


DRAFT OCTOBER 15, 2024

## Chapter 7

# Environment

Encourage open spaces and natural systems that can adapt to the various needs of the community.



Danville prioritizes preserving environmental systems, parks, open spaces, and recreational programs. In doing so, Danville's environment will be designed in a way that anticipates ecosystem changes and fosters the long-term health, wellbeing, and sustainability of both the community and its natural surroundings.

# Environmental Policies

## EN.1: ENVIRONMENTAL SYSTEMS

PROTECT AND EMPHASIZE THE BENEFITS OF HEALTHY ENVIRONMENTAL SYSTEMS AND ECOSYSTEM SERVICES THROUGHOUT DANVILLE.

### EN.1.1 River Reconnection

Reconnect residents to the Dan River and celebrate the legacy of this natural asset as a central element of Danville's story.

### EN.1.2 Tree Canopy Expansion

Expand Danville's tree canopy to offset urban heat island impacts.

### EN.1.3 Vacant Land Activation

Promote vacant land activation for green space enhancement when applicable.

### EN.1.4 Low Impact Development

Prioritize low impact development (LID) across the city.

## EN.2: PARKS & OPEN SPACES

ENSURE EQUITABLE ACCESS TO PARKS AND OPEN SPACES.

### EN.2.1 Green Space Access

Fill the gaps in community access to parks, open space, and recreation offerings, considering distance to facilities, staff capacity, and programming for a variety of age groups.

### EN.2.2 Climate Resiliency

Advocate for climate-resilient green spaces.

## EN.3: EDUCATION & HEALTH

ADVOCATE FOR AND SUPPORT ENVIRONMENTAL EDUCATION PROGRAMS.

### EN.3.1 Educational Opportunities

Use parks and open spaces as learning opportunities.

### EN.3.2 Mental Health

Work with local healthcare organizations, trauma support groups, and county resources to connect residents to mental health services.

# Aligning with Public Feedback

Functioning natural systems that connect with a strong system of parks, open spaces, and recreational opportunities have a wide range of public benefits, from enhancing community pride to youth engagement. The environment is an issue the cuts across three of the themes the Danville community identified with during public engagement: Infrastructure and Accessibility, Education and Youth Development, and Holistic Living. A lack of activities for youth was among the most common challenges identified during public engagement, along with a need to enhance the physical elements of public parks through better maintenance. Parks and open space also provide unique opportunities for entertainment options, the lack of which was a common weakness cited by residents.



**Goal 7. Environment**

Aligning with Public Feedback

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### EN.1 Environmental Systems

Issues of public health, safety, and maintenance of natural features like the Dan River were commonly identified as priorities by Danville residents. With nearly 8,000 acres of vacant land, Danville has a unique opportunity to utilize this asset as a means of managing water and creating spaces within neighborhoods and throughout the community that are positive assets, rather than vacant areas that drive negative perceptions regarding safety. Similarly, encouraging new construction to adopt low impact development approaches will ensure that resources like the Dan River are not negatively impacted by future growth.



### EN.2 Parks & Open Spaces

Enhanced parks and recreational opportunities, particularly for youth, were among the most common desires expressed by the community. Expanding access to the Dan River will provide new opportunities for recreation as well as economic activity. Further, focusing enhancing Danville's network of 21 neighborhood parks will ensure equitable access to this resources throughout the city. Lastly, incorporating solutions to make Danville more resilient to extreme weather and climate events will ensure that these spaces serve as resources to the community at all times, but especially during emergencies.



### EN.3 Education & Health

Educational opportunities were consistently identified as a challenge and a concern for residents, while access to parks and natural resources were identified as a strength. Strong local parks and open spaces create unique opportunities for schools to engage in hands-on learning opportunities and make students active participants in community environmental and recreational programs, which tend to improve student well-being and learning outcomes. Parks, open spaces, and outdoor recreational facilities also contribute positively toward community mental health.



## POLICY

### EN.1

# Environmental Systems

Protect and emphasize the benefits of healthy environmental systems and ecosystem services throughout Danville.

Environmental systems are the parks, open spaces, vacant land, waterways, and more that make up the Danville ecosystem. These spaces play a pivotal role in resident health. The goal of promoting well-designed environmental systems is to ensure that Danville's outdoor areas are not only accessible and enjoyable for residents but also designed in a way that anticipates change and fosters the long-term health, well-being, and sustainability of both the community and its natural surroundings.

## Desired Outcomes

- Increased number of Dan River access points
- Creation of ADA-accessible Dan River lookout points
- Maintained water quality in the Dan River
- Expanded tree canopy
- Decreased ground heat
- Decreased stormwater runoff



**Goal 7. Environment**

Policy EN.1 Environmental Systems



## WHY IT MATTERS

### Danville is a river community at its core.

Danville was settled around the Dan River, Sandy River, and their many tributaries. These waters provided the harvest, ran the mills the city was known for, and are key to the story of this city. Maintaining a clean river, promoting educational opportunities, and enhancing physical access to water is key. It is also important to consider the impact Danville has on these water systems, with the potential for development, plantings, and other interventions to either help or hurt the severity of flooding, pollution, and more.

Danville has **access to over 15 miles of the Dan River**, which contributes to over 4,959 acres of floodplain. **That is 18% of Danville!**



### Goal 7. Environment

Policy EN.1 Environmental Systems



## Danville is reconnecting people with the Dan River.

### Award Winners

Danville Utilities has been recognized as a bronze medal award winner in the 2024 Governor’s Environmental Excellence Awards. The awards celebrated successful and innovative efforts to improve Virginia’s environment.

### Dan River Basin Association

The Dan River Basin Association (DRBA) works to foster the creation of a regional identity as a way to promote the history, natural resources, and unique features of the Dan River Valley region that straddles the state dividing line between Virginia and North Carolina. By protecting the region’s natural assets such as the Dan River and its tributaries, DRBA is working to promote tourism as well as healthy lifestyles. DRBA assists localities in creating community parks, trails, and access to local rivers and streams.

### Development

Dan River Falls is the most prominent example of new development taking place on the Dan River. River views are prime real estate, and the city is aware of the need for balance between private development and public access to the water.

### River Health and Water Levels

The USGS continuously measures water health, levels, and quality.

### Riverfront Park

The City of Danville Riverfront Park is currently under construction. When completed, it will enhance connectivity across the river, provide whitewater recreation, enhance native plantings and flood protection measures, and more.

**Source:** 2017, [The Economic Impact of the James River Park System - Capital Region Collaborative](#)

## Learn from Leaders

Greenville, SC | Richmond, VA |  
New Bern, NC

Each of these cities is known for its waterfront access and has made a concerted effort to focus public investment in access and recreation along the water. These investments have helped inspire local development, tourism, and health. In Richmond alone, local business owners estimated a 32.7% loss in revenue if the James River Park System did not exist. This has also helped local homeowners. For every quarter-mile closer to the James River Park System a single-family property is, the property’s assessed value increased by a total of \$8,963.

Continue to create incremental growth and stabilize the local economy by building on current successes and cementing the Dan River as a public amenity, both around the River District and beyond. A recommended next step would be to focus on the northern point of the river. This will help attract new residents and development.



Concept Rendering from the  
Danville Riverfront Park Plan



DANVILLE  
RIVERFRONT PARK



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Policy EN.1 Environmental Systems



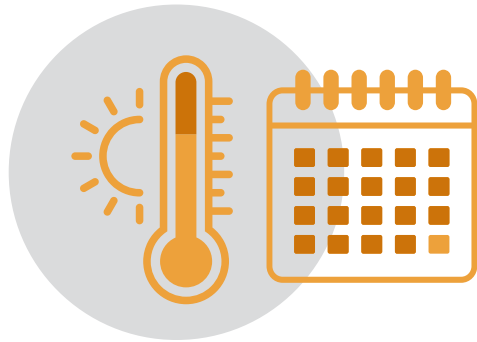


## WHY IT MATTERS

### Danville is hot and is set to get hotter.

2023 was the hottest summer on record, and temperatures are projected to continue increasing. In fact, 19 of the hottest years on record have occurred within the last two decades and it is estimated temperatures in Danville will increase by 10° F between 2020 and 2090.

**Source:** 2023 [NASA](#), 2020 [Washington Post](#), 2023 [NOAA Climate Explorer](#)

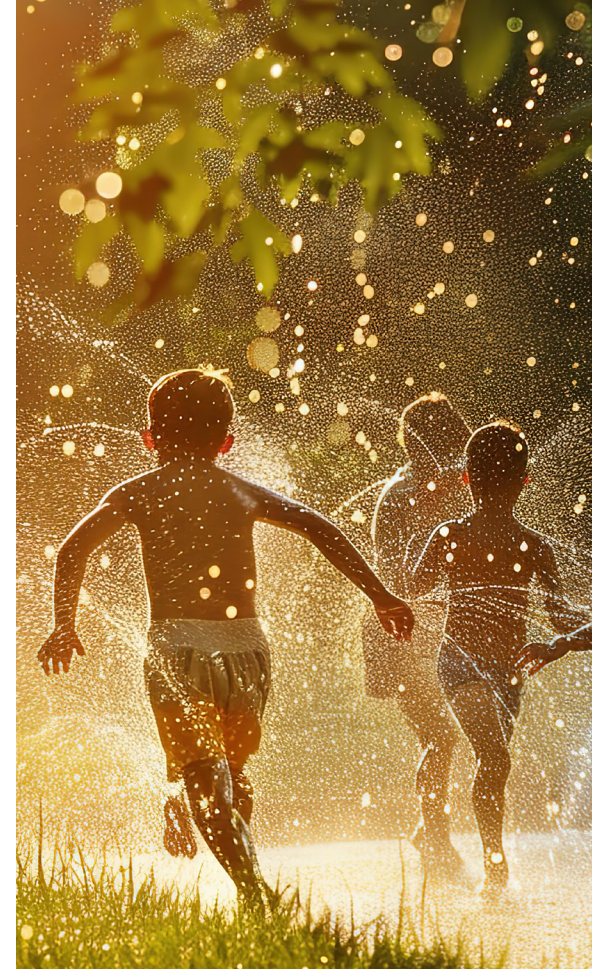


### Extreme heat is a public health issue.

Over the last 30 years, extreme heat has been the deadliest form of weather, including floods, extreme cold, tornadoes, hurricanes, and other events—according to the National Weather Service. Aside from heat stroke, extreme heat can also increase strain on emergency rooms, skyrocket energy uses, and have adverse effects on at-risk residents such as seniors and residents with low incomes.

Danville is combating this with its [Beat the Heat Programming](#), and there are opportunities to tackle this with infrastructure like street trees to provide shade on highly trafficked streets, cooling shelters at public facilities like fire stations, and more.

**Source:** 2022 [“The Heat is On”](#) Report by the Trust for Public Land





## WHY IT MATTERS

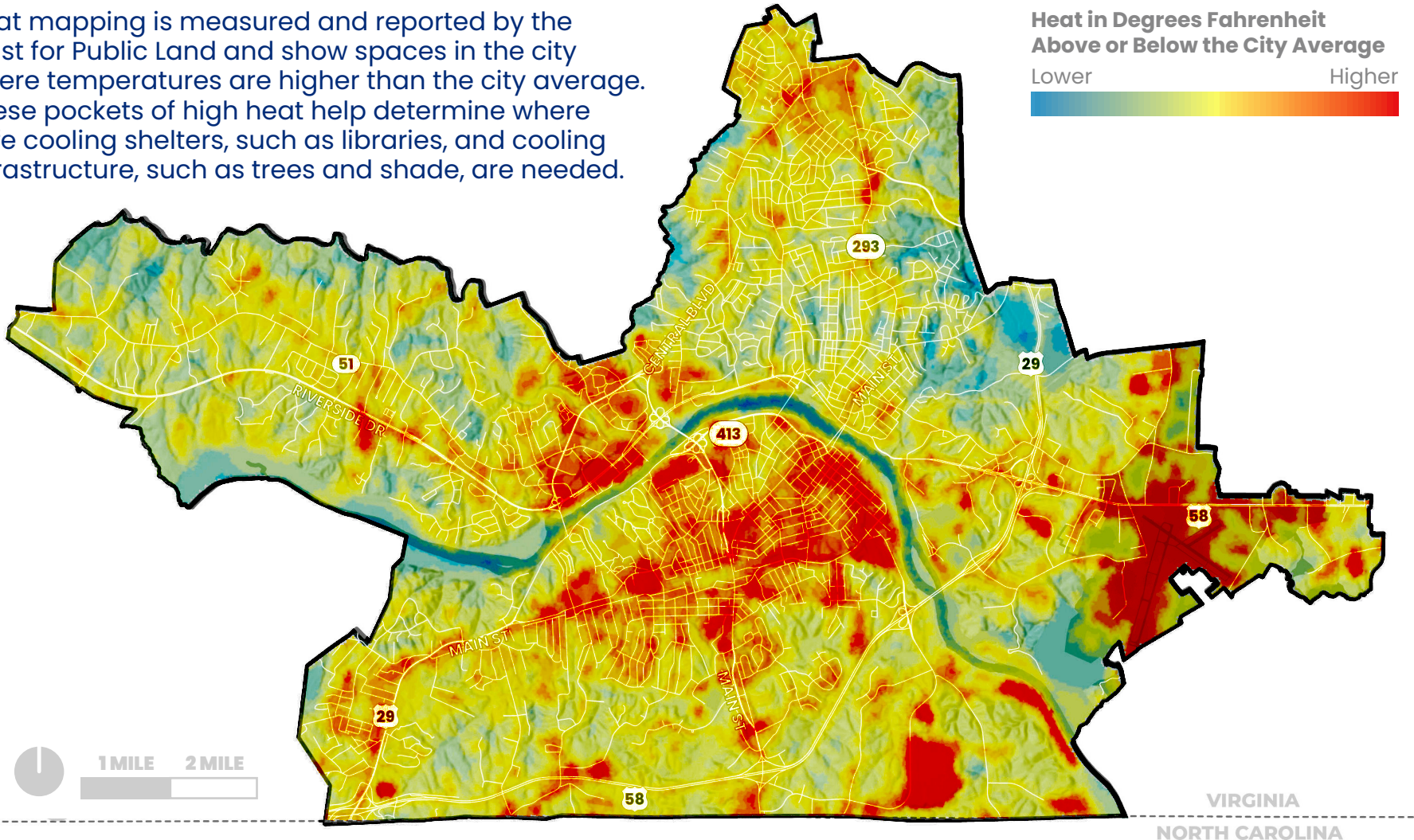
### Heat pockets can inform the best locations for interventions like resource hubs.

Heat mapping is measured and reported by the Trust for Public Land and show spaces in the city where temperatures are higher than the city average. These pockets of high heat help determine where safe cooling shelters, such as libraries, and cooling infrastructure, such as trees and shade, are needed.

