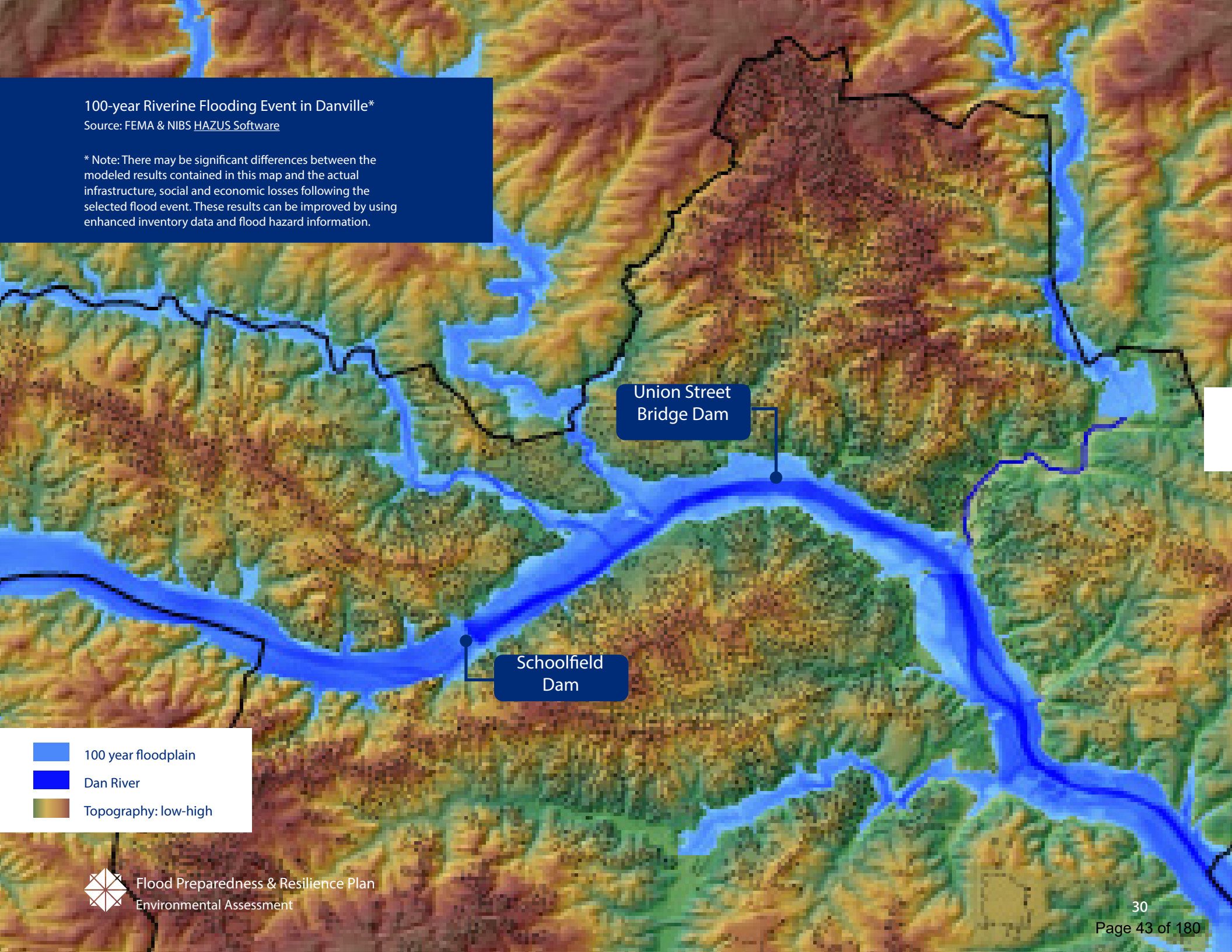
Areas of significant grade change are often particularly susceptible to surface erosion and high stormwater runoff. Recognizing the importance of stabilized riverbanks and the contribution of waterway sedimentation to increased flooding, Danville should conduct a comprehensive shoreline vulnerability assessment. This study should identify areas prone to erosion and evaluate sedimentation stability, allowing the prioritization of shoreline protection efforts and maintenance of the integrity of the river ecosystem.



100-year Riverine Flooding Event in Danville*

Source: FEMA & NIBS [HAZUS Software](#)

* Note: There may be significant differences between the modeled results contained in this map and the actual infrastructure, social and economic losses following the selected flood event. These results can be improved by using enhanced inventory data and flood hazard information.



- 100 year floodplain
- Dan River
- Topography: low-high



Soil & Geology

The ground on which Danville is built plays an important role in the city's resilience. The soil types and geology of Danville affect its susceptibility to flooding, as well as its ability to recover from flood damage. According to the USDA Web Soil Survey, Danville's soils are predominantly sandy loams – a composition that offers both advantages and challenges.

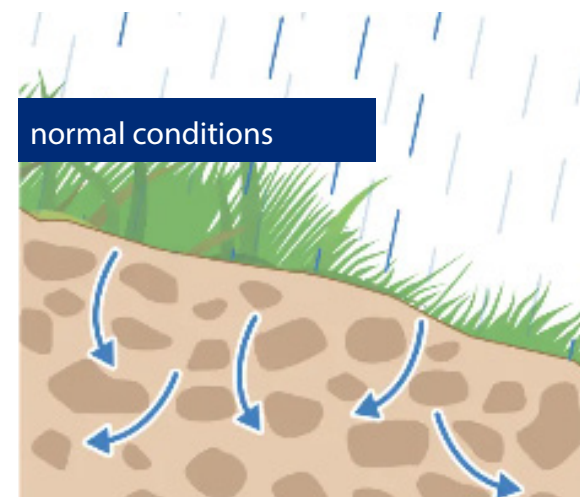
These sandy loams, with their high proportion of sand and moderate amounts of silt and clay, are generally well-drained and have good aeration. These characteristics can be beneficial for agriculture and certain types of development. However, these soil types are also prone to erosion and nutrient leaching.

The city's history of agriculture also plays a role in the quality of Danville's soil. Danville's urban development began in the late 1700s when the city's first settlers built the first structures at Wynne's Falls, which later became the site of its first tobacco warehouse that helped launch the city's growth. Years of intensive cultivation have, in some areas, led to soil compaction and structural weakening. This history affects how the land absorbs water today, potentially increasing runoff and flood risks in certain areas.

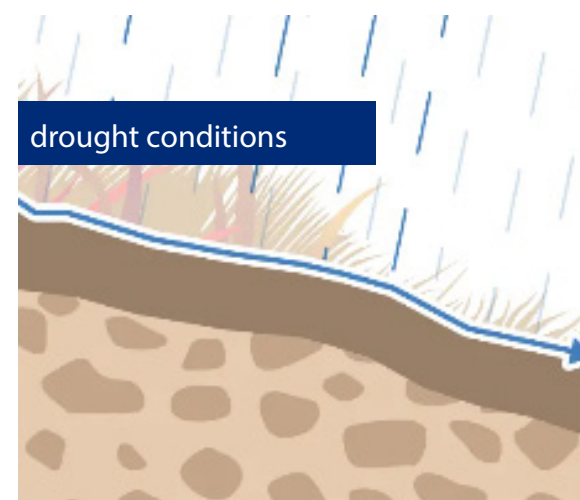
The slope of the land, combined with these soil characteristics, further influences flood vulnerability. Generally, the higher the slope, the more runoff and erosion occur, and the less suitable the land is for building and farming. Slopes also affect the soil depth, moisture, and temperature, which influence plant growth and diversity.

How Soil Responds to Rainfall

Source: BBC [Why Flash Flood Happens After Drought](#)



soil absorbs water like a sponge



soil repels water, leading to runoff



How Soil Responds to Rainfall

The diagram on the previous page illustrates how Danville's soil behaves during normal conditions versus drought conditions. In normal conditions, the soil acts like a sponge, absorbing water effectively. During drought, the dry soil can repel water, leading to increased runoff and potential flooding when rain does occur. Understanding this soil behavior is crucial for Danville's flood preparedness and water management strategies.



Understanding the Impact of Air Quality on Health

Source: American Lung Association [Air Quality Facts](#)

Air pollution can significantly affect our health, with changes in air pollution regulation or city foliage influencing rates of respiratory illnesses. Here are some key points to consider:

- Living close to industry or busy highways can put residents at greater risk for illness
- Air pollution can trigger heart attacks and strokes, potentially leading to early death
- Particle pollution can lead to asthma attacks and increased emergency room visits
- Poor air quality can lead to premature births and lower weight in newborns
- Changing climatological patterns can lead to increased wildfires

Air Quality

While Danville has been fortunate to enjoy good air quality, a changing climate may pose new challenges in this area. As temperatures rise, there may be an increase in ground-level ozone, a key component of smog. Additionally, the potential for more frequent wildfires in the region – a consequence of hotter, drier conditions – could periodically impact local air quality.

The Air Quality Index (AQI) is a color-coded index designed to communicate air quality based on ozone and PM2.5 measurements; this effort is a partnership between federal, state, tribal, and local agencies to provide real-time data to residents to help inform daily decisions. As a city with a population of just over 42,000, Danville is not required to report to AQI. The closest active monitoring stations for PM10, PM2.5, CO, NO2, SO2, and Lead are 20-70 miles away in Virginia and North Carolina.

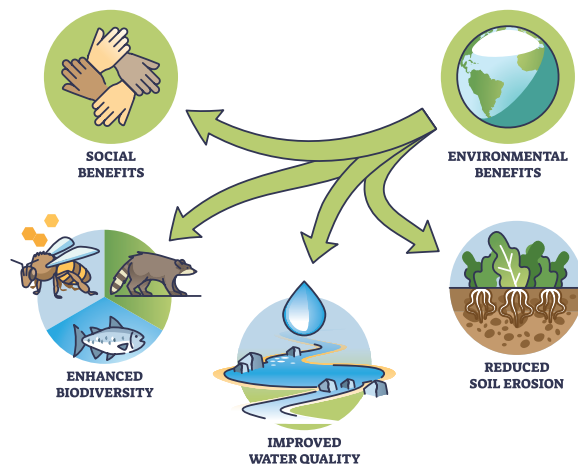
Although Danville is not required to report to the AQI due to population size, maintaining vigilant monitoring will be important as the climate changes. The City's Public Works or Environmental Services department, with support from the City Manager's office, could pursue EPA's Enhanced Air Quality Monitoring for Communities grants and establish partnerships with the Virginia Department of Environmental Quality or regional academic institutions for monitoring program development. The health of residents, particularly those with respiratory conditions, the young, and the elderly, may depend on the ability of the City to anticipate and communicate poor air quality conditions with residents.



Ecology

Existing parks and green networks in Danville play an important role in the city's culture, connectivity, and recreation; they are also an important part of Danville's local ecosystem. The city is making efforts to preserve natural habitats through projects like the Danville Riverfront Park, which will also provide an urban green space for visitors and serves as a venue for community events and gatherings.

Although the planning of open spaces looks to be promising, the incorporation of native species into parks and open spaces can specifically help to restore ecological conditions that will help mitigate flooding. Large trees, significant shrubbery, and plants that have stable root systems will help to anchor soil during times of major rainfall and offer protection against erosion. At the same time, increasing the tree canopy will help to reduce urban heat-island impacts by providing stable sources of shade during times of extreme heat.



Climate Conditions

Understanding how climate is affecting Danville can be accomplished by monitoring changing precipitation patterns and observing average seasonal temperatures. Looking at historical patterns can help to identify trends, and from these trends, projections can be created for what the middle and latter portions of this century will look like. It is also important to understand that precipitation historical patterns are largely deviating from future projections.

Climate projections can offer insight into lengthening warm seasons, changes in water supply, potential for flooding events, the intensity of summer heat, and other conditions that help communities better prepare for the future.

Precipitation Changes

Annual rainfall is on the rise. According to the Fourth National Climate Assessment, precipitation has increased somewhat and is projected to continue to increase in Danville through the 21st century. These changes are anticipated to occur across all four seasons with the greatest shift projected in winter and spring. On average, Danville is expected to have an increase of 2 inches of annual precipitation by 2050. While this projected increase in annual precipitation can contribute to overall flooding, the greater risk is the rise in high intensity storm events.

The character of rainstorms is also changing. In addition to increasing precipitation levels, the recorded number and intensity of high precipitation storms has been increasing over the past half-century. Furthermore, these storms appear to be getting stronger; from 1958 to 2012, the recorded precipitation during heavy storms increased by 27%. This trend is expected to continue. By mid-century, Danville is projected to have 2 more days annually that exceed the 99th percentile precipitation. This means that heavy rainfall is expected to occur more often and is more likely to occur in high intensity bursts. These changes coincide with increasing temperatures. A warmer atmosphere can hold more moisture, which can lead to more frequent and more severe rainfall events.



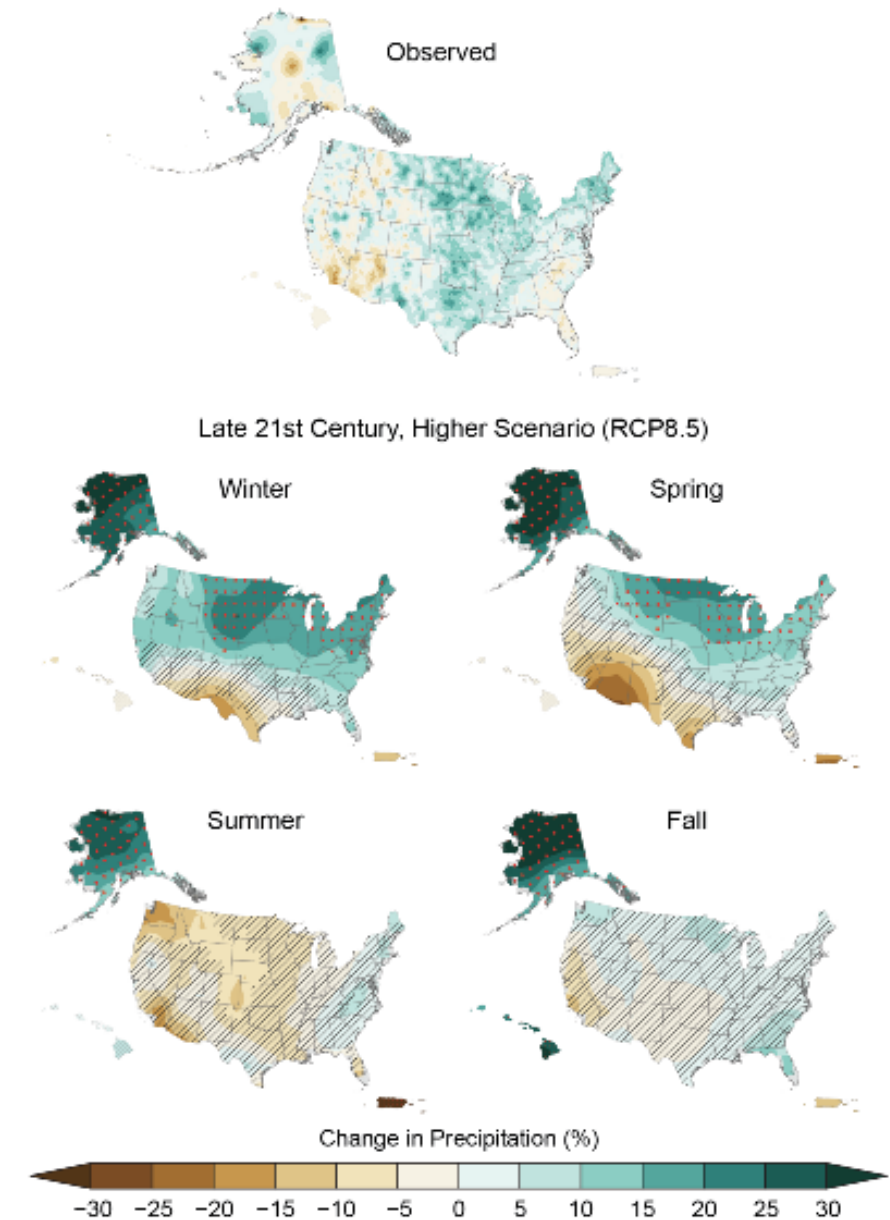
Both the increase in annual precipitation as well as the increase in high intensity storm events can cause shocks and stressors to Danville. From 1980-2024, there have been 109 confirmed weather and climate-related events with losses exceeding \$1 billion each in the broader state of Virginia. In Danville, events like the 2021 ice storm and severe storms, have all caused further impacts even beyond precipitation including strong winds and ensuing downed trees (and thereby damaged power lines). Thorough flooding and resilience planning measures outlined later in this report consider the long-term stresses associated with greater annual precipitation trends, and the increased likelihood of sudden, intense, and unanticipated precipitation events.

To better understand and respond to changing precipitation patterns, Danville should implement a targeted advanced rain gauge network that builds upon existing nearby monitoring stations at the Wastewater Treatment Plant and Sandy River. By adding 3-4 strategic locations across the city, particularly in flood-prone areas, this enhanced system would provide more detailed real-time precipitation data. This focused monitoring approach would strengthen the city's ability to predict and manage flood risks and inform Danville's long-term climate resilience strategies.



Observed & Projected Change | Seasonal Precipitation

Source: Fourth National Climate Assessment, Volume II. Revised 2021



Temperature Fluctuations

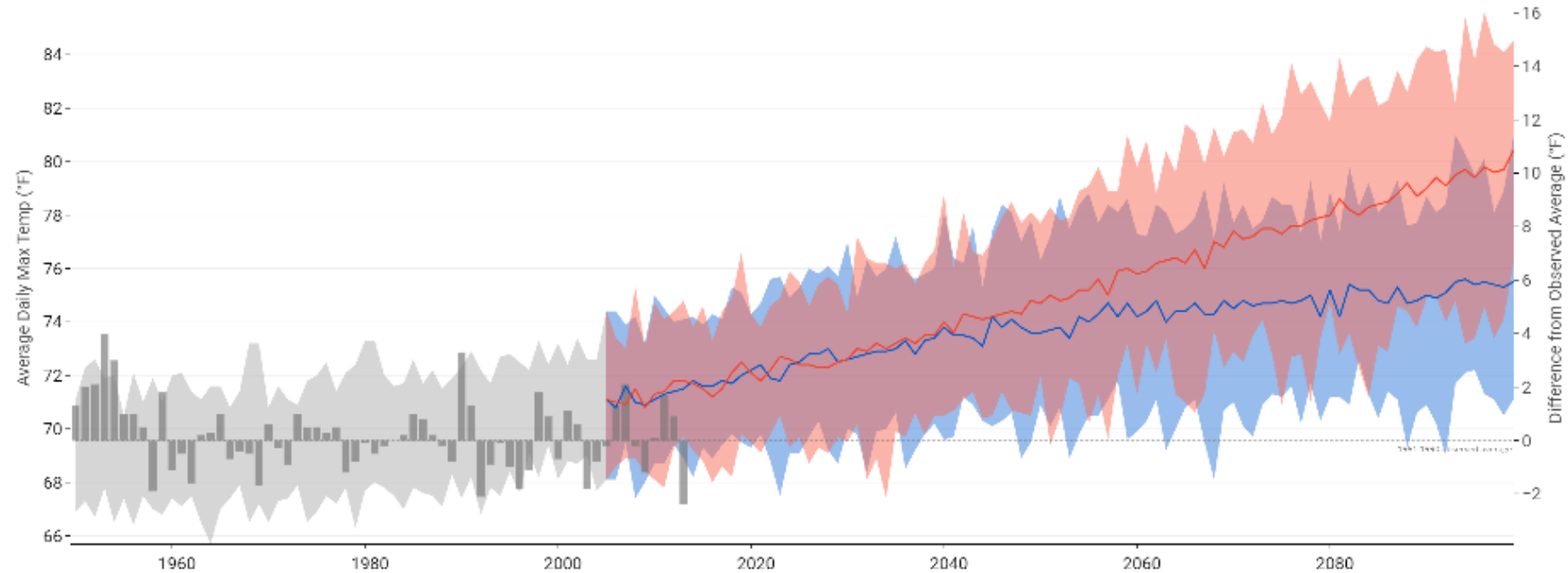
Danville is getting hotter. As Danville confronts the realities of a changing climate, understanding temperature trends is critical. Temperature not only dictates the comfort and safety of communities but also influences the sustainability of the natural and built environment.

Temperature Forecasts

Temperature serves as a fundamental gauge of a region's climate and directly affects the livelihood of its inhabitants, the health of its ecosystems, and the durability of its infrastructure. In Danville, projections indicate a significant uptick in temperatures. By the turn of the century, the Average Daily Maximum Temperature is expected to climb by 6-11 degrees Fahrenheit above the historical average. This rise in temperature presents an array of challenges and necessitates a proactive approach to urban planning and public health. The graph below visualizes this upward trajectory, underscoring the need for adaptive strategies to mitigate the heat's impact.

Average Daily Maximum Temperature (°F) | Danville, VA

Source: [NEMAC Climate Explorer](#)



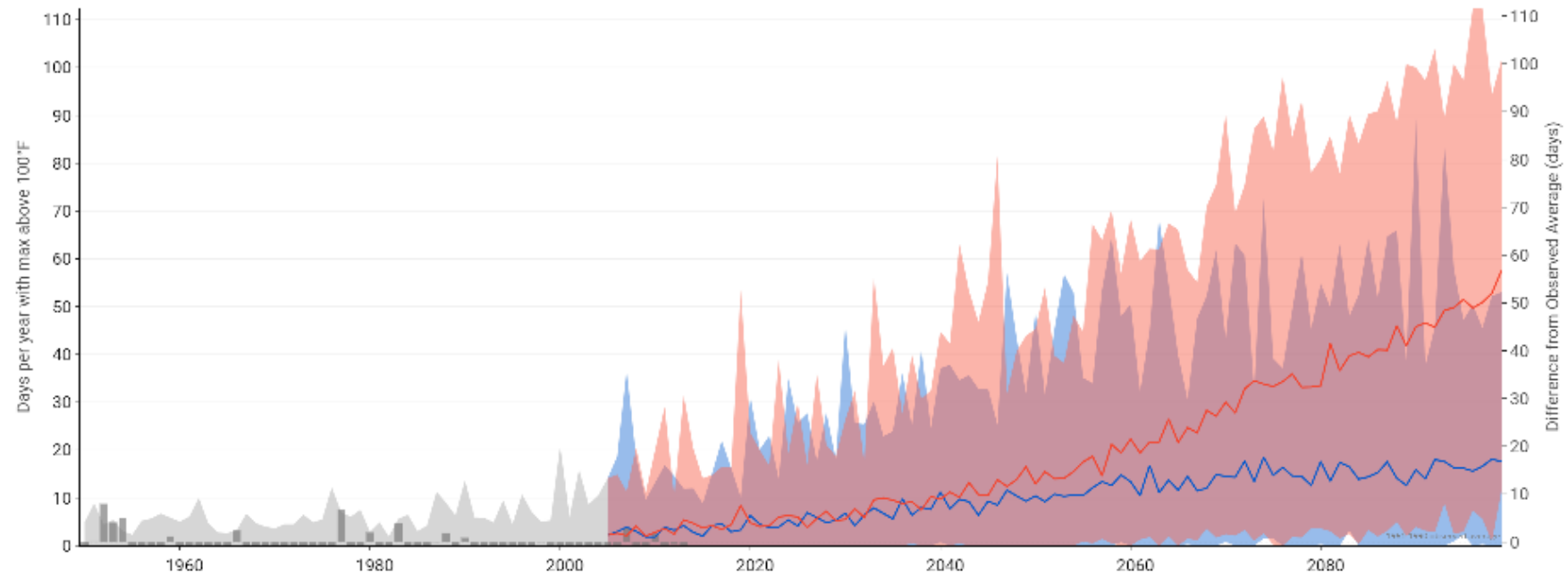
Days Over 100°F

Not only are average temperatures on the rise, but the number of days exceeding 100°F is also projected to increase. The graph below indicates that the frequency, intensity, and duration of extreme heat events are expected to rise significantly in the coming decades – between 18-56 days annually by the end of the century – posing potentially serious challenges for the city and its residents.

Although current discussions with local emergency responders indicate a relatively low number of annual heat-related health emergency calls, the anticipated increase in temperatures due to rising incidences of extreme heat days is a cause for concern. Extreme heat can impact people, infrastructure, and the environment in big ways. For people, high heat days can lead to heat-related illnesses and deaths, especially among the elderly, the poor, unhoused, and those suffering from chronic conditions. For infrastructure, high heat days can cause damage to roads, bridges, and buildings, as well as increase the demand for electricity and water, leading to higher cooling costs that particularly burden low-income households. For the environment, high heat days can lead to an increase in wildfires and drought, as well as affect the quality of air, water, and ecosystems.

Maximum Temperature Over 100°F | Danville, VA

Source: [NEMAC Climate Explorer](#)





Destination Danville: Eco-tourism & Volunteerism on the River

River programming and a strong campaign can attract visitors for activities like boating, fishing, hiking, picnics, and swimming. Educational signage, tours, volunteer cleanup efforts, and community events can promote regular engagement and help protect the Dan River's ecosystem.

3.3 Summary & Recommendations

This audit of flooding in Danville outlines the historical, current, and potential future flooding scenarios that impact the city. Analyzing past events, current vulnerabilities, and existing policies identifies gaps in flood management and helps to craft effective strategies to enhance Danville's resilience against flooding. This comprehensive audit is essential for a proactive approach to managing flood risks and ensuring the community's safety and well-being.

The city's topographical features, including its position at an elevation of approximately 531 feet above sea level and a notable grade change across its landscape, play a significant role in flood dynamics. The combination of rolling hills and cliffs not only contributes to the city's scenic beauty but also affects how water flows during heavy rainfall. This complex terrain, with its mix of steep slopes and lower basins, is particularly prone to rapid water accumulation, leading to increased flooding risks.

Flood management requires a multi-faceted approach, as no one solution can be used to achieve total flood resilience across all forms of flooding. Some considerations for developing an approach to flood management in Danville can be found on the following page.



Storms, Hurricanes, and Intense Precipitation: The city frequently faces severe storms, including hurricanes, that bring intense rainfall. These weather events lead to swift increases in water levels, overwhelming the floodplain and urban drainage systems. The need to account for hurricane-induced precipitation in urban planning and floodway management is critical for Danville's flood resilience.

Watershed-scale Challenges: The Dan River watershed covers an extensive area that spans multiple counties and states. This means that localized stormwater retention efforts, such as rain barrels, rain gardens, or permeable pavements, may not significantly reduce the risk of Dan River flooding. However, these efforts could help manage smaller creek or flash floods and basement backups that affect local communities. To address the larger-scale problem of Dan River flooding, a coordinated approach among all stakeholders in the watershed is needed and can be facilitated in large part by the City of Danville. Possible measures to consider are sustainable land use planning and floodplain restoration.

River Flows & Time Delay Rainfall to Streamflow Peak: The dynamics of river flow and the delay between precipitation and peak streamflow significantly affect flooding in Danville. The National Weather Service's Advanced Hydrologic Prediction Service provides forecasts for the Dan River at the STP near Danville year-round, considering both past precipitation and expected rainfall up to 48 hours in the future. These forecasts are crucial for understanding how rainfall translates into river flow and, subsequently, flood risks.

Impervious Surfaces: Danville's extensive impervious surfaces, particularly within its floodplains, significantly contribute to flooding. These hard surfaces impede natural water infiltration, causing rapid runoff accumulation and elevated flood risks in urban areas. Implementing strategies to reduce impervious cover in vulnerable zones is vital for mitigating flood impacts.

Stormwater Infrastructure Management and Ownership: Another challenge for stormwater management in the Dan River watershed is the ambiguity among private property owners regarding responsibility for storm infrastructure maintenance. Many streams, pipes, and culverts that convey stormwater runoff are located on private lands but are not properly maintained by the landowners. This contributes to localized flooding, erosion, sedimentation, flow disruptions, and water quality issues, impacting neighboring residences and public infrastructure. A clear and consistent policy for storm infrastructure ownership and maintenance is needed to ensure effective stormwater management and reduce flood hazards.

Balancing Recreation with Ecological Preservation: Activity along the river should be supported in an ecologically responsible and safe manner. By revisiting the engineering of the remaining low-head dams, danger zones for kayakers and swimmers can be diminished, and fish can more easily swim up and downstream (refer to the Danville Comprehensive Plan for suggestions regarding low-head dams).



4. Socioeconomic Assessment

Understanding social conditions is an important aspect of resilience planning. It helps identify social vulnerabilities, which are known to impact a population's ability to recover after a disaster.

Strong social connections ahead of an unanticipated event also play a significant role in resilience by reducing stress and enhancing the capacity to overcome challenges; healthy residents are more likely to have strong emotional and physical wellbeing, which makes them less susceptible to a sudden shock.



4.1 Community Engagement and Awareness

The core of building a resilient Danville lies not just in infrastructure and policy but also in empowering its residents through effective community engagement and education. Understanding the concerns and interests of the community is pivotal in tailoring programs and initiatives that resonate with the public. Engagement conducted throughout this planning process, including surveys and direct interactions, has encouraged residents to voice their interests and needs; these insights are crucial in shaping city-wide programming.

See the Economy Chapter in the 2024 Danville Comprehensive Plan for information and recommendations.



4.2 CRCI Indicators

The FEMA Community Resilience Challenges Index (CRCI) provides a strong framework for understanding and identifying the at-risk population when judging the degree of resilience a community exhibits. This method of evaluations consists of a composite index comprising 22 indicators derived from 14 peer-reviewed community resilience methodologies.¹ Danville's indicators reveal populations more vulnerable than those in the state of Virginia and the United States overall. Below is a table of select CRCI indicators highlighting these differences.

Select CRCI Indicators for Danville, Virginia and the U.S., 2021				
	Data Source	Danville	Virginia	USA
% without HS Diploma	ACS 2021_B12001: Educational Attainment for Population 25 Years and Over	15.8%	9.2%	11.1%
% Age 65 & Older	ACS 2021_A01001: Age	20.3%	15.5%	16.0%
% with a Disability	ACS 2021_B18101: Sex by Age by Disability Status	19.4%	11.9%	12.6%
% HH without a Vehicle	ACS 2021_A10030: Housing Units by Vehicles Available	14.6%	6.0%	8.3%
% Single Parent HH	ACS 2021_B09005: Household Type For Children Under 18 Years In Households (Excluding Householders, Spouses, and Unmarried Partners)	47.6%	23.7%	25.1%
% HH without a Smartphone	ACS 2021_B28001: Types of Computers in Household	23.1%	12.9%	13.5%
% without Health Insurance	ACS 2021_A20001: Health Insurance	9.4%	7.9%	8.8%
% Below Poverty Level	ACS 2021_A13005: Poverty Status in the Past 12 Months by Sex	23.1%	9.9%	12.6%
Median HH Income	ACS 2021_A14006: Median Household Income (In 2021 Inflation Adjusted Dollars)	\$38,904	\$80,615	\$69,021
Income Inequality (Gini Index)	ACS 2021_A14028: Gini Index of Income Inequality	.49	.47	.48



The variables in the previous table illustrate a broad range of indicators of social vulnerability. Each metric reflects a demographic characteristic with specific and measurable outcomes. For instance, individuals with lower incomes, particularly those in poverty, often have reduced access to community resources and are likely to reside in areas with less resilient infrastructure. Similarly, a high percentage of single-parent households indicates challenges in emergency situations due to limited support systems and resources.

4.3 Economic Landscape

FEMA's CRCI data highlights economic challenges and inequalities in Danville; the city's median household income of \$38,904 is in sharp contrast to both the Virginia state average of \$80,615 and the national figure of \$69,021. Furthermore, Danville's poverty rate of 23.1% is more than double that of the state and significantly greater than the U.S. nationally.

These discrepancies can significantly challenge the resilience of Danville and its communities. However, they also offer an opportunity for growth and transformation as Danville implements its Comprehensive Plan. Job training, internships, workshops, and economic diversification and development can reduce economic inequalities and enhance the city's resilience and support sustainability goals.



4.4 Summary & Recommendations

Community Engagement and Education

This section explores strategies and approaches that the City of Danville can adopt to continue to enhance public awareness, facilitate easy access to information, and foster an informed and participatory community.

Public Awareness Campaigns

Addressing the expressed interests of residents, such as home repair assistance, energy efficiency, and improved communication with City staff, is essential. Despite the existence of several beneficial programs and services, participation rates remain low. By initiating targeted public awareness campaigns, the city can significantly increase resident engagement and utilization of valuable resources like the Danville Home\$ave Program, SeeClickFix for reporting local issues, and the city's mass notification system for emergency alerts.

User-friendly Web Experiences

Updated search functionality for web resources can help residents navigate the Danville website. While people who are experienced with using technology may be able to easily find the information they are looking for, those who are not as savvy may have a hard time finding what services are available to them. An audit of the City's website and a short community survey can help identify some of the site's weaknesses so that a more accessible web experience can be created for everyone trying to use it.

Educational Visuals

Presenting information in a visual format with short blurbs of text helps people to find what they're looking for quickly while focusing on key details. Using graphics and symbols can also help provide explanations to people of all backgrounds, regardless of age, reading level, or even spoken language. Short-form content like this is also much more accessible for people using screen readers, as it allows them to find the information quickly without listening to entire pages of content.

Social Media

Another way to deliver important information to residents is through social media outlets. Using platforms like Instagram can help provide easily navigable and highly visual content. Story highlights can be saved to help users find information that they hope to find regularly, like service dates for emergency shelters, food pantries, upcoming events, assistance programs, available grant funding, and ways to connect with City staff.





Home Weatherization

Courses > Home Weatherization

3 Activities
15 Minutes
+ Intermediate

Start Course

Do you live in an older home and have high energy bills? This class will help you learn how to weatherize your home and find programs that will help you with home improvements and upgrades to inefficient appliances.

Activities In This Course

Click on a lesson below to begin

1 Understand Your Bill Learn how to read your energy bill. Understand what charges and rates are, how billing works, and what programs are available to reduce your cost. 01:00 Start	2 Do It Yourself Learn some easy DIY weatherization methods that will help protect your home and your wallet. 03:00 Start	3 Assistance Learn about important resources for the weatherization industry that might be available to you. 00:45 Start
--	--	---

The Ruby B. Archie Public Library's Learning Resources webpage offers a great opportunity for residents to find information about home weatherization, energy use, and how to prepare for extreme weather. The example above is one way that this information could be integrated into existing digital learning resources.





Fostering Community Preparedness

After gaining an understanding of programs, incentives, and initiatives, progress can be made toward community preparedness. This involves actions like protecting homes against flooding, ensuring property is insured against damages, having the right equipment on hand, and having a plan for what to do in the case of an emergency.

Proactive Flood Mitigation

Flooding is often the result of drains being unable to efficiently manage water due to blockages from leaves and litter. Regular maintenance of street drains and culverts, especially prior to an impending storm, should be conducted to ensure they are clear of debris and able to perform to the expectations to which they were designed.

Home and business owners should make sure they are performing routine inspections of their gutters and downspouts to ensure they are clear of debris. Identifying and addressing areas around the perimeter of the building that slope toward the foundation can help prevent water from pooling and creating costly damage.

See the Community Chapter in the 2024 Danville Comprehensive Plan for information and recommendations.

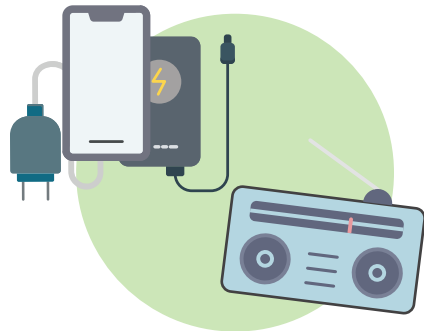


Household Resilience Planning

Insurance plans often do not cover sump pump replacement or water damage due to sump pump failure; it is important to be aware of what insurance plans are willing to cover so that it does not come as a surprise when damage claims are refused after an event. Property owners should take the time to make sure basement sump pumps are operating properly and that a generator or emergency backup sump pump system is ready should a power outage occur.

All equipment such as chainsaws, lighting, and power tools should be tested to make sure they are in good working order, free of rust, and are easily accessible. Necessary fuel sources should be available for any tools that may be needed in an emergency. Ensure all batteries are charged and ready for use.

Furthermore, to enhance community resilience, Danville should consider programs to fund residential backup generators for high-risk populations. This initiative could ensure that vulnerable residents, such as the elderly or those with medical needs, have access to power during outages caused by extreme weather events.



Access to
Communication



Home & Vehicle
Power Backup



Tools & Safety
Equipment



Medical Kit &
Information





Strengthening Community Lifelines Networks

Having networks in place prior to a disaster can relieve some of the stress of having to locate assistance and resources in the midst of an emergency. FEMA has developed a framework and toolkit for creating this network, called Community Lifelines. This network involves all aspects of emergency response and recovery including: safety and security; food, hydration, and shelter; health and medical; energy; communications; transportation; hazardous materials; and water systems. Creating this community lifeline network allows for better coordination between emergency response, City staff, members of the public, and local organizations. With a well-organized disaster response network, all agencies know their roles and responsibilities and can act with immediacy and effectiveness to minimize damage and ensure all members of the community are safe and supported during and following an event.



Economic Opportunities

Focusing job creation and skill development in green and sustainable industries can help transition Danville's economy into one that is diversified and future focused. People working in industries that are becoming obsolete due to technological advances, the expansion of the gig economy, and those who are in careers that are dependent on unsustainable materials will need to explore options for evolving their careers to keep up with these changes. Job development training, internships, and workshops can help provide these residents with the skills needed to advance their careers while also securing their ability to continue working well into the future.

Embracing a sustainable future includes more than just supporting careers related to green tech, renewable energy, and the electrification of cars, it also includes encouraging businesses within Danville to source locally, find ways to use waste heat and recycled material as a resource, and develop circular practices focused on reducing single-use items.





5. Infrastructure Assessment

Danville's infrastructure network is core to the city's functionality and resilience. This section provides an overview of the current state of key infrastructure systems, including water management, power and gas distribution, transportation networks, and buildings. Understanding the existing conditions and challenges of these systems allows for the identification of areas of vulnerability and opportunity for enhancement.

Danville's infrastructures were initially built to support the development of the textile and tobacco industries. Transportation routes were the first major infrastructure projects developed, most notably with the connection of the railroad between Richmond and Danville in the mid-1800's. Railway continued acting as a major development driver through the 1900's, which caused most of the ensuing development and infrastructure to be built along the Dan River itself. The loss of the textile and tobacco industries caused the development of infrastructure to remain rather stagnant until recently, as the largest driver behind infrastructure funding is oftentimes economic development.

The large projects like the casino, Riverfront Park, and business parks that are discussed in the Danville Comprehensive Plan indicate a need for upgrading many infrastructure types in the city, but most substantially, the water management systems and the energy supplies.



5.1 Existing Infrastructure & Systems

Water Systems

Danville's Dams

The National Inventory of Dams includes information about the location, classification, and emergency preparedness related to these structures. The health of the dams is important for preventing flooding by controlling the amount of water that flows downstream. Hazard potential for many of the dams is undetermined. Schoolfield is classified as a Significant potential hazard, however its condition has been determined satisfactory. The Boatwright Dam has been rated as a Low potential hazard, though the condition has not been assessed.

The Long Mill Dam was removed as of July 2024 due to the risk to resident safety and its impact on local fish and wildlife. There are six remaining dams within city limits, three of which are along the Dan River; of the six, two dams have been evaluated for hazard potential. Schoolfield is the only structure to have an Emergency Action Plan.

See the Infrastructure Chapter in the 2024 Danville Comprehensive Plan for information and recommendations.

Dam Inventory Danville, Virginia

Schoolfield	HPC: Significant
	EAP: Yes
	Primary Purpose: Hydroelectric
Boatwright	HPC: Low
	EAP: No
	Primary Purpose: Recreation
Lpi	HPC: Undetermined
	EAP: No
	Primary Purpose: Other
South of Danville	HPC: Undetermined
	EAP: Not Required
	Primary Purpose: Irrigation
Boatwright #1	HPC: Undetermined
	EAP: No
	Primary Purpose: Irrigation
Riverside	HPC: Undetermined
	EAP: No
	Primary Purpose: Hydroelectric

Sewer Systems & Pipes

The Public Works Sanitation Division is responsible for cleaning, inspecting, and maintaining storm drains and approximately 380 miles of sanitary sewer lines. This includes cleaning drains from publicly owned culverts and drainage ditches within the right-of-way during periods of heavy rain; Public Works is not responsible for clearing drainage pathways on privately owned properties.

During the engagement process, residents expressed uncertainty about responsibility of maintenance and upgrades for infrastructure located on their property. This has led to drainage problems that affect the community on a larger scale; common issues that have been identified include:

- corrugated metal pipes past the end of their functional life
- collapsed or cracked pipes under structures
- undersized pipes
- debris built up on the inlet or outlet of pipes
- lack of cleaning and maintenance
- improper pipe installation

Stormwater Management

Danville has a stormwater management system that is separate from its sewer system. Stormwater is discharged directly into the environment rather than being treated at the Danville Water Treatment Plant. A separated stormwater system is useful in areas with greater rainfall, as it reduces the amount of sewerage to be treated and eliminates unwanted overflow events. As part of a Municipal Separate Storm Sewer System (MS4), Danville is required to maintain a stormwater management program that includes pollution prevention, treatment techniques, monitoring, and other measures to ensure stormwater is not introducing harmful contaminants into the environment.



Power and Gas

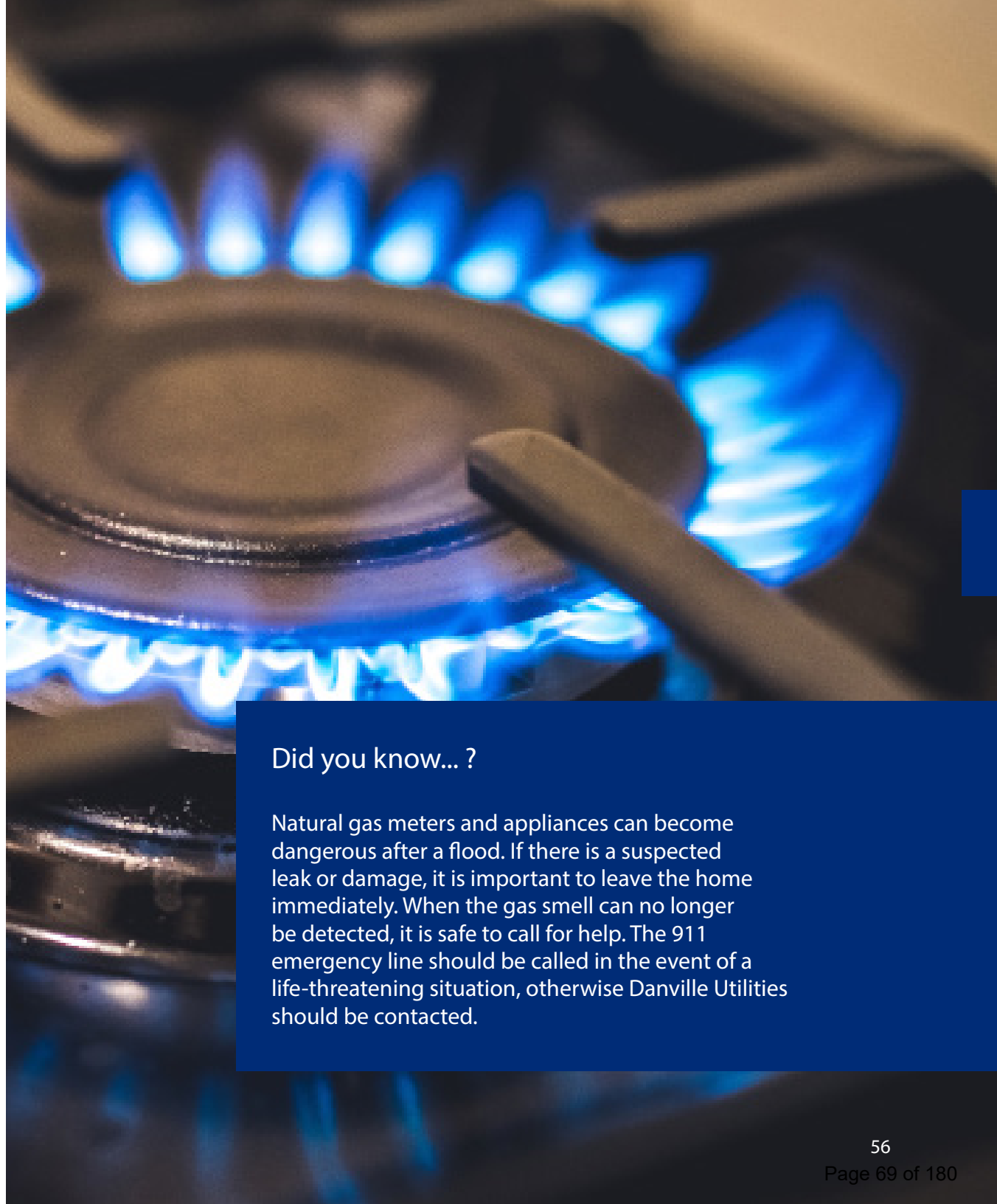
As of 2022, Danville's residential heating fuel is sourced mostly from electricity and utility gas, with only 7% of residents relying on alternative fuel sources such as wood or kerosene. This reliance on centralized energy infrastructure emphasizes the importance of ensuring these distribution systems are resilient, reliable, and sustainable.

Danville's power distribution network consists of a mix of overhead and underground lines, with the majority being overhead, particularly in residential areas. As of 2023, only 5% of Danville Utilities' electrical lines are underground (Source: Danville council member powers idea to use casino cash to bury more utility lines (godanriver.com)). Overhead installation of lines, while cost-effective, leaves the system vulnerable to storm-related outages caused by falling trees and wind damage. During focus group sessions, first responders cited response delays to managing downed power lines. These delays led to concerns around public safety, access, and the diversion of personnel from responding to other emergency situations while they maintained a perimeter at these dangerous sites. During severe weather events, electrical systems in particular face potential disruptions. High winds, ice accumulation, fallen trees, and flooding pose risks to power lines and transformers, while extreme temperatures can strain the capacity of the system. The city's emergency response plans include protocols for rapid assessment and restoration of critical services in the event of storm-related outages.

Undergrounding power lines, especially in areas that are more at risk including those that flood more often can mitigate the risk fallen electric lines pose to power supply and public safety. Electric lines and transformers inside substations located in the 50 and 100-year floodplains must be prioritized for undergrounding and flood protection measures. Danville Utilities' Power and Light division has been gradually working on undergrounding power lines in critical areas to improve resilience across the city. While this process can be lengthy, this endeavor requires strategic and careful planning including the need for identification of feasible underground utility routes so that power is always maintained for customers.



The natural gas distribution system, managed by the city-owned utilities under the Water & Gas operating division, serves a significant portion of Danville's residents and businesses. The system's infrastructure includes a distribution network of underground pipes, which are less susceptible but not entirely safe from storm damage when compared to overhead power lines. Flood water can cause erosion and uprooting of trees which could expose pipes to damage from fallen trees and debris. Extreme cold can also cause gas pipes that are at risk to leak or break if not maintained properly.



Did you know... ?

Natural gas meters and appliances can become dangerous after a flood. If there is a suspected leak or damage, it is important to leave the home immediately. When the gas smell can no longer be detected, it is safe to call for help. The 911 emergency line should be called in the event of a life-threatening situation, otherwise Danville Utilities should be contacted.



See the Transportation Chapter in the 2024 Danville Comprehensive Plan for information and recommendations.



Transportation and Access

Two four-lane highways, US Highway 58 and US Highway 29, run along the southern border and cut through the east side of the city providing access to nearby communities. Other major roads include Main Street, Central Boulevard, Memorial Drive, and Riverside Drive. Along with the roads and streets throughout the city, there are 41 bridges in Danville which cross the Dan River. During input sessions, Danville's first responders cited few concerns about emergency vehicle accessibility outside of narrow residential streets with on-street parking. Of particular concern is the Norfolk Southern railway bridge, where debris accumulation at bridge piers contributes to upstream flooding. The City is working with state and federal agencies on potential bridge replacement to address both flood risk and structural concerns that could impact river health.

Buildings

Structures contribute to flooding risks by introducing impervious surfaces that do not absorb or slow the rate of water flow. Stormwater runoff from these structures can pool in low-lying areas and contribute to drain overflows. Additionally, improperly connected and unmaintained gutter systems can fail to direct stormwater away from buildings and other structures, contributing to foundation erosion and basement flooding.

The residential sector in Danville faces particular challenges in terms of flood resilience. Many older homes were built before current flood-resistant construction standards were implemented, while others may have deteriorated flood resistance due to long-term wear-and-tear, deferred maintenance, or alteration of water flow patterns in the surrounding landscape. This leaves homes more susceptible to water intrusion and structural damage during flood events. Additionally, a significant portion of Danville's housing stock is comprised of rental properties, where tenants may have limited ability to implement flood-proofing measures, and landlords may lack incentives to invest in such improvements.

Commercial and public buildings in flood-prone areas also face risks, which have led to economic disruptions and may contribute to interruptions in essential services during flood events. The city's building codes and zoning regulations play a role in managing these risks for new and substantially modified construction, but addressing vulnerabilities in existing structures remains a significant challenge.

The built environment of Danville, including homes, businesses, offices, shopping centers, and other structures, both contributes - and is vulnerable - to flooding.



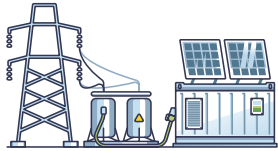
5.2 Utility Management and Emergency Response

Danville Utilities plays a central role in the city's infrastructure resilience and emergency response capabilities. As the operator of all four major utilities (electricity, natural gas, water, and wastewater), Danville Utilities is uniquely positioned to coordinate comprehensive responses to infrastructure challenges during emergencies.

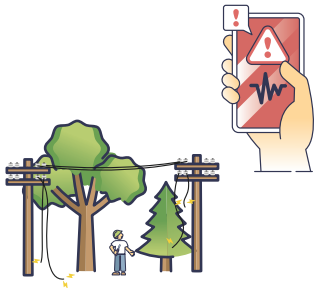
A key component of Danville Utilities' emergency preparedness is its participation in the Region III FEMA Mutual Aid Agreement. This agreement connects Danville to a national network of over 1,100 utilities, facilitating cooperation during natural disasters. When local resources are overwhelmed, Danville can request assistance through this network, specifying needs in crews, skills, equipment, and materials. This mutual aid system significantly enhances the city's ability to restore power and other critical services rapidly in times of crisis.