#### Heat Map

Source: 2023 Trust for Public Land

Heat in Degrees Fahrenheit Above or Below the City Average



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Policy EN.1 Environmental Systems



## WHY IT MATTERS

### Danville has 7,789 acres of undeveloped land.

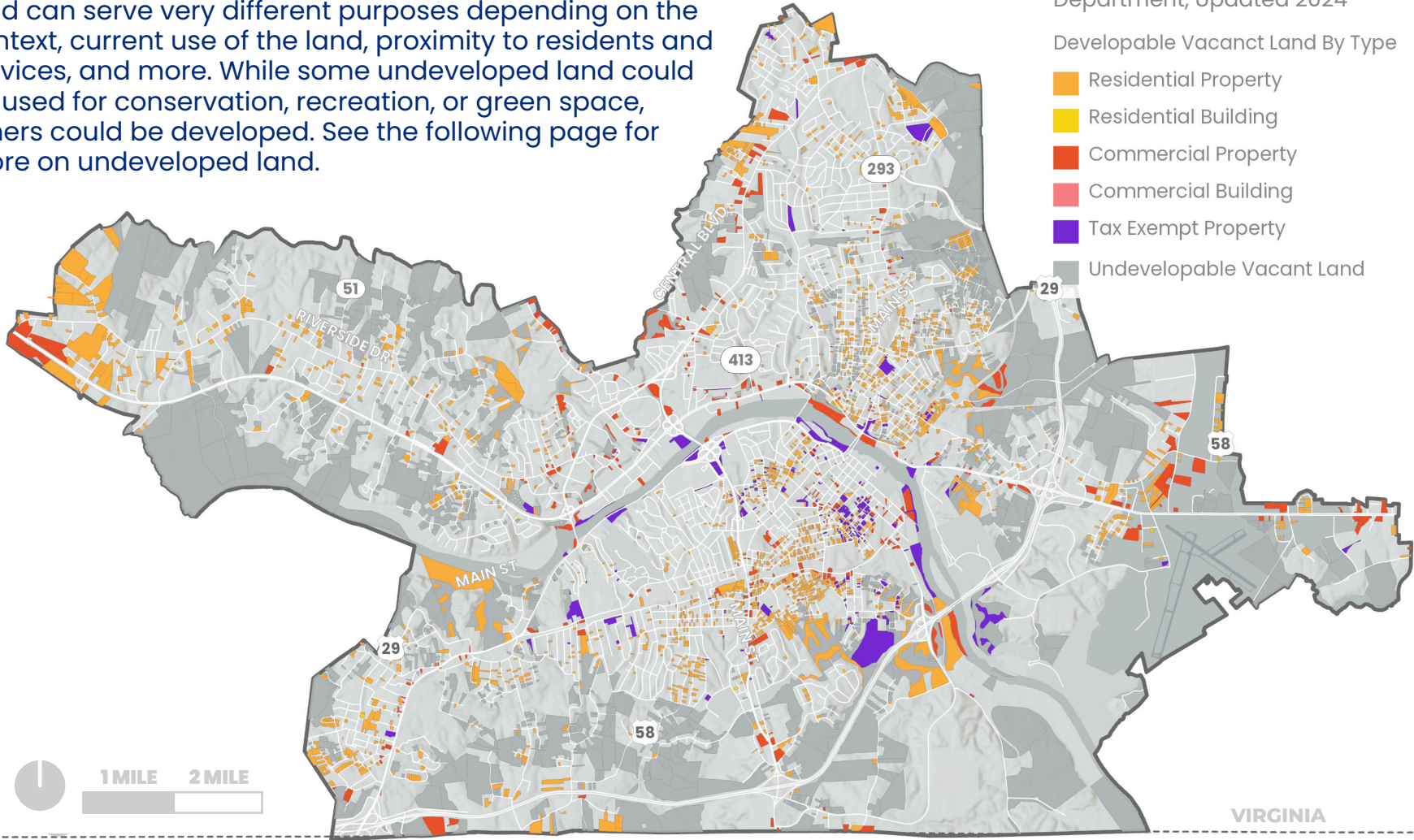
That's 32% of all the land in the city! This undeveloped land can serve very different purposes depending on the context, current use of the land, proximity to residents and services, and more. While some undeveloped land could be used for conservation, recreation, or green space, others could be developed. See the following page for more on undeveloped land.

#### Developable Land

**Source:** Danville GIS Department, Updated 2024

Developable Vacant Land By Type

- Residential Property
- Residential Building
- Commercial Property
- Commercial Building
- Tax Exempt Property
- Undevelopable Vacant Land



#### Goal 7. Environment

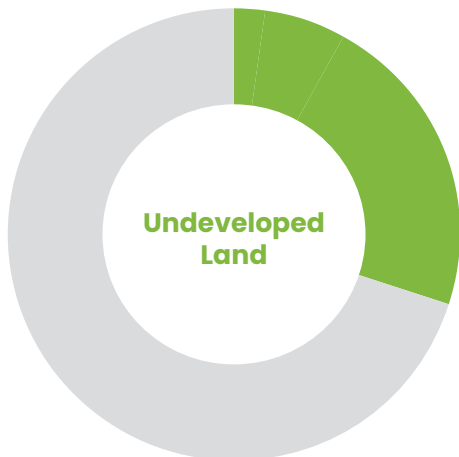
Policy EN.1 Environmental Systems



## WHY IT MATTERS

### Danville is thinking very carefully about the future of its undeveloped land.

Almost one third of Danville’s land is undeveloped.



Only 1 in 5 of those undeveloped acres is developable (a total of just 1,589 acres). These developable lots achieve all of the following:

- Not currently developed
- Not in the floodplain
- On land with proper soils for development
- Not too steep

This means the other 4 in 5 acres should contribute to local ecology.



437 of those developable acres are owned by the City of Danville, and the city is carefully considering the future of those city-owned lots. On average, these lots are about half an acre in size, just enough space for one to two single family homes.





## Danville is tackling vacant land.

### Land Bank

The Danville Neighborhood Development Corporation (DNDC) runs the city's land bank. This land is typically smaller parcels of land that are sold to homeowners and other property owners for single developments such as a new home, a home extension, a community garden, a neighborhood park, or a new business. Click [here](#) to learn how to purchase or donate property.

### Certified Sites

Some larger areas of vacant land have been packaged together as part of the [Virginia Certified Sites Program](#) to better attract development. These sites are meant for larger developments such as new industries, town centers, and apartments. Because the scale of development is larger, the Commonwealth (and sometimes the city) offer incentives to help with development of these parcels and work to ensure the development of these areas meets the overall goals of PLAN Danville and the community. Learn more about these certified sites in Chapter 6. Economy.





## WHY IT MATTERS

### **When it rains, it pours in Danville.**

Flooding has been happening more frequently and will likely continue as shifting climates make storms more frequent and extreme. The hilly terrain that makes the city so iconic also means that water often rushes and then pools downhill in residential neighborhoods on its way to the Dan River. Many community members and businesses have experienced basement flooding over the years, and notable floods such as the flood of 2020 have impacted whole buildings and streets.

### **Danville values the Dan River and its tributaries.**

The River was a source of life and community from the start. It led to the strong mill culture of the city and remains a treasured place for many community members to experience and enjoy. Tools like low impact development (LID) can ensure the Dan River and its tributary water bodies can thrive.



#### **Goal 7. Environment**

Policy EN.1 Environmental Systems



## WHY IT MATTERS

### Low Impact Development (LID) could be a useful tool to harness water as an asset.

LID refers to systems and practices that use or mimic natural processes that reduce stormwater runoff, reuse water, and create healthier water systems.

LID aims to achieve five key goals:

1. Reduce impervious surfaces.
2. Prevent impacts to natural systems.
3. Manage water close to the source.
4. Utilize less complex, non-structural Best Management Practices (also called BMPs, which are a set of national standards directly from the Environmental Protection Agency).
5. Create a multi-functional landscape.

LID includes a wide range of interventions that create more quality spaces, including the following:

- Bioretention gardens
- Trees
- Green roofs
- Permeable paving surfaces
- Vegetated swales
- Filtration systems
- Erosion control and limited grading
- Rainwater harvesting
- Compact development
- Redevelopment
- Infill Development



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Policy EN.1 Environmental Systems



## WHY IT MATTERS

### LID can help save money.

LID does not just consider natural systems, but also the built environment. As Danville is set to grow, additional development will be needed. By developing with the environment in mind, Danville will have more quality, lasting spaces.

### Learn from Leaders

Multiple communities across the nation have studied and proven that LID can decrease costs of new development, ensure quality spaces, and add value to the community. Developers of a corporate campus in Naperville, Illinois preserved much of the site’s natural drainage features and topography, reducing grading and earthwork costs. They used bioswales and other techniques in parking lots to manage stormwater. They maximized the amount of natural areas, eliminating the need for irrigation systems and lowering maintenance costs when compared to turf grass. Total LID project costs were almost \$500K less than a conventional design would have been.

### Total Cost Savings of LID | Case Study

Source: 2015, Environmental Protection Agency

Construction Item	Cost of Conventional Development	Cost When Using LID Practices	Dollars Saved with LID
Site Preparation	\$2,178,500	\$1,966,000	\$212,500
Stormwater Management	\$480,910	\$418,000	\$62,910
Landscape Development	\$502,750	\$316,650	\$186,100
<b>Total</b>	<b>\$3,162,160</b>	<b>\$2,700,650</b>	<b>\$461,510</b>







## RECOMMENDATIONS & ACTIONS

### RECOMMENDATION

#### **EN.1.1 River Reconnection**

Reconnect residents to the Dan River and celebrate the legacy of this natural asset as a central element of Danville's story.

### ACTIONS

1. Continue to implement the connectivity and trails recommendations outlined in the 2019 City of Danville Riverwalk Plan.
2. Partner with the Dan River Basin Association to pursue, obtain, and manage grant funding for conservation efforts, green flood mitigation measures, and other naturalized interventions for flooding and ecological restoration of the Dan River.
3. Continue to coordinate with the Virginia Department of Transportation and West Piedmont Planning District Commission on the regional Dan River trail system to ensure compatible investments.
4. Continue to implement the Danville River District Green Space Plan.
5. Connect a City of Danville blueway with existing regional blueways in the Dan River Basin, ensuring the use of the Dan River and applicable tributaries for ecological enhancement and recreational use.
6. Create direct access to the waterfront by implementing the Riverfront Park Plan.





## RECOMMENDATIONS & ACTIONS

### RECOMMENDATION

## EN.1.2 Tree Canopy Expansion

Expand Danville's tree canopy to offset urban heat island impacts.

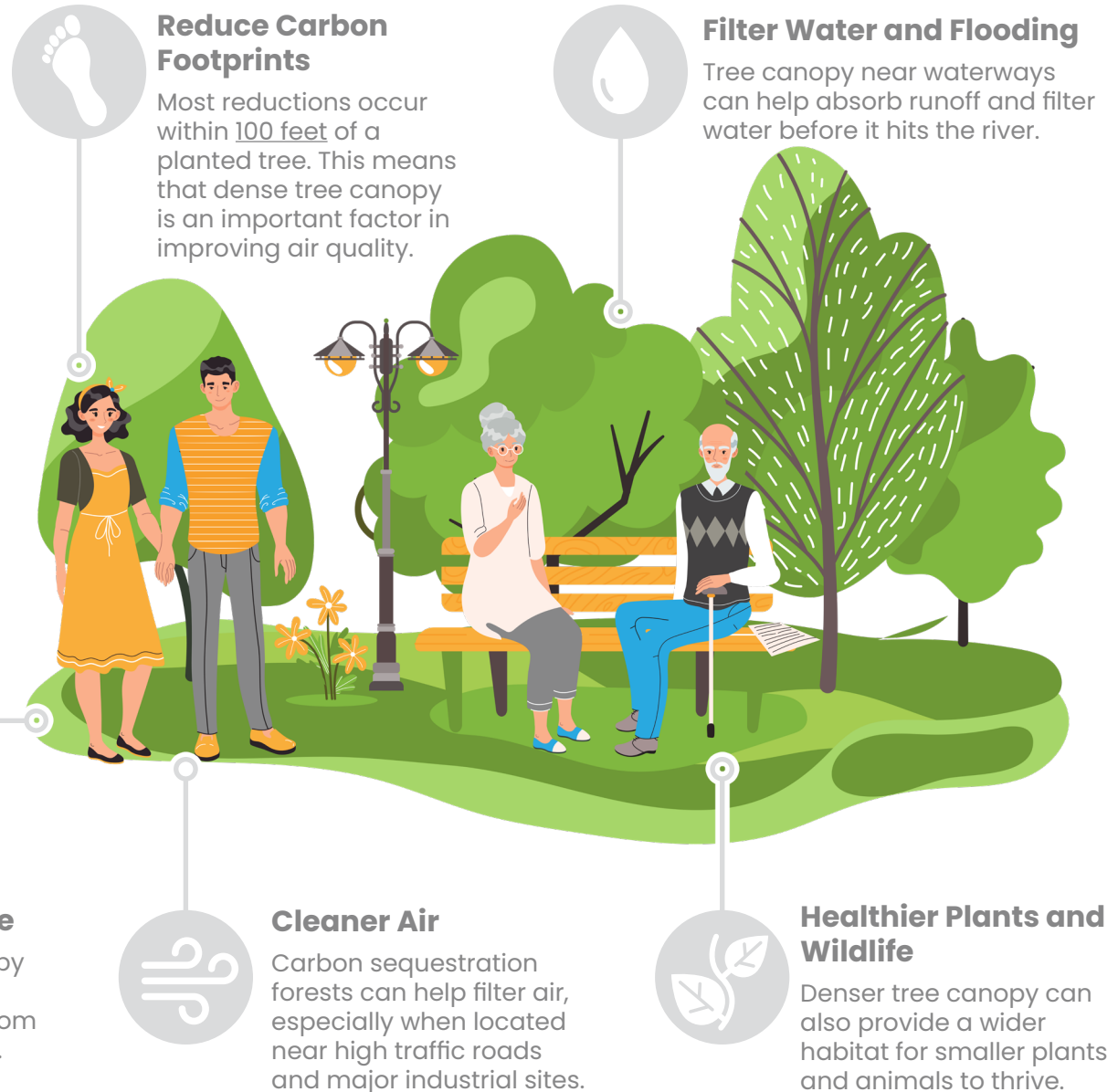
### ACTIONS

1. Add street trees along key corridors to add comfort, value, and beautification throughout the city.
2. Support the financing and development of carbon sequestration forests off major routes to mitigate airborne and noise pollution while enhancing local eco-habitats.
3. Analyze Danville Interchange Gardens (DIG) sites for opportunities to densify tree canopy near major interchanges and offset PM2.5 emissions caused by heavy road traffic.
4. Partner with The Health Collaborative to continue tracking health and air quality impacts in Danville.
5. Track tree plantings on the City of Danville Open Data Portal to measure which corridors are in most need of plantings and monitor long-term tree maintenance.
6. Refine the City of Danville plant palette to promote native tree species with large canopies which will increase shade, decrease ground heat, and promote resilient planting types that match the local climate.
7. Pursue funding to develop a tree planting program to enhance urban green spaces and help mitigate heat island effects.
8. Under the Landscape and Screen Regulations ordinance (Article 9.C.), include the requirement to include variation of native or adapted species on public property.
9. Spearhead yearly tree-planting campaigns with a mix of species in collaboration with local organizations and schools.