Despite these robust support systems, discussions with city staff and emergency responders suggested that Danville Utilities faces several challenges in emergency response:



Power Distribution: The increasing frequency of severe storms has made power outages more difficult to manage. There is a recognized need for enhanced power distribution response measures and improved backup power systems.



Communications: Effective communication during emergencies is vital. Any lapses can lead to delays and mismanagement during critical times.



Workforce Capacity: The physical availability and capability of crew lines to respond swiftly to multiple simultaneous emergencies is an ongoing challenge.

Scalability: Scaling response efforts to match the severity of emergency events is logistically complex and resource-intensive.

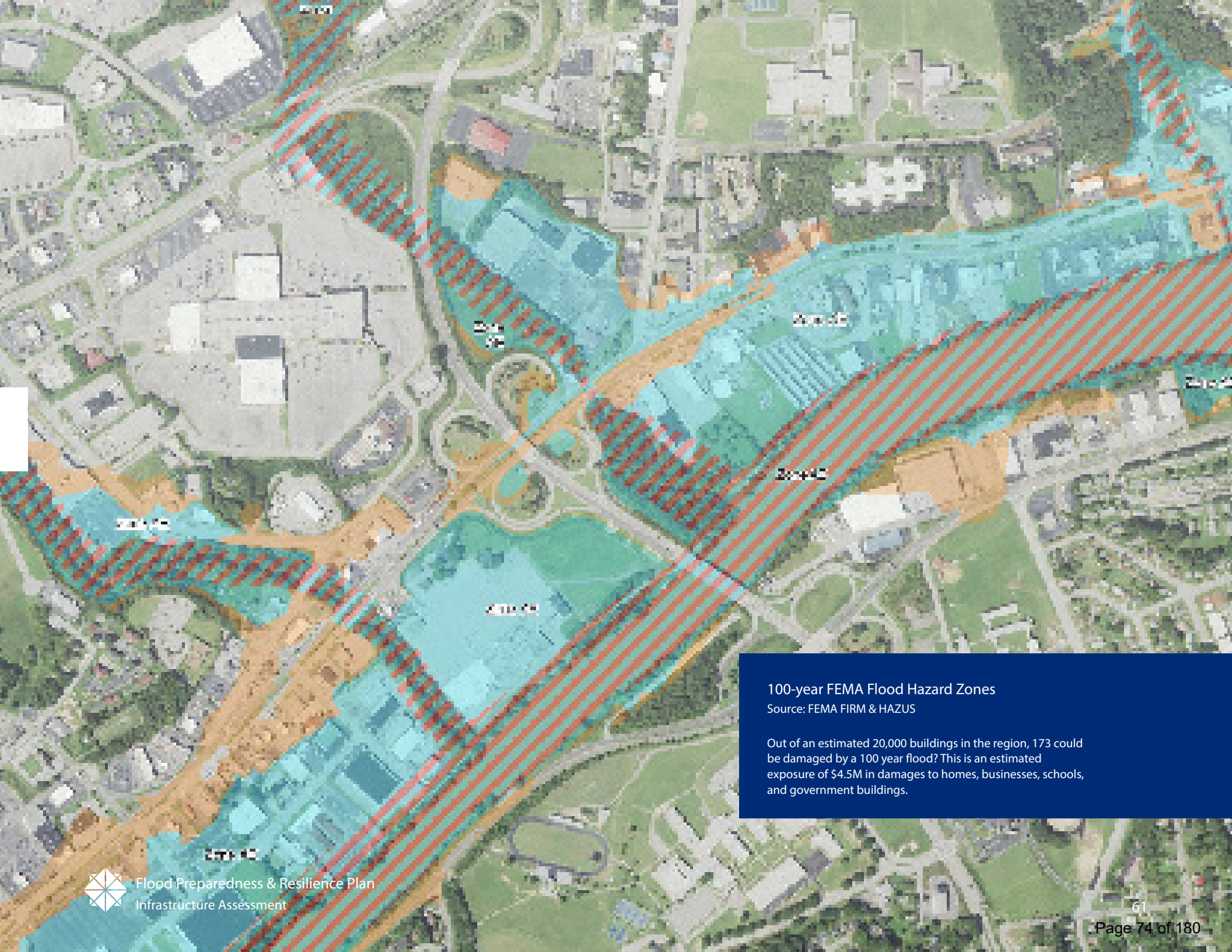
Staffing: Attracting and retaining skilled personnel, particularly those with expertise in climate adaptation, is key to maintaining a ready response team.



Budget Constraints: Financial limitations can impede the utility's ability to upgrade infrastructure, invest in new technologies, or expand its workforce.

Addressing these challenges proactively can not only strengthen Danville Utilities' operational resilience but also solidify its role as a reliable partner in the broader mutual aid network, prepared to both offer and receive assistance when needed.





100-year FEMA Flood Hazard Zones

Source: FEMA FIRM & HAZUS

Out of an estimated 20,000 buildings in the region, 173 could be damaged by a 100 year flood? This is an estimated exposure of \$4.5M in damages to homes, businesses, schools, and government buildings.



5.3 Summary & Recommendations

As Danville plans for the future, enhancing the resilience of its infrastructure systems is paramount. The recommendations in this section address major vulnerabilities while leveraging best practices and emerging technologies. These strategies aim to both mitigate current risks and to prepare Danville for future challenges due to a changing climate and increasing urbanization.

Water Management Enhancements

Like many cities in America, Danville's stormwater is sized for historical rainfall patterns. Management of water quality infrastructures can help to stabilize the floodplain itself, but also help to minimize downstream debris originating from storm events. When considering increased precipitation patterns, it is important for Danville to maintain a healthy water management system (sewer system and piping) as well as managing the upstream impacts of water that stem from the Dan River. With these future precipitation projections in mind, Danville should consider upsizing its stormwater piping systems to ensure that water is able to be evacuated in a timely fashion. Furthermore, it is important for Danville to continue to monitor and improve the functionality of the city's dams to reduce the likelihood of future dam failure.





Smart Infrastructure Integration

Technological advances over the last several decades have led to the development of tools for monitoring and tracking activities, including water and energy. By using smart technologies and data metrics, inefficiencies can be identified and allow for better decision-making about how and when resources are used.

Incorporating smart infrastructure can significantly enhance Danville's resilience. This includes:

Water Management Systems: Implementing advanced sensor networks and automated controls in the city's water management systems can significantly improve response to flooding events. These systems can monitor water levels in real-time, control floodgates, and provide early warnings to residents and businesses in flood-prone areas.

Resilient Power Grids: Developing a smart power grid with the ability to provide redundant power supply, isolate problems, and integrate renewable energy sources can reduce the impact of outages. Incorporating energy storage systems and microgrids, especially in critical areas like hospitals and emergency services, will enhance the city's resilience during disasters.

Smart Urban Planning Tools: Utilizing Geographic Information System (GIS) for urban planning can help identify flood-prone areas, plan effective land use, and assess the impact of proposed developments on flood risks. Integrating these tools with climate data can guide sustainable development and infrastructure upgrades.



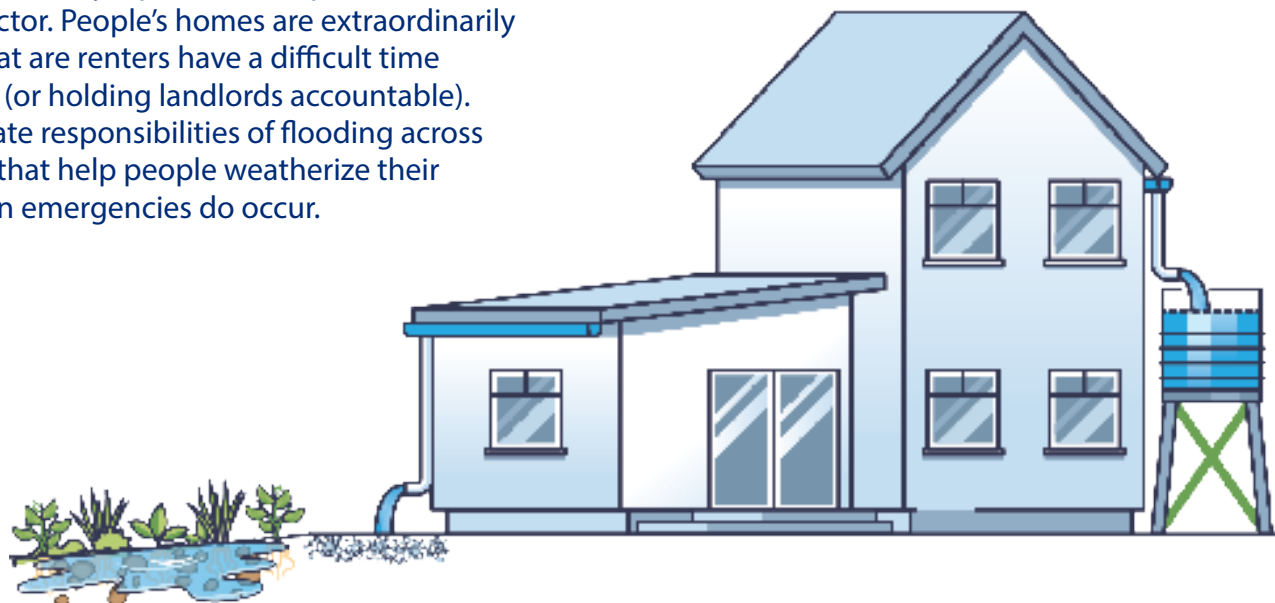


Access Route Resilience

While Danville's first responders indicated there are no major access difficulties regarding roadways, downed trees and powerlines can sometimes become a problem following major storms. Regular maintenance of street trees and monitoring their proximity to power lines can help to prevent major branches from becoming obstacles for vehicle access. Proactive maintenance and engineering solutions focused on water diversion can help to ensure access routes are clear. Effective strategies include monitoring the structural integrity of all roads and bridges, soil stabilization along roadways, ensuring drainage systems are functioning properly, and redirecting runoff.

Building Resilience

As noted in the 2024 Comprehensive Plan, a major portion of exposure of the built environment is in the residential sector. People's homes are extraordinarily susceptible to flooding, and residents that are renters have a difficult time finding the funds to fix their own homes (or holding landlords accountable). It will be important for the city to delineate responsibilities of flooding across rights-of-way, and to develop programs that help people weatherize their homes, but also, provide pumps for when emergencies do occur.



Enhancing Utility Resilience and Emergency Response

To address the challenges faced by Danville Utilities and improve overall infrastructure resilience, the following recommendations are proposed:

Power Distribution Enhancement: Implement improved power distribution response measures and backup power systems to better manage the increasing frequency of storm-related outages. Continue to identify opportunities to bury powerlines in high-risk areas.

Regional Coordination: Develop stronger coordination with regional utilities for disaster planning and response, enhancing the ability to scale efforts during major emergencies.

Emergency Preparedness: Establish regular check-ins with the local or nearest Homeland Security office to ensure emergency preparedness levels are up to date and aligned with best practices.

Right-size Staffing: Increase staffing capacity to address climate adaptation issues, potentially through programs like Climate Corps or similar federal or state-level support organizations.

Strategic Budgeting: Review and adjust utility pricing structures to reflect the level of resilience needed for future system enhancements. Continue pursuing grant opportunities for infrastructure improvements.

Communication Systems: Invest in robust communication systems to minimize delays and streamline management during critical times.

Workforce Development: Develop programs to attract and retain skilled personnel, ensuring a ready and capable response team for emergencies.





The Future of Utilities

Source: [Utility Analytics Institute](#)

- Many seasoned utility professionals are reaching retirement, making it critical to ensure this industry knowledge is passed down to a new generation of trained workers
- Renewables, energy storage, and smart grid technology can help to provide stable electricity by diversifying power sources
- The maintenance and upgrading of critical infrastructure becomes even more important as Danville experiences more frequent extreme weather



6. Governance Assessment

While Danville is positioned to gain economic advantage as the city becomes more densely populated and interconnected, it is also likely to encounter increasingly complex issues related to social management. It is therefore integral to grow the city's capacity to sustainably manage both anticipated and unforeseen risks along with the city's population.

Good urban governance is a multifaceted concept that can improve the quality of living conditions for residents. The influence of city governance can accelerate and strengthen how a city mitigates risks and rebounds from adverse situations; this includes convening, engaging, and involving stakeholders, guiding and steering policies, providing resources, demonstrating best-practices, and making informed decisions.

Functional and focused governance is a prerequisite for designing and executing successful resilience initiatives in Danville. It is imperative that governance gaps are filled, modified, and coordinated to address Danville's specific current and future challenges. The following summarizes the current coordination and management of the specific systems detailed previously in the infrastructure assessment as well as Danville's emergency response network.



6.1 Current Governance Structures

Danville's governance structure for resilience-related policies and regulations involves several key entities:

City Council: Holds the ultimate authority for adopting and amending city ordinances, including those related to floodplain management, stormwater control, and sustainable development.

Planning Commission: Advises the City Council on matters of land use planning, zoning, and development regulations, playing an important role in integrating resilience considerations into the city's planning framework.

Department of Community Development: Oversees the implementation and enforcement of zoning ordinances, building codes, and other development regulations that impact the city's resilience.

Public Works Department: Responsible for implementing and enforcing stormwater management regulations and maintaining critical infrastructure.

Danville Utility Commission: Shapes policies related to utility management, which help support infrastructure resilience.

Emergency Management Agency: Housed within the Fire Department, this agency primarily focuses on response while also informing policy decisions related to disaster preparedness and resilience.

Danville does not have dedicated positions specifically for resilience policy development and implementation, such as a Resilience Coordinator; the city currently relies on existing staff across various departments to address resilience-related policy needs.





Utility Management

Danville is unique in that it is the only municipality in Virginia to operate all four major utilities: electricity, natural gas, water, and wastewater, in addition to telecommunications services. These services are managed by Danville Utilities, the official department responsible for utilities in the city. The city provides water, gas, electricity, refuse collection, and some telecommunications services for its residents, while additional telecommunications services are provided by private companies.

Guiding the strategic direction of these utilities is the Danville Utility Commission, a seven-member advisory board to the City Council. This commission plays a role in shaping utilities policies, recommending utility consumption rates, suggesting code amendments, condemning public right of way, and overseeing the budget for the Department of Utilities.

Danville Utilities also plays a crucial role in emergency response through its participation in the Region III FEMA Mutual Aid Agreement. This agreement connects Danville to a national network of over 1,100 utilities, facilitating cooperation during natural disasters. When local resources are overwhelmed, Danville can request assistance through this network, specifying needs in crews, skills, equipment, and materials.



Stormwater Management

Danville's approach to stormwater management is guided by its participation in the Municipal Separate Storm Sewer System (MS4) Program. This federal mandate, driven by requirements from the Environmental Protection Agency under the Clean Water Act, requires urbanized areas to manage their stormwater discharges through a VSMP (Virginia Stormwater Management Program) Permit. This permit obligates the MS4 to develop and implement a comprehensive Program Plan, targeting the reduction of pollutant discharges from their storm sewer systems to the maximum extent possible.

The MS4 Program Plan is built around six minimum control measures:

- Public Education and Outreach
- Public Involvement and Participation
- Illicit Discharge Detection and Elimination
- Construction Site Stormwater Runoff Control
- Post-Construction Runoff Control
- Good Housekeeping and Pollution Prevention

Each of these measures is supported by specific Best Management Practices (BMPs) and measurable goals.





Emergency Management

At the core of Danville's emergency response is the Emergency Operations Plan (EOP), a comprehensive document that outlines how the city prepares for, responds to, and recovers from disasters. Updated every four years as required by Virginia law, the EOP is a living document that evolves based on experiences, lessons learned, and changing environmental conditions.

The EOP designates clear roles and responsibilities within the city government. The City Manager serves as Director of Emergency Management, while the Fire Chief acts as the Coordinator of Emergency Management. This structure ensures that Danville has experienced, knowledgeable leaders driving response during crisis situations.



6.2 Intergovernmental Coordination

At the heart of effective emergency management lies an important interplay between local, state, and federal entities. Each level of government collaborates to safeguard lives, property, and community well-being before, during, and after crises. Each has its own planning and preparation requirements, funding, programs, and resources. In Danville this cooperative effort between Danville, the state of Virginia, and the federal government ensures comprehensive and coordinated preparation and response to disasters.

At the state level, the Virginia Department of Emergency Management (VDEM) provides support in planning, training, and assisting local governments during emergencies. Danville, located in VDEM's Zone 6, benefits from this regional approach to emergency management.

Complementing the VDEM is the Virginia Department of Conservation and Recreation (DCR). The DCR administers the Community Flood Preparedness Fund, which has supported many of Danville's flood mitigation efforts, prioritizing community-scale hazard mitigation activities that use nature-based solutions to reduce flood risk. In 2022, the City of Danville was awarded \$368,000 for flood mitigation as part of the state's Round 3 Supplemental Grant Awards.

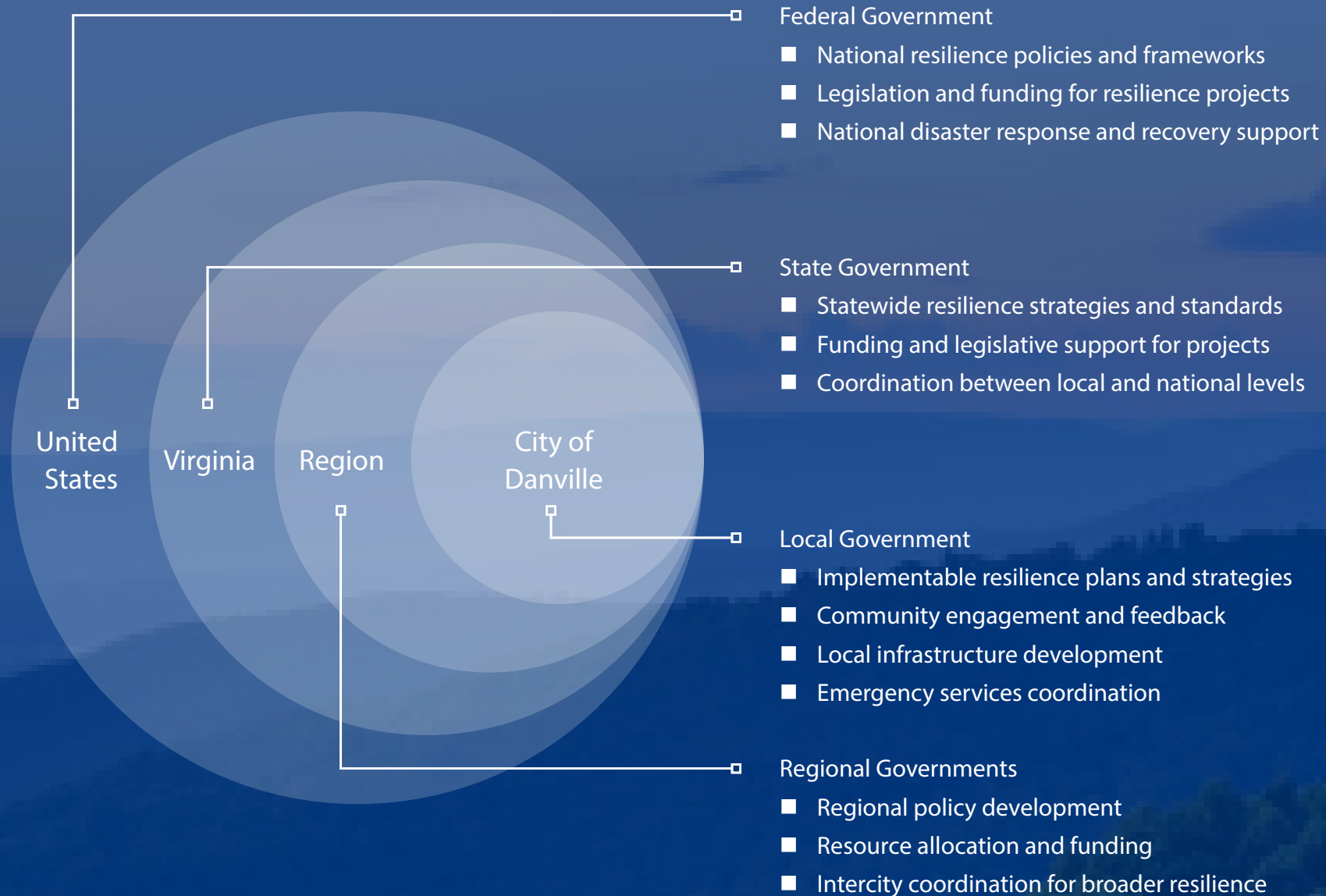
At the federal level, Danville's approach to flood risk management is significantly influenced by its relationship with the Federal Emergency Management Agency (FEMA) programs. FEMA oversees critical initiatives like the National Flood Insurance Program (NFIP) and the Community Rating System (CRS).

Danville participates in the NFIP, which is essential for communities at risk of flooding. This program ensures that residents, particularly in flood-prone areas, have access to flood insurance. Participation in the NFIP is a significant step in acknowledging and preparing for flood risks. Danville does not yet participate in the CRS program, but doing so could provide significant benefits for residents, including discounts of 5-45% on flood insurance premiums and enhanced floodplain management practices that reduce flood risks.

This multi-tiered governance structure, spanning from local utilities to federal programs, establishes the foundation for Danville's approach to resilience and emergency management.



Involving different levels of government is crucial in creating resilient communities. While local governments can engage directly with residents, local businesses, and first responders to get feedback and organize implementation strategies, regional, state, and federal entities can assist with higher level coordination efforts, resource allocation, funding, and legislative support at a larger scale.





6.3 Communication and Public Engagement

Effective communication is vital for disaster and emergency response, especially in the context of flood risk assessment and management. In Danville, there are various channels of communication that can be used to disseminate information, alert the public, and coordinate actions during disasters.

Emergency Communication Channels

Danville has established a diverse array of communication channels to disseminate critical information during emergencies. The city's mass notification system provides weather updates and community notifications, with non-critical notices available through an opt-in service. The City of Danville Alert Center provides timely updates on local situations such as road closures, evacuation orders, shelter locations, and recovery resources. The Alert Center also operates the Danville Local Government News and Announcements website, where residents can find more information and sign up for notifications.

The city also leverages federal and state resources to enhance its communication capabilities. The National Weather Service (NWS) provides weather forecasts, warnings, and advisories for the Danville/South Boston Area, as well as river and flood stage data. The Virginia State Emergency Communications Committee (SECC) oversees the Emergency Alert System (EAS) and the Wireless Emergency Alerts (WEA) in Virginia, which are used to broadcast critical messages to the public via radio, television, and mobile devices. Additionally, the Virginia Department of Transportation (VDOT) Hotline provides real-time information about road conditions and closures.

Local media also plays an important role in emergency communications in Danville. Local online newspapers, radio stations, television channels, and social media platforms help inform the public, amplifying the government's messages, and providing additional perspectives and analysis on disasters and emergency situations.



Public Engagement Initiatives

Beyond emergency communications, Danville has also implemented public education and outreach programs, particularly in relation to stormwater management and environmental stewardship. These initiatives, which form part of the city's compliance with the MS4 program, aim to increase public awareness and encourage community participation in resilience efforts. Key focus areas of these educational programs have included topics like sediment control and nutrient impacts on the Dan River.

These public engagement initiatives go beyond information dissemination. They are designed to foster a sense of community responsibility and participation and to empower residents to take an active role in maintaining the city's environmental health with everyday actions and coordinated events.



6.4 Summary & Recommendations

To enhance Danville's resilience governance structures, several improvements are recommended:

Dedicated Resilience Positions

Danville currently lacks dedicated leadership positions focused specifically on resilience efforts. This absence has led to fragmented approaches to flood management and challenges in securing funding for resilience projects. To address this gap, it is recommended that the City appoint a Resilience Coordinator and establish a Resilience Grant Administrator.

The Resilience Coordinator would be responsible for overseeing floodplain management, enforcing regulations, and integrating flood resilience into city planning and community outreach. This role would be central to preparing Danville for potential participation in FEMA's Community Rating System (CRS).

The Resilience Grant Administrator would focus on securing funding for resilience projects. Engagement with city staff revealed challenges in coordinating and applying for grants. This dedicated position could help identify funding opportunities, prepare and write competitive applications, and manage awarded grants.



Community Rating System (CRS) Participation

A key priority for Danville should be joining the Community Rating System (CRS) program. The CRS is a voluntary program that rewards communities with discounts on flood insurance premiums for adopting floodplain management practices beyond the National Flood Insurance Program's (NFIP) minimum requirements. Currently, Danville does not participate in the CRS, which means residents are missing out on potential flood insurance premium discounts ranging from 5% to 45%. Common barriers to CRS participation include staffing capacity needs, extensive documentation requirements, and the resources needed to implement and track qualifying floodplain management activities. This non-participation also indicates areas for growth in the city's floodplain management practices.

Despite not being part of the CRS, Danville has taken proactive steps towards flood preparedness. The city's Emergency Management actively educates residents and businesses about flood risks, focusing on safety measures and appropriate responses before, during, and after flood events. This existing commitment to public education provides a strong foundation for future CRS participation.

By joining the CRS program, Danville could achieve multiple benefits:

- Providing residents with discounted flood insurance rates
- Encouraging continued commercial development in safe areas
- Establishing tracking measures for understanding the stability of structures within the floodplain

It's important to recognize that CRS participation is not just about insurance discounts, but about creating a comprehensive approach to flood risk management that enhances overall community resilience.

As Danville considers preparing for CRS participation, it is also recommended to review and update emergency response capabilities. This could include improving coordination between healthcare facilities and emergency services, addressing capacity issues, and enhancing community trust in local healthcare systems during emergencies. Many of these issues were identified during Comprehensive Planning focus group sessions and require coordination between the public and private sectors. These efforts, while not directly part of the CRS program, would complement its goals by improving the city's overall disaster preparedness and response capabilities.

Through these policy and governance updates, with a particular focus on potential CRS participation, Danville could position itself to enhance its flood resilience and better protect its residents and businesses.



Improved Interagency Coordination

Danville should strive to improve coordination between various agencies, city departments, and organizations. This enhanced collaboration can help identify and address gaps in governance structures more effectively. Regular inter-departmental meetings focused on resilience planning could foster a more holistic approach to city-wide resilience efforts. A dedicated Resilience Task Force with representatives from all appropriate city departments could facilitate this change, and a shared project and initiative tracking system for resilience efforts could enhance collaboration and minimize duplication of efforts. Furthermore, creating formal mechanisms for regular collaboration with state and federal agencies on resilience initiatives could enhance governance and access to available resources.

Annual Resilience Review

The city would benefit from implementing an annual review of its resilience operations. This systematic evaluation should examine actions taken before and after disaster events, helping to identify successful strategies and areas for improvement. By allowing for continuous testing and refinement of approaches, this review process can lead to a more efficient and cost-effective resilience strategy over time.

Regional Network Development

Recognizing that many resilience challenges extend beyond city boundaries, Danville should work to create a regional network for resilience planning. Coordinating with nearby communities to develop a regional plan for emergency response and resilience initiatives can provide a more comprehensive approach to shared challenges. This network can be particularly valuable in understanding available local resources and how to scale emergency responses effectively based on event severity.

By adopting these recommendations, Danville can enhance governmental operations around resilience to create a more robust, coordinated, and effective institutional framework for resilience planning and emergency response. Furthermore, this enhanced governance structure provides the foundation necessary for successfully implementing the broader resilience strategies outlined in this plan.





7. Policies & Ordinances

Danville's commitment to becoming a resilient city requires a foundation of policies and regulations that guide decision-making, shape development, and ensure the city is prepared to face future challenges. This section outlines the key policy updates and ordinance revisions necessary to embed resilience into the fabric of Danville's governance and planning processes.

Resilience policies and regulations serve multiple critical functions:

- They provide a framework for consistent decision-making across city departments and over time, ensuring that short-term actions align with long-term resilience goals.
- They set clear expectations for developers, businesses, and residents, creating a predictable environment that encourages investment in resilience measures.
- They enable the city to leverage state and federal resources by aligning local practices with broader resilience initiatives and funding requirements.
- They institutionalize best practices in flood management, sustainable development, and climate adaptation, ensuring these considerations are integrated into all aspects of city planning and operations.
- They create accountability mechanisms, allowing for regular assessment and improvement of the city's resilience efforts.



The policies and ordinances discussed in this section touch on various aspects of urban resilience, from floodplain management and stormwater control to sustainable development practices and emergency preparedness. They represent a holistic approach to building Danville's capacity to withstand, respond to, and thrive in the face of both acute shocks and chronic stresses.

It's important to recognize that these policies and regulations are not static. They should be regularly reviewed and updated to reflect new knowledge, changing conditions, and evolving best practices in urban resilience. The goal is to create a flexible yet robust policy environment that supports Danville's vision of a resilient future.

The following sections explore specific policy updates, ordinance revisions, and new initiatives designed to strengthen Danville's resilience framework. These recommendations are based on careful analysis of current gaps, opportunities for improvement, and alignment with state and federal resilience standards.



7.1 Existing Policy & Regulatory Framework

Existing Ordinances

Danville's approach to managing flood risks is primarily articulated through three key ordinances: the Floodplain Overlay District, the Storm Drainage and Stormwater Management Facilities Ordinance, and the Subdivision Ordinance. Each of these play an important role in shaping the city's resilience to flooding and stormwater management. To enhance Danville's preparedness to flood risks, several updates are recommended.

Floodplain Overlay District Ordinance

Floodplain Districts are determined based on FEMA's Flood Insurance Study and Flood Insurance Rate Maps, with specific delineations for various flood zones. These districts overlay existing zoning districts and take precedence in the case of conflicting provisions. The ordinance sets forth specific requirements for development within flood-prone areas.

Danville's Floodplain Overlay District is a set of regulations specifically crafted to manage flood-prone areas within the city's jurisdiction. These regulations apply to development within any FEMA 100-year floodplain and focus on safeguarding life and property, minimizing disruption, and preserving the city's tax base. It focuses on managing flood-prone areas via:

- Regulation of development to prevent exacerbation of flood conditions.
- Restrictions or prohibitions of uses in designated flood-prone districts.
- Requirement for floodproofing measures for developments within these districts.
- Standards for residential and non-residential construction, including elevation requirements.
- Prohibitions in the Floodway District to prevent development-induced flood level increases.

Variances may be granted under certain conditions, but only upon demonstration that they will not result in significant flood level increases or additional threats to public safety. Provisions are made for the continuation, modification, or repair of structures that predate the ordinance, with strict limitations on expansions and requirements for any substantial improvements to meet current floodplain management regulations.



Storm Drainage & Stormwater Management Facilities Ordinance

Storm drainage and stormwater management are dictated by the Stormwater Quality Management and Discharge Control Ordinance in Chapter 9 Article 5 of the City Code. Operating under the guidelines of the Virginia Stormwater Management Program (VSMP), this ordinance is important to managing the impact of urban development on stormwater and mitigating flood risks. Key aspects of this ordinance include:

- Requirements for comprehensive stormwater management plans for land-disturbing activities;
- Mandates for developers to contribute to storm drainage improvements;
- Provisions for the creation and implementation of a Storm Drainage and Stormwater Management Facilities Master Plan;
- Enforcement mechanisms, including significant penalties for non-compliance; and,
- The ordinance also emphasizes long-term maintenance and periodic inspection of stormwater management facilities, underscoring the city's commitment to sustainable environmental management.

Subdivision Ordinance

The Subdivision Ordinance, outlined in Chapter 35.5 of the Danville City Code, governs the process of land subdivision in Danville. While not exclusively focused on flood resilience, it contains several provisions that contribute to the city's overall flood management strategy:

- Standards for street design that ensure unobstructed access during flooding events
- Requirements for infrastructure studies and assessments to ensure compliance with design and construction standards
- Mandates for proper grading and drainage plans, including documentation of natural and man-made drainage and stormwater facilities
- Special provisions for floodplain development, including requirements for engineering studies and stormwater management plans

These ordinances are complemented by various policies and programs that play a significant role in shaping Danville's approach to resilience. These include public education initiatives on flood risks, emergency response protocols, and interagency coordination efforts.





7.2 Summary & Recommendations

While Danville's existing policy and regulatory framework provides a solid foundation for flood management and resilience planning, analysis has revealed several areas where it could be strengthened to better address current and future challenges. This section explores these gaps and proposes recommendations for enhancing Danville's resilience policies and regulations.



Floodplain Overlay District Ordinance

Danville's Floodplain Overlay District Ordinance serves as the primary tool for managing development in flood-prone areas. While the Floodplain Overlay District provides a basic framework, it lacks specific standards for floodproofing, incentives for exceeding minimum requirements, and consideration of cumulative development impacts. In the context of a zoning ordinance, gaps in Danville's Floodplain Overlay District may center on zoning-specific regulations and how they integrate with floodplain management. Identified gaps include:



Data Utilization: The ordinance relies on FEMA floodplain designations and does not mandate the regular updating of floodplain data to reflect the most recent topographic and hydrological studies. FEMA designations are updated infrequently while physical conditions and events can change rapidly, which could lead to zoning decisions based on outdated information.



Cumulative Impact Assessment: There is insufficient consideration of how multiple developments in the floodplain might collectively impact flood risk over time. Additionally, the ordinance does not currently require developers to assess how their projects might affect overall flood dynamics in the area.



Specificity in Floodproofing Standards: While the ordinance requires floodproofing, it lacks specific standards, detailed construction guidelines, and materials specifications.



Zoning for Green Infrastructure: The current ordinance does not adequately incentivize or require the integration of green infrastructure into development plans.



Incentivization for Beyond Compliance: There are limited incentives for developers to exceed minimum floodplain management standards.



As part of the Community Flood Preparedness Fund grant, the following updates to the Floodplain Overlay District Ordinance are recommended:

No Adverse Impact: Introduce a provision requiring that new development be constructed to mitigate all potential flood damage both on-site and to neighboring properties.

Watercourse Alterations: Require engineering analysis following standard practices to demonstrate that flood-carrying capacity will not be decreased, as part of any development or project, whether public or private, and certification that the altered watercourse will be maintained.

Enhanced Inspections: Allow for inspection of manufactured homes installed or replaced in flood hazard areas, ensuring they obtain necessary permits and certifications regarding lowest floor elevation and ingress/egress.

Manufactured Home Parks: Introduce specific requirements for manufactured homes in Zone A to minimize flood damage, including provisions for elevating mechanical equipment and appliances.

Regular Data Updates: Establish a schedule for reassessing Floodplain Overlay District boundaries, incorporating the latest topographic and hydrological data.

Cumulative Impact Assessments: Require developers to conduct and submit assessments that consider how their projects might affect overall flood risk in the area.

Comprehensive Floodproofing Standards: Develop and codify specific standards for floodproofing, including detailed construction guidelines and materials specifications.

Green Infrastructure Promotion: Introduce zoning incentives or requirements for integrating green infrastructure into development plans.

Incentives for Excellence: Develop a system of incentives for developers who exceed minimum floodplain management standards.



By implementing these recommendations, Danville can significantly strengthen its Floodplain Overlay District Ordinance, creating a more robust and adaptive approach to managing flood risks. These enhancements will not only improve the city's ability to withstand and recover from flood events but also contribute to a more sustainable and resilient urban environment for all residents. Furthermore, these updates will position Danville to potentially participate in the Community Rating System in the future, which could lead to reduced flood insurance premiums for residents.



Storm Drainage and Stormwater Management Facilities Ordinance

Danville's Storm Drainage and Stormwater Management Facilities Ordinance plays an important role in the city's environmental and urban planning framework. Operating under the guidelines of the Virginia Stormwater Management Program (VSMP), this ordinance is designed to manage the impact of urban development on stormwater, a critical factor in mitigating flood risks and preserving environmental quality.

The existing ordinance enforces requirements for land-disturbing activities, mandates comprehensive stormwater management plans, and includes a cost-sharing mechanism for certain stormwater projects on private property. However, review has revealed several areas where the ordinance could be strengthened to better address current and future stormwater management challenges:



Cost-Sharing Mechanisms: While the current ordinance includes provisions for cost-sharing on certain stormwater projects, primarily focused on residential flood mitigation, the criteria and implementation process could be clarified. New development projects currently manage stormwater impacts through on-site peak flow reduction and/or downstream improvements at the developer's expense. Consider reviewing and updating the cost-sharing provisions to clearly define eligible projects, funding mechanisms, and implementation procedures for both new development and existing flood-prone areas.



Climate Data Integration: The ordinance as it exists today does not adequately take into consideration changing climate patterns, which can significantly affect storm frequency and intensity. Danville should establish guidelines for regular updates to the ordinance and the Storm Drainage and Stormwater Management Facilities Master Plan (SDSMF Master Plan) to reflect current climate data and projections. This should include provisions for adjusting stormwater management requirements based on updated climate information.



Green Infrastructure Integration: The ordinance as written does not explicitly promote the adoption of green stormwater infrastructure as a complement to traditional stormwater management systems. The city should promote the use of green infrastructure alongside traditional stormwater management systems. This could include incentives for developers who incorporate green infrastructure solutions and the development of guidelines and standards for various green infrastructure techniques.





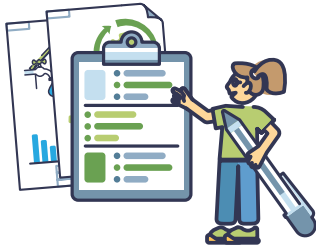
Interdepartmental Coordination: While the ordinance involves multiple city departments, it does not detail specific mechanisms for coordination between different city departments and external agencies for holistic stormwater management. Danville should include provisions for improved coordination among city departments in stormwater management planning. This could involve creating a cross-departmental stormwater management task force and developing shared data systems and planning processes.



Enforcement and Compliance: The SDSF Master Plan should include enforcement mechanisms to ensure compliance, to avoid inadequate stormwater infrastructure and management.



Adaptive Management Approach: The current ordinance lacks provisions for regular review and adjustment of stormwater management strategies based on performance data and changing environmental conditions. Incorporating an adaptive management approach would allow for periodic review and adjustment of stormwater management strategies, ensuring the ordinance remains effective over time.



Comprehensive Stormwater Master Planning: While the ordinance provides for an SDSMF Master Plan, there's an opportunity to more fully integrate this plan with other city planning efforts and ensure it addresses long-term climate resilience. The city should work to enhance the scope and integration of the SDSMF Master Plan, ensuring it aligns with broader resilience goals and other city planning initiatives.

By implementing these recommendations, Danville can create a more comprehensive and adaptive approach to stormwater management. These enhancements will better equip the city to handle changing precipitation patterns, reduce flood risks, and promote sustainable urban development. Moreover, these updates will align Danville's stormwater management practices with current best practices in urban resilience and environmental stewardship.



Subdivision Ordinance

Danville's Subdivision Ordinance plays a role in shaping new developments within the city. While it includes some base standards to mitigate the effects of flooding and stormwater damage, there are several opportunities to enhance its effectiveness in promoting flood resilience:



Intent Language: The ordinance lacks explicit language addressing flood risk minimization and prevention in its purpose and intent statement. To address this, Danville should add language in Article 1.B. Purpose and Intent, that clearly addresses the proper diversion of stormwater, preservation of floodplains, and encouragement of best management practices for flood risk minimization and prevention.



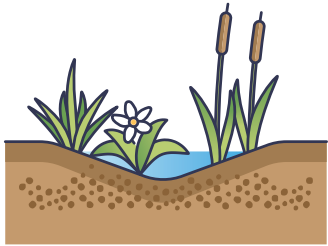
Flood-Resilient Road Design: Current requirements for passable roadways during flooding events are limited and don't cover the full floodplain overlay district. The city should extend the requirement for passable roadways during flooding events to the full floodplain overlay district and any land in special hazard zones.

The ordinance should specify that streets and sidewalks shall be designed to minimize the potential for increasing or aggravating flood levels. Consideration should be given to requiring alternate routes to provide secondary ingress and egress in the event of significant weather events.



Flood Data Requirements: The ordinance does not mandate comprehensive flood-related data in development plans. To address this, Danville should require that all new subdivision proposals and other proposed developments (including manufactured housing parks and subdivisions) greater than 50 lots or 5 acres, whichever is less, include base flood elevation data. This will increase the availability of critical information for plat reviewers and ensure more informed decision-making.





Stormwater Management Practices: There's a need for more specific requirements regarding stormwater best management practices in new subdivisions. The city should introduce specific requirements for stormwater best management practices in new subdivisions, including requiring easements for these practices.



Enhanced Plat Requirements: To provide comprehensive information for review and decision-making processes, the ordinance should ensure that subdivision plats include all necessary flood-related data, including but not limited to base flood elevation data.

These updates will help Danville ensure that new developments are designed with flood resilience as a primary consideration from the outset. These changes will contribute to a more comprehensive approach to flood risk management across the city, aligning new development practices with broader resilience goals.





8. Recommendations

This chapter outlines a comprehensive set of recommendations designed to enhance Danville's resilience, with a particular focus on flood preparedness and management. These recommendations are organized into six key goals, each addressing a key aspect of community resilience:

- R-1: Advocate for Efficient and Resilient Homes
- R-2: Prepare Residents for Flooding Events
- R-3: Expand Resilient and Sustainable Development Policies and Regulations
- R-4: Reduce Stress on Infrastructure through Maintenance and Upgrades
- R-5: Enhance Resilience within the Built and Natural Environments
- R-6: Conduct Flood Risk Assessment & Develop Approach to Stormwater Management

For each goal, this chapter provides:

Overview: A brief overview of the goal's purpose and importance

Actions: Specific actions to be taken, along with potential partners and implementation timelines

Funding Sources: Potential funding sources to support the implementation of these actions

Evaluating Success: Metrics for tracking and measuring progress towards the goal

Additional Resources: Tools and resources to assist in implementing the recommended actions

These recommendations are the result of comprehensive analysis and community engagement, and they align with broader city planning efforts, including the Danville Comprehensive Plan. They are designed to be actionable, measurable, and adaptable to Danville's unique context and evolving needs. The following sections provide detailed guidance for each goal, offering a roadmap for building a more resilient Danville.



R-1

Advocate for Efficient & Resilient Homes

This goal aims to enhance the resilience and sustainability of residential properties in Danville through improved energy efficiency and eco-friendly practices. This goal focuses on educating homeowners and renters about the benefits of home weatherization and the adoption of green infrastructure, which are crucial for reducing energy costs, mitigating stormwater runoff, and enhancing overall community resilience. Additionally, this goal aims to provide residents with basic information about where and how to apply for grants to improve the energy efficiency of their own homes.

R-1.01 Initiate a public education campaign with brochures and resources along with a 'Weatherization Web Hub' in the city's housing section to promote home weatherization for longevity and energy efficiency, providing benefits information, DIY tutorials, and a local vendor directory.

R-1.02 Create educational programming on native plants and green infrastructure practices, coupled with resources on rain gardens and permeable solutions to mitigate flooding.

R-1.03 Develop a checklist for residents to follow for flood preparedness that includes tasks like ensuring sump pumps and backup generators are operating, flashlights and battery packs are charged, and downspouts and gutters are clear.





Tools & Resources

- Energy Star Program & Tools
- EPA Green Infrastructure Webcast Series
- Home Energy Saver Tool
- Virginia Cooperative Extension



Tracking & Measuring Progress

- Home weatherization participation
Number and percentage of homes participating in the weatherization program.
- Green infrastructure adoption
Number and percentage of households implementing green infrastructure solutions.
- Energy consumption reduction
Percentage reduction in energy consumption in weatherized homes.
- Stormwater runoff reduction
Reduction in stormwater runoff volumes in areas with implemented green infrastructure.
- Community engagement
Number of community members reached through educational programs and campaigns.
- Program satisfaction
Resident satisfaction levels with the education campaign and implementation outcomes.
- Cost savings
Total energy cost savings for participants post-weatherization and green infrastructure adoption.



Funding Sources

Virginia DHCD Housing Innovations in Energy Efficiency

Financial incentives offered for implementing energy-efficient practices. Emphasizes innovative solutions for energy efficiency in residential buildings, contributing to lower energy costs and improved environmental outcomes.

Energy Star Rebate Finder

A tool provided by the U.S. EPA that helps residents find energy-efficient rebates and offers available in their area.

Department of Energy Grants

DOE offers various grants that support energy efficiency and renewable energy projects at the local level.

Community Development Block Grants

Administered by HUD, these grants can be used for community development projects, including those focusing on energy efficiency and sustainability.

State Energy Program Funds

Provided by the DOE, SEP funds support energy efficiency and renewable energy projects at the state level.

Home\$ave Residential Energy Efficiency Program

Danville Utilities provides rebates for home efficiency upgrades to residents within its utility network.



R-2 Prepare Residents for Flooding Events

This encompasses raising awareness about flood risks, insurance options, and safe practices during floods. The actions under this goal aim to educate the public, provide resources for disaster preparedness, and ensure that residents have the necessary tools to effectively respond to flood events.

R-2.01 Champion the adoption of flood insurance in vulnerable zones through an annual digital awareness drive, inclusive of webinars and Q&A sessions, as well as interactive tools like flood risk maps and personal flood risk assessments and supported by brochure distributions in community touchpoints.

R-2.02 Organize flood awareness campaigns, providing information about flood insurance and flood risk reduction measures for homes.

R-2.03 Help make citizens aware of safe flooding protocols and evacuation practices.

R-2.04 Create programming to fund residential backup generators for high-risk populations.

R-2.05 Utilize Danville social media outlets to expand access to important flood preparedness information for residents.

R-2.06 Increase partnerships with Red Cross and other disaster-relief agencies to assist families unable to travel widely during times of need, such as during evacuation orders or displacement-causing events.





Tools & Resources

- FEMA's Products and Tools
- Ready.gov Flood Preparedness
- National Flood Insurance Program
- Danville Emergency Management Agency
- FloodSmart Social Media Toolkit
- FEMA Flood Risk Communication Toolkit for City Officials



Tracking & Measuring Progress

- Flood insurance uptake
Number and percentage of residents obtaining flood insurance in vulnerable zones.
- Campaign reach
Number of residents reached through awareness campaigns and educational programs by factors such as location, risk level, vulnerability, and demographic.
- Evacuation plan awareness
Percentage of residents aware of safe evacuation practices and flood safety protocols, by factors such as location, risk level, vulnerability, and demographic.
- Generator program utilization
Number of vulnerable or high-risk population households equipped with backup generators.



Funding Sources

Community Development Block Grants

Federal grants that can be utilized for community preparedness and disaster resilience programs.

FEMA Grants

Grants for projects focusing on disaster preparedness, including public education campaigns.

State Flood Control Programs

State-level funding opportunities for flood education and preparedness initiatives.



R-3

Expand Resilient & Sustainable Policies and Regulations

Promoting sustainable and resilient development practices is essential for enhancing the quality of life, economic prosperity, and environmental health of Danville. This goal involves establishing and enforcing regulations that require developers to contribute to public amenities, such as parks, trails, and green infrastructure, and provide incentives for projects that incorporate sustainability and resilience features, such as energy efficiency, water conservation, and stormwater management. The actions under this goal also aim to engage the community in the planning and development process, and provide data and tools to inform decision-making and monitor progress.



- | | |
|--------|---|
| R-3.01 | Create incentives and requirements for developer contributions, with data-driven community feedback. |
| R-3.02 | Encourage the integration of sustainable and resilient design principles into city planning and development processes. |
| R-3.03 | Define City and property owner responsibilities for drainage infrastructure maintenance, particularly at public-private boundaries. |
| R-3.04 | Establish a Community Lifelines network and ensure all relevant parties understand their respective roles. |
| R-3.05 | Upgrade stormwater regulations periodically to reflect changes in precipitation and flooding. |
| R-3.06 | Limit new development in high-risk floodplain areas and explore opportunities to create naturalized public spaces in appropriate flood-prone locations, particularly when properties become available through voluntary programs. |
| R-3.07 | Maintain NFIP compliance through floodplain management activities, including periodic overlay district assessments, comprehensive SFHA permitting, and participation in the Community Rating System. |
| R-3.08 | Developers should contribute to storm drainage improvements based on impact, calculated proportionally to factors like size and runoff. |
| R-3.09 | Strengthen stakeholder engagement by ensuring all parties are involved in resilience planning to identify current shortfalls and potential improvements to emergency response. |



Tools & Resources

- EPA Smart Growth tools and resources
- EPA Smart Growth Self-Assessment for Rural Communities
- HUD Location Affordability Portal
- DOE Energy Efficiency and Renewable Energy tools and data
- EDA Comprehensive Economic Development Strategy guidelines



Tracking & Measuring Progress

- Flood resilience code update
Updated municipal codes incorporating flood resilience standards and requirements.
- CRS program participation
Number/percentage of residents and businesses that are aware of and participate.
- Flood insurance coverage
Number/percentage of residents and businesses that have flood insurance coverage.
- Flood damage reduction
Amount and percentage of flood damages and losses avoided or reduced.



Funding Sources

Community Development Block Grants

Federal grants that can be utilized for community development and revitalization projects, such as parks, trails, and green infrastructure.

HUD Resilience Programs

Assistance for projects that address climate impacts and enhance community resilience, such as the National Disaster Resilience Competition, the Community Development Block Grant Disaster Recovery Program, and the Partnership for Sustainable Communities.

DOE Efficiency and Renewable Energy Programs

Assistance for projects that improve energy efficiency and increase use of renewable energy sources, such as the State Energy Program, the Weatherization Assistance Program, and the Solar Energy Technologies Office.

EPA Sustainable Communities Programs

Assistance for projects supporting smart growth and sustainable development, such as the Building Blocks for Sustainable Communities Program, Greening America's Communities, and the Local Foods, Local Places Program.

EDA Resilience Programs

Assistance for projects that support economic development and resilience, such as the Economic Adjustment Assistance Program, the Regional Innovation Strategies Program, and the Disaster Supplemental Funding Program.



R-4

Reduce Stress on Infrastructure through Maintenance & Upgrades

Reducing stress on infrastructure systems caused by natural hazards, aging, and increased demand involves maintaining and upgrading the existing infrastructure assets, such as power lines, water pipes, and roads, to ensure their reliability, safety, and efficiency. The actions under this goal also aim to enhance the resilience of infrastructure systems by adopting innovative technologies and practices, such as underground utilities, smart grids, and green infrastructure.