## How to Keep Emissions Low and Enhance Air Quality with Carbon Sequestration Forests

Not only are Danville’s rural surroundings an important part of the character of the city, they are also an important part of keeping the heat down, air quality high, and a more healthy environment for community members. Trees can remove particulate matter from the air and capture heat before it hits pavement and contributes to heat islands in the city.





## RECOMMENDATIONS & ACTIONS

### RECOMMENDATION

## EN.1.3 Vacant Land Activation

Promote vacant land activation for green space enhancement when applicable.

### ACTIONS

1. Create a guide for community members, developers, and approval authorities to determine the best use of vacant land activation based on the surrounding context.

#### Action Steps

- 1.a. Implement the Activating Vacant Land Toolkit (following page).
- 1.b. Partner with the local university to create “how-to-guides” for residents to create specific activations such as pollinator gardens, outdoor markets, etc.
2. Partner with the City of Danville Land Bank to allow community members to temporarily activate vacant land.
3. Prioritize activating land near existing businesses, residences, or incoming development to promote more infill development in neighborhoods.





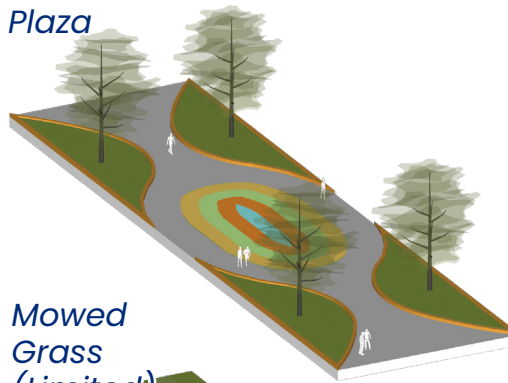
## How to Activate Vacant Land

While larger tracts of vacant land, such as the Virginia Certified Mega-Sites, have vast development potential, many smaller vacant lots in the City of Danville could be activated in a variety of ways. Depending on the surroundings of vacant land, there can be both temporary and long-term strategies to best use the land to serve the neighborhood, aside from traditional development.

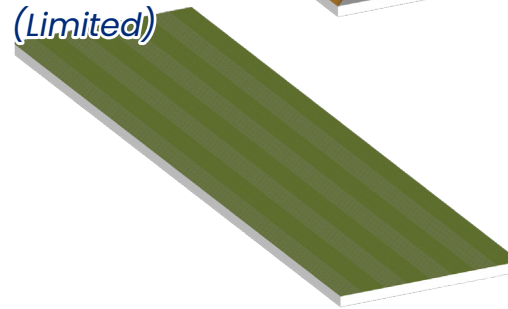
- Activations for Community  
*Best near homes*
- Activations for Environment  
*Best near parks or vacant land between homes*
- Activations for Infrastructure  
*Best near industrial uses. Permeable parking could also be considered near existing parks and businesses*
- Activations for Culture & Economy  
*Best near existing businesses.*

### Activations for Community

Plaza

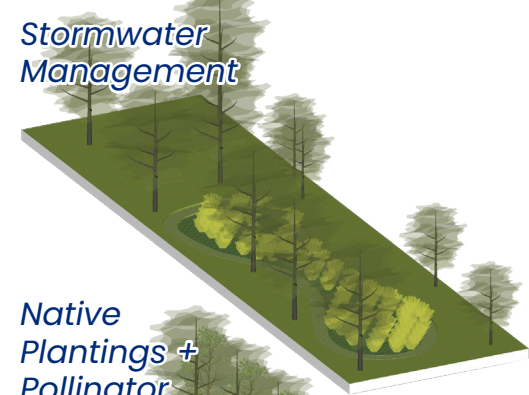


Mowed Grass (Limited)

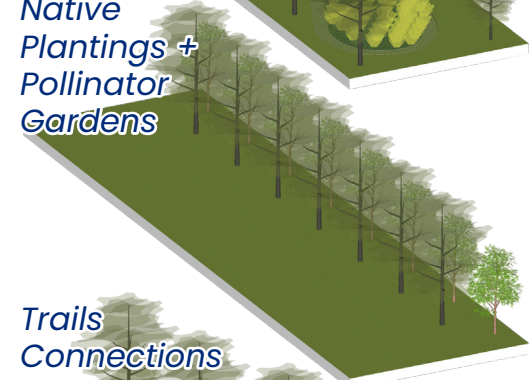


### Activations for Environment

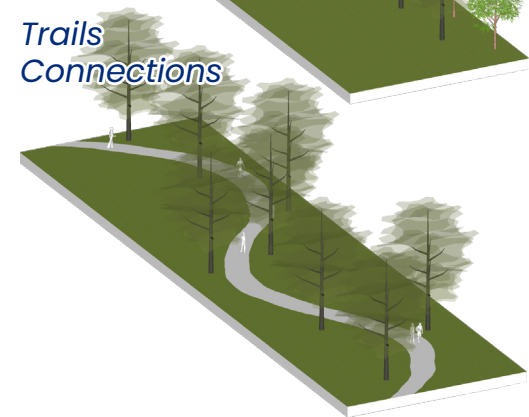
Stormwater Management



Native Plantings + Pollinator Gardens



Trails Connections

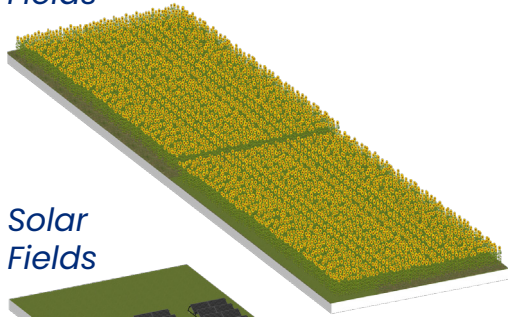




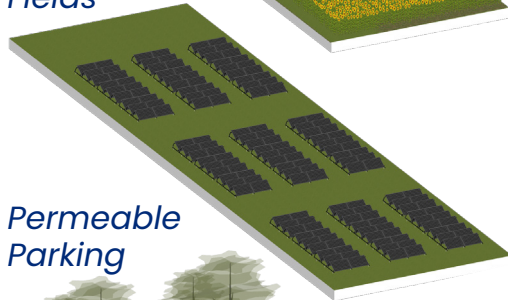
**TOOLS**

**Activations for Infrastructure**

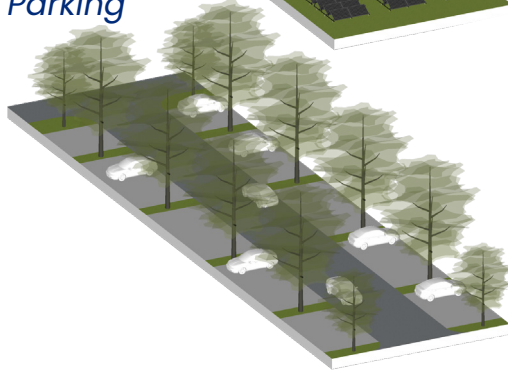
*Biofuel Fields*



*Solar Fields*

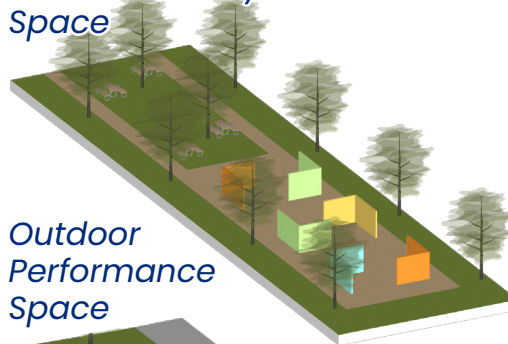


*Permeable Parking*

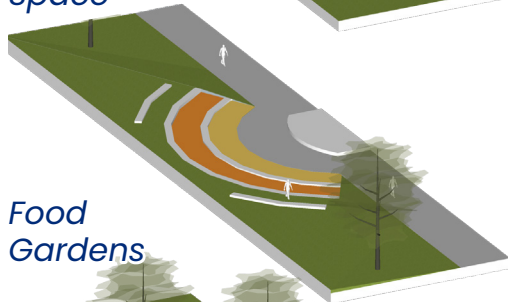


**Activations for Culture**

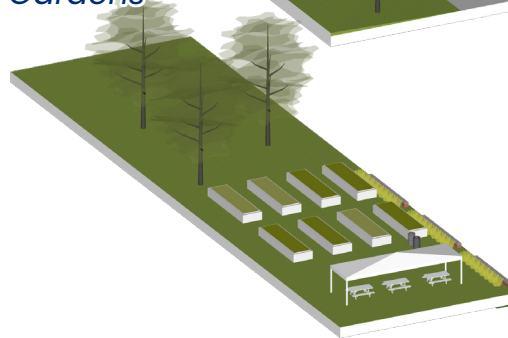
*Outdoor Gallery Space*



*Outdoor Performance Space*



*Food Gardens*



**Activations for Economy**

*Food Truck Park*



*Outdoor Eating Space*



*Multiple Combined Vacant Parcels*



**Goal 7. Environment**

Policy EN.1 Environmental Systems



### RECOMMENDATION

## EN.1.4 Low Impact Development

Prioritize low impact development across the city.

### ACTIONS

1. Implement smart land use practices.

#### Action Steps

- 1.a. Prioritize density around the community hubs and mixed-use districts outlined in Chapter 2. Land Use to concentrate development.
- 1.b. Encourage adaptive reuse and infill to preserve historic structures, reduce embodied carbon, and limit raw materials produced for construction.
2. Pursue funding to integrate green infrastructure such as street trees, naturalized bioswales, and more as part of major streetscapes improvements, especially on high traffic corridors and regional roads such as Piney Forest Road and West Main Street.
3. Design flood-adaptable green spaces.

#### Action Steps

- 3.a. Adopt a flood overlay zoning ordinance.
- 3.b. Update the landscaping zoning article to prioritize low impact development, green infrastructure, on-site water retention, and naturalized uses in the floodplain.
- 3.c. Integrate flood resilience measures in park design near the waterfront, using lessons learned from Riverfront Park. Interventions include native plantings, water-purifying plantings, and permeable pavements.
- 3.d. Discourage the development of land in the floodplains of the Dan River and its tributaries and parcels with severe slopes except where adequate measures can be put in place to minimize runoff and on-site and off-site flood-related impacts.



## How to Implement Low Impact Development

There is a range of potential solutions that help manage stormwater runoff and create more health spaces for community members to thrive.



Sometimes the best solutions are the most simple! LID is not useful if it is abandoned after a year because it is too costly or complicated to maintain. Whatever solutions are implemented in future developments, they need to be achievable and maintainable.



### Obvious

#### Methods

surface filters, bioretention, tree filters, green roofs, pervious paving surfaces

#### Money Savings

Installing green roofs, disconnecting roof downspouts from driveways or streets, and incorporating bioretention areas to capture on-site runoff saves money by eliminating the need for costly runoff detention basins and pipe systems.



### Simple

#### Methods

bioretention, vegetated swales, natural filtration systems and erosion control measures, roof downspout daylighting, rainwater harvesting

#### Money Savings

Adding roadside bioswales, making roads narrower and designing smaller or porous parking lots with on-site runoff retention reduces the amount of pavement, curbs & gutters needed.



### Lovable

#### Methods

landscaping that provides double-duty for stormwater management

#### Money Savings

Preserving natural features in the neighborhood can increase the value and sale price of residential lots. Using existing trees and vegetation saves money by reducing landscaping costs and decreasing stormwater volume.



### Smart

#### Methods

compact development, redevelopment/infill, shared parking & reduced parking requirements, appropriate-width streets, minimized mowed lawn

#### Money Savings

Designing more compact development saves money by reducing site grading and building preparation costs, and can increase the number of lots available for sale.





POLICY

EN.2

# Parks and Open Spaces

Ensure equitable access to parks and open spaces.

Parks and open spaces are a pivotal part of the mental, physical, and social well-being of community members. They are spaces to gather, play, and grow. The City of Danville is proud of its quality green spaces across its neighborhoods, and is actively working to enhance these spaces to best meet the needs and wants of its community members.

## Desired Outcomes

- Increased walkable and bikeable access to parks and open spaces
- Increased ratio of parks with climate resilient interventions
- Maintained staff capacity and operations proportional to demand



**Goal 7. Environment**

Policy EN.2 Parks and Open Spaces



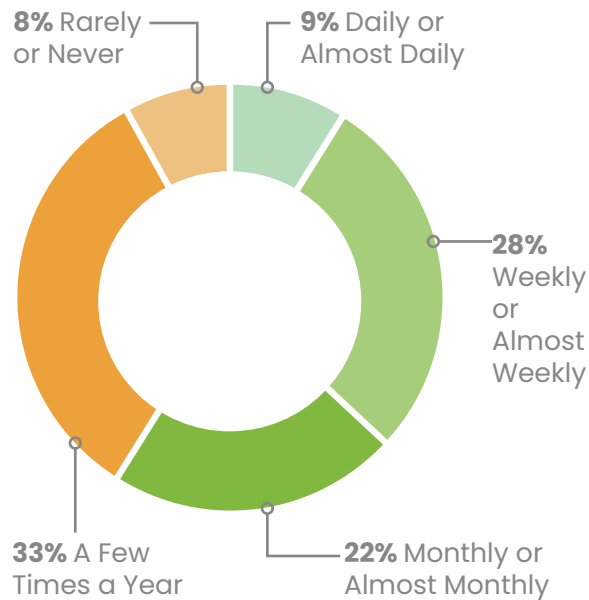


## WHY IT MATTERS

### Parks play a major role in community members' lives.

When asked how often community members visit Danville parks and/or trails, over half said they go regularly.

**Source:** 2023, Community Pulse Check Survey



### Green spaces are an economic asset.

Neighborhood parks can provide up to a 20% increase in housing values for those homes facing the park and community-wide parks may also provide benefits up to 33% of the residential real estate value.

**Source:** 2005, Illinois Association of Park Districts



## Goal 7. Environment

Policy EN.2 Parks and Open Spaces



## WHY IT MATTERS

### Green spaces are a health asset.

In a post-pandemic world, communities have placed an increased value on outdoor activities. Parks and recreation organizations deliver vital services that advance physical and mental health for community members.