- | | |
|--------|--|
| R-4.01 | Ensure all trees near power poles and along lines are inspected for signs of weakness or line interference and are trimmed annually. |
| R-4.02 | Continue replacement of overhead utilities with underground lines in areas that are prone to repeat outages and downed power lines, prioritizing underground utility conversion in critical infrastructure areas such as hospitals, emergency services, and schools. |
| R-4.03 | Develop and implement an urban heat island mitigation strategy, including increased urban tree canopy and cool roofing initiatives. |
| R-4.04 | Continue regular inspection and maintenance of drains and culverts in flood-prone areas, including pre-storm cleanouts, while monitoring structural integrity of roads and applying soil stabilization techniques along roadways. |
| R-4.05 | Develop a smart power grid to help monitor power demand and isolate problems. |
| R-4.06 | Consider implementing energy storage and microgrids in critical areas, such as hospitals and locations that can serve as resilience hubs. |
| R-4.07 | Use GIS and climate data to identify high flood risk areas and assess the impact of proposed development on flood patterns and infrastructure. |
| R-4.08 | Develop and implement comprehensive procedures that are compatible with the Emergency Action Plans (EAPs) of dam owners. Procedures should ensure effective warning and evacuation guidance in the event of a dam failure. |
| R-4.09 | Raise low-lying roads out of the floodplain (Trade Street, Goodyear Boulevard, and River Street). |



Tools & Resources

- DOE Grid Modernization Initiative
- EPA Water Infrastructure programs
- EPA Green Infrastructure tools and resources
- ASCE Infrastructure Resilience Division



Tracking & Measuring Progress

- Tree maintenance
Number and percentage of trees near power poles and along lines that are inspected and trimmed annually.
- Underground utility conversion
Number and percentage of overhead utilities that are replaced with underground lines, by location and criticality.
- Infrastructure reliability
Number and severity of infrastructure-related accidents and injuries, by type and location.
- Infrastructure efficiency
Amount and cost of energy and water consumption by savings, by source and sector.



Funding Sources

USDA Rural Development Programs

Grants and loans for rural communities to improve their infrastructure systems, such as the Electric Loan Program, the Water and Waste Disposal Loan and Grant Program, and the Community Facilities Direct Loan and Grant Program.

DOT Infrastructure Programs

Grants and loans for transportation infrastructure projects, such as the Infrastructure for Rebuilding America (INFRA) Grant Program, the Better Utilizing Investments to Leverage Development (BUILD) Transportation Discretionary Grants Program, and the Transportation Infrastructure Finance and Innovation Act (TIFIA) Program.

DOE Grid Modernization Initiative

Assistance for projects that enhance the resilience, reliability, and security of the electric grid, such as the Grid Modernization Laboratory Consortium, the Grid Modernization Multi-Year Program Plan, and the Grid Modernization Peer Review.

EPA Water Infrastructure Programs

Grants and loans for water infrastructure projects, such as the Clean Water State Revolving Fund (CWSRF), the Drinking Water State Revolving Fund (DWSRF), and the Water Infrastructure Finance and Innovation Act (WIFIA) Program.



R-5

Enhance Resilience within the Built & Natural Environments

Improving the health and quality of Danville's waterways can enhance the ecosystem benefits that the Dan River and its tributaries provide for the community. Targeted efforts include identification of shoreline vulnerabilities, assessment of infrastructure needs, and collaboration with local and state partners to lead maintenance and cleanup events.



- | | |
|--------|---|
| R-5.01 | Collaborate with local and state agencies to manage and improve rivers and waterways for recreational use and ecological resilience. |
| R-5.02 | Enhance year-round recreational programs that teach river ecology, flood resilience, and environmental stewardship through guided nature walks, water sports including flood safety, and volunteer clean-up and conservation efforts. |
| R-5.03 | Collaborate with relevant authorities to assess and upgrade city infrastructure to ensure it is capable of withstanding future climate-related stresses. |
| R-5.04 | Improve and protect water quality by establishing buffer zones along water bodies to help filter runoff and prevent erosion. |
| R-5.05 | Conduct a shoreline vulnerability assessment to identify erosion and assess sedimentation stability. |
| R-5.06 | Identify potentially dangerous slopes near roadways, businesses, and residences. Perform stability analysis to understand risk of erosion and landslide. |
| R-5.07 | Initiate a city-wide soil health improvement program to improve soil health, enhance water retention, and reduce erosion. |
| R-5.08 | Maintain existing flood monitoring stations and expand environmental monitoring across the city, coordinating all reporting data through government databases and a centralized online portal on Danville's website to provide comprehensive tracking of environmental quality metrics. |
| R-5.09 | Develop a city-wide green infrastructure plan, identifying priority areas for implementation. |



Tools & Resources

- Virginia DEQ Water Quality Assessment Integrated Report
- Virginia DEQ Stormwater Handbooks
- Virginia DCR ConservationVision
- EPA Flood Resilience Checklist
- Dan River Basin Association guides



Tracking & Measuring Progress

- Waterway management and improvement
Number and extent of rivers and waterways that are managed and improved for recreational use and ecological resilience.
- Dan River Recreational Program engagement and satisfaction
Number and diversity of recreational programs and participants on the Dan River, and the level of satisfaction and learning outcomes.
- Climate-resilient infrastructure update rate
Number and condition of city infrastructure that are assessed and upgraded to withstand future climate-related stresses.
- Shoreline erosion and sedimentation stability
Degree and rate of shoreline erosion and sedimentation stability.



Funding Sources

City of Danville General Fund

Danville's General Fund supports resilience initiatives like environmental protection, infrastructure upgrades, and emergency preparedness.

DEQ Water Quality Improvement Fund

The WQIF funds projects addressing water pollution through stormwater management, wetland restoration, and sediment reduction.

DCR Virginia Land Conservation Fund

This fund offers matching grants for land conservation efforts that protect water quality, wildlife habitats, and open spaces.

USACE Flood Risk Management Program

The USACE program offers resources for flood risk mitigation, including assessments and infrastructure improvements.

DRBA Grants and Donations

DRBA grants and donations fund environmental stewardship and conservation efforts in the Dan River watershed.

Community Development Block Grants

The CDBG program can fund local development projects, including infrastructure improvements and flood mitigation for low- and moderate-income residents.



R-6

Conduct a Flood Risk Assessment & Develop an Approach to Stormwater Management

This goal prioritizes a comprehensive approach to flood risk assessment and stormwater management in Danville, and the actions identified aim to build a robust, integrated system that not only manages current flood risks but also anticipates future challenges, ensuring the safety and well-being of the community.

- | | |
|--------|---|
| R-6.01 | Appoint a Resilience Coordinator to oversee floodplain management, enforce regulations, and integrate flood resilience into city planning and community outreach. |
| R-6.02 | Improve flooding based on priority assessed in Flood Risk Area Matrix and funding availability. |
| R-6.03 | Establish a comprehensive flood plain monitoring system to continuously assess and update flood risk data, aiding in proactive flood management and planning. |
| R-6.04 | Implement an advanced rain gauge network across Danville to provide accurate, real-time precipitation data, enhancing the city's capacity to respond to flood threats promptly. |
| R-6.05 | Adopt a robust process for NIMS compliance to ensure a coordinated and efficient approach to incident management and enhance the potential for grant funding. |
| R-6.06 | Collaborate with regional partners to create a watershed management plan and watershed-scale emergency response. |
| R-6.07 | Hire a dedicated grant-writer focused on seeking out and applying for resilience project funding. |
| R-6.08 | Conduct an annual review of resilience operations to determine successes and track improvements over time. |





Tools & Resources

- EPA Flood Resilience Checklist
- Climate Resilience Toolkit



Tracking & Measuring Progress

- Flood area improvement
Number/percentage of improved areas.
- Floodplain structure adaptation
Number/percentage of structures in floodplain that are flood-proofed, relocated, or removed.
- Natural floodplain conservation
Number and percentage of floodplain acres that are restored or preserved as natural spaces.
- Flood warning responsiveness
Number/percentage of residents and businesses that receive flood warnings and take appropriate actions.
- Flood recovery efficiency rate
Number/percentage of residents and businesses recovered from flood events.
- Flood resilience financial efficiency
Amount and percentage of funds saved or leveraged for flood resilience projects.



Funding Sources

FEMA Assistance Programs

Including Hazard Mitigation Grant Program (HMGP), Building Resilient Infrastructure and Communities (BRIC) program, and Flood Mitigation Assistance (FMA) program.

EPA Clean Water State Revolving Fund

Provides low-interest loans for water quality protection projects for wastewater treatment, non-point source pollution control, and watershed and estuary management.

EPA Drinking Water State Revolving Fund

Provides financial assistance to water systems and state safe water programs.

Virginia DEQ Stormwater Local Assistance Fund

Provides matching grants to local governments for stormwater best management practices that reduce non-point source pollution in impaired waters.

Danville Regional Foundation Grants

Support projects that align with DRF's mission and focus areas, such as economic transformation, education, health and wellness, and community development.



Tools & Resources Cont.: R-1

Energy Star Program & Tools

The U.S. Environmental Protection Agency's [Energy Star program](#) offers a wide range of tools and resources for improving home energy efficiency. This includes rebate finders, product finders for energy-efficient appliances, and a wealth of educational materials.

EPA Green Infrastructure Webcast Series

A [resource offering instructional videos](#) on various topics related to green infrastructure, including design, implementation, and maintenance.

Home Energy Saver Tool

Developed by the U.S. Department of Energy, this [online tool](#) helps homeowners and renters estimate their energy use and savings opportunities, providing personalized recommendations for energy efficiency improvements.

Virginia Cooperative Extension

This organization provides a range of resources on green infrastructure and native plant landscaping, including [guides](#), [workshops](#), and [webinars](#).



Funding Sources Cont.: R-1

Virginia DHCD Housing Innovations in Energy Efficiency

HIEE Funds are allocated to the Department of Housing and Community Development's (DHCD) through the Affordable and Special needs Housing (ASNH) program and the Weatherization Deferral Repair (WDR) Program.

ASNH funds are available to non-profit organizations or for-profit housing developers, DHCD-certified Community Housing Development Organizations (CHDOs), and public housing authorities

WDR funds are distributed using the Weatherization Assistance Program (WAP) and in partnership with non-profit weatherization providers on a community-by-community basis. Eligibility is in two parts: qualifying applicant household and qualifying home.

Department of Energy Grants

The Department of Energy offers an Energy Savings Hub tool, which provides residents and consumers with clean energy tax credits for making homes more energy efficient.

Community Development Block Grants

CDBG Urgent Need Fund Grants enable prompt responses to immediate health and safety threats and prioritize long-term recovery with emphasis on low and moderate-income persons and families. These grants are applied for at the local level through the City of Danville.

CDBG Community Improvement Grants are available to aid the City of Danville and contracted Planning District Commissions, nonprofit organizations, and other competent entities to undertake projects in several categories, including Targeted Neighborhood Housing Rehabilitation.

State Energy Program Funds

The Virginia C-PACE (Commercial Property Assessed Clean Energy) Program through SEP provides property owners with 100% upfront capital to "upgrade their buildings with energy efficiency, renewable energy, and water management systems"



Tools & Resources Cont.: R-2

Federal Emergency Management Agency (FEMA) Products and Tools

Provides various data products and tools to help communicate flood risk and inform mitigation actions, such as the [Flood Map Service Center](#), the [National Flood Hazard Layer \(NFHL\)](#), the [National Risk Index](#), the [Resilience Analysis and Planning Tool \(RAPT\)](#), and the [Climate Risk and Resilience Portal \(ClimRR\)](#).

Ready.gov Flood Preparedness

A [comprehensive guide on flood readiness](#), which covers topics such as how to prepare before, during, and after a flood, how to buy flood insurance, and how to protect your property from flood damage.

National Flood Insurance Program

NFIP is a [source of information and tools](#) to promote flood insurance adoption, such as how to find an agent, how to file a claim, and how to understand your policy.

Danville Emergency Management Agency

A source of [localized information and tools](#) for Danville residents regarding flood preparedness and evacuation, such as emergency plans, floodplain management plans, and notification systems.

FloodSmart Social Media Toolkit

A [ready-to-use digital resource](#) for social media platforms to increase outreach efficiency, which provides graphics, videos, and messages to promote flood insurance and flood risk awareness.

FEMA Flood Risk Communication Toolkit for City Officials

A [ready-made template](#) for public service announcements to be used in local media for flood awareness, which provides scripts, audio files, and video files for various flood-related topics, such as flood insurance, flood safety tips, and flood recovery.



Environmental Protection Agency (EPA) Smart Growth Tools and Resources

A list of useful tools and key resources for communities on a variety of topics related to smart growth and sustainable development, such as climate change, codes and ordinances, economic development, environmental justice, green building, housing, land reuse, transportation, and water.

Environmental Protection Agency (EPA) Smart Growth Self-Assessment for Rural Communities

A tool to help rural communities evaluate their policies and programs to identify opportunities and strategies for smart growth and rural development.

Department of Housing and Urban Development (HUD) Location Affordability Portal

A tool to help consumers, researchers, and policymakers estimate combined housing and transportation costs for neighborhoods across the U.S., and understand how these costs vary by location, household characteristics, and travel behavior.

Department of Energy (DOE) Energy Efficiency and Renewable Energy Tools and Data

A collection of tools and data to help communities assess their energy use and potential for energy efficiency and renewable energy, such as the Energy Data Explorer, the Building Energy Asset Score, and the Solar Power Prospector.

Economic Development Administration (EDA) Comprehensive Economic Development Strategy Guidelines

A guide to help communities develop and implement a strategic plan for economic development and resilience, which is required for applying for EDA assistance.



Department of Energy (DOE) Grid Modernization Initiative

Technical assistance for projects that enhance the resilience, reliability, and security of the electric grid, such as the Grid Modernization Laboratory Consortium, the Grid Modernization Multi-Year Program Plan, and the Grid Modernization Peer Review.

Environmental Protection Agency (EPA) Water Infrastructure Programs

A set of grants and loans for water infrastructure projects, such as the Clean Water State Revolving Fund (CWSRF), the Drinking Water State Revolving Fund (DWSRF), and the Water Infrastructure Finance and Innovation Act (WIFIA) Program.

Environmental Protection Agency (EPA) Green Infrastructure Tools and Resources

A list of useful tools and resources for communities on how to plan, design, implement, and maintain green infrastructure projects, such as the Green Infrastructure Modeling Tools, the Green Infrastructure Wizard, and the Green Infrastructure Webcast Series.

American Society of Civil Engineers (ASCE) Infrastructure Resilience Division

A division of the American Society of Civil Engineers that provides technical guidance, standards, and best practices for infrastructure resilience, as well as a network of experts and professionals in the field.



Tools & Resources Cont.: R-5

Virginia Department of Environmental Quality (DEQ) Water Quality Assessment Integrated Report

The integrated report provides information on the status and trends of water quality in the state.

Virginia Department of Environmental Quality (DEQ) Stormwater Handbooks

These handbooks provide guidance regarding erosion and sediment control and stormwater management guidelines.

Virginia Department of Conservation and Recreation (DCR) ConservationVision

ConservationVision provides a suite of GIS-based tools and data for land conservation and planning such as the Natural Heritage Data Explorer and open GIS Data.

Environmental Protection Agency (EPA) Flood Resilience Checklist

The checklist is a tool that helps communities identify opportunities to improve their resilience to future floods through policy and regulatory tools and non-regulatory programs.

Dan River Basin Association Guides

These guides offer a variety of recreational activities and educational programs on the Dan River through links to resources and interactive map.



EPA Flood Resilience Checklist

This checklist is a tool that helps communities identify opportunities to improve their resilience to future floods through policy and regulatory tools and non-regulatory programs.

Climate Resilience Toolkit

The Climate Resilience Toolkit is a website that provides scientific tools, information, and expertise to help people manage their climate-related risks and opportunities and improve their resilience to extreme events.



Funding Sources Cont.: R-6

FEMA Hazard Mitigation Grant Program (HMGP)

Provides grants to states and local governments to implement long-term hazard mitigation measures after a major disaster declaration.

FEMA Building Resilient Infrastructure and Communities (BRIC) Program

Supports states, local communities, tribes and territories, as they undertake hazard mitigation projects reducing the risks they face from disasters and natural hazards.

FEMA Flood Mitigation Assistance (FMA) Program

Provides funding to states, territories, federally-recognized tribes and local communities for projects and planning that reduces or eliminates long-term risk of repetitive flood damage to structures insured under the National Flood Insurance Program (NFIP).





9. Implementation

The Implementation Plan for Danville's resilience strategy serves as the roadmap, translating the proposed goals and actions into tangible, positive changes for the community. This chapter outlines the systematic approach to execute each initiative, ensuring that every step taken contributes effectively towards building a resilient, thriving future for Danville. It focuses on five key areas:

Continuous Monitoring and Improvement: Establishing a cyclical process for ongoing assessment and refinement of resilience efforts.

Financial Decision-Making: Integrating resilience considerations into the city's financial planning and project evaluation processes.

Key Partners: Identifying and engaging stakeholders from various sectors to support resilience initiatives.

Engagement: Developing strategies to inform, educate, and involve residents in resilience-building efforts.

Financing Resilience: Exploring diverse funding sources to support resilience projects and initiatives.

This section establishes a framework for the implementation of Danville's resilience goals, ensuring that efforts are well-coordinated, financial sustainable, and rooted in community involvement.



9.1 Continuous Monitoring & Improvement

To ensure the ongoing effectiveness of Danville's resilience goals and actions, the city should implement a cyclical process of monitoring and improvement. This approach would allow for adaptive management, ensuring that resilience efforts remain relevant and effective in the face of changing conditions and emerging challenges.

Build Awareness & Capacity: Educate and train city staff, residents, and businesses on the importance and benefits of community and flood resilience, as well as the potential risks and impacts of flooding. This could include the development of training programs around flood risks and mitigation strategies, as well as creating and distributing resources on best practices for flood preparedness and response. Ultimately, Danville should aim to foster a culture of learning and collaboration among the city and its stakeholders to share knowledge and experiences, and to leverage collective strengths and capacities.

Assess Vulnerabilities: Conduct regular and comprehensive assessments of the city's exposure and sensitivity to flood hazards, as well as its adaptive capacity and coping mechanisms. Identify the most vulnerable areas, populations, and sectors, and the factors that contribute to their vulnerability. Evaluate the current and projected future scenarios of flood frequency, intensity, and duration, and their implications for the city's social, economic, and environmental well-being.

Set Priorities: Based on vulnerability assessments, prioritize goals and actions that address the most urgent and important needs of the city and its stakeholders. Consider feasibility, cost-effectiveness, and sustainability of the proposed solutions, as well as their alignment with the city's vision and values. Engage and consult with residents, key partners, and stakeholders to ensure input and buy-in for the prioritization process and the outcomes.

Take Action: Implement prioritized goals and actions in a timely and efficient manner, following the established plans and procedures. Incorporate best practices and innovative solutions from other cities and organizations that have successfully implemented similar actions or faced similar challenges.

Track Metrics: Establish a baseline and indicators to measure the current and desired state of preparedness and resilience in the city and track changes over time. Collect and analyze data from various sources, such as flood risk assessments, floodplain monitoring systems, municipal codes, and community feedback, to identify the strengths, weaknesses, opportunities, and challenges of current and ongoing efforts. Use data to evaluate effectiveness and impact of goals and actions, and to identify areas for improvement and adjustment.

It is important to note that this process is not linear, but cyclical; results and lessons learned from actions should be shared with residents, key partners, and stakeholders and solicit their input and feedback for improvement. Review and update goals and actions periodically based on data and feedback to reflect the changing conditions and needs of the city and the community.



9.2 Key Partners

The success of Danville's resilience plan hinges on the collaborative efforts of a diverse array of partners. Each goal and action identified in the plan requires the involvement of specific partners, whose expertise, resources, and support are critical to the successful implementation of the resilience initiatives. From non-profits, community organizations, and local businesses, through all scales of government, this section highlights the potential partners who will play a pivotal role in transforming Danville's vision of resilience into reality.

Federal Government

Federal Emergency Management Agency (FEMA): Federal agency that provides technical assistance, guidance, and funding for flood risk analysis and mapping, CRS participation, and disaster preparedness and response.

Environmental Protection Agency (EPA): Federal agency that provides education, guidance, and funding opportunities for water quality and green infrastructure as well as for air quality, climate action, and other related topics.

National Weather Service (NWS): Federal agency that provides weather forecasts, warnings, and advisories, as well as river and flood stage data, for the Danville/South Boston area.

Ready Campaign: A National public service campaign¹ designed to educate and empower the American people to prepare for, respond to, and mitigate emergencies and disasters.

U.S. Army Corps of Engineers (USACE): Responsible for conducting the shoreline vulnerability assessment and providing recommendations for erosion control and sedimentation management.

U.S. Geological Survey (USGS): Provide scientific support and data for flood risk assessments and environmental monitoring.

¹ [Ready.gov](https://www.ready.gov)



Local Government

City of Danville: Lead agency responsible for leading the coordination and implementation of goals and actions, as well as providing funding and technical support for the various activities such as appointing a Resilience Coordinator, leading public communication and awareness campaigns, improving flood problem areas, and updating municipal codes.

West Piedmont Planning District Commission (WPPDC): Regional organization that coordinates the regional All-Hazards Mitigation Plan and provides planning assistance and technical support for hazard mitigation, environmental management, and community resilience initiatives.

State Government

VA Department of Conservation and Recreation (DCR): Collaborate on river and waterway management and conservation efforts.

VA Cooperative Extension: Partner in educational campaigns on native plants and green infrastructure.

VA Department of Environmental Quality (DEQ): State agency that regulates water quality and stormwater management, and provides permits, grants, and loans for water-related projects.

VA Department of Housing & Community Development (DHCD): Support initiatives for efficient housing, weatherization programs, and sustainable community development.

VA Department of Transportation (VDOT): State agency that maintains and operates the state highway system, including bridges, culverts, and drainage structures, and provides traffic information and emergency services.



Non-profits and Organizations

Dan River Basin Association (DRBA): Responsible for facilitating public engagement and education, as well as organizing and delivering recreational programs and volunteer opportunities for river clean-up and conservation efforts.

Danville Regional Foundation (DRF): A local nonprofit organization that supports community development and revitalization initiatives in the Danville region and provides funding and resources for projects that enhance the quality of life and economic vitality of the area.

Commonwealth Center for Recurrent Flooding Resiliency (CCRFR): a partnership between Old Dominion University and the College of William & Mary that aims to provide training, technical, and non-technical services and policy guidance in areas of recurrent flooding in Virginia.

Source: Dan River Basin Association



Residents, Groups, and Stakeholders

Local Stakeholders: Responsible for participating in the planning and implementation, as well as providing feedback and input on the needs and preferences of the community.

Community Organizations: Play an important role in disseminating information and facilitating community participation in resilience initiatives. Their engagement is essential for the success of public awareness campaigns and in fostering community-based resilience building activities.

Local Businesses: Engage in sustainable development and support economic incentives for resilience measures.

Local Residents: Central to the resilience plan, local residents are the primary beneficiaries and contributors. Their active participation in resilience-building efforts, from providing feedback to adopting sustainable practices, is critical to the plan's successful implementation. Residents are encouraged to engage in educational programs, community events, and emergency preparedness activities. Their firsthand experiences and insights are invaluable in shaping a resilience plan that truly resonates with and protects the community. Residents also play a key role in maintaining and enhancing community cohesion, which is essential in times of crisis and recovery.



9.3 Financial Strategies for Resilience and City Projects

As Danville continues to advance its resilience and infrastructure goals, the integration of financial strategies across all city-led projects is important. This section outlines a comprehensive approach to financial decision-making that ensures that resilience considerations are embedded in every phase of planning, budgeting, and implementation. By effectively managing financial resources and exploring diverse funding opportunities, Danville can support sustainable development and community resilience, ensuring that all projects and initiatives contribute to the long-term well-being of the city.

Integrating Resilience into Financial Decision-making

As Danville continues its efforts to strengthen community resilience, it is increasingly important to consider how financial decision-making processes can support these goals. By embedding resilience into budgeting, investment strategies, and long-term financial planning, the city can better prepare for the uncertainties of the future, particularly those related to climate and flooding.

Danville's Current Financial Landscape

Danville's financial policies and processes have effectively supported the city's needs up to this point. However, as the risks associated with a changing climate and extreme weather events become more apparent, there is a growing opportunity to refine these processes further. By integrating resilience considerations into financial decision-making, Danville can enhance its ability to manage and mitigate these risks proactively. This evolution in financial planning can help ensure that the city remains on a sustainable path, even as new challenges emerge.

Strategies for Integrating Resilience into Decision-making Processes

Ensuring cost-effectiveness is a fundamental aspect of implementing the goals and actions outlined in the resilience plan for the City of Danville. However, it is important to integrate resilience considerations into the decision-making process and financial calculations to support the city's long-term sustainability and preparedness. The following is a step-by-step approach to effectively embedding resilience into Danville's financial strategies.



1. Initial Planning and Analysis

This stage involves the foundational work of analyzing and planning projects and initiatives. It sets the stage for making informed financial decisions that account for both immediate costs and long-term benefits. By including externalities in cost-benefit analyses, Danville ensures that financial resources are directed toward the most impactful initiatives.

Include Externalities in Cost-Benefit Analysis: Each proposed action should go through a thorough cost-benefit analysis (CBA) that accounts for externalities – factors not typically accounted for in traditional financial analyses. These might include environmental impacts (e.g. increased flood risk from new development); social effects (e.g. displacement of communities); and economic consequences (e.g. increased maintenance costs).

Prioritize Projects Based on Comprehensive Value: Prioritize actions that offer the highest overall value, considering both direct and indirect impacts. Projects should be evaluated not only for their financial return, but also for their contribution to Danville’s long-term sustainability and resilience. For example, a green stormwater infrastructure project might have higher upfront costs but could offer significant long-term savings through reduced flood damage and improved public health and housing security.

2. Budget Development and Timeline Establishment

Developing a detailed budget and timeline is essential for managing the financial aspects of any project. This stage ensures that resources are allocated efficiently and that projects and initiatives progress according to plan to avoid unanticipated delays or departures.

Develop Detailed Budgets: Create a comprehensive budget for initiatives and projects that includes all anticipated costs, such as staffing, materials, equipment, and contingency funds for unforeseen costs. For example, when planning a new public park, the budget should cover everything from initial design and construction to ongoing maintenance and potential environmental restoration activities.

Create Clear Timelines: Establish a timeline that aligns budget allocation with project and initiative phases, ensuring that funds are available when needed and that the project is completed on schedule. Timelines should be clear and achievable.



3. Funding Identification and Securement

This stage focuses on securing the necessary financial resources to support Danville projects and initiatives. As much as possible, it is important to explore diverse funding sources to reduce financial risk and increase project feasibility.

Explore and Identify Funding Sources: Identify potential funding sources, such as local government budgets, state and federal grants, and private partnerships.

Secure Funds through Strategic Proposals: Prepare proposals that clearly outline the project or initiative's value and financial viability, supported by the cost-benefit analysis and detailed plans. These proposals should be tailored to the specific requirements of each funding source.

4. Implementation and Expenditure Monitoring

Once the project or initiative is underway, ongoing monitoring of expenditures and progress is important to ensure that it stays on track. This stage helps identify and address issues before they escalate.

Implement Actions According to Plan: Carry out the project or initiative as planned, ensuring that each step is executed within the allocated budget and timeline.

Monitor Expenditures and Progress: Regularly track expenditures against the allocated budget and assess progress against the timeline. This monitoring will highlight any deviations and allow for timely corrective actions.

5. Coordination with Partners and Stakeholders

Collaboration with outside partners and stakeholders is essential for the success of city-led projects. This stage ensures that all efforts are aligned and resources are used efficiently.

Engage with Partners: Collaborate with key partners, stakeholders, and community members to share resources, expertise, and insights. This collaborative approach can lead to cost savings and enhanced project outcomes.

Avoid Duplication of Efforts: Coordinate actions across different projects to prevent overlapping efforts and wasted resources. For example, if multiple infrastructure projects are planned in the same area, coordinate their timelines to minimize disruption and cost.



6. Evaluation and Reporting

Evaluation and reporting are key to maintaining accountability and transparency for city-led projects. This stage ensures that project outcomes are assessed and shared with stakeholders.

Assess Outcomes and Impacts: Continuously evaluate the effectiveness of implemented actions by measuring both quantitative and qualitative outcomes.

Adjust Plans as Necessary: Based on ongoing evaluation, make any necessary adjustments to ongoing and future projects. This could involve revising budget estimates, altering timelines, or changing project scopes based on lessons learned.

Report Progress: Regularly report on the progress, challenges, and successes to all relevant stakeholders, including funding bodies, city officials, and the community.

7. Continual Improvement and Adaptation

The final stage involves using the insights gained from each project and initiative to improve future efforts. This iterative process ensures that the city continues to adapt and refine its decision-making processes.

Learn from Implementation: Analyze the outcomes of each project and initiative to identify best practices and areas for improvement.

Apply Lessons to Future Projects: Use knowledge gained to enhance future decision-making and project planning. Continuously adapting the process ensures that Danville remains responsive to new challenges and opportunities.



Identifying Funding Resources

In Danville, funding for various city projects, especially those related to infrastructure repair, improvement, and resilience building, comes from a mix of local, state, and federal sources. This diverse funding approach enables the city to undertake significant projects, addressing issues ranging from flood damage repair to stormwater management and infrastructure modernization.

Local Funding Contributions

A substantial portion of funding for projects in Danville originates from the city's budget. This includes allocations for general stormwater improvements, infrastructure rehabilitation, and upgrades to essential services like sanitary sewers and electrical distribution systems. These projects often involve substantial investment from the city's funds, reflecting Danville's commitment to maintaining and enhancing its infrastructure.

For specific incidents like flood damage to critical infrastructure, Danville has utilized insurance proceeds to cover a part of the repair costs. This approach demonstrates the city's preparedness in managing financial risks associated with natural disasters and the importance of having robust insurance policies for key assets.

State Grants and Matching Funds

State grants contribute significantly to Danville's efforts in specific areas like flood mitigation and resilience planning. These grants often require the city to provide matching funds, exemplifying a collaborative financial effort between state agencies and the local government. Such grants are pivotal in enabling focused studies and the implementation of strategic plans to reduce vulnerabilities and enhance community resilience.

Federal Assistance

Federal assistance, particularly from agencies like FEMA, plays a prominent role in supplementing Danville's resources for dealing with the aftermath of significant natural disasters. This form of funding is often vital in addressing extensive damage and facilitating recovery efforts, ensuring the city can bounce back from severe weather events and other emergencies.





10. Conclusion

10.1 A Resilient Future

This Flood Preparedness and Resilience Plan for Danville represents a comprehensive approach to addressing the city's environmental, infrastructural, and social challenges in the face of increasing flood risks. Through robust analysis and community engagement, this plan provides a roadmap for enhancing Danville's ability to withstand, respond to, and thrive amidst evolving environmental conditions. Written concurrently and in alignment with the PLAN Danville comprehensive plan for the city, this effort ensures that resilience strategies, particularly in flood preparedness, are aligned with the City's long-term goals for growth and development.

The plan's six key goals, ranging from advocating for efficient and resilient homes to conducting thorough flood risk assessments, form the backbone of Danville's strategy for a more resilient future. These goals, grounded in practical considerations and local realities, aim to yield tangible benefits in flood protection, infrastructure enhancement, and community preparedness.

Central to this plan is the recognition that resilience requires a multi-faceted approach. The guiding principles outlined in the document emphasize the importance of community empowerment, sustainable development, infrastructure investment, and comprehensive flood risk management. These principles, when applied across city initiatives, will help ensure that resilience becomes an integral part of Danville's growth and development.

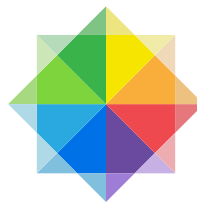


Implementation of this plan will require coordinated efforts across all sectors of the community. From individual property owners taking steps to flood-proof their homes, to businesses adopting sustainable practices, to city departments integrating resilience into their operations, each action contributes to Danville's overall preparedness.

The plan also highlights the importance of key initiatives such as participating in the Community Rating System (CRS), hiring a Resilience Coordinator, and identifying a Grant Writer. These practical steps can provide immediate benefits, including potential discounts on flood insurance rates for residents and improved access to funding for resilience projects.

As Danville moves forward with this plan, it's important to recognize that building resilience is an ongoing process. The strategies outlined here are designed to be adaptable, allowing for refinement based on new data, changing conditions, and lessons learned from implementation.

By embracing this Flood Preparedness and Resilience Plan, Danville is taking a proactive stance in safeguarding its future. The efforts outlined here will not only help protect against flood risks but also contribute to the city's overall stability and prosperity. As these strategies are put into action, Danville is poised to become a community that doesn't just withstand challenges, but emerges stronger from them, creating a safer, more resilient environment for all its residents.



11. Appendix

11.1 Key Assessments and Findings

In order to create actionable policies focused on these needs, this study evaluated the City for risk factors and environmental concerns through a series of assessments, including:

Environmental Assessment

Climate Conditions: Analysis revealed significant changes in precipitation patterns and temperature fluctuations, indicating an increased risk of flooding and high-intensity storms.

Physical Conditions: Examination of Danville's hydrography, watersheds, topography, soil, and geology highlighted areas of vulnerability and potential for environmental conservation.

Ecosystem Services: The study identified critical provisioning, regulating, cultural, and supporting services provided by local ecosystems, emphasizing the need for their protection and enhancement.

Socioeconomic Assessment

Community Awareness: The assessment highlighted the need for improved public awareness campaigns, including user-friendly web experiences, educational visuals, and effective use of social media.

Community Preparedness: Evaluation of current preparedness levels revealed opportunities for enhancing drainage systems, home equipment readiness, and community lifeline networks.

Economic Opportunities: The study identified potential for job creation and industry development in sectors aligned with resilience goals, such as green technology and sustainable practices.



Infrastructure Assessment

Hard Infrastructure: Analysis of water, power, gas, access routes, and buildings revealed areas requiring upgrades and maintenance to improve resilience.

Smart Infrastructure: The assessment identified opportunities for implementing advanced technologies to enhance infrastructure efficiency and adaptability.

Governance Assessment

Utility Management: Evaluation of current practices highlighted areas for improvement in utility management and emergency response capabilities.

Emergency Response: Analysis of the city's emergency response framework revealed strengths to build upon and gaps to address for more effective disaster management.

Governance Assessment

Utility Management: Evaluation of current practices highlighted areas for improvement in utility management and emergency response capabilities.

Emergency Response: Analysis of the city's emergency response framework revealed strengths to build upon and gaps to address for more effective disaster management.



11.2 Glossary: Common Terms in Resilience Planning

Understanding key terms in resilience planning establishes the foundation for effectively developing and implementing strategies that enhance Danville's capacity to withstand and recover from disasters. Some of these terms include:

Adaptive Resilience: The ability of a system or community to adjust and evolve in response to changing conditions, learning from each situation to improve future responses.

Climate Change: Long-term shifts in temperature and weather patterns, primarily caused by human activities, particularly the burning of fossil fuels.

Community Rating System (CRS): A voluntary program administered by FEMA that rewards communities for implementing floodplain management practices that exceed National Flood Insurance Program minimum standards.

Ecosystem Services: The benefits that people obtain from ecosystems, including provisioning services (e.g., food and water), regulating services (e.g., flood and disease control), cultural services (e.g., recreational benefits), and supporting services (e.g., nutrient cycling).

Flash flooding: When rain is heavy and falls quickly, it is unable to soak into the ground fast enough. This extra water runs off the hills and collects in the valleys.

Floodplain: The area of land adjacent to a river or stream that experiences flooding during periods of high discharge.

Flood Hazard Area: Regions identified as high-risk for flooding, influencing insurance requirements and rates.

Flood Insurance: Insurance coverage against property loss from flooding, often mandated in high-risk areas.

Flood Risk: The potential of flooding and related damage, considering geographical and historical data.

Green Infrastructure: An approach to water management that protects, restores, or mimics the natural water cycle, often incorporating both natural and engineered systems.

Impervious Surface: A surface that does not allow water to penetrate, increasing stormwater runoff volume and velocity (e.g., concrete, asphalt).



Municipal Separate Storm Sewer System (MS4): A system of conveyances designed to collect and transport stormwater runoff in urban areas.

National Flood Insurance Program (NFIP): A program managed by FEMA that provides flood insurance to property owners in participating communities.

Resilience: The capacity of a community, business, or natural environment to prevent, withstand, respond to, and recover from a disruption.

Shock: A sudden and unexpected event that can cause significant and immediate disruption to a system or community. Examples of shocks include natural disasters such as floods, earthquakes, or hurricanes, as well as human-made events such as terrorist attacks or pandemics.

Stressor: A slow and gradual event that can accumulate over time, weakening a system or community. Stressors can be environmental, social, or economic in nature, and can include factors such as climate change, economic downturns, or social inequalities. Unlike shocks, stressors may not always be immediately visible, but can have long-term effects that can accumulate over time.

Stormwater Management: The effort to reduce runoff of rainwater or melted snow into streets, lawns, and other sites and the improvement of water quality.

Urban Flooding: Water accumulation in developed areas with impervious surfaces such as roads and parking lots. Often affects buildings and infrastructure.

Urban Heat Island Effect: A phenomenon where urban areas experience higher temperatures than surrounding rural areas due to the concentration of structures and impervious surfaces that absorb and retain heat.

Watershed: An area of land that drains water, sediment, and dissolved materials to a common outlet such as a river, lake, or ocean.

Weatherization: The practice of protecting a building and its interior from the elements, particularly from sunlight, precipitation, and wind, to reduce energy consumption and optimize energy efficiency.



STAFF REPORT

DATE: April 13, 2026
TO: Planning Commission
FROM: Renee Burton, Division Director of Planning
RE: Special Use Permit application PZ26-00223 filed by JLF Innovations, Inc. to allow indoor commercial recreation in accordance with Chapter 41.3.A at Parcel 73158 (145 Holt Garrison Parkway Suite 410).

SUMMARY

The applicant, JLF Innovations, Inc., requests a special use Permit to allow indoor commercial recreation at Parcel 145 Holt Garrison Parkway, Suite 410. The property is zoned HB, Highway Business, and is the future home of Bricks and Minifigs Danville, a retail LEGO/hobby store. The applicant proposes to expand operations to include staff-supervised birthday parties and structured STEM educational classes.

The subject property is located within Coleman Marketplace, a commercial center containing retail and service-oriented businesses, all of which are zoned HB, Highway Business, and is designated Convenience Commercial on the Future Land Use Map, which supports retail and office uses.

The activities will take place entirely indoors and within the business's existing operating hours: Monday through Friday from 11:00 a.m. to 8:00 p.m., Saturdays from 10:00 a.m. to 8:00 p.m., and Sundays from 12:00 p.m. to 6:00 p.m. The applicant expects to employ two to three staff members during regular retail hours and up to three to five employees during scheduled events or peak periods.

Thirteen (13) notices were mailed to property owners within 300 feet of the subject property. At this time, no responses have been received.

ALIGNMENT WITH THE COMPREHENSIVE PLAN

The proposed use is compatible with the Comprehensive Plan, the surrounding commercial context, and the established operational characteristics of the corridor. Specifically, support for this project aligns with the following PLANDanville goals:

- Ch. 2 - Land Use: To better connect Danville residents to amenities and encourage growth in existing developed areas
- Ch 3 - Transportation: To establish activity centers within the existing transportation network
- Ch. 6 - Economy: To support small businesses and entrepreneurs; and to invest in commercial districts

- Ch. 7 - Environment: To support low impact development through use of existing buildings/structures
- Ch. 8 - Culture: To create paths for all community members to celebrate their unique identities

RECOMMENDATION

Planning staff recommends approval of Special Use Permit application PZ26-00223 to allow indoor recreation in accordance with Chapter 41.3.A at Parcel 73158 (145 Holt Garrison Parkway Suite 410).

ATTACHMENTS

1. Application
2. 145 Holt Garrison Pkwy Ste 410 Aerials Map
3. 145 Holt Garrison Pkwy Ste 410 Owners Zoning Map

DANVILLE, VA

- a. The Comprehensive Plan.
 - b. The applicable zoning district.
 - c. The surrounding properties.
 - d. Current and future neighborhood conditions.
 - e. Pedestrian and vehicular traffic patterns, on-site and off-site.
 - f. Adequate public facilities.
4. When requested by the Director of Planning/Zoning Administrator, the Planning Commission, or the City Council, the following information shall be provided by the applicant:
- a. The architectural elevations and floor plans of proposed building(s).
 - b. Traffic impact analysis.
 - c. Fiscal impact analysis.
 - d. Parking and site circulation analysis.
 - e. Photographs of property and surrounding area.
 - f. Environmental impact statement.

Property Location: 145 Holt Garrison Parkway, Suite 410, Danville, VA 24540

Describe Proposed Request: Please see attached letter.

Applicant's Signature

Date

Commonwealth of Virginia

City of Danville

The foregoing instrument was acknowledged before me this 20th day of February, 2026
by Lisa Jones

Lisa Kingery Jones
Notary Public

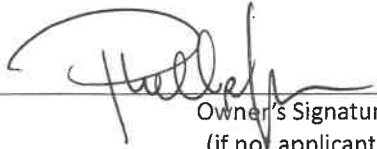
Registration No.:

1153419

Expires:

05/31/2029

Lisa Kingery Jones
- NOTARY PUBLIC -
Reg.#7753419, Commonwealth of Virginia
My Commission Expires on May 31, 2029


Owner's Signature
(if not applicant)

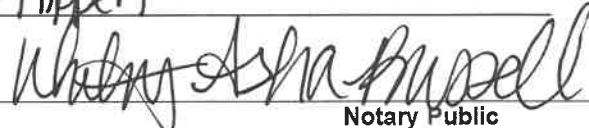
DANVILLE, VA
2/19/2026
Date

Commonwealth of Virginia

City of Danville

The foregoing instrument was acknowledged before me this 19 day of February, 20 26

by Philip Flippen


Notary Public

Registration No.: 7988500

Expires: August 31, 2026

WHITNEY ASHA RUSSELL
NOTARY PUBLIC
REG. # 7988500
COMMONWEALTH OF VIRGINIA
MY COMMISSION EXPIRES AUGUST 31, 2026

City of Danville, Virginia (Division of Planning and Zoning)

Written Statement of Proposed Project Compatibility

Property Location:

145 Holt Garrison Parkway, Suite 410, Danville, Virginia 24540

Describe Proposed Request:

JLF Innovations, Inc, dba Bricks and Minifigs Danville (the applicant), a independent owner of the Bricks and Minifigs Franchising Inc, proposes to operate a hobby/toy retail store with accessory indoor birthday parties and structured STEM educational classes/trainings within its existing commercial building.

1. Description of Proposed Use

The primary use of the property will be a **retail sales establishment** specializing in LEGO products and related merchandise.

Accessory to the principal retail use, the business will offer:

- **Indoor Birthday Parties** (reservation-only, staff-supervised)
- **STEM Educational Classes and Trainings**, including robotics, engineering challenges, and structured skill-based workshops

All activities will occur entirely within the enclosed building. No outdoor events, exterior sound amplification, temporary structures, or site alterations are proposed.

Hours of Operation:

- **Monday – Friday:** 11:00 AM – 8:00 PM
- **Saturday:** 10:00 AM – 8:00 PM
- **Sunday:** 12:00 PM – 6:00 PM

Birthday parties and STEM classes will occur only within these operating hours.

Employees:

- **Estimated 2–3 employees on-site during standard retail hours**
- **Up to 3–5 employees during scheduled events or peak**

periods

Staffing levels are consistent with small-scale neighborhood-serving retail establishments.

2. Compatibility with the Comprehensive Plan

The proposed use supports the City of Danville Comprehensive Plan goals promoting:

- Economic development and small business growth
- Activation of commercial corridors
- Youth enrichment and educational programming
- Community-oriented retail and service uses

The inclusion of structured STEM programming aligns with community objectives to expand educational opportunities and workforce skill development in science, technology, engineering, and mathematics.

3. Consistency with the Applicable Zoning District

The proposed retail use is consistent with commercial zoning districts that permit retail sales establishments.

Birthday parties and STEM classes are clearly **accessory uses**, incidental and subordinate to the principal retail function, and are comparable in intensity and character to typical commercial indoor instructional or personal service activities permitted within commercial districts.

No expansion of building footprint, change in intensity beyond typical retail operations, or deviation from zoning performance standards is proposed.

4. Surrounding Properties

The property is located within a commercial area characterized by retail and service-oriented businesses. Specifically, the space is a suite next to Bath and Body Works and Target at the Coleman Marketplace Center. The proposed use is compatible in scale, character, and intensity with surrounding commercial properties and does not introduce industrial, high-noise, or late-night activity.

All activities are family-oriented, low-impact, and fully contained indoors.

5. Current and Future Neighborhood Conditions

The proposed use enhances the commercial corridor by:

- Increasing daytime and early evening activity
- Providing youth-focused programming
- Supporting family-centered community engagement

The use does not introduce adverse operational characteristics such as outdoor gatherings, amplified music, or late-night activity.

6. Pedestrian and Vehicular Traffic Patterns

Traffic generation is expected to be consistent with standard retail peak periods.

- Birthday parties are reservation-based and staggered.
- STEM classes have defined start and end times.
- Attendance is limited and controlled.

Parking demand will remain consistent with existing retail capacity. No changes to site circulation or access are proposed.

7. Adequacy of Public Facilities

The existing building is connected to public water, sewer, and utilities. The proposed use will not create demand exceeding typical retail commercial use. No additional public infrastructure improvements are required.

Conclusion

The proposed retail store with accessory birthday parties and STEM educational programming is consistent with:

- The City of Danville Comprehensive Plan
- The applicable commercial zoning district
- Surrounding commercial land uses
- Existing neighborhood conditions and infrastructure capacity

All activities are indoor, controlled, reservation-based when applicable, and operate within established business hours. The use is low-impact, family-oriented, and enhances the vitality of the commercial corridor while remaining fully compatible with

surrounding properties.

I welcome any follow up questions or concerns and look forward to serving the City of Danville and all of its surrounding communities.

Regards,

A handwritten signature in black ink, appearing to read "Phillip J. Flippen". The signature is fluid and cursive, with a large initial "P" and a stylized "J" and "F".

Phillip J. Flippen, MA, LPC
CEO and Owner

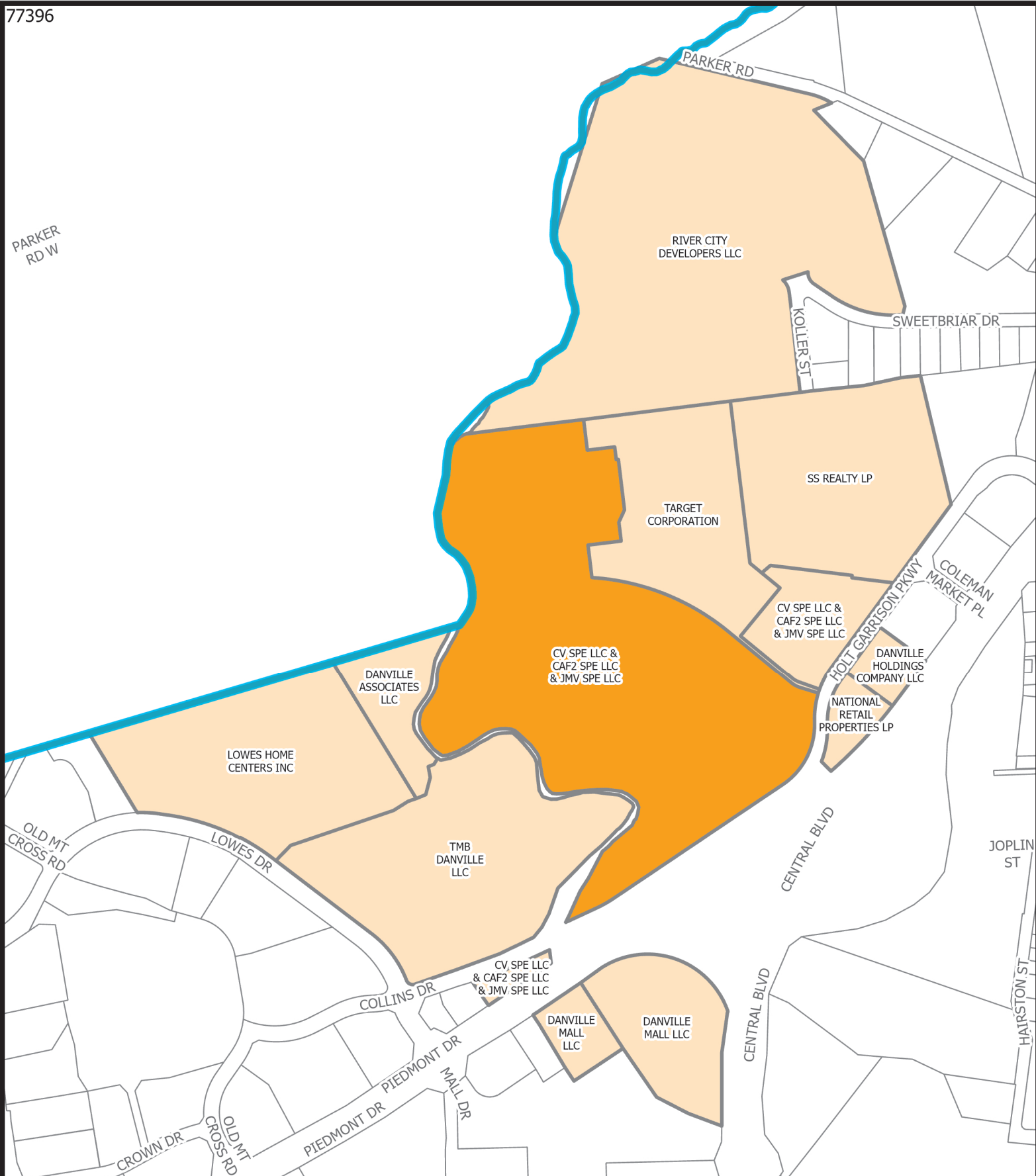


2025 AERIAL IMAGERY OF SUBJECT PROPERTY

Prepared by:
Planning Division
3/12/2026



Disclaimer: Information contained on this map is to be used for reference purposes only. The City of Danville is not responsible for any inaccuracies herein contained. The City of Danville makes no representation of warranty as to this map's accuracy, and in particular, its accuracy in labeling, dimensions, contours, property boundaries, or placement or location of any map features thereon. No responsibility is assumed for damages or other liabilities due to the accuracy, availability, use or misuse of the information herein provided.



SURROUNDING PROPERTY OWNERS AND ZONING WITHIN 300 FEET OF SUBJECT PROPERTY

Prepared by:
Planning Division
3/12/2026



Disclaimer: Information contained on this map is to be used for reference purposes only. The City of Danville is not responsible for any inaccuracies herein contained. The City of Danville makes no representation of warranty as to this map's accuracy, and in particular, its accuracy in labeling, dimensions, contours, property boundaries, or placement or location of any map features thereon. No responsibility is assumed for damages or other liabilities due to the accuracy, availability, use or misuse of the information herein provided.