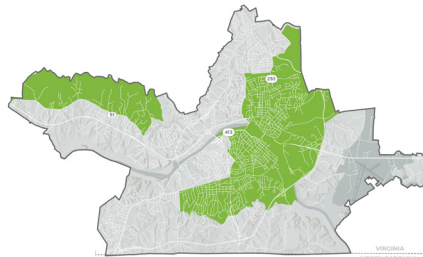
The National Alliance on Mental Illness found that **1 in 5 American adults and 1 in 6 American youth ages 6 to 17 have some form of mental illness**, making mental health a particular area of focus for parks and recreation agencies.

Parks also provide social opportunities, allowing residents to host gatherings and create a sense of community. This is especially important in Danville, where key neighborhoods were identified by the UNC Greensboro and the Health Collaborative for their health outcomes.

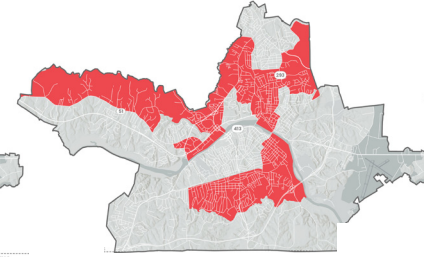
While community members have access to green spaces in these neighborhoods, the gaps in health are likely indicative of other health barriers and could inform future programming in recreation spaces aimed at improving community health.

Source: 2021, Health Equity Assessment

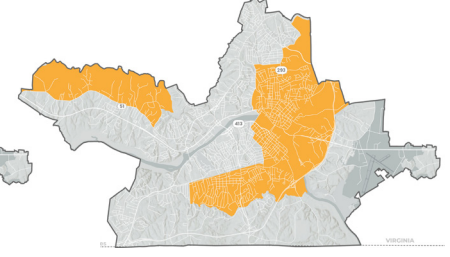
2020 Census Tracts with High Obesity Rate



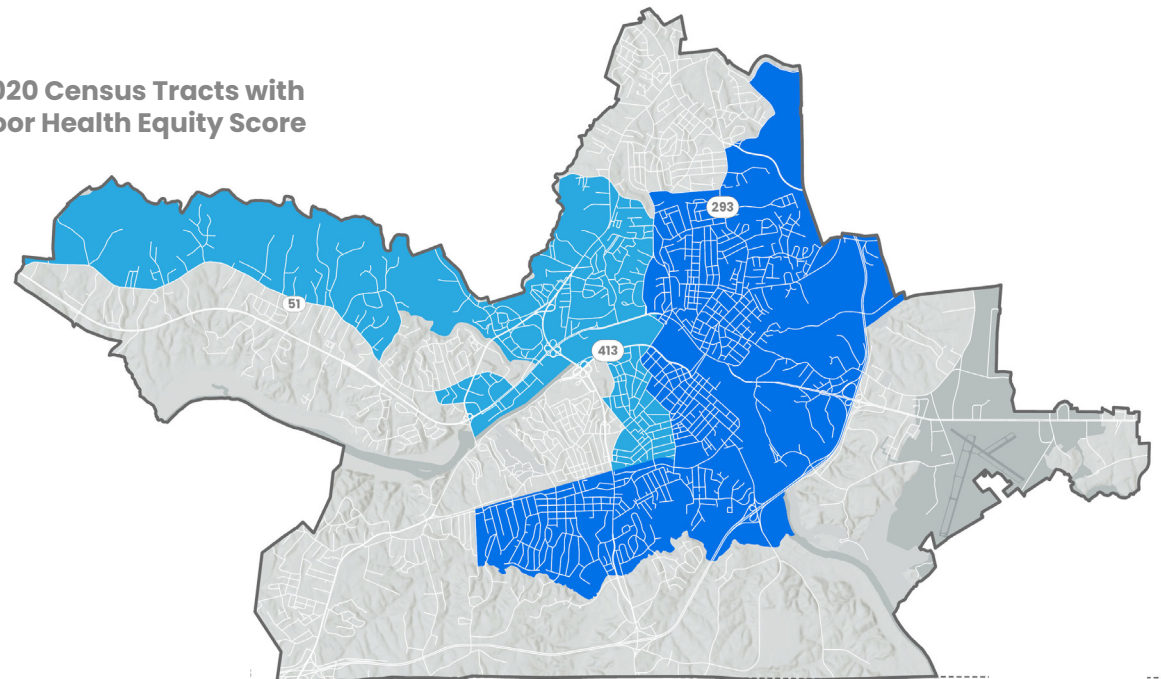
2020 Census Tracts with High Heart Disease Rate



2020 Census Tracts with Poor Mental Health



2020 Census Tracts with Poor Health Equity Score



### Goal 7. Environment

Policy EN.2 Parks and Open Spaces



## WHY IT MATTERS

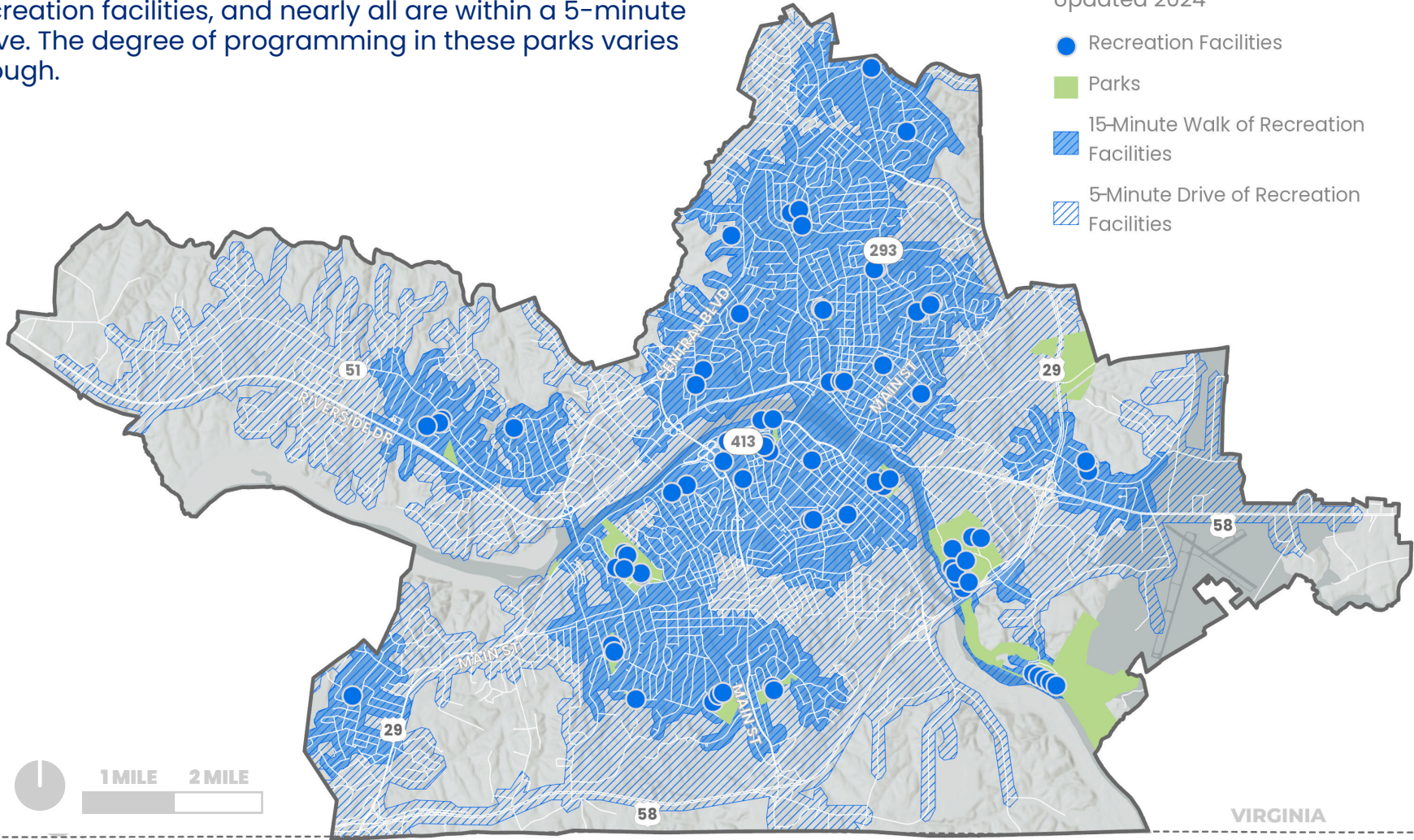
### Access to quality parks and green spaces is key.

Most residents are within a 15-minute walk of parks or recreation facilities, and nearly all are within a 5-minute drive. The degree of programming in these parks varies though.

### Access to Parks & Recreation

**Source:** Danville GIS Department, Updated 2024

- Recreation Facilities
- Parks
- ▨ 15-Minute Walk of Recreation Facilities
- ▨ 5-Minute Drive of Recreation Facilities



### Goal 7. Environment

Policy EN.2 Parks and Open Spaces

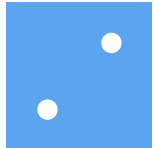


# Almost every majority-minority neighborhood in Danville has or is within walking distance of a park or recreation facility.

## Equitable Access to Parks & Recreation

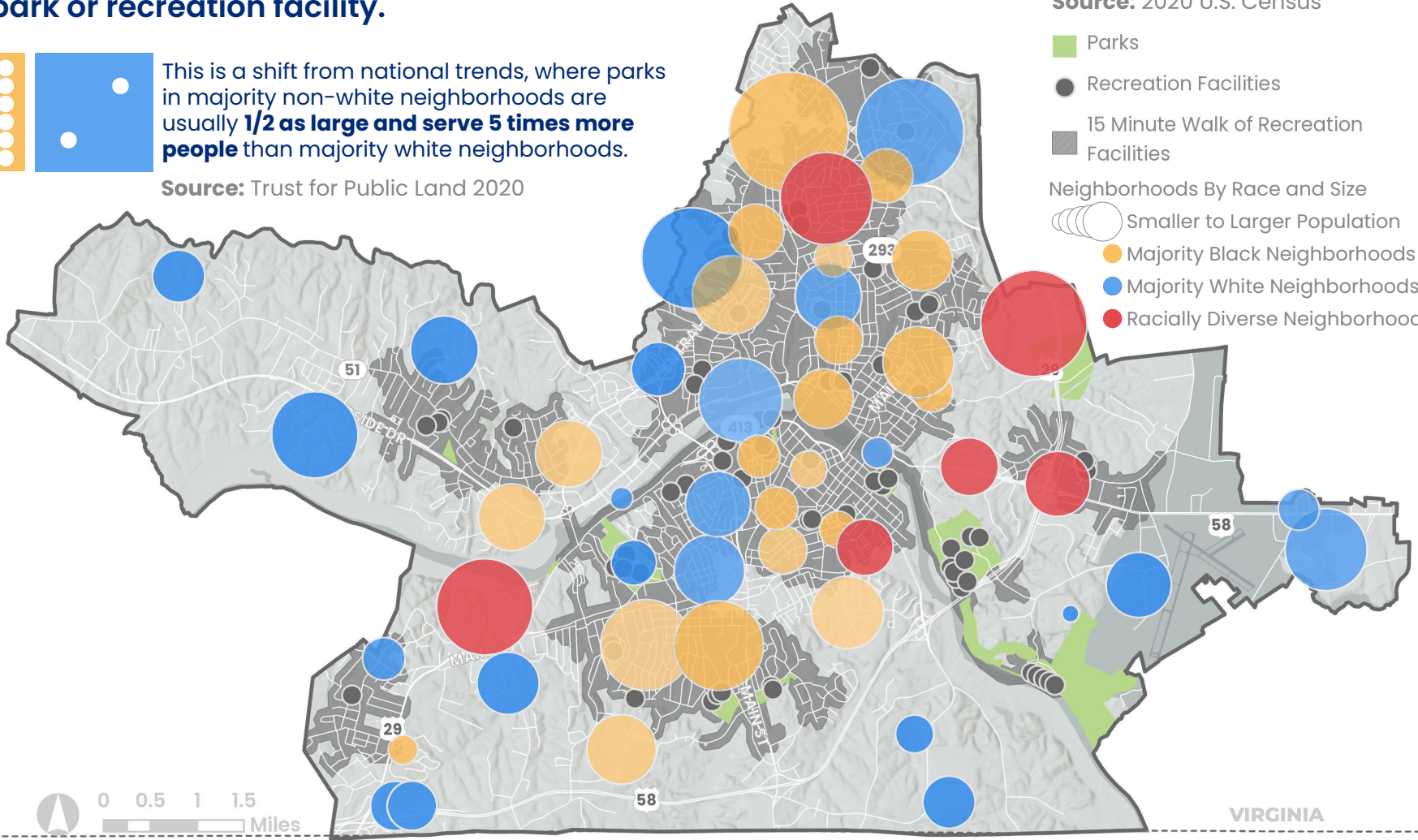
Source: 2020 U.S. Census

- Parks
- Recreation Facilities
- 15 Minute Walk of Recreation Facilities
- Neighborhoods By Race and Size
  - Smaller to Larger Population
  - Majority Black Neighborhoods
  - Majority White Neighborhoods
  - Racially Diverse Neighborhoods



This is a shift from national trends, where parks in majority non-white neighborhoods are usually **1/2 as large and serve 5 times more people** than majority white neighborhoods.

Source: Trust for Public Land 2020

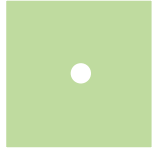


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NORTH CAROLINA





### The majority of people in Danville living at or below the poverty line have or are within walking distance of a park or recreation facility.