STAFF REPORT

DATE: April 13, 2026
TO: Planning Commission
FROM: Renee Burton, Division Director of Planning
RE: Special Use Permit application PZ26-00244 filed by Jonathan Sharolli to allow adult daycare in accordance with Chapter 41.3.A at Parcel 03430 (405 North Main Street).

SUMMARY

The applicant is requesting approval of a special use permit to allow the establishment of an adult day care facility at 405 North Main Street. The request is intended to supplement and function as part of the adult day care facility approved by City Council on March 3, 2026 (PZ26-00152) at 401 North Main Street.

Based on the Virginia Uniform Statewide Building Code (USBC), adult day care facilities are allowed one (1) occupant per thirty-five (35) square feet. The proposed 2,100 square foot facility at 405 North Main Street would allow for an increase in capacity of approximately 60 occupants. Off-street parking will be required at a rate of one (1) space per staff member per shift, plus four (4) additional spaces.

The proposed use represents an expansion of an already approved special use, utilizes an existing vacant commercial space, and remains consistent with the purpose and intent of the North Main Business District, which supports small-scale commercial services and community-oriented uses. Impacts related to traffic and noise are expected to remain minimal, as activities are conducted indoors and operation is limited to daytime hours.

Forty-four (44) notices were mailed to property owners within 300 feet of the subject property. At this time, four (4) responses have been received, one (1) opposed and three (3) unopposed.

ALIGNMENT WITH THE COMPREHENSIVE PLAN

The proposed use is compatible with the Comprehensive Plan, the surrounding commercial context, and the established operational characteristics of the corridor. Specifically, support for this project aligns with the following PLANDanville goals:

- Ch. 2 - Land Use: To better connect Danville residents to amenities and encourage growth in existing developed areas
- Ch 3 - Transportation: To create a multimodal transportation network that supports freedom of mobility
- Ch. 6 - Economy: To support small businesses and entrepreneurs; and to invest in

commercial districts (NMBD)

- Ch. 7 - Environment: To support low impact development through the use of existing buildings/structures
- Ch. 8 - Culture: To create paths for placemaking in redevelopment hubs, such as the NMBD

RECOMMENDATION

Planning staff recommends approval of PZ26-00244 to allow an adult daycare facility at Parcel 03430 (405 North Main Street).

ATTACHMENTS

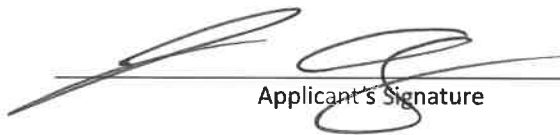
1. Application
2. 405 N Main St Aerials Map
3. 405 N Main St Owners Zoning Map

DANVILLE, VA

- a. The Comprehensive Plan.
 - b. The applicable zoning district.
 - c. The surrounding properties.
 - d. Current and future neighborhood conditions.
 - e. Pedestrian and vehicular traffic patterns, on-site and off-site.
 - f. Adequate public facilities.
4. When requested by the Director of Planning/Zoning Administrator, the Planning Commission, or the City Council, the following information shall be provided by the applicant:
- a. The architectural elevations and floor plans of proposed building(s).
 - b. Traffic impact analysis.
 - c. Fiscal impact analysis.
 - d. Parking and site circulation analysis.
 - e. Photographs of property and surrounding area.
 - f. Environmental impact statement.

Property Location: 405 N. Main St Danville, VA

Describe Proposed Request: Requesting a special use
permit for property to be used as an
adult daycare facility


Applicant's Signature

3/11/26
Date

Commonwealth of Virginia

City of Danville

The foregoing instrument was acknowledged before me this 11 day of March, 2026
by Stefanie E Jackson



Notary Public

Stefanie E Jackson
NOTARY PUBLIC
Commonwealth of Virginia
Reg. # 8102312
My Commission Expires 04/30/28

Registration No.: 8102312

Expires: 04/30/2028



2025 AERIAL IMAGERY OF SUBJECT PROPERTY

Prepared by:
Planning Division
3/12/2026



Disclaimer: Information contained on this map is to be used for reference purposes only. The City of Danville is not responsible for any inaccuracies herein contained. The City of Danville makes no representation of warranty as to this map's accuracy, and in particular, its accuracy in labeling, dimensions, contours, property boundaries, or placement or location of any map features thereon. No responsibility is assumed for damages or other liabilities due to the accuracy, availability, use or misuse of the information herein provided.

Prepared by:
Planning Division
3/12/2026



Page 160 of 180

STAFF REPORT

DATE: April 13, 2026
TO: Planning Commission
FROM: Renee Burton, Division Director of Planning
RE: Special Use Permit application PZ26-00251 filed by BFBDanville LLC to allow a waiver of side yard setback requirements in accordance with Chapter 41.2.I at Parcel 72436 (143 & 153 Crown Drive).

SUMMARY

The applicant, BFBDanville LLC, has submitted Special Use Permit application PZ26-00251 requesting approval to allow a waiver of the required side yard setback at 143 and 153 Crown Drive for a proposed subdivision of the existing commercial parcel. The subject property is zoned HB- Highway Business, which requires a minimum of twenty (20) foot side yard setback. The proposed waiver is intended to allow a zero-foot side yard setback between the two existing buildings along the proposed division and is intended to accommodate the subdivision of the property and allow for independent ownership and operation of the two existing structures. The applicant states that each building has its own independently constructed wall along the proposed lot line, and that these walls meet applicable fire resistance requirements of the Virginia Construction Code, allowing the structures to function as separate buildings. Documentation of this is required prior to recording a subdivision.

Surrounding properties are developed with commercial uses consistent with the Highway Business Zone, including retail, service, and restaurant uses. The proposed setback waiver applies only to an interior lot line and would not affect the required setbacks along public street frontages or exterior property boundaries.

Existing parking serving the two commercial buildings will remain unchanged as part of this request. The existing Goodwill building at 153 Crown Drive will use ingress and egress from Collins Drive and the vacant building at 143 Crown Drive will be served by access points from Lowes Drive and Crown Drive. The applicant has indicated that no change in use intensity is proposed. Any future redevelopment, change in use, or site modification that affects parking demand would be subject to review and approval at that time.

The establishment of a new interior lot line will require compliance with the landscaping and buffering requirements. A Landscape Plan in accordance with Chapter 41.4.C will be required prior to recording a subdivision to show that required landscaped areas, buffers, and screening standards are met for each resulting parcel.

Nineteen (19) notices were mailed to property owners within 300 feet of the subject property.

At this time, three (3) responses have been received, all unopposed.

ALIGNMENT WITH THE COMPREHENSIVE PLAN

The proposed use is compatible with the Comprehensive Plan, dependent upon appropriate landscaping pursuant to the UDC. Specifically, support for this project aligns with the following PLANDanville goals:

- Ch. 7 - Environment
 - EN.1.2 Tree Canopy Expansion - Expand Danville's tree canopy to offset urban heat island impacts.
 - EN.1.4 Low Impact Development - Prioritize low impact development (LID) across the city.
- Ch. 6 - Economy
 - E.2.1 Strengthen the Redevelopment Process - Enhance the efficiency and effectiveness of the redevelopment process for industrial and commercial business hubs within the city to attract new businesses, stimulate economic growth, create job opportunities, and enhance the overall vibrancy.

RECOMMENDATION

Planning staff recommends approval of Special Use Permit application PZ26-00251 to allow a waiver or side yard setback requirements in accordance with Chapter 41.2.I at Parcel 72436(143 & 153 Crown Drive) with the condition that a Landscape Plan be submitted and approved prior to recording a subdivision plat.

ATTACHMENTS

1. Application
2. 143 Crown Dr Aerial Map
3. 143 Crown Dr Owners Zoning Map (1)

- a. The Comprehensive Plan.
 - b. The applicable zoning district.
 - c. The surrounding properties.
 - d. Current and future neighborhood conditions.
 - e. Pedestrian and vehicular traffic patterns, on-site and off-site.
 - f. Adequate public facilities.
4. When requested by the Director of Planning/Zoning Administrator, the Planning Commission, or the City Council, the following information shall be provided by the applicant:
- a. The architectural elevations and floor plans of proposed building(s).
 - b. Traffic impact analysis.
 - c. Fiscal impact analysis.
 - d. Parking and site circulation analysis.
 - e. Photographs of property and surrounding area.
 - f. Environmental impact statement.

Property Location: 143 & 153 Crown Drive, Danville VA

Describe Proposed Request: See attached narrative

[Signature]
Applicant's Signature

3/16/2026
Date

Commonwealth of Virginia
City of Danville Charlottesville

The foregoing instrument was acknowledged before me this 16 day of March, 2026
by Benjamin Blackburn

[Signature]
Notary Public

Registration No.: 266048

Expires: August 31, 2026



March 10, 2026

City of Danville, VA - Community Development
Division of Planning and Zoning
c/o Renee Burton – Division Director of Planning
427 Patton Street
Danville, VA 24541
434.799.5260 Ext. 2502
BurtonR@Danvilleva.gov

RE: Special Use Permit - Narrative
143 & 153 Crown Drive Danville, VA
City of Danville PID: 72436
B&A Job # 04240075.01

BFBDanville LLC, et al, (Owner and Applicant) is requesting a special use permit specific to the proposed development of 143 and 153 Crown Drive to support redevelopment efforts on the subject parcel. Westwood Professional Services, Inc. is acting as the agent on behalf of the Owner.

The property is currently zoned Highway Business (HB) and the special use request is for an exemption to the 20' minimum side setback required by current zoning regulations. The requested side setback will be 0' to accommodate the proposed internal subdivision of the property as shown on the attached exhibit.

Subdividing the parent property into 2 parcels will create flexibility in ownership for the two buildings and separation of operations. One space operates in a retail function, while the other functions as a storage facility. Additionally, the individual ownership of each parcel will likely increase the taxed assessed values versus taxing as a whole.

Each new lot will meet minimum public road frontage required per current zoning regulations. Parking and access will be managed under private cross access agreements to be put in place at such time as either property is sold independently.

Westwood Professional Services, Inc has reviewed existing conditions of the existing walls of the building along the location where this new lot line will be. It has been determined there are two existing walls directly adjacent to each other (a 6" thick solid concrete wall on one side and a minimum 8" thick concrete masonry unit wall on the other side) that are each load-bearing for the roof on each side of the wall, and the roof structure on each side of the new line will not affect the wall or roof structure in the opposite side of the new lot line. As such, each structure on each side of the new property line can be considered a separate building. Each existing wall appears to meet the requirements of a prescriptive 2-hour wall per the 2021 Virginia Construction Code Section 721, with no openings in either wall. As such, these two walls appear to be sufficient to meet the requirements of a 2-hour exterior wall directly adjacent to a property line as required per VCC Table 705.5.

The existing zoning district will remain commercial which is supported by the Comprehensive Plan. The adjacent properties are various commercial entities including big box stores, multi-tenant retail, restaurants, and restaurants with drive-thru. No changes to access locations or existing development patterns are anticipated with the exception of minor updates that may be required by future tenants of the building or landscape modifications within the parking area. Existing utilities currently serve the building and will remain in place to serve future users.

The project location and use is appropriate with the existing surrounding land uses and zoning designations. We appreciate your consideration of this Special Use Permit application and look forward to the new investment by the applicant to provide new opportunities within the City of Danville.

Westwood

1208 Corporate Circle
Roanoke, VA 24018

main (540) 772-9580
fax (540) 772-8050

Sincerely,
Westwood Professional Services, Inc.

A handwritten signature in black ink, appearing to read "BK" with a stylized flourish.

Ben Crew, L.A - Agent for BFBDanville LLC, etal.
Director, Land Development
Attachments: Proposed Division Concept Plan

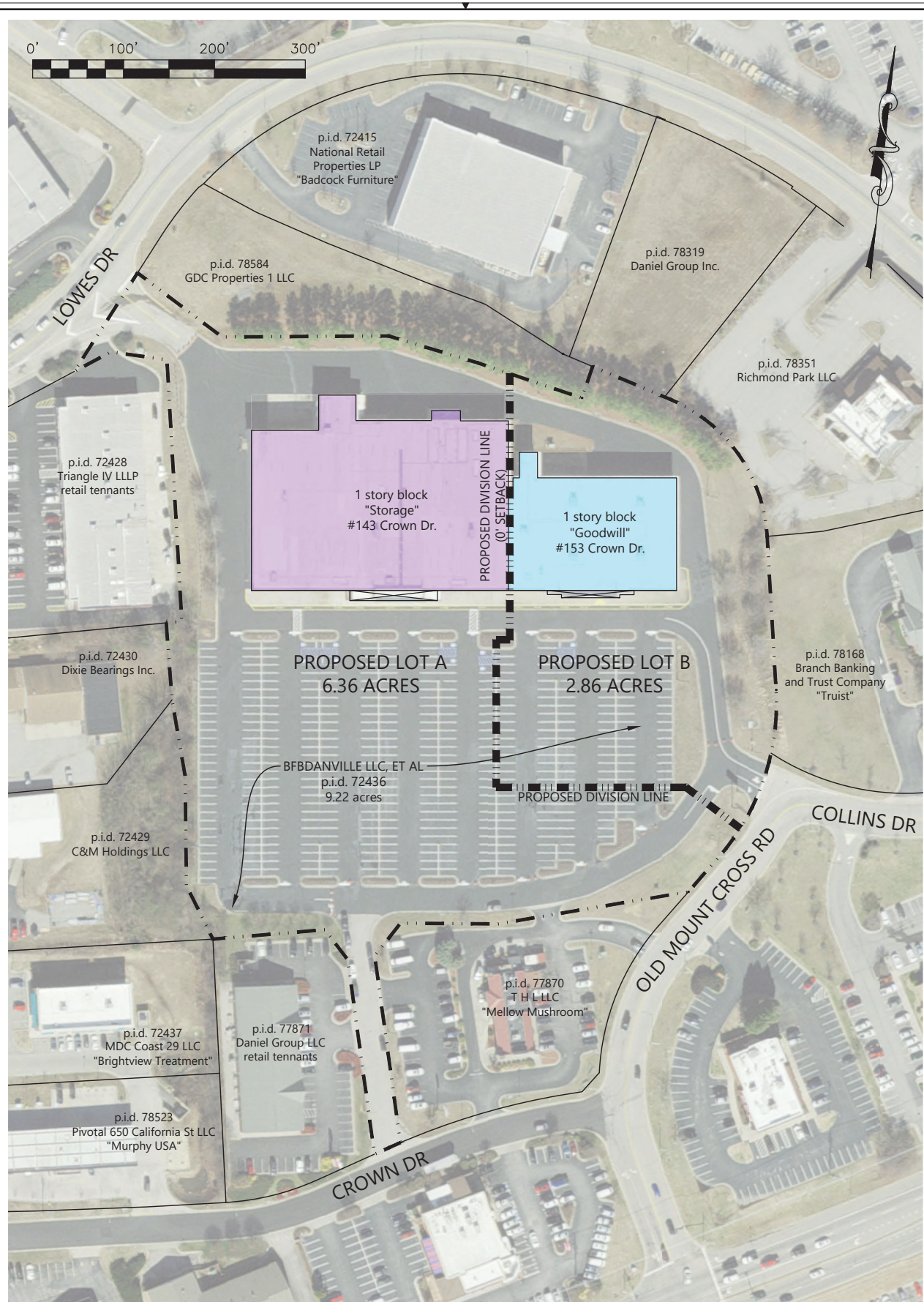


EXHIBIT A
SHOWING THE PROPOSED SUBDIVISION
OF DANVILLE P.I.D. 72436

Westwood

Westwood Professional Services, Inc.
 1208 CORPORATE CIRCLE
 ROANOKE, VA 24018
 T: 540.772.9580

DRAWN BY: MSS
 CHECKED BY: BTC

PROJECT #04240075.01 - SUP
 DATED 03-10-2026

westwoodps.com

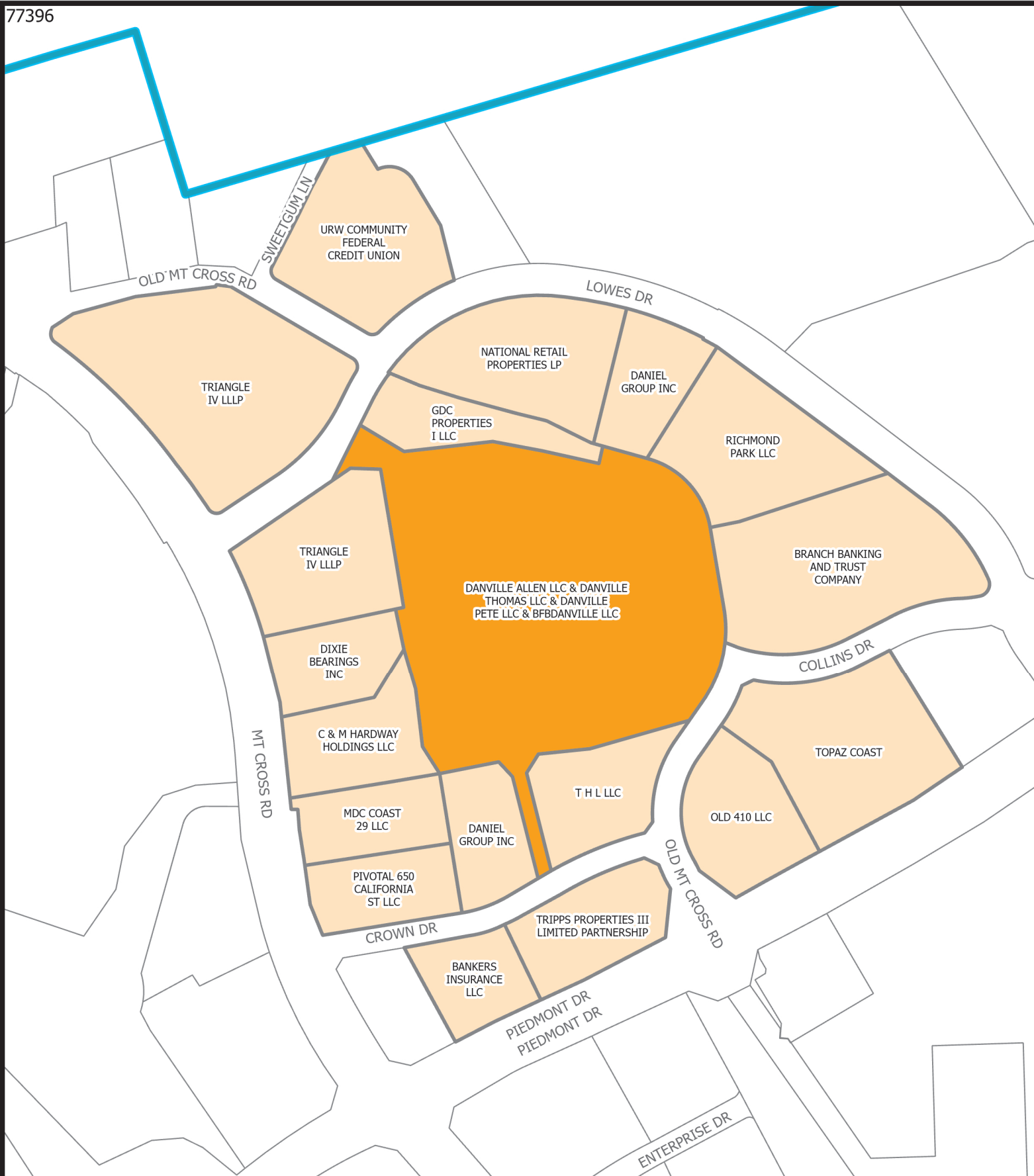


2025 AERIAL IMAGERY OF SUBJECT PROPERTY

Prepared by:
Planning Division
3/19/2026



Disclaimer: Information contained on this map is to be used for reference purposes only. The City of Danville is not responsible for any inaccuracies herein contained. The City of Danville makes no representation of warranty as to this map's accuracy, and in particular, its accuracy in labeling, dimensions, contours, property boundaries, or placement or location of any map features thereon. No responsibility is assumed for damages or other liabilities due to the accuracy, availability, use or misuse of the information herein provided.



SURROUNDING PROPERTY OWNERS AND ZONING WITHIN 300 FEET OF SUBJECT PROPERTY

Prepared by:
Planning Division
3/19/2026



Disclaimer: Information contained on this map is to be used for reference purposes only. The City of Danville is not responsible for any inaccuracies herein contained. The City of Danville makes no representation of warranty as to this map's accuracy, and in particular, its accuracy in labeling, dimensions, contours, property boundaries, or placement or location of any map features thereon. No responsibility is assumed for damages or other liabilities due to the accuracy, availability, use or misuse of the information herein provided.

PLANNING COMMISSION MINUTES

MARCH 9, 2026

MEMBERS PRESENT

John Ranson
Sylvester Townes
Jimmy Bolton
Pierre Jones
Ann Evans

MEMBERS ABSENT

Steve Petrick
Kalil Khan

STAFF

Cynthia Lester
Clarke Whitfield
Stefanie Jackson
Renee Burton
Shanika Williams

I. ITEMS FOR PUBLIC HEARING

1. *Special Use Permit application PZ26-00191 filed by the Industrial Development Authority for a waiver to maximum sign area at Parcel 21322 (Memorial Drive).*

Mr. Bolton opened the Public Hearing.

Ms. Custer stated. I'm here on behalf of the Industrial Development Authority. We are trying to get the signage approved in this location so that the public can have clear identification of the commercial tenants that will be moving into the Dan River Falls facility. It will also facilitate way finding for citizens, visitors and patrons alike it needs to be large enough to be visible from Memorial Drive as people are driving by. Another rendition which also still meets the requirements and specification of 125 square feet of advertising space. No more than 150 architect square feet of architectural elements, and obviously this rendition is much less than the 30 square feet height requirement.

Mr. Ranson stated. Is it an illuminated sign?

Ms. Custer stated. Yes, we are still working on the details of how the lighting will be reflected, but we will make sure it's visible at night.

Mr. Ranson stated. On both sides?

Ms. Custer stated. Yes.

Ms. Evans stated. Will it have where each is located?

Ms. Custer stated. No, it will not have where each is located, you'll turn into that driveway you will be able to enter the building and then there'll be specific directional signage within the building itself to locate the different tenants.

Mr. Bolton closed the Public Hearing

Mr. Ranson made a motion to approve application PZ26-00191. Ms. Evans seconded the motion. The motion was approved by a 5-0 vote.

2. *Special Use Permit application PZ25-00424 filed by Blackstone Building Group, LLC to allow a waiver of lot frontage requirements Parcels 78585, 77925, 71138, 77918, 77919, 77920, 77921 and 77922 (Vandola Road, Riverside Drive and Kayewood Lane).*

Mr. Bolton opened the Public Hearing.

Mr. Byers stated. I am the builder developer for Vandola Crescent. I apologize I could not be here when this came up in the fall. It was sent to City Council, which has now reverted back to y'all to give me the opportunity to explain. Little history on the project, it was unanimously approved in the summer of 2024 for up to 360 units by Planning Commission and City Council. Through the development some items have come up that we did not have prior knowledge of. There were water pressure issues; which we entered into a 50/50 agreement with the city of Danville. That has already been signed and approved by city council. Bring water service from Riverside to the Vandola project which would alleviate any pressure issue. The project as it stands today is 317 units, I have never asked for additional density or capacity if anything we are 43 units less than we were originally approved for. We had been in discussion about dedicating all the city right of way which there is a reimbursement agreement. When that was drafted in the mid 2000's that dictated that it had to be individual lots. Where this was originally planned as a condominium. The building hasn't changed. You could build today as a condominium, but that kicks out the whole right of way dedication and reimbursement agreement. In order for that to be accomplished we would need a waiver of lot lengths just on the workforce housing, not on the 55 and over. The smallest lot would be 16.9 on an 18-foot requirement but if you take the average of an 8-unit building, In the different width we are actually at 19 point and some odd feet if you take an average of that vertically and horizontally. If this project was developed today, whether it's a condo or fee simple lot, there's no physical way to sell the difference. The difference is we have been relying on that reimbursement agreement in large part for affordability of the units. If we were not allowed to have that, it takes away from affordability. It also creates a hodgepodge because you could have it reimbursement dedication here. All we are asking for is a waiver of 18 feet and it is only for the workforce units, not all the units it is some interior units. When this was first approved and we went to the housing summit units that we advertised were the same exact units we have today. We have a lot of amenities which we can provide because of the reimbursement agreement. Which includes part pavilion, child play area, and dog park, the 55 and over section has its own pool, clubhouse, pickleball and dog parks. One of things we did change was I removed 8 units from the master plan. I wanted to build and donate a non-profit childcare facility on site. The origination of that is, to be honest with my own children, childcare has skyrocketed and through the profitability of the project, this will be donated into a 5013C. We are working with some of the foundations as well as the city to create grants that would drive the operating costs down. My goal is to drive the cost of childcare down by 2/3. To have an amenity-rich community, we need to have all the benefits that are available to us because we're giving back. If we take that away something else is going to come out of the project. All the units along Vandola enter and exit off their own lane. There are no driveways on Vandola.



SKM_C551i
S26031108310.pdf

I have put a lot of time and thought into and done a lot of marketing studies, trying to pinpoint what workers are going to be coming to the area and what amenities and type housing they're expecting, that is where the concept came from. This style of project is being built in hundreds of places throughout the Mid-Atlantic. The conditions that we are asking for are for the workforce units to amend that 18-foot requirement is a small price to pay for the development as a whole. I hope in your consideration of all of the project, we have spent thousands of dollars on traffic studies, soil studies, wetland and marketing studies, as well as engineering and architecture. It will cost another \$150,000 to change this. We need housing here. Once we can work through this final issue, we are basically shoveled ready.