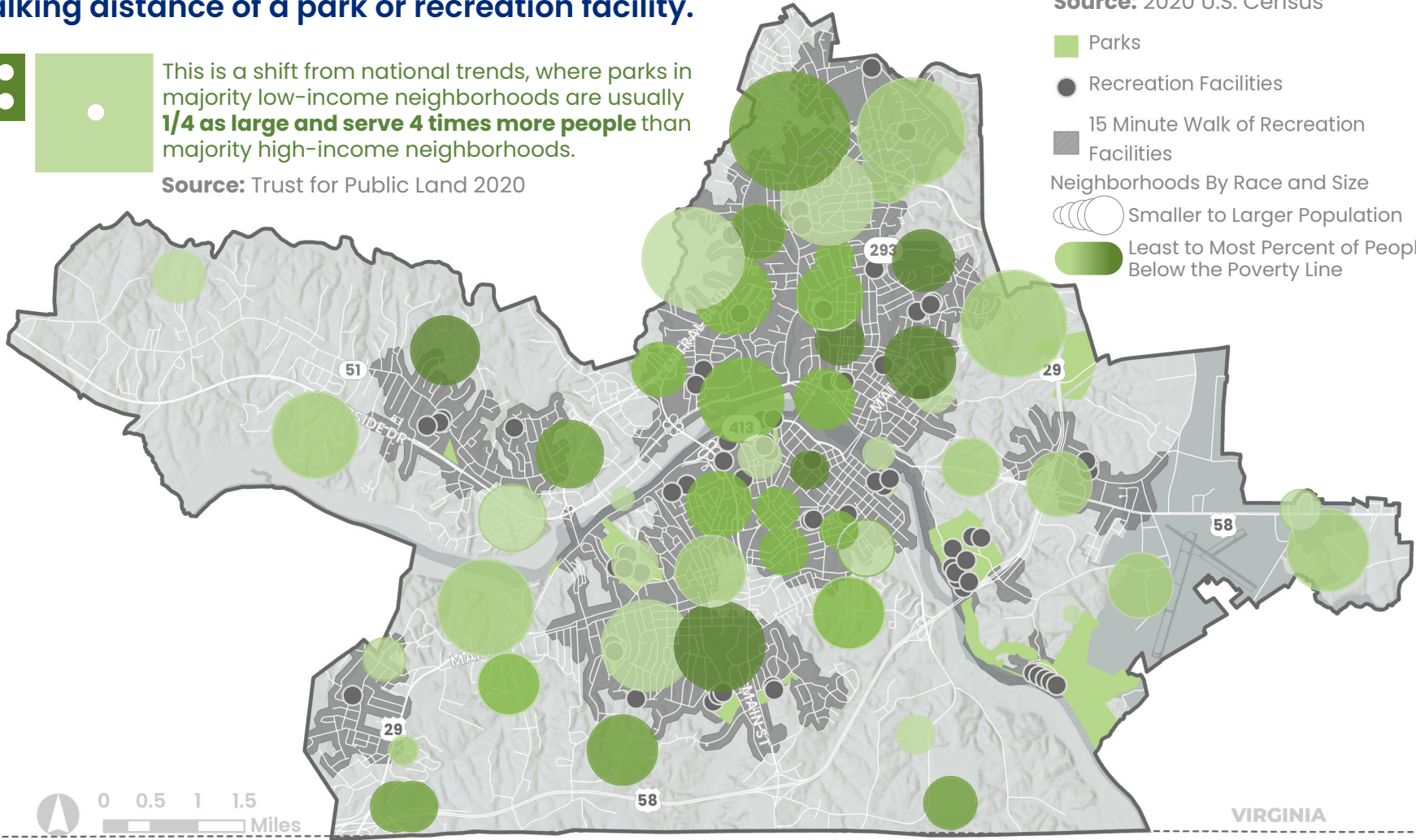
This is a shift from national trends, where parks in majority low-income neighborhoods are usually **1/4 as large and serve 4 times more people** than majority high-income neighborhoods.

Source: Trust for Public Land 2020

### Equitable Access to Parks & Recreation

Source: 2020 U.S. Census

- Parks
- Recreation Facilities
- 15 Minute Walk of Recreation Facilities
- Neighborhoods By Race and Size
  - Smaller to Larger Population
  - Least to Most Percent of People Below the Poverty Line



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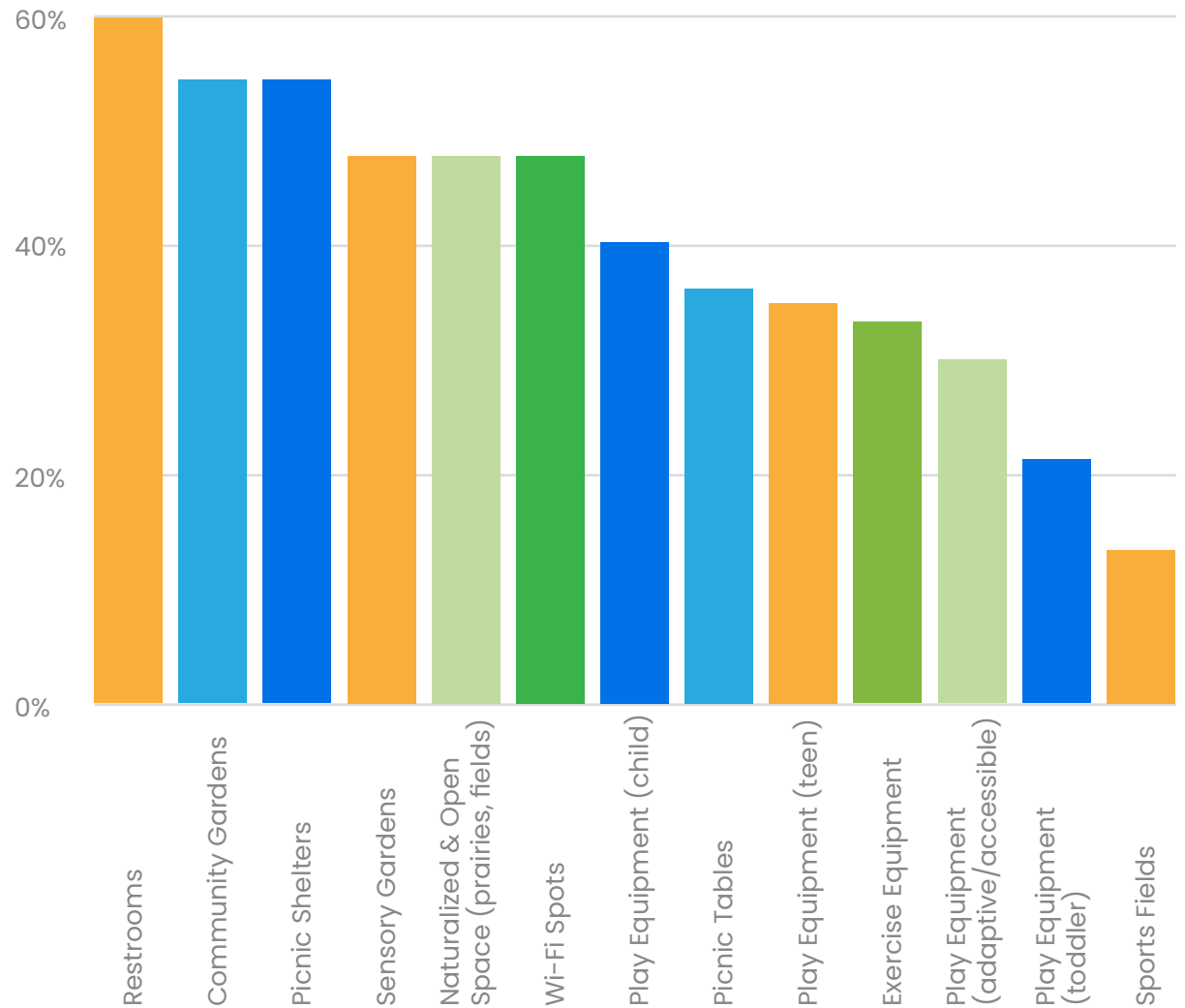


## WHY IT MATTERS

Community members want to see a variety of amenities in their parks and open spaces.

“What types of amenities would you most like to see in parks and open spaces?”

Source: 2023, Community Pulse Check Survey



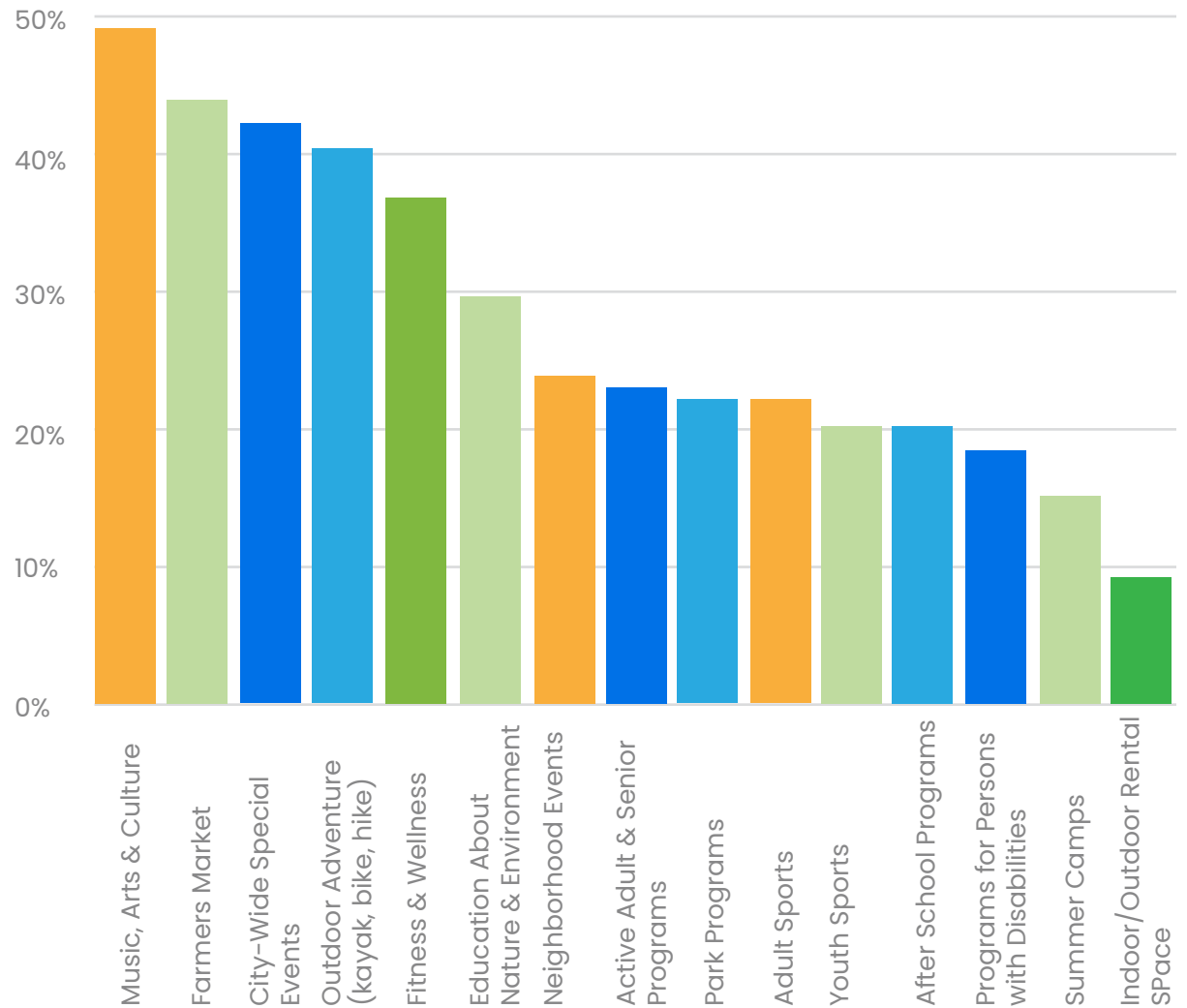


## WHY IT MATTERS

Community members also want seeing a variety of programs to activate these places.

“What recreation programs do your household have the most need for?”

Source: 2023, Community Pulse Check Survey



### Goal 7. Environment

Policy EN.2 Parks and Open Spaces





## Danville is already implementing improvements to parks and open spaces.

### Splash Pads

The city is expecting to complete the development of four different splash pads across the city in 2024 at Third Avenue Park, Doyle Thomas Park, Riverfront Park and Ballou Park.

### Westmoreland

The Westmoreland Neighborhood Organization is designing a safe and accessible new park on land which they will be donating to the city to maintain and program upon completion.

### Neighborhood Park Projects

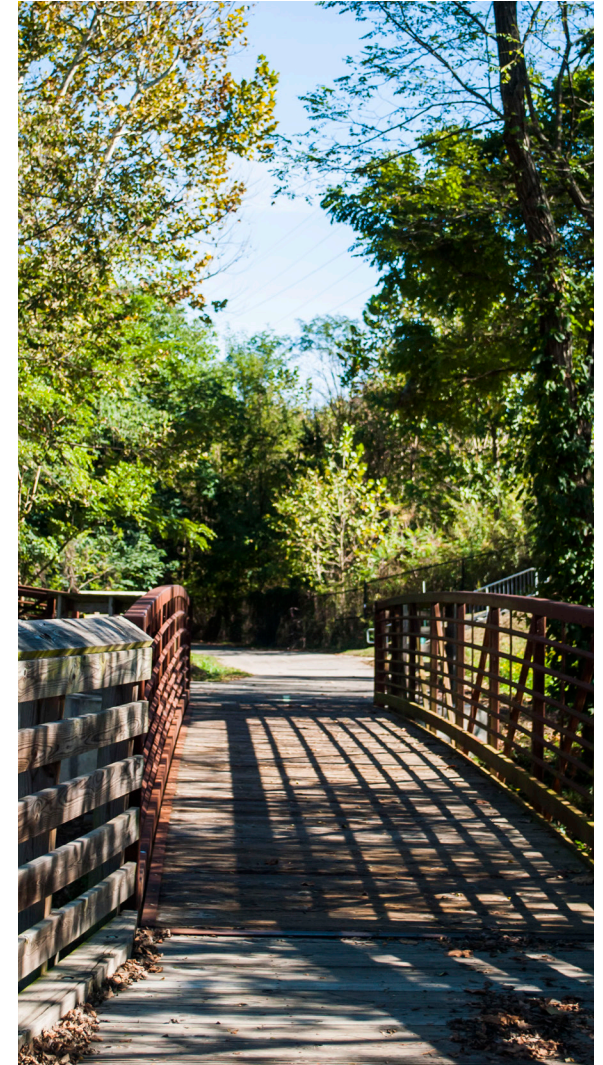
The [Neighborhood Park Network Plan](#) is the plan for the future of smaller parks in residential areas. It details the strategic operations and planning required to update Danville's 21 neighborhood parks. The plan includes timelines, maps, descriptions of park planning organization, and specific known amenities for park improvements.

### Heart the Park Initiative

Since the development of the Neighborhood Park Projects in 2021, the Danville Department of Parks and Recreation has collaborated with 3 different neighborhoods each year to create resident-led park designs. By rotating these parks, it maximizes the amount of parks and neighborhoods across the city getting updated plans and regularly collaborating with city staff. Some of the most recent include [Doyle Thomas Park](#), [Coates Recreation Center](#), and [Pumpkin Creek Park](#). Since then, the goal is to complete large scale park improvement projects at two parks each year, due to changes in funding and grants awarded.

### Parks and Recreation Plan

In 2023 and 2024, Danville updated its Parks and Recreation Plan as well as conducted an assessment of staff capacity to better create realistic commitments and next steps.





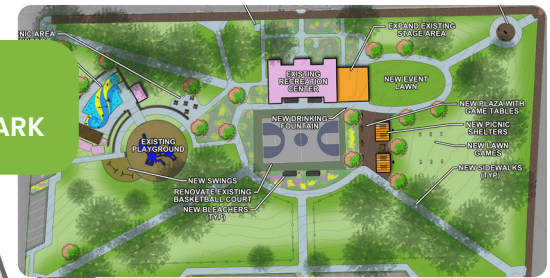
Danville Parks and Recreation have been hard at work, partnering with neighborhoods to envision the future of their green spaces.

Heart the Park Initiative Designs

Source: Danville GIS Department, Updated 2024



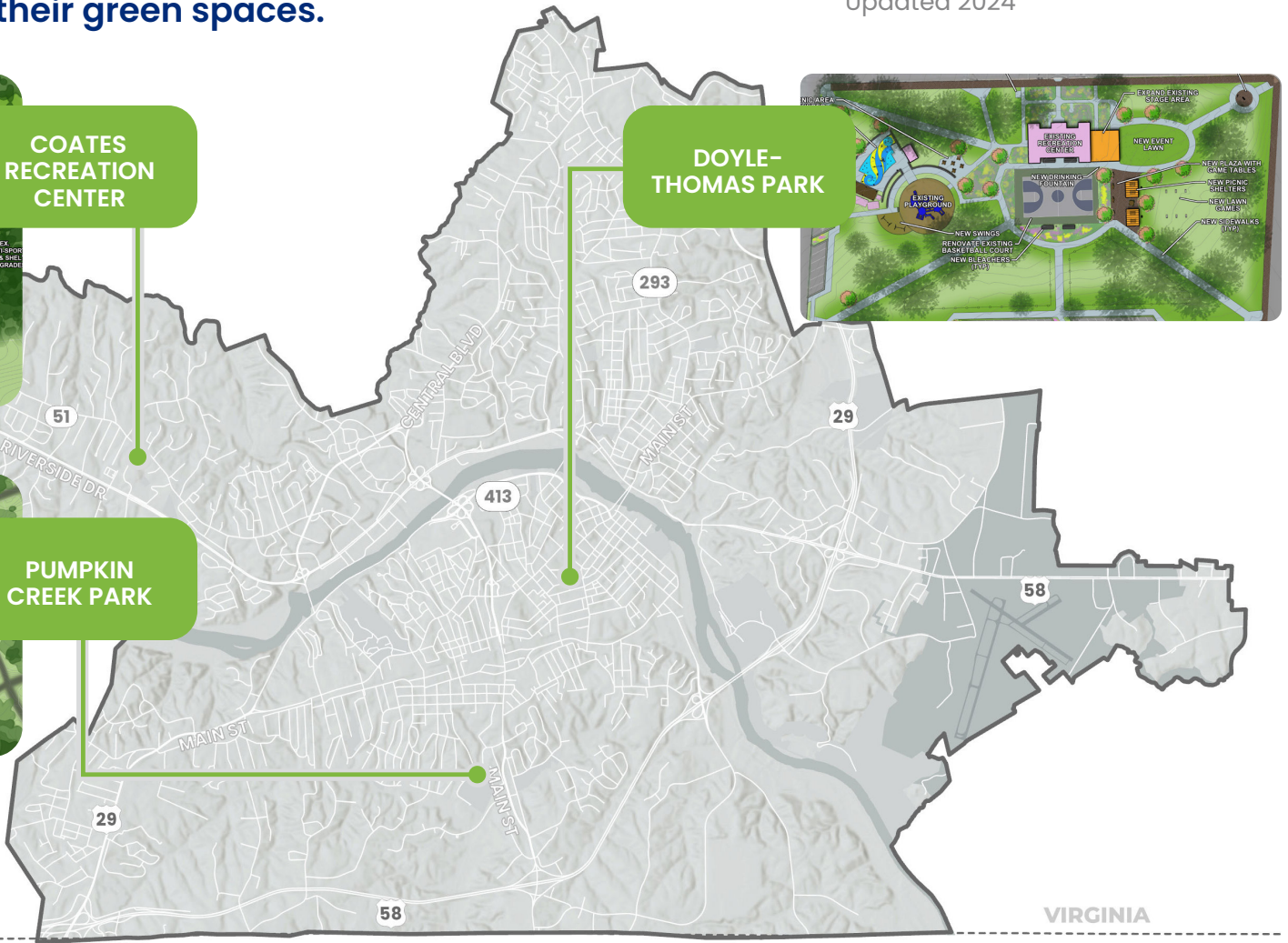
COATES RECREATION CENTER



DOYLE-THOMAS PARK



PUMPKIN CREEK PARK



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## WHY IT MATTERS

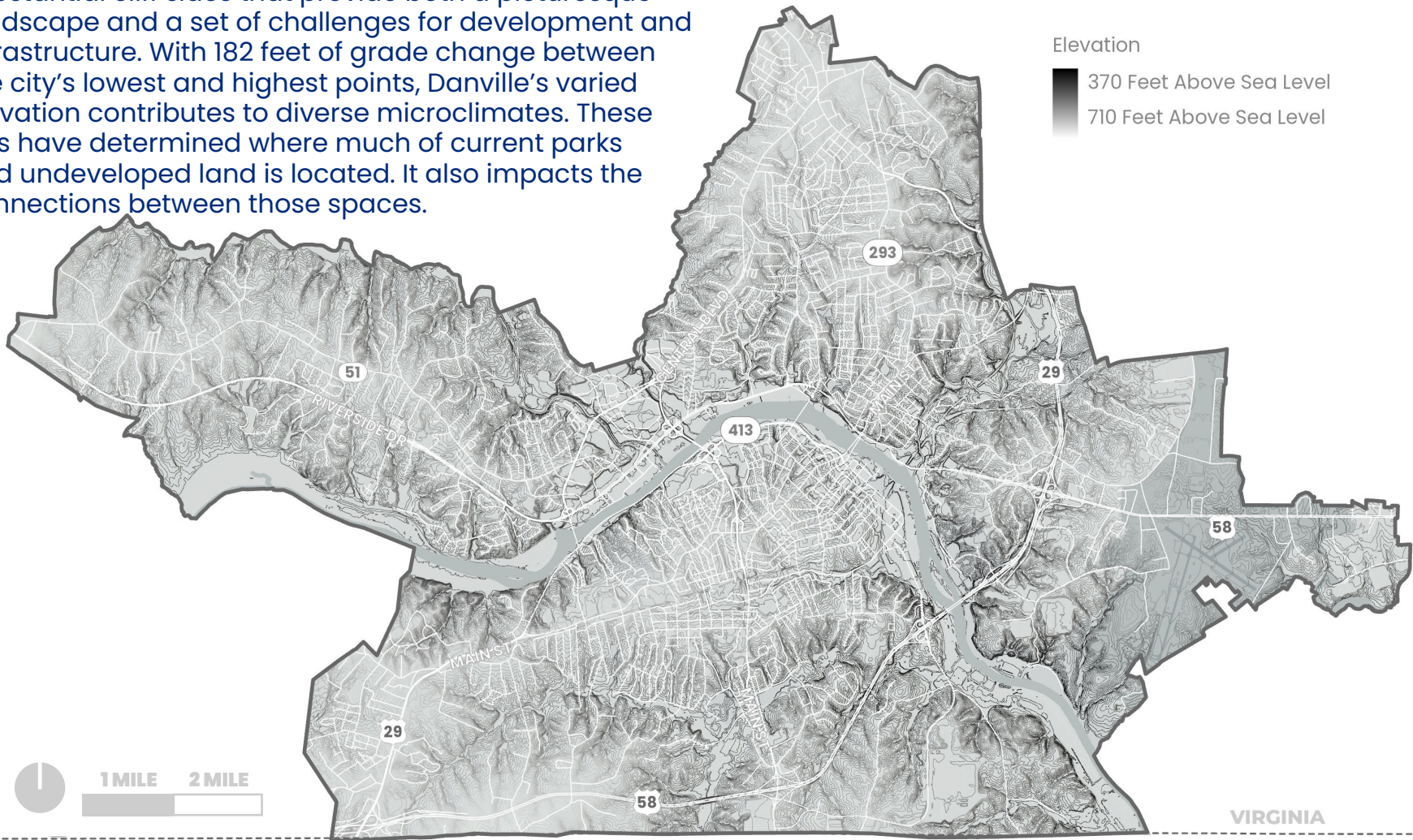
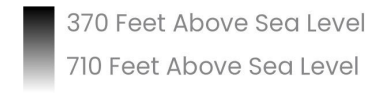
### Danville has a diverse topography.

Danville’s topography is characterized by rolling hills and substantial cliff sides 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. These hills have determined where much of current parks and undeveloped land is located. It also impacts the connections between those spaces.

### Elevation and Topography

**Source:** Danville GIS Department, Updated 2024

Elevation



### Goal 7. Environment

Policy EN.2 Parks and Open Spaces

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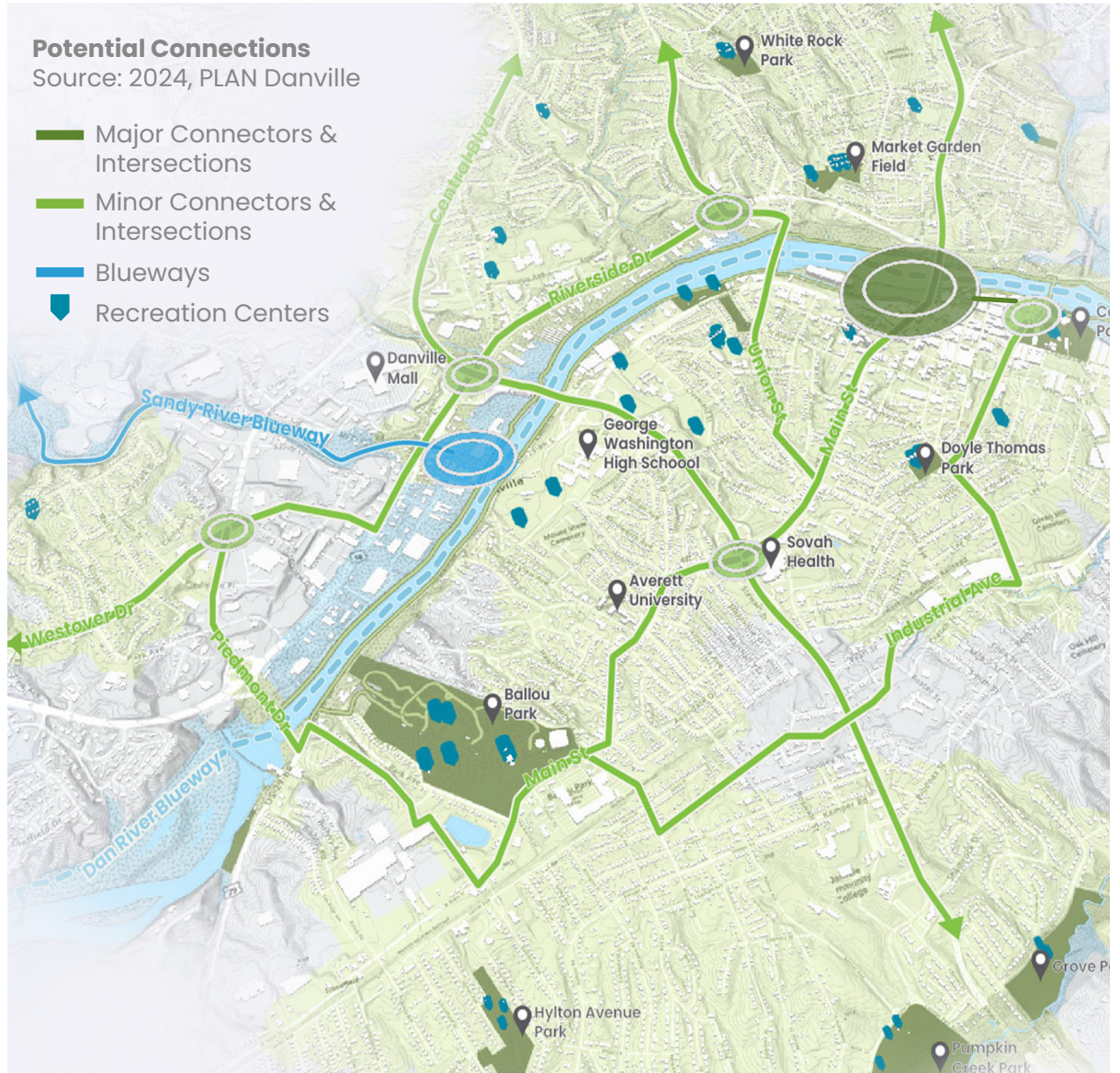
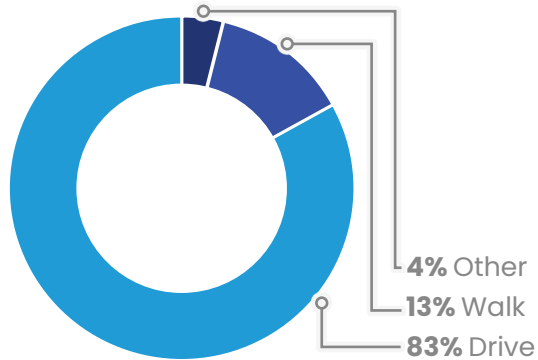
## WHY IT MATTERS

### Getting to parks could become car optional.

Currently, most community members drive to parks. By enhancing trails and alternative connections between parks, the city could have a better connected “green web” as shown here.