Ms. Evans stated. You said it didn't affect every unit. How many units does it affect?

Mr. Byers stated. 221 units.

Ms. Evans stated. Out of a total of 317 units.

Mr. Byers stated. 96 units of the 55 and over are not the issue right now. Those are wider units because they are all lower on basically one floor living with 2 car garages.

Mr. Byers stated. If you built this today as a condominium and forego the right of way agreement and reimbursement, if you built it that way on one side of the road and you built fee simple with lots, there's no physical different way to tell the difference in the two. There is a line in the ground that shows up in your deed and your survey. But physically and vertically there is nothing you can see. There is still HOA management company for both the 55 and over and workforce.

Mr. Ranson stated. The site plans are connected units, and they go property line to property line.

Mr. Byers stated. Correct.

Mr. Ranson stated. The separation and then they meet the requirements for side yards per the building code. So, you will have some units that are 16.9, some that are 17, if they are connected, they will not have side yard.

Mr. Byers stated. There is a cavity between the party walls, so some units are a little bit wider than the others and then the end units are a little wider than the interior. They vary in width. Every lot is not going to be 16.9 but there.

Mr. Ranson stated. You said the party wall is on the property line.

Mr. Byers stated. The property line normally splits the interior of the party.

Mr. Ranson stated. So, if it's 12-inch wall, they get 6 inches and they get 6 inches.

Mr. Byers stated. Correct, that provides fire and sound separation.

Mr. Ranson stated. You stated the number of units hasn't changed.

Mr. Byers stated. No, it has not. Again, we were approved for 360 units, we are at 317. I don't know how this misinformation that we were trying to go up. This has never been about increasing the units, it been about being able to tie into the dedication and reimbursement program for the roads and the right of way and make it cohesive through the whole project.

Ms. Evans stated. We're just talking about the workforce housing. Correct?

Mr. Byers stated. Correct.

Ms. Evans stated. How many units are in the workforce housing?

Mr. Byers stated. 221.

Ms. Evans stated. And of 221 how many will be 16.9, less than 18.

Mr. Byers stated. Approximately 50% of the lot less than 18.

Mr. Clements stated. I'm a realtor in the area and vice president of Wilkins and Company. I have served the community for the past 20 years. I have dedicated time to helping Mr. Byers market and bring this project to fruition. Housing is such an important issue in our area and new construction is

something that we have an abundance of here unfortunately. I also service as vice president for the state of Virginia real estate Association. I have just come to say this is truly a very important project for our community as far as housing we have to have it here, we have to have it somewhere, but it's been a lot of time, energy and a lot of strategic thinking put into why this project needs to go here.

Ms. Wood stated. When I saw the rendering of this. I was thrilled. I do mortgages. I am a strong advocate for this development and as a neighboring resident of the city. I think it will be a great way to build stronger community in that western part of the city of Danville. This project is so critical for Virginians for economic development, and I just want to say definitively that I hope that you'll consider the exception to the lot line rule but the lot in this case is literally the wall of the house. I think we're going to accommodate both affordable housing, a great neighborhood, and meet a lot of the requirements of the PLAN Danville Master Plan.

Mr. Barrow stated. I'm here on behalf of Blackstone Building Group. The special permit will not result in an increase in volume or density. The project has always been 317 units and will remain, and we are committed to conditioning the special use permit on that. It was approved for up to 360, it's at 317 and that's where it will stay. The special use permit was necessitated by the cost share agreement between the city and Blackstone because under the PUD and the way that the water comes into the community, each of the units would not have been individually metered and to maximize the cost share agreement, each of the units will now be individually metered with their own unique water meter, and that is why we have to split this into lots so that each lot can be metered. Each lot is essentially a unit.

Mr. Byers stated. This project has been crucial in economic development activity for Berry Hill and other places. I can tell you I have proven fact that Microporous, WB Alloys. All their HR departments are reviewing this development. Why? What's the number one problem for HR directors today for retention and hiring is housing.

Mr. Bolton closed the Public Hearing

Mr. Jones stated. Question for staff, out of the 221 units, roughly half, would be affected by the 16.9-foot barrier. So, of the 221, 110 would receive roughly 16.9 which takes about 122 feet away from the entire workforce portion is that any place of compromise? That we could suggest. Are they open, is that even an option for us?

Ms. Williams stated. Are you suggesting a compromise as much as we limit the number of workforce houses that are allowed the less than 18 feet?

Mr. Jones stated. I guess my question is asking more to be acute with 122 feet being taken by the 16.9 barrier that's being suggested. If they are saying 317, I'm asking, what if they do 316 with the dismissal of 1 unit maybe even out the 122 feet that we're losing against the city recommendation for 18 feet and they are given 16.9 will lose 122 feet roughly. If it's half of the units that will be affected. Has that been some type of suggested compromise? Maybe if one unit is taken away. Could that alleviate the need for those 122 feet that we're missing.

Ms. Williams stated. I will say that we have had meetings with the applicant and his lawyer and attempted to figure out a way around and we have not been able to come to a compromise.

Mr. Jones stated. If we see the city bears need for project and it's of such paramount importance, I find it very difficult not to be able to come to a place of agreement. With the attempts of compromise or move one single unit or anything.

Mr. Byers stated. Changing the configuration of these buildings and the site plans to talk about what you're doing is going to cost a minimum of \$150,000. We're going to have to go through the

approval processes again. This thing is going to keep dragging on and get more expensive. How are we supposed to provide affordable housing? The total topic in this country today in every city and state in the country is flexible zoning to get the inventory and affordability. Zoning has to be pliable. It cannot be static anymore/ The urban land institute is now recommending that you have single family, duplex, triplex, fourplex and townhomes all on the same street. I don't think that we are overreaching in this project. A lot of thought and money has been put in. I don't just walk by a site and say, hey I think that would look good. There's a lot of research going into this project. I think we need to understand that you could record all the lots at 18 feet, all the amenities, and you could come here and build something less than what I think the surrounding area is going to want. I think we ought to take into consideration that there's a pallet of different things and they're not always class A is what we presented here today. It is all math you can take from over here and give from over there. My biggest concern right now is the time and more money pumping into this. Building costs continue to go up annually. I have taken every company in this area; we have combined all that data together to come where we need to be in the 290s to low 300s. I am paying buyer assistance than National average is 2% for builders. I'm doing everything I can to bring affordability, little money down. I just want to get some shovels in the ground and start building houses.

Mr. Jones stated. Let's make it clear, I am pro affordable housing as I see the need to push this forward, it's just a matter of conversation, me asking inquiring as to what we could do in respect to the city's recommendation. What we could do to get it to go forward because we do need it, I agree. We have to respect and consider the city's recommendations. That was my questioning.

Mr. Byers stated. Part of the conversation and zoning right now nationwide is that one side shoe fits all zoning unfortunate it doesn't work anymore. There are areas that you could build today where the first-time home buyers' salary range is higher. You can afford bigger units, more amenities in those areas.

Mr. Jones stated. Will the driveway to the garage be within the 16.9?

Mr. Byers stated. Yes. Over the United States, units are being built and approved as small as 14 to 15 feet wide. We really are not pushing the boundary here.

Mr. Ranson stated. I respect the city's planning staff tremendously. And you know that. I also am an advocate for affordable housing, and I feel like I understand the city's recommendation. However, I feel like the difference is so small as to be not noticeable, if it was 2 or 3 feet it would be different. They do maintain they don't increase the density, and they retain proper side yard requirements.

Mr. Ranson made a motion to approve application PZ25-00424. Ms. Evans seconded the motion. The motion was approved by a 3-1-1 vote. Mr. Bolton abstains from voting on this agenda item.

3. *Special Use Permit PZ26-00194 filed by Da Ville Management LLC to allow indoor commercial recreation at Parcel 22399 (401 South Ridge Street).*

Mr. Bolton opened the Public Hearing.

Ms. Gannon stated. I live directly across the street from 401 South Ridge Street; my building is 5000 square feet with 4 units. I have practiced my massage therapy business for 12 years. Council has denied a special use request in 2020 for this address from different applicants, the same reasons for the denial still apply. Simply put, it's not good for the neighborhood. I remain concerned and distrustful of the definition of special events, special is undetermined. Events, even as benign as a birthday celebration will surely include alcohol, loud noise and late nights. This address has a long history of gun violence destruction of property, and loss of life and general disruption including loud noise, drunkenness, and gunfire overflowing on my side of the street that has involved calling for law

enforcement and backup. In contrast to this disruptive scenario, the River District includes countless shops, commensurate serving the needs of residents and tourists. Galleries, boutiques, antiques, flowers, clothing, coffee, pet. These are experiences that promote healthy living and a vibrant, connected neighborhood that includes foot traffic, and families. With an estimated population of 11 thousand and more residents. I ask each member of the Planning Commission to honor, uphold and support the efforts of our own City. The sacrifices of Danville citizens who have been diligent in construction, rehabilitation and maintenance of the River District property and its surrounding area.

Mr. Johnson stated. I am the owner of Kafe Da'Ville, I did a little history of the property prior to purchasing and have heard of some things that have happened there. I have also heard of some things that have happened at other addresses around the city. We have been open for about 73 days, as a full-scale restaurant, and things have been going pretty well. We are open at regular restaurant hours, we close at 9:30. Kitchen closes at 9. We have not had any instances. Since I don't know what happened. I don't want to carry that burden of things that happened in the past. We should at that address have good solid business, allow that to be the staple to what we are doing here currently. There is a need for quality and a good, and a good place to eat. We have space, we have the parking, and we have a different kind of cultural vibe there. I do all the cooking. I'm there 18 hours a day. I go to Greensboro, Winston Salem to the depots and pick up and come back. This is a retirement for me. This isn't a night club, and I want to be very clear. The violations that the city is speaking of we started out doing community services with the program SAP. Made a public announcement during the city council meeting that we would feed anyone and everyone who was on public assistance. We did that for 30 days. The license was issued August 31, 2025. We didn't open until December 4, 2025. We are trying to be a staple in the community. We are consistent at what we do and we're really proficient. The hardest part is trying to get good health here. I hear about workforce and affordable housing. I live across the line in North Carolina. I'm thinking of buying it here. I understand violence. Violence doesn't take place at our place. Sorry to anybody that has experienced that. That is not the experience that we have at Kafe Da'Ville. I just want to start off by saying that I have heard that many times. Although there are new restaurants that have opened and have had major tragedies in the last year or so. Those licenses and permits have been issued. There are new current businesses that are open. I collectively do my homework. We want to have a nice place that we have and be a staple to the community.

Ms. Evans stated. You indicated that you are a restaurant?

Mr. Johnson stated. Yes, full service.

Ms. Evans stated. Are you having indoor entertainment, DJs?

Mr. Johnson stated. What we have is, the ambiance is different, and I welcome everyone here to understand the cultural thing with the music. If you come to my place, it is full of flowers, most people would say this place is freaky. There are flowers everywhere and we play a variety of music. Sunday is gospel, there is no hip hop. There's not any kind of bad language not any of that. People come in and have a good time. The whole concept of what we were trying to do is create people to come back out. The music is not loud; we have singalongs. We have a premier POS system, which generates the age limits. Our age limits are 32 and up. We don't have minor kids that come in. I am selling cuisine and it's a full course. My average ticket is about \$29. My business is not a hang out; it's a full-service placement. The main thing, and initially setting up was at 3:30 we were opening up to the public because we partnered with Fisher and Watkins Funeral Home, who we were hoping to do repasts in the morning times when they have their early service. We have yet been able to do that because of this special use permit. We can't have a banquet. All of the events that have happened, and I think there was one editing issue with the social media person that does the flyers and they put on the flyer a price. We do it by dinners, and by the nature of my business it is a 10% margin it is very low, food cost is like a commodity. It is like the stock market \$80 today and tomorrow \$120 for the same items, it is really that difficult, and I am there. This is very imperative to

be able to have the ability that I can have these repasts in the morning. We are in sync with the community every day. There isn't a church or a place that's in our community. I could have filled this place up with people that wanted to speak, but I wanted to come genuinely, not a façade, just what we are. And that's just a full-service restaurant that just serves great food. But with this hindrance of not being able to have a community banquet or so forth, that really makes ends meet for us. We can't survive.

Ms. Evans stated. You are asking for a special use permit to allow this to continue. Correct?

Mr. Johnson stated. To allow what to continue?

Ms. Evans stated. Your DJs and your sing-alongs.

Mr. Johnson stated. I didn't know that having a DJ or sing-along was illegal to do.

Ms. Evans stated. To my understanding you were sent several letters by the city indicating that you needed to request a special use permit, you did not and you continue to have these sing-alongs. Correct?

Mr. Johnson stated. No, from my understanding, that wasn't it. I think it was the advertising. What I take from what we received is because we don't have events. We haven't had one what we had was buffet and we play music and you pay for the buffet and maybe someone plays a DJ. 90% of the time Bluetooth is going. You can't afford a DJ for \$500.

Ms. Evans stated. I see a post on Facebook dated October 26, 2025. That you were having a DJ, but you did not open until December 4, 2025. Correct?

Mr. Johnson stated. That is correct. That was doing that fundraising thing, when we initially started. Yes, we have a DJ quite often that sits in is what I am saying to you.

Ms. Evans stated. It doesn't say anything about fundraising. It just says come down and see the DJ.

Ms. Johnson stated. That is when she got that particular one, she seen that and we corrected it because it was edited by the person and it was incorrect. That was a fundraiser and it was publicly known by the city council that we were doing it that day, which was Halloween that first Friday. We didn't open on the 26th.

Mr. Ranson stated. I was probably one of your first customers and the food was so good. This doesn't invalidate your ability to run a restaurant, is that correct?

Ms. Williams stated. It does not.

Mr. Johnson stated. In order to create opportunities for other scopes of like, for instance, what we based Kafe Da'Ville opening at 3:30 was so that we could have that time, we have the space, we have the parking to accommodate repasts every day. We decided to entertain that in the morning. We partnership with that and found out that we could not do that. That was a big source of revenue. As a big profit margin I think they were doing anywhere between 10 to 20 per week last year, funeral services help a lot with keeping the doors open. I am working all these hours because I can't afford to hire anyone. This limits, I cannot have a birthday party when I came and asked Ms. Burton, what can or cannot do? Understanding the DJ, we do not have alcohol here. That is just a draw to bring people in. It's not that we are trying to create an ambiance of a club life. I want to go home and get into my bed. I'm too exhausted. I am in my craft, and I enjoy it and the community is very receptive of it.

Mr. Jones stated. When did you obtain access to the building? Not the date of opening.

Mr. Johnson stated. Two years, and I was at another place and there was another gentleman in and I let him stay. They had alcohol, they were running a business. I didn't want to sell myself short in my other place. I would come down on the weekends and do a little work and bring that revenue and do a little work until I got here. I knew ultimately where I was and what the projection of the city was going to be 5 years ago.

Mr. Jones stated. You stated you had done the research on the prior history and stigma to that building. Did you know that prior to opening all of that?

Mr. Johnson stated. I did not. I found out actually from previous renters of the place and told me the horrific story. In 2006 or 2007 when that tragedy happened from my understanding late hours, wrong concept not having food as your primary thing. I don't know about the other places, I understand people get hungry, what do I mean about hungry in my industry because of alcohol or whatever. I'm, in my, craft food is my thing. Food is our thing. And my product shows it. I have had people come to me from the casino wanting to rent from us. I can't rent it because of this. Those are extra times that I could really help with my revenue to make things happen.

Mr. Jones stated. There was a zoning violation sent to you on June 2, and a second violation was sent on October 24, just to be sure on my end, you were in ownership, even though you hadn't opened yet, you were still operating at that time. Correct? What was your perception of those zoning violations that were sent? I know you said the other ones you thought were maybe an advertisement.

Mr. Johnson stated. I know of the advertisement issue in October, the early part I think was just hear say because nothing happened there. I had a call that there was a fight the night before. We were inside hanging flowers. Someone who works for the city said that I heard that you guys had a shooting or a fight outside, I said maybe the wrong place. I try my best to not steer towards negativity and just focus on what we do by all means and I want to continue.

Mr. Jones stated. I want to, for clarity's sake, you received the letters of violation on June 2, October 24, and December 30th. Did you see them?

Mr. Johnson stated. I saw them. As I explained to them by email, I didn't get a call back to get clarity on it. The last two were how I have a person that does all the social media stuff and when they print it, that printing it wasn't that we had it, it was that actual flyer that incorporated that in it.

Mr. Jones stated. So, the flyer.

Mr. Johnson stated. Sometimes it is animated, like if you ChatGPT it, I think that's what they were doing, it said "ticket", that word ticket made it seem like there was a sale. There was no sale ever, it was always food. I tell people every day I can't have birthday parties, but you're welcome to come in and do regular dining. I'm afraid that this violation is going to be, and I've been in compliance and trying to talk to them. Telling them this isn't happening, we have printed out the recording and emails, clarity of those particular events that were printed. Not particularly that the events happened. It was just the wording of it, DJ, ticket, sale and price those little things like that. We are totally aware of that already.

Mr. Townes stated. I would say so we don't get it confused. I have been to this business multiple times. It is not a club. It is just a restaurant. There was a young lady playing music, but it is not to the point where everybody is nice and subtle and those other places that we're making reference to when that business was open. When all this happened, it was clubs. It wasn't just a restaurant, it

was a club and his business is a restaurant versus a club, so we don't get it tied together and balanced. I have been there multiple times, it is a great atmosphere.

Mr. Jones stated. If this was to pass, what would be the hours that you would allow?

Mr. Johnson stated. From 6 AM to closing at 10 PM. The reason is 6 AM, we have had a few repasts that people want to do like a morning coming in with the families, and we're entertained with breakfast. Our normal business hours don't start until 3:30 PM daily. I scaled back between the hours I am putting in because I just physically can't do it. I am taking 1 day off which is Tuesday. We don't plan to mix the repast timing with families with regular business hours. This was all planned, it wasn't by coincidence for a dinner restaurant place. As for the DJ, doesn't mean a disco if you will for a better word.

Mr. Jones stated. What is your capacity?

Mr. Johnson stated. 156.

Mr. Jones stated. If there is an event it would close down the public restaurant?

Mr. Johnson stated. Yes, that would allow me to be able to do that. We get calls quite often for out-of-towners from the casino that are looking for a place like so. It is really a different place, it is more modern, a really nice place.

Mr. Jones stated. Something of this nature, would you have security implemented?

Mr. Johnson stated. Yes, definitely. We wouldn't have anything, and security would be from the local DPS. I don't want trouble. I am so anal about what we have and when we have it.

Ms. Hartman stated. I am a resident in the area; I want to briefly express my support of the special use permit. Since opening, Kafe Da Ville has been an addition to the neighborhood. It provides a welcoming place for residents, visitors, and families together for meals. Their ability to host the repasts and small gatherings for families, especially those coming from Fisher & Watkins Funeral Home nearby and is very important and a great service for our community. My father was a pastor for nearly 50 years, so I know firsthand how meaningful that could be and is for families during their time of bereavement. From what I have seen as a neighbor, the restaurant operates in a respectful and professional manner, and I believe their request is reasonable and beneficial to our area, for those reasons I am in support and if you haven't tried the amazing Southern Cuisine, I would ask you to try it personally. Experience what they offer. I think you would be very pleased with what they are offering.

Ms. Kent stated. I also have the letters from Fisher & Watkins Funeral Home and Wyatt Electric who are in support.

Mr. Jones stated. The zoning violations that were sent to the business. From the city's perspective what was the purpose? Was it because of the event being held or because of advertising?

Ms. Burton stated. There were advertisements for an event to be held, and we saw that after the fact of the date of the advertisement, I will say that is the violation.

Mr. Jones stated. In order to be put in proper standing to have such events? Would there be furtherance from the city as to what would need to be done to put him in good standing to do that?

Ms. Burton stated. You would receive a special use permit for indoor commercial recreation and that would allow you the opportunity to charge at the door. So, if you were to charge 20-25 dollars entry

fee, that is what the special use permit is for and meets the definition of indoor commercial recreation.

Ms. Evans stated. You speak of repasts. Is that indoor recreation or is that just renting the building?

Ms. Burton stated. It is the same. So, if they are, anytime that you are renting a space, be it birthday party, repast, baby shower, those types of events, are indoor commercial recreation. You are charging for the use of the facility. That qualifies.

Mr. Bolton stated. Are they permitted under code to have any events that would spill outdoors or is it when he talks about these events, would they be limited to indoors?

Ms. Burton stated. So, the special use permit could be for indoor or outdoor and this time the request is indoor commercial recreation. It can be either. Depending on the particular operation.

Mr. Bolton stated. Would he have to ask for permission to do outdoor if we were to recommend as it is indoor commercial?

Ms. Burton stated. Yes, generally we only see indoors because those are individuals' visuals, you're charging for a facility use. Outdoor is typically utilized as a carnival or a circus coming to town, those types of things.

Mr. Ranson stated. If they charge people to have a birthday party, that's indoor commercial recreation?

Ms. Burton stated. Yes.

Mr. Ranson stated. If they have a birthday party and they're just serving food off the menu and they have a cake and don't have a charge, would it be ok, if that is correct?

Ms. Burton stated. So, if you were the business owner and you charged me to have the birthday party. No matter says, you limited me to 50 attendees, but you charged me one fee. That's indoor commercial recreation. If I and 10 individuals happen to get together and go to the restaurant, that you operate at no additional fee, we specifically order off the menu, then that is not indoor commercial recreation.

Mr. Jones stated. So, if we were to pass this, do we have the right to initiate or implement restriction barriers? I see one event was maybe until 11, could we say conditions of to 10 PM being the latest? Do we have the right to suggest that in approval?

Ms. Burton stated. Yes.

Mr. Johnson stated. Safe for the record I will not have any events outside of 10 PM.

Mr. Bolton stated. Did you say earlier there is no alcohol?

Mr. Johnson stated. There is no alcohol right now. In regard to the birthday parties, the design of the inside of my place, it is very difficult to have a birthday party and service the public. My seat arrangements are high-top tables, that sort of thing. I don't have a section where you can sit any more than 6. So, that's why the special use permits all of the things I wasn't even aware of. I thought it was just okay if you have an event and you charge at the door then the special use permit is needed but it's even more broad as you guys are finding out. I couldn't have a birthday party to rent or shower because you need this permit. My place is really designed to do that like bridal showers,

bachelors. Particularly in this and time that really offsets and make a financial ability for us to sustain where we are.

Mr. Ranson stated. You don't charge for the event per say. You just charge for the food?

Mr. Johnson stated. Yes, it is not really an event. It's to rent my place. We would like to have reservations and have things preset. All activities are preset. I am open to having a time restriction. But as for an event, there is no way.

Mr. Townes stated. You were addressing the time, and I noticed when you came up, he asked about alcohol and you said not yet, would that offset that time you know alcohol sales are higher at night?

Mr. Johnson stated. When we shut down, we are shutting down. I have a very minute group, and I don't have anybody tampering with my food.

Ms. Evans stated. You indicated, no alcohol yet, do you plan to in the future?

Mr. Johnson stated. We have an application already now. We have permit processing now.

Mr. Bolton stated. When you have someone come to you and rent the restaurant out. Do you see every event being served food prepared by your restaurant or could someone come in from the outside, and you are not even there? They are renting it out.

Mr. Johnson stated. Absolutely not there is no outside food. You can't come and redecorate, I don't even allow birthday cakes in. I don't want to be in the paper or talked about in any derogatory way if you will. Everything comes through me.

Mr. Bolton closed the Public Hearing.

Mr. Townes made a motion to approve application PZ26-00194. Mr. Ranson seconded the motion. The motion was approved by a 4-1 vote.

Mr. Jones amended the motion with a 10pm shutdown, and security at events. Mr. Ranson second the motion. The motion was approved by a 4-1 vote.

4. *Code amendment request PZ26-00221 filed by the City of Danville to amend Chapter 41 entitled "CODE Danville, The Unified Development Code of Danville, Virginia" of the City of Danville, 2025, as amended. Specifically, amend Article 8 "Administration and Procedures".*

Mr. Bolton opened the Public Hearing.

.

Mr. Bolton closed the Public Hearing.

Ms. Williams stated. 41.8.0 and 41.8.P and 41.8.Q, refer to subdivisions. Our separate subdivision ordinance. So, we are removing it from "Administration and Procedures" to place these items into the subdivision ordinance so that all subdivision information is in one place to make it more usable and consistent.

Mr. Jones made a motion to approve the amendment PZ26-00221 to be placed in the right division. Ms. Evans seconded the motion. The motion was approved by a 5-0 vote.

5. *Code amendment request PZ26-00220 filed by the City of Danville to amend Chapter 41 entitled "CODE Danville, The Unified Development Code of Danville, Virginia" of the City of Danville, 2025 as amended. Specifically, amend Article 7 "Subdivisions".*

Mr. Bolton opened the Public Hearing.

Mr. Bolton closed the Public Hearing.

Ms. Evans made a motion to approve application PZ26-00220. Mr. Jones seconded the motion. The motion was approved by a 5-0 vote.

II. MINUTES

February 9, 2026, minutes were approved by unanimous vote.

With no further business, the meeting adjourned at 3:28 p.m.

APPROVED