#### How Residents Most Often Get to Parks

Source: 2023, Community Pulse Check Survey



#### Goal 7. Environment

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## WHY IT MATTERS





### Flooding is already impacting the community, and it is set to happen more often.

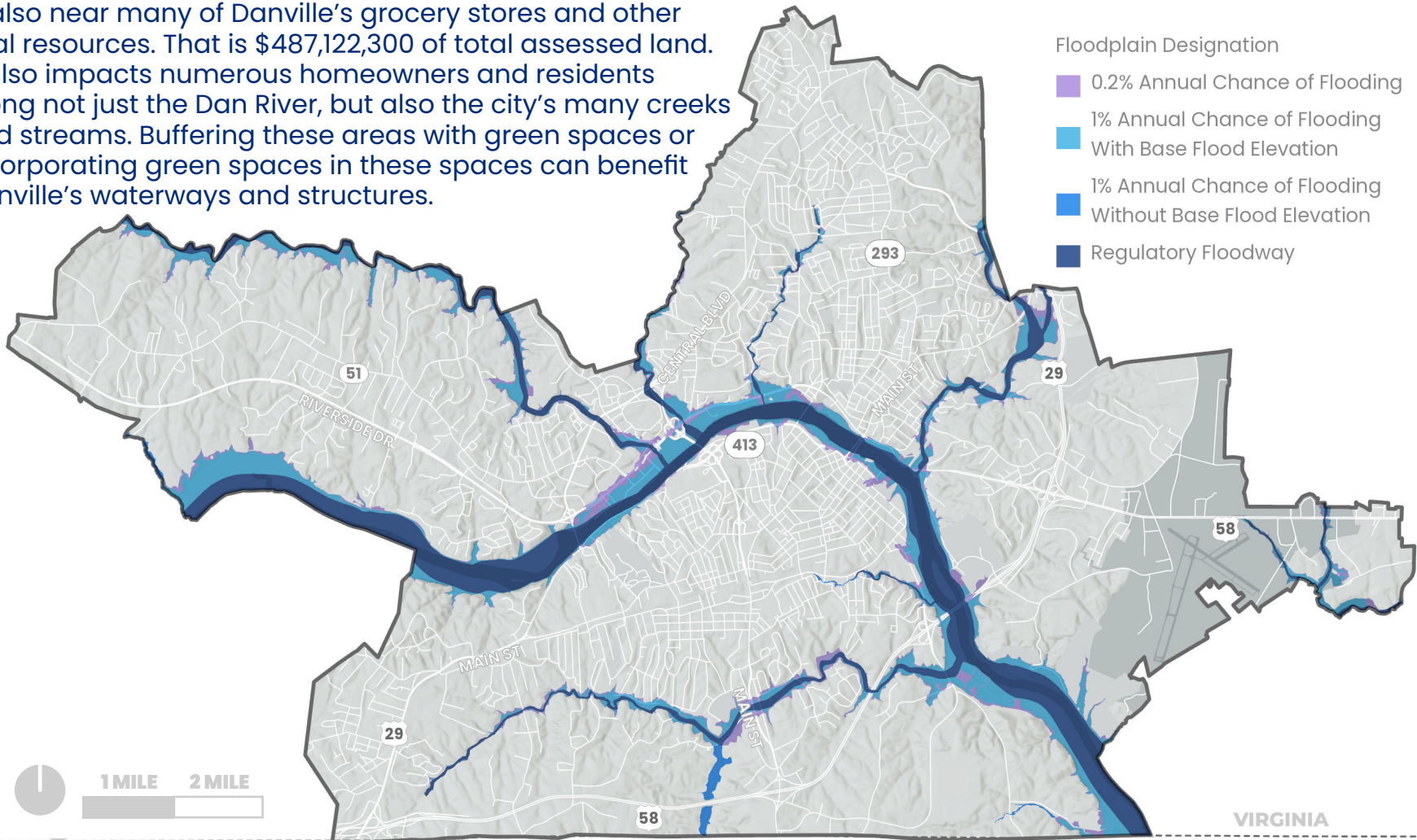
694 structures in Danville are in the floodplain. The floodplain is also near many of Danville’s grocery stores and other vital resources. That is \$487,122,300 of total assessed land. It also impacts numerous homeowners and residents along not just the Dan River, but also the city’s many creeks and streams. Buffering these areas with green spaces or incorporating green spaces in these spaces can benefit Danville’s waterways and structures.

#### Flood Prone Areas

**Source:** Danville GIS Department, Updated 2024

##### Floodplain Designation

-  0.2% Annual Chance of Flooding
-  1% Annual Chance of Flooding With Base Flood Elevation
-  1% Annual Chance of Flooding Without Base Flood Elevation
-  Regulatory Floodway



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#### Goal 7. Environment

Policy EN.2 Parks and Open Spaces



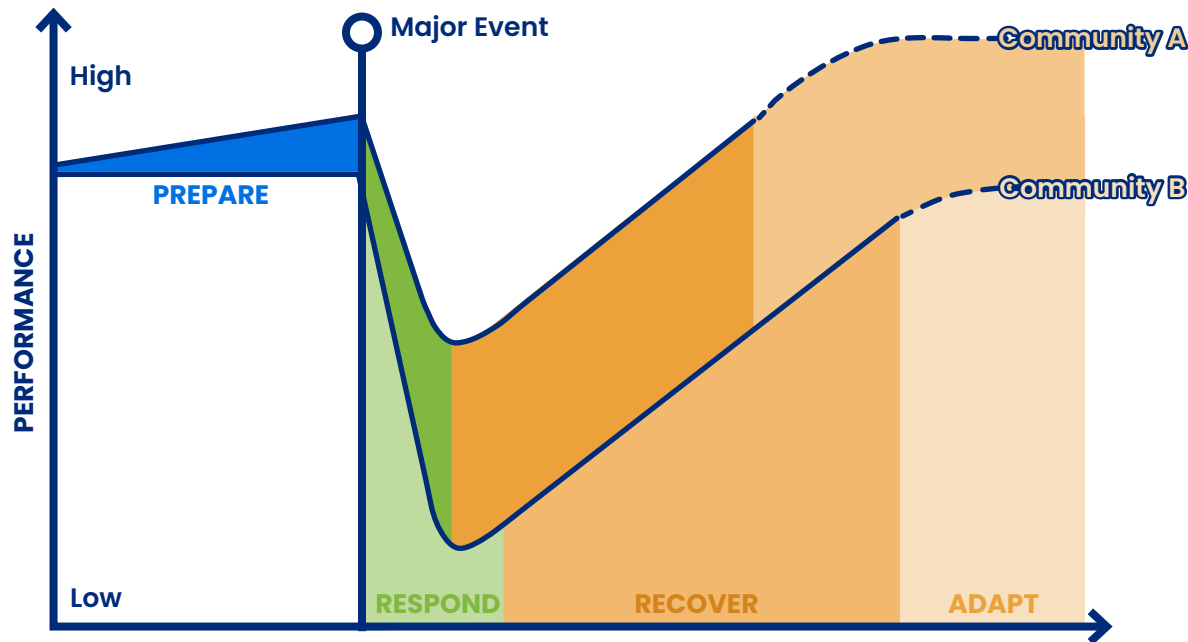
## WHY IT MATTERS

### Preparing for the challenges of tomorrow earlier will help save money, capacity, and time.

The less a community prepares for events such as flooding, heat, and other potential emergencies, the longer it takes to respond, recover, and adapt. By creating environments that respond to some of these events, Danville can transition more of its staff and funding to other needed initiatives in the future.

To help visualize this, see how a more prepared community (Community A) can respond, recover, and adapt faster.

**Source:** Adapted from M.E. Hynes, B. Ross, and CARRI, 2008



## DANVILLE IN ACTION

### Danville is tackling resiliency.

#### Flood Risk Assessment

Danville conducted a Flood Risk Assessment to determine the impacts of flooding on Danville’s neighborhoods and how to best prepare, adapt, and recover in the face of natural disasters. Learn more about how Danville plans to tackle flooding and the impact this has on the community in the Danville Flood Risk Assessment.

#### Sustainability Strategies

The city has developed Sustainability Strategies to be integrated in new and renovated parks and ensure equitable, inclusive access to quality green spaces.

#### Emergency Management

The City of Danville Emergency Management staff are dedicated to developing and achieving plans and projects centered around mitigation, preparedness, response, and recovery in partnership with other departments such as Fire, Police, and Parks and Recreation.



## Goal 7. Environment

Policy EN.2 Parks and Open Spaces



## RECOMMENDATIONS & ACTIONS

### RECOMMENDATION

## EN.2.1 Green Space Access

Fill the gaps in community access to parks, open space, and recreation offerings considering distance to facilities, staff capacity, and programming for a variety of age groups.

### ACTIONS

1. Fill gaps in access to parks and open space by utilizing vacant land and public-private partnerships with entities such as Danville Public Schools to leverage existing resources for community use.
2. Continue the neighborhood parks outreach and design program to ensure any new or improved parks spaces reflect the community's voice.
3. Conduct a capacity assessment to understand parks and recreation staff needs and ability to take on additional or altered recreational programming.
4. Conduct a programming assessment to identify any potential gaps in recreational offerings by age, ability, culture or location.
5. Maintain a balance of naturalized open space and programmed park land.
6. Maintain and exceed, when possible, ADA standards at programmed park lands as part of future park design and build processes.
7. Connect community members to the River District and more local neighborhood parks by developing a "green web" of neighborhood green spaces and multi-mobility connections.





## RECOMMENDATIONS & ACTIONS

8. Maintain healthy green spaces and environments to promote active lifestyles and healthy living.

### Action Steps

- 8.a. Work towards a 15-minute walking access to quality green spaces for all residents.
- 8.b. For programmed green spaces, include facilities that fit the needs of community members within a walkable distance that encourage active movement. This can include the following:
  - Play sets
  - Adult exercise equipment
  - Trails
  - Canoe or kayak launches

## RECOMMENDATION

### EN.2.2 Climate Resiliency

Advocate for climate-resilient green spaces.

## ACTIONS

1. Promote the design and management of parks and green spaces that can withstand climate-related stresses by doing the following.

### Action Steps

- 1.a. Increase the acreage of naturalized land in Danville parks instead of mowed lawn when possible.
- 1.b. Create and educate community members about floodwater retention basins.
- 1.c. Enhance existing Recreation Centers to serve as cooling shelters.
- 1.d. Continue to enhance bio-diversity in public spaces using native plantings and encouraging connected green spaces or nature corridors.





## How to Create Climate Resilient Resource Hubs

A resource hub is a community facility/amenity that connects residents to resiliency, mobility, and community-related resources and services to help residents be prepared for disruptions, including chronic stressors (like rising temperatures and aging pipes) and acute emergencies (like a dam break or a flash flood).

Resource hubs are open in times of emergency, but also during every day “steady state” periods. During normal operation (up to 99% of the time in some cases), resource hubs connect residents to resources, build resilience-related skills, and cultivate relationships in the communities they serve. Hubs can meet a number of physical and social goals by using a trusted physical space such as a school or recreation facility. Learn more about how to [create](#) and [report](#) on the status of resilient resource hubs from leaders in this space like DC.

## The Three Modes of Operation for Resource Hubs

Source: 2024, DC Guide to Developing Resilience Hubs



	Normal	Disruption	Recovery
Programming	Promote community well-being, trust, and vitality (i.e. rec center, co-working, school)	Meet immediate needs (refrigeration, charging, information, medical supplies)	Support long term recovery as an operational base for residents
Design	Accommodates programming	Withstands extreme weather and accommodates peak demand	Includes space for recovery planning, in addition to everyday programming
Operations	Personnel and resources for programming	Coordinate relief efforts and emergency supplies through hub	Prepare for second wave of disruption or return to “normal”
Communication	Consistent communication to build trust	Facilitate emergency alerts through trusted channels	Facilitate recovery communications
Power	Reduce use and emissions through alternative energy	Provide back-up power	Reconnect to the grid


## Resource hubs work best when strengthening existing community assets.

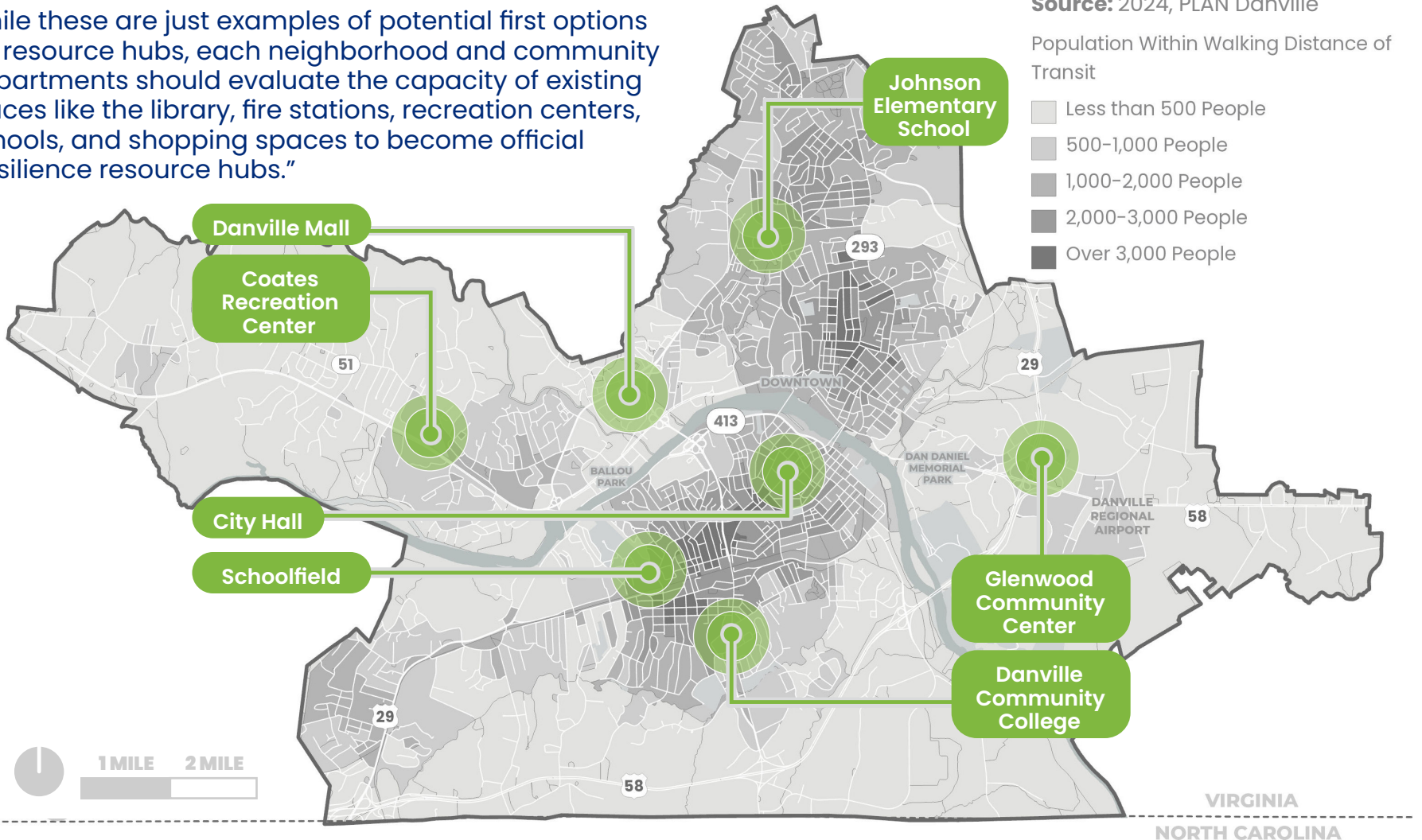
While these are just examples of potential first options for resource hubs, each neighborhood and community departments should evaluate the capacity of existing places like the library, fire stations, recreation centers, schools, and shopping spaces to become official “resilience resource hubs.”

### Potential Resilience Resource Hubs

Source: 2024, PLAN Danville

Population Within Walking Distance of Transit

-  Less than 500 People
-  500-1,000 People
-  1,000-2,000 People
-  2,000-3,000 People
-  Over 3,000 People





## How to Create Climate Resilient Resource Hubs

There are many components that could be used to create a hub. While every hub certainly does not need all of these elements, it is a good menu to keep in mind when considering future facilities improvements.



### Housing

- Walkable distance to resource hubs
- Diversity of housing typologies
- Monthly housing costs
- Quality of housing



### Economy

- Activated retail storefronts (cafés, seating)
- Lighting and placemaking





## TOOLS



### Transportation

- Bike racks
- E-bike rental
- Scooter rental
- Charging station
- Bus shelter with seating
- Sidewalks & crossings
- Signage & wayfinding
- Lighting for safety



### Infrastructure

- Energy efficient buildings
- Low impact development
- On-site stormwater retention
- Public wi-fi



### Culture & Community

- Art & Sculpture
- Signage
- Programming & events
- Community kitchens, dance studios, & other cultural businesses
- Plazas, alleys, & places of gathering



### Environment

- Parklets
- Heating & cooling shelters
- Tree canopy for shade
- Outdoor exercise stations
- Play spaces
- Healing gardens



## Goal 7. Environment

Policy EN.2 Parks and Open Spaces

POLICY

EN.3

# Education and Health

Advocate for and support environmental education programs.

In addition to providing quality spaces and programming, Danville's parks and open spaces are great opportunities for learning and growth for all age groups.

## Desired Outcomes

- Increased signage
- Continued monitoring and evaluation of measures of impact



**Goal 7. Environment**

Policy EN.3 Education and Health





## WHY IT MATTERS

### Parks impact more than just physical health.

They can also help with mental health and education. Education was especially important to the community, mentioned from day one of the PLAN Danville Process. While Danville’s testing scores are lower on average than the state, they are generally on the rise.

Source: 2023 [Danville City Public Schools](#) and the [City of Danville](#)

### Parks can help close the educational achievement gap in communities.

Closing the Achievement Gap surveyed 40 K-12 schools in 13 states across the nation, all of whom used offsite open spaces to extend learning options for students. The results show the positive impact of hands-on learning opportunities, as measured by the standardized achievement scores of “socially disadvantaged” students in the area.

Source: 2003 [American Planning Association](#) [American Parks Forum](#)



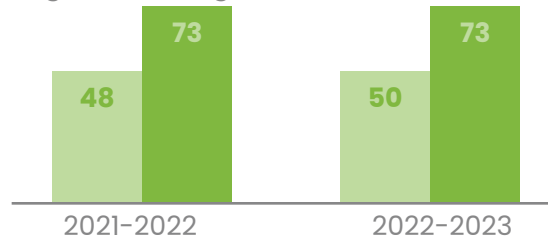
#### Goal 7. Environment

Policy EN.3 Education and Health

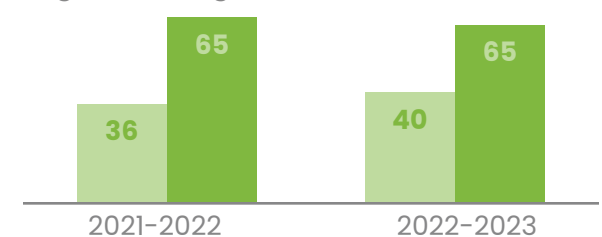
### Danville Public Schools Testing Scores Over Time

Source: 2023 [Danville City Public Schools](#)

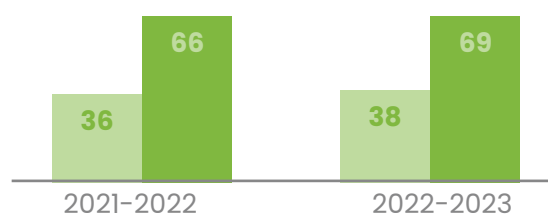
#### English Reading



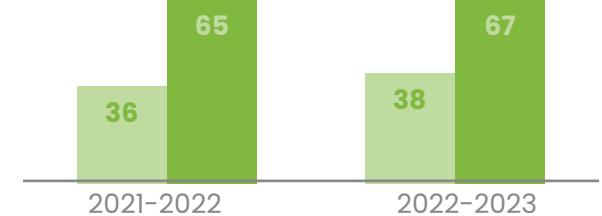
#### English Writing



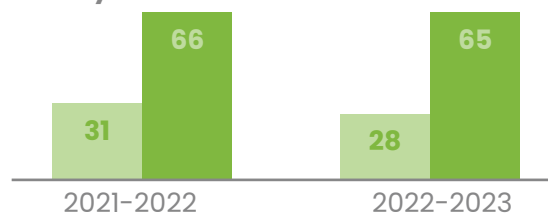
#### Math




#### Science



#### History



 District  
 State



“City parks engage children in informal, experiential learning through play and shared experiences with peers, laying the foundation for effective formal education.”

*- American Planning Association*



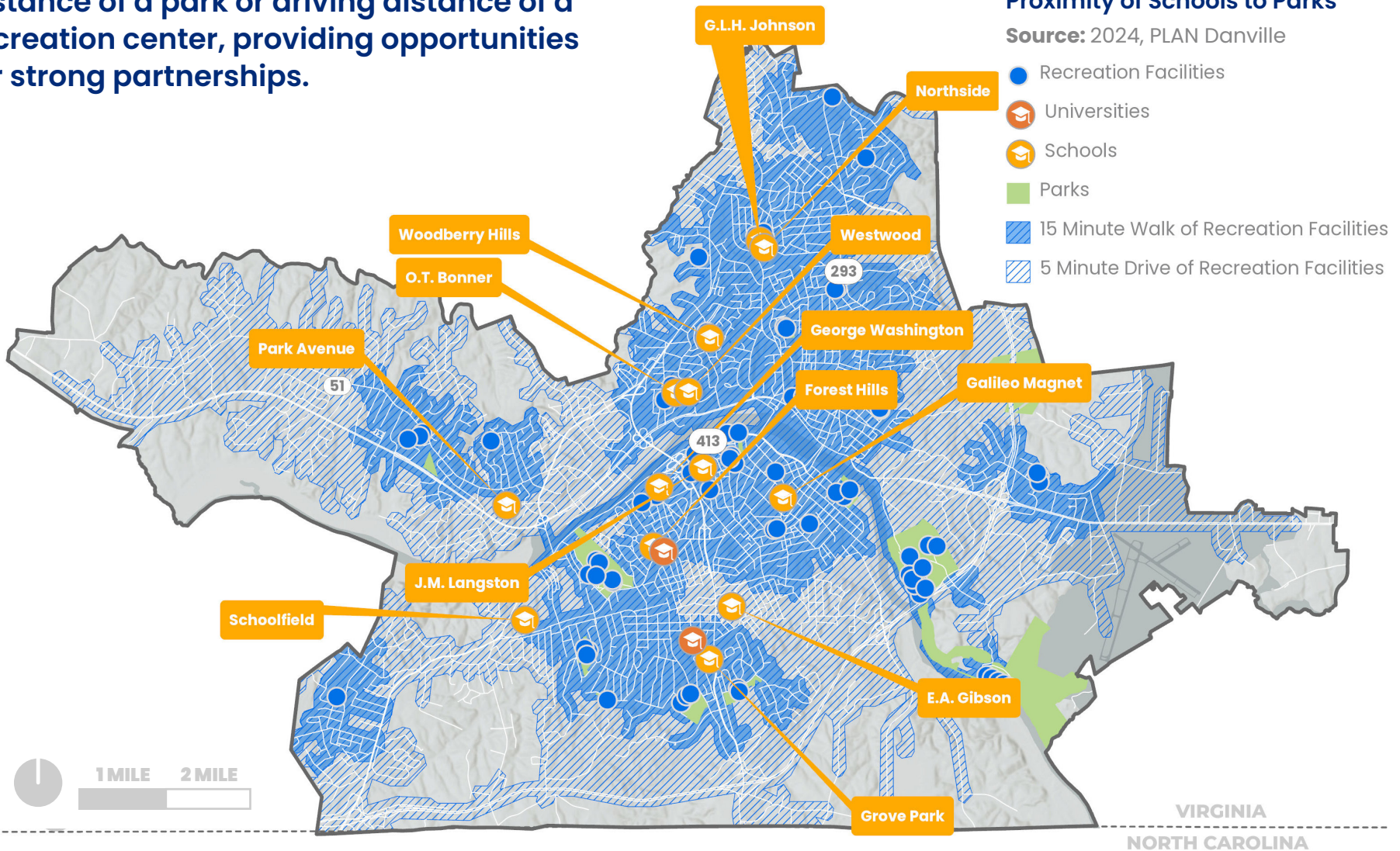


Danville’s schools are all within walking distance of a park or driving distance of a recreation center, providing opportunities for strong partnerships.

### Proximity of Schools to Parks

Source: 2024, PLAN Danville

- Recreation Facilities
- Universities
- Schools
- Parks
- 15 Minute Walk of Recreation Facilities
- 5 Minute Drive of Recreation Facilities







## Danville is tracking health outcomes.

### National Health Dashboard

Danville is part of the [City Health Dashboard](#), making it easier to track how Danville is doing in its health outcomes and how it compares to peer communities. This will be useful when prioritizing programming and tracking the impact of things such as parks in the future.

### Local Health Dashboard

The Dan River Health Collaborative investigates and annually reports on the state of health for Danville residents.

### Danville Schools

Danville City Public Schools are [continuously working](#) with staff, students and families to create safe, fun, and educational learning environments for students while tracking state standards.

## Danville is providing award winning services.

Danville’s Health Collaborative, City Staff, Parks and Recreation, and Emergency Services were 2020 All American City Award Winners from the National Civic League for their extensive work improving health and education outcomes, including their work creating the Youth Health Equity Leadership Institute, Fit Mobile program, Community Health Worker Project. They were recognized again in 2024 as award finalists.

In its first year, the Community Health Worker Project connected over 300 residents with primary care physicians!





## WHY IT MATTERS

### Parks can also help with mental health.

The Danville Health Collaborative's [2021 Health Equity Report](#) cited that mental health issues such as isolation, depression, schizophrenia, bipolar disorder, and stressors of poverty were among the most-mentioned chronic health problems. In particular, people were concerned about the mental health of the elderly and children.

Research from the University of Florida shows that leisure activities can alleviate [depressive symptoms](#), improve cognition and memory, and enhance overall well-being [in older adults](#).

The City of Danville Department of Social Services provides several key services to assist children and adults with the financial and programmatic resources needed to have a quality life. This includes a focus on the following services:

- financial aid,
- adoption,
- child/adult protective services,
- employment,
- mediation, and
- fraud protection.

There are also several mental health specific services provided by the City, Danville-Pittsylvania Community Services, and others including a support hotline, community services board, and more.

In conjunction with Danville Police, Fire, Emergency Preparedness, and Parks and Recreation, they also provided needed support from youth to adulthood to ensure quality services for proper mental and physical health.



### Goal 7. Environment

Policy EN.3 Education and Health



## Danville has several relationship building programs and services.

Danville’s Police, Fire, and Social Services Departments have several avenues to connect community members with public services staff and professionals, providing a safe space for connection and care.

**B.R.A.V.E. (Bringing Resources After Violence)** was designed to enhance the Police Department’s ability to recognize repeat domestic violence offenders as well as repeat victims by simplifying the data review process, routing all information through the Special Victims Unit, and creating an objective scoring system to identify victims most at risk of escalating violence. This scoring system also helps to determine the level of resources response to reported incidents ranging from follow up phone calls to multi-agency at home visits.

**G.R.A.C.E. (Grief Resources and Community Empowerment)** is a program in partnership with Mother’s Stronger Together and the Danville Commonwealth’s Attorney’s Office Victim Witness Program with the purpose of identifying those impacted by the violent, unexpected death of a loved one and provide resources, assistance in planning, and overall community-based support to provide comfort and promote healing from trauma related to loss.





**HDDU (Homelessness Doesn't Define Us)** was created to teach things such as how to manage money, housing, interview and job skills, and computer skills at the homeless shelter. The community relations liaison goes every other week to teach the classes and form relationships with these individuals. Through this opportunity, homeless individuals have been connected with mental health services, housing opportunities, jobs and more. It has resulted in trusting relationships with the homeless, where they feel comfortable reaching out to the community relations liaison and providing personal information.

**The Youth Police Academy**, for children ages 9–17, provides awareness of what police officers experience in their day-to-day tasks. They are introduced to each different division within the department and activities associated with each. During the academy, children are also instructed in physical fitness and wellness.

**IDDU (Incarceration Does not Define Us)** is a program which reintroduces individuals who have been incarcerated back into society by providing them with guidance, support, and direction on how to find jobs, get identification, pursue their education, etc. The program was created to focus on a restorative community that values respect, opportunity, forgiveness, accountability, and access for current and previously incarcerated individuals.

**T.R.A.P. Program (Therapeutic Response to Addiction Problems)** has been designed to allow patrol officers to aid in helping individuals with clear drug or alcohol addiction problems. All patrol cars are equipped with TRAP bags which include resources, brochures, and more for those individuals suffering from addiction problems. Officers can transport individuals to receive the help they need.

If the patrol officer meets an individual struggling with addiction after business hours, they will leave a TRAP bag with them and send

the individual's contact information to the community relations liaison who will then follow up with the individual.

**The REACH Partnership**, by the Danville Health Collaborative, provides several key services:

- **Gateway Health, PATHS, and Compassion Health Care, Inc.** employ Community Health Workers in different neighborhoods at Danville Public Schools clinics and at Danville Pittsylvania Community Services (DPCS).
- **Care Coordinators** refer citizens and engage them in the REACH system. One is placed at Sovah and another at DPCS to address the need for expanded mental health connections.
- **Community Paramedics** provide needed clinical supports. They are housed at the Danville Life Saving Crew.





## RECOMMENDATIONS & ACTIONS

### RECOMMENDATION

## EN.3.1 Educational Opportunities

Use parks and open spaces as learning opportunities.

### ACTIONS

1. Partner with the Danville Health Collaborative to continue to track and report social determinants of health overlaid with access to parks and recreation to see where programming and infrastructure may help alleviate gaps in community health and alter future investments accordingly. Social determinants of health tracked to date include
  - physical health outcomes
  - mental health outcomes
  - poverty
  - income
  - housing
  - access to vehicles
  - access to transit
  - access to healthy food
  - access to internet
2. Incorporate environmental education and stewardship in parks and greenspaces through signage and community partnerships.
3. Partner with the Danville Historical Society to determine future opportunities for historical markers and programming as a part of parks and recreational offerings.
4. Partner with the Danville Emergency Preparedness Department to create promotional materials around safety in parks and open spaces, such as Low Head Dam safety.





## RECOMMENDATIONS & ACTIONS

### RECOMMENDATION

## EN.3.2 Mental Health

Work with local healthcare organizations, trauma support groups, and county resources to connect residents to mental health services.

### ACTIONS

1. Host community listening sessions with mental health professionals at recreation centers.
2. Offer a mental health support page on the city website to connect residents to existing programs offered by the Danville Health Collaborative and related partners.
3. Continue to offer recreational programming that supports positive and inclusive access to mental health services (e.g. yoga, art therapy, meditation, etc).
4. Enhance community health education so residents build familiarity health care systems and reduce hesitancy in utilizing them.